



# 2023 Regional Flood Plan

## Appendices

Region 11 / Guadalupe

January 2023

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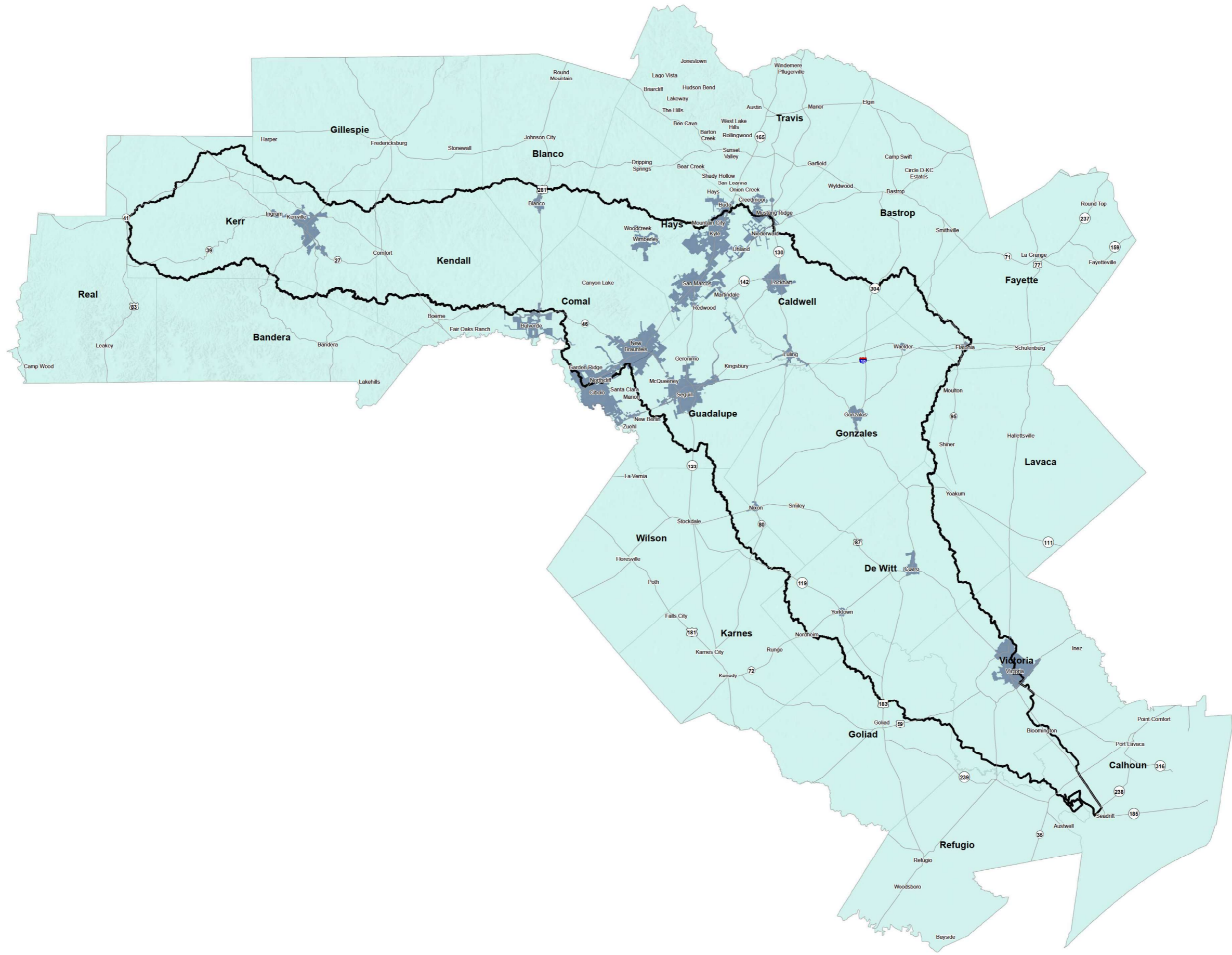
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**Map 13: Floodplain Management**



**Legend**

**Existing Floodplain Regulations by Entity Type**

- County = Yes
- Municipality = No
- Municipality = Unknown
- Municipality = Yes

**Floodplain Management**  
Region 11: Guadalupe

0 4.5 9 Miles

PROJECT NO.	GRA21363
FILE	11 Floodplain_Mgmt
DATE	7/25/2023
SCALE	1 in = 9 miles
DRAFTED	02405

**Map 13**

**Table 6: Existing Floodplain Management Practices**



Entity	Floodplain management regulations (Yes/No/Unknown)	Adopted minimum regulations pursuant to Texas Water Code Section 16.3145? (Yes/No)	NFIP Participant (Yes/No)	Community Rating System Participant (Yes/No) If Yes, CRS Level is indicated	Higher Standards Adopted (Yes/No)	Floodplain Management Practices (Strong/Moderate/Low/None)	Level of enforcement of practices (High/ Moderate/ Low/None)	Existing Stormwater or Drainage Fee (Yes/No)	Web Link to Entity Regulations
Bandera County	Yes	Yes	Yes	No	Unknown	Unknown	Unknown	Unknown	<a href="https://www.banderacounty.org/documents/Bandera%20County%20Flood%20Order.pdf">https://www.banderacounty.org/documents/Bandera%20County%20Flood%20Order.pdf</a>
Bastrop County	Yes	Yes	Yes	Yes - 8	Yes	Strong	High	Unknown	<a href="https://www.co.bastrop.tx.us/page/dsen.floodplain">https://www.co.bastrop.tx.us/page/dsen.floodplain</a>
Blanco County	Yes	Yes	Yes	No	Unknown	Unknown	Unknown	Unknown	<a href="http://www.co.blanco.tx.us/upload/page/3972/docs/5-28-19%20Blanco%20Subdivision%20%20Regulations.pdf">http://www.co.blanco.tx.us/upload/page/3972/docs/5-28-19%20Blanco%20Subdivision%20%20Regulations.pdf</a>
Blanco	Yes	Yes	Yes	No	Unknown	Unknown	Unknown	Unknown	<a href="https://www.cityofblanco.com/masterplan/summary">https://www.cityofblanco.com/masterplan/summary</a>
Boerne	Yes	Yes	Yes	No	Unknown	Unknown	Unknown	Unknown	<a href="https://www.ci.boerne.tx.us/DocumentCenter/View/14583/FloodDamagePreventionOrd2020-20">https://www.ci.boerne.tx.us/DocumentCenter/View/14583/FloodDamagePreventionOrd2020-20</a>
Buda	Yes	Yes	Yes	No	Yes	Moderate	Unknown	Unknown	<a href="https://www.ci.buda.tx.us/DocumentCenter/View/5745/Unified-Development-Code--Oct-2017?bidid=">https://www.ci.buda.tx.us/DocumentCenter/View/5745/Unified-Development-Code--Oct-2017?bidid=</a>
Bulverde	Yes	Yes	Yes	No	Yes	Moderate	Unknown	Unknown	<a href="http://www.bulverdetx.gov/documentcenter/view/2697">http://www.bulverdetx.gov/documentcenter/view/2697</a>
Caldwell County	Yes	Yes	Yes	No	Unknown	Unknown	Unknown	Unknown	<a href="https://www.capcog.org/wp-content/uploads/2019/10/2012-Flood-Damage-Prevention-Ordinance.pdf">https://www.capcog.org/wp-content/uploads/2019/10/2012-Flood-Damage-Prevention-Ordinance.pdf</a>
Calhoun County	Yes	Yes	Yes	No	Yes	Moderate	Unknown	Unknown	<a href="http://www.calhouncotx.org/Floodplain%20Order%209-25-14%20Original%20with%20signatures.pdf">http://www.calhouncotx.org/Floodplain%20Order%209-25-14%20Original%20with%20signatures.pdf</a>
Cibolo	Yes	Yes	Yes	No	Unknown	Unknown	Unknown	Unknown	<a href="https://library.municode.com/tx/cibolo/codes/code_of_ordinances?nodeId=PTIICOR_CH30FL">https://library.municode.com/tx/cibolo/codes/code_of_ordinances?nodeId=PTIICOR_CH30FL</a>
Comal County	Yes	Yes	Yes	No	Yes	Moderate	Unknown	Unknown	<a href="https://cceo.org/flood/documents/Flood_Damage_Prevention_Order.pdf">https://cceo.org/flood/documents/Flood_Damage_Prevention_Order.pdf</a>
Creedmoor	Yes	Yes	Yes	No	Unknown	Unknown	Unknown	Unknown	-
Cuero	Yes	Yes	Yes	No	Yes	Moderate	Unknown	Unknown	<a href="https://z2.frankinlegal.net/franklin/Z2Browser2.html?showset=cueroset">https://z2.frankinlegal.net/franklin/Z2Browser2.html?showset=cueroset</a>
DeWitt County	Yes	Yes	Yes	No	Unknown	Unknown	Unknown	Unknown	<a href="http://www.co.dewitt.tx.us/upload/page/1604/docs/DeWitt_Co_Flood_Damage_Court_Order_60.3xdx[1].pdf">http://www.co.dewitt.tx.us/upload/page/1604/docs/DeWitt_Co_Flood_Damage_Court_Order_60.3xdx[1].pdf</a>
Fayette County	Yes	Yes	Yes	No	Yes	Moderate	Unknown	Unknown	<a href="https://www.capcog.org/wp-content/uploads/2019/10/Flood-Damage-Prevention-Regulations.pdf">https://www.capcog.org/wp-content/uploads/2019/10/Flood-Damage-Prevention-Regulations.pdf</a>
Flatonia	Yes	Yes	Yes	No	Unknown	Unknown	Unknown	Unknown	<a href="https://z2.frankinlegal.net/franklin/Z2Browser2.html?showset=flatoniaset">https://z2.frankinlegal.net/franklin/Z2Browser2.html?showset=flatoniaset</a>
Garden Ridge	Yes	Yes	Yes	No	Unknown	Unknown	Unknown	Unknown	<a href="https://www.ci.garden-ridge.tx.us/313/List-of-Ordinances">https://www.ci.garden-ridge.tx.us/313/List-of-Ordinances</a>
Gillespie County	Yes	Yes	Yes	No	Unknown	Unknown	Unknown	Unknown	-
Goliad County	Yes	Yes	Yes	No	Unknown	Unknown	Unknown	Unknown	<a href="http://www.co.goliad.tx.us/upload/page/2538/docs/Subdivision_Regulations_04-08_10-11[1].pdf">http://www.co.goliad.tx.us/upload/page/2538/docs/Subdivision_Regulations_04-08_10-11[1].pdf</a>
Gonzales County	Yes	Yes	Yes	No	Unknown	Unknown	Unknown	Unknown	<a href="http://www.co.gonzales.tx.us/upload/page/2427/docs/Permits/Floodplain%20Order.pdf">http://www.co.gonzales.tx.us/upload/page/2427/docs/Permits/Floodplain%20Order.pdf</a>
Gonzales	Yes	Yes	Yes	No	Unknown	Unknown	Unknown	Unknown	<a href="https://z2.frankinlegal.net/franklin/Z2Browser2.html?showset=gonzalesset">https://z2.frankinlegal.net/franklin/Z2Browser2.html?showset=gonzalesset</a>

Entity	Floodplain management regulations (Yes/No/Unknown)	Adopted minimum regulations pursuant to Texas Water Code Section 16.31457 (Yes/No)	NFIP Participant (Yes/No)	Community Rating System Participant (Yes/No) If Yes, CRS Level is indicated	Higher Standards Adopted (Yes/No)	Floodplain Management Practices (Strong/Moderate/Low/None)	Level of enforcement of practices (High/Moderate/Low/None)	Existing Stormwater or Drainage Fee (Yes/No)	Web Link to Entity Regulations
Guadalupe County	Yes	Yes	Yes	Yes - 8	Yes	Strong	High	Unknown	<a href="http://www.co.guadalupe.tx.us/eh/pdfs/floodplain_order.pdf">http://www.co.guadalupe.tx.us/eh/pdfs/floodplain_order.pdf</a>
Hays County	Yes	Yes	Yes	No	Yes	Moderate	Unknown	Unknown	<a href="https://hayscountytexas.com/download/departments/development_services/regulations/2017-Hays-County-Development-Regulations.pdf">https://hayscountytexas.com/download/departments/development_services/regulations/2017-Hays-County-Development-Regulations.pdf</a>
Ingram	Yes	Yes	Yes	No	Unknown	Unknown	Unknown	Unknown	<a href="https://z2.franklinlegal.net/franklin/Z2Browser2.html?showset=ingramset">https://z2.franklinlegal.net/franklin/Z2Browser2.html?showset=ingramset</a>
Karnes County	Yes	Yes	Yes	No	Unknown	Unknown	Unknown	Unknown	<a href="http://www.co.karnes.tx.us/upload/page/1027/docs/Financials/Karnes%20County%20Subdivision.pdf">http://www.co.karnes.tx.us/upload/page/1027/docs/Financials/Karnes%20County%20Subdivision.pdf</a>
Kendall County	Yes	Yes	Yes	No	Yes	Moderate	Unknown	Unknown	<a href="https://www.co.kendall.tx.us/upload/page/0069/docs/Kendall%20County%20Engineering%20and%20Development%20Fee%20Schedule.pdf">https://www.co.kendall.tx.us/upload/page/0069/docs/Kendall%20County%20Engineering%20and%20Development%20Fee%20Schedule.pdf</a>
Kerr County	Yes	Yes	Yes	No	Yes	Moderate	Unknown	Unknown	<a href="http://www.co.kerr.tx.us/engineer/Flood_Damage_Prevention_Order_37967_02.24.2020.pdf">http://www.co.kerr.tx.us/engineer/Flood_Damage_Prevention_Order_37967_02.24.2020.pdf</a>
Kerrville	Yes	Yes	Yes	No	Yes	Moderate	Unknown	Unknown	<a href="https://library.municode.com/tx/kerrville/codes/code_of_ordinances">https://library.municode.com/tx/kerrville/codes/code_of_ordinances</a>
Kyle	Yes	Yes	Yes	No	Unknown	Unknown	Unknown	Unknown	<a href="https://library.municode.com/tx/kyle/codes/code_of_ordinances">https://library.municode.com/tx/kyle/codes/code_of_ordinances</a>
Lavaca County	Yes	Yes	Yes	No	Unknown	Unknown	Unknown	Unknown	<a href="https://www.co.lavaca.tx.us/upload/page/2457/Check%20List%20Subdivision%20PDF.pdf">https://www.co.lavaca.tx.us/upload/page/2457/Check%20List%20Subdivision%20PDF.pdf</a>
Lockhart	Yes	Yes	Yes	No	Unknown	Unknown	Unknown	Unknown	<a href="https://library.municode.com/tx/lockhart/codes/code_of_ordinances?nodeId=PTIICOR_CH22FL">https://library.municode.com/tx/lockhart/codes/code_of_ordinances?nodeId=PTIICOR_CH22FL</a>
Luling	Yes	Yes	Yes	No	Unknown	Unknown	Unknown	Unknown	<a href="https://library.municode.com/tx/luling/codes/code_of_ordinances">https://library.municode.com/tx/luling/codes/code_of_ordinances</a>
Marion	Yes	Yes	Yes	No	Unknown	Unknown	Unknown	Unknown	<a href="https://www.cityofmariontx.org/government/forms__documents.php#outer-13">https://www.cityofmariontx.org/government/forms__documents.php#outer-13</a>
Martindale	Yes	Yes	Yes	No	Yes	Moderate	Unknown	Unknown	<a href="https://codelibrary.amlegal.com/codes/martindale/latest/martindale_tx/0-0-0-2122">https://codelibrary.amlegal.com/codes/martindale/latest/martindale_tx/0-0-0-2122</a>
Mountain City	Yes	Yes	Yes	No	Unknown	Unknown	Unknown	Unknown	<a href="https://mountaincitytx.com/mountain-city-water-utility-2020-ccr/">https://mountaincitytx.com/mountain-city-water-utility-2020-ccr/</a>
Mustang Ridge	Yes	Yes	Yes	No	Unknown	Unknown	Unknown	Unknown	-
New Braunfels	Yes	Yes	Yes	Yes - 8	Yes	Strong	High	Unknown	<a href="https://www.nbtexas.org/DocumentView.aspx?DID=1848">https://www.nbtexas.org/DocumentView.aspx?DID=1848</a>
Niederwald	Yes	Yes	Yes	No	Unknown	Unknown	Unknown	Unknown	<a href="http://cityofniederwald.org/sites/default/files/SITE-DEVELOPMENT-ORDINANCE.pdf">http://cityofniederwald.org/sites/default/files/SITE-DEVELOPMENT-ORDINANCE.pdf</a>
Nixon	Yes	Yes	Yes	No	Unknown	Unknown	Unknown	Unknown	<a href="https://nixon.texas.gov/notice-category/ordinances/">https://nixon.texas.gov/notice-category/ordinances/</a>
Real County	Yes	Yes	Yes	No	Unknown	Unknown	Unknown	Unknown	<a href="https://library.municode.com/tx/sugar_land/codes/land_development_code?nodeId=CH8FLDARERE">https://library.municode.com/tx/sugar_land/codes/land_development_code?nodeId=CH8FLDARERE</a>
Refugio County	Yes	Yes	Yes	No	Yes	Moderate	Unknown	Unknown	<a href="http://www.co.refugio.tx.us/upload/page/8757/2019/Subdivision%20Regulations.pdf">http://www.co.refugio.tx.us/upload/page/8757/2019/Subdivision%20Regulations.pdf</a>
San Marcos	Yes	Yes	Yes	Yes - 7	Yes	Strong	High	Yes	<a href="https://library.municode.com/tx/san_marcos/codes/code_of_ordinances?nodeId=SPAGEOR_CH39FLDAPR">https://library.municode.com/tx/san_marcos/codes/code_of_ordinances?nodeId=SPAGEOR_CH39FLDAPR</a>

Entity	Floodplain management regulations (Yes/No/Unknown)	Adopted minimum regulations pursuant to Texas Water Code Section 16.3145? (Yes/No)	NFIP Participant (Yes/No)	Community Rating System Participant (Yes/No) If Yes, CRS Level is indicated	Higher Standards Adopted (Yes/No)	Floodplain Management Practices (Strong/Moderate/Low/None)	Level of enforcement of practices (High/ Moderate/ Low/None)	Existing Stormwater or Drainage Fee (Yes/No)	Web Link to Entity Regulations
Schertz	Yes	Yes	Yes	No	Yes	Moderate	Unknown	Unknown	<a href="https://library.municode.com/tx/schertz/codes/unified_development_code?nodeId=SCUNDECO_ART13LADIACDR_S21.13.3FLDAPR">https://library.municode.com/tx/schertz/codes/unified_development_code?nodeId=SCUNDECO_ART13LADIACDR_S21.13.3FLDAPR</a>
Seguin	Yes	Yes	Yes	No	Yes	Moderate	Unknown	Unknown	<a href="https://library.municode.com/tx/seguin/codes/code_of_ordinances?nodeId=PTIICOR_CH54FL">https://library.municode.com/tx/seguin/codes/code_of_ordinances?nodeId=PTIICOR_CH54FL</a>
Spring Branch	Yes	Yes	Yes	No	Unknown	Unknown	Unknown	Unknown	<a href="https://cceo.org/flood/documents/Spring_Branch_Flood_Damage_Prevention_Ordinance_Interlocal.pdf">https://cceo.org/flood/documents/Spring_Branch_Flood_Damage_Prevention_Ordinance_Interlocal.pdf</a>
Staples	Yes	Yes	Yes	No	Unknown	Unknown	Unknown	Unknown	-
Travis County	Yes	Yes	Yes	No	Yes	Moderate	Unknown	Unknown	<a href="https://library.municode.com/tx/austin/codes/code_of_ordinances?nodeId=TIT30AUTRCOSURE_CH30-4DR">https://library.municode.com/tx/austin/codes/code_of_ordinances?nodeId=TIT30AUTRCOSURE_CH30-4DR</a>
Uhland	Yes	Yes	Yes	No	Unknown	Unknown	Unknown	Unknown	<a href="https://www.cityofuhland.com/wp-content/uploads/2015/12/126-Flood-Damage-Prevention-Ordinance.pdf">https://www.cityofuhland.com/wp-content/uploads/2015/12/126-Flood-Damage-Prevention-Ordinance.pdf</a>
Victoria County	Yes	Yes	Yes	No	Yes	Moderate	Unknown	Unknown	<a href="https://library.municode.com/tx/victoria/codes/code_of_ordinances?nodeId=CICO_CH9.5FLDAPR">https://library.municode.com/tx/victoria/codes/code_of_ordinances?nodeId=CICO_CH9.5FLDAPR</a>
Victoria	Yes	Yes	Yes	No	Yes	Moderate	Unknown	Unknown	<a href="https://library.municode.com/tx/victoria/codes/code_of_ordinances">https://library.municode.com/tx/victoria/codes/code_of_ordinances</a>
Waelder	Yes	Yes	Yes	No	Unknown	Unknown	Unknown	Unknown	-
Wilson County	Yes	Yes	Yes	No	Yes	Moderate	Unknown	Unknown	<a href="http://www.co.wilson.tx.us/upload/page/2300/docs/Dawn/Ordinances/WC_Flood_Order_Final_10272010.pdf">http://www.co.wilson.tx.us/upload/page/2300/docs/Dawn/Ordinances/WC_Flood_Order_Final_10272010.pdf</a>
Wimberley	Yes	Yes	Yes	No	Unknown	Unknown	Unknown	Unknown	<a href="https://z2codes.franklinlegal.net/franklin/Z2Browser2.html?showset=wimberleyset&amp;collection=wimberley&amp;docode=z2Code_z20000702">https://z2codes.franklinlegal.net/franklin/Z2Browser2.html?showset=wimberleyset&amp;collection=wimberley&amp;docode=z2Code_z20000702</a>
Woodcreek	Yes	Yes	Yes	No	Unknown	Unknown	Unknown	Unknown	<a href="https://library.municode.com/tx/woodcreek/codes/code_of_ordinances">https://library.municode.com/tx/woodcreek/codes/code_of_ordinances</a>
Yorktown	Yes	Yes	Yes	No	Unknown	Unknown	Unknown	Unknown	-
Smiley	Unknown	Unknown	Yes	No	Unknown	Unknown	Unknown	Unknown	-
Nordheim	No	No	No	No	Unknown	Unknown	Unknown	Unknown	-

**Key**  
 Floodplain management 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).  
 Level of enforcement: None (does not enforce floodplain management regulations), low (provides permitting of development in the floodplain, may not perform inspections, may not issue fines or violations), moderate (enforces much of the ordinance, performs limited inspections and is limited in issuance of fines and violations), 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).

## **Appendix 3-B |**

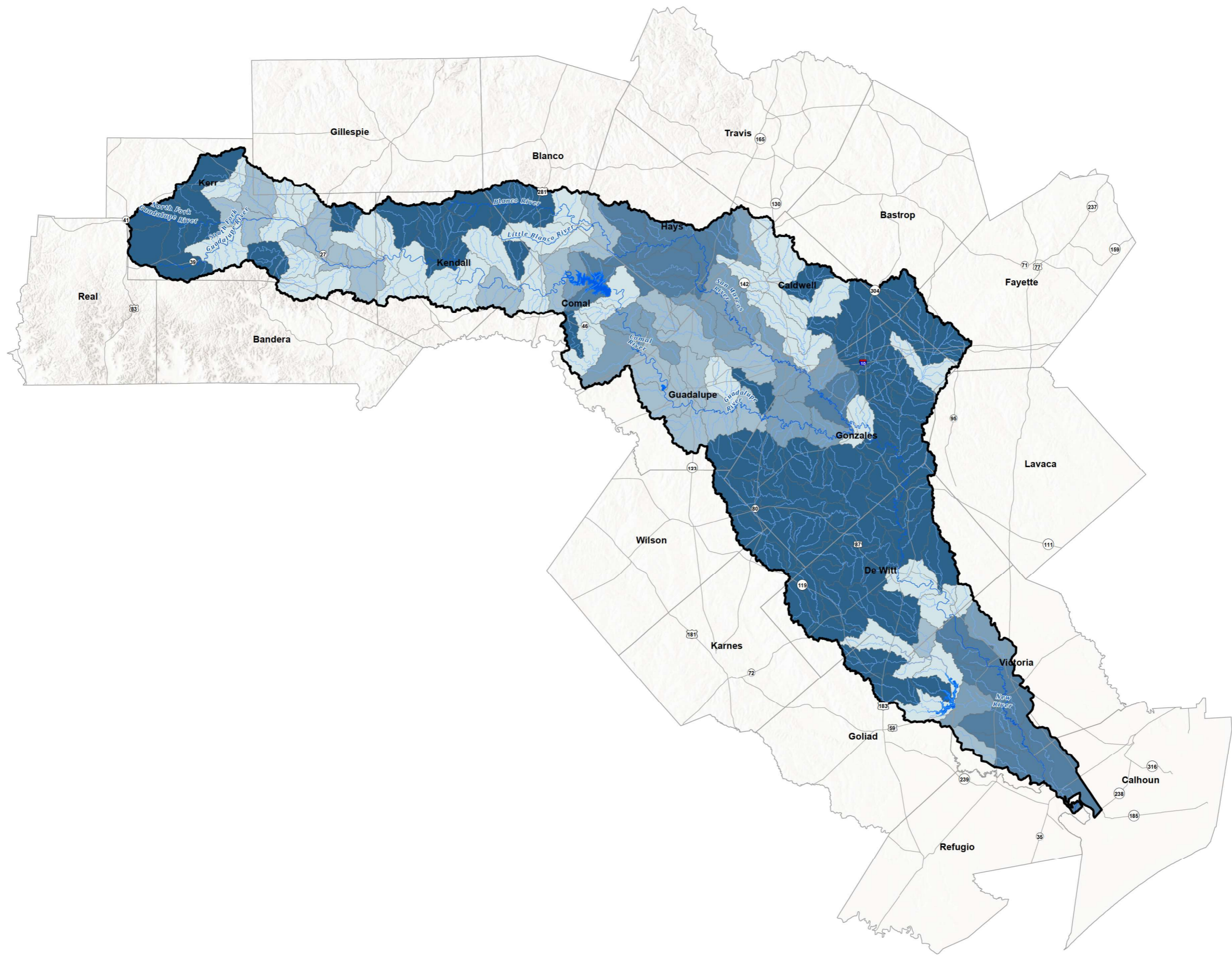
**Table 11:** Regional Flood Plan Flood Mitigation and Floodplain Management Goals

Goal ID	RFIG No.	RFIG Name	Goal	Term of Goal	Target Year	Applicable To	Residual Risk	How Will the Goal be Measured	Overarching Goal	Associated Goal IDs
11000001	11	Guadalupe	Improve safety beyond minimal signage at 35% of low water crossings through automatic flood warning gates and/or flood level passed	Short Term (10-year)	2033	Flood planning region	65% of low water crossings have no change in flood risk	Number of low water crossings with safety improvements	Protect against loss of life and property (362.3.b.13-14)	11000002
11000002	11	Guadalupe	Improve safety beyond minimal signage at 90% of low water crossings through automatic flood warning gates and/or flood level passed	Long Term (30-year)	2053	Flood planning region	10% of low water crossings have no change in flood risk	Number of low water crossings with safety improvements	Protect against loss of life and property (362.3.b.13-14)	11000001
11000003	11	Guadalupe	Consider incorporating nature-based practices when acreage exceeds one acre (LID, green infrastructure, natural channel design) in 30% of Flood Mitigation Projects and Flood Management Strategies recommended in the Regional Flood Plan.	Short Term (10-year)	2033	Flood planning region	No change in flood risk; reduces impacts on the environment	Number of FMPs and FMSS evaluating and implementing nature-based practices	Include strategies and projects that use nature-based features (362.3.b.17)	11000004
11000004	11	Guadalupe	Consider incorporating nature-based practices when acreage exceeds one acre (LID, green infrastructure, natural channel design) in 100% of Flood Mitigation Projects and Flood Management Strategies recommended in the Regional Flood Plan.	Long Term (30-year)	2053	Flood planning region	No change in flood risk; reduces impacts on the environment	Number of FMPs and FMSS evaluating and implementing nature-based practices	Include strategies and projects that use nature-based features (362.3.b.17)	11000003
11000005	11	Guadalupe	Increase adoption of higher standards to 30% of communities in high growth counties.	Short Term (10-year)	2033	Flood planning region	Risk to existing structures does not increase due to better floodplain management practices; Annual flood risk to new construction in participating communities will be <1%	Number of communities adopting higher standards	Protect against loss of life and property (362.3.b.13-14)	11000006
11000006	11	Guadalupe	Increase adoption of higher standards to 70% of communities in high growth counties.	Long Term (30-year)	2053	Flood planning region	Risk to existing structures does not increase due to better floodplain management practices; Annual flood risk to new construction across the region will be <1%	Number of entities participating in NFIP; number of entities with equivalent standards	Protect against loss of life and property (362.3.b.13-14)	11000005
11000007	11	Guadalupe	Increase high growth community CRS participation to 50% of all high growth communities.	Short Term (10-year)	2033	Flood planning region	Risk to existing structures does not increase due to better floodplain management practices; Annual flood risk to new construction in participating communities will be <1%	Number of entities participating in CRS.	Protect against loss of life and property (362.3.b.13-14)	11000008
11000008	11	Guadalupe	Increase high growth community CRS participation to 75% of all high growth communities.	Long Term (30-year)	2053	Flood planning region	Risk to existing structures does not increase due to better floodplain management practices; Annual flood risk to new construction in participating communities will be <1%	Number of entities participating in CRS.	Protect against loss of life and property (362.3.b.13-14)	11000007
11000009	11	Guadalupe	Reduce number of vulnerable buildings/structures/critical facilities within the 1% existing flood hazard layer by 20%.	Short Term (10-year)	2033	Flood planning region	80% of identified structures will have an annual risk of flooding of >1%;	Number of structures removed from existing flood hazard layer	Protect against loss of life and property (362.3.b.13-14)	11000010
11000010	11	Guadalupe	Reduce number of vulnerable buildings/structures/critical facilities within the 1% existing flood hazard layer by 50%.	Long Term (30-year)	2053	Flood planning region	50% of identified structures will have an annual risk of flooding of >1%;	Number of structures removed from existing flood hazard layer	Protect against loss of life and property (362.3.b.13-14)	11000009
11000011	11	Guadalupe	Increase percentage of communities with dedicated funding sources for operations & maintenance and implementation of storm drainage systems to 35% of communities.	Short Term (10-year)	2033	Flood planning region	Entities without dedicated funding have no change in flood risk; entities with new funding sources have reduced risk as stormwater O&M and capital projects are implemented	Number of entities with dedicated funding sources for stormwater operations and maintenance	Protect against loss of life and property (362.3.b.13-14)	11000012
11000012	11	Guadalupe	Increase percentage of communities with dedicated funding sources for operations & maintenance and implementation of storm drainage system to 60% of communities	Long Term (30-year)	2053	Flood planning region	Entities without dedicated funding have no change in flood risk; entities with new funding sources have reduced risk as stormwater O&M and capital projects are implemented	Number of entities with dedicated funding sources for stormwater operations and maintenance	Protect against loss of life and property (362.3.b.13-14)	11000011

**Appendix 4-A |**

## **Map 14: Greatest Gaps in Flood Risk Information**



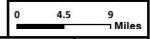



**Legend**

- River
- Tributary
- Major Reservoirs

**Percent Inadequate Mapping**

- 80-100%
- 60-80%
- 30-60%
- 15-30%
- 0-15%





  
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 Office: (512) 617-3100

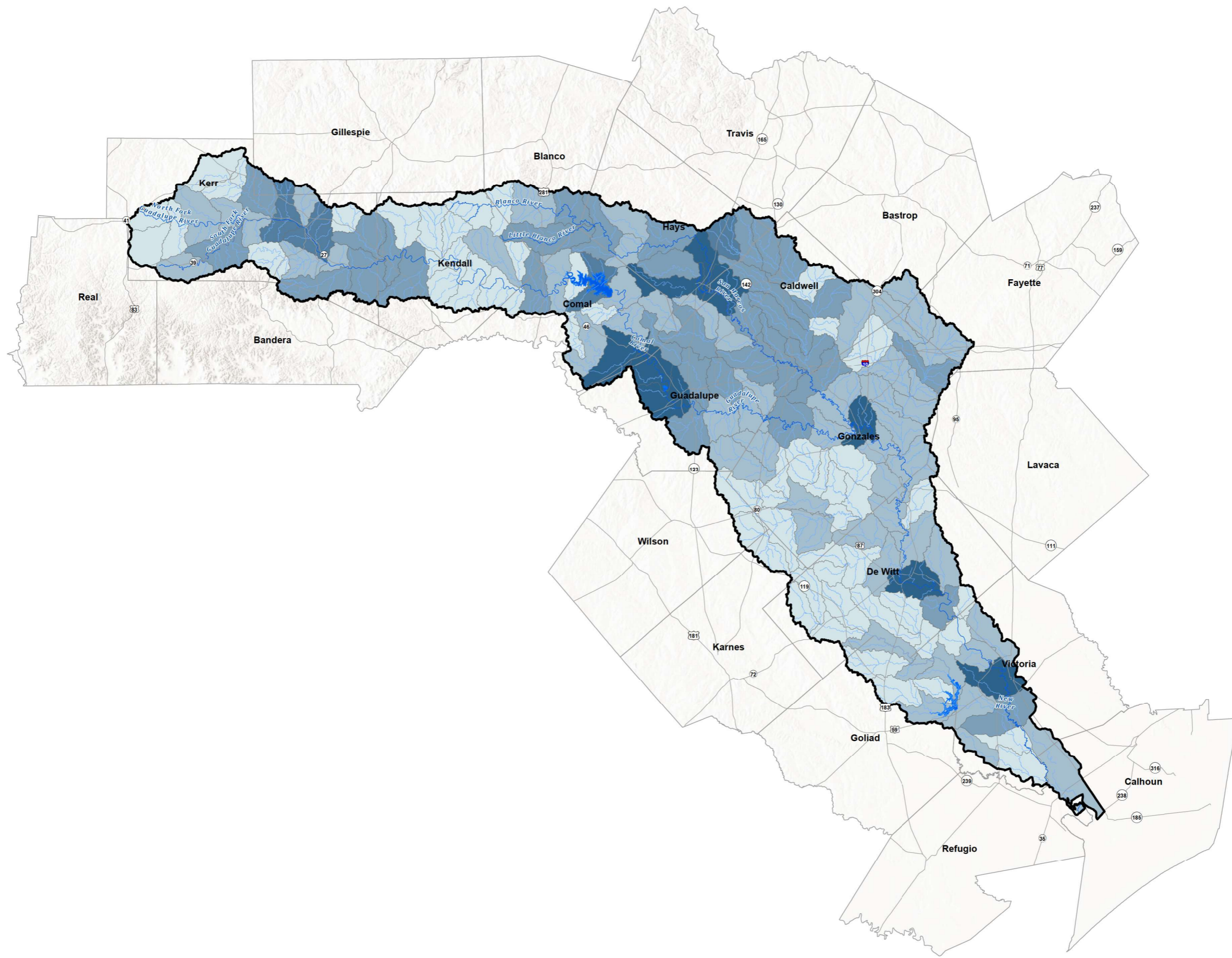


**Greatest Gaps in Flood Risk Information**




Region 11: Guadalupe

PROJECT NO.	GRA21362	<b>Map</b> <b>14</b>
FILE	14_GreatFloodsGuadalupe	
DATE	7/26/2022	
SCALE	1 in = 9 miles	
DRAFTED	02405	






## Map 15: Greatest Flood Risk



**Legend**

-  River
-  Tributary
-  Major Reservoirs

**Total Unweighted**

-  7 - 14
-  15 - 20
-  21 - 28
-  29 - 522
-  523 - 531

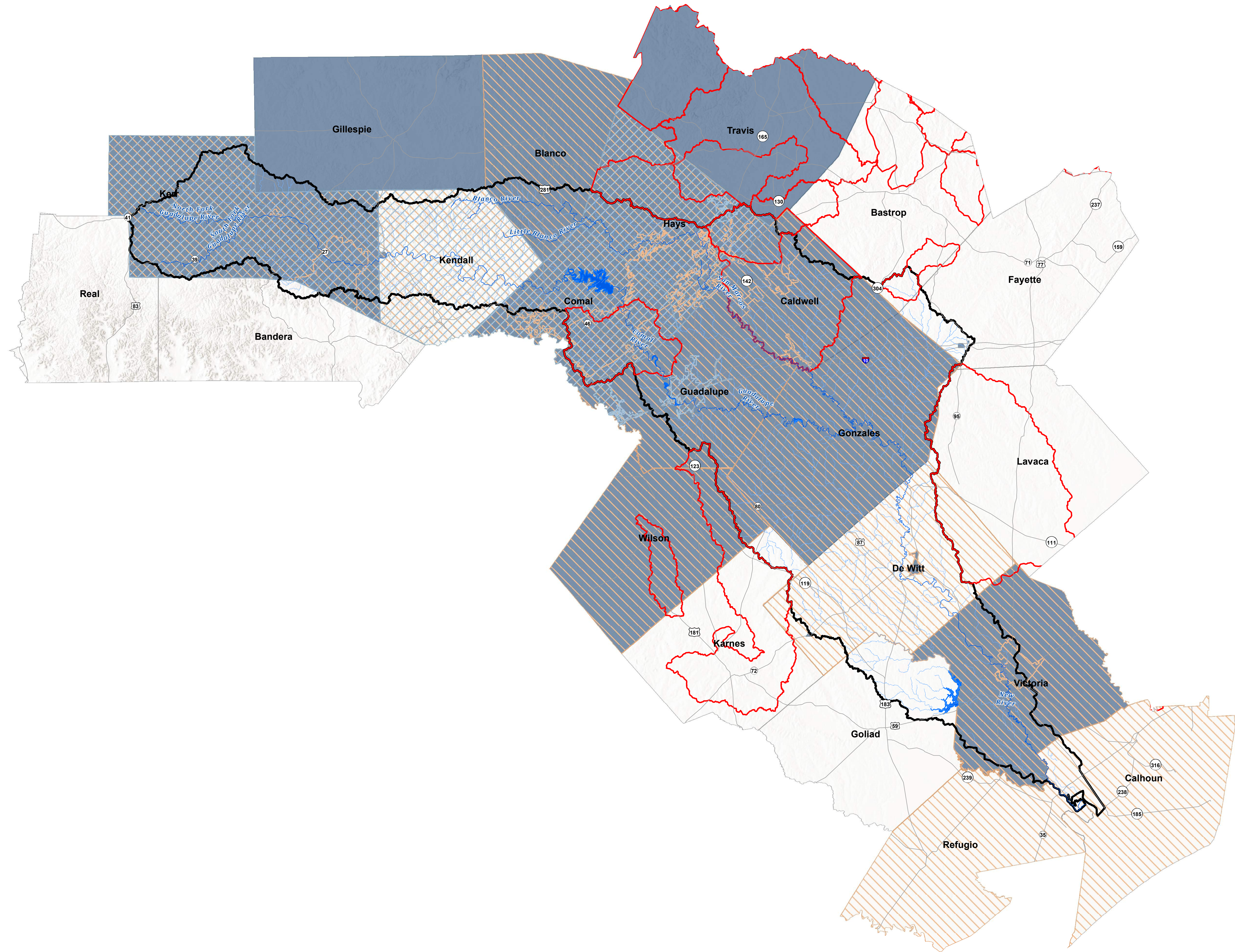


**Greatest Flood Risk**  
Region 11: Guadalupe

PROJECT NO.	GRA21362	<b>Map</b> <b>15</b>
FILE	15_GreatFloodRisk	
DATE	3/14/2022	
SCALE	1 in = 9 miles	
DRAFTED	02405	

## Appendix 4-B |

**Map 16:** Extent of Potential Flood Management Evaluations and Existing Mapping Needs

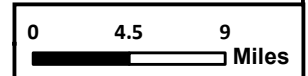


**Legend**

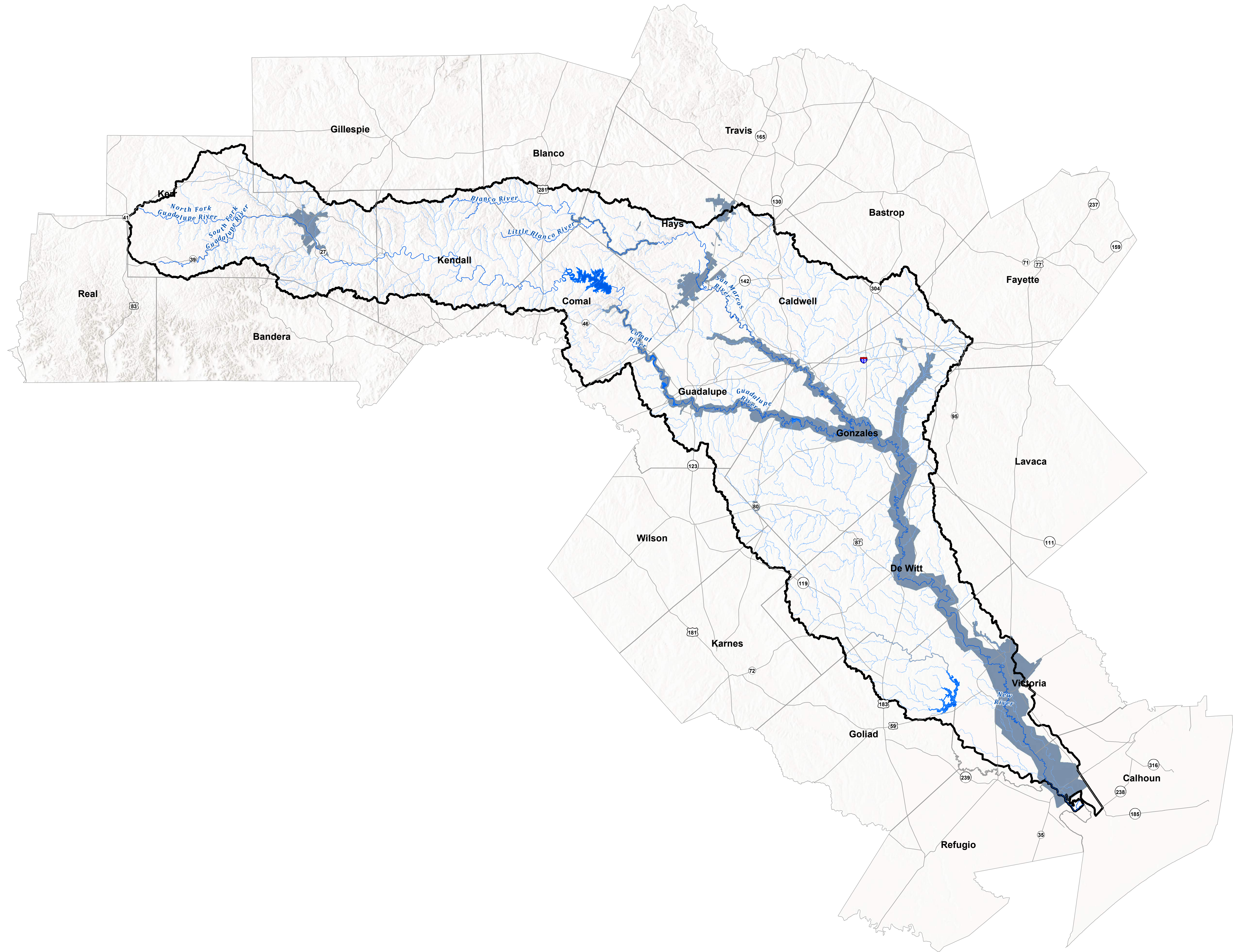
- River
- Tributary
- FIF CAT 1 Project Areas
- Major Reservoirs
- FME Type**
- Preparedness
- Project Planning
- Watershed Planning
- Counties

**Extent of Potential Flood Management Evaluations and Existing Mapping Needs**

Region 11: Guadalupe



**Map 17:** Extent of Potential Flood Mitigation  
Projects



**Legend**

- River
- Tributary
- Major Reservoirs
- Counties
- FMP Extent

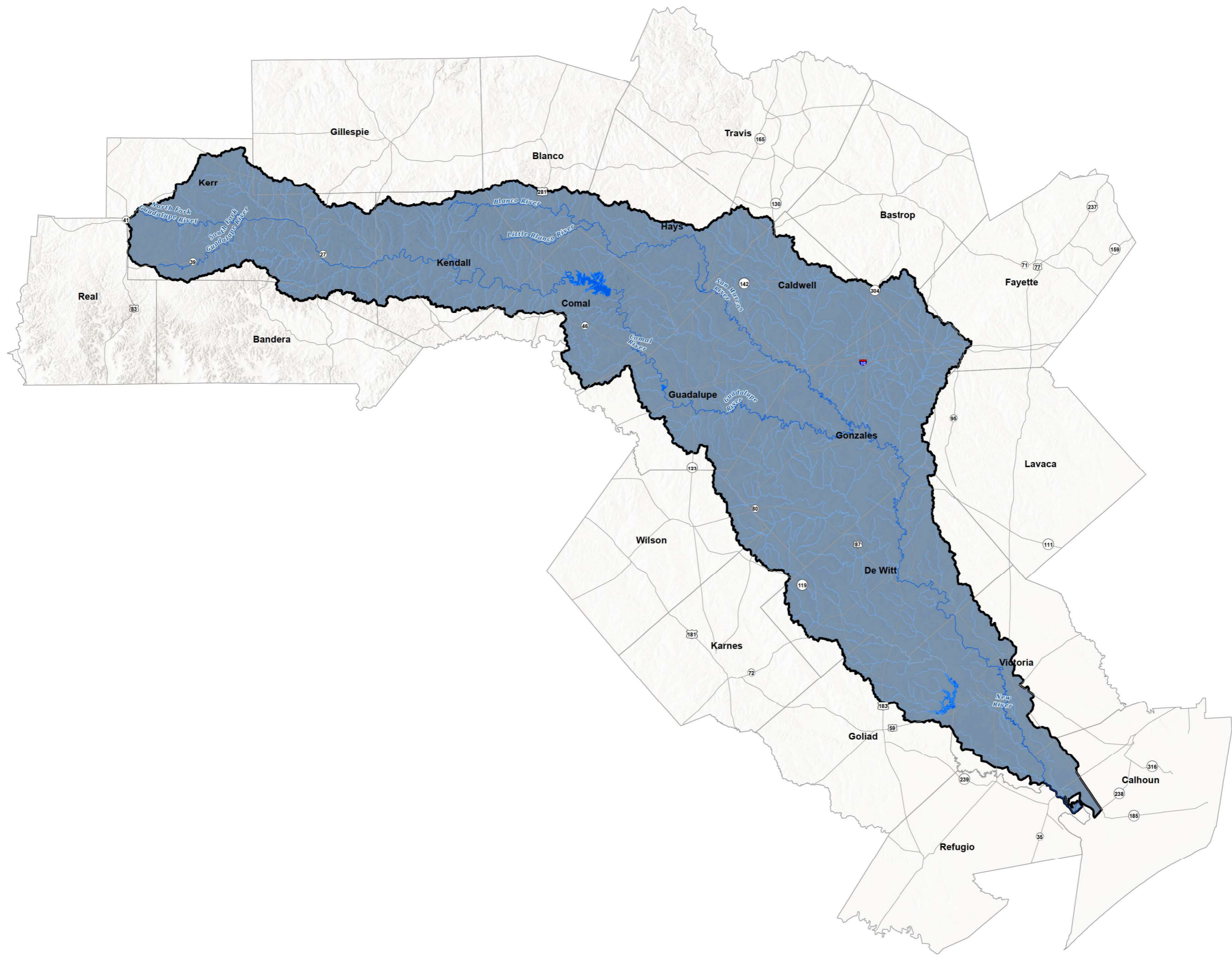
**Extent of Potential Flood Mitigation Projects**  
 Region 11: Guadalupe

0 4.5 9 Miles  

PROJECT NO.	GBA21382	<b>Map</b> <b>17</b>
FILE	17_FMP_Extent	
DATE	12/15/2022	
SCALE	1 in = 9 miles	
DRAFTED	02-405	



**Map 18:** Extent of Potential Flood Management Strategies

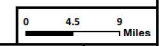


**Legend**

- River
- Tributary
- Major Reservoirs
- FMS Extent

**Extent of Potential Flood Management Strategies**

Region 11: Guadalupe



PROJECT NO.	GRA21362
FILE	18_FMS_Extent
DATE	7/24/2022
SCALE	1 in = 9 miles
DRAFTED	02405

**Table 12:** Potential Flood Management Evaluations Identified by RFPG

FME ID	RFPG No.	RFPG Name	FME Name	Description	Associated Goals	Counties	HUC8s	HUC12s	Watershed Name	Study Type	FME Area (sqmi)	Flood Risk Type	Sponsor	Entities with Oversight	Emergency Need	Estimated Study Cost	Potential Funding Sources and Amount	Estimated number of structures at flood risk	Habitable structures at flood risk	Estimated Population at flood risk	Critical facilities at flood risk (#)	Number of low water crossings at flood risk (#)	Estimated number of road closures (#)	Estimated length of roads at flood risk (Miles)	Estimated active farm & ranch land at flood risk (acres)	Existing or Anticipated Models (year)	Existing or Anticipated Maps (year)
111000001	11	Guadalupe	Blanco County Low Water Crossing Improvements Study	Study of solutions to upgrade and/or raise low water crossing in the county. The low water crossings most frequently and most severely flooded will be assessed for elevation and improvement (e.g., curbed and/or pedestrian walkways) roadways.	11000001, 11000002	Blanco	12100203, 12100201	-	Multiple	Watershed Planning	711.0	Riverine	Blanco	Multiple	No	\$250,000	-	167	122	256	0	30	0	14.2	4091.8	Yes, Unknown	Yes, Unknown
111000002	11	Guadalupe	Blanco County Soil Conservation Plan	Develop soil conservation plan which provides information on proper land stewardship including diagram, soil map, assessment of vegetation and wildlife fuels, schedule for applying conservation practices; plan for operation and maintenance.	11000003, 11000004	Blanco	12100203, 12100201	-	Multiple	Watershed Planning	711.0	Riverine	Blanco	Multiple	No	\$100,000	-	167	122	256	0	30	0	14.2	4091.8	Yes, Unknown	Yes, Unknown
111000003	11	Guadalupe	Caldwell County Bridge Improvements Project Planning	Project planning for proposed project to replace antiquated bridges built before 1950. These bridges cannot support the weight of emergency vehicles. In addition, upgraded bridge infrastructure would reduce backwater flooding at undersized crossings.	11000009, 11000010	Caldwell	12100202, 12100203	-	Multiple	Project Planning	544.7	Riverine	Caldwell	Multiple	No	\$256,000	-	937	635	2,190	7	40	0	71.2	35718.5	Yes, Unknown	Yes, Unknown
111000004	11	Guadalupe	Caldwell County Emergency Service District #1 Drainage and Utility Plan	Develop a drainage and utility plan.	11000009, 11000010	Caldwell, Hays	12100203	-	San Marcos	Watershed Planning	110.6	Riverine	Caldwell County Emergency Service District #1	Multiple	No	\$100,000	-	136	74	289	0	13	0	10.9	4872.8	Yes, Unknown	Yes, Unknown
111000005	11	Guadalupe	Caldwell County Emergency Service District #3 River Crossing Improvements Study	Study solutions to upgrade river crossings throughout the district including but not limited to Scull Road Bridge.	11000001, 11000002	Caldwell	12100203	-	San Marcos	Watershed Planning	23.6	Riverine	Caldwell County Emergency Service District #3	Multiple	No	\$1,000,000	-	465	347	1,254	1	5	0	12.6	3124.1	Yes, Unknown	Yes, Unknown
111000006	11	Guadalupe	Caldwell County Emergency Service District #3 Repetitive Loss Property Mitigation Study	Study of identify flood-prone and repetitive loss properties through the Texas Water Development Board and identify and study solutions to reduce or eliminate flooding at identified properties.	11000009, 11000010	Caldwell	12100203	-	San Marcos	Project Planning	23.6	Riverine	Caldwell County Emergency Service District #3	Multiple	No	\$1,000,000	-	465	347	1,254	1	5	0	12.6	3124.1	Yes, Unknown	Yes, Unknown
111000007	11	Guadalupe	Caldwell County Emergency Service District #4 Fire Station 2 Project Planning	Planning for proposed project to build a swell and raise driveway of Fire Station 2 to prevent inundation of facility and to keep station in service during major storm events.	11000015, 11000016	Caldwell	12100203	-	San Marcos	Project Planning	0.0	Riverine	Caldwell County Emergency Service District #4	Multiple	No	\$100,000	-	0	0	0	0	0	0	0.0	0.0	Yes, Unknown	Yes, Unknown
111000008	11	Guadalupe	Canyon Regional WA Hays Caldwell Water Treatment Plant Floodwall Project Planning	Project planning for Canyon Regional WA - Hays Caldwell Water Treatment Plant Floodwall Project	11000009, 11000010	Guadalupe	12100202	-	Middle Guadalupe	Project Planning	0.0	Riverine	Canyon Regional Water Authority	Multiple	No	\$159,355	-	1	0	0	0	0	0	0.1	0.0	Yes, Unknown	Yes, Unknown
111000009	11	Guadalupe	Center Point ISD Drainage Improvements Study	Study of solutions to construct new storm drainage infrastructure to reduce the potential impacts of future flood events.	11000009, 11000010	Kerr	12100201	-	Upper Guadalupe	Watershed Planning	95.5	Riverine	Caldwell County Emergency Service District #4	Multiple	No	\$100,000	-	462	293	730	0	16	0	22.9	4927.8	Yes, Unknown	Yes, Unknown
111000010	11	Guadalupe	City of Cibolo and Seguin Road Access and Conditions Study	Study to evaluate access and road conditions for response vehicles, develop and implement options to improve access and/or add redundant access routes in high risk areas.	11000015, 11000016	Guadalupe	12100202	-	Middle Guadalupe	Preparedness	59.2	Riverine	Cibolo	Multiple	No	\$500,000	-	846	642	2,283	5	8	0	25.2	1157.1	Yes, Unknown	Yes, Unknown
111000011	11	Guadalupe	City of Cibolo and Seguin USACE Study	Undertake a comprehensive study of flood risk and reduction alternatives, with the assistance of the U.S. Army Corps of Engineers. Project planning to implement feasible alternatives for flood reduction.	11000009, 11000010	Guadalupe	12100202	-	Middle Guadalupe	Watershed Planning	59.2	Riverine	Cibolo	Multiple	No	\$1,000,000	-	846	642	2,283	5	8	0	25.2	1157.1	Yes, Unknown	Yes, Unknown
111000012	11	Guadalupe	City of Buda Dam Study	Study to evaluate dam failure risks, planning for structural and nonstructural measures to protect the integrity of the earthen fill dams.	11000009, 11000010	Hays	12100203	-	San Marcos	Preparedness	9.3	Riverine	Buda	Multiple	No	\$500,000	-	3	1	3	0	1	0	0.9	7.7	Yes, Unknown	Yes, Unknown
111000013	11	Guadalupe	City of Bulverde Drainage Improvements Study	Study of solutions to replace existing culverts with larger ones, improve drainage channels; clear-out existing drainage channels; survey and remove hazardous trees from drainage systems.	11000009, 11000010	Comal	12100202, 12100201	-	Multiple	Watershed Planning	15.8	Riverine	Bulverde	Multiple	No	\$150,000	-	0	0	0	0	1	0	0.6	1.4	Yes, Unknown	Yes, Unknown
111000014	11	Guadalupe	City of Bulverde Local Flooding Study	Study of solutions to elevate some segments of roadways in various portions of the community to address localized flooding issues.	11000009, 11000010	Comal	12100202, 12100201	-	Multiple	Watershed Planning	15.8	Riverine	Bulverde	Multiple	No	\$100,000	-	0	0	0	0	1	0	0.6	1.4	Yes, Unknown	Yes, Unknown
111000015	11	Guadalupe	City of Flatonia Drainage Project Planning	Project planning for proposed project to make culvert and drainage ditch improvements from just south of the Union Pacific Railroad at US 90 to the north side frontage road of I-10.	11000009, 11000010	Fayette	12100202	-	Middle Guadalupe	Project Planning	0.7	Riverine	Flatonia	Multiple	No	\$2,739,000	-	0	0	0	0	0	0	0.1	15.4	Yes, Unknown	Yes, Unknown
111000016	11	Guadalupe	City of Flatonia WWTP Floodproofing Project Planning	Project planning for proposed project to floodproof Waste Water Treatment Plant	11000015, 11000016	Fayette	12100202	-	Middle Guadalupe	Project Planning	0.0	Riverine	Flatonia	Multiple	No	\$100,000	-	0	0	0	0	0	0	0.0	0.0	Yes, Unknown	Yes, Unknown
111000017	11	Guadalupe	City of Garden Ridge Drainage Improvements Project Planning	Project planning to complete final phase of drainage infrastructure upgrades.	11000009, 11000010	Comal	12100202	-	Middle Guadalupe	Project Planning	7.3	Riverine	Garden Ridge	Multiple	No	\$100,000	-	9	0	20	0	0	0	0.0	18.4	Yes, Unknown	Yes, Unknown
111000018	11	Guadalupe	City of Gonzales Tinsley Creek Improvement Project Planning	Project planning to upgrade aging infrastructure that was overwhelmed during Hurricane Harvey. Projects may include replacing box culvert bridges, replacing box culvert bridges with clear span bridges, and relocating utilities within the stream bed.	11000009, 11000010	Gonzales	12100202	-	Middle Guadalupe	Project Planning	6.1	Riverine	Gonzales	Multiple	No	\$600,000	-	532	412	1,070	2	5	0	13.4	127.7	Yes, Unknown	Yes, Unknown
111000019	11	Guadalupe	City of Gonzales Tinsley Creek Flood Mitigation Project Planning	Project planning for proposed improvements along Tinsley Creek include replacing a low water crossing at Johnson Street, adding culverts under Johnson Street, and replacing box culvert crossings with free span bridge crossings at several streets.	11000001, 11000002	Gonzales	12100202	-	Middle Guadalupe	Project Planning	6.1	Riverine	Gonzales	Multiple	No	\$430,000	-	532	412	1,070	2	5	0	13.4	127.7	Yes, Unknown	Yes, Unknown
111000020	11	Guadalupe	City of Ingram Drainage Improvements Study	Study of solutions to upgrade existing storm drainage infrastructure to reduce the potential impacts of future flood events.	11000009, 11000010	Kerr	12100201	-	Upper Guadalupe	Watershed Planning	1.5	Riverine	Ingram	Multiple	No	\$100,000	-	122	76	141	0	0	0	3.1	24.2	Yes, Unknown	Yes, Unknown
111000022	11	Guadalupe	City of Kerrville Pinto Trail Project Planning	Project planning for proposed project to provide flood relief to the properties adjacent to the channel at risk of flooding, including widening existing channels, constructing a grass-lined trapezoidal channel, and seeding the proposed earthen channels.	11000009, 11000010	Kerr	12100201	-	Upper Guadalupe	Project Planning	0.0	Riverine	Kerrville	Multiple	No	\$100,000	-	0	0	0	0	0	0	0.0	0.0	Yes, Unknown	Yes, Unknown
111000023	11	Guadalupe	City of Kerrville Park Street Low Water Crossing Project Planning	Project planning for proposed project to improve or replace the Park Street Low Water Crossing.	11000001, 11000002	Kerr	12100201	-	Upper Guadalupe	Project Planning	0.0	Riverine	Kerrville	Multiple	No	\$340,000	-	0	0	0	0	1	0	0.1	0.0	Yes, Unknown	Yes, Unknown
111000024	11	Guadalupe	City of Kerrville First Street Low Water Crossing Project Planning	Project planning for proposed project to improve or replace the First Street Low Water Crossing.	11000001, 11000002	Kerr	12100201	-	Upper Guadalupe	Project Planning	0.0	Riverine	Kerrville	Multiple	No	\$510,000	-	0	0	0	0	1	0	0.0	0.0	Yes, Unknown	Yes, Unknown
111000025	11	Guadalupe	City of Kerrville Fourth Street Low Water Crossing Project Planning	Project planning for proposed project to improve or replace the Park Street Low Water Crossing.	11000001, 11000002	Kerr	12100201	-	Upper Guadalupe	Project Planning	0.0	Riverine	Kerrville	Multiple	No	\$180,000	-	0	0	0	0	1	0	0.1	0.0	Yes, Unknown	Yes, Unknown

FME ID	RFPG No.	RFPG Name	FME Name	Description	Associated Goals	Counties	HUC8s	HUC12s	Watershed Name	Study Type	FME Area (sqmi)	Flood Risk Type	Sponsor	Entities with Oversight	Emergency Need	Estimated Study Cost	Potential Funding Sources and Amount	Estimated number of structures at flood risk	Habitable structures at flood risk	Estimated Population at flood risk	Critical facilities at flood risk (#)	Number of low water crossings at flood risk (#)	Estimated number of road closures (#)	Estimated length of roads at flood risk (Miles)	Estimated active farm & ranch land at flood risk (acres)	Existing or Anticipated Models (year)	Existing or Anticipated Maps (year)
111000026	11	Guadalupe	City of Kerrville Hill Country Drive at SH 16 Project Planning	Project planning for proposed project to raise the roadway profile and regrade Hill Country Drive, and increase the downstream pipe capacity at Hill Country Drive.	11000009, 11000010	Kerr	12100201	-	Upper Guadalupe	Project Planning	0.0	Riverine	Kerrville	Multiple	No	\$245,000	-	0	0	0	0	0	0	0.0	0.0	Yes, Unknown	Yes, Unknown
111000028	11	Guadalupe	City of Kerrville Harper Street between Culberson Avenue and Lewis Avenue Project Planning	Project planning for proposed storm drain system project to relieve localized flooding and excessive ponding that occurs throughout Harper Street.	11000009, 11000010	Kerr	12100201	-	Upper Guadalupe	Project Planning	0.0	Riverine	Kerrville	Multiple	No	\$180,000	-	1	1	2	0	0	0	0.0	0.0	Yes, Unknown	Yes, Unknown
111000029	11	Guadalupe	City of Kerrville Circle Avenue Drainage Channel Project Planning	Project planning for proposed channel and street improvement project to alleviate sedimentation and erosion issues at the intersection of Culberson Avenue and Circle Avenue.	11000009, 11000010	Kerr	12100201	-	Upper Guadalupe	Project Planning	0.0	Riverine	Kerrville	Multiple	No	\$100,000	-	0	0	0	0	0	0	0.0	0.0	Yes, Unknown	Yes, Unknown
111000030	11	Guadalupe	City of Kerrville Jack Drive Undersized Inlet Project Planning	Project planning for proposed street and drainage improvements project to relieve road and property flooding from occurring directly downstream of Jack Drive's existing undersized inlet.	11000009, 11000010	Kerr	12100201	-	Upper Guadalupe	Project Planning	0.0	Riverine	Kerrville	Multiple	No	\$240,000	-	0	0	0	0	0	0	0.0	0.0	Yes, Unknown	Yes, Unknown
111000031	11	Guadalupe	City of Kerrville Harper Road to Town Creek (Fay Drive) Drainage Improvements Study	Study of solutions to implement drainage improvements on Harper Road to Town Creek (Fay Drive).	11000009, 11000010	Kerr	12100201	-	Upper Guadalupe	Project Planning	0.2	Riverine	Kerrville	Multiple	No	\$150,000	-	4	4	7	0	1	0	0.1	0.0	Yes, Unknown	Yes, Unknown
111000033	11	Guadalupe	City of Kyle Prairie and Woodland Restoration Plan	Prepare and implement a prairie or woodland restoration plan for 1 or more of Kyle's park properties. Selection of a municipal park where all or a portion of the site may be restored to a natural grassland or woodland	11000003, 11000004	Hays	12100203	-	San Marcos	Watershed Planning	31.2	Riverine	Kyle	Multiple	No	\$250,000	-	422	360	1,368	0	9	0	7.2	727.1	Yes, Unknown	Yes, Unknown
111000034	11	Guadalupe	City of Kyle - N. Burleson Street Drainage Improvements Project Planning	Project planning for proposed project to conduct street reconstruction and drainage improvements to minimize flooding in the downtown area.	11000009, 11000010	Hays	12100203	-	San Marcos	Project Planning	0.0	Riverine	Kyle	Multiple	No	\$983,000	-	1	1	3	0	1	0	0.2	0.0	Yes, Unknown	Yes, Unknown
111000035	11	Guadalupe	City of Lockhart Drainage Improvements Study	Study to identify Capital Improvements to Municipal Drainage System and study solutions to upgrade system to improve drainage capacity and reduce flood damages.	11000009, 11000010	Caldwell	12100203	-	San Marcos	Watershed Planning	15.6	Riverine	Lockhart	Multiple	No	\$2,400,000	-	62	43	187	2	6	0	5.9	344.1	Yes, Unknown	Yes, Unknown
111000036	11	Guadalupe	City of Lockhart USACE Study	Undertake a comprehensive study of flood risk and reduction alternatives with USACE, covering all incorporated and unincorporated areas of the city that currently have limited studies with no determined base flood elevations as well as unmapped areas.	11000009, 11000010	Caldwell	12100203	-	San Marcos	Watershed Planning	15.6	Riverine	Lockhart	Multiple	No	\$360,000	-	62	43	187	2	6	0	5.9	344.1	Yes, Unknown	Yes, Unknown
111000037	11	Guadalupe	City of Luling Drainage Improvements Study	Study of solutions to upgrade undersized stormwater drains and culverts.	11000009, 11000010	Guadalupe, Caldwell	12100203	-	San Marcos	Watershed Planning	5.5	Riverine	Luling	Multiple	No	\$150,000	-	74	52	199	0	0	0	6.3	209.5	Yes, Unknown	Yes, Unknown
111000038	11	Guadalupe	City of Martindale Drainage Improvements Study	Study of solutions to upgrade undersized stormwater drains and culverts.	11000009, 11000010	Caldwell	12100203	-	San Marcos	Watershed Planning	2.1	Riverine	Martindale	Multiple	No	\$100,000	-	196	167	550	1	3	0	5.5	52.7	Yes, Unknown	Yes, Unknown
111000039	11	Guadalupe	City of Mountain City Repetitive Loss Structure Mitigation Study	Study of solutions to floodproof or otherwise mitigate repetitive loss structures that have been identified by FEMA for the number of flood insurance claims.	11000009, 11000010	Hays	12100203	-	San Marcos	Project Planning	0.5	Riverine	Mountain City	Multiple	No	\$150,000	-	0	0	0	0	0	0	0.0	0.0	Yes, Unknown	Yes, Unknown
111000043	11	Guadalupe	City of New Braunfels - Box Culvert Installation to Reduce Flood Risk on Blieders Creek, Comal River and Landa Park Project Planning	Project planning for proposed drainage improvements project to reduce flooding in the Blieders Creek and German Creek watersheds by conveying flows to the Guadalupe River. The project is also intended to relieve flooding in the Landa Park area.	11000009, 11000010	Comal	12100202	-	Middle Guadalupe	Project Planning	0.4	Riverine	New Braunfels	Multiple	No	\$878,000	-	60	30	353	0	4	0	1.0	5.1	Yes, Unknown	Yes, Unknown
111000044	11	Guadalupe	City of New Braunfels Faust St / Nacogdoches Ave Improvements Project Planning	Study to analyze drainage conveyance and flooding issues within the Faust Street and Nacogdoches Avenue area and project planning for solutions within project area.	11000009, 11000010	Comal	12100202	-	Middle Guadalupe	Watershed Planning	0.1	Riverine	New Braunfels	Multiple	No	\$1,102,000	-	2	0	8	0	0	0	0.0	0.0	Yes, Unknown	Yes, Unknown
111000045	11	Guadalupe	City of New Braunfels Dry Comal Creek Tributary East Watershed Project Planning	Study to analyze drainage conveyance and flooding issues within the Dry Comal Creek Tributaries East area (Kerlick Lane/Encino Drive/Mission Drive) and project planning for solutions within project area.	11000009, 11000010	Comal	12100202	-	Middle Guadalupe	Watershed Planning	1.1	Riverine	New Braunfels	Multiple	No	\$344,000	-	77	48	588	0	0	0	1.3	15.3	Yes, Unknown	Yes, Unknown
111000047	11	Guadalupe	City of New Braunfels Hunters Creek Regional Project Planning	Study to analyze drainage conveyance and flooding issues within the Hunters Creek area including the detention facility for the Westpointe development and project planning for solutions within project area.	11000009, 11000010	Comal	12100202	-	Middle Guadalupe	Watershed Planning	0.1	Riverine	New Braunfels	Multiple	No	\$211,000	-	0	0	0	0	0	0	0.0	0.0	Yes, Unknown	Yes, Unknown
111000048	11	Guadalupe	City of New Braunfels South Guadalupe Tributary Watershed Project Planning	Study to analyze drainage conveyance and flooding issues within the South Guadalupe River tributary area (Mesquite/Eastman/Oleander/Walnut Heights) and project planning for solutions within project area.	11000009, 11000010	Comal	12100202	-	Middle Guadalupe	Watershed Planning	0.4	Riverine	New Braunfels	Multiple	No	\$168,000	-	12	12	35	0	0	0	0.2	0.0	Yes, Unknown	Yes, Unknown
111000049	11	Guadalupe	City of New Braunfels Dry Comal Creek West Watershed Project Planning	Project planning for solutions to minimize flooding issues within the Cedar Elm Street, Landa-Madeline drainage area.	11000009, 11000010	Comal	12100202	-	Middle Guadalupe	Watershed Planning	0.1	Riverine	New Braunfels	Multiple	No	\$126,000	-	0	0	0	0	0	0	0.0	0.0	Yes, Unknown	Yes, Unknown
111000051	11	Guadalupe	City of Niederwald Engineering Review of City Hall	Contract a consultation from an engineer to review the new City Hall building to ensure its resiliency (modular building that holds community documents and archives).	11000009, 11000010	Caldwell, Hays	12100203	-	San Marcos	Project Planning	3.7	Riverine	Niederwald	Multiple	No	\$10,000	-	9	2	24	0	2	0	1.5	150.0	Yes, Unknown	Yes, Unknown
111000052	11	Guadalupe	City of Nixon Voluntary Buyout Program Project Planning	Project planning to develop and implement a program to buyout NFIP repetitive loss properties.	11000009, 11000010	Gonzales, Wilson	12100202	-	Middle Guadalupe	Project Planning	1.6	Riverine	Nixon	Multiple	No	\$150,000	-	13	6	22	0	0	0	0.1	6.2	Yes, Unknown	Yes, Unknown
111000054	11	Guadalupe	City of San Marcos Regional Detention Study	Study of solutions for regional detention and water quality strategies.	11000009, 11000010	Guadalupe, Caldwell, Hays	12100203	-	San Marcos	Watershed Planning	35.6	Riverine	San Marcos	Multiple	No	\$200,000	-	2,270	1,626	12,650	14	12	0	48.1	822.4	Yes, Unknown	Yes, Unknown
111000055	11	Guadalupe	City of San Marcos Modeling of Purgatory Creek and Willow Springs Creek Overflow Area	2-Dimensional Modeling of the Purgatory Creek and Willow Springs Creek Overflow Area	11000009, 11000010	Hays	12100203	-	San Marcos	Watershed Planning	0.4	Riverine	San Marcos	Multiple	No	\$271,000	-	159	130	349	0	0	0	3.0	0.0	Yes, Unknown	Yes, Unknown
111000056	11	Guadalupe	City of San Marcos Low Water Crossing at Jackman Project Planning	Project planning to replace low water crossing at Jackman	11000001, 11000002	Hays	12100203	-	San Marcos	Project Planning	0.0	Riverine	San Marcos	Multiple	No	\$150,000	-	0	0	0	0	0	0	0.1	0.0	Yes, Unknown	Yes, Unknown
111000057	11	Guadalupe	City of San Marcos Low Water Crossing at Mitchell and Purgatory Creek Project Planning	Project planning to replace low water crossing at Mitchell and Purgatory Creek	11000001, 11000002	Hays	12100203	-	San Marcos	Project Planning	0.0	Riverine	San Marcos	Multiple	No	\$200,000	-	0	0	0	0	0	0	0.1	0.0	Yes, Unknown	Yes, Unknown
111000058	11	Guadalupe	City of San Marcos LWC at River Road and Railroad Trestle/Blanco River Project Planning	Project planning to replace low water crossing at River Road and Railroad Trestle/Blanco River	11000001, 11000002	Hays	12100203	-	San Marcos	Project Planning	0.0	Riverine	San Marcos	Multiple	No	\$150,000	-	0	0	0	0	1	0	0.1	0.0	Yes, Unknown	Yes, Unknown

FME ID	RFPG No.	RFPG Name	FME Name	Description	Associated Goals	Counties	HUC8s	HUC12s	Watershed Name	Study Type	FME Area (sqmi)	Flood Risk Type	Sponsor	Entities with Oversight	Emergency Need	Estimated Study Cost	Potential Funding Sources and Amount	Estimated number of structures at flood risk	Habitable structures at flood risk	Estimated Population at flood risk	Critical facilities at flood risk (#)	Number of low water crossings at flood risk (#)	Estimated number of road closures (#)	Estimated length of roads at flood risk (Miles)	Estimated active farm & ranch land at flood risk (acres)	Existing or Anticipated Models (year)	Existing or Anticipated Maps (year)	
11100059	11	Guadalupe	City of San Marcos LWC at S LBJ and Purgatory Creek Project Planning	Project planning to replace low water crossing at S LBJ and Purgatory Creek	11000001, 11000002	Hays	12100203	-	San Marcos	Project Planning	0.0	Riverine	San Marcos	Multiple	No	\$150,000	-	0	0	0	0	0	0	0.0	0.0	Yes, Unknown	Yes, Unknown	
11100060	11	Guadalupe	City of San Marcos - Extension of River Ridge Parkway West Project Planning	Project planning for proposed project identified through the San Marcos Transportation Plan, to increase the ability to divert traffic during flooding events	11000009, 11000010	Hays	12100203	-	San Marcos	Project Planning	0.3	Riverine	San Marcos	Multiple	No	\$298,000	-	69	59	1,288	1	0	0	0	3.2	0.4	Yes, Unknown	Yes, Unknown
11100061	11	Guadalupe	City of Seguin Drainage Improvements Study	Study of solutions to increase drainage capacity, add stormwater detention and/or retention basins, and implement drainage improvements as deemed necessary to reduce flood risk.	11000009, 11000010	Guadalupe	12100202	-	Middle Guadalupe	Watershed Planning	38.3	Riverine	Seguin	Multiple	No	\$1,100,000	-	846	642	2,283	5	8	0	25.2	1157.1	Yes, Unknown	Yes, Unknown	
11100062	11	Guadalupe	City of Seguin Low Water Crossing Improvements Study	Study of solutions for drainage improvements at low water crossings.	11000001, 11000002	Guadalupe	12100202	-	Middle Guadalupe	Watershed Planning	38.3	Riverine	Seguin	Multiple	No	\$1,500,000	-	846	642	2,283	5	8	0	25.2	1157.1	Yes, Unknown	Yes, Unknown	
11100063	11	Guadalupe	City of Seguin Ingress Egress Improvements Project Planning	Project planning for proposed project to provide/construct additional means of access into single-entry neighborhoods; Update subdivision codes for a higher level of ingress and egress.	11000015, 11000016	Guadalupe	12100202	-	Middle Guadalupe	Preparedness	38.3	Riverine	Seguin	Multiple	No	\$250,000	-	846	642	2,283	5	8	0	25.2	1157.1	Yes, Unknown	Yes, Unknown	
11100064	11	Guadalupe	City of Seguin City-wide Drainage Improvements Project Planning	Project planning to increase Regional Detention, Channel & Drainage System Improvements.	11000009, 11000010	Guadalupe	12100202	-	Middle Guadalupe	Project Planning	38.3	Riverine	Seguin	Multiple	No	\$200,000	-	846	642	2,283	5	8	0	25.2	1157.1	Yes, Unknown	Yes, Unknown	
11100065	11	Guadalupe	City of Seguin Voluntary Buyout Program Project Planning	Project planning to develop an acquisition and elevation program in flood hazard areas. Elevate or acquire and demolish repetitive loss properties. Acquire high risk vacant land and maintain as open space.	11000009, 11000010	Guadalupe	12100202	-	Middle Guadalupe	Project Planning	38.3	Riverine	Seguin	Multiple	No	\$300,000	-	846	642	2,283	5	8	0	25.2	1157.1	Yes, Unknown	Yes, Unknown	
11100066	11	Guadalupe	City of Seguin Citywide Drainage Project Planning	Project planning for four priority drainage projects within the City of Seguin that would greatly improve the safety of their 25,520 residents. Project areas include North Guadalupe, North Heideke, Mays Creek and Walnut Branch.	11000009, 11000010	Guadalupe	12100202	-	Middle Guadalupe	Project Planning	38.3	Riverine	Seguin	Multiple	No	\$4,304,000	-	846	642	2,283	5	8	0	25.2	1157.1	Yes, Unknown	Yes, Unknown	
11100067	11	Guadalupe	City of Seguin Sewage Treatment Plant Floodproofing Project Planning	Project planning for proposed project to flood-proof sewage treatment plants in flood hazard / low-lying areas.	11000015, 11000016	Guadalupe	12100202	-	Middle Guadalupe	Project Planning	0.0	Riverine	Seguin	Multiple	No	\$100,000	-	8	0	48	0	0	0	0.2	0.0	Yes, Unknown	Yes, Unknown	
11100068	11	Guadalupe	City of Umland Drainage Improvement Project Planning	Project planning for proposed project to mitigate against flooding by increasing the capacity of drainage routes to contain the storm water. Proposed drainage improvements will reduce flood waters backing up into the City.	11000009, 11000010	Caldwell, Hays	12100203	-	San Marcos	Project Planning	2.8	Riverine	Umland	Multiple	No	\$1,334,000	-	27	11	46	0	3	0	1.5	94.1	Yes, Unknown	Yes, Unknown	
11100069	11	Guadalupe	City of Victoria Drainage Improvement Study	Study of solutions to increase dimensions of drainage culverts in areas prone to flooding and/or drainage problems in various City locations.	11000009, 11000010	Victoria	12100204	-	Lower Guadalupe	Watershed Planning	37.5	Riverine	Victoria	Multiple	No	\$1,000,000	-	1,139	933	3,181	24	0	0	36.2	110.7	Yes, Unknown	Yes, Unknown	
11100070	11	Guadalupe	City of Victoria Harden Critical Infrastructure Project Planning	Project planning to harden city buildings, critical infrastructure, and government buildings. Hardening of non-governmental facilities that have been identified as crucial in the response and recovery to/of emergencies and disasters.	11000015, 11000016	Victoria	12100204	-	Lower Guadalupe	Project Planning	37.5	Riverine	Victoria	Multiple	No	\$100,000	-	1,139	933	3,181	24	0	0	36.2	110.7	Yes, Unknown	Yes, Unknown	
11100071	11	Guadalupe	City of Victoria Voluntary Buyout Program Project Planning	Project planning to implement a voluntary acquisition program for repetitive flood properties.	11000009, 11000010	Victoria	12100204	-	Lower Guadalupe	Project Planning	37.5	Riverine	Victoria	Multiple	No	\$150,000	-	1,139	933	3,181	24	0	0	36.2	110.7	Yes, Unknown	Yes, Unknown	
11100072	11	Guadalupe	City of Victoria Flood Gate Project Planning	Project planning for proposed project to rehabilitate, repair, or replace the City of Victoria's existing flood gates, install additional flood gates as appropriate, and construct a storm water lift station in an area to be determined by study.	11000009, 11000010	Victoria	12100204	-	Lower Guadalupe	Project Planning	37.5	Riverine	Victoria	Multiple	No	\$45,000	-	1,139	933	3,181	24	0	0	36.2	110.7	Yes, Unknown	Yes, Unknown	
11100073	11	Guadalupe	City of Victoria Regional Drainage Solutions Project Planning	Project planning for proposed project for five regional drainage solutions within the City: the Gardens Apartment diversion, Shenandoah ditch improvements, Anthony Road outfall improvements, Lone Tree Road outfall improvements, and Clegg Ditch outfall.	11000009, 11000010	Victoria	12100204	-	Lower Guadalupe	Project Planning	37.5	Riverine	Victoria	Multiple	No	\$1,327,962	-	1,139	933	3,181	24	0	0	36.2	110.7	Yes, Unknown	Yes, Unknown	
11100074	11	Guadalupe	City of Victoria - Storm Sewer Improvements Project Planning	Project planning for project to replace storm sewer pipe under 18-inch diameter (29.9 miles). As a result of overland flow analysis and Storm Sewer System Level of Service Analysis, it was determined to replace all pipe less than 18-inch diameter.	11000009, 11000010	Victoria	12100204	-	Lower Guadalupe	Project Planning	37.5	Riverine	Victoria	Multiple	No	\$3,946,100	-	1,139	933	3,181	24	0	0	36.2	110.7	Yes, Unknown	Yes, Unknown	
11100075	11	Guadalupe	City of Victoria Clean and Televis Storm Sewers Project Planning	Project planning for proposed project to clean and televis storm sewers (165.7 miles). As a result of overland flow analysis and Storm Sewer System Level of Service Analysis, it was determined to clean and televis storm sewers.	11000009, 11000010	Victoria	12100204	-	Lower Guadalupe	Project Planning	37.5	Riverine	Victoria	Multiple	No	\$1,662,106	-	1,139	933	3,181	24	0	0	36.2	110.7	Yes, Unknown	Yes, Unknown	
11100076	11	Guadalupe	City of Victoria Regrade Priority Ditches and Driveway Culverts Project Planning	Project planning for proposed drainage improvements. As a result of a roadside ditch capacity evaluation, it was determined that 23 miles of ditch and 669 driveway culverts are negatively impacting conveyance capacity and need to be regraded.	11000009, 11000010	Victoria	12100204	-	Lower Guadalupe	Project Planning	37.5	Riverine	Victoria	Multiple	No	\$1,165,853	-	1,139	933	3,181	24	0	0	36.2	110.7	Yes, Unknown	Yes, Unknown	
11100077	11	Guadalupe	City of Victoria Repair Channel Failures & Sediment Removal Project Planning	Project planning for proposed channel improvements. Using field visits and drone footage, it was determined to repair 33,657 sq ft of concreted lined channel, 11,829 sq ft of earthen channel, and remove 227,099 sq ft of sediment.	11000009, 11000010	Victoria	12100204	-	Lower Guadalupe	Project Planning	37.5	Riverine	Victoria	Multiple	No	\$276,201	-	1,139	933	3,181	24	0	0	36.2	110.7	Yes, Unknown	Yes, Unknown	
11100078	11	Guadalupe	City of Victoria Stream Restoration Study	Study to implement a stream restoration/channelization program to ensure adequate drainage/diversion of storm water, throughout various City low water crossings, streambeds, creek sheds, tributaries, and riverine areas.	11000009, 11000010	Victoria	12100204	-	Lower Guadalupe	Watershed Planning	37.5	Riverine	Victoria	Multiple	No	\$500,000	-	1,139	933	3,181	24	0	0	36.2	110.7	Yes, Unknown	Yes, Unknown	
11100079	11	Guadalupe	City of Waelder Voluntary Buyout Program Project Planning	Project planning to develop and implement a program to buyout NFIP repetitive loss properties.	11000009, 11000010	Gonzales	12100202	-	Middle Guadalupe	Project Planning	1.3	Riverine	Waelder	Multiple	No	\$150,000	-	170	88	207	0	9	0	4.0	4.3	Yes, Unknown	Yes, Unknown	
11100080	11	Guadalupe	City of Wimberley Drainage Master Plan	Creation of drainage master plan for City of Wimberley to mitigate the flood hazard by defining priorities, policies, and strategies to address and remedy the drainage needs and challenges in Wimberley.	11000009, 11000010	Hays	12100203	-	San Marcos	Watershed Planning	8.9	Riverine	Wimberley	Multiple	No	\$150,000	-	503	421	1,045	0	6	0	7.7	25.5	Yes, Unknown	Yes, Unknown	
11100081	11	Guadalupe	City of Wimberley FM 1492 at Blanco River Low Water Crossing Project Planning	Project planning for proposed project to replace low water crossing at FM 1492 at Blanco River	11000001, 11000002	Hays	12100203	-	San Marcos	Project Planning	0.0	Riverine	Wimberley	Multiple	No	\$100,000	-	0	0	0	0	1	0	0.1	0.0	Yes, Unknown	Yes, Unknown	
11100082	11	Guadalupe	City of Wimberley Hidden Valley at Blanco River Low Water Crossing Project Planning	Project planning for proposed project to replace low water crossing at Hidden Valley at Blanco River	11000001, 11000002	Hays	12100203	-	San Marcos	Project Planning	0.0	Riverine	Wimberley	Multiple	No	\$100,000	-	4	4	12	0	1	0	0.2	0.7	Yes, Unknown	Yes, Unknown	
11100083	11	Guadalupe	City of Wimberley Little Arkansas at Blanco River Low Water Crossing Project Planning	Project planning for proposed project to replace low water crossing at Little Arkansas at Blanco River	11000001, 11000002	Hays	12100203	-	San Marcos	Project Planning	0.0	Riverine	Wimberley	Multiple	No	\$100,000	-	0	0	0	0	0	0	0.0	0.6	Yes, Unknown	Yes, Unknown	
11100084	11	Guadalupe	City of Wimberley Valley Drive at Pierce Creek Low Water Crossing Project Planning	Project planning for proposed project to replace low water crossing at Valley Drive at Pierce Creek	11000001, 11000002	Hays	12100203	-	San Marcos	Project Planning	0.0	Riverine	Wimberley	Multiple	No	\$100,000	-	0	0	0	0	1	0	0.1	0.0	Yes, Unknown	Yes, Unknown	

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11100085	11	Guadalupe	City of Wimberley Flite Acres Road Low Water Crossing Project Planning	Project planning for proposed project to replace low water crossing at Flite Acres Road	11000001, 11000002	Hays	12100203	-	San Marcos	Project Planning	0.0	Riverine	Wimberley	Multiple	No	\$100,000	-	4	3	11	0	0	0	0.5	0.0	Yes, Unknown	Yes, Unknown
11100086	11	Guadalupe	City of Wimberley FM 1492 at Pierce Creek Low Water Crossing Project Planning	Project planning for proposed project to replace low water crossing at FM 1492 at Pierce Creek	11000001, 11000002	Hays	12100203	-	San Marcos	Project Planning	0.0	Riverine	Wimberley	Multiple	No	\$100,000	-	3	3	10	0	1	0	0.1	0.0	Yes, Unknown	Yes, Unknown
11100087	11	Guadalupe	City of Wimberley Wilson Creek at River Road Low Water Crossing Project Planning	Project planning for proposed project to replace low water crossing at Wilson Creek at River Road	11000001, 11000002	Hays	12100203	-	San Marcos	Project Planning	0.0	Riverine	Wimberley	Multiple	No	\$100,000	-	0	0	0	0	0	0	0.1	0.0	Yes, Unknown	Yes, Unknown
11100088	11	Guadalupe	City of Wimberley Green Acres Dr. at Fire Station Low Water Crossing Project Planning	Project planning for proposed project to replace low water crossing at Green Acres Dr. at Fire Station	11000001, 11000002	Hays	12100203	-	San Marcos	Project Planning	0.0	Riverine	Wimberley	Multiple	No	\$100,000	-	0	0	0	0	0	0	0.0	0.0	Yes, Unknown	Yes, Unknown
11100089	11	Guadalupe	City of Wimberley Leveritt's Loop Low Water Crossing Project Planning	Project planning for proposed project to replace low water crossing at Leveritt's Loop	11000001, 11000002	Hays	12100203	-	San Marcos	Project Planning	0.0	Riverine	Wimberley	Multiple	No	\$100,000	-	9	9	16	0	0	0	0.2	0.0	Yes, Unknown	Yes, Unknown
11100090	11	Guadalupe	City of Wimberley Spoke Hollow Dr. at Spoke Pile Creek Low Water Crossing Project Planning	Project planning for proposed project to replace low water crossing at Spoke Hollow Dr. at Spoke Pile Creek	11000001, 11000002	Hays	12100203	-	San Marcos	Project Planning	0.0	Riverine	Wimberley	Multiple	No	\$100,000	-	0	0	0	0	1	0	0.1	0.2	Yes, Unknown	Yes, Unknown
11100091	11	Guadalupe	City of Wimberley River Road at Western City Limit Low Water Crossing Project Planning	Project planning for proposed project to replace low water crossing at River Road at Western City Limit	11000001, 11000002	Hays	12100203	-	San Marcos	Project Planning	0.0	Riverine	Wimberley	Multiple	No	\$100,000	-	0	0	0	0	0	0	0.0	0.0	Yes, Unknown	Yes, Unknown
11100092	11	Guadalupe	City of Wimberley Paradise Hills Low Water Crossing Project Planning	Project planning for proposed project to replace low water crossing at Paradise Hills	11000001, 11000002	Hays	12100203	-	San Marcos	Project Planning	0.0	Riverine	Wimberley	Multiple	No	\$100,000	-	0	0	0	0	1	0	0.1	0.0	Yes, Unknown	Yes, Unknown
11100093	11	Guadalupe	City of Wimberley River Road Reconstruction Project Planning	Project planning for proposed project to reconstruct roadway along Blanco River	11000009, 11000010	Hays	12100203	-	San Marcos	Project Planning	0.1	Riverine	Wimberley	Multiple	No	\$100,000	-	23	16	41	0	0	0	1.5	3.8	Yes, Unknown	Yes, Unknown
11100094	11	Guadalupe	City of Wimberley Little Ranches at Panther Creek Low Water Crossing Project Planning	Project planning for proposed project to reconstruct low water crossing and roadway at Little Ranches at Panther Creek	11000001, 11000002	Hays	12100203	-	San Marcos	Project Planning	0.0	Riverine	Wimberley	Multiple	No	\$100,000	-	0	0	0	0	0	0	0.0	0.0	Yes, Unknown	Yes, Unknown
11100095	11	Guadalupe	City of Wimberley Hoots Holler Low Water Crossing Project Planning	Project planning for proposed project to reconstruct low water crossing and roadway at Hoots Holler	11000001, 11000002	Hays	12100203	-	San Marcos	Project Planning	0.0	Riverine	Wimberley	Multiple	No	\$100,000	-	0	0	0	0	0	0	0.0	0.0	Yes, Unknown	Yes, Unknown
11100096	11	Guadalupe	Comal County Evacuation and Dam Safety Plan	Develop evacuation and dam safety plan for coordination with USACE and dam re-enforcement.	11000015, 11000016	Comal	12100202, 12100203, 12100201	-	Multiple	Preparedness	573.0	Riverine	Comal	Multiple	No	\$50,000	-	3,677	2,782	9,129	6	77	0	92.6	9463.3	Yes, Unknown	Yes, Unknown
11100097	11	Guadalupe	Comal County Low Water Crossing Improvements Project Planning	Project planning to upgrade low water crossings with larger culverts and elevated roadways where feasible. Acquire easement and/or right of ways adjacent to River Road for first responder access	11000001, 11000002	Comal	12100202, 12100203, 12100201	-	Multiple	Project Planning	573.0	Riverine	Comal	Multiple	No	\$150,000	-	3,677	2,782	9,129	6	77	0	92.6	9463.3	Yes, Unknown	Yes, Unknown
11100098	11	Guadalupe	Comal County Voluntary Buyout Program Project Planning	Project planning to remediate repetitive losses along the Guadalupe River by acquiring flood damaged structures and converting acquired land to open(green)space.	11000003, 11000004, 11000009, 11000010	Comal	12100202, 12100203, 12100201	-	Multiple	Project Planning	573.0	Riverine	Comal	Multiple	No	\$357,000	-	3,677	2,782	9,129	6	77	0	92.6	9463.3	Yes, Unknown	Yes, Unknown
11100099	11	Guadalupe	Comal County Retention Dam Project Planning	Project planning for proposed project to design and construct 4 retention dams to assist in controlling flash flooding in municipalities and unincorporated areas of the county.	11000009, 11000010	Comal	12100202, 12100203, 12100201	-	Multiple	Project Planning	573.0	Riverine	Comal	Multiple	No	\$8,000,000	-	3,677	2,782	9,129	6	77	0	92.6	9463.3	Yes, Unknown	Yes, Unknown
11100100	11	Guadalupe	Comal County Master WID River Road Low Water Crossing Improvement Project Planning	Project planning for proposed project to implement low water crossing improvements at River Road.	11000009, 11000010	Comal	12100202	-	Middle Guadalupe	Project Planning	2.9	Riverine	Comal Master WID	Multiple	No	\$700,000	-	139	121	282	0	8	0	6.1	97.6	Yes, Unknown	Yes, Unknown
11100101	11	Guadalupe	City of Cuero Drainage Improvements Study	Study of solutions to improve drainage and stormwater system to reduce drainage and flooding issues.	11000009, 11000010	De Witt	12100202, 12100204	-	Multiple	Watershed Planning	6.6	Riverine	Cuero	Multiple	No	\$150,000	-	1,991	1,533	3,213	10	2	0	35.2	116.2	Yes, Unknown	Yes, Unknown
11100102	11	Guadalupe	City of Cuero City Public Service Station Project Planning	Project planning for proposed project to retrofit or floodproof City Public Service Station currently under renovation. Facility will serve as secondary location for community offices and critical utility service data and equipment	11000015, 11000016	De Witt	12100202, 12100204	-	Multiple	Project Planning	6.6	Riverine	Cuero	Multiple	No	\$100,000	-	1,991	1,533	3,213	10	2	0	35.2	116.2	Yes, Unknown	Yes, Unknown
11100103	11	Guadalupe	City of Cuero WWTP Floodproofing Project Planning	Project planning to floodproof/retrofit older components of the Cuero Wastewater Treatment Plant subject to flooding.	11000015, 11000016	De Witt	12100204	-	Lower Guadalupe	Project Planning	0.0	Riverine	Cuero	Multiple	No	\$100,000	-	4	0	2	0	0	0	0.0	2.5	Yes, Unknown	Yes, Unknown
11100104	11	Guadalupe	Dewitt County Drainage District Channel Improvements Project Planning	Project planning for proposed project to install drop basket structure and reconstruct drainage channels to control flooding and erosion. Structure will assist in stabilizing banks and holding bottoms of channel on grade	11000009, 11000010	De Witt	12100202, 12100204	-	Multiple	Project Planning	6.6	Riverine	Dewitt County Drainage District 1	Multiple	No	\$250,000	-	1,991	1,533	3,213	10	2	0	35.2	116.2	Yes, Unknown	Yes, Unknown
11100105	11	Guadalupe	DeWitt County (City of Nordheim) Flash Flood Mitigation Project Planning	Project planning for proposed project to construct necessary barriers or berms to reduce impact of runoff from flash floods onto neighborhoods, streams, and impacting community water wells from proposed Pilot Knob landfill.	11000009, 11000010	De Witt	12100204	-	Lower Guadalupe	Project Planning	0.5	Riverine	Nordheim	Multiple	No	\$150,000	-	0	0	0	0	0	0	0.0	0.0	Yes, Unknown	Yes, Unknown
11100106	11	Guadalupe	Gillespie County Low Water Crossing Improvements Project Planning	Project planning to place automatic warning signs at 35 documented low water crossings in the county	11000001, 11000002	Gillespie	12100203, 12100201	-	Multiple	Project Planning	1057.2	Riverine	Gillespie	Multiple	No	\$50,000	-	8	2	22	0	0	0	0.1	347.9	Yes, Unknown	Yes, Unknown
11100107	11	Guadalupe	Gonzales County Voluntary Buyout Program Project Planning	Project planning to develop and implement a program to buyout NFIP repetitive loss properties.	11000009, 11000010	Gonzales	12100203, 12100201	-	Multiple	Project Planning	1066.9	Riverine	Gillespie	Multiple	No	\$150,000	-	1,649	760	2,086	4	55	0	123.7	101450.5	Yes, Unknown	Yes, Unknown
11100108	11	Guadalupe	GBRA FEMA Cooperating Technical Partners (CTP) Modeling and Mapping	GBRA has entered into a partnership with FEMA by which GBRA commissions an engineering firm to perform flood inundation modeling and mapping, and dams in series modeling.	11000009, 11000010	Multiple	12100203, 12100201	-	Multiple	Watershed Planning	7876.2	Riverine, Coastal	Guadalupe-Blanco River Authority	Multiple	No	\$250,000	-	22,831	16,352	55,779	126	467	0	767.5	304947.2	Yes, Unknown	Yes, Unknown

FME ID	RFPG No.	RFPG Name	FME Name	Description	Associated Goals	Counties	HUC8s	HUC12s	Watershed Name	Study Type	FME Area (sqmi)	Flood Risk Type	Sponsor	Entities with Oversight	Emergency Need	Estimated Study Cost	Potential Funding Sources and Amount	Estimated number of structures at flood risk	Habitable structures at flood risk	Estimated Population at flood risk	Critical facilities at flood risk (#)	Number of low water crossings at flood risk (#)	Estimated number of road closures (#)	Estimated length of roads at flood risk (Miles)	Estimated active farm & ranch land at flood risk (acres)	Existing or Anticipated Models (year)	Existing or Anticipated Maps (year)
111000109	11	Guadalupe	Guadalupe County Drainage Improvements Study	Study of solutions to upgrade undersized stormwater drains and culverts.	11000009, 11000010	Guadalupe	12100202, 12100203	-	Multiple	Watershed Planning	713.1	Riverine	Guadalupe	Multiple	No	\$3,000,000	-	5,822	4,851	14,109	14	130	0	116.7	25477.2	Yes, Unknown	Yes, Unknown
111000110	11	Guadalupe	Guadalupe County Voluntary Buyout Program Project Planning	Project planning to develop a land acquisition program in flood hazard areas. Acquire and demolish repetitive loss properties. Acquire high risk vacant land and maintain as open space.	11000009, 11000010	Guadalupe	12100202, 12100203	-	Multiple	Project Planning	713.1	Riverine	Guadalupe	Multiple	No	\$150,000	-	5,822	4,851	14,109	14	130	0	116.7	25477.2	Yes, Unknown	Yes, Unknown
111000111	11	Guadalupe	Guadalupe County LWC Project Planning	Project planning for proposed project to mark and place electric gates at low water crossings.	11000001, 11000002	Guadalupe	12100202, 12100203	-	Multiple	Project Planning	713.1	Riverine	Guadalupe	Multiple	No	\$2,000,000	-	5,822	4,851	14,109	14	130	0	116.7	25477.2	Yes, Unknown	Yes, Unknown
111000112	11	Guadalupe	Hays County Dam Inundation Maps	Conduct study and work with TCEQ to continue to develop inundation maps for all High Hazard dams.	11000009, 11000010	Hays	12100203	-	San Marcos	Preparedness	676.0	Riverine	Hays	Multiple	No	\$500,000	-	4,359	3,223	17,721	15	117	0	100.0	10536.8	Yes, Unknown	Yes, Unknown
111000113	11	Guadalupe	Hays County Harden Critical Infrastructure Project Planning	Project planning to ensure new structures are structurally reinforced against natural hazards. To include, flood-proofing (if needed), freeboard, higher levels of soil compaction and proper perimeter drainage systems.	11000015, 11000016	Hays	12100203	-	San Marcos	Project Planning	676.0	Riverine	Hays	Multiple	No	\$100,000	-	4,359	3,223	17,721	15	117	0	100.0	10536.8	Yes, Unknown	Yes, Unknown
111000114	11	Guadalupe	Hays County Drainage Project Planning (Willow Springs Creek between McCarty Lane and Hunter Road)	Project planning for channel improvement and/or property acquisition project to reduce flood damages along Willow Springs Creek from McCarty Lane to Hunter Road.	11000009, 11000010	Hays	12100203	-	San Marcos	Project Planning	0.7	Riverine	Hays	Multiple	No	\$800,000	-	4	1	3	0	0	0	0.0	0.0	Yes, Unknown	Yes, Unknown
111000115	11	Guadalupe	Hays County Drainage Project Planning (Willow Springs Creek between Hunter Rd and the Railroad)	Project planning for detention project to reduce flood damages along Willow Springs Creek from Hunter Road to the railroad.	11000009, 11000010	Hays	12100203	-	San Marcos	Project Planning	0.2	Riverine	Hays	Multiple	No	\$1,200,000	-	3	3	8	0	0	0	0.1	8.1	Yes, Unknown	Yes, Unknown
111000116	11	Guadalupe	Hays County Southeastern Property Acquisition Project Planning	Project planning for property acquisition project to mitigate repetitive loss flooding where drainage projects were analyzed and deemed ineffective for cost/ benefit reasons in southeastern Hays County.	11000009, 11000010	Hays	12100202, 12100203	-	Multiple	Project Planning	49.1	Riverine	Hays	Multiple	No	\$800,000	-	1,420	1,067	6,688	12	14	0	25.1	1058.0	Yes, Unknown	Yes, Unknown
111000118	11	Guadalupe	Hays County Community Flood Mitigation Project Planning	Hays County Community Flood Mitigation Project Planning	11000009, 11000010	Hays	12100203	-	San Marcos	Project Planning	676.0	Riverine	Hays	Multiple	No	\$238,035	-	4,359	3,223	17,721	15	117	0	100.0	10536.8	Yes, Unknown	Yes, Unknown
111000119	11	Guadalupe	Hunts ISD Storm Drainage Infrastructure Project Planning	Project planning to construct new storm drainage infrastructure to reduce the potential impacts of future flood events.	11000009, 11000010	Kerr	12100201	-	Upper Guadalupe	Project Planning	173.8	Riverine	Caldwell County Emergency Service District #4	Multiple	No	\$100,000	-	629	283	744	1	41	0	25.9	5502.3	Yes, Unknown	Yes, Unknown
111000120	11	Guadalupe	Ingram ISD Construct New Storm Drainage Infrastructure	Project planning to construct new storm drainage infrastructure to reduce the potential impacts of future flood events.	11000009, 11000010	Kerr	12100201	-	Upper Guadalupe	Project Planning	208.0	Riverine	Caldwell County Emergency Service District #4	Multiple	No	\$100,000	-	606	331	844	1	24	0	18.7	4971.4	Yes, Unknown	Yes, Unknown
111000121	11	Guadalupe	Ingram ISD Improve Existing Storm Drainage Infrastructure	Project planning to upgrade existing storm drainage infrastructure to reduce the potential impacts of future flood events.	11000009, 11000010	Kerr	12100201	-	Upper Guadalupe	Project Planning	208.0	Riverine	Caldwell County Emergency Service District #4	Multiple	No	\$100,000	-	606	331	844	1	24	0	18.7	4971.4	Yes, Unknown	Yes, Unknown
111000122	11	Guadalupe	Kerr County Center Point Storm Drainage Infrastructure Project Planning	Project planning to construct new storm drainage infrastructure to reduce the potential impacts of future flood events.	11000009, 11000010	Kerr	12100201	-	Upper Guadalupe	Project Planning	1103.0	Riverine	Kerr	Multiple	No	\$125,000	-	3,833	2,315	7,415	6	158	0	124.1	28070.5	Yes, Unknown	Yes, Unknown
111000123	11	Guadalupe	Kerr County Dam Integrity Study	Create a dam integrity study and identify repairs to be made to County dams as necessary.	11000009, 11000010	Kerr	12100201	-	Upper Guadalupe	Preparedness	1103.0	Riverine	Kerr	Multiple	No	\$500,000	-	3,833	2,315	7,415	6	158	0	124.1	28070.5	Yes, Unknown	Yes, Unknown
111000124	11	Guadalupe	Kerr ISD Storm Drainage Infrastructure Project Planning	Project planning for proposed project to construct new storm drainage infrastructure to reduce the potential impacts of future flood events.	11000009, 11000010	Kerr	12100201	-	Upper Guadalupe	Project Planning	165.4	Riverine	Caldwell County Emergency Service District #4	Multiple	No	\$100,000	-	1,968	1,348	6,355	4	43	0	41.1	2781.8	Yes, Unknown	Yes, Unknown
111000126	11	Guadalupe	Travis County Voluntary Buyout Program Project Planning	Project planning to identify and prioritize structures for elevation as flood mitigation. Elevate flood prone structures throughout unincorporated Travis County.	11000009, 11000010	Travis	12100203	-	San Marcos	Project Planning	1020.8	Riverine	Travis	Multiple	No	\$300,000	-	7	7	18	0	1	0	0.1	99.0	Yes, Unknown	Yes, Unknown
111000127	11	Guadalupe	Upper Guadalupe River Authority Evaluation of Water and Sediment Control Facilities	Study to evaluate the flood benefits and cost-effectiveness of UGRA's existing nine Kerr County facilities. Evaluation would include H&H modeling and financial data to determine flood risk reduction. Results could guide decisions on future facilities.	11000009, 11000010	Kerr	12100201	-	Upper Guadalupe	Watershed Planning	1103.0	Riverine	Upper Guadalupe River Authority	Multiple	No	\$250,000	-	3,833	2,315	7,415	6	158	0	124.1	28070.5	Yes, Unknown	Yes, Unknown
111000128	11	Guadalupe	Victoria County Planning and Development Standards Study	Conduct study for the development and implementation of county wide planning & development standards, sub-division rules, infrastructure rules and building / construction codes.	11000005, 11000006	Victoria	12100303, 12100204, 12100403	-	Multiple	Watershed Planning	886.5	Riverine	Victoria	Multiple	No	\$100,000	-	1,808	1,382	4,019	60	5	0	98.5	33695.7	Yes, Unknown	Yes, Unknown
111000129	11	Guadalupe	Victoria County Drainage Improvements Study	Study of solutions to increase dimensions of drainage culverts in areas prone to flooding and/or drainage problems, in various county locations.	11000009, 11000010	Victoria	12100303, 12100204, 12100403	-	Multiple	Watershed Planning	886.5	Riverine	Victoria	Multiple	No	\$150,000	-	1,808	1,382	4,019	60	5	0	98.5	33695.7	Yes, Unknown	Yes, Unknown
111000130	11	Guadalupe	Victoria County FIRMs	Engineering Studies to revise Flood Insurance Rate Maps (FIRMs) throughout the County to establish Base Flood Elevations (BFE) in areas that are currently identified as unstudied Zone As.	11000009, 11000010	Victoria	12100303, 12100204, 12100403	-	Multiple	Watershed Planning	886.5	Riverine	Victoria	Multiple	No	\$500,000	-	1,808	1,382	4,019	60	5	0	98.5	33695.7	Yes, Unknown	Yes, Unknown
111000131	11	Guadalupe	Victoria County Drainage Improvements around County EOC Project Planning	Project planning to improve drainage around County EOC and flood-proof facilities as necessary.	11000009, 11000010	Victoria	12100204	-	Lower Guadalupe	Project Planning	0.0	Riverine	Victoria	Multiple	No	\$100,000	-	0	0	0	0	0	0	0.0	0.0	Yes, Unknown	Yes, Unknown
111000132	11	Guadalupe	Victoria County Bridge Improvements Project Planning	Project planning to raise various County bridges above current Base Flood Elevation (BFE) levels to include such improvements as: box culverts, wingback walls, rip rap, channelization, and road base improvement.	11000001, 11000002, 11000015, 11000016	Victoria	12100303, 12100204, 12100403	-	Multiple	Project Planning	886.5	Riverine	Victoria	Multiple	No	\$500,000	-	1,808	1,382	4,019	60	5	0	98.5	33695.7	Yes, Unknown	Yes, Unknown
111000133	11	Guadalupe	Victoria County Voluntary Buyout Program Project Planning	Project planning to implement a voluntary acquisition program for repetitive flood properties.	11000009, 11000010	Victoria	12100303, 12100204, 12100403	-	Multiple	Project Planning	886.5	Riverine	Victoria	Multiple	No	\$300,000	-	1,808	1,382	4,019	60	5	0	98.5	33695.7	Yes, Unknown	Yes, Unknown
111000134	11	Guadalupe	Wilson County Stormwater Management Plan	Develop flood hazard information by collecting information, high water marks, and conduct engineering studies to develop the 100 year and 500 year flood elevation levels.	11000015, 11000016	Wilson	12100202	-	Middle Guadalupe	Watershed Planning	805.8	Riverine	Wilson	Multiple	No	\$500,000	-	18	9	33	0	0	0	4.0	2120.0	Yes, Unknown	Yes, Unknown
111000135	11	Guadalupe	Wilson County Low Water Crossing Improvements Project Planning	Project planning to upgrade infrastructure at low water crossings to provide unimpeded access during 100 year base flood event to facilitate evacuation and response by emergency vehicles	11000001, 11000002	Wilson	12100202	-	Middle Guadalupe	Project Planning	805.8	Riverine	Wilson	Multiple	No	\$150,000	-	18	9	33	0	0	0	4.0	2120.0	Yes, Unknown	Yes, Unknown



FME ID	RFPG No.	RFPG Name	FME Name	Description	Associated Goals	Counties	HUC8s	HUC12s	Watershed Name	Study Type	FME Area (sqmi)	Flood Risk Type	Sponsor	Entities with Oversight	Emergency Need	Estimated Study Cost	Potential Funding Sources and Amount	Estimated number of structures at flood risk	Habitable structures at flood risk	Estimated Population at flood risk	Critical facilities at flood risk (#)	Number of low water crossings at flood risk (#)	Estimated number of road closures (#)	Estimated length of roads at flood risk (Miles)	Estimated active farm & ranch land at flood risk (acres)	Existing or Anticipated Models (year)	Existing or Anticipated Maps (year)
111000136	11	Guadalupe	Wilson County Voluntary Buyout Program Project Planning	Project planning to establish of a voluntary aquistion and demolition program, structure relocation program, and structure elevation program to address repetitive loss, floodprone properties. Keep a database of properties.	11000009, 11000010	Wilson	12100202	-	Middle Guadalupe	Project Planning	805.8	Riverine	Wilson	Multiple	No	\$150,000	-	18	9	33	0	0	0	4.0	2120.0	Yes, Unknown	Yes, Unknown
111000137	11	Guadalupe	Emergency power generators at critical infrastructure/key resource locations project planning	Project planning to install emergency generators at critical facilities to provide back-up power from hazard events.	11000015, 11000016	Blanco	12100203, 12100201	-	Multiple	Project Planning	711.0	Riverine	Blanco	Multiple	No	\$100,000	-	167	122	256	0	30	0	14.2	4091.8	Yes, Unknown	Yes, Unknown
111000138	11	Guadalupe	Cypress Creek Regional detention	Project planning for regional detention project on Cypress Creek that will reduce flooding through the unincorporated town of Comfort, TX and possibly provide enhanced aquifer recharge.	11000003, 11000004	Kendall	12100201	-	Upper Guadalupe	Project Planning	3.2	Riverine	Kendall	Multiple	No	\$113,855	-	439	290	574	0	5	0	10.7	745.3	Yes, Unknown	Yes, Unknown
111000139	11	Guadalupe	Technical Study to Enhance Great Springs Project Regional Flood Mitigation	The study will assess and quantify the flood mitigation impacts of an additional 50,000 acres of land conservation and trail development and identify possible modifications of open space and trail features to enhance flood mitigation.	11000003	Comal, Hays	12100202, 12100203	-	Multiple	Watershed Planning	274.6	Riverine	Edwards Aquifer Authority	Multiple	No	\$250,000	-	382	294	802	3	44	0	18.5	6858.2	Yes, Unknown	Unknown
111000140	11	Guadalupe	City of Victoria WWTP Protection Project	Project planning for potential erosion protection and streambank stabilization project intended to protect the levee around the City's wastewater plant.	11000009, 11000010	Victoria	12100204	-	Lower Guadalupe	Project Planning	0.1	Riverine	Victoria	Multiple	No	\$300,000	-	11	0	13	11	0	0	0.0	26.8	Yes, Unknown	Yes, Unknown
111000141	11	Guadalupe	City of San Marcos McKie Street at Willow Springs Creek Project Planning	Alternatives analysis to determine if a feasible FMP exists at this location. Develop technical data required for FMPs.	11000001, 11000002	Hays	12100203	-	San Marcos	Project Planning	0.0	Riverine	San Marcos	Multiple	No	\$50,000	-	0	0	0	0	1	0	0.0	0.0	Yes, Unknown	Yes, Unknown
111000142	11	Guadalupe	City of San Marcos South LBJ Drive at Willow Springs Creek Project Planning	Alternatives analysis to determine if a feasible FMP exists at this location. Develop technical data required for FMPs.	11000001, 11000002	Hays	12100203	-	San Marcos	Project Planning	0.0	Riverine	San Marcos	Multiple	No	\$50,000	-	0	0	0	0	1	0	0.0	0.0	Yes, Unknown	Yes, Unknown
111000143	11	Guadalupe	Dewitt County Drainage District 1 Cuero Levee Study	Feasibility study of potential levee to protect City from river flooding with risk to life/safety and catastrophic damage, as has been experienced in Cuero on numerous occasions.	11000009, 11000010	De Witt	12100202, 12100204	-	Multiple	Project Planning	6.6	Riverine	Dewitt County Drainage District 1	Multiple	No	\$250,000	-	1,991	1,533	3,213	10	2	0	35.2	116.2	Yes, Unknown	Yes, Unknown
111000144	11	Guadalupe	City of New Braunfels Wood Road/Landa Street Drainage Improvement	Project planning for drainage improvement project to capture runoff east of Walnut Avenue and detains it in a 12-acre detention pond with 144 acre-feet of storage capacity. The pond outfall structure discharges to an existing channel south of Wood Road.	11000009, 11000010	Comal	12100202	-	Middle Guadalupe	Project Planning	0.2	Riverine	New Braunfels	Multiple	No	\$3,575,700	-	47	23	523	0	0	0	0.7	0.0	Yes, Unknown	Yes, Unknown
111000145	11	Guadalupe	Kendall County Guadalupe River Model Study	Study to complete an HH model for all of the Guadalupe River within Kendall County.	11000009, 11000010	Kendall	12100201, 12100203	-	Multiple	Watershed Planning	660.6	Riverine	Kendall	Multiple	No	\$250,000	-	1,374	716	1,964	3	28	0	44.4	24197.7	Yes, Unknown	Yes, Unknown
111000146	11	Guadalupe	Kendall County Stream Gauges and Flood Hazard Beacons	Study to evaluate locations for stream gauges and flood hazard beacons.	11000001, 11000002	Kendall	12100201, 12100203	-	Multiple	Preparedness	660.6	Riverine	Kendall	Multiple	No	\$150,000	-	1,374	716	1,964	3	28	0	44.4	24197.7	Yes, Unknown	Yes, Unknown
111000147	11	Guadalupe	City of Kerrville Spring Street Project	Develop required technical data for FMP. Project planning for storm drain and channel improvement project.	11000009, 11000010	Kerr	12100201	-	Upper Guadalupe	Project Planning	0.0	Riverine	Kerrville	Multiple	No	\$15,000	-	0	0	0	0	0	0	0.0	0.0	Yes, Unknown	Yes, Unknown
111000148	11	Guadalupe	City of Kerrville Clay Street Drainage and Kroc Center Detention Pond Spillway Improvements	Develop required technical data for FMP. Project planning for detention pond spillway improvement project.	11000001, 11000002, 11000009, 11000010	Kerr	12100201	-	Upper Guadalupe	Project Planning	0.0	Riverine	Kerrville	Multiple	No	\$15,000	-	0	0	0	0	0	0	0.0	0.0	Yes, Unknown	Yes, Unknown
111000149	11	Guadalupe	City of Kerrville Coronado Drive and Junction Highway Drainage Improvements	Develop required technical data for FMP. Project planning for street and drainage improvement project.	11000001, 11000002, 11000009, 11000010	Kerr	12100201	-	Upper Guadalupe	Project Planning	0.0	Riverine	Kerrville	Multiple	No	\$15,000	-	9	0	70	0	0	0	0.1	0.0	Yes, Unknown	Yes, Unknown

**Table 13:** Potentially Feasible Flood Mitigation  
Projects Identified by RFPG

FMP ID	RFPG No.	RFPG Name	FMP Name	Description	Associated Goals (ID)	Counties	HUC12s	Watershed Name	Project Type	Project Area (sqmi)	Flood Risk Type (Riverine, Coastal, Urban, Playa, Other)	Sponsor	Entities with Oversight	Emergency Need (Y/N)	Estimated Project Cost (\$)	Potential Funding Sources and Amount
11300001	11	Guadalupe	Detention on the Blanco River	The proposed dam height of 102 ft. and dam length of 1,840 ft. will provide a maximum storage capacity of approximately 1128 ac-ft.	11000009, 11000010	Blanco, Hays	-	San Marcos	Dam	6.3	Riverine, Coastal	Blanco	Blanco	No	\$9,338,000	-
11300006	11	Guadalupe	Plum Creek Tributary 3 Arbor Knot Dr. Improvement	A proposed culvert improvement has been developed to convey a 1% ACE event. The proposed culvert improvement is to add one additional 8ft x 4ft culvert totaling three culverts at this location, and raising the finished deck elevation by 0.5ft.	11000009, 11000010	Hays	-	San Marcos	Infrastructure	0.0	Riverine, Coastal	Kyle	Kyle	No	\$557,000	-
11300007	11	Guadalupe	Plum Creek Tributary 4 Sledge Rd. Improvement	The proposed culvert improvement resulted in eight (7ft x 4ft) box culverts, needed to clear the roadway and to alleviate additional backwater flooding.	11000015, 11000016	Hays	-	San Marcos	Infrastructure	0.0	Riverine, Coastal	Kyle	Kyle	No	\$1,149,000	-
113000010	11	Guadalupe	65ft Channel Modification and Additional Culvert	The channel modifications consists of 65-ft bottom width channel modifications with 4:1 side slopes spanning from the North I-35 frontage road down past Goforth Road to Kym Way.	11000009, 11000010	Hays	-	San Marcos	Infrastructure	0.2	Riverine, Coastal	Kyle	Kyle	No	\$589,000	-
113000011	11	Guadalupe	Plum Creek Detention Pond Upstream of IH35	This project consists of a detention pond between the railroad track and the South bound I-35 frontage road. Under this proposed alternative a 13-ft high dam wall would be placed on Plum Creek near Kyle Center Drive.	11000009, 11000010	Hays	-	San Marcos	Detention Pond	0.3	Riverine, Coastal	Kyle	Kyle	No	\$864,000	-
113000015	11	Guadalupe	Improve Flood Warning Systems	Enhancing stream flow gage network by increasing number of gages throughout community by at least six	11000015, 11000016	Hays	-	San Marcos	Preparedness	25.7	Riverine, Coastal	San Marcos	San Marcos	No	\$339,000	-
113000026	11	Guadalupe	Purgatory Creek Channel Improvement	Purgatory Creek Channel Improvement Project Preliminary Engineering Report	11000009, 11000010	Hays	-	San Marcos	Channel	0.2	Riverine, Coastal	San Marcos	San Marcos	No	\$22,391,000	-
113000027	11	Guadalupe	Sherwood/Kingwood Drainage Improvements	Sherwood Drive and Kingwood Street Improvements Preliminary Engineering Report	11000015, 11000016	Hays	-	San Marcos	Infrastructure	0.1	Riverine, Coastal	San Marcos	San Marcos	No	\$5,644,000	-
113000035	11	Guadalupe	Guadalupe Street Automatic Flood Gates	Place automatic flood gates with vehicle detection on inside of flooded area to allow for egress.	11000001, 1000002	Guadalupe	-	Middle Guadalupe	Preparedness	0.0	Riverine, Coastal	Seguin	Seguin	No	\$115,000	-
113000036	11	Guadalupe	Baldrige Creek Regional Detention Pond	The scope of work includes constructing a regional detention pond on Baldrige Creek upstream of the City. The proposed pond would be located northwest of the City and would release runoff at a substantially lower flowrate, resulting in lower flood eleva	11000009, 11000010	Gonzales	-	Middle Guadalupe	Comprehensive	1.0	Riverine, Coastal	Waelder	Waelder	No	\$2,573,000	-
113000037	11	Guadalupe	Baldrige Creek Channel and Culvert Improvement and Detention Pond	A combination of a 50 ft. bottom width channel modification with 3:1 side slopes downstream of SH 97 and the addition of two 10 foot by 10 foot concrete box culverts was determined to be the most effective flood mitigation solution for the area. The propo	11000009, 11000010	Gonzales	-	Middle Guadalupe	Comprehensive	0.3	Riverine, Coastal	Waelder	Waelder	No	\$3,928,000	-
113000039	11	Guadalupe	Wilson Creek - Green Acres Dr. Improvement	A proposed updated culvert geometry consists of 11 box culverts (10ft-12ft) and a raised finished deck elevation (3ft rise).	11000009, 11000010	Hays	-	San Marcos	Infrastructure	0.0	Riverine, Coastal	Wimberley	Wimberley	No	\$1,246,000	-
113000040	11	Guadalupe	Regional Detention South of Mountain Crest Drive	The alternative consists of a 20 ft. tall detention structure with a 175 ac-ft detention capacity. The outflow control would consist of culverts for low flow and an overflow weir for high flow.	11000009, 11000010	Hays	-	San Marcos	Detention Pond	0.2	Riverine, Coastal	Woodcreek	Woodcreek	No	\$946,000	-
113000041	11	Guadalupe	Improvements to Brookside Drive Culvert Crossing	The culvert opening will be increased to three 36" concrete pipes to match the culvert capacity just downstream at Brook Meadow Dr. and also involve some minimal re-grading of the stream flowline.	11000009, 11000010	Hays	-	San Marcos	LWC upgrade	0.0	Riverine, Coastal	Woodcreek	Woodcreek	No	\$38,000	-
113000042	11	Guadalupe	Brookmeadow Drive Drainage Improvements	The proposed alternative consists of a rip rap ditch along the south side of Brookmeadow Drive, under Overbrook Court and down to Hog Creek. The capacity of the ditch would be enough to hold the most frequent flows	11000009, 11000010	Hays	-	San Marcos	LWC upgrade	0.0	Riverine, Coastal	Woodcreek	Woodcreek	No	\$65,000	-
113000044	11	Guadalupe	Regional Detention on Bear Creek	The proposed dam height of 85 ft. and dam length of 620 ft. will provide a maximum storage capacity of approximately 3,375 ac-ft.	11000009, 11000010	Comal	-	Middle Guadalupe	Detention Pond	393.0	Riverine, Coastal	Comal	Comal	No	\$6,973,000	-
113000047	11	Guadalupe	Regional Detention on Peach Creek	A 29 ft. high dam with a length of 5780 ft. would provide approximately 41,774 ac-ft of storage. This site would be able to store a large volume of water and greatly reduce the peak from the Peach Creek watershed.	11000009, 11000010	Gonzales	-	Middle Guadalupe	Detention Pond	312.5	Riverine, Coastal	Gonzales	Gonzales	No	\$7,821,000	-
113000052	11	Guadalupe	Kerr County Back-up Power Generators	Installing generators at critical facilities will help ensure physical safety for facility occupants and maintain electronic systems functionality during power outages. Portable generators will maintain additional systems functionality	11000015, 11000016	Kerr	-	Upper Guadalupe	Preparedness	23.6	Riverine, Coastal	Kerr	Kerr	No	\$806,000	-
113000060	11	Guadalupe	City of Victoria Back-up Power Generators	Install emergency generators and quick connects on all buildings, critical infrastructure, and government buildings.	11000015, 11000016	Victoria	-	Lower Guadalupe	Preparedness	0.0	Riverine	Victoria	Victoria	No	\$551,000	-
113000061	11	Guadalupe	City of Buda-Lifschutz Headwaters Voluntary Buyout	Voluntary, targeted buyouts for 1 or more affected properties. (November 11, 2016 Preliminary Engineering Report)	11000009, 11000010	Hays	-	San Marcos	Property Acquisition	9.7	Riverine, Coastal	Buda	Buda	No	\$565,000	-
113000062	11	Guadalupe	City of Nixon-Wastewater System Flood Improvements	The WWTP lift station and 8th Avenue lift station have experienced inundation and caused overflows as a result of stormwater inflow into the wastewater system. Also need a new generator & SCADA System Improvements at the City's WWTP, Water Well 6/Water PI	11000015, 11000016	Gonzales	-	Middle Guadalupe	Comprehensive	1.4	Riverine, Coastal	Nixon	Nixon	No	\$3,949,000	-
113000063	11	Guadalupe	City of San Marcos-Emergency Generators	Purchase and installation of generators for temporary sheltering efforts in all public facilities capable of housing citizens.	11000015, 11000016	Hays	-	San Marcos	Preparedness	25.7	Riverine, Coastal	San Marcos	San Marcos	No	\$58,000	-
113000064	11	Guadalupe	Victoria County-Emergency Generators	Install emergency generators at critical facilities.	11000015, 11000016	Victoria	-	Lower Guadalupe	Preparedness	37.2	Riverine, Coastal	Victoria	Victoria	No	\$551,000	-
113000065	11	Guadalupe	City of Seguin Regional Detention Southwest of Seguin City Limits Project	Proposed regional detention detention project on Mays Creek.	11000009, 11000010	Guadalupe	-	Middle Guadalupe	Detention Pond	0.3	Riverine, Coastal	Seguin	Seguin	No	\$2,015,000	-
113000066	11	Guadalupe	City of Seguin - Culvert Improvements at Guadalupe River Drive Project	Proposed project to add two additional 10 ft. by 10 ft. reinforced concrete box culverts on either side of the existing two- 10ft. by 10ft. box culverts at Guadalupe River Dr.	11000009, 11000010	Guadalupe	-	Middle Guadalupe	LWC upgrade	0.1	Riverine, Coastal	Seguin	Seguin	No	\$594,000	-
113000067	11	Guadalupe	City of Victoria Channel and Bridge Modifications on State Highway 87 Project	Proposed channel and bridge modification project. The design modification consists of adding two additional piers to the right and left overbanks of the bridge.	11000009, 11000010	Victoria	-	Lower Guadalupe	Comprehensive	0.1	Riverine, Coastal	Victoria	Victoria	No	\$8,350,000	-
113000068	11	Guadalupe	City of Victoria Detention Structure Located Upstream of State Highway 87 Project	Proposed detention structure located upstream of State Highway 87. The detention basin has a proposed height of 11ft from crest to inlet structure. The dam has a proposed capacity of 3700 ac-ft. Three culvert outlet structures are proposed to be used for	11000009, 11000010	Victoria	-	Lower Guadalupe	Comprehensive	3.2	Riverine, Coastal	Victoria	Victoria	No	\$58,395,000	-
113000069	11	Guadalupe	Guadalupe County Detention on York Creek Project	Project for detention on York Creek. The currently proposed dam height of 48 ft. and dam length of 4800 ft. will provide a maximum storage capacity of approximately 48,130 ac-ft.	11000009, 11000010	Guadalupe	-	San Marcos	Comprehensive	365.3	Riverine, Coastal	Guadalupe	Guadalupe	No	\$15,133,000	-

FMP ID	Flood Risk										Reduction in Flood Risk							
	Area in 100yr Floodplain	Area in 500yr Floodplain	Estimated number of structures at 100yr flood risk	Residential structures at 100-year flood risk	Estimated Population at 100-year flood risk	Critical Facilities at 100-year flood risk	Number of low water crossings at flood risk	Estimated number of road closures	Estimated length of roads at 100-year flood risk (Miles)	Estimated farm & ranch land at 100-year flood risk (acres)	Number of structures with reduced 100yr flood risk	Number of structures removed from 100yr flood risk	Number of structures removed from 500yr flood risk	Residential structures removed from 100yr flood risk	Estimated Population removed from 100yr flood risk	Critical facilities removed from 100yr flood risk	Number of low water crossings removed from 100yr flood risk	Estimated reduction in road closure occurrences
113000001	3.8	0.9	508	417	1,044	0	10	0	8.3	978.3	1939	131	165	107	375	0	0	Unknown
113000006	0.0	0.0	2	2	4	0	0	0	0.0	0.0	0	0	0	0	0	0	0	Unknown
113000007	0.0	0.0	0	0	0	0	0	0	0.1	3.5	3	0	0	0	0	0	0	Unknown
113000010	0.1	0.0	39	34	165	0	1	0	0.8	2.3	9	4	15	4	16	0	0	Unknown
113000011	0.2	0.0	49	43	207	0	2	0	1.1	8.3	10	1	8	1	2	0	0	Unknown
113000015	6.2	2.6	2,278	1,626	12,618	14	12	0	46.9	387.6	0	0	0	0	0	0	0	Unknown
113000026	0.2	0.0	73	53	319	0	1	0	1.4	0.0	5	27	0	27	56	0	5	Unknown
113000027	0.0	0.0	17	14	55	0	0	0	0.3	0.0	15	1	0	1	32	0	0	Unknown
113000035	0.0	0.0	1	1	2	0	0	0	0.1	1.2	0	0	0	0	0	0	0	Unknown
113000036	0.5	0.1	132	69	172	0	5	0	2.5	128.2	11	48	24	35	72	0	3	Unknown
113000037	0.2	0.0	122	68	169	0	4	0	2.2	6.7	7	87	42	56	131	0	7	Unknown
113000039	0.0	0.0	2	2	5	0	1	0	0.1	0.0	5	0	0	0	0	0	0	Unknown
113000040	0.1	0.0	33	28	64	0	0	0	0.6	0.0	14	8	0	8	17	0	0	Unknown
113000041	0.0	0.0	0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0	0	Unknown
113000042	0.0	0.0	7	7	14	0	0	0	0.1	0.0	0	0	0	0	0	0	0	Unknown
113000044	282.6	24.5	9,789	7,399	20,781	84	19	0	250.1	80,411.7	4825	159	55	112	456	0	0	Unknown
113000047	229.4	17.3	3,965	2,562	6,140	71	12	0	157.3	65,348.5	1447	12	1	12	34	0	0	Unknown
113000052	4.3	2.3	1,522	1,050	5,950	4	20	0	30.6	193.3	0	0	0	0	0	0	0	Unknown
113000060	0.0	0.0	0	0	5,096	0	0	0	0.0	0.0	0	0	0	0	0	0	0	Unknown
113000061	0.1	0.0	22	19	59	0	1	0	1.0	10.3	0	1	0	0	0	0	0	Unknown
113000062	0.1	0.0	13	6	22	0	0	0	0.1	7.8	0	0	0	0	0	0	0	Unknown
113000063	6.2	2.6	2,275	1,624	12,613	14	11	0	46.0	384.7	0	0	0	0	0	0	0	Unknown
113000064	5.2	1.1	1,135	932	3,167	24	0	0	35.9	101.6	0	0	0	0	0	0	0	Unknown
113000065	0.2	0.0	20	19	42	0	1	0	0.4	28.0	4	8	3	8	19	0	1	Unknown
113000066	0.1	0.0	16	15	37	0	0	0	0.3	7.8	4	6	3	6	13	0	1	Unknown
113000067	0.1	0.0	2	2	2	0	0	0	0.1	67.8	2	2	0	2	4	0	0	Unknown
113000068	2.9	0.2	56	42	146	0	3	0	3.2	640.6	2	38	0	29	52	0	0	Unknown
113000069	271.6	20.4	4,637	2,953	7,280	75	16	0	189.0	85,276.0	1622	100	95	80	287	0	0	Unknown

FMP ID	Estimated length of roads removed from 100yr flood risk (Miles)	Estimated farm & ranch land removed from 100yr 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	Cost/ Structure removed	Percent Nature-based Solution (by cost)	Negative Impact (Y/N)	Negative Impact Mitigation (Y/N)	Social Vulnerability Index (SVI)	Water Supply Benefit (Y/N)	Traffic Count for Low Water Crossings	Benefit-Cost Ratio
113000001	0.0	0.0	Unknown	Unknown	50-year	100-year	\$71,000	0.0%	No	-	0.18	No	0	1.45
113000006	1.0	0.0	Unknown	Unknown	10-year	25-year	-	0.0%	No	-	0.36	No	0	0.10
113000007	1.0	0.0	Unknown	Unknown	2-year	25-year	-	0.0%	No	-	0.24	No	0	0.10
113000010	0.0	0.0	Unknown	Unknown	50-year	100-year	\$147,000	18.2%	No	-	0.34	No	0	1.73
113000011	0.0	0.0	Unknown	Unknown	50-year	100-year	\$864,000	8.4%	No	-	0.34	No	0	1.51
113000015	0.0	0.0	Unknown	Unknown	-	-	-	0.0%	No	-	0.59	No	0	0.00
113000026	1.0	0.0	Unknown	Unknown	-	-	\$829,000	2.2%	No	-	0.54	No	0	0.11
113000027	0.0	0.0	Unknown	Unknown	10-year	25-year	\$5,644,000	2.0%	No	-	0.63	No	0	0.80
113000035	0.0	0.0	Unknown	Unknown	-	-	-	0.0%	No	-	0.49	No	0	0.00
113000036	1.0	0.0	Unknown	Unknown	25-year	100-year	\$54,000	2.0%	No	-	0.72	No	0	1.19
113000037	1.0	0.0	Unknown	Unknown	25-year	100-year	\$45,000	2.0%	No	-	0.72	No	0	0.78
113000039	0.0	0.0	Unknown	Unknown	5-year	100-year	-	2.0%	No	-	0.22	No	0	0.10
113000040	0.0	0.0	Unknown	Unknown	10-year	100-year	\$118,000	0.0%	No	-	0.11	No	0	0.98
113000041	0.0	0.0	Unknown	Unknown	-	-	-	0.0%	No	-	0.00	No	0	0.10
113000042	0.0	0.0	Unknown	Unknown	2-year	10-year	-	0.0%	No	-	0.11	No	0	0.01
113000044	0.0	0.0	Unknown	Unknown	50-year	100-year	\$44,000	0.0%	No	-	0.54	No	0	3.53
113000047	0.0	0.0	Unknown	Unknown	50-year	100-year	\$652,000	0.0%	No	-	0.66	No	0	0.77
113000052	0.0	0.0	Unknown	Unknown	-	-	-	0.0%	No	-	0.56	No	0	0.00
113000060	0.0	0.0	Unknown	Unknown	-	-	-	0.0%	No	-	0.00	No	0	0.00
113000061	0.0	0.0	Unknown	Unknown	-	-	\$565,000	0.0%	No	-	0.12	No	0	0.30
113000062	0.0	0.0	Unknown	Unknown	-	-	-	0.0%	No	-	0.68	No	0	0.00
113000063	0.0	0.0	Unknown	Unknown	-	-	-	0.0%	No	-	0.59	No	0	0.00
113000064	0.0	0.0	Unknown	Unknown	-	-	-	0.0%	No	-	0.54	No	0	0.00
113000065	1.0	0.0	Unknown	Unknown	25-year	100-year	\$252,000	2.0%	No	-	0.49	No	0	1.17
113000066	1.0	0.0	Unknown	Unknown	10-year	50-year	\$594,000	2.0%	No	-	0.49	No	0	1.28
113000067	0.0	0.0	Unknown	Unknown	100-year	100-year	\$239,000	2.1%	No	-	0.13	No	0	0.25
113000068	0.0	0.0	Unknown	Unknown	50-year	100-year	\$1,537,000	1.3%	No	-	0.27	No	0	0.10
113000069	0.0	0.0	Unknown	Unknown	50-year	100-year	\$151,000	0.0%	No	-	0.67	No	0	1.57

**Table 14: Potentially Feasible Flood Management Strategies Identified by RFPG**

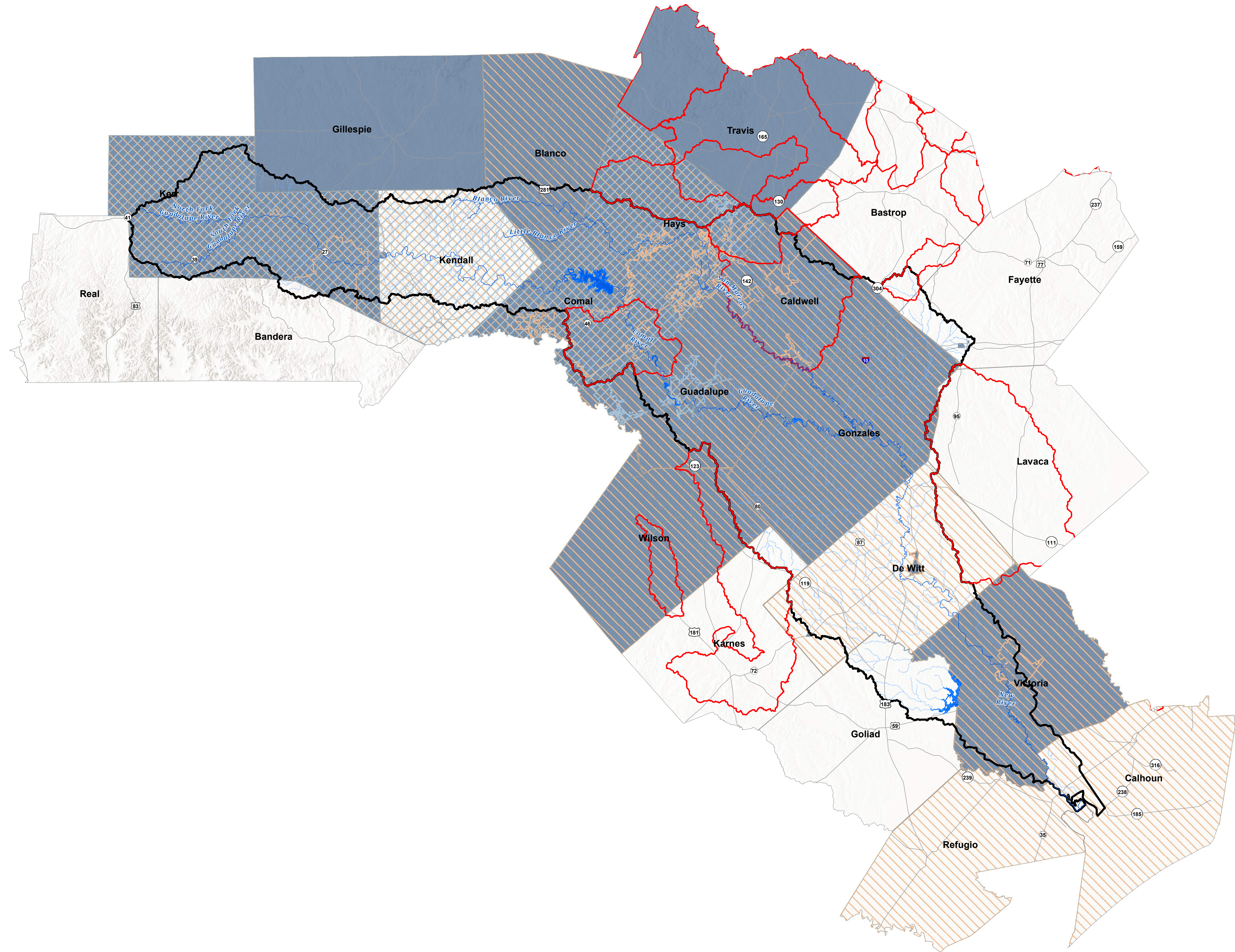
FMS ID	FMS Name	Description	Associated Goals (ID)	Counties	HUC10s	Watersheds	Strategy Type	Strategy Area (sqmi)	Flood Risk Type (Riverine, Coastal, Urban, Playa Other)	Sponsor	Entities with Oversight	Emergency Need (Y/N)	Estimated Total Strategy Cost (\$)	Potential Funding Sources and Amount	Flood Risk									
															Area in 100yr (1% annual chance) Floodplain	Area in 500yr (0.2% annual chance) Floodplain	Estimated number of structures at 100yr flood risk	Residential structures at flood risk	Estimated Population at flood risk	Critical facilities at flood risk (#)	Number of low water crossings at flood risk (#)	Estimated number of road closures (#)	Estimated length of roads at flood risk (Miles)	Estimated active farm & ranch land at flood risk (acres)
112000186	Education and Outreach	Activities not limited to implementing/improving flood education and awareness programs for residents, elected officials, and real estate agents/developers; and flood insurance campaigns to reduce flood risk and increase NFIP participation.	11000001	Lavaca, Gonzales, Guadalupe, Bandera, Comal, Real, Caldwell, Kendall, Fayette, Kerr, Hays, Bastrop, Gillespie, Blanco, Travis, Refugio, Calhoun, Goliad, Victoria, Karnes, De Witt, Wilson	-	11000133, 11000130, 11000136, 11000140, 11000137, 11000141, 11000138, 11000139, 11000146, 11000148, 11000149, 11000142, 11000143, 11000144, 11000145, 11000147, 11000150, 11000134, 11000135, 11000131, 11000132, 11000129, 11000125, 11000124, 11000126, 11000127, 11000128, 11000151	Education and Outreach	6,010.4	Coastal	Guadalupe Regional Flood Planning Group	Guadalupe Regional Flood Planning Group	No	\$978,000	Unknown	1166.20	194.10	27,069	18,878	62,638	127	661	Unknown	935	360,251.31
112000187	Property Acquisitions and Structural Elevation	Develop and implement a voluntary buyout or structural elevation assistance programs to eliminate repetitive loss structures and implementing programs to purchase/preserve open space to protect riparian corridors.	11000003, 11000009	Lavaca, Gonzales, Guadalupe, Bandera, Comal, Real, Caldwell, Kendall, Fayette, Kerr, Hays, Bastrop, Gillespie, Blanco, Travis, Refugio, Calhoun, Goliad, Victoria, Karnes, De Witt, Wilson	-	11000133, 11000130, 11000136, 11000140, 11000137, 11000141, 11000138, 11000139, 11000146, 11000148, 11000149, 11000142, 11000143, 11000144, 11000145, 11000147, 11000150, 11000134, 11000135, 11000131, 11000132, 11000129, 11000125, 11000124, 11000126, 11000127, 11000128, 11000151	Property Acquisition and Structural Elevation	6,010.4	Coastal	Guadalupe Regional Flood Planning Group	Guadalupe Regional Flood Planning Group	No	\$1,250,000	Unknown	1166.20	194.10	27,069	18,878	62,638	127	661	Unknown	935	360,251.31
112000188	Regulatory and Guidance	Regularly review and update floodplain ordinances, land use/zoning, development criteria, and enforcement. Develop and implement higher standards, green infrastructure program, and use best available data (eg. BLE) to manage floodplains	11000003, 11000005, 11000009	Lavaca, Gonzales, Guadalupe, Bandera, Comal, Real, Caldwell, Kendall, Fayette, Kerr, Hays, Bastrop, Gillespie, Blanco, Travis, Refugio, Calhoun, Goliad, Victoria, Karnes, De Witt, Wilson	-	11000133, 11000130, 11000136, 11000140, 11000137, 11000141, 11000138, 11000139, 11000146, 11000148, 11000149, 11000142, 11000143, 11000144, 11000145, 11000147, 11000150, 11000134, 11000135, 11000131, 11000132, 11000129, 11000125, 11000124, 11000126, 11000127, 11000128, 11000151	Regulatory and Guidance	6,010.4	Coastal	Guadalupe Regional Flood Planning Group	Guadalupe Regional Flood Planning Group	No	\$93,000	Unknown	1166.20	194.10	27,069	18,878	62,638	127	661	Unknown	935	360,251.31
112000189	Flood Measurement and Warning	Develop or implement programs to increase flood warning including reverse 911 systems; evacuation/emergency management plans and personnel training; NOAA all-hazards radios, and programs to increase safety at low water crossings (signs, flashers, gages)	11000001, 11000009	Lavaca, Gonzales, Guadalupe, Bandera, Comal, Real, Caldwell, Kendall, Fayette, Kerr, Hays, Bastrop, Gillespie, Blanco, Travis, Refugio, Calhoun, Goliad, Victoria, Karnes, De Witt, Wilson	-	11000133, 11000130, 11000136, 11000140, 11000137, 11000141, 11000138, 11000139, 11000146, 11000148, 11000149, 11000142, 11000143, 11000144, 11000145, 11000147, 11000150, 11000134, 11000135, 11000131, 11000132, 11000129, 11000125, 11000124, 11000126, 11000127, 11000128, 11000151	Flood Measurement and Warning	6,010.4	Coastal	Guadalupe Regional Flood Planning Group	Guadalupe Regional Flood Planning Group	No	\$9,541,000	Unknown	1166.20	194.10	27,069	18,878	62,638	127	661	Unknown	935	360,251.31
112000190	Infrastructure Projects	Develop programs to preserve system functionality (storm drains, culverts, bridges); enhance riparian corridors & preserve floodplain capacity; and infrastructure improvements programs that identify and prioritize flood risk reduction projects	11000003, 11000009, 11000011	Lavaca, Gonzales, Guadalupe, Bandera, Comal, Real, Caldwell, Kendall, Fayette, Kerr, Hays, Bastrop, Gillespie, Blanco, Travis, Refugio, Calhoun, Goliad, Victoria, Karnes, De Witt, Wilson	-	11000133, 11000130, 11000136, 11000140, 11000137, 11000141, 11000138, 11000139, 11000146, 11000148, 11000149, 11000142, 11000143, 11000144, 11000145, 11000147, 11000150, 11000134, 11000135, 11000131, 11000132, 11000129, 11000125, 11000124, 11000126, 11000127, 11000128, 11000151	Infrastructure Projects	6,010.4	Coastal	Guadalupe Regional Flood Planning Group	Guadalupe Regional Flood Planning Group	No	\$21,611,000	Unknown	1166.20	194.10	27,069	18,878	62,638	127	661	Unknown	935	360,251.31

FMS ID	Reduction in Flood Risk												Cost/ Structure Removed	Consideration of Nature-based Solution (Y/N)	Negative Impact (Y/N)	Negative Impact Mitigation (Y/N)	Water Supply Benefit (Y/N)	
	Number of structures with reduced 100yr (1% annual chance) Flood risk	Number of structures removed from 100yr (1% annual chance) Flood risk	Number of structures removed from 500yr (0.2% annual chance) Flood risk	Habitable structures removed from 100yr (1% annual chance) Flood risk	Estimated Population removed from 100yr (1% annual chance) Flood risk	Critical facilities removed from 100yr (1% annual chance) Flood risk (#)	Number of low water crossings removed from 100yr (1% annual chance) Flood risk (#)	Estimated reduction in road closure occurrences	Estimated length of roads removed from 100yr flood risk (Miles)	Estimated active farm & ranch land removed from 100yr flood risk (acres)	Estimated reduction in fatalities (if available)	Estimated reduction in injuries (if available)						
112000186	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Not Available	Not Available	-	-	No	-	No
112000187	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Not Available	Not Available	-	-	No	-	No
112000188	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Not Available	Not Available	-	-	No	-	No
112000189	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Not Available	Not Available	-	-	No	-	No
112000190	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Not Available	Not Available	-	-	No	-	No



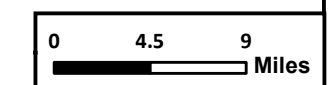
**Appendix 5-A |**



**Map 19: Recommended Flood Management Evaluations**



**Legend**

- River
- Tributary
- FIF CAT 1 Project Areas
- Major Reservoirs
- FME Type**
- Preparedness
- Project Planning
- Watershed Planning





  
 Freese and Nichols, Inc.  
 Office: (512) 617-3100

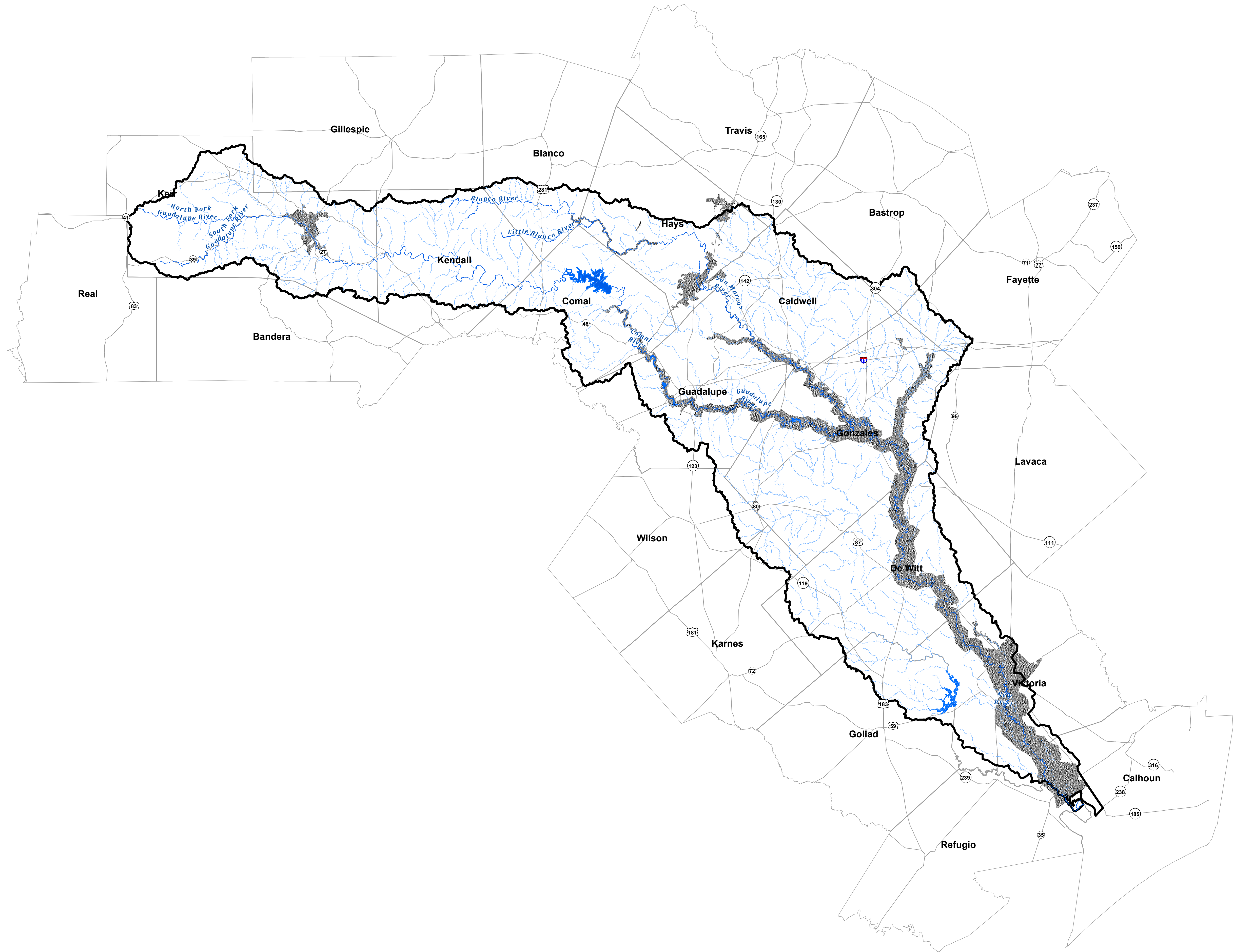


## Recommended Flood Management Evaluations

Region 11: Guadalupe

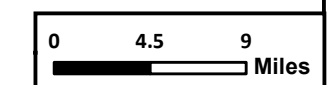
FN JOB NO	GBA21382	<b>Map</b> <b>19</b>
FILE	19_RecommendFME	
DATE	12/15/2022	
SCALE	1 in = 9 miles	
DRAFTED	02-405	

## **Map 20:** Recommended Flood Mitigation Projects



**Legend**

- River
- Tributary
- Major Reservoirs
- Counties
- FMP Extent

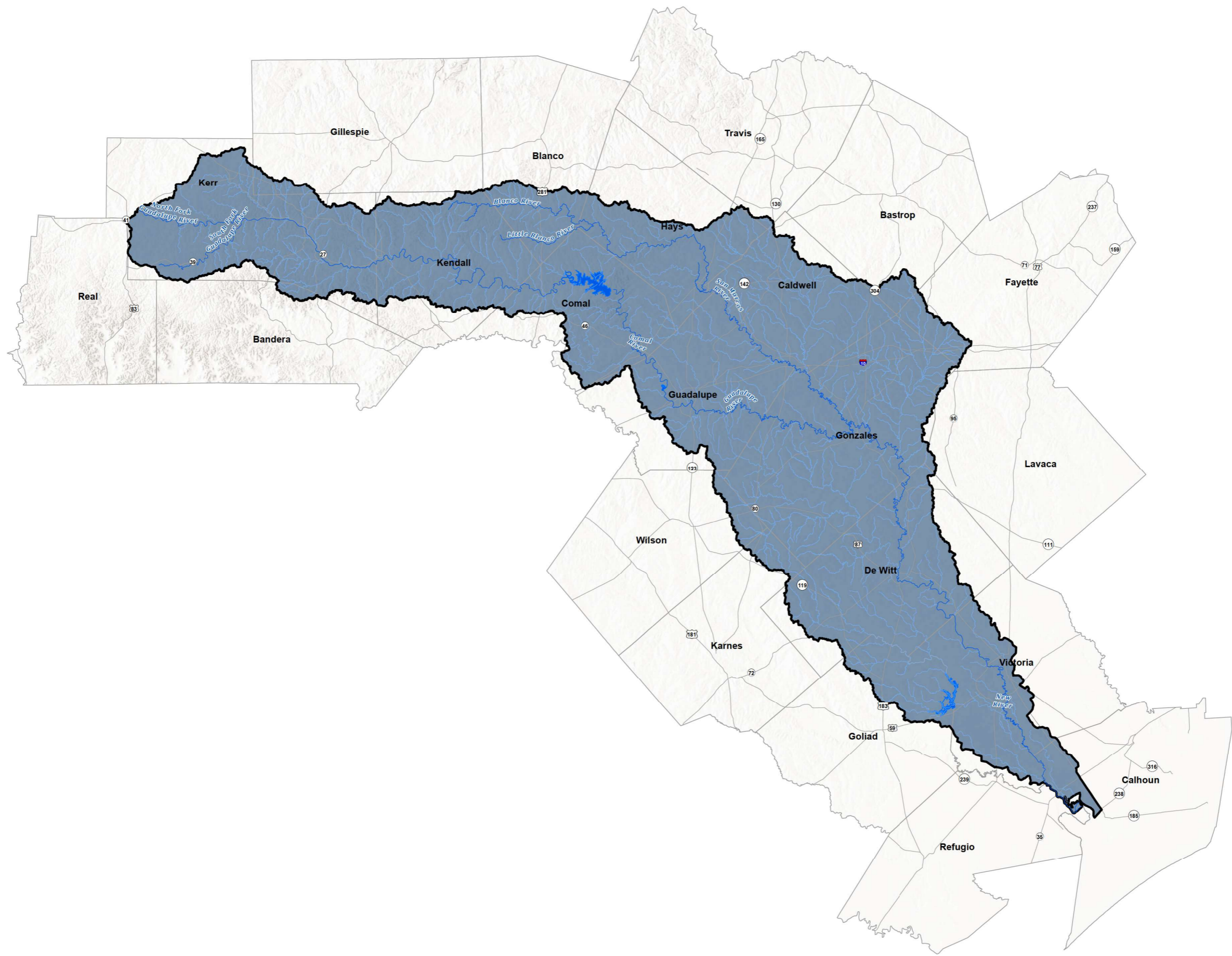


**Recommended Flood Mitigation Projects**  
Region 11: Guadalupe



PROJECT NO.	GBA21382	<b>Map</b> <b>20</b>
FILE	20_RecommendFMP	
DATE	12/15/2022	
SCALE	1 in = 9 miles	
DRAFTED	02-405	

## **Map 21:** Recommended Flood Management Strategies



- Legend**
- River
  - Tributary
  - Major Reservoirs
  - FMS Extent



**Recommended Flood Management Strategies**  
Region 11: Guadalupe

0 4.5 9 Miles	
PROJECT NO.	GRA21362
FILE	21_RecommendedFMS
DATE	3/24/2022
SCALE	1 in = 9 miles
DRAFTED	02405

**Table 15: Flood Management Evaluations  
Recommended by RFPG**



FME ID	RFPG No.	RFPG Name	FME Name	Description	Associated Goals	Counties	HUC8s	HUC12s	Watershed Name	Study Type	FME Area (sqmi)	Flood Risk Type	Sponsor	Entities with Oversight	Emergency Need	Estimated Study Cost	Potential Funding Sources and Amount	Estimated number of structures at flood risk	Habitable structures at flood risk	Estimated Population at flood risk	Critical facilities at flood risk (#)	Number of low water crossings at flood risk (#)	Estimated number of road closures (#)	Estimated length of roads at flood risk (Miles)	Estimated active farm & ranch land at flood risk (acres)	Existing or Anticipated Models (year)	Existing or Anticipated Maps (year)	RFPG Recommendation (Y/N)	Reason for Recommendation
111000001	11	Guadalupe	Blanco County Low Water Crossing Improvements Study	Study of solutions to upgrade and/or raise low water crossing in the county. The low water crossings most frequently and most severely flooded will be assessed for elevation and improvement (e.g., curbed and/or pedestrian walkways) roadways.	11000001, 11000002	Blanco	12100203, 12100201	-	Multiple	Watershed Planning	711.0	Riverine	Blanco	Multiple	No	\$250,000	-	167	122	256	0	30	0	14.2	4091.8	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000002	11	Guadalupe	Blanco County Soil Conservation Plan	Develop soil conservation plan which provides information on proper land stewardship including diagram, soil map, assessment of vegetation and wildlife fuels, schedule for applying conservation practices; plan for operation and maintenance.	11000003, 11000004	Blanco	12100203, 12100201	-	Multiple	Watershed Planning	711.0	Riverine	Blanco	Multiple	No	\$100,000	-	167	122	256	0	30	0	14.2	4091.8	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000003	11	Guadalupe	Caldwell County Bridge Improvements Project Planning	Project planning for proposed project to replace antiquated bridges built before 1950. These bridges cannot support the weight of emergency vehicles. In addition, upgraded bridge infrastructure would reduce backwater flooding at undersized crossings.	11000009, 11000010	Caldwell	12100202, 12100203	-	Multiple	Project Planning	544.7	Riverine	Caldwell	Multiple	No	\$256,000	-	937	635	2,190	7	40	0	71.2	35718.5	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000004	11	Guadalupe	Caldwell County Emergency Service District #1 Drainage and Utility Plan	Develop a drainage and utility plan.	11000009, 11000010	Caldwell, Hays	12100203	-	San Marcos	Watershed Planning	110.6	Riverine	Caldwell County Emergency Service District #1	Multiple	No	\$100,000	-	136	74	289	0	13	0	10.9	4872.8	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000005	11	Guadalupe	Caldwell County Emergency Service District #3 River Crossing Improvements Study	Study solutions to upgrade river crossings throughout the district including but not limited to Scull Road Bridge.	11000001, 11000002	Caldwell	12100203	-	San Marcos	Watershed Planning	23.6	Riverine	Caldwell County Emergency Service District #3	Multiple	No	\$1,000,000	-	465	347	1,254	1	5	0	12.6	3124.1	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000006	11	Guadalupe	Caldwell County Emergency Service District #3 Repetitive Loss Property Mitigation Study	Study of identify flood-prone and repetitive loss properties through the Texas Water Development Board and identify and study solutions to reduce or eliminate flooding at identified properties.	11000009, 11000010	Caldwell	12100203	-	San Marcos	Project Planning	23.6	Riverine	Caldwell County Emergency Service District #3	Multiple	No	\$1,000,000	-	465	347	1,254	1	5	0	12.6	3124.1	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000007	11	Guadalupe	Caldwell County Emergency Service District #4 Fire Station 2 Project Planning	Planning for proposed project to build a well and raise driveway of Fire Station 2 to prevent inundation of facility and to keep station in service during major storm events.	11000015, 11000016	Caldwell	12100203	-	San Marcos	Project Planning	0.0	Riverine	Caldwell County Emergency Service District #4	Multiple	No	\$100,000	-	0	0	0	0	0	0	0.0	0.0	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000008	11	Guadalupe	Canyon Regional WA Hays Caldwell Water Treatment Plant Floodwall Project Planning	Project planning for Canyon Regional WA - Hays Caldwell Water Treatment Plant Floodwall Project	11000009, 11000010	Guadalupe	12100202	-	Middle Guadalupe	Project Planning	0.0	Riverine	Canyon Regional Water Authority	Multiple	No	\$159,355	-	1	0	0	0	0	0	0.1	0.0	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000009	11	Guadalupe	Center Point ISD Drainage Improvements Study	Study of solutions to construct new storm drainage infrastructure to reduce the potential impacts of future flood events.	11000009, 11000010	Kerr	12100201	-	Upper Guadalupe	Watershed Planning	95.5	Riverine	Caldwell County Emergency Service District #4	Multiple	No	\$100,000	-	462	293	730	0	16	0	22.9	4927.8	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000010	11	Guadalupe	City of Cibolo and Seguin Road Access and Conditions Study	Study to evaluate access and road conditions for response vehicles, develop and implement options to improve access and/or add redundant access routes in high risk areas.	11000015, 11000016	Guadalupe	12100202	-	Middle Guadalupe	Preparedness	59.2	Riverine	Cibolo	Multiple	No	\$500,000	-	846	642	2,283	5	8	0	25.2	1157.1	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000011	11	Guadalupe	City of Cibolo and Seguin USACE Study	Undertake a comprehensive study of flood risk and reduction alternatives, with the assistance of the U.S. Army Corps of Engineers. Project planning to implement feasible alternatives for flood reduction.	11000009, 11000010	Guadalupe	12100202	-	Middle Guadalupe	Watershed Planning	59.2	Riverine	Cibolo	Multiple	No	\$1,000,000	-	846	642	2,283	5	8	0	25.2	1157.1	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000012	11	Guadalupe	City of Buda Dam Study	Study to evaluate dam failure risks, planning for structural and nonstructural measures to protect the integrity of the earthen fill dams.	11000009, 11000010	Hays	12100203	-	San Marcos	Preparedness	9.3	Riverine	Buda	Multiple	No	\$500,000	-	3	1	3	0	1	0	0.9	7.7	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000013	11	Guadalupe	City of Bulverde Drainage Improvements Study	Study of solutions to replace existing culverts with larger ones, improve drainage channels; clear-out existing drainage channels; survey and remove hazardous trees from drainage systems.	11000009, 11000010	Comal	12100202, 12100201	-	Multiple	Watershed Planning	15.8	Riverine	Bulverde	Multiple	No	\$150,000	-	0	0	0	0	1	0	0.6	1.4	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000014	11	Guadalupe	City of Bulverde Local Flooding Study	Study of solutions to elevate some segments of roadways in various portions of the community to address localized flooding issues.	11000009, 11000010	Comal	12100202, 12100201	-	Multiple	Watershed Planning	15.8	Riverine	Bulverde	Multiple	No	\$100,000	-	0	0	0	0	1	0	0.6	1.4	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000015	11	Guadalupe	City of Flatonia Drainage Project Planning	Project planning for proposed project to make culvert and drainage ditch improvements from just south of the Union Pacific Railroad at US 90 to the north side frontage road of I-10.	11000009, 11000010	Fayette	12100202	-	Middle Guadalupe	Project Planning	0.7	Riverine	Flatonia	Multiple	No	\$2,739,000	-	0	0	0	0	0	0	0.1	15.4	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000016	11	Guadalupe	City of Flatonia WWTP Floodproofing Project Planning	Project planning for proposed project to floodproof Waste Water Treatment Plant	11000015, 11000016	Fayette	12100202	-	Middle Guadalupe	Project Planning	0.0	Riverine	Flatonia	Multiple	No	\$100,000	-	0	0	0	0	0	0	0.0	0.0	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000017	11	Guadalupe	City of Garden Ridge Drainage Improvements Project Planning	Project planning to complete final phase of drainage infrastructure upgrades.	11000009, 11000010	Comal	12100202	-	Middle Guadalupe	Project Planning	7.3	Riverine	Garden Ridge	Multiple	No	\$100,000	-	9	0	20	0	0	0	0.0	18.4	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000018	11	Guadalupe	City of Gonzales Tinsley Creek Improvement Project Planning	Project planning to upgrade aging infrastructure that was overwhelmed during Hurricane Harvey. Projects may include replacing box culvert bridges, replacing box culvert bridges with clear span bridges, and relocating utilities within the stream bed.	11000009, 11000010	Gonzales	12100202	-	Middle Guadalupe	Project Planning	6.1	Riverine	Gonzales	Multiple	No	\$600,000	-	532	412	1,070	2	5	0	13.4	127.7	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000019	11	Guadalupe	City of Gonzales Tinsley Creek Flood Mitigation Project Planning	Project planning for proposed improvements along Tinsley Creek include replacing a low water crossing at Johnson Street, adding culverts under Johnson Street, and replacing box culvert crossings with free span bridge crossings at several streets.	11000001, 11000002	Gonzales	12100202	-	Middle Guadalupe	Project Planning	6.1	Riverine	Gonzales	Multiple	No	\$430,000	-	532	412	1,070	2	5	0	13.4	127.7	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000020	11	Guadalupe	City of Ingram Drainage Improvements Study	Study of solutions to upgrade existing storm drainage infrastructure to reduce the potential impacts of future flood events.	11000009, 11000010	Kerr	12100201	-	Upper Guadalupe	Watershed Planning	1.5	Riverine	Ingram	Multiple	No	\$100,000	-	122	76	141	0	0	0	3.1	24.2	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000022	11	Guadalupe	City of Kerrville Pinto Trail Project Planning	Project planning for proposed project to provide flood relief to the properties adjacent to the channel at risk of flooding, including widening existing channels, constructing a grass-lined trapezoidal channel, and seeding the proposed earthen channels.	11000009, 11000010	Kerr	12100201	-	Upper Guadalupe	Project Planning	0.0	Riverine	Kerrville	Multiple	No	\$100,000	-	0	0	0	0	0	0	0.0	0.0	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000023	11	Guadalupe	City of Kerrville Park Street Low Water Crossing Project Planning	Project planning for proposed project to improve or replace the Park Street Low Water Crossing.	11000001, 11000002	Kerr	12100201	-	Upper Guadalupe	Project Planning	0.0	Riverine	Kerrville	Multiple	No	\$340,000	-	0	0	0	0	1	0	0.1	0.0	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000024	11	Guadalupe	City of Kerrville First Street Low Water Crossing Project Planning	Project planning for proposed project to improve or replace the First Street Low Water Crossing.	11000001, 11000002	Kerr	12100201	-	Upper Guadalupe	Project Planning	0.0	Riverine	Kerrville	Multiple	No	\$510,000	-	0	0	0	0	1	0	0.0	0.0	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000025	11	Guadalupe	City of Kerrville Fourth Street Low Water Crossing Project Planning	Project planning for proposed project to improve or replace the Park Street Low Water Crossing.	11000001, 11000002	Kerr	12100201	-	Upper Guadalupe	Project Planning	0.0	Riverine	Kerrville	Multiple	No	\$180,000	-	0	0	0	0	1	0	0.1	0.0	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000026	11	Guadalupe	City of Kerrville Hill Country Drive at SH 16 Project Planning	Project planning for proposed project to raise the roadway profile and regrade Hill Country Drive, and increase the downstream pipe capacity at Hill Country Drive.	11000009, 11000010	Kerr	12100201	-	Upper Guadalupe	Project Planning	0.0	Riverine	Kerrville	Multiple	No	\$245,000	-	0	0	0	0	0	0	0.0	0.0	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000028	11	Guadalupe	City of Kerrville Harper Street between Culberson Avenue and Lewis Avenue Project Planning	Project planning for proposed storm drain system project to relieve localized flooding and excessive ponding that occurs throughout Harper Street.	11000009, 11000010	Kerr	12100201	-	Upper Guadalupe	Project Planning	0.0	Riverine	Kerrville	Multiple	No	\$180,000	-	1	1	2	0	0	0	0.0	0.0	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements

FME ID	RFPG No.	RFPG Name	FME Name	Description	Associated Goals	Counties	HUC8s	HUC12s	Watershed Name	Study Type	FME Area (sqmi)	Flood Risk Type	Sponsor	Entities with Oversight	Emergency Need	Estimated Study Cost	Potential Funding Sources and Amount	Estimated number of structures at flood risk	Habitable structures at flood risk	Estimated Population at flood risk	Critical facilities at flood risk (#)	Number of low water crossings at flood risk (#)	Estimated number of road closures (#)	Estimated length of roads at flood risk (Miles)	Estimated active farm & ranch land at flood risk (acres)	Existing or Anticipated Models (year)	Existing or Anticipated Maps (year)	RFPG Recommendation (Y/N)	Reason for Recommendation
111000029	11	Guadalupe	City of Kerrville Circle Avenue Drainage Channel Project Planning	Project planning for proposed channel and street improvement project to alleviate sedimentation and erosion issues at the intersection of Culberson Avenue and Circle Avenue.	11000009, 11000010	Kerr	12100201	-	Upper Guadalupe	Project Planning	0.0	Riverine	Kerrville	Multiple	No	\$100,000	-	0	0	0	0	0	0	0.0	0.0	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000030	11	Guadalupe	City of Kerrville Jack Drive Undersized Inlet Project Planning	Project planning for proposed street and drainage improvements project to relieve road and property flooding from occurring directly downstream of Jack Drive's existing undersized inlet.	11000009, 11000010	Kerr	12100201	-	Upper Guadalupe	Project Planning	0.0	Riverine	Kerrville	Multiple	No	\$240,000	-	0	0	0	0	0	0	0.0	0.0	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000031	11	Guadalupe	City of Kerrville Harper Road to Town Creek (Fay Drive) Drainage Improvements Study	Study of solutions to implement drainage improvements on Harper Road to Town Creek (Fay Drive).	11000009, 11000010	Kerr	12100201	-	Upper Guadalupe	Project Planning	0.2	Riverine	Kerrville	Multiple	No	\$150,000	-	4	4	7	0	1	0	0.1	0.0	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000033	11	Guadalupe	City of Kyle Prairie and Woodland Restoration Plan	Prepare and implement a prairie or woodland restoration plan for 1 or more of Kyle's park properties. Selection of a municipal park where all or a portion of the site may be restored to a natural grassland or woodland	11000003, 11000004	Hays	12100203	-	San Marcos	Watershed Planning	31.2	Riverine	Kyle	Multiple	No	\$250,000	-	422	360	1,368	0	9	0	7.2	727.1	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000034	11	Guadalupe	City of Kyle - N. Bureson Street Drainage Improvements Project Planning	Project planning for proposed project to conduct street reconstruction and drainage improvements to minimize flooding in the downtown area.	11000009, 11000010	Hays	12100203	-	San Marcos	Project Planning	0.0	Riverine	Kyle	Multiple	No	\$983,000	-	1	1	3	0	1	0	0.2	0.0	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000035	11	Guadalupe	City of Lockhart Drainage Improvements Study	Study to identify Capital Improvements to Municipal Drainage System and study solutions to upgrade system to improve drainage capacity and reduce flood damages.	11000009, 11000010	Caldwell	12100203	-	San Marcos	Watershed Planning	15.6	Riverine	Lockhart	Multiple	No	\$2,400,000	-	62	43	187	2	6	0	5.9	344.1	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000036	11	Guadalupe	City of Lockhart USACE Study	Undertake a comprehensive study of flood risk and reduction alternatives with USACE, covering all incorporated and unincorporated areas of the city that currently have limited studies with no determined base flood elevations as well as unmapped areas.	11000009, 11000010	Caldwell	12100203	-	San Marcos	Watershed Planning	15.6	Riverine	Lockhart	Multiple	No	\$360,000	-	62	43	187	2	6	0	5.9	344.1	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000037	11	Guadalupe	City of Luling Drainage Improvements Study	Study of solutions to upgrade undersized stormwater drains and culverts.	11000009, 11000010	Guadalupe, Caldwell	12100203	-	San Marcos	Watershed Planning	5.5	Riverine	Luling	Multiple	No	\$150,000	-	74	52	199	0	0	0	6.3	209.5	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000038	11	Guadalupe	City of Martindale Drainage Improvements Study	Study of solutions to upgrade undersized stormwater drains and culverts.	11000009, 11000010	Caldwell	12100203	-	San Marcos	Watershed Planning	2.1	Riverine	Martindale	Multiple	No	\$100,000	-	196	167	550	1	3	0	5.5	52.7	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000039	11	Guadalupe	City of Mountain City Repetitive Loss Structure Mitigation Study	Study of solutions to floodproof or otherwise mitigate repetitive loss structures that have been identified by FEMA for the number of flood insurance claims.	11000009, 11000010	Hays	12100203	-	San Marcos	Project Planning	0.5	Riverine	Mountain City	Multiple	No	\$150,000	-	0	0	0	0	0	0	0.0	0.0	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000043	11	Guadalupe	City of New Braunfels - Box Culvert Installation to Reduce Flood Risk on Blieders Creek, Comal River and Landa Park Project Planning	Project planning for proposed drainage improvements project to reduce flooding in the Blieders Creek and German Creek watersheds by conveying flows to the Guadalupe River. The project is also intended to relieve flooding in the Landa Park area.	11000009, 11000010	Comal	12100202	-	Middle Guadalupe	Project Planning	0.4	Riverine	New Braunfels	Multiple	No	\$878,000	-	60	30	353	0	4	0	1.0	5.1	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000044	11	Guadalupe	City of New Braunfels Faust St / Nacogdoches Ave Improvements Project Planning	Study to analyze drainage conveyance and flooding issues within the Faust Street and Nacogdoches Avenue area and project planning for solutions within project area.	11000009, 11000010	Comal	12100202	-	Middle Guadalupe	Watershed Planning	0.1	Riverine	New Braunfels	Multiple	No	\$1,102,000	-	2	0	8	0	0	0	0.0	0.0	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000045	11	Guadalupe	City of New Braunfels Dry Comal Creek Tributary East Watershed Project Planning	Study to analyze drainage conveyance and flooding issues within the Dry Comal Creek Tributaries East area (Kerlick Lane/Encino Drive/Mission Drive) and project planning for solutions within project area.	11000009, 11000010	Comal	12100202	-	Middle Guadalupe	Watershed Planning	1.1	Riverine	New Braunfels	Multiple	No	\$344,000	-	77	48	588	0	0	0	1.3	15.3	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000047	11	Guadalupe	City of New Braunfels Hunters Creek Regional Project Planning	Study to analyze drainage conveyance and flooding issues within the Hunters Creek area including the detention facility for the Westpointe development and project planning for solutions within project area.	11000009, 11000010	Comal	12100202	-	Middle Guadalupe	Watershed Planning	0.1	Riverine	New Braunfels	Multiple	No	\$211,000	-	0	0	0	0	0	0	0.0	0.0	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000048	11	Guadalupe	City of New Braunfels South Guadalupe Tributary Watershed Project Planning	Study to analyze drainage conveyance and flooding issues within the South Guadalupe River tributary area (Mesquite/Eastman/Oleander/Walnut Heights) and project planning for solutions within project area.	11000009, 11000010	Comal	12100202	-	Middle Guadalupe	Watershed Planning	0.4	Riverine	New Braunfels	Multiple	No	\$168,000	-	12	12	35	0	0	0	0.2	0.0	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000049	11	Guadalupe	City of New Braunfels Dry Comal Creek West Watershed Project Planning	Project planning for solutions to minimize flooding issues within the Cedar Elm Street, Landa-Madeline drainage area.	11000009, 11000010	Comal	12100202	-	Middle Guadalupe	Watershed Planning	0.1	Riverine	New Braunfels	Multiple	No	\$126,000	-	0	0	0	0	0	0	0.0	0.0	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000051	11	Guadalupe	City of Niederwald Engineering Review of City Hall	Contract a consultation from an engineer to review the new City Hall building to ensure its resiliency (modular building that holds community documents and archives).	11000009, 11000010	Caldwell, Hays	12100203	-	San Marcos	Project Planning	3.7	Riverine	Niederwald	Multiple	No	\$10,000	-	9	2	24	0	2	0	1.5	150.0	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000052	11	Guadalupe	City of Nixon Voluntary Buyout Program Project Planning	Project planning to develop and implement a program to buyout NFIP repetitive loss properties.	11000009, 11000010	Gonzales, Wilson	12100202	-	Middle Guadalupe	Project Planning	1.6	Riverine	Nixon	Multiple	No	\$150,000	-	13	6	22	0	0	0	0.1	6.2	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000054	11	Guadalupe	City of San Marcos Regional Detention Study	Study of solutions for regional detention and water quality strategies.	11000009, 11000010	Guadalupe, Caldwell, Hays	12100203	-	San Marcos	Watershed Planning	35.6	Riverine	San Marcos	Multiple	No	\$200,000	-	2,270	1,626	12,650	14	12	0	48.1	822.4	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000055	11	Guadalupe	City of San Marcos Modeling of Purgatory Creek and Willow Springs Creek Overflow Area	2-Dimensional Modeling of the Purgatory Creek and Willow Springs Creek Overflow Area	11000009, 11000010	Hays	12100203	-	San Marcos	Watershed Planning	0.4	Riverine	San Marcos	Multiple	No	\$271,000	-	159	130	349	0	0	0	3.0	0.0	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000056	11	Guadalupe	City of San Marcos Low Water Crossing at Jackman Project Planning	Project planning to replace low water crossing at Jackman	11000001, 11000002	Hays	12100203	-	San Marcos	Project Planning	0.0	Riverine	San Marcos	Multiple	No	\$150,000	-	0	0	0	0	0	0	0.1	0.0	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000057	11	Guadalupe	City of San Marcos Low Water Crossing at Mitchell and Purgatory Creek Project Planning	Project planning to replace low water crossing at Mitchell and Purgatory Creek	11000001, 11000002	Hays	12100203	-	San Marcos	Project Planning	0.0	Riverine	San Marcos	Multiple	No	\$200,000	-	0	0	0	0	0	0	0.1	0.0	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000058	11	Guadalupe	City of San Marcos LWC at River Road and Railroad Trestle/Blanco River Project Planning	Project planning to replace low water crossing at River Road and Railroad Trestle/Blanco River	11000001, 11000002	Hays	12100203	-	San Marcos	Project Planning	0.0	Riverine	San Marcos	Multiple	No	\$150,000	-	0	0	0	0	1	0	0.1	0.0	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000059	11	Guadalupe	City of San Marcos LWC at S LBJ and Purgatory Creek Project Planning	Project planning to replace low water crossing at S LBJ and Purgatory Creek	11000001, 11000002	Hays	12100203	-	San Marcos	Project Planning	0.0	Riverine	San Marcos	Multiple	No	\$150,000	-	0	0	0	0	0	0	0.0	0.0	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000060	11	Guadalupe	City of San Marcos - Extension of River Ridge Parkway West Project Planning	Project planning for proposed project identified through the San Marcos Transportation Plan, to increase the ability to divert traffic during flooding events	11000009, 11000010	Hays	12100203	-	San Marcos	Project Planning	0.3	Riverine	San Marcos	Multiple	No	\$298,000	-	69	59	1,288	1	0	0	3.2	0.4	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000061	11	Guadalupe	City of Seguin Drainage Improvements Study	Study of solutions to increase drainage capacity, add stormwater detention and/or retention basins, and implement drainage improvements as deemed necessary to reduce flood risk.	11000009, 11000010	Guadalupe	12100202	-	Middle Guadalupe	Watershed Planning	38.3	Riverine	Seguin	Multiple	No	\$1,100,000	-	846	642	2,283	5	8	0	25.2	1157.1	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000062	11	Guadalupe	City of Seguin Low Water Crossing Improvements Study	Study of solutions for drainage improvements at low water crossings.	11000001, 11000002	Guadalupe	12100202	-	Middle Guadalupe	Watershed Planning	38.3	Riverine	Seguin	Multiple	No	\$1,500,000	-	846	642	2,283	5	8	0	25.2	1157.1	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000063	11	Guadalupe	City of Seguin Ingress Egress Improvements Project Planning	Project planning for proposed project to provide/construct additional means of access into single-entry neighborhoods; Update subdivision codes for a higher level of ingress and egress.	11000015, 11000016	Guadalupe	12100202	-	Middle Guadalupe	Preparedness	38.3	Riverine	Seguin	Multiple	No	\$250,000	-	846	642	2,283	5	8	0	25.2	1157.1	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements

FME ID	RFPG No.	RFPG Name	FME Name	Description	Associated Goals	Counties	HUC8s	HUC12s	Watershed Name	Study Type	FME Area (sqmi)	Flood Risk Type	Sponsor	Entities with Oversight	Emergency Need	Estimated Study Cost	Potential Funding Sources and Amount	Estimated number of structures at flood risk	Habitable structures at flood risk	Estimated Population at flood risk	Critical facilities at flood risk (#)	Number of low water crossings at flood risk (#)	Estimated number of road closures (#)	Estimated length of roads at flood risk (Miles)	Estimated active farm & ranch land at flood risk (acres)	Existing or Anticipated Models (year)	Existing or Anticipated Maps (year)	RFPG Recommendation (Y/N)	Reason for Recommendation
111000064	11	Guadalupe	City of Seguin City-wide Drainage Improvements Project Planning	Project planning to increase Regional Detention, Channel & Drainage System improvements.	11000009, 11000010	Guadalupe	12100202	-	Middle Guadalupe	Project Planning	38.3	Riverine	Seguin	Multiple	No	\$200,000	-	846	642	2,283	5	8	0	25.2	1157.1	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000065	11	Guadalupe	City of Seguin Voluntary Buyout Program Project Planning	Project planning to develop an acquisition and elevation program in flood hazard areas. Elevate or acquire and demolish repetitive loss properties. Acquire high risk vacant land and maintain as open space.	11000009, 11000010	Guadalupe	12100202	-	Middle Guadalupe	Project Planning	38.3	Riverine	Seguin	Multiple	No	\$300,000	-	846	642	2,283	5	8	0	25.2	1157.1	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000066	11	Guadalupe	City of Seguin Citywide Drainage Project Planning	Project planning for four priority drainage projects within the City of Seguin that would greatly improve the safety of their 25,520 residents. Project areas include North Guadalupe, North Heideke, Mays Creek and Walnut Branch.	11000009, 11000010	Guadalupe	12100202	-	Middle Guadalupe	Project Planning	38.3	Riverine	Seguin	Multiple	No	\$4,304,000	-	846	642	2,283	5	8	0	25.2	1157.1	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000067	11	Guadalupe	City of Seguin Sewage Treatment Plant Floodproofing Project Planning	Project planning for proposed project to flood-proof sewage treatment plants in flood hazard / low-lying areas.	11000015, 11000016	Guadalupe	12100202	-	Middle Guadalupe	Project Planning	0.0	Riverine	Seguin	Multiple	No	\$100,000	-	8	0	48	0	0	0	0.2	0.0	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000068	11	Guadalupe	City of Umland Drainage Improvement Project Planning	Project planning for proposed project to mitigate against flooding by increasing the capacity of drainage routes to contain the storm water. Proposed drainage improvements will reduce flood waters backing up into the City.	11000009, 11000010	Caldwell, Hays	12100203	-	San Marcos	Project Planning	2.8	Riverine	Umland	Multiple	No	\$1,334,000	-	27	11	46	0	3	0	1.5	94.1	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000069	11	Guadalupe	City of Victoria Drainage Improvement Study	Study of solutions to increase dimensions of drainage culverts in areas prone to flooding and/or drainage problems in various City locations.	11000009, 11000010	Victoria	12100204	-	Lower Guadalupe	Watershed Planning	37.5	Riverine	Victoria	Multiple	No	\$1,000,000	-	1,139	933	3,181	24	0	0	36.2	110.7	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000070	11	Guadalupe	City of Victoria Harden Critical Infrastructure Project Planning	Project planning to harden city buildings, critical infrastructure, and government buildings. Hardening of non-governmental facilities that have been identified as crucial in the response and recovery to/of emergencies and disasters.	11000015, 11000016	Victoria	12100204	-	Lower Guadalupe	Project Planning	37.5	Riverine	Victoria	Multiple	No	\$100,000	-	1,139	933	3,181	24	0	0	36.2	110.7	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000071	11	Guadalupe	City of Victoria Voluntary Buyout Program Project Planning	Project planning to implement a voluntary acquisition program for repetitive flood properties.	11000009, 11000010	Victoria	12100204	-	Lower Guadalupe	Project Planning	37.5	Riverine	Victoria	Multiple	No	\$150,000	-	1,139	933	3,181	24	0	0	36.2	110.7	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000072	11	Guadalupe	City of Victoria Flood Gate Project Planning	Project planning for proposed project to rehabilitate, repair, or replace the City of Victoria's existing flood gates, install additional flood gates as appropriate, and construct a storm water lift station in an area to be determined by study.	11000009, 11000010	Victoria	12100204	-	Lower Guadalupe	Project Planning	37.5	Riverine	Victoria	Multiple	No	\$45,000	-	1,139	933	3,181	24	0	0	36.2	110.7	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000073	11	Guadalupe	City of Victoria Regional Drainage Solutions Project Planning	Project planning for proposed project for five regional drainage solutions within the City: the Gardens Apartment diversion, Shenandoah ditch improvements, Anthony Road outfall improvements, Lone Tree Road outfall improvements, and Clegg Ditch outfall.	11000009, 11000010	Victoria	12100204	-	Lower Guadalupe	Project Planning	37.5	Riverine	Victoria	Multiple	No	\$1,327,962	-	1,139	933	3,181	24	0	0	36.2	110.7	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000074	11	Guadalupe	City of Victoria - Storm Sewer Improvements Project Planning	Project planning for project to replace storm sewer pipe under 18-inch diameter (29.9 miles). As a result of overland flow analysis and Storm Sewer System Level of Service Analysis, it was determined to replace all pipe less than 18-inch diameter.	11000009, 11000010	Victoria	12100204	-	Lower Guadalupe	Project Planning	37.5	Riverine	Victoria	Multiple	No	\$3,946,100	-	1,139	933	3,181	24	0	0	36.2	110.7	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000075	11	Guadalupe	City of Victoria Clean and Televis Storm Sewers Project Planning	Project planning for proposed project to clean and televise storm sewers (165.7 miles). As a result of overland flow analysis and Storm Sewer System Level of Service Analysis, it was determined to clean and televise storm sewers.	11000009, 11000010	Victoria	12100204	-	Lower Guadalupe	Project Planning	37.5	Riverine	Victoria	Multiple	No	\$1,662,106	-	1,139	933	3,181	24	0	0	36.2	110.7	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000076	11	Guadalupe	City of Victoria Regrade Priority Ditches and Driveway Culverts Project Planning	Project planning for proposed drainage improvements. As a result of a roadside ditch capacity evaluation, it was determined that 23 miles of ditch and 669 driveway culverts are negatively impacting conveyance capacity and need to be regraded.	11000009, 11000010	Victoria	12100204	-	Lower Guadalupe	Project Planning	37.5	Riverine	Victoria	Multiple	No	\$1,165,853	-	1,139	933	3,181	24	0	0	36.2	110.7	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000077	11	Guadalupe	City of Victoria Repair Channel Failures & Sediment Removal Project Planning	Project planning for proposed channel improvements. Using field visits and drone footage, it was determined to repair 33,657 sq ft of concreted lined channel, 11,829 sq ft of earthen channel, and remove 227,099 sq ft of sediment.	11000009, 11000010	Victoria	12100204	-	Lower Guadalupe	Project Planning	37.5	Riverine	Victoria	Multiple	No	\$276,201	-	1,139	933	3,181	24	0	0	36.2	110.7	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000078	11	Guadalupe	City of Victoria Stream Restoration Study	Study to implement a stream restoration/channelization program to ensure adequate drainage/diversion of storm water, throughout various City low water crossings, streambeds, creek sheds, tributaries, and riverine areas.	11000009, 11000010	Victoria	12100204	-	Lower Guadalupe	Watershed Planning	37.5	Riverine	Victoria	Multiple	No	\$500,000	-	1,139	933	3,181	24	0	0	36.2	110.7	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000079	11	Guadalupe	City of Waelder Voluntary Buyout Program Project Planning	Project planning to develop and implement a program to buyout NFIP repetitive loss properties.	11000009, 11000010	Gonzales	12100202	-	Middle Guadalupe	Project Planning	1.3	Riverine	Waelder	Multiple	No	\$150,000	-	170	88	207	0	9	0	4.0	4.3	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000080	11	Guadalupe	City of Wimberley Drainage Master Plan	Creation of drainage master plan for City of Wimberley to mitigate the flood hazard by defining priorities, policies, and strategies to address and remedy the drainage needs and challenges in Wimberley.	11000009, 11000010	Hays	12100203	-	San Marcos	Watershed Planning	8.9	Riverine	Wimberley	Multiple	No	\$150,000	-	503	421	1,045	0	6	0	7.7	25.5	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000081	11	Guadalupe	City of Wimberley FM 1492 at Blanco River Low Water Crossing Project Planning	Project planning for proposed project to replace low water crossing at FM 1492 at Blanco River	11000001, 11000002	Hays	12100203	-	San Marcos	Project Planning	0.0	Riverine	Wimberley	Multiple	No	\$100,000	-	0	0	0	0	1	0	0.1	0.0	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000082	11	Guadalupe	City of Wimberley Hidden Valley at Blanco River Low Water Crossing Project Planning	Project planning for proposed project to replace low water crossing at Hidden Valley at Blanco River	11000001, 11000002	Hays	12100203	-	San Marcos	Project Planning	0.0	Riverine	Wimberley	Multiple	No	\$100,000	-	4	4	12	0	1	0	0.2	0.7	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000083	11	Guadalupe	City of Wimberley Little Arkansas at Blanco River Low Water Crossing Project Planning	Project planning for proposed project to replace low water crossing at Little Arkansas at Blanco River	11000001, 11000002	Hays	12100203	-	San Marcos	Project Planning	0.0	Riverine	Wimberley	Multiple	No	\$100,000	-	0	0	0	0	0	0	0.0	0.6	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000084	11	Guadalupe	City of Wimberley Valley Drive at Pierce Creek Low Water Crossing Project Planning	Project planning for proposed project to replace low water crossing at Valley Drive at Pierce Creek	11000001, 11000002	Hays	12100203	-	San Marcos	Project Planning	0.0	Riverine	Wimberley	Multiple	No	\$100,000	-	0	0	0	0	1	0	0.1	0.0	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000085	11	Guadalupe	City of Wimberley Flite Acres Road Low Water Crossing Project Planning	Project planning for proposed project to replace low water crossing at Flite Acres Road	11000001, 11000002	Hays	12100203	-	San Marcos	Project Planning	0.0	Riverine	Wimberley	Multiple	No	\$100,000	-	4	3	11	0	0	0	0.5	0.0	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000086	11	Guadalupe	City of Wimberley FM 1492 at Pierce Creek Low Water Crossing Project Planning	Project planning for proposed project to replace low water crossing at FM 1492 at Pierce Creek	11000001, 11000002	Hays	12100203	-	San Marcos	Project Planning	0.0	Riverine	Wimberley	Multiple	No	\$100,000	-	3	3	10	0	1	0	0.1	0.0	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000087	11	Guadalupe	City of Wimberley Wilson Creek at River Road Low Water Crossing Project Planning	Project planning for proposed project to replace low water crossing at Wilson Creek at River Road	11000001, 11000002	Hays	12100203	-	San Marcos	Project Planning	0.0	Riverine	Wimberley	Multiple	No	\$100,000	-	0	0	0	0	0	0	0.1	0.0	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000088	11	Guadalupe	City of Wimberley Green Acres Dr. at Fire Station Low Water Crossing Project Planning	Project planning for proposed project to replace low water crossing at Green Acres Dr. at Fire Station	11000001, 11000002	Hays	12100203	-	San Marcos	Project Planning	0.0	Riverine	Wimberley	Multiple	No	\$100,000	-	0	0	0	0	0	0	0.0	0.0	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000089	11	Guadalupe	City of Wimberley Leveritt's Loop Low Water Crossing Project Planning	Project planning for proposed project to replace low water crossing at Leveritt's Loop	11000001, 11000002	Hays	12100203	-	San Marcos	Project Planning	0.0	Riverine	Wimberley	Multiple	No	\$100,000	-	9	9	16	0	0	0	0.2	0.0	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements

FME ID	RFPG No.	RFPG Name	FME Name	Description	Associated Goals	Counties	HUC8s	HUC12s	Watershed Name	Study Type	FME Area (sqmi)	Flood Risk Type	Sponsor	Entities with Oversight	Emergency Need	Estimated Study Cost	Potential Funding Sources and Amount	Estimated number of structures at flood risk	Habitable structures at flood risk	Estimated Population at flood risk	Critical facilities at flood risk (#)	Number of low water crossings at flood risk (#)	Estimated number of road closures (#)	Estimated length of roads at flood risk (Miles)	Estimated active farm & ranch land at flood risk (acres)	Existing or Anticipated Models (year)	Existing or Anticipated Maps (year)	RFPG Recommendation (Y/N)	Reason for Recommendation
111000090	11	Guadalupe	City of Wimberley Spoke Hollow Dr. at Spoke Pile Creek Low Water Crossing Project Planning	Project planning for proposed project to replace low water crossing at Spoke Hollow Dr. at Spoke Pile Creek	11000001, 11000002	Hays	12100203	-	San Marcos	Project Planning	0.0	Riverine	Wimberley	Multiple	No	\$100,000	-	0	0	0	0	1	0	0.1	0.2	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000091	11	Guadalupe	City of Wimberley River Road at Western City Limit Low Water Crossing Project Planning	Project planning for proposed project to replace low water crossing at River Road at Western City Limit	11000001, 11000002	Hays	12100203	-	San Marcos	Project Planning	0.0	Riverine	Wimberley	Multiple	No	\$100,000	-	0	0	0	0	0	0	0.0	0.0	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000092	11	Guadalupe	City of Wimberley Paradise Hills Low Water Crossing Project Planning	Project planning for proposed project to replace low water crossing at Paradise Hills	11000001, 11000002	Hays	12100203	-	San Marcos	Project Planning	0.0	Riverine	Wimberley	Multiple	No	\$100,000	-	0	0	0	0	1	0	0.1	0.0	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000093	11	Guadalupe	City of Wimberley River Road Reconstruction Project Planning	Project planning for proposed project to reconstruct roadway along Blanco River	11000009, 11000010	Hays	12100203	-	San Marcos	Project Planning	0.1	Riverine	Wimberley	Multiple	No	\$100,000	-	23	16	41	0	0	0	1.5	3.8	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000094	11	Guadalupe	City of Wimberley Little Ranches at Panther Creek Low Water Crossing Project Planning	Project planning for proposed project to reconstruct low water crossing and roadway at Little Ranches at Panther Creek	11000001, 11000002	Hays	12100203	-	San Marcos	Project Planning	0.0	Riverine	Wimberley	Multiple	No	\$100,000	-	0	0	0	0	0	0	0.0	0.0	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000095	11	Guadalupe	City of Wimberley Hoots Holler Low Water Crossing Project Planning	Project planning for proposed project to reconstruct low water crossing and roadway at Hoots Holler	11000001, 11000002	Hays	12100203	-	San Marcos	Project Planning	0.0	Riverine	Wimberley	Multiple	No	\$100,000	-	0	0	0	0	0	0	0.0	0.0	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000096	11	Guadalupe	Comal County Evacuation and Dam Safety Plan	Develop evacuation and dam safety plan for coordination with USACE and dam re-enforcement.	11000015, 11000016	Comal	12100202, 12100203, 12100201	-	Multiple	Preparedness	573.0	Riverine	Comal	Multiple	No	\$50,000	-	3,677	2,782	9,129	6	77	0	92.6	9463.3	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000097	11	Guadalupe	Comal County Low Water Crossing Improvements Project Planning	Project planning to upgrade low water crossings with larger culverts and elevated roadways where feasible. Acquire easement and/or right of ways adjacent to River Road for first responder access	11000001, 11000002	Comal	12100202, 12100203, 12100201	-	Multiple	Project Planning	573.0	Riverine	Comal	Multiple	No	\$150,000	-	3,677	2,782	9,129	6	77	0	92.6	9463.3	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000098	11	Guadalupe	Comal County Voluntary Buyout Program Project Planning	Project planning to remediate repetitive losses along the Guadalupe River by acquiring flood damaged structures and converting acquired land to open(green)space.	11000003, 11000004, 11000005, 11000010	Comal	12100202, 12100203, 12100201	-	Multiple	Project Planning	573.0	Riverine	Comal	Multiple	No	\$357,000	-	3,677	2,782	9,129	6	77	0	92.6	9463.3	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000099	11	Guadalupe	Comal County Retention Dam Project Planning	Project planning for proposed project to design and construct 4 retention dams to assist in controlling flash flooding in municipalities and unincorporated areas of the county.	11000009, 11000010	Comal	12100202, 12100203, 12100201	-	Multiple	Project Planning	573.0	Riverine	Comal	Multiple	No	\$8,000,000	-	3,677	2,782	9,129	6	77	0	92.6	9463.3	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000100	11	Guadalupe	Comal County Master WID River Road Low Water Crossing Improvement Project Planning	Project planning for proposed project to implement low water crossing improvements at River Road.	11000009, 11000010	Comal	12100202	-	Middle Guadalupe	Project Planning	2.9	Riverine	Comal Master WID	Multiple	No	\$700,000	-	139	121	282	0	8	0	6.1	97.6	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000101	11	Guadalupe	City of Cuero Drainage Improvements Project Planning	Study of solutions to improve drainage and stormwater system to reduce drainage and flooding issues.	11000009, 11000010	De Witt	12100202, 12100204	-	Multiple	Watershed Planning	6.6	Riverine	Cuero	Multiple	No	\$150,000	-	1,991	1,533	3,213	10	2	0	35.2	116.2	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000102	11	Guadalupe	City of Cuero City Public Service Station Project Planning	Project planning for proposed project to retrofit or floodproof City Public Service Station currently under renovation. Facility will serve as secondary location for community offices and critical utility service data and equipment	11000015, 11000016	De Witt	12100202, 12100204	-	Multiple	Project Planning	6.6	Riverine	Cuero	Multiple	No	\$100,000	-	1,991	1,533	3,213	10	2	0	35.2	116.2	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000103	11	Guadalupe	City of Cuero WWTP Floodproofing Project Planning	Project planning to floodproof/retrofit older components of the Cuero Wastewater Treatment Plant subject to flooding.	11000015, 11000016	De Witt	12100204	-	Lower Guadalupe	Project Planning	0.0	Riverine	Cuero	Multiple	No	\$100,000	-	4	0	2	0	0	0	0.0	2.5	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000104	11	Guadalupe	Dewitt County Drainage District Channel Improvements Project Planning	Project planning for proposed project to install drop basket structure and reconstruct drainage channels to control flooding and erosion. Structure will assist in stabilizing banks and holding bottoms of channel on grade	11000009, 11000010	De Witt	12100202, 12100204	-	Multiple	Project Planning	6.6	Riverine	Dewitt County Drainage District 1	Multiple	No	\$250,000	-	1,991	1,533	3,213	10	2	0	35.2	116.2	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000105	11	Guadalupe	DeWitt County (City of Nordheim) Flash Flood Mitigation Project Planning	Project planning for proposed project to construct necessary barriers or berms to reduce impact of runoff from flash floods onto neighborhoods, streams, and impacting community water wells from proposed Pilot Knob landfill.	11000009, 11000010	De Witt	12100204	-	Lower Guadalupe	Project Planning	0.5	Riverine	Nordheim	Multiple	No	\$150,000	-	0	0	0	0	0	0	0.0	0.0	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000106	11	Guadalupe	Gillespie County Low Water Crossing Improvements Project Planning	Project planning to place automatic warning signs at 35 documented low water crossings in the county	11000001, 11000002	Gillespie	12100203, 12100201	-	Multiple	Project Planning	1057.2	Riverine	Gillespie	Multiple	No	\$50,000	-	8	2	22	0	0	0	0.1	347.9	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000107	11	Guadalupe	Gonzales County Voluntary Buyout Program Project Planning	Project planning to develop and implement a program to buyout NFIP repetitive loss properties.	11000009, 11000010	Gonzales	12100203, 12100201	-	Multiple	Project Planning	1066.9	Riverine	Gillespie	Multiple	No	\$150,000	-	1,649	760	2,086	4	55	0	123.7	101450.5	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000108	11	Guadalupe	GBRA FEMA Cooperating Technical Partners (CTP) Modeling and Mapping	GBRA has entered into a partnership with FEMA by which GBRA commissions an engineering firm to perform flood inundation modeling and mapping, and dams in series modeling.	11000009, 11000010	Multiple	12100203, 12100201	-	Multiple	Watershed Planning	7876.2	Riverine, Coastal	Guadalupe-Blanco River Authority	Multiple	No	\$250,000	-	22,831	16,352	55,779	126	467	0	767.5	304947.2	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000109	11	Guadalupe	Guadalupe County Drainage Improvements Study	Study of solutions to upgrade undersized stormwater drains and culverts.	11000009, 11000010	Guadalupe	12100202, 12100203	-	Multiple	Watershed Planning	713.1	Riverine	Guadalupe	Multiple	No	\$3,000,000	-	5,822	4,851	14,109	14	130	0	116.7	25477.2	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000110	11	Guadalupe	Guadalupe County Voluntary Buyout Program Project Planning	Project planning to develop a land acquisition program in flood hazard areas. Acquire and demolish repetitive loss properties. Acquire high risk vacant land and maintain as open space.	11000009, 11000010	Guadalupe	12100202, 12100203	-	Multiple	Project Planning	713.1	Riverine	Guadalupe	Multiple	No	\$150,000	-	5,822	4,851	14,109	14	130	0	116.7	25477.2	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000111	11	Guadalupe	Guadalupe County LWC Project Planning	Project planning for proposed project to mark and place electric gates at low water crossings.	11000001, 11000002	Guadalupe	12100202, 12100203	-	Multiple	Project Planning	713.1	Riverine	Guadalupe	Multiple	No	\$2,000,000	-	5,822	4,851	14,109	14	130	0	116.7	25477.2	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000112	11	Guadalupe	Hays County Dam Inundation Maps	Conduct study and work with TCEQ to continue to develop inundation maps for all High Hazard dams.	11000009, 11000010	Hays	12100203	-	San Marcos	Preparedness	676.0	Riverine	Hays	Multiple	No	\$500,000	-	4,359	3,223	17,721	15	117	0	100.0	10536.8	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000113	11	Guadalupe	Hays County Harden Critical Infrastructure Project Planning	Project planning to ensure new structures are structurally reinforced against natural hazards. To include, flood-proofing (if needed), freeboard, higher levels of soil compaction and proper perimeter drainage systems.	11000015, 11000016	Hays	12100203	-	San Marcos	Project Planning	676.0	Riverine	Hays	Multiple	No	\$100,000	-	4,359	3,223	17,721	15	117	0	100.0	10536.8	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000114	11	Guadalupe	Hays County Drainage Project Planning (Willow Springs Creek between McCarty Lane and Hunter Road)	Project planning for channel improvement and/or property acquisition project to reduce flood damages along Willow Springs Creek from McCarty Lane to Hunter Road.	11000009, 11000010	Hays	12100203	-	San Marcos	Project Planning	0.7	Riverine	Hays	Multiple	No	\$800,000	-	4	1	3	0	0	0	0.0	0.0	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000115	11	Guadalupe	Hays County Drainage Project Planning (Willow Springs Creek between Hunter Rd and the Railroad)	Project planning for detention project to reduce flood damages along Willow Springs Creek from Hunter Road to the railroad.	11000009, 11000010	Hays	12100203	-	San Marcos	Project Planning	0.2	Riverine	Hays	Multiple	No	\$1,200,000	-	3	3	8	0	0	0	0.1	8.1	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements

FME ID	RFPG No.	RFPG Name	FME Name	Description	Associated Goals	Counties	HUC8s	HUC12s	Watershed Name	Study Type	FME Area (sqmi)	Flood Risk Type	Sponsor	Entities with Oversight	Emergency Need	Estimated Study Cost	Potential Funding Sources and Amount	Estimated number of structures at flood risk	Habitable structures at flood risk	Estimated Population at flood risk	Critical facilities at flood risk (#)	Number of low water crossings at flood risk (#)	Estimated number of road closures (#)	Estimated length of roads at flood risk (Miles)	Estimated active farm & ranch land at flood risk (acres)	Existing or Anticipated Models (year)	Existing or Anticipated Maps (year)	RFPG Recommendation (Y/N)	Reason for Recommendation
111000116	11	Guadalupe	Hays County Southeastern Property Acquisition Project Planning	Project planning for property acquisition project to mitigate repetitive loss flooding where drainage projects were analyzed and deemed ineffective for cost/benefit reasons in southeastern Hays County.	11000009, 11000010	Hays	12100202, 12100203	-	Multiple	Project Planning	49.1	Riverine	Hays	Multiple	No	\$800,000	-	1,420	1,067	6,688	12	14	0	25.1	1058.0	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000118	11	Guadalupe	Hays County Community Flood Mitigation Project Planning	Hays County Community Flood Mitigation Project Planning	11000009, 11000010	Hays	12100203	-	San Marcos	Project Planning	676.0	Riverine	Hays	Multiple	No	\$238,035	-	4,359	3,223	17,721	15	117	0	100.0	10536.8	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000119	11	Guadalupe	Hunts ISD Storm Drainage Infrastructure Project Planning	Project planning to construct new storm drainage infrastructure to reduce the potential impacts of future flood events.	11000009, 11000010	Kerr	12100201	-	Upper Guadalupe	Project Planning	173.8	Riverine	Caldwell County Emergency Service District #4	Multiple	No	\$100,000	-	629	283	744	1	41	0	25.9	5502.3	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000120	11	Guadalupe	Ingram ISD Construct New Storm Drainage Infrastructure	Project planning to construct new storm drainage infrastructure to reduce the potential impacts of future flood events.	11000009, 11000010	Kerr	12100201	-	Upper Guadalupe	Project Planning	208.0	Riverine	Caldwell County Emergency Service District #4	Multiple	No	\$100,000	-	606	331	844	1	24	0	18.7	4971.4	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000121	11	Guadalupe	Ingram ISD Improve Existing Storm Drainage Infrastructure	Project planning to upgrade existing storm drainage infrastructure to reduce the potential impacts of future flood events.	11000009, 11000010	Kerr	12100201	-	Upper Guadalupe	Project Planning	208.0	Riverine	Caldwell County Emergency Service District #4	Multiple	No	\$100,000	-	606	331	844	1	24	0	18.7	4971.4	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000122	11	Guadalupe	Kerr County Center Point Storm Drainage Infrastructure Project Planning	Project planning to construct new storm drainage infrastructure to reduce the potential impacts of future flood events.	11000009, 11000010	Kerr	12100201	-	Upper Guadalupe	Project Planning	1103.0	Riverine	Kerr	Multiple	No	\$125,000	-	3,833	2,315	7,415	6	158	0	124.1	28070.5	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000123	11	Guadalupe	Kerr County Dam Integrity Study	Create a dam integrity study and identify repairs to be made to County dams as necessary.	11000009, 11000010	Kerr	12100201	-	Upper Guadalupe	Preparedness	1103.0	Riverine	Kerr	Multiple	No	\$500,000	-	3,833	2,315	7,415	6	158	0	124.1	28070.5	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000124	11	Guadalupe	Kerr ISD Storm Drainage Infrastructure Project Planning	Project planning for proposed project to construct new storm drainage infrastructure to reduce the potential impacts of future flood events.	11000009, 11000010	Kerr	12100201	-	Upper Guadalupe	Project Planning	165.4	Riverine	Caldwell County Emergency Service District #4	Multiple	No	\$100,000	-	1,968	1,348	6,355	4	43	0	41.1	2781.8	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000126	11	Guadalupe	Travis County Voluntary Buyout Program Project Planning	Project planning to identify and prioritize structures for elevation as flood mitigation. Elevate flood prone structures throughout unincorporated Travis County.	11000009, 11000010	Travis	12100203	-	San Marcos	Project Planning	1020.8	Riverine	Travis	Multiple	No	\$300,000	-	7	7	18	0	1	0	0.1	99.0	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000127	11	Guadalupe	Upper Guadalupe River Authority Evaluation of Water and Sediment Control Facilities	Study to evaluate the flood benefits and cost-effectiveness of UGRA's existing nine Kerr County facilities. Evaluation would include H&H modeling and financial data to determine flood risk reduction. Results could guide decisions on future facilities.	11000009, 11000010	Kerr	12100201	-	Upper Guadalupe	Watershed Planning	1103.0	Riverine	Upper Guadalupe River Authority	Multiple	No	\$250,000	-	3,833	2,315	7,415	6	158	0	124.1	28070.5	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000128	11	Guadalupe	Victoria County Planning and Development Standards Study	Conduct study for the development and implementation of county wide planning & development standards, sub-division rules, infrastructure rules and building / construction codes.	11000005, 11000006	Victoria	12100303, 12100204, 12100403	-	Multiple	Watershed Planning	886.5	Riverine	Victoria	Multiple	No	\$100,000	-	1,808	1,382	4,019	60	5	0	98.5	33695.7	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000129	11	Guadalupe	Victoria County Drainage Improvements Study	Study of solutions to increase dimensions of drainage culverts in areas prone to flooding and/or drainage problems, in various county locations.	11000009, 11000010	Victoria	12100303, 12100204, 12100403	-	Multiple	Watershed Planning	886.5	Riverine	Victoria	Multiple	No	\$150,000	-	1,808	1,382	4,019	60	5	0	98.5	33695.7	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000130	11	Guadalupe	Victoria County FIRMs	Engineering Studies to revise Flood Insurance Rate Maps (FIRMs) throughout the County to establish Base Flood Elevations (BFE) in areas that are currently identified as unstudied Zone As.	11000009, 11000010	Victoria	12100303, 12100204, 12100403	-	Multiple	Watershed Planning	886.5	Riverine	Victoria	Multiple	No	\$500,000	-	1,808	1,382	4,019	60	5	0	98.5	33695.7	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000131	11	Guadalupe	Victoria County Drainage Improvements around County EOC Project Planning	Project planning to improve drainage around County EOC and flood-proof facilities as necessary.	11000009, 11000010	Victoria	12100204	-	Lower Guadalupe	Project Planning	0.0	Riverine	Victoria	Multiple	No	\$100,000	-	0	0	0	0	0	0	0.0	0.0	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000132	11	Guadalupe	Victoria County Bridge Improvements Project Planning	Project planning to raise various County bridges above current Base Flood Elevation (BFE) levels to include such improvements as: box culverts, wingback walls, rip rap, channelization, and road base improvement.	11000001, 11000002, 11000015, 11000016	Victoria	12100303, 12100204, 12100403	-	Multiple	Project Planning	886.5	Riverine	Victoria	Multiple	No	\$500,000	-	1,808	1,382	4,019	60	5	0	98.5	33695.7	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000133	11	Guadalupe	Victoria County Voluntary Buyout Program Project Planning	Project planning to implement a voluntary acquisition program for repetitive flood properties.	11000009, 11000010	Victoria	12100303, 12100204, 12100403	-	Multiple	Project Planning	886.5	Riverine	Victoria	Multiple	No	\$300,000	-	1,808	1,382	4,019	60	5	0	98.5	33695.7	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000134	11	Guadalupe	Wilson County Stormwater Management Plan	Develop flood hazard information by collecting information, high water marks, and conduct engineering studies to develop the 100 year and 500 year flood elevation levels.	11000015, 11000016	Wilson	12100202	-	Middle Guadalupe	Watershed Planning	805.8	Riverine	Wilson	Multiple	No	\$500,000	-	18	9	33	0	0	0	4.0	2120.0	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000135	11	Guadalupe	Wilson County Low Water Crossing Improvements Project Planning	Project planning to upgrade infrastructure at low water crossings to provide unimpeded access during 100 year base flood event to facilitate evacuation and response by emergency vehicles	11000001, 11000002	Wilson	12100202	-	Middle Guadalupe	Project Planning	805.8	Riverine	Wilson	Multiple	No	\$150,000	-	18	9	33	0	0	0	4.0	2120.0	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000136	11	Guadalupe	Wilson County Voluntary Buyout Program Project Planning	Project planning to establish of a voluntary acquisition and demolition program, structure relocation program, and structure elevation program to address repetitive loss, floodprone properties. Keep a database of properties.	11000009, 11000010	Wilson	12100202	-	Middle Guadalupe	Project Planning	805.8	Riverine	Wilson	Multiple	No	\$150,000	-	18	9	33	0	0	0	4.0	2120.0	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000137	11	Guadalupe	Emergency power generators at critical infrastructure/key resource locations project planning	Project planning to install emergency generators at critical facilities to provide back up power from hazard events.	11000015, 11000016	Blanco	12100203, 12100201	-	Multiple	Project Planning	711.0	Riverine	Blanco	Multiple	No	\$100,000	-	167	122	256	0	30	0	14.2	4091.8	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000138	11	Guadalupe	Cypress Creek Regional detention	Project planning for regional detention project on Cypress Creek that will reduce flooding through the unincorporated town of Comfort, TX and possibly provide enhanced aquifer recharge.	11000003, 11000004	Kendall	12100201	-	Upper Guadalupe	Project Planning	3.2	Riverine	Kendall	Multiple	No	\$113,855	-	439	290	574	0	5	0	10.7	745.3	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000139	11	Guadalupe	Technical Study to Enhance Great Springs Project Regional Flood Mitigation	The study will assess and quantify the flood mitigation impacts of an additional 50,000 acres of land conservation and trail development and identify possible modifications of open space and trail features to enhance flood mitigation.	11000003	Comal, Hays	12100202, 12100203	-	Multiple	Watershed Planning	274.6	Riverine	Edwards Aquifer Authority	Multiple	No	\$250,000	-	382	294	802	3	44	0	18.5	6858.2	Yes, Unknown	Unknown	Yes	Meets minimum TWDB requirements
111000140	11	Guadalupe	City of Victoria WWTP Protection Project	Project planning for potential erosion protection and streambank stabilization project intended to protect the levee around the City's wastewater plant.	11000009, 11000010	Victoria	12100204	-	Lower Guadalupe	Project Planning	0.1	Riverine	Victoria	Multiple	No	\$300,000	-	11	0	13	11	0	0	0.0	26.8	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000141	11	Guadalupe	City of San Marcos McKie Street at Willow Springs Creek Project Planning	Alternatives analysis to determine if a feasible FMP exists at this location. Develop technical data required for FMPs.	11000001, 11000002	Hays	12100203	-	San Marcos	Project Planning	0.0	Riverine	San Marcos	Multiple	No	\$50,000	-	0	0	0	0	1	0	0.0	0.0	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000142	11	Guadalupe	City of San Marcos South LBJ Drive at Willow Springs Creek Project Planning	Alternatives analysis to determine if a feasible FMP exists at this location. Develop technical data required for FMPs.	11000001, 11000002	Hays	12100203	-	San Marcos	Project Planning	0.0	Riverine	San Marcos	Multiple	No	\$50,000	-	0	0	0	0	1	0	0.0	0.0	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000143	11	Guadalupe	Dewitt County Drainage District 1 Cuero Levee Study	Feasibility study of potential levee to protect City from river flooding with risk to life/safety and catastrophic damage, as has been experienced in Cuero on numerous occasions.	11000009, 11000010	De Witt	12100202, 12100204	-	Multiple	Project Planning	6.6	Riverine	Dewitt County Drainage District 1	Multiple	No	\$250,000	-	1,991	1,533	3,213	10	2	0	35.2	116.2	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements

FME ID	RFPG No.	RFPG Name	FME Name	Description	Associated Goals	Counties	HUC8s	HUC12s	Watershed Name	Study Type	FME Area (sqmi)	Flood Risk Type	Sponsor	Entities with Oversight	Emergency Need	Estimated Study Cost	Potential Funding Sources and Amount	Estimated number of structures at flood risk	Habitables structures at flood risk	Estimated Population at flood risk	Critical facilities at flood risk (#)	Number of low water crossings at flood risk (#)	Estimated number of road closures (#)	Estimated length of roads at flood risk (Miles)	Estimated active farm & ranch land at flood risk (acres)	Existing or Anticipated Models (year)	Existing or Anticipated Maps (year)	RFPG Recommendation (Y/N)	Reason for Recommendation
111000144	11	Guadalupe	City of New Braunfels Wood Road/Landa Street Drainage Improvement	Project planning for drainage improvement project to capture runoff east of Walnut Avenue and detains it in a 12-acre detention pond with 144 acre-feet of storage capacity. The pond outfall structure discharges to an existing channel south of Wood Road.	11000009, 11000010	Comal	12100202	-	Middle Guadalupe	Project Planning	0.2	Riverine	New Braunfels	Multiple	No	\$3,575,700	-	47	23	523	0	0	0	0.7	0.0	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000145	11	Guadalupe	Kendall County Guadalupe River Model Study	Study to complete an HH model for all of the Guadalupe River within Kendall County.	11000009, 11000010	Kendall	12100201, 12100203	-	Multiple	Watershed Planning	660.6	Riverine	Kendall	Multiple	No	\$250,000	-	1,374	716	1,964	3	28	0	44.4	24197.7	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000146	11	Guadalupe	Kendall County Stream Gauges and Flood Hazard Beacons	Study to evaluate locations for stream gauges and flood hazard beacons.	11000001, 11000002	Kendall	12100201, 12100203	-	Multiple	Preparedness	660.6	Riverine	Kendall	Multiple	No	\$150,000	-	1,374	716	1,964	3	28	0	44.4	24197.7	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000147	11	Guadalupe	City of Kerrville Spring Street Project	Develop required technical data for FMP. Project planning for storm drain and channel improvement project.	11000009, 11000010	Kerr	12100201	-	Upper Guadalupe	Project Planning	0.0	Riverine	Kerrville	Multiple	No	\$15,000	-	0	0	0	0	0	0	0.0	0.0	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000148	11	Guadalupe	City of Kerrville Clay Street Drainage and Kroc Center Detention Pond Spillway Improvements	Develop required technical data for FMP. Project planning for detention pond spillway improvement project.	11000001, 11000002, 11000009, 11000010	Kerr	12100201	-	Upper Guadalupe	Project Planning	0.0	Riverine	Kerrville	Multiple	No	\$15,000	-	0	0	0	0	0	0	0.0	0.0	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements
111000149	11	Guadalupe	City of Kerrville Coronado Drive and Junction Highway Drainage Improvements	Develop required technical data for FMP. Project planning for street and drainage improvement project.	11000001, 11000002, 11000009, 11000010	Kerr	12100201	-	Upper Guadalupe	Project Planning	0.0	Riverine	Kerrville	Multiple	No	\$15,000	-	9	0	70	0	0	0	0.1	0.0	Yes, Unknown	Yes, Unknown	Yes	Meets minimum TWDB requirements

**Table 16: Potentially Feasible Flood Mitigation  
Projects Recommended by RFPG**

FMP ID	RFPG No.	RFPG Name	FMP Name	Description	Associated Goals (ID)	Counties	HUC12s	Watershed Name	Project Type	Project Area (sqmi)	Flood Risk Type (Riverine, Coastal, Urban, Playa, Other)	Sponsor	Entities with Oversight	Emergency Need (Y/N)	Estimated Project Cost (\$)	Potential Funding Sources and Amount
11300001	11	Guadalupe	Detention on the Blanco River	The proposed dam height of 102 ft. and dam length of 1,840 ft. will provide a maximum storage capacity of approximately 1128 ac-ft.	11000009, 11000010	Blanco, Hays	-	San Marcos	Dam	6.3	Riverine, Coastal	Blanco	Blanco	No	\$9,338,000	-
11300006	11	Guadalupe	Plum Creek Tributary 3 Arbor Knot Dr. Improvement	A proposed culvert improvement has been developed to convey a 1% ACE event. The proposed culvert improvement is to add one additional 8ft x 4ft culvert totaling three culverts at this location, and raising the finished deck elevation by 0.5ft.	11000009, 11000010	Hays	-	San Marcos	Infrastructure	0.0	Riverine, Coastal	Kyle	Kyle	No	\$557,000	-
11300007	11	Guadalupe	Plum Creek Tributary 4 Sledge Rd. Improvement	The proposed culvert improvement resulted in eight (7ft x 4ft) box culverts, needed to clear the roadway and to alleviate additional backwater flooding.	11000015, 11000016	Hays	-	San Marcos	Infrastructure	0.0	Riverine, Coastal	Kyle	Kyle	No	\$1,149,000	-
113000010	11	Guadalupe	65ft Channel Modification and Additional Culvert	The channel modifications consists of 65-ft bottom width channel modifications with 4:1 side slopes spanning from the North I-35 frontage road down past Goforth Road to Kym Way.	11000009, 11000010	Hays	-	San Marcos	Infrastructure	0.2	Riverine, Coastal	Kyle	Kyle	No	\$589,000	-
113000011	11	Guadalupe	Plum Creek Detention Pond Upstream of IH35	This project consists of a detention pond between the railroad track and the South bound I-35 frontage road. Under this proposed alternative a 13-ft high dam wall would be placed on Plum Creek near Kyle Center Drive.	11000009, 11000010	Hays	-	San Marcos	Detention Pond	0.3	Riverine, Coastal	Kyle	Kyle	No	\$864,000	-
113000015	11	Guadalupe	Improve Flood Warning Systems	Enhancing stream flow gage network by increasing number of gages throughout community by at least six	11000015, 11000016	Hays	-	San Marcos	Preparedness	25.7	Riverine, Coastal	San Marcos	San Marcos	No	\$339,000	-
113000026	11	Guadalupe	Purgatory Creek Channel Improvement	Purgatory Creek Channel Improvement Project Preliminary Engineering Report	11000009, 11000010	Hays	-	San Marcos	Channel	0.2	Riverine, Coastal	San Marcos	San Marcos	No	\$22,391,000	-
113000027	11	Guadalupe	Sherwood/Kingwood Drainage Improvements	Sherwood Drive and Kingwood Street Improvements Preliminary Engineering Report	11000015, 11000016	Hays	-	San Marcos	Infrastructure	0.1	Riverine, Coastal	San Marcos	San Marcos	No	\$5,644,000	-
113000035	11	Guadalupe	Guadalupe Street Automatic Flood Gates	Place automatic flood gates with vehicle detection on inside of flooded area to allow for egress.	11000001, 1000002	Guadalupe	-	Middle Guadalupe	Preparedness	0.0	Riverine, Coastal	Seguin	Seguin	No	\$115,000	-
113000036	11	Guadalupe	Baldrige Creek Regional Detention Pond	The scope of work includes constructing a regional detention pond on Baldrige Creek upstream of the City. The proposed pond would be located northwest of the City and would release runoff at a substantially lower flowrate, resulting in lower flood eleva	11000009, 11000010	Gonzales	-	Middle Guadalupe	Comprehensive	1.0	Riverine, Coastal	Waelder	Waelder	No	\$2,573,000	-
113000037	11	Guadalupe	Baldrige Creek Channel and Culvert Improvement and Detention Pond	A combination of a 50 ft. bottom width channel modification with 3:1 side slopes downstream of SH 97 and the addition of two 10 foot by 10 foot concrete box culverts was determined to be the most effective flood mitigation solution for the area. The propo	11000009, 11000010	Gonzales	-	Middle Guadalupe	Comprehensive	0.3	Riverine, Coastal	Waelder	Waelder	No	\$3,928,000	-
113000039	11	Guadalupe	Wilson Creek - Green Acres Dr. Improvement	A proposed updated culvert geometry consists of 11 box culverts (10ft-12ft) and a raised finished deck elevation (3ft rise).	11000009, 11000010	Hays	-	San Marcos	Infrastructure	0.0	Riverine, Coastal	Wimberley	Wimberley	No	\$1,246,000	-
113000040	11	Guadalupe	Regional Detention South of Mountain Crest Drive	The alternative consists of a 20 ft. tall detention structure with a 175 ac-ft detention capacity. The outflow control would consist of culverts for low flow and an overflow weir for high flow.	11000009, 11000010	Hays	-	San Marcos	Detention Pond	0.2	Riverine, Coastal	Woodcreek	Woodcreek	No	\$946,000	-
113000041	11	Guadalupe	Improvements to Brookside Drive Culvert Crossing	The culvert opening will be increased to three 36" concrete pipes to match the culvert capacity just downstream at Brook Meadow Dr. and also involve some minimal re-grading of the stream flowline.	11000009, 11000010	Hays	-	San Marcos	LWC upgrade	0.0	Riverine, Coastal	Woodcreek	Woodcreek	No	\$38,000	-
113000042	11	Guadalupe	Brookmeadow Drive Drainage Improvements	The proposed alternative consists of a rip rap ditch along the south side of Brookmeadow Drive, under Overbrook Court and down to Hog Creek. The capacity of the ditch would be enough to hold the most frequent flows.	11000009, 11000010	Hays	-	San Marcos	LWC upgrade	0.0	Riverine, Coastal	Woodcreek	Woodcreek	No	\$65,000	-
113000044	11	Guadalupe	Regional Detention on Bear Creek	The proposed dam height of 85 ft. and dam length of 620 ft. will provide a maximum storage capacity of approximately 3,375 ac-ft.	11000009, 11000010	Comal	-	Middle Guadalupe	Detention Pond	393.0	Riverine, Coastal	Comal	Comal	No	\$6,973,000	-
113000047	11	Guadalupe	Regional Detention on Peach Creek	A 29 ft. high dam with a length of 5780 ft. would provide approximately 41,774 ac-ft of storage. This site would be able to store a large volume of water and greatly reduce the peak from the Peach Creek watershed.	11000009, 11000010	Gonzales	-	Middle Guadalupe	Detention Pond	312.5	Riverine, Coastal	Gonzales	Gonzales	No	\$7,821,000	-
113000052	11	Guadalupe	Kerr County Back-up Power Generators	Installing generators at critical facilities will help ensure physical safety for facility occupants and maintain electronic systems functionality during power outages. Portable generators will maintain additional systems functionality.	11000015, 11000016	Kerr	-	Upper Guadalupe	Preparedness	23.6	Riverine, Coastal	Kerr	Kerr	No	\$806,000	-
113000060	11	Guadalupe	City of Victoria Back-up Power Generators	Install emergency generators and quick connects on all buildings, critical infrastructure, and government buildings.	11000015, 11000016	Victoria	-	Lower Guadalupe	Preparedness	0.0	Riverine	Victoria	Victoria	No	\$551,000	-
113000061	11	Guadalupe	City of Buda-Lifschutz Headwaters Voluntary Buyout	Voluntary, targeted buyouts for 1 or more affected properties. (November 11, 2016 Preliminary Engineering Report)	11000009, 11000010	Hays	-	San Marcos	Property Acquisition	9.7	Riverine, Coastal	Buda	Buda	No	\$565,000	-
113000062	11	Guadalupe	City of Nixon-Wastewater System Flood Improvements	The WWTP lift station and 8th Avenue lift station have experienced inundation and caused overflows as a result of stormwater inflow into the wastewater system. Also need a new generator & SCADA System Improvements at the City's WWTP, Water Well 6/Water PI	11000015, 11000016	Gonzales	-	Middle Guadalupe	Comprehensive	1.4	Riverine, Coastal	Nixon	Nixon	No	\$3,949,000	-
113000063	11	Guadalupe	City of San Marcos-Emergency Generators	Purchase and installation of generators for temporary sheltering efforts in all public facilities capable of housing citizens.	11000015, 11000016	Hays	-	San Marcos	Preparedness	25.7	Riverine, Coastal	San Marcos	San Marcos	No	\$58,000	-
113000064	11	Guadalupe	Victoria County-Emergency Generators	Install emergency generators at critical facilities.	11000015, 11000016	Victoria	-	Lower Guadalupe	Preparedness	37.2	Riverine, Coastal	Victoria	Victoria	No	\$551,000	-
113000065	11	Guadalupe	City of Seguin Regional Detention Southwest of Seguin City Limits Project	Proposed regional detention detention project on Mays Creek.	11000009, 11000010	Guadalupe	-	Middle Guadalupe	Detention Pond	0.3	Riverine, Coastal	Seguin	Seguin	No	\$2,015,000	-
113000066	11	Guadalupe	City of Seguin - Culvert Improvements at Guadalupe River Drive Project	Proposed project to add two additional 10 ft. by 10 ft. reinforced concrete box culverts on either side of the existing two- 10ft. by 10ft. box culverts at Guadalupe River Dr.	11000009, 11000010	Guadalupe	-	Middle Guadalupe	LWC upgrade	0.1	Riverine, Coastal	Seguin	Seguin	No	\$594,000	-
113000067	11	Guadalupe	City of Victoria Channel and Bridge Modifications on State Highway 87 Project	Proposed channel and bridge modification project. The design modification consists of adding two additional piers to the right and left overbanks of the bridge.	11000009, 11000010	Victoria	-	Lower Guadalupe	Comprehensive	0.1	Riverine, Coastal	Victoria	Victoria	No	\$8,350,000	-
113000068	11	Guadalupe	City of Victoria Detention Structure Located Upstream of State Highway 87 Project	Proposed detention structure located upstream of State Highway 87. The detention basin has a proposed height of 11ft from crest to inlet structure. The dam has a proposed capacity of 3700 ac-ft. Three culvert outlet structures are proposed to be used for	11000009, 11000010	Victoria	-	Lower Guadalupe	Comprehensive	3.2	Riverine, Coastal	Victoria	Victoria	No	\$58,395,000	-
113000069	11	Guadalupe	Guadalupe County Detention on York Creek Project	Project for detention on York Creek. The currently proposed dam height of 48 ft. and dam length of 4800 ft. will provide a maximum storage capacity of approximately 48,130 ac-ft.	11000009, 11000010	Guadalupe	-	San Marcos	Comprehensive	365.3	Riverine, Coastal	Guadalupe	Guadalupe	No	\$15,133,000	-



FMP ID	Flood Risk											Reduction in Flood Risk						
	Area in 100yr Floodplain	Area in 500yr Floodplain	Estimated number of structures at 100yr flood risk	Residential structures at 100-year flood risk	Estimated Population at 100-year flood risk	Critical Facilities at 100-year flood risk	Number of low water crossings at flood risk	Estimated number of road closures	Estimated length of roads at 100-year flood risk (Miles)	Estimated farm & ranch land at 100-year flood risk (acres)	Number of structures with reduced 100yr flood risk	Number of structures removed from 100yr flood risk	Number of structures removed from 500yr flood risk	Residential structures removed from 100yr flood risk	Estimated Population removed from 100yr flood risk	Critical facilities removed from 100yr flood risk	Numbers of low water crossings removed from 100yr flood risk	Estimated reduction in road closure occurrences
113000001	3.8	0.9	508	417	1,044	0	10	0	8.3	978.3	1939	131	165	107	375	0	0	Unknown
113000006	0.0	0.0	2	2	4	0	0	0	0.0	0.0	0	0	0	0	0	0	0	Unknown
113000007	0.0	0.0	0	0	0	0	0	0	0.1	3.5	3	0	0	0	0	0	0	Unknown
113000010	0.1	0.0	39	34	165	0	1	0	0.8	2.3	9	4	15	4	16	0	0	Unknown
113000011	0.2	0.0	49	43	207	0	2	0	1.1	8.3	10	1	8	1	2	0	0	Unknown
113000015	6.2	2.6	2,278	1,626	12,618	14	12	0	46.9	387.6	0	0	0	0	0	0	0	Unknown
113000026	0.2	0.0	73	53	319	0	1	0	1.4	0.0	5	27	0	27	56	0	5	Unknown
113000027	0.0	0.0	17	14	55	0	0	0	0.3	0.0	15	1	0	1	32	0	0	Unknown
113000035	0.0	0.0	1	1	2	0	0	0	0.1	1.2	0	0	0	0	0	0	0	Unknown
113000036	0.5	0.1	132	69	172	0	5	0	2.5	128.2	11	48	24	35	72	0	3	Unknown
113000037	0.2	0.0	122	68	169	0	4	0	2.2	6.7	7	87	42	56	131	0	7	Unknown
113000039	0.0	0.0	2	2	5	0	1	0	0.1	0.0	5	0	0	0	0	0	0	Unknown
113000040	0.1	0.0	33	28	64	0	0	0	0.6	0.0	14	8	0	8	17	0	0	Unknown
113000041	0.0	0.0	0	0	0	0	0	0	0.0	0.0	0	0	0	0	0	0	0	Unknown
113000042	0.0	0.0	7	7	14	0	0	0	0.1	0.0	0	0	0	0	0	0	0	Unknown
113000044	282.6	24.5	9,789	7,399	20,781	84	19	0	250.1	80,411.7	4825	159	55	112	456	0	0	Unknown
113000047	229.4	17.3	3,965	2,562	6,140	71	12	0	157.3	65,348.5	1447	12	1	12	34	0	0	Unknown
113000052	4.3	2.3	1,522	1,050	5,950	4	20	0	30.6	193.3	0	0	0	0	0	0	0	Unknown
113000060	0.0	0.0	0	0	5,096	0	0	0	0.0	0.0	0	0	0	0	0	0	0	Unknown
113000061	0.1	0.0	22	19	59	0	1	0	1.0	10.3	0	1	0	0	0	0	0	Unknown
113000062	0.1	0.0	13	6	22	0	0	0	0.1	7.8	0	0	0	0	0	0	0	Unknown
113000063	6.2	2.6	2,275	1,624	12,613	14	11	0	46.0	384.7	0	0	0	0	0	0	0	Unknown
113000064	5.2	1.1	1,135	932	3,167	24	0	0	35.9	101.6	0	0	0	0	0	0	0	Unknown
113000065	0.2	0.0	20	19	42	0	1	0	0.4	28.0	4	8	3	8	19	0	1	Unknown
113000066	0.1	0.0	16	15	37	0	0	0	0.3	7.8	4	6	3	6	13	0	1	Unknown
113000067	0.1	0.0	2	2	2	0	0	0	0.1	67.8	2	2	0	2	4	0	0	Unknown
113000068	2.9	0.2	56	42	146	0	3	0	3.2	640.6	2	38	0	29	52	0	0	Unknown
113000069	271.6	20.4	4,637	2,953	7,280	75	16	0	189.0	85,276.0	1622	100	95	80	287	0	0	Unknown

FMP ID	Estimated length of roads removed from 100yr flood risk (Miles)	Estimated farm & ranch land removed from 100yr 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	Cost/ Structure removed	Percent Nature-based Solution (by cost)	Negative Impact (Y/N)	Negative Impact Mitigation (Y/N)	Social Vulnerability Index (SVI)	Water Supply Benefit (Y/N)	Traffic Count for Low Water Crossings	Benefit-Cost Ratio	RFPG Recommendation (Y/N)	Reason for Recommendation
113000001	0.0	0.0	Unknown	Unknown	50-year	100-year	\$71,000	0.0%	No	-	0.18	No	0	1.45	Yes	Meets minimum TWDB requirements
113000006	1.0	0.0	Unknown	Unknown	10-year	25-year	-	0.0%	No	-	0.36	No	0	0.10	Yes	Meets minimum TWDB requirements
113000007	1.0	0.0	Unknown	Unknown	2-year	25-year	-	0.0%	No	-	0.24	No	0	0.10	Yes	Meets minimum TWDB requirements
113000010	0.0	0.0	Unknown	Unknown	50-year	100-year	\$147,000	18.2%	No	-	0.34	No	0	1.73	Yes	Meets minimum TWDB requirements
113000011	0.0	0.0	Unknown	Unknown	50-year	100-year	\$864,000	8.4%	No	-	0.34	No	0	1.51	Yes	Meets minimum TWDB requirements
113000015	0.0	0.0	Unknown	Unknown	-	-	-	0.0%	No	-	0.59	No	0	0.00	Yes	Meets minimum TWDB requirements
113000026	1.0	0.0	Unknown	Unknown	-	-	\$829,000	2.2%	No	-	0.54	No	0	0.11	Yes	Meets minimum TWDB requirements
113000027	0.0	0.0	Unknown	Unknown	10-year	25-year	\$5,644,000	2.0%	No	-	0.63	No	0	0.80	Yes	Meets minimum TWDB requirements
113000035	0.0	0.0	Unknown	Unknown	-	-	-	0.0%	No	-	0.49	No	0	0.00	Yes	Meets minimum TWDB requirements
113000036	1.0	0.0	Unknown	Unknown	25-year	100-year	\$54,000	2.0%	No	-	0.72	No	0	1.19	Yes	Meets minimum TWDB requirements
113000037	1.0	0.0	Unknown	Unknown	25-year	100-year	\$45,000	2.0%	No	-	0.72	No	0	0.78	Yes	Meets minimum TWDB requirements
113000039	0.0	0.0	Unknown	Unknown	5-year	100-year	-	2.0%	No	-	0.22	No	0	0.10	Yes	Meets minimum TWDB requirements
113000040	0.0	0.0	Unknown	Unknown	10-year	100-year	\$118,000	0.0%	No	-	0.11	No	0	0.98	Yes	Meets minimum TWDB requirements
113000041	0.0	0.0	Unknown	Unknown	-	-	-	0.0%	No	-	0.00	No	0	0.10	Yes	Meets minimum TWDB requirements
113000042	0.0	0.0	Unknown	Unknown	2-year	10-year	-	0.0%	No	-	0.11	No	0	0.01	Yes	Meets minimum TWDB requirements
113000044	0.0	0.0	Unknown	Unknown	50-year	100-year	\$44,000	0.0%	No	-	0.54	No	0	3.53	Yes	Meets minimum TWDB requirements
113000047	0.0	0.0	Unknown	Unknown	50-year	100-year	\$652,000	0.0%	No	-	0.66	No	0	0.77	Yes	Meets minimum TWDB requirements
113000052	0.0	0.0	Unknown	Unknown	-	-	-	0.0%	No	-	0.56	No	0	0.00	Yes	Meets minimum TWDB requirements
113000060	0.0	0.0	Unknown	Unknown	-	-	-	0.0%	No	-	0.00	No	0	0.00	Yes	Meets minimum TWDB requirements
113000061	0.0	0.0	Unknown	Unknown	-	-	\$565,000	0.0%	No	-	0.12	No	0	0.30	Yes	Meets minimum TWDB requirements
113000062	0.0	0.0	Unknown	Unknown	-	-	-	0.0%	No	-	0.68	No	0	0.00	Yes	Meets minimum TWDB requirements
113000063	0.0	0.0	Unknown	Unknown	-	-	-	0.0%	No	-	0.59	No	0	0.00	Yes	Meets minimum TWDB requirements
113000064	0.0	0.0	Unknown	Unknown	-	-	-	0.0%	No	-	0.54	No	0	0.00	Yes	Meets minimum TWDB requirements
113000065	1.0	0.0	Unknown	Unknown	25-year	100-year	\$252,000	2.0%	No	-	0.49	No	0	1.17	Yes	Meets minimum TWDB requirements
113000066	1.0	0.0	Unknown	Unknown	10-year	50-year	\$594,000	2.0%	No	-	0.49	No	0	1.28	Yes	Meets minimum TWDB requirements
113000067	0.0	0.0	Unknown	Unknown	100-year	100-year	\$239,000	2.1%	No	-	0.13	No	0	0.25	Yes	Meets minimum TWDB requirements
113000068	0.0	0.0	Unknown	Unknown	50-year	100-year	\$1,537,000	1.3%	No	-	0.27	No	0	0.10	Yes	Meets minimum TWDB requirements
113000069	0.0	0.0	Unknown	Unknown	50-year	100-year	\$151,000	0.0%	No	-	0.67	No	0	1.57	Yes	Meets minimum TWDB requirements

**Table 17: Potentially Feasible Flood Management Strategies Recommended by RFPG**

FMS ID	RFPG No.	RFPG Name	FMS Name	Description	Associated Goals (ID)	Counties	HUC8s	HUC12s	Watershed Name	Project Type	Strategy Project Area (sqmi)	Flood Risk Type	Sponsor	Entities with Oversight	Emergency Need (Y/N)	Estimated Total Project Cost (\$)	Potential Funding Sources and Amount	Cost/ Structure removed	Consideration of Nature-based Solution (Y/N)	Negative Impact (Y/N)	Negative Impact Mitigation (Y/N)	Water Supply Benefit (Y/N)	RFPG Recommendation (Y/N)	Reason for Recommendation
112000186	11	Guadalupe	Education and Outreach	Activities not limited to implementing/improving flood education and awareness programs for residents, elected officials, and real estate agents/developers; and flood insurance campaigns to reduce flood risk and increase NFIP participation.	11000001	All	All	All	All	Education and Outreach	6,010.4	Riverine, Coastal	Guadalupe RFPG	-	No	\$978,000	-	-	-	N	N/A	N	Yes	Meets minimum TWDB requirements
112000187	11	Guadalupe	Property Acquisitions and Structural Elevation	Develop and implement a voluntary buyout or structural elevation assistance programs to eliminate repetitive loss structures and implementing programs to purchase/preserve open space to protect riparian corridors.	11000003, 11000009	All	All	All	All	Property Acquisition and Structural Elevation	6,010.4	Riverine, Coastal	Guadalupe RFPG	-	No	\$1,250,000	-	-	-	N	N/A	N	Yes	Meets minimum TWDB requirements
112000188	11	Guadalupe	Regulatory and Guidance	Regularly review and update floodplain ordinances, land use/zoning, development criteria, and enforcement. Develop and implement higher standards, green infrastructure program, and use best available data (eg. BLE) to manage floodplains.	11000003, 11000005, 11000009	All	All	All	All	Regulatory and Guidance	6,010.4	Riverine, Coastal	Guadalupe RFPG	-	No	\$93,000	-	-	-	N	N/A	N	Yes	Meets minimum TWDB requirements
112000189	11	Guadalupe	Flood Measurement and Warning	Develop or implement programs to increase flood warning including reverse 911 systems; evacuation/emergency management plans and personnel training; NOAA all-hazards radios, and programs to increase safety at low water crossings (signs, flashers, gates).	11000001, 11000009	All	All	All	All	Flood Measurement and Warning	6,010.4	Riverine, Coastal	Guadalupe RFPG	-	No	\$9,541,000	-	-	-	N	N/A	N	Yes	Meets minimum TWDB requirements
112000190	11	Guadalupe	Infrastructure Projects	Develop programs to preserve system functionality (storm drains, culverts, bridges); enhance riparian corridors & preserve floodplain capacity; and infrastructure improvements programs that identify and prioritize flood risk reduction projects.	11000003, 11000009, 11000011	All	All	All	All	Infrastructure Projects	6,010.4	Riverine, Coastal	Guadalupe RFPG	-	No	\$21,611,000	-	-	-	N	N/A	N	Yes	Meets minimum TWDB requirements

**Appendix 5-B |**

FME, FMS, FMP One Pagers

# Flood Management Evaluation (FME)



Title **Blanco County Low Water Crossing Improvements Study**

ID# **111000001**

Sponsor (name of entity, not person) **Blanco (County)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Watershed Planning**

Study description **Study of solutions to upgrade and/or raise low water crossing in the county. The low water crossings most frequently and most severely flooded will be assessed for elevation and improvement (e.g., curbed and/or pedestrian walkways) roadways.**

New Hydrologic or Hydraulic model? **No** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Blanco** Watershed HUC# (if known) **12100203,12100201**

Drainage area (Square miles, est.) **711** Goal(s) **11000001, 11000002**

## 100-Year Flood Risk Summary

Population at risk **256** # of structures **167** Critical facilities **0**

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

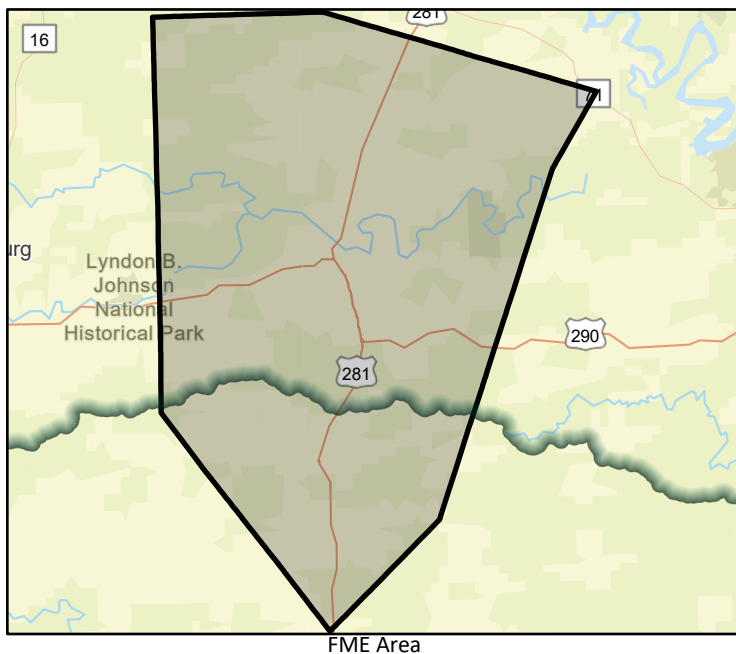
Farm/Ranch land impacted (acres) **4,092** Roadway(s) impacted (length) **14**

Number of low water crossings **30** Historical road closures **-**

## Estimated Cost and Funding Availability

Total Cost **\$250,000** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



# Flood Management Evaluation (FME)



Title **Blanco County Soil Conservation Plan**

ID# **111000002**

Sponsor (name of entity, not person) **Blanco (County)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Watershed Planning**

Study description **Develop soil conservation plan which provides information on proper land stewardship including diagram, soil map, assessment of vegetation and wildlife fuels, schedule for applying conservation practices; plan for operation and maintenance.**

New Hydrologic or Hydraulic model? **Yes** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Blanco** Watershed HUC# (if known) **12100203,12100201**

Drainage area (Square miles, est.) **711** Goal(s) **11000003, 11000004**

## 100-Year Flood Risk Summary

Population at risk **256** # of structures **167** Critical facilities **0**

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

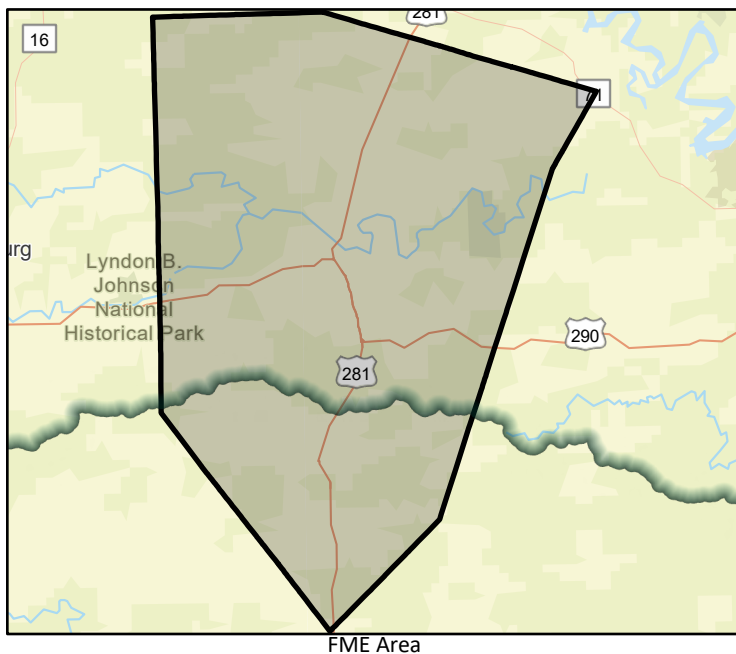
Farm/Ranch land impacted (acres) **4,092** Roadway(s) impacted (length) **14**

Number of low water crossings **30** Historical road closures **-**

## Estimated Cost and Funding Availability

Total Cost **\$100,000** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**





# Flood Management Evaluation (FME)



Title **Caldwell County Bridge Improvements Project Planning**

ID# **111000003**

Sponsor (name of entity, not person) **Caldwell (County)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Project Planning**

Study description **Project planning for proposed project to replace antiquated bridges built before 1950. These bridges cannot support the weight of emergency vehicles. In addition, upgraded bridge infrastructure would reduce backwater flooding at undersized crossings.**

New Hydrologic or Hydraulic model? **Yes** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Caldwell** Watershed HUC# (if known) **12100202,12100203**

Drainage area (Square miles, est.) **545** Goal(s) **11000009, 11000010**

## 100-Year Flood Risk Summary

Population at risk **2,190** # of structures **937** Critical facilities **7**

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

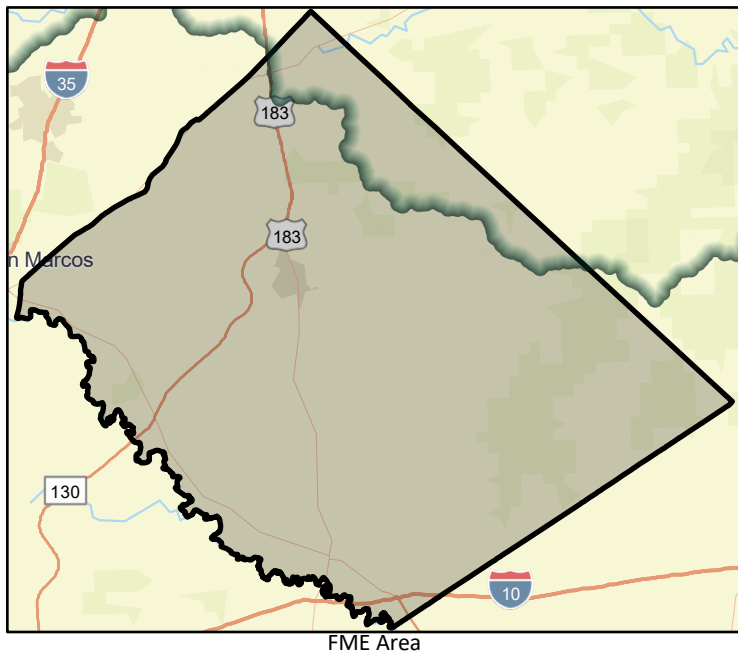
Farm/Ranch land impacted (acres) **35,718** Roadway(s) impacted (length) **71**

Number of low water crossings **40** Historical road closures **-**

## Estimated Cost and Funding Availability

Total Cost **\$256,000** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



# Flood Management Evaluation (FME)



Title **Caldwell County Emergency Service District #1 Drainage and Utility Plan**

ID# **111000004**

Sponsor (name of entity, not person) **Caldwell County Emergency Service District #1**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Watershed Planning**

Study description **Develop a drainage and utility plan.**

New Hydrologic or Hydraulic model? **No** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Caldwell,Hays** Watershed HUC# (if known) **12100203**

Drainage area (Square miles, est.) **111** Goal(s) **11000009, 11000010**

## 100-Year Flood Risk Summary

Population at risk **289** # of structures **136** Critical facilities **0**

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

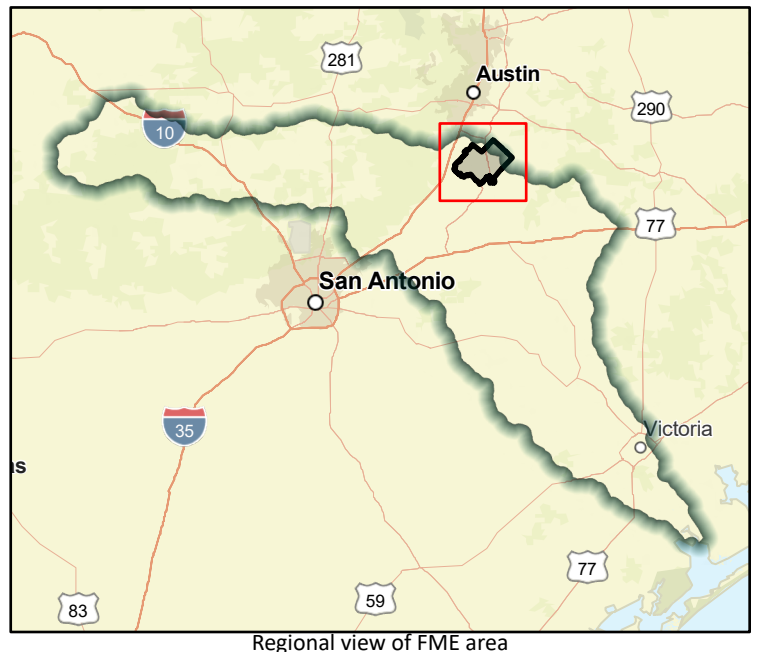
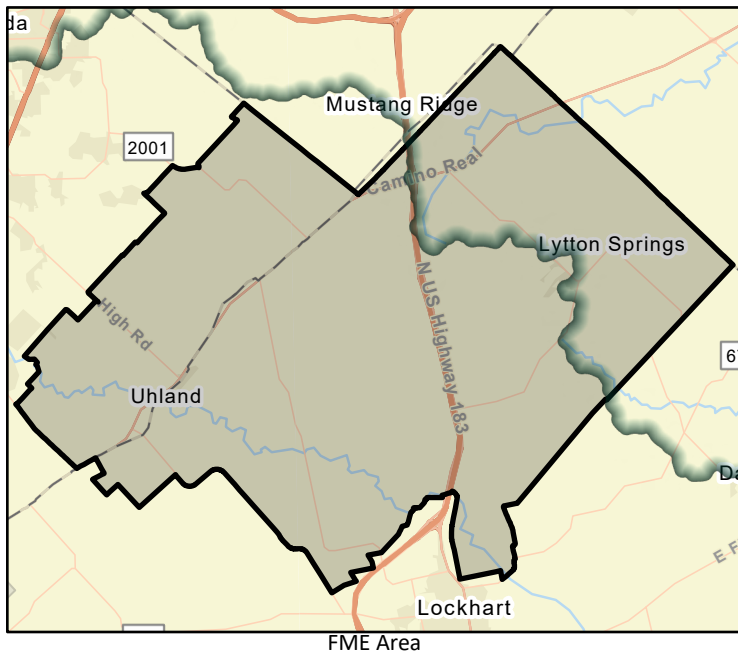
Farm/Ranch land impacted (acres) **4,873** Roadway(s) impacted (length) **11**

Number of low water crossings **13** Historical road closures **-**

## Estimated Cost and Funding Availability

Total Cost **\$100,000** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



# Flood Management Evaluation (FME)



Title Caldwell County Emergency Service District #3 River Crossing Improvements Study

ID# 111000005

Sponsor (name of entity, not person) Caldwell County Emergency Service District #3

RFPG recommend? Yes Reason for Recommendation Meets minimum TWDB requirements

## Study Details

Study type Watershed Planning

Study description Study solutions to upgrade river crossings throughout the district including but not limited to Scull Road Bridge.

New Hydrologic or Hydraulic model? Yes Emergency Need? No Existing/Anticipated models in near term? Yes

County Caldwell Watershed HUC# (if known) 12100203

Drainage area (Square miles, est.) 24 Goal(s) 11000001, 11000002

## 100-Year Flood Risk Summary

Population at risk 1,254 # of structures 465 Critical facilities 1

Flood risk type: Riverine? Yes Coastal? No Local? No Playa? No Other? No

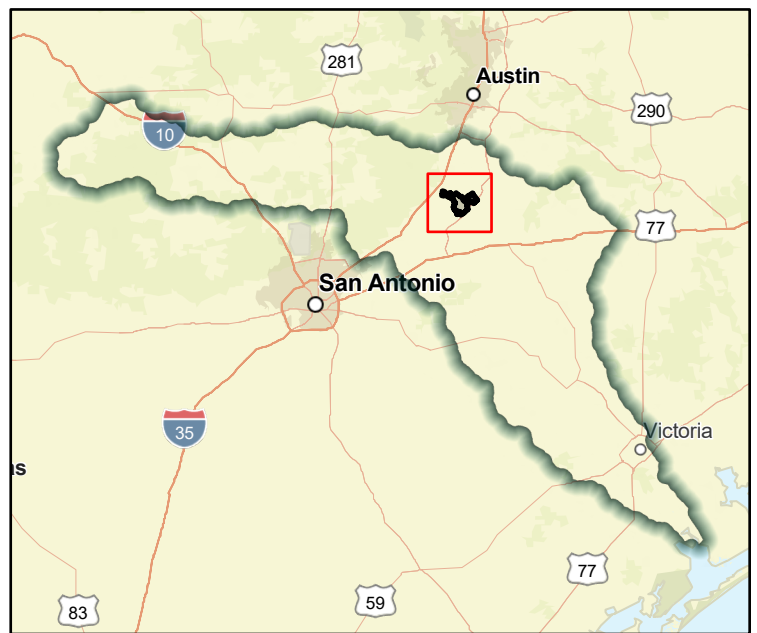
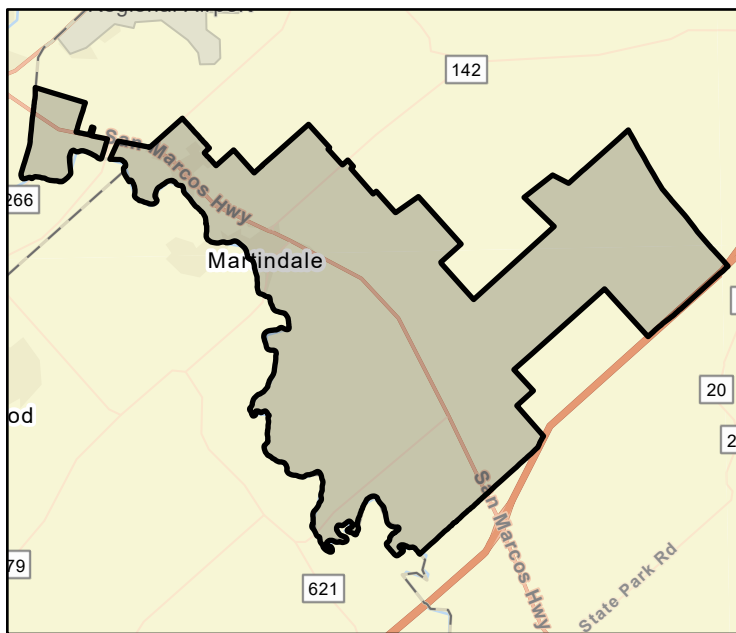
Farm/Ranch land impacted (acres) 3,124 Roadway(s) impacted (length) 13

Number of low water crossings 5 Historical road closures -

## Estimated Cost and Funding Availability

Total Cost \$1,000,000 Amount of Available Funding TBD Federal funding availability No

Funding source -



# Flood Management Evaluation (FME)



Title Caldwell County Emergency Service District #3 Repetitive Loss Property Mitigation Study

ID# 111000006

Sponsor (name of entity, not person) Caldwell County Emergency Service District #3

RFPG recommend? Yes Reason for Recommendation Meets minimum TWDB requirements

## Study Details

Study type Project Planning

Study description Study of identify flood-prone and repetitive loss properties through the Texas Water Development Board and identify and study solutions to reduce or eliminate flooding at identified properties.

New Hydrologic or Hydraulic model? Yes Emergency Need? No Existing/Anticipated models in near term? Yes

County Caldwell Watershed HUC# (if known) 12100203

Drainage area (Square miles, est.) 24 Goal(s) 11000009, 11000010

## 100-Year Flood Risk Summary

Population at risk 1,254 # of structures 465 Critical facilities 1

Flood risk type: Riverine? Yes Coastal? No Local? No Playa? No Other? No

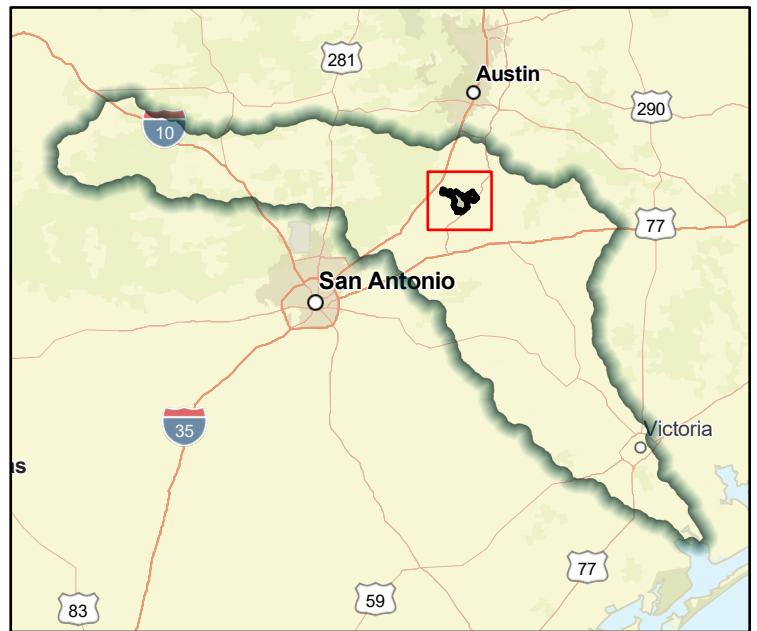
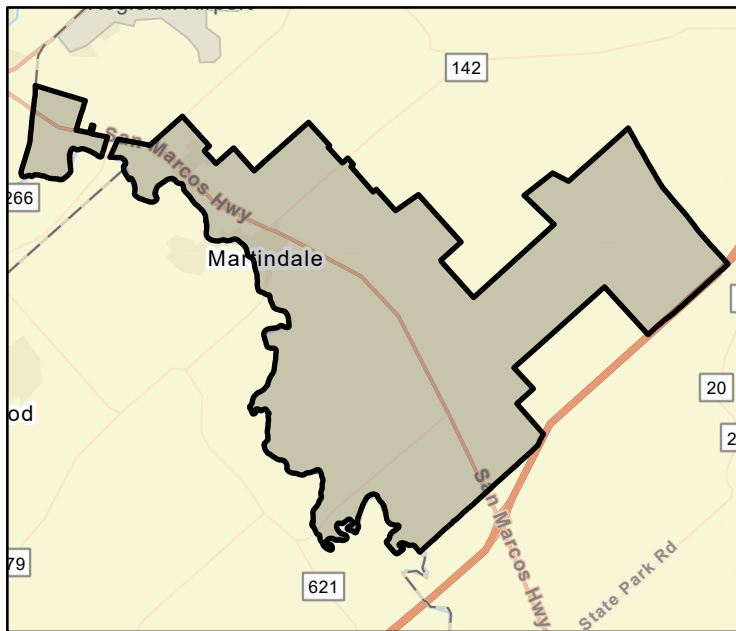
Farm/Ranch land impacted (acres) 3,124 Roadway(s) impacted (length) 13

Number of low water crossings 5 Historical road closures -

## Estimated Cost and Funding Availability

Total Cost \$1,000,000 Amount of Available Funding TBD Federal funding availability No

Funding source -



# Flood Management Evaluation (FME)



Title **Caldwell County Emergency Service District #4 Fire Station 2 Project Planning**

ID# **11100007**

Sponsor (name of entity, not person) **Caldwell County Emergency Service District #4**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Project Planning**

Study description **Planning for proposed project to build a swell and raise driveway of Fire Station 2 to prevent inundation of facility and to keep station in service during major storm events.**

New Hydrologic or Hydraulic model? **Yes** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Caldwell** Watershed HUC# (if known) **12100203**

Drainage area (Square miles, est.) **0** Goal(s) **11000015, 11000016**

## 100-Year Flood Risk Summary

Population at risk **0** # of structures **0** Critical facilities **0**

Flood risk type: Riverine? **No** Coastal? **No** Local? **No** Playa? **No** Other? **No**

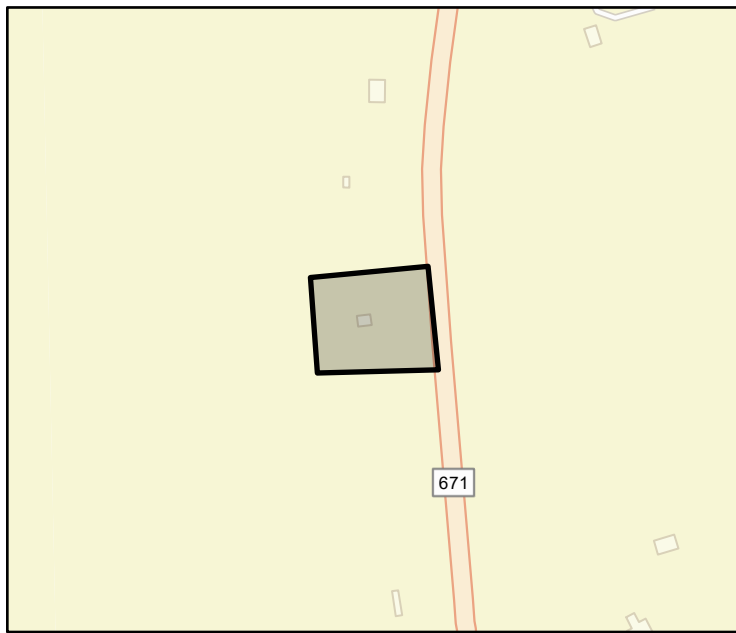
Farm/Ranch land impacted (acres) **0** Roadway(s) impacted (length) **0**

Number of low water crossings **0** Historical road closures **-**

## Estimated Cost and Funding Availability

Total Cost **\$100,000** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



FME Area



Regional view of FME area

# Flood Management Evaluation (FME)



Title Canyon Regional WA Hays Caldwell Water Treatment Plant Floodwall Project Planning

ID# 111000008

Sponsor (name of entity, not person) Canyon Regional Water Authority

RFPG recommend? Yes Reason for Recommendation Meets minimum TWDB requirements

## Study Details

Study type Project Planning

Study description Project planning for Canyon Regional WA - Hays Caldwell Water Treatment Plant Floodwall Project

New Hydrologic or Hydraulic model? Yes Emergency Need? No Existing/Anticipated models in near term? Yes

County Guadalupe Watershed HUC# (if known) 12100202

Drainage area (Square miles, est.) 0 Goal(s) 11000009, 11000010

## 100-Year Flood Risk Summary

Population at risk 0 # of structures 1 Critical facilities 0

Flood risk type: Riverine? Yes Coastal? No Local? No Playa? No Other? No

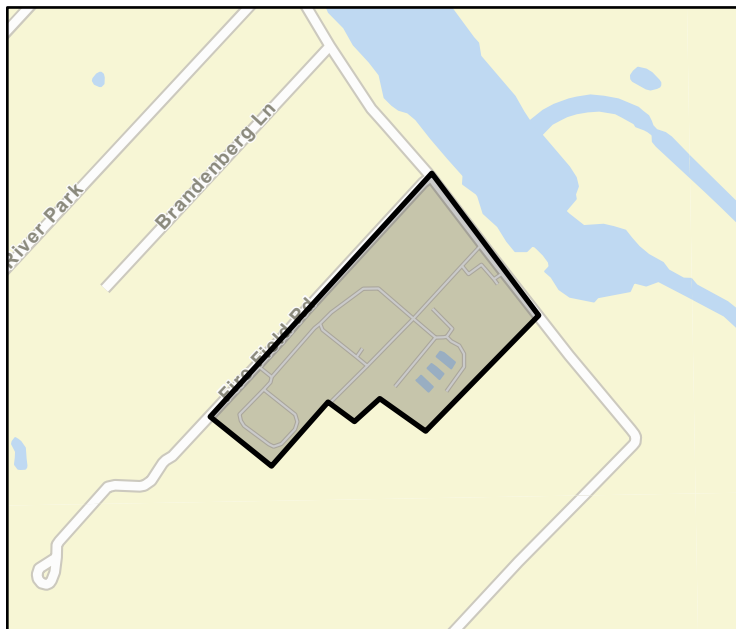
Farm/Ranch land impacted (acres) 0 Roadway(s) impacted (length) 0

Number of low water crossings 0 Historical road closures -

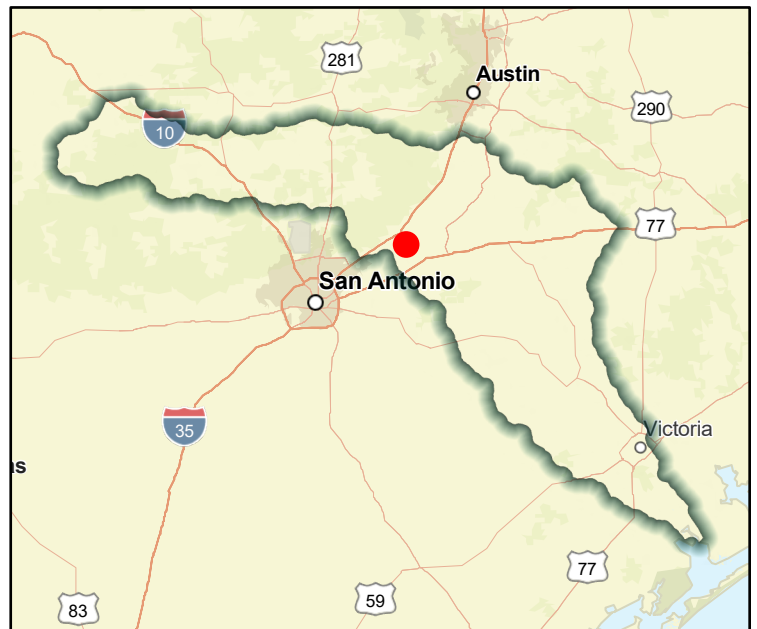
## Estimated Cost and Funding Availability

Total Cost \$159,355 Amount of Available Funding TBD Federal funding availability No

Funding source -



FME Area



Regional view of FME area

# Flood Management Evaluation (FME)



Title **Center Point ISD Drainage Improvements Study**

ID# **111000009**

Sponsor (name of entity, not person) **Center Point ISD**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Watershed Planning**

Study description **Study of solutions to construct new storm drainage infrastructure to reduce the potential impacts of future flood events.**

New Hydrologic or Hydraulic model? **Yes** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Kerr** Watershed HUC# (if known) **12100201**

Drainage area (Square miles, est.) **96** Goal(s) **11000009, 11000010**

## 100-Year Flood Risk Summary

Population at risk **730** # of structures **462** Critical facilities **0**

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

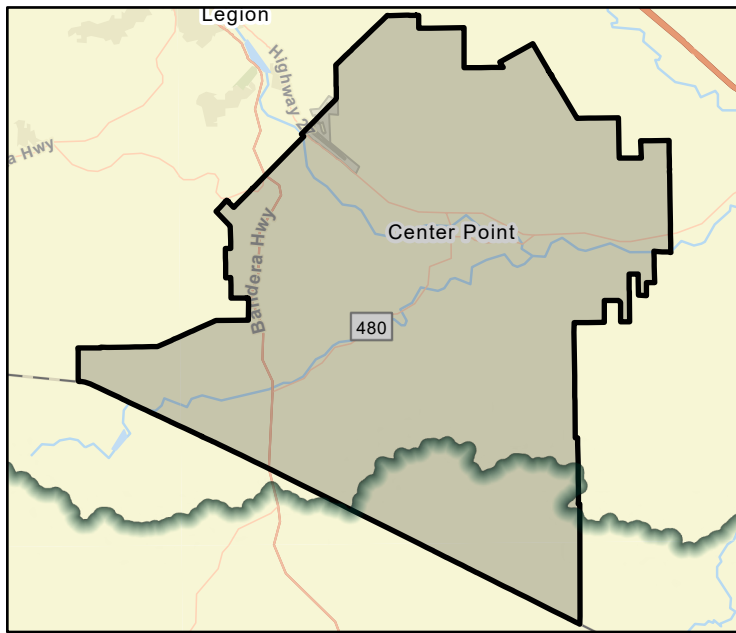
Farm/Ranch land impacted (acres) **4,928** Roadway(s) impacted (length) **23**

Number of low water crossings **16** Historical road closures **-**

## Estimated Cost and Funding Availability

Total Cost **\$100,000** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



FME Area



Regional view of FME area

# Flood Management Evaluation (FME)



Title **City of Cibolo and Seguin Road Access and Conditions Study**

ID# **111000010**

Sponsor (name of entity, not person) **MULTIPLE**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Preparedness**

Study description **Study to evaluate access and road conditions for response vehicles, develop and implement options to improve access and/or add redundant access routes in high risk areas.**

New Hydrologic or Hydraulic model? **No** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Guadalupe** Watershed HUC# (if known) **12100202**

Drainage area (Square miles, est.) **59** Goal(s) **11000015, 11000016**

## 100-Year Flood Risk Summary

Population at risk **2,283** # of structures **846** Critical facilities **5**

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

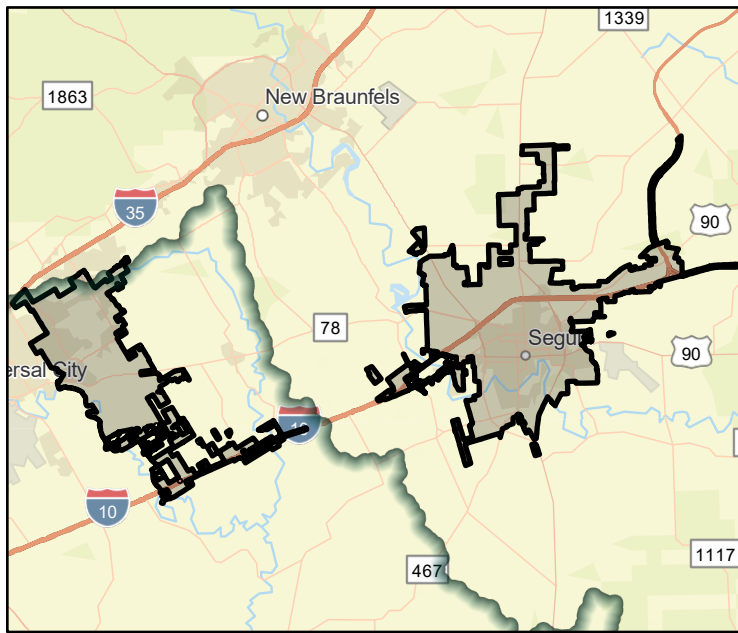
Farm/Ranch land impacted (acres) **1,157** Roadway(s) impacted (length) **25**

Number of low water crossings **8** Historical road closures **-**

## Estimated Cost and Funding Availability

Total Cost **\$500,000** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



FME Area



Regional view of FME area



# Flood Management Evaluation (FME)



Title **City of Cibolo and Seguin USACE Study**

ID# **111000011**

Sponsor (name of entity, not person) **MULTIPLE**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Watershed Planning**

Study description **Undertake a comprehensive study of flood risk and reduction alternatives, with the assistance of the U.S. Army Corps of Engineers. Project planning to implement feasible alternatives for flood reduction.**

New Hydrologic or Hydraulic model? **Yes** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Guadalupe** Watershed HUC# (if known) **12100202**

Drainage area (Square miles, est.) **59** Goal(s) **11000009, 11000010**

## 100-Year Flood Risk Summary

Population at risk **2,283** # of structures **846** Critical facilities **5**

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

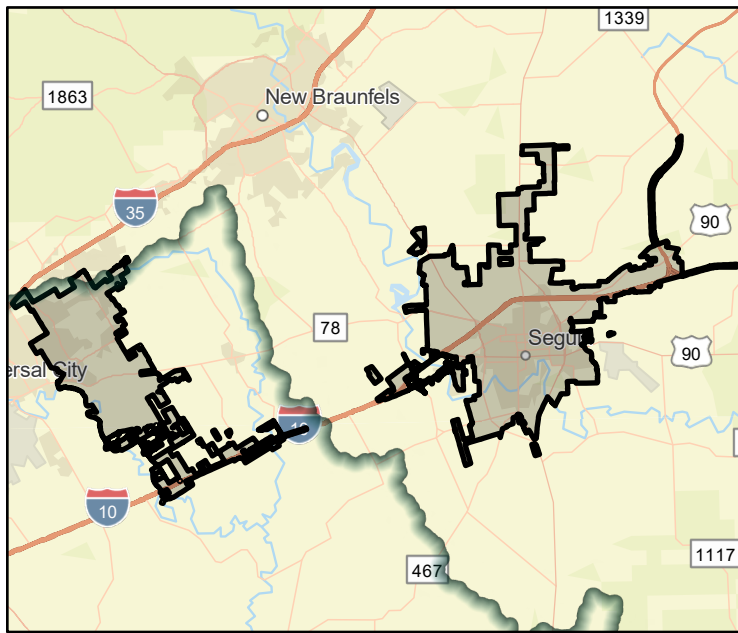
Farm/Ranch land impacted (acres) **1,157** Roadway(s) impacted (length) **25**

Number of low water crossings **8** Historical road closures **-**

## Estimated Cost and Funding Availability

Total Cost **\$1,000,000** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



FME Area



Regional view of FME area

# Flood Management Evaluation (FME)



Title **City of Buda Dam Study**

ID# **111000012**

Sponsor (name of entity, not person) **Buda (Municipality)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Preparedness**

Study description **Study to evaluate dam failure risks, planning for structural and nonstructural measures to protect the integrity of the earthen fill dams.**

New Hydrologic or Hydraulic model? **Yes** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Hays** Watershed HUC# (if known) **12100203**

Drainage area (Square miles, est.) **9** Goal(s) **11000009, 11000010**

## 100-Year Flood Risk Summary

Population at risk **3** # of structures **3** Critical facilities **0**

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

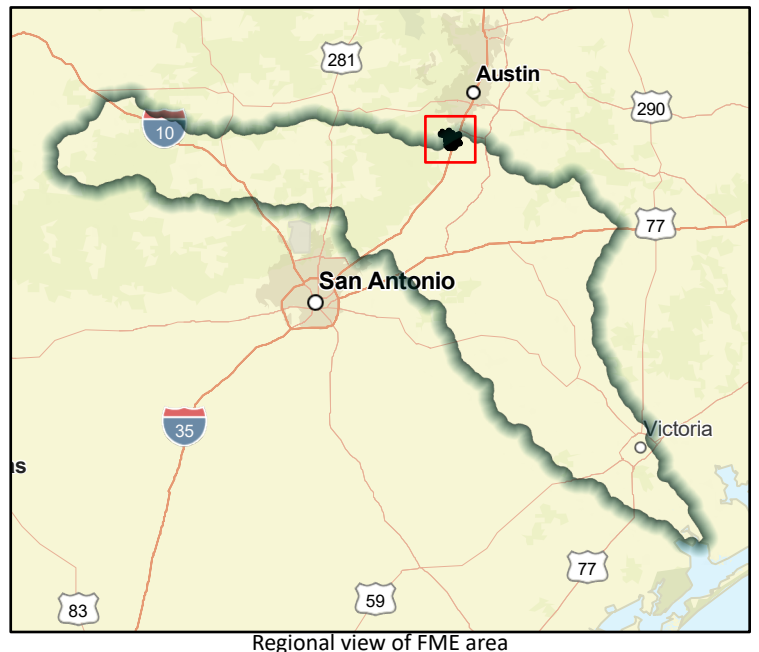
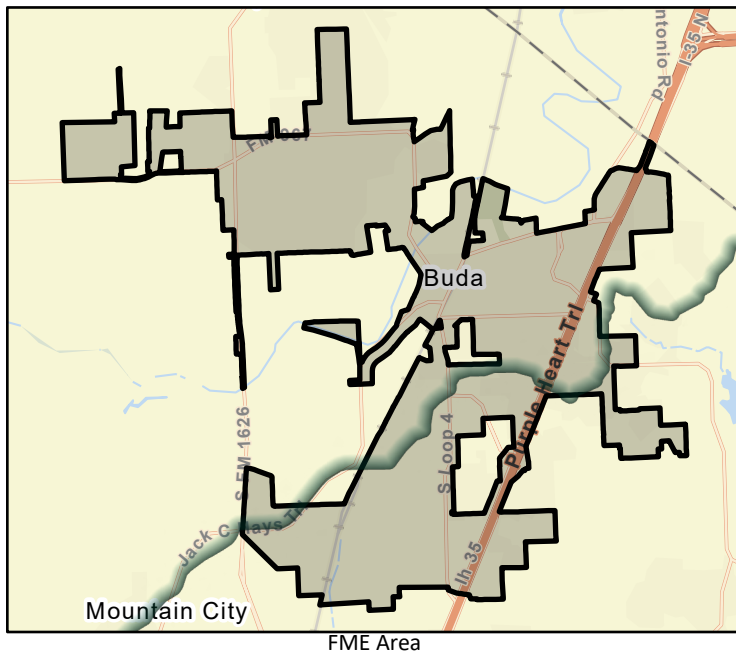
Farm/Ranch land impacted (acres) **8** Roadway(s) impacted (length) **1**

Number of low water crossings **1** Historical road closures **-**

## Estimated Cost and Funding Availability

Total Cost **\$500,000** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



# Flood Management Evaluation (FME)



Title **City of Bulverde Drainage Improvements Study**

ID# **111000013**

Sponsor (name of entity, not person) **Bulverde (Municipality)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Watershed Planning**

Study description **Study of solutions to replace existing culverts with larger ones, improve drainage channels; clear-out existing drainage channels; survey and remove hazardous trees from drainage systems.**

New Hydrologic or Hydraulic model? **Yes** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Comal** Watershed HUC# (if known) **12100202,12100201**

Drainage area (Square miles, est.) **16** Goal(s) **11000009, 11000010**

## 100-Year Flood Risk Summary

Population at risk **0** # of structures **0** Critical facilities **0**

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

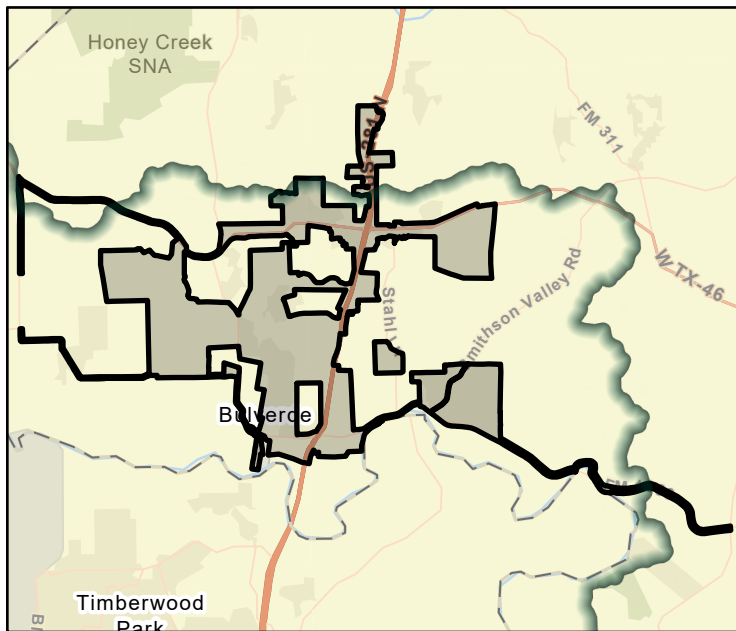
Farm/Ranch land impacted (acres) **1** Roadway(s) impacted (length) **1**

Number of low water crossings **1** Historical road closures **-**

## Estimated Cost and Funding Availability

Total Cost **\$150,000** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



FME Area



Regional view of FME area

# Flood Management Evaluation (FME)



Title **City of Bulverde Local Flooding Study**

ID# **111000014**

Sponsor (name of entity, not person) **Bulverde (Municipality)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Watershed Planning**

Study description **Study of solutions to elevate some segments of roadways in various portions of the community to address localized flooding issues.**

New Hydrologic or Hydraulic model? **Yes** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Comal** Watershed HUC# (if known) **12100202,12100201**

Drainage area (Square miles, est.) **16** Goal(s) **11000009, 11000010**

## 100-Year Flood Risk Summary

Population at risk **0** # of structures **0** Critical facilities **0**

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

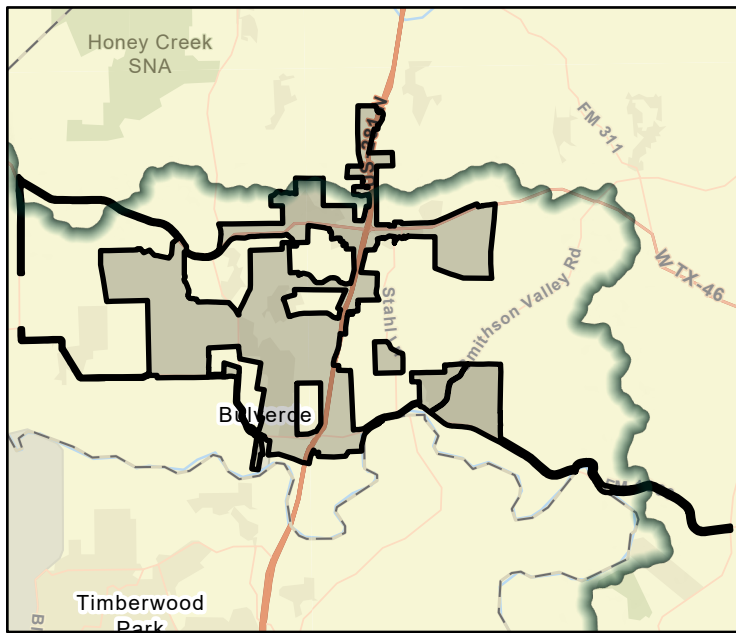
Farm/Ranch land impacted (acres) **1** Roadway(s) impacted (length) **1**

Number of low water crossings **1** Historical road closures **-**

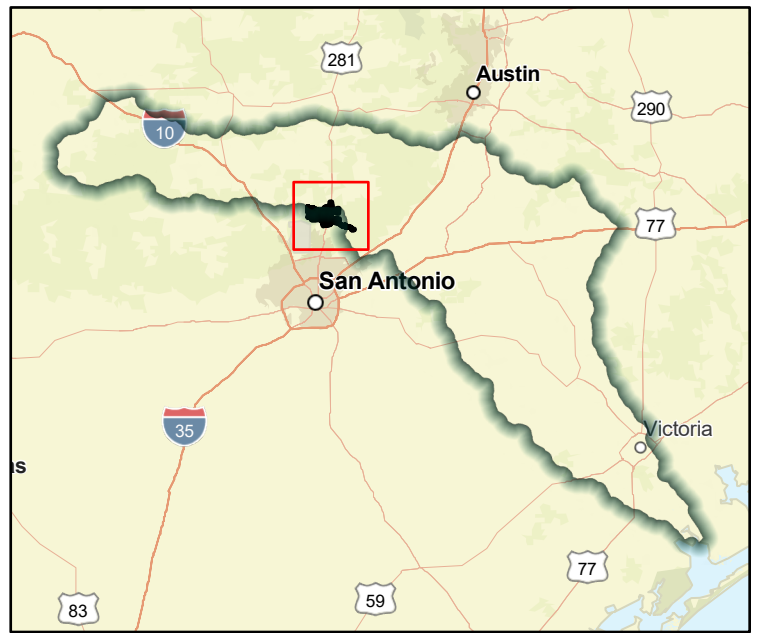
## Estimated Cost and Funding Availability

Total Cost **\$100,000** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



FME Area



Regional view of FME area

# Flood Management Evaluation (FME)



Title **City of Flatonia Drainage Project Planning**

ID# **111000015**

Sponsor (name of entity, not person) **Flatonia (Municipality)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Project Planning**

Study description **Project planning for proposed project to make culvert and drainage ditch improvements from just south of the Union Pacific Railroad at US 90 to the north side frontage road of I-10.**

New Hydrologic or Hydraulic model? **Yes** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Fayette** Watershed HUC# (if known) **12100202**

Drainage area (Square miles, est.) **1** Goal(s) **11000009, 11000010**

## 100-Year Flood Risk Summary

Population at risk **0** # of structures **0** Critical facilities **0**

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

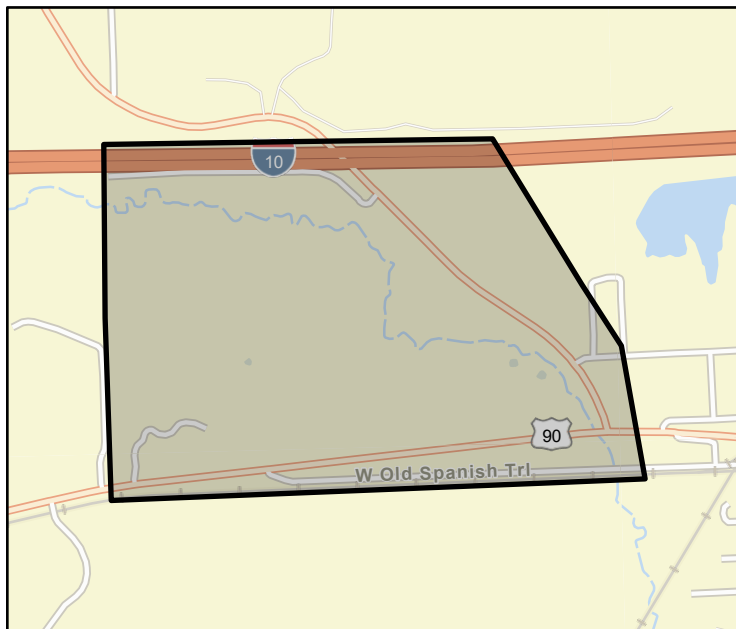
Farm/Ranch land impacted (acres) **15** Roadway(s) impacted (length) **0**

Number of low water crossings **0** Historical road closures **-**

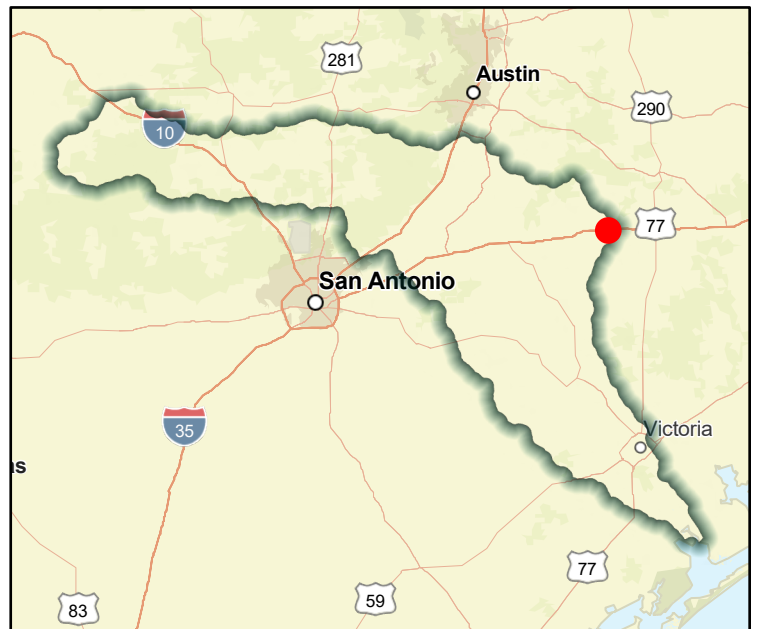
## Estimated Cost and Funding Availability

Total Cost **\$2,739,000** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



FME Area



Regional view of FME area

# Flood Management Evaluation (FME)



Title **City of Flatonia WWTP Floodproofing Project Planning**

ID# **111000016**

Sponsor (name of entity, not person) **Flatonia (Municipality)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Project Planning**

Study description **Project planning for proposed project to floodproof Waste Water Treatment Plant**

New Hydrologic or Hydraulic model? **Yes** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Fayette** Watershed HUC# (if known) **12100202**

Drainage area (Square miles, est.) **0** Goal(s) **11000015, 11000016**

## 100-Year Flood Risk Summary

Population at risk **0** # of structures **0** Critical facilities **0**

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

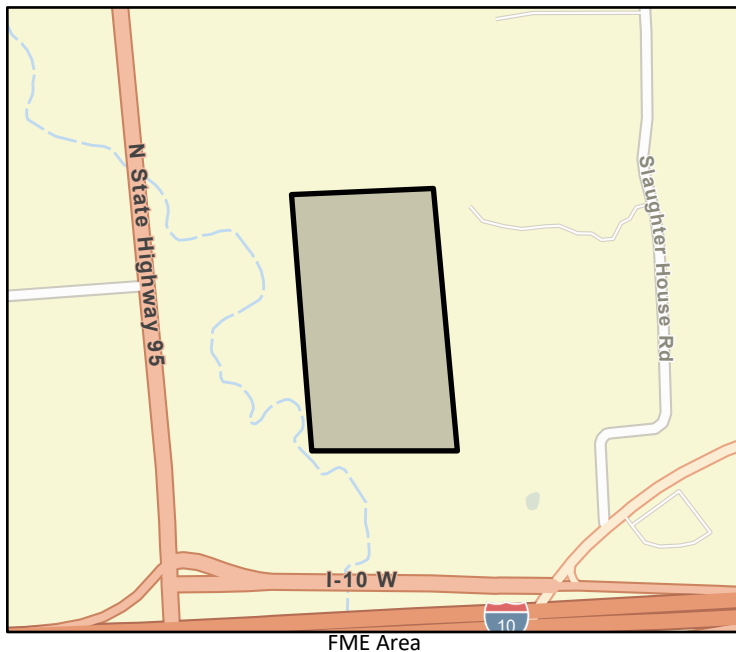
Farm/Ranch land impacted (acres) **0** Roadway(s) impacted (length) **0**

Number of low water crossings **0** Historical road closures **-**

## Estimated Cost and Funding Availability

Total Cost **\$100,000** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



FME Area



Regional view of FME area

# Flood Management Evaluation (FME)



Title **City of Garden Ridge Drainage Improvements Project Planning**

ID# **111000017**

Sponsor (name of entity, not person) **Garden Ridge (Municipality)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Project Planning**

Study description **Project planning to complete final phase of drainage infrastructure upgrades.**

New Hydrologic or Hydraulic model? **Yes** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Comal** Watershed HUC# (if known) **12100202**

Drainage area (Square miles, est.) **7** Goal(s) **11000009, 11000010**

## 100-Year Flood Risk Summary

Population at risk **20** # of structures **9** Critical facilities **0**

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

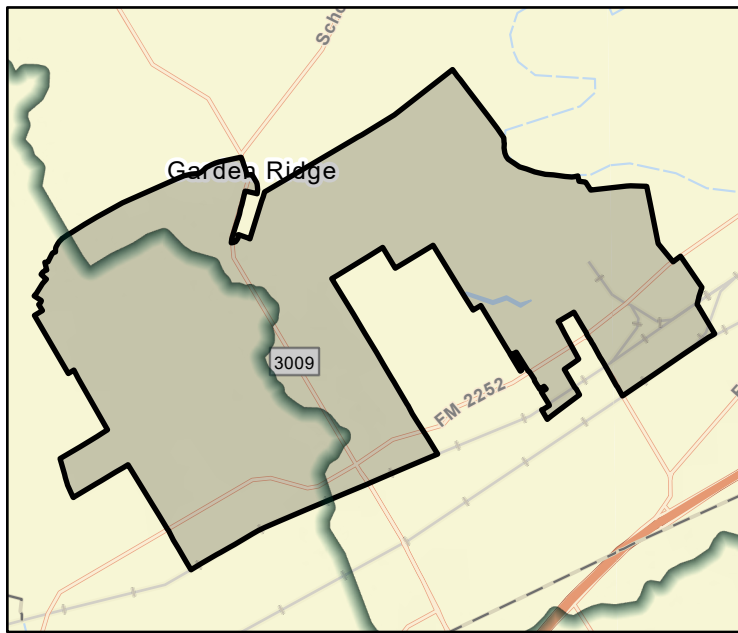
Farm/Ranch land impacted (acres) **18** Roadway(s) impacted (length) **0**

Number of low water crossings **0** Historical road closures **-**

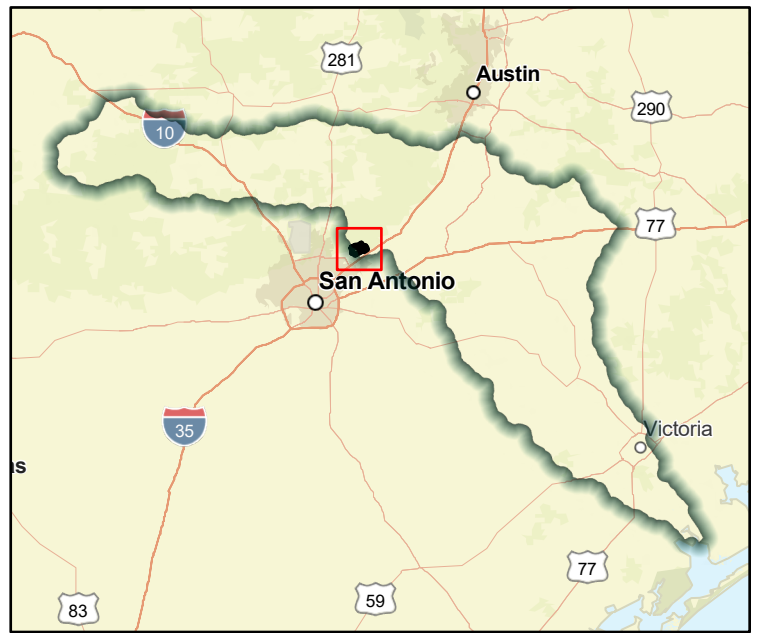
## Estimated Cost and Funding Availability

Total Cost **\$100,000** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



FME Area



Regional view of FME area

# Flood Management Evaluation (FME)



Title **City of Gonzales Tinsley Creek Improvement Project Planning**

ID# **111000018**

Sponsor (name of entity, not person) **Gonzales (Municipality)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Project Planning**

Study description **Project planning to upgrade aging infrastructure that was overwhelmed during Hurricane Harvey. Projects may include replacing box culvert bridges, replacing box culvert bridges with clear span bridges, and relocating utilities within the stream bed.**

New Hydrologic or Hydraulic model? **Yes** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Gonzales** Watershed HUC# (if known) **12100202**

Drainage area (Square miles, est.) **6** Goal(s) **11000009, 11000010**

## 100-Year Flood Risk Summary

Population at risk **1,070** # of structures **532** Critical facilities **2**

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

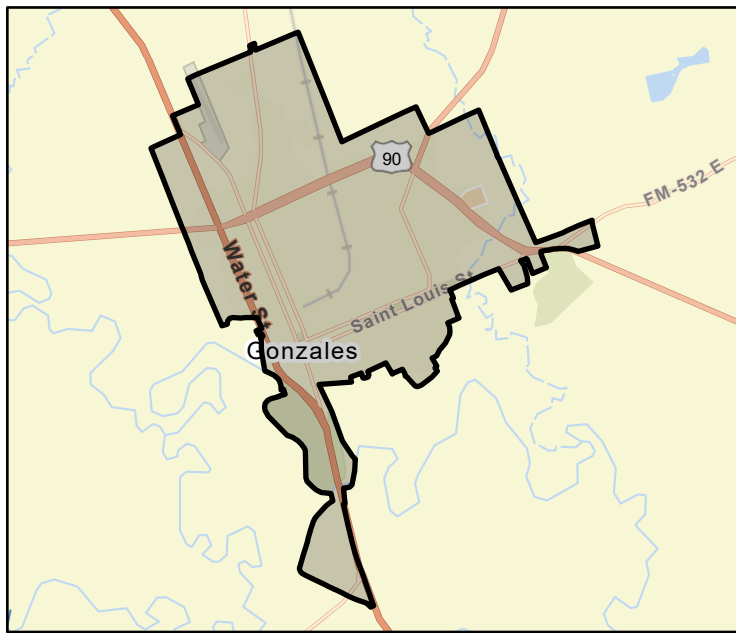
Farm/Ranch land impacted (acres) **128** Roadway(s) impacted (length) **13**

Number of low water crossings **5** Historical road closures **-**

## Estimated Cost and Funding Availability

Total Cost **\$600,000** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



FME Area



Regional view of FME area



# Flood Management Evaluation (FME)



Title **City of Gonzales Tinsley Creek Flood Mitigation Project Planning**

ID# **111000019**

Sponsor (name of entity, not person) **Gonzales (Municipality)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Project Planning**

Study description **Project planning for proposed improvements along Tinsley Creek include replacing a low water crossing at Johnson Street, adding culverts under Johnson Street, and replacing box culvert crossings with free span bridge crossings at several streets.**

New Hydrologic or Hydraulic model? **Yes** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Gonzales** Watershed HUC# (if known) **12100202**

Drainage area (Square miles, est.) **6** Goal(s) **11000001, 11000002**

## 100-Year Flood Risk Summary

Population at risk **1,070** # of structures **532** Critical facilities **2**

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

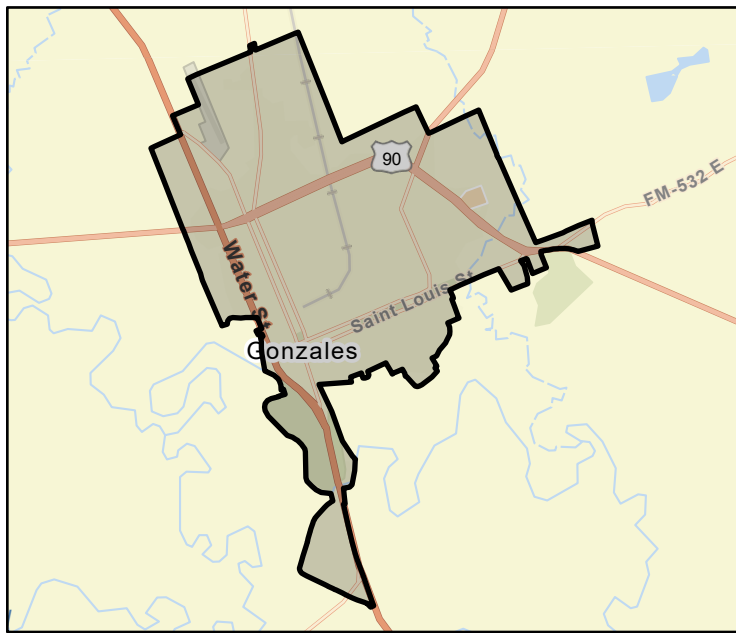
Farm/Ranch land impacted (acres) **128** Roadway(s) impacted (length) **13**

Number of low water crossings **5** Historical road closures **-**

## Estimated Cost and Funding Availability

Total Cost **\$430,000** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



FME Area



Regional view of FME area

# Flood Management Evaluation (FME)



Title **City of Ingram Drainage Improvements Study**

ID# **111000020**

Sponsor (name of entity, not person) **Ingram (Municipality)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Watershed Planning**

Study description **Study of solutions to upgrade existing storm drainage infrastructure to reduce the potential impacts of future flood events.**

New Hydrologic or Hydraulic model? **Yes** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Kerr** Watershed HUC# (if known) **12100201**

Drainage area (Square miles, est.) **1** Goal(s) **11000009, 11000010**

## 100-Year Flood Risk Summary

Population at risk **141** # of structures **122** Critical facilities **0**

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

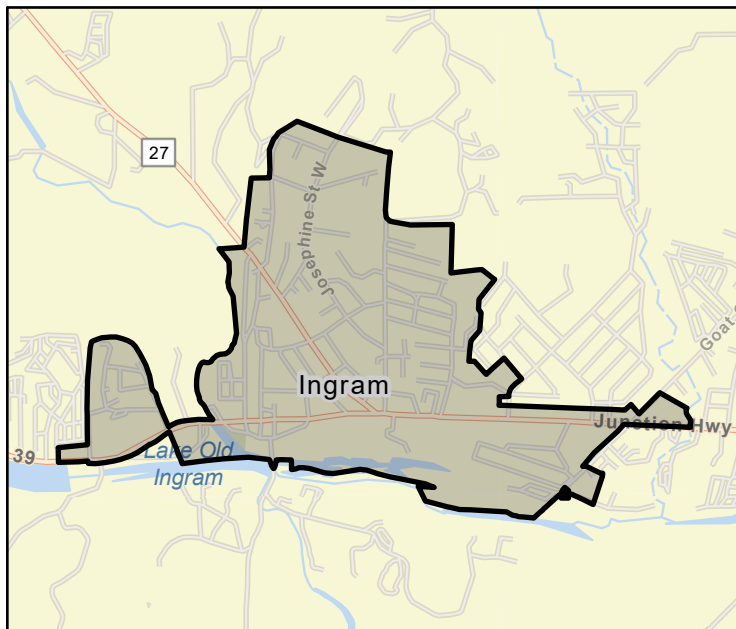
Farm/Ranch land impacted (acres) **24** Roadway(s) impacted (length) **3**

Number of low water crossings **0** Historical road closures **-**

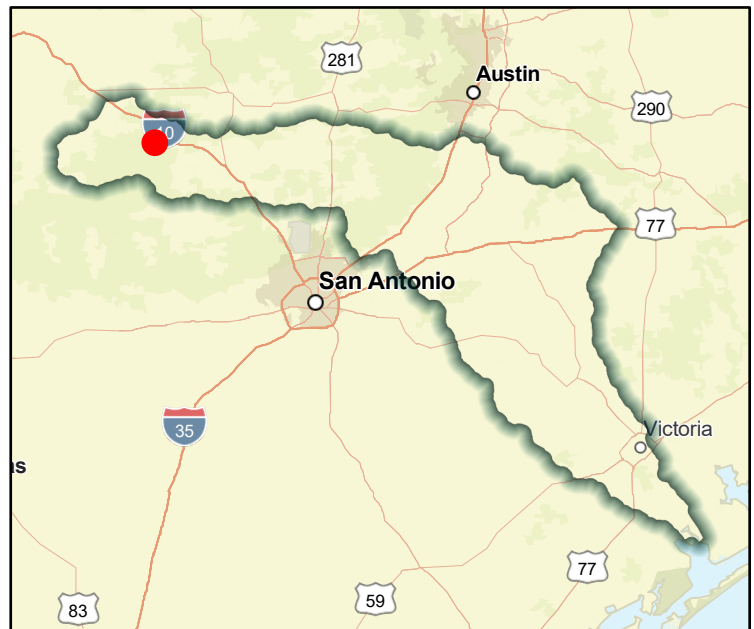
## Estimated Cost and Funding Availability

Total Cost **\$100,000** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



FME Area



Regional view of FME area

# Flood Management Evaluation (FME)



Title **City of Kerrville Pinto Trail Project Planning**

ID# **111000022**

Sponsor (name of entity, not person) **Kerrville (Municipality)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Project Planning**

Study description **Project planning for proposed project to provide flood relief to the properties adjacent to the channel at risk of flooding, including widening existing channels, constructing a grass-lined trapezoidal channel, and seeding the proposed earthen channels.**

New Hydrologic or Hydraulic model? **Yes** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Kerr** Watershed HUC# (if known) **12100201**

Drainage area (Square miles, est.) **0** Goal(s) **11000009, 11000010**

## 100-Year Flood Risk Summary

Population at risk **0** # of structures **0** Critical facilities **0**

Flood risk type: Riverine? **No** Coastal? **No** Local? **No** Playa? **No** Other? **No**

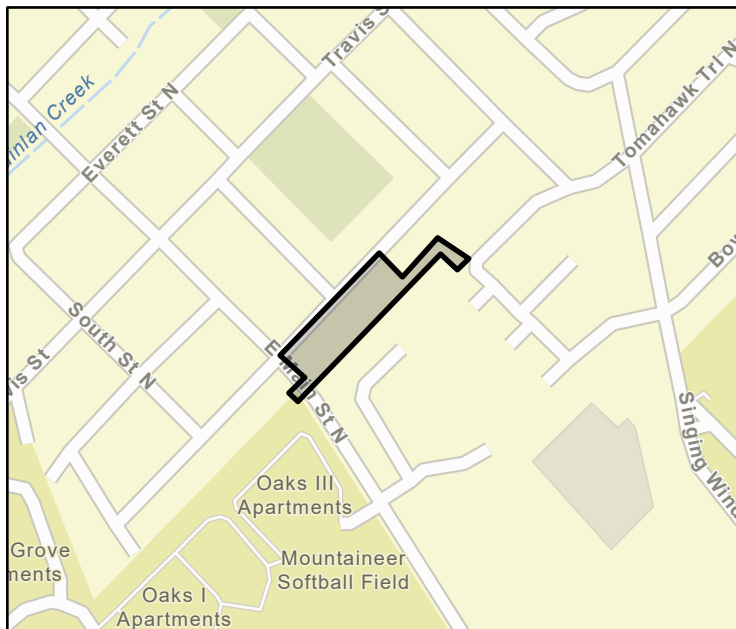
Farm/Ranch land impacted (acres) **0** Roadway(s) impacted (length) **0**

Number of low water crossings **0** Historical road closures **-**

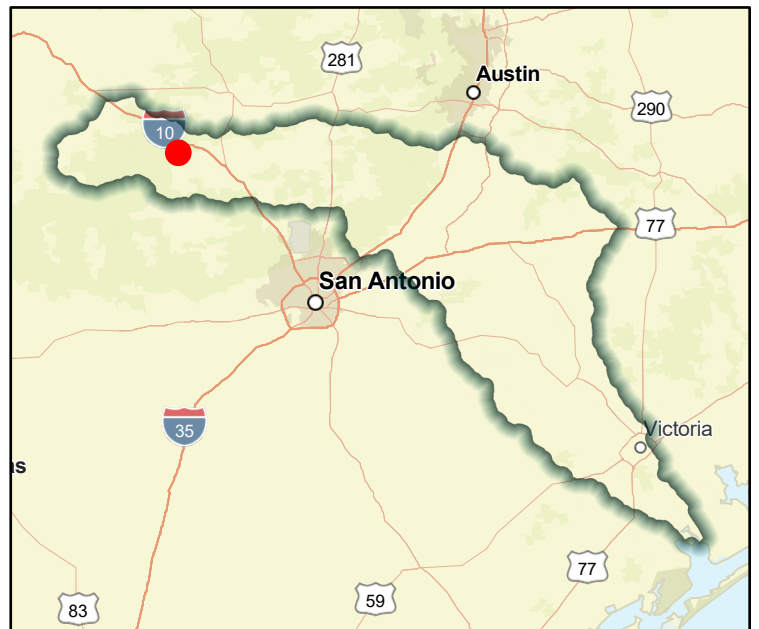
## Estimated Cost and Funding Availability

Total Cost **\$100,000** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



FME Area



Regional view of FME area

# Flood Management Evaluation (FME)



Title **City of Kerrville Park Street Low Water Crossing Project Planning**

ID# **111000023**

Sponsor (name of entity, not person) **Kerrville (Municipality)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Project Planning**

Study description **Project planning for proposed project to improve or replace the Park Street Low Water Crossing.**

New Hydrologic or Hydraulic model? **Yes** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Kerr** Watershed HUC# (if known) **12100201**

Drainage area (Square miles, est.) **0** Goal(s) **11000001, 11000002**

## 100-Year Flood Risk Summary

Population at risk **0** # of structures **0** Critical facilities **0**

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

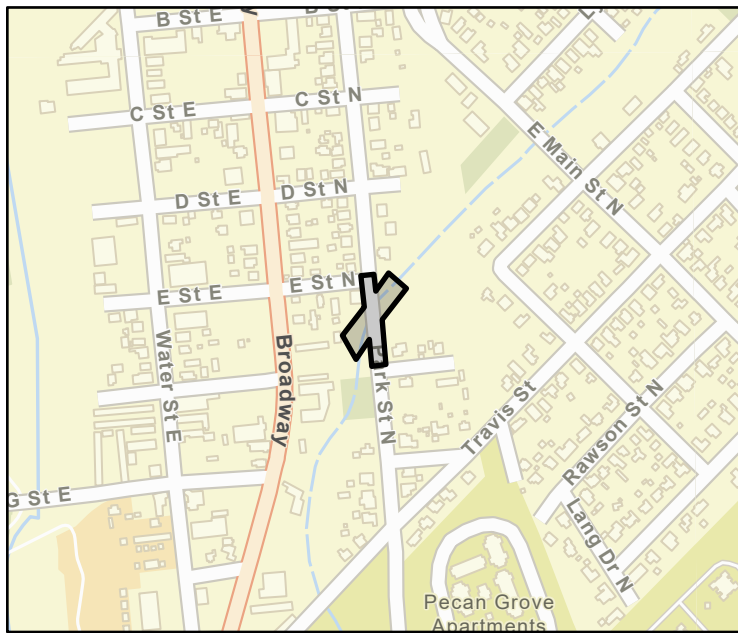
Farm/Ranch land impacted (acres) **0** Roadway(s) impacted (length) **0**

Number of low water crossings **1** Historical road closures **-**

## Estimated Cost and Funding Availability

Total Cost **\$340,000** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



FME Area



Regional view of FME area

# Flood Management Evaluation (FME)



Title **City of Kerrville First Street Low Water Crossing Project Planning**

ID# **111000024**

Sponsor (name of entity, not person) **Kerrville (Municipality)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Project Planning**

Study description **Project planning for proposed project to improve or replace the First Street Low Water Crossing.**

New Hydrologic or Hydraulic model? **Yes** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Kerr** Watershed HUC# (if known) **12100201**

Drainage area (Square miles, est.) **0** Goal(s) **11000001, 11000002**

## 100-Year Flood Risk Summary

Population at risk **0** # of structures **0** Critical facilities **0**

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

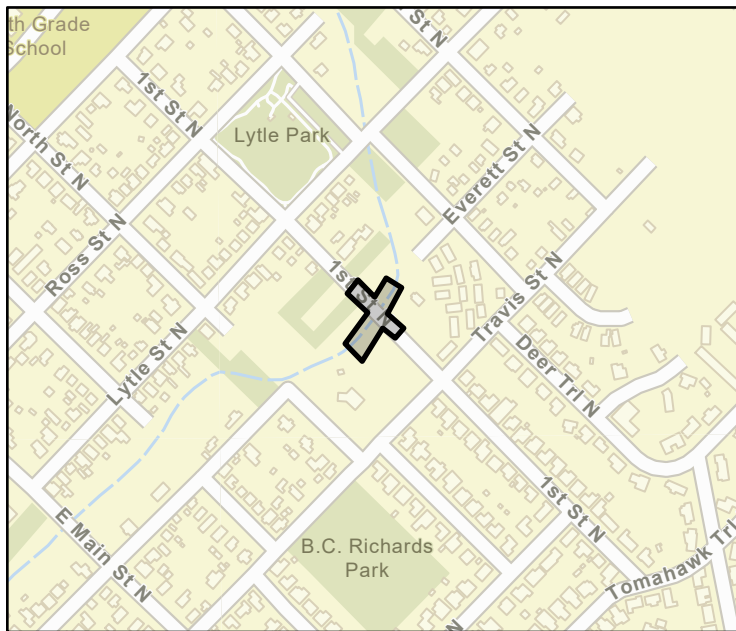
Farm/Ranch land impacted (acres) **0** Roadway(s) impacted (length) **0**

Number of low water crossings **1** Historical road closures **-**

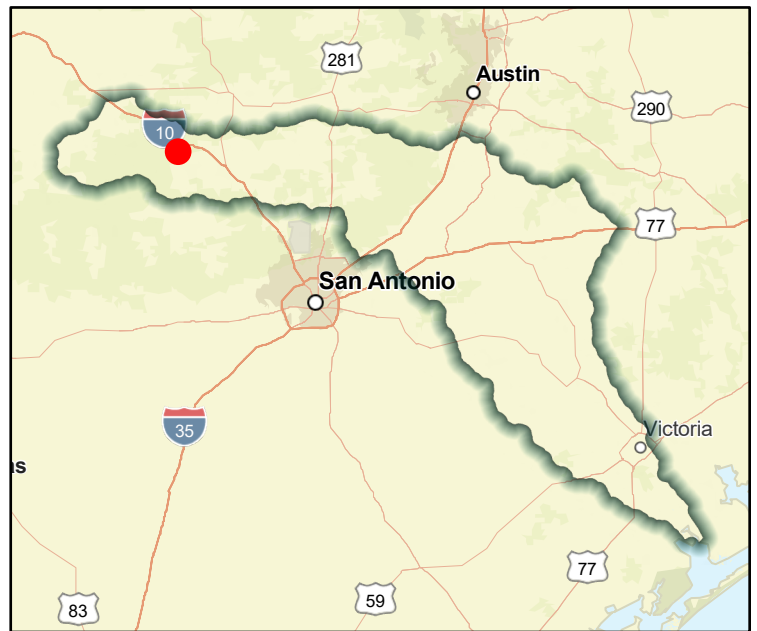
## Estimated Cost and Funding Availability

Total Cost **\$510,000** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



FME Area



Regional view of FME area

# Flood Management Evaluation (FME)



Title **City of Kerrville Fourth Street Low Water Crossing Project Planning**

ID# **111000025**

Sponsor (name of entity, not person) **Kerrville (Municipality)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Project Planning**

Study description **Project planning for proposed project to improve or replace the Park Street Low Water Crossing.**

New Hydrologic or Hydraulic model? **Yes** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Kerr** Watershed HUC# (if known) **12100201**

Drainage area (Square miles, est.) **0** Goal(s) **11000001, 11000002**

## 100-Year Flood Risk Summary

Population at risk **0** # of structures **0** Critical facilities **0**

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

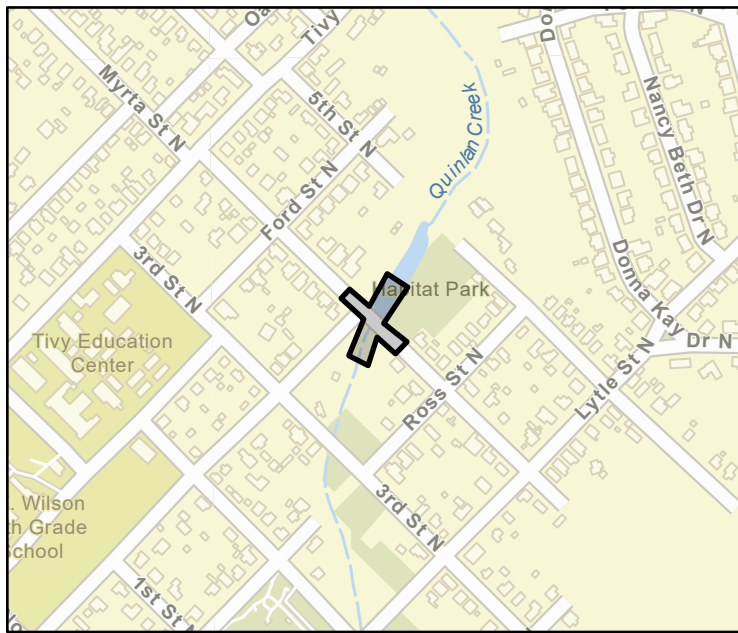
Farm/Ranch land impacted (acres) **0** Roadway(s) impacted (length) **0**

Number of low water crossings **1** Historical road closures **-**

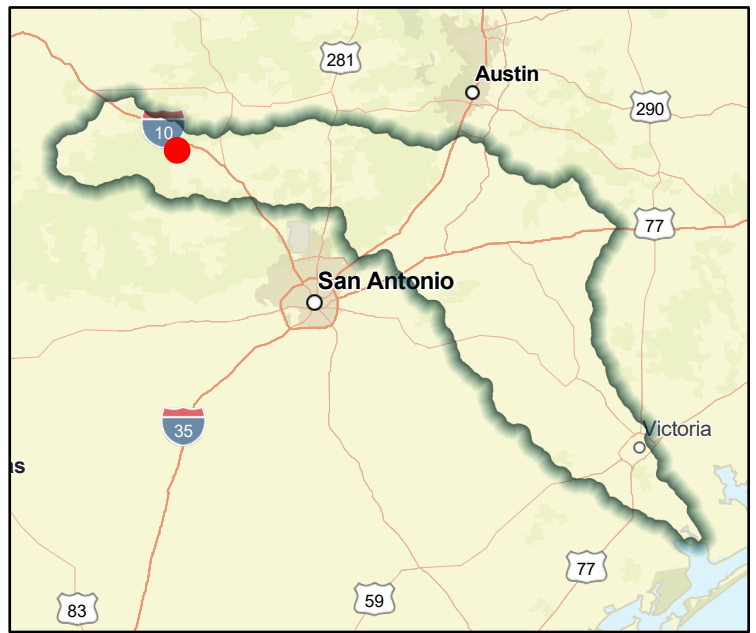
## Estimated Cost and Funding Availability

Total Cost **\$180,000** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



FME Area



Regional view of FME area

# Flood Management Evaluation (FME)



Title **City of Kerrville Hill Country Drive at SH 16 Project Planning**

ID# **111000026**

Sponsor (name of entity, not person) **Kerrville (Municipality)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Project Planning**

Study description **Project planning for proposed project to raise the roadway profile and regrade Hill Country Drive, and increase the downstream pipe capacity at Hill Country Drive.**

New Hydrologic or Hydraulic model? **Yes** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Kerr** Watershed HUC# (if known) **12100201**

Drainage area (Square miles, est.) **0** Goal(s) **11000009, 11000010**

## 100-Year Flood Risk Summary

Population at risk **0** # of structures **0** Critical facilities **0**

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

Farm/Ranch land impacted (acres) **0** Roadway(s) impacted (length) **0**

Number of low water crossings **0** Historical road closures **-**

## Estimated Cost and Funding Availability

Total Cost **\$245,000** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



FME Area



Regional view of FME area

# Flood Management Evaluation (FME)



Title **City of Kerrville Harper Street between Culberson Avenue and Lewis Avenue Project Planning**

ID# **111000028**

Sponsor (name of entity, not person) **Kerrville (Municipality)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Project Planning**

Study description **Project planning for proposed storm drain system project to relieve localized flooding and excessive ponding that occurs throughout Harper Street.**

New Hydrologic or Hydraulic model? **Yes** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Kerr** Watershed HUC# (if known) **12100201**

Drainage area (Square miles, est.) **0** Goal(s) **11000009, 11000010**

## 100-Year Flood Risk Summary

Population at risk **2** # of structures **1** Critical facilities **0**

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

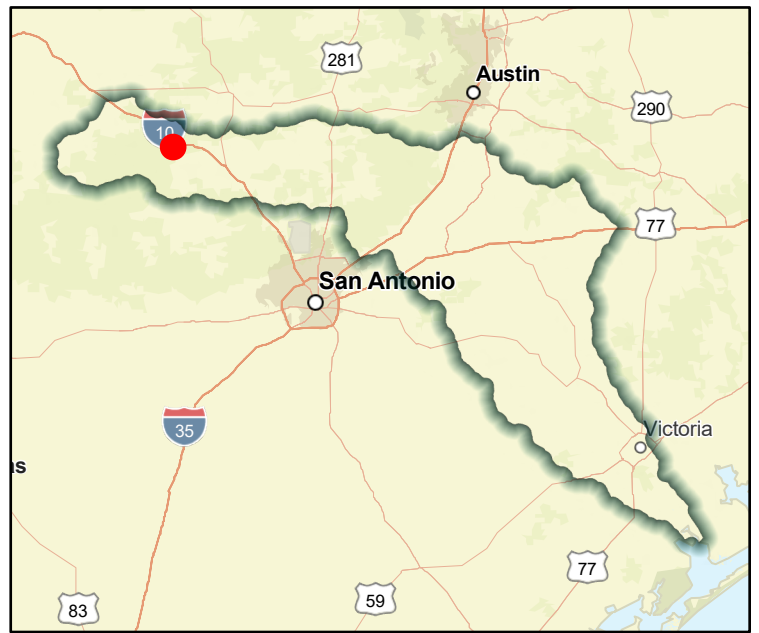
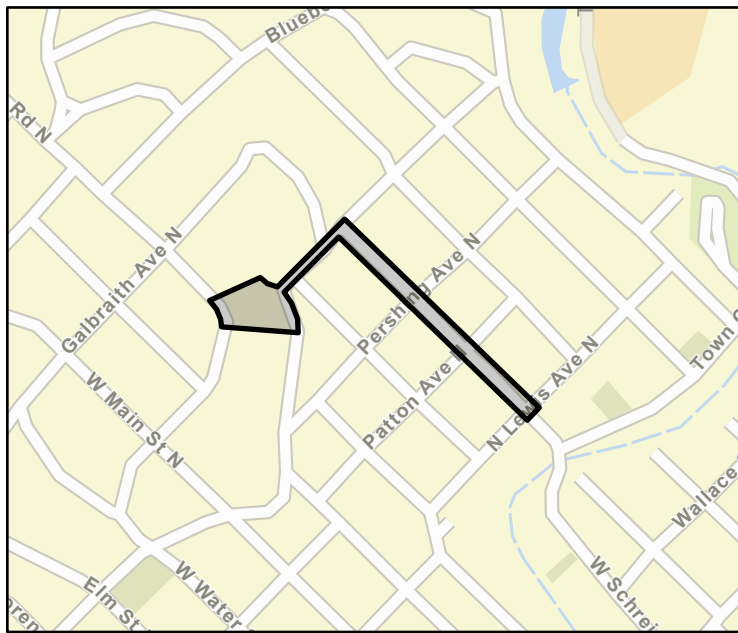
Farm/Ranch land impacted (acres) **0** Roadway(s) impacted (length) **0**

Number of low water crossings **0** Historical road closures **-**

## Estimated Cost and Funding Availability

Total Cost **\$180,000** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**





# Flood Management Evaluation (FME)



Title **City of Kerrville Circle Avenue Drainage Channel Project Planning**

ID# **111000029**

Sponsor (name of entity, not person) **Kerrville (Municipality)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Project Planning**

Study description **Project planning for proposed channel and street improvement project to alleviate sedimentation and erosion issues at the intersection of Culberson Avenue and Circle Avenue.**

New Hydrologic or Hydraulic model? **Yes** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Kerr** Watershed HUC# (if known) **12100201**

Drainage area (Square miles, est.) **0** Goal(s) **11000009, 11000010**

## 100-Year Flood Risk Summary

Population at risk **0** # of structures **0** Critical facilities **0**

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

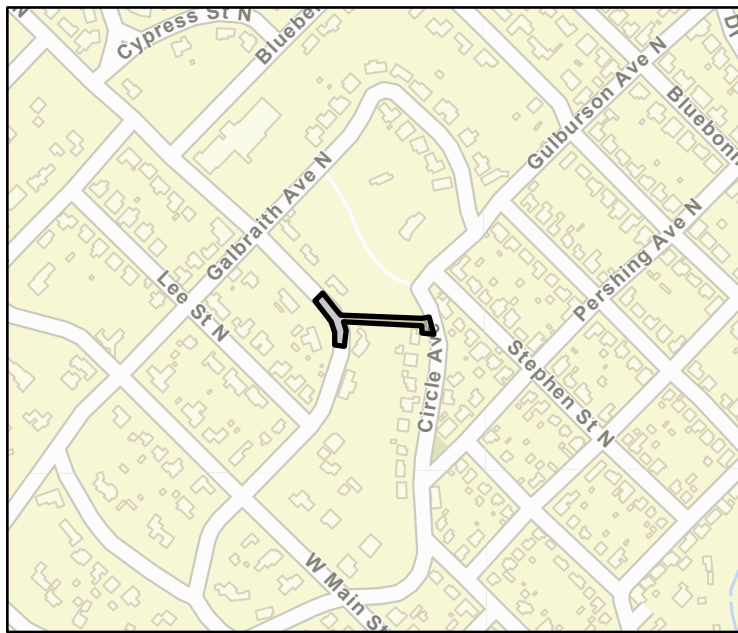
Farm/Ranch land impacted (acres) **0** Roadway(s) impacted (length) **0**

Number of low water crossings **0** Historical road closures **-**

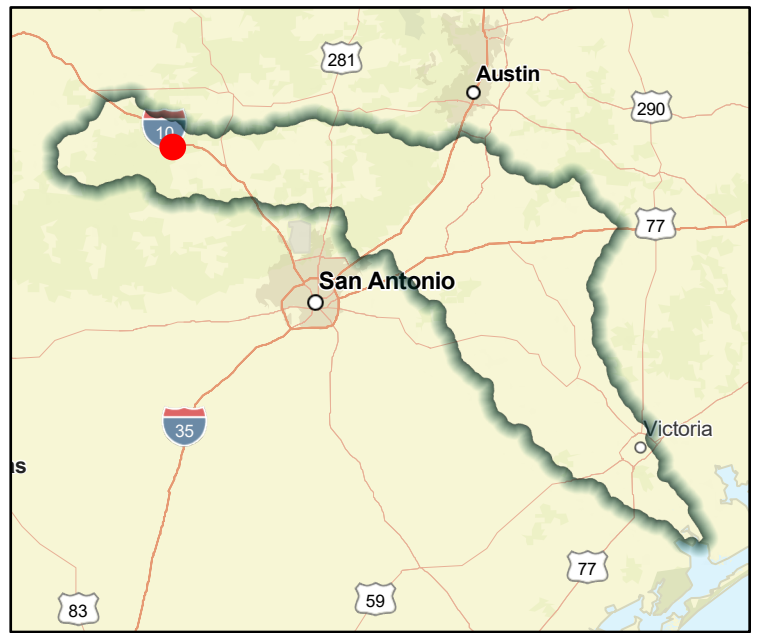
## Estimated Cost and Funding Availability

Total Cost **\$100,000** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



FME Area



Regional view of FME area

# Flood Management Evaluation (FME)



Title **City of Kerrville Jack Drive - Undersized Inlet Project Planning**

ID# **111000030**

Sponsor (name of entity, not person) **Kerrville (Municipality)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Project Planning**

Study description **Project planning for proposed street and drainage improvements project to relieve road and property flooding from occurring directly downstream of Jack Drive's existing undersized inlet.**

New Hydrologic or Hydraulic model? **Yes** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Kerr** Watershed HUC# (if known) **12100201**

Drainage area (Square miles, est.) **0** Goal(s) **11000009, 11000010**

## 100-Year Flood Risk Summary

Population at risk **0** # of structures **0** Critical facilities **0**

Flood risk type: Riverine? **No** Coastal? **No** Local? **No** Playa? **No** Other? **No**

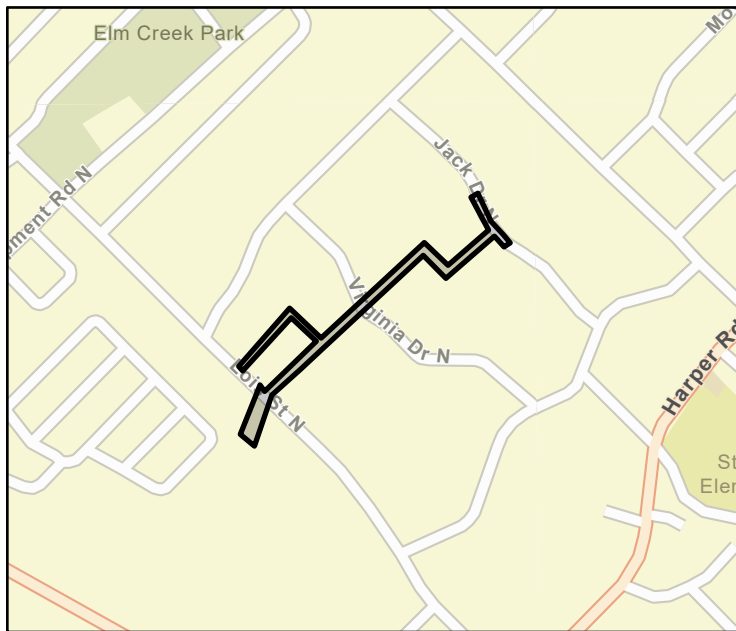
Farm/Ranch land impacted (acres) **0** Roadway(s) impacted (length) **0**

Number of low water crossings **0** Historical road closures **-**

## Estimated Cost and Funding Availability

Total Cost **\$240,000** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



FME Area



Regional view of FME area

# Flood Management Evaluation (FME)



Title City of Kerrville Harper Road to Town Creek (Fay Drive) Drainage Improvements Study

ID# 111000031

Sponsor (name of entity, not person) Kerrville (Municipality)

RFPG recommend? Yes Reason for Recommendation Meets minimum TWDB requirements

## Study Details

Study type Project Planning

Study description Study of solutions to implement drainage improvements on Harper Road to Town Creek (Fay Drive).

New Hydrologic or Hydraulic model? Yes Emergency Need? No Existing/Anticipated models in near term? Yes

County Kerr Watershed HUC# (if known) 12100201

Drainage area (Square miles, est.) 0 Goal(s) 11000009, 11000010

## 100-Year Flood Risk Summary

Population at risk 7 # of structures 4 Critical facilities 0

Flood risk type: Riverine? Yes Coastal? No Local? No Playa? No Other? No

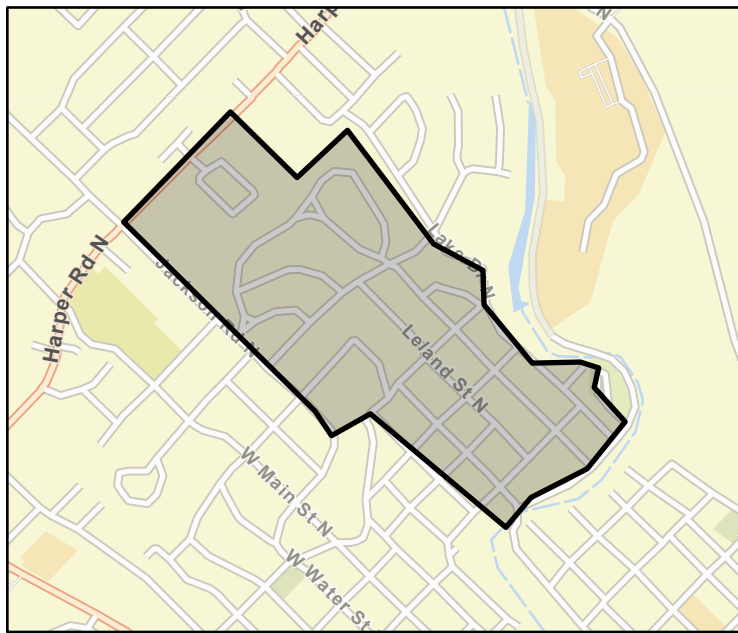
Farm/Ranch land impacted (acres) 0 Roadway(s) impacted (length) 0

Number of low water crossings 1 Historical road closures -

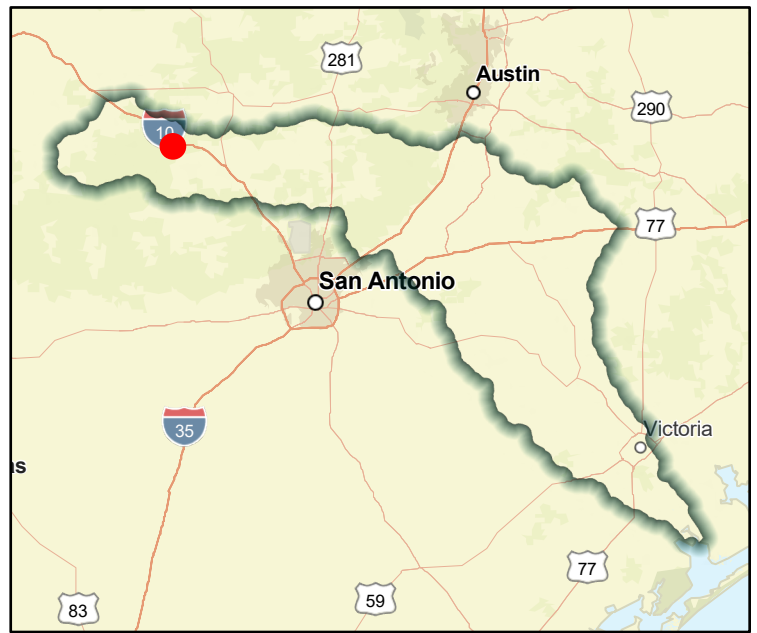
## Estimated Cost and Funding Availability

Total Cost \$150,000 Amount of Available Funding TBD Federal funding availability No

Funding source -



FME Area



Regional view of FME area

# Flood Management Evaluation (FME)



Title **City of Kyle Prairie and Woodland Restoration Plan**

ID# **111000033**

Sponsor (name of entity, not person) **Kyle (Municipality)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Watershed Planning**

Study description **Prepare and implement a prairie or woodland restoration plan for 1 or more of Kyle's park properties. Selection of a municipal park where all or a portion of the site may be restored to a natural grassland or woodland**

New Hydrologic or Hydraulic model? **No** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Hays** Watershed HUC# (if known) **12100203**

Drainage area (Square miles, est.) **31** Goal(s) **11000003, 11000004**

## 100-Year Flood Risk Summary

Population at risk **1,368** # of structures **422** Critical facilities **0**

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

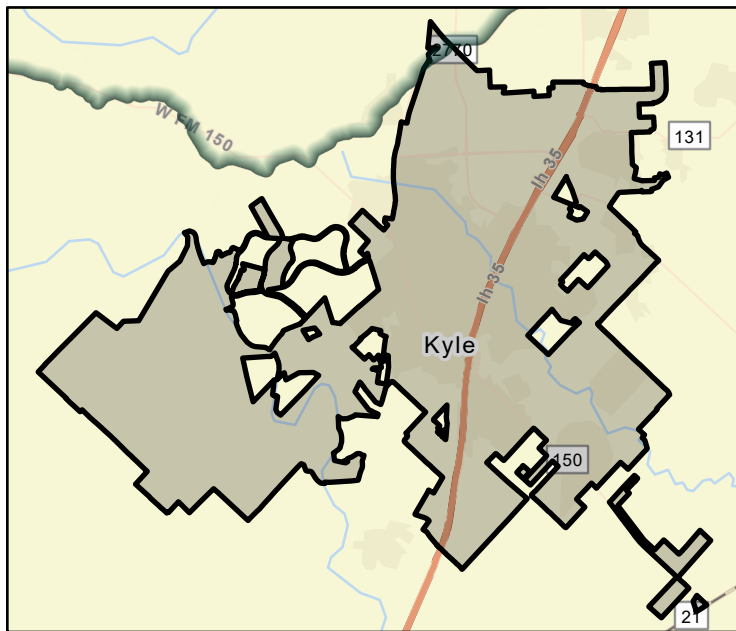
Farm/Ranch land impacted (acres) **727** Roadway(s) impacted (length) **7**

Number of low water crossings **9** Historical road closures **-**

## Estimated Cost and Funding Availability

Total Cost **\$250,000** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



FME Area



Regional view of FME area

# Flood Management Evaluation (FME)



Title **City of Kyle - N. Burleson Street Drainage Improvements Project Planning**

ID# **111000034**

Sponsor (name of entity, not person) **Kyle (Municipality)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Project Planning**

Study description **Project planning for proposed project to conduct street reconstruction and drainage improvements to minimize flooding in the downtown area.**

New Hydrologic or Hydraulic model? **Yes** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Hays** Watershed HUC# (if known) **12100203**

Drainage area (Square miles, est.) **0** Goal(s) **11000009, 11000010**

## 100-Year Flood Risk Summary

Population at risk **3** # of structures **1** Critical facilities **0**

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

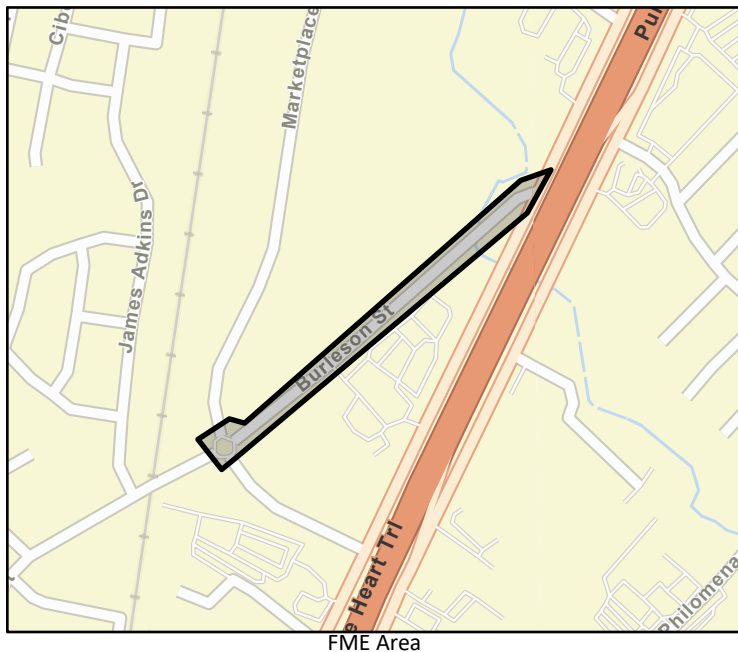
Farm/Ranch land impacted (acres) **0** Roadway(s) impacted (length) **0**

Number of low water crossings **1** Historical road closures **-**

## Estimated Cost and Funding Availability

Total Cost **\$983,000** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



# Flood Management Evaluation (FME)



Title **City of Lockhart Drainage Improvements Study**

ID# **111000035**

Sponsor (name of entity, not person) **Lockhart (Municipality)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Watershed Planning**

Study description **Study to identify Capital Improvements to Municipal Drainage System and study solutions to upgrade system to improve drainage capacity and reduce flood damages.**

New Hydrologic or Hydraulic model? **Yes** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Caldwell** Watershed HUC# (if known) **12100203**

Drainage area (Square miles, est.) **16** Goal(s) **11000009, 11000010**

## 100-Year Flood Risk Summary

Population at risk **187** # of structures **62** Critical facilities **2**

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

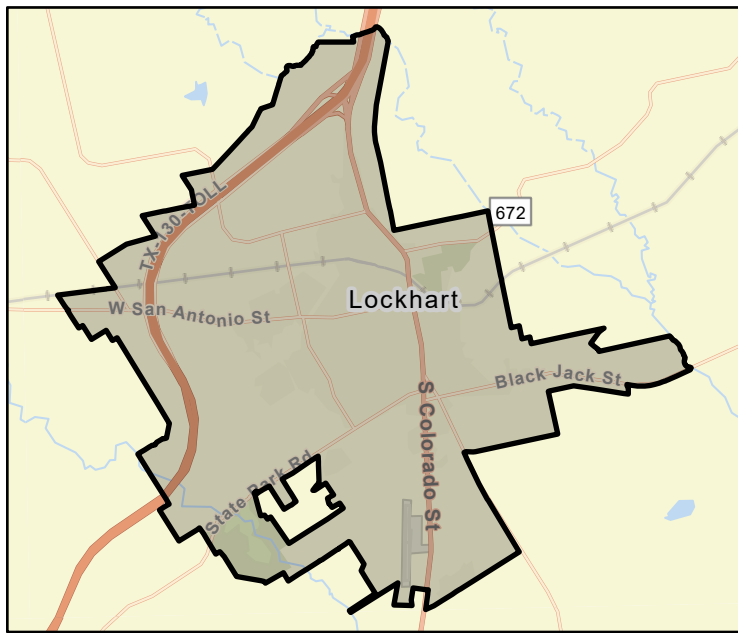
Farm/Ranch land impacted (acres) **344** Roadway(s) impacted (length) **6**

Number of low water crossings **6** Historical road closures **-**

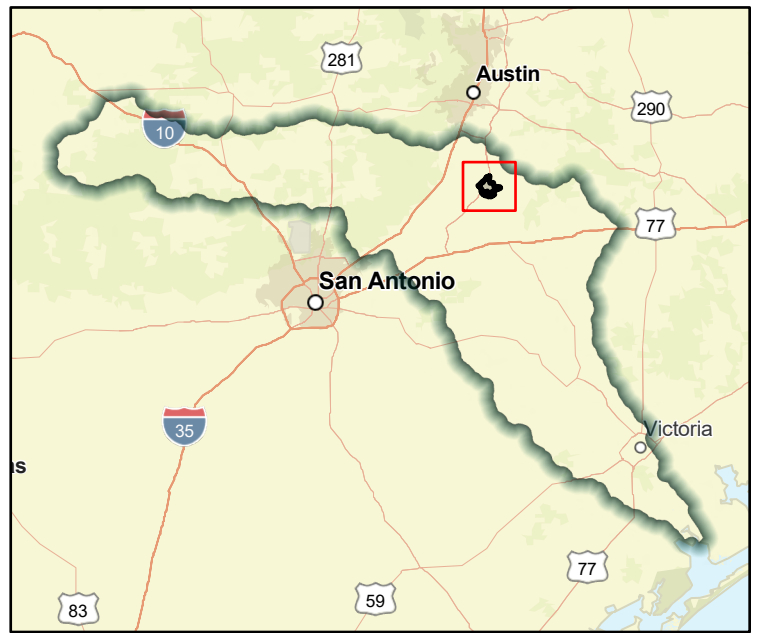
## Estimated Cost and Funding Availability

Total Cost **\$2,400,000** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



FME Area



Regional view of FME area

# Flood Management Evaluation (FME)



Title **City of Lockhart USACE Study**

ID# **111000036**

Sponsor (name of entity, not person) **Lockhart (Municipality)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Watershed Planning**

Study description **Undertake a comprehensive study of flood risk and reduction alternatives with USACE, covering all incorporated and unincorporated areas of the city that currently have limited studies with no determined base flood elevations as well as unmapped areas.**

New Hydrologic or Hydraulic model? **Yes** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Caldwell** Watershed HUC# (if known) **12100203**

Drainage area (Square miles, est.) **16** Goal(s) **11000009, 11000010**

## 100-Year Flood Risk Summary

Population at risk **187** # of structures **62** Critical facilities **2**

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

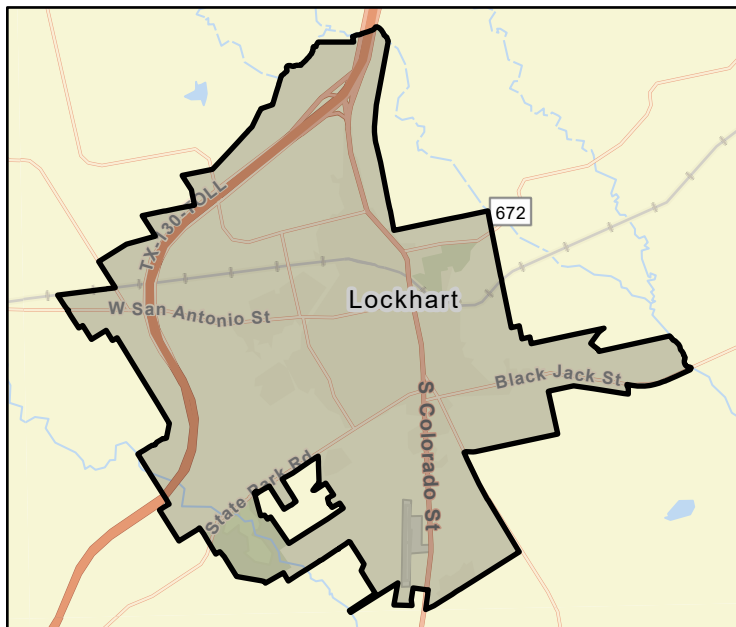
Farm/Ranch land impacted (acres) **344** Roadway(s) impacted (length) **6**

Number of low water crossings **6** Historical road closures **-**

## Estimated Cost and Funding Availability

Total Cost **\$360,000** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



FME Area



Regional view of FME area

# Flood Management Evaluation (FME)



Title **City of Luling Drainage Improvements Study**

ID# **111000037**

Sponsor (name of entity, not person) **Luling (Municipality)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Watershed Planning**

Study description **Study of solutions to upgrade undersized stormwater drains and culverts.**

New Hydrologic or Hydraulic model? **Yes** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Guadalupe, Caldwell** Watershed HUC# (if known) **12100203**

Drainage area (Square miles, est.) **6** Goal(s) **11000009, 11000010**

## 100-Year Flood Risk Summary

Population at risk **199** # of structures **74** Critical facilities **0**

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

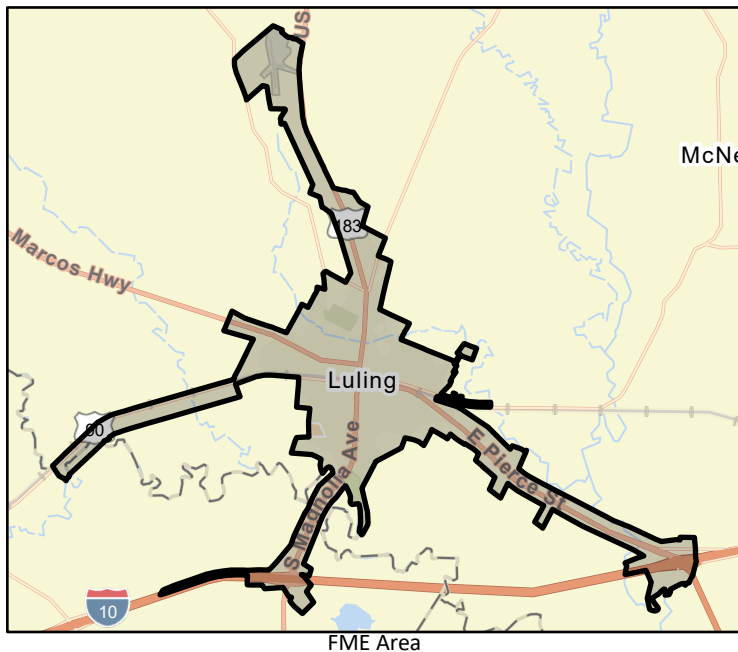
Farm/Ranch land impacted (acres) **210** Roadway(s) impacted (length) **6**

Number of low water crossings **0** Historical road closures **-**

## Estimated Cost and Funding Availability

Total Cost **\$150,000** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**





# Flood Management Evaluation (FME)



Title **City of Martindale Drainage Improvements Study**

ID# **111000038**

Sponsor (name of entity, not person) **Martindale (Municipality)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Watershed Planning**

Study description **Study of solutions to upgrade undersized stormwater drains and culverts.**

New Hydrologic or Hydraulic model? **Yes** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Caldwell** Watershed HUC# (if known) **12100203**

Drainage area (Square miles, est.) **2** Goal(s) **11000009, 11000010**

## 100-Year Flood Risk Summary

Population at risk **550** # of structures **196** Critical facilities **1**

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

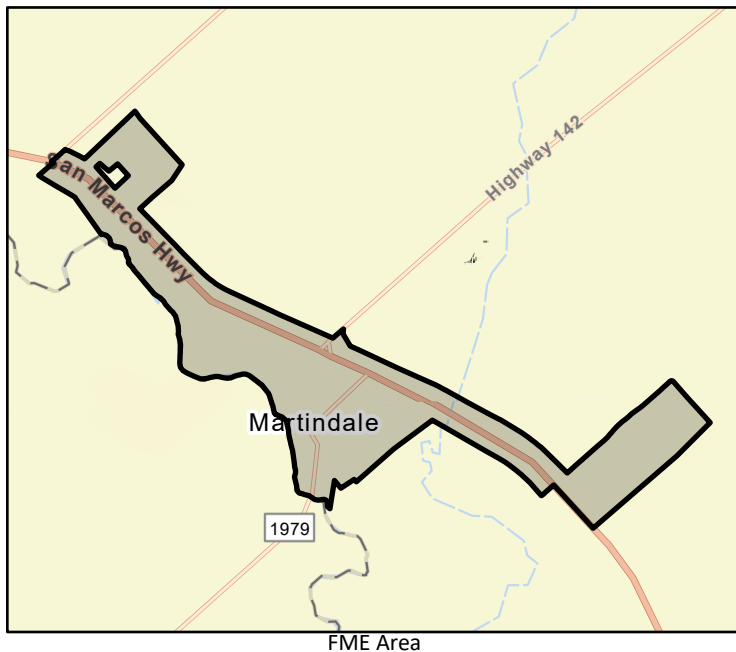
Farm/Ranch land impacted (acres) **53** Roadway(s) impacted (length) **6**

Number of low water crossings **3** Historical road closures **-**

## Estimated Cost and Funding Availability

Total Cost **\$100,000** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



# Flood Management Evaluation (FME)



Title **City of Mountain City Repetitive Loss Structure Mitigation Study**

ID# **111000039**

Sponsor (name of entity, not person) **Mountain City (Municipality)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Project Planning**

Study description **Study of solutions to floodproof or otherwise mitigate repetitive loss structures that have been identified by FEMA for the number of flood insurance claims.**

New Hydrologic or Hydraulic model? **Yes** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Hays** Watershed HUC# (if known) **12100203**

Drainage area (Square miles, est.) **1** Goal(s) **11000009, 11000010**

## 100-Year Flood Risk Summary

Population at risk **0** # of structures **0** Critical facilities **0**

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

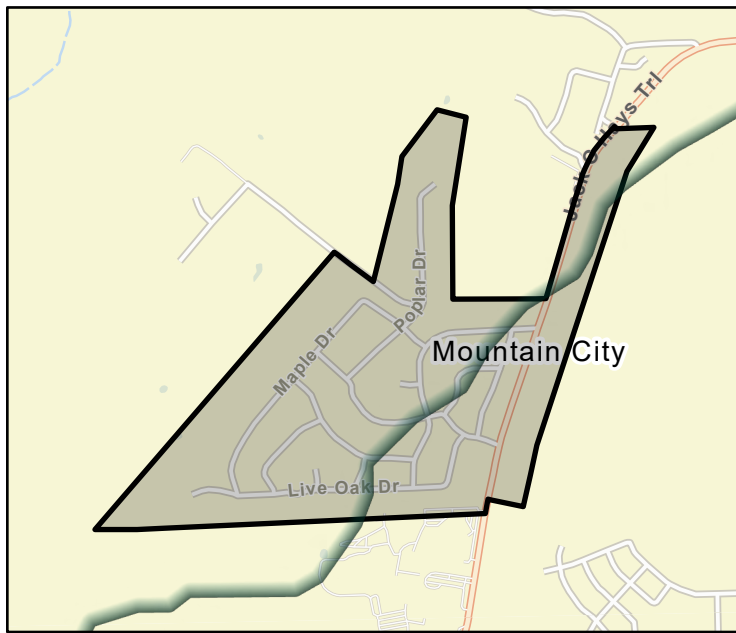
Farm/Ranch land impacted (acres) **0** Roadway(s) impacted (length) **0**

Number of low water crossings **0** Historical road closures **-**

## Estimated Cost and Funding Availability

Total Cost **\$150,000** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



FME Area



Regional view of FME area

# Flood Management Evaluation (FME)



Title **City of New Braunfels - Box Culvert Installation to Reduce Flood Risk on Blieders Creek, Comal River and Landa Park Project Planning**

ID# **111000043**

Sponsor (name of entity, not person) **New Braunfels (Municipality)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Project Planning**

Study description **Project planning for proposed drainage improvements project to reduce flooding in the Blieders Creek and German Creek watersheds by conveying flows to the Guadalupe River. The project is also intended to relieve flooding in the Landa Park area.**

New Hydrologic or Hydraulic model? **Yes** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Comal** Watershed HUC# (if known) **12100202**

Drainage area (Square miles, est.) **0** Goal(s) **11000009, 11000010**

## 100-Year Flood Risk Summary

Population at risk **353** # of structures **60** Critical facilities **0**

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

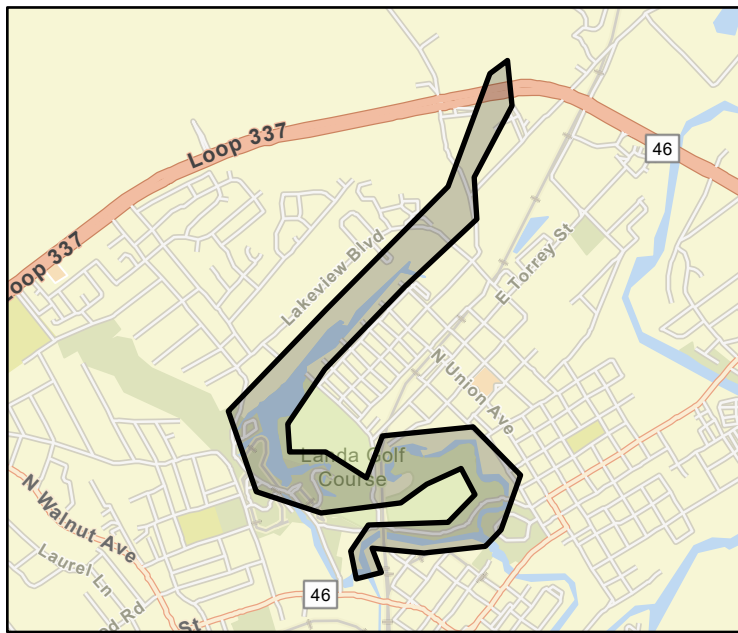
Farm/Ranch land impacted (acres) **5** Roadway(s) impacted (length) **1**

Number of low water crossings **4** Historical road closures **-**

## Estimated Cost and Funding Availability

Total Cost **\$878,000** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



FME Area



Regional view of FME area

# Flood Management Evaluation (FME)



Title **City of New Braunfels Faust St / Nacogdoches Ave Improvements Project Planning**

ID# **111000044**

Sponsor (name of entity, not person) **New Braunfels (Municipality)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Watershed Planning**

Study description **Study to analyze drainage conveyance and flooding issues within the Faust Street and Nacogdoches Avenue area and project planning for solutions within project area.**

New Hydrologic or Hydraulic model? **Yes** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Comal** Watershed HUC# (if known) **12100202**

Drainage area (Square miles, est.) **0** Goal(s) **11000009, 11000010**

## 100-Year Flood Risk Summary

Population at risk **8** # of structures **2** Critical facilities **0**

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

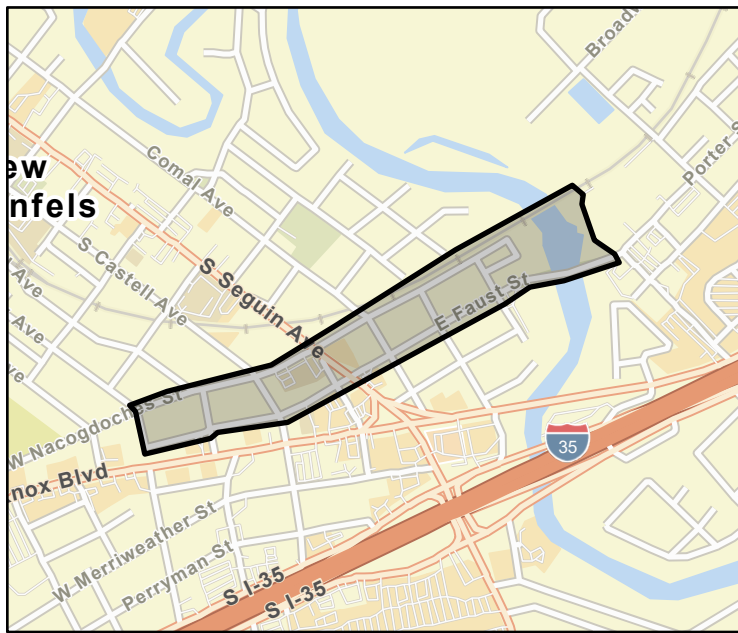
Farm/Ranch land impacted (acres) **0** Roadway(s) impacted (length) **0**

Number of low water crossings **0** Historical road closures **-**

## Estimated Cost and Funding Availability

Total Cost **\$1,102,000** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



FME Area



Regional view of FME area

# Flood Management Evaluation (FME)



Title **City of New Braunfels Dry Comal Creek Tributary East Watershed Project Planning**

ID# **111000045**

Sponsor (name of entity, not person) **New Braunfels (Municipality)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Watershed Planning**

Study description **Study to analyze drainage conveyance and flooding issues within the Dry Comal Creek Tributaries East area (Kerlick Lane/Encino Drive/Mission Drive) and project planning for solutions within project area.**

New Hydrologic or Hydraulic model? **Yes** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Comal** Watershed HUC# (if known) **12100202**

Drainage area (Square miles, est.) **1** Goal(s) **11000009, 11000010**

## 100-Year Flood Risk Summary

Population at risk **588** # of structures **77** Critical facilities **0**

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

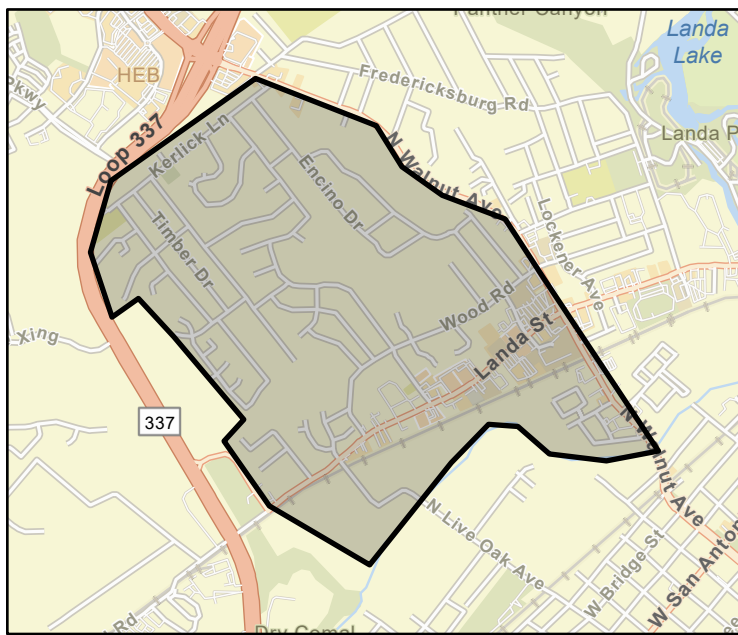
Farm/Ranch land impacted (acres) **15** Roadway(s) impacted (length) **1**

Number of low water crossings **0** Historical road closures **-**

## Estimated Cost and Funding Availability

Total Cost **\$344,000** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



FME Area



Regional view of FME area

# Flood Management Evaluation (FME)



Title **City of New Braunfels Hunters Creek Regional Project Planning**

ID# **111000047**

Sponsor (name of entity, not person) **New Braunfels (Municipality)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Watershed Planning**

Study description **Study to analyze drainage conveyance and flooding issues within the Hunters Creek area including the detention facility for the Westpointe development and project planning for solutions within project area.**

New Hydrologic or Hydraulic model? **Yes** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Comal** Watershed HUC# (if known) **12100202**

Drainage area (Square miles, est.) **0** Goal(s) **11000009, 11000010**

## 100-Year Flood Risk Summary

Population at risk **0** # of structures **0** Critical facilities **0**

Flood risk type: Riverine? **No** Coastal? **No** Local? **No** Playa? **No** Other? **No**

Farm/Ranch land impacted (acres) **0** Roadway(s) impacted (length) **0**

Number of low water crossings **0** Historical road closures **-**

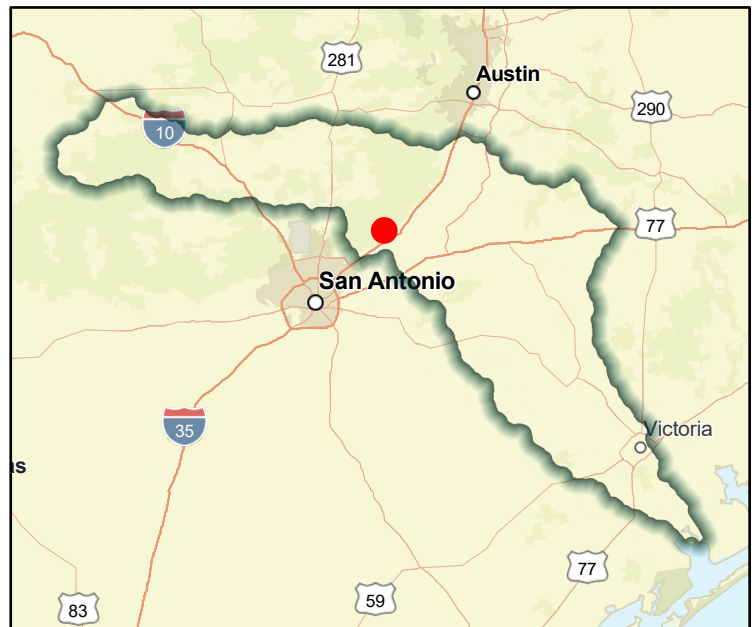
## Estimated Cost and Funding Availability

Total Cost **\$211,000** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



FME Area



Regional view of FME area

# Flood Management Evaluation (FME)



Title **City of New Braunfels South Guadalupe Tributary Watershed Project Planning**

ID# **111000048**

Sponsor (name of entity, not person) **New Braunfels (Municipality)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Watershed Planning**

Study description **Study to analyze drainage conveyance and flooding issues within the South Guadalupe River tributary area (Mesquite/Eastman/Oleander/Walnut Heights) and project planning for solutions within project area.**

New Hydrologic or Hydraulic model? **Yes** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Comal** Watershed HUC# (if known) **12100202**

Drainage area (Square miles, est.) **0** Goal(s) **11000009, 11000010**

## 100-Year Flood Risk Summary

Population at risk **35** # of structures **12** Critical facilities **0**

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

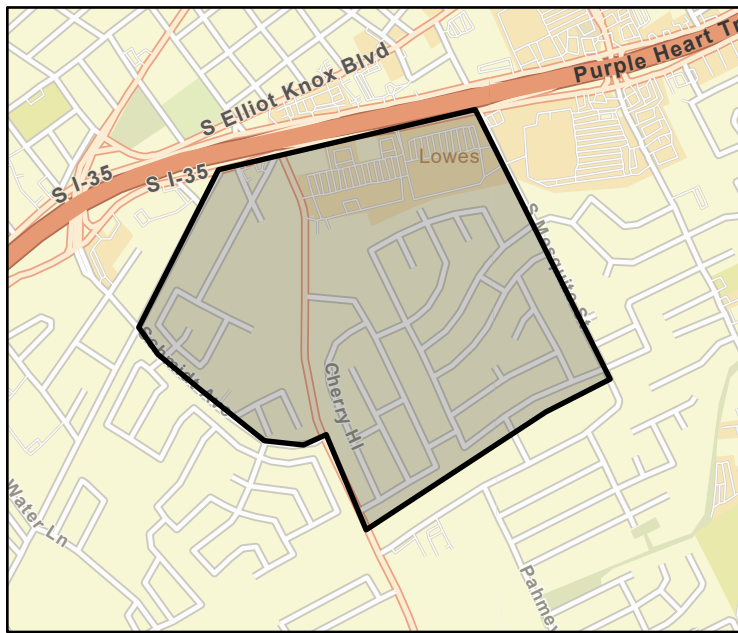
Farm/Ranch land impacted (acres) **0** Roadway(s) impacted (length) **0**

Number of low water crossings **0** Historical road closures **-**

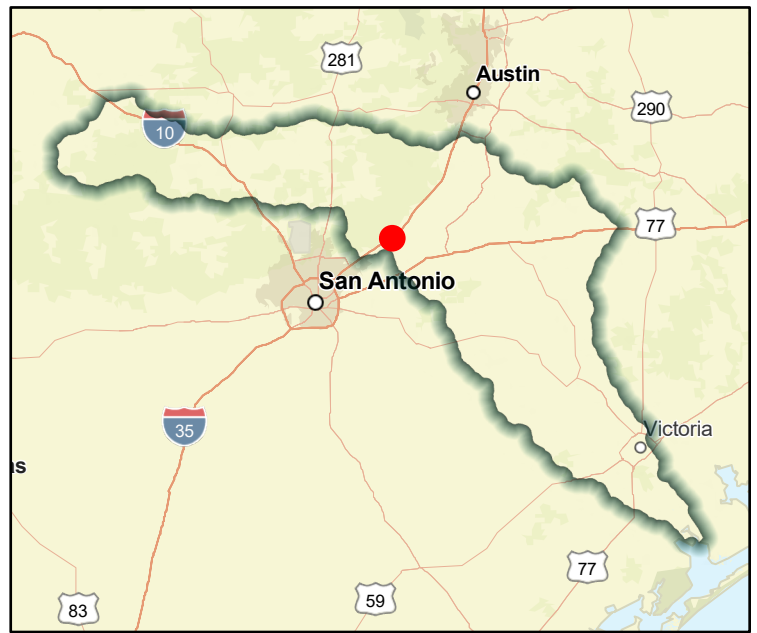
## Estimated Cost and Funding Availability

Total Cost **\$168,000** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



FME Area



Regional view of FME area

# Flood Management Evaluation (FME)



Title **City of New Braunfels Dry Comal Creek West Watershed Project Planning**

ID# **111000049**

Sponsor (name of entity, not person) **New Braunfels (Municipality)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Watershed Planning**

Study description **Project planning for solutions to minimize flooding issues within the Cedar Elm Street, Landa-Madeline drainage area.**

New Hydrologic or Hydraulic model? **Yes** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Comal** Watershed HUC# (if known) **12100202**

Drainage area (Square miles, est.) **0** Goal(s) **11000009, 11000010**

## 100-Year Flood Risk Summary

Population at risk **0** # of structures **0** Critical facilities **0**

Flood risk type: Riverine? **No** Coastal? **No** Local? **No** Playa? **No** Other? **No**

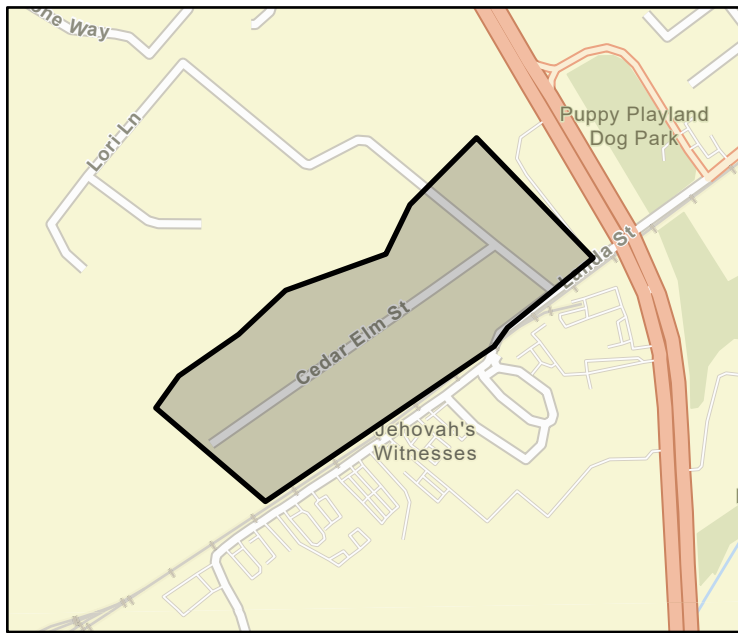
Farm/Ranch land impacted (acres) **0** Roadway(s) impacted (length) **0**

Number of low water crossings **0** Historical road closures **-**

## Estimated Cost and Funding Availability

Total Cost **\$126,000** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



FME Area



Regional view of FME area



# Flood Management Evaluation (FME)



Title **City of Niederwald Engineering Review of City Hall**

ID# **111000051**

Sponsor (name of entity, not person) **Niederwald (Municipality)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Project Planning**

Study description **Contract a consultation from an engineer to review the new City Hall building to ensure its resiliency (modular building that holds community documents and archives).**

New Hydrologic or Hydraulic model? **Yes** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Caldwell,Hays** Watershed HUC# (if known) **12100203**

Drainage area (Square miles, est.) **4** Goal(s) **11000009, 11000010**

## 100-Year Flood Risk Summary

Population at risk **24** # of structures **9** Critical facilities **0**

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

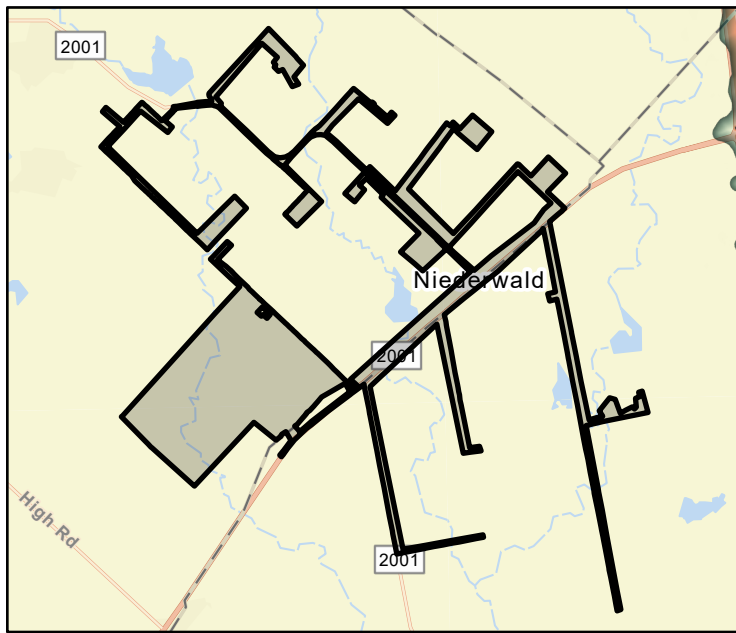
Farm/Ranch land impacted (acres) **150** Roadway(s) impacted (length) **1**

Number of low water crossings **2** Historical road closures **-**

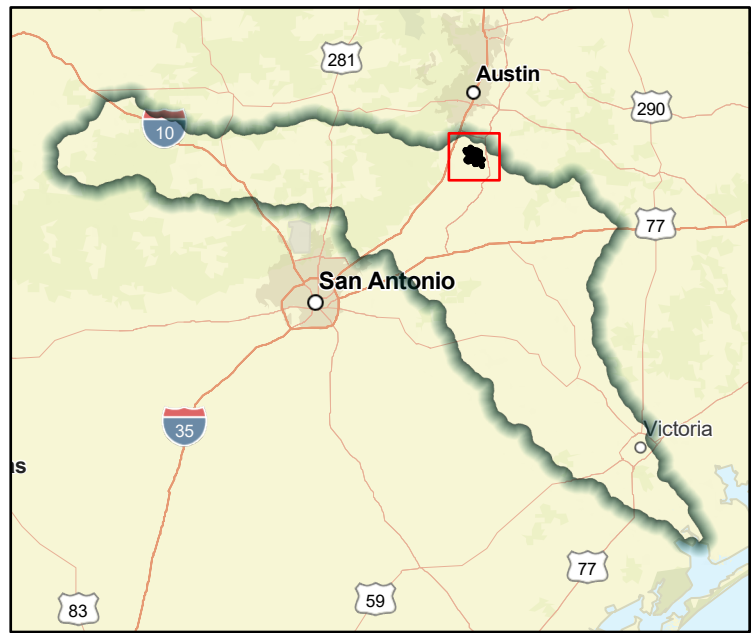
## Estimated Cost and Funding Availability

Total Cost **\$10,000** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



FME Area



Regional view of FME area

# Flood Management Evaluation (FME)



Title **City of Nixon Voluntary Buyout Program Project Planning**

ID# **111000052**

Sponsor (name of entity, not person) **Nixon (Municipality)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Project Planning**

Study description **Project planning to develop and implement a program to buyout NFIP repetitive loss properties.**

New Hydrologic or Hydraulic model? **Yes** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Gonzales,Wilson** Watershed HUC# (if known) **12100202**

Drainage area (Square miles, est.) **2** Goal(s) **11000009, 11000010**

## 100-Year Flood Risk Summary

Population at risk **22** # of structures **13** Critical facilities **0**

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

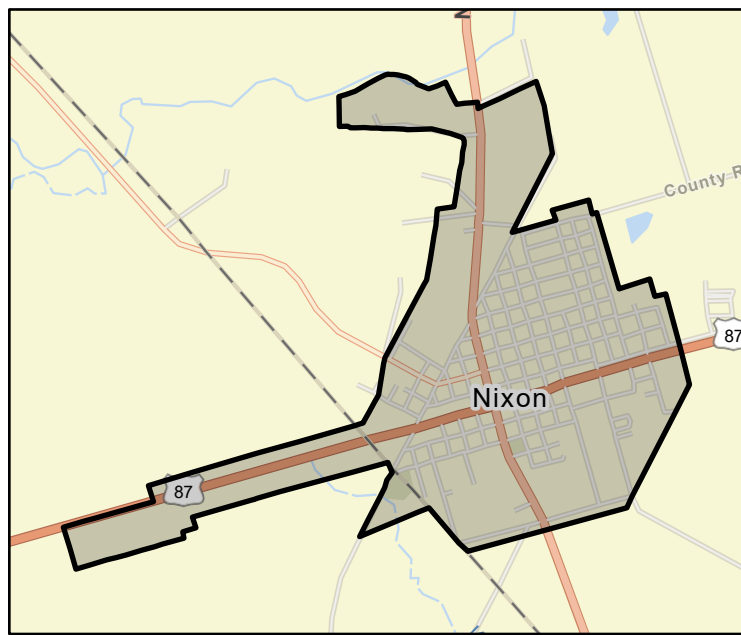
Farm/Ranch land impacted (acres) **6** Roadway(s) impacted (length) **0**

Number of low water crossings **0** Historical road closures **-**

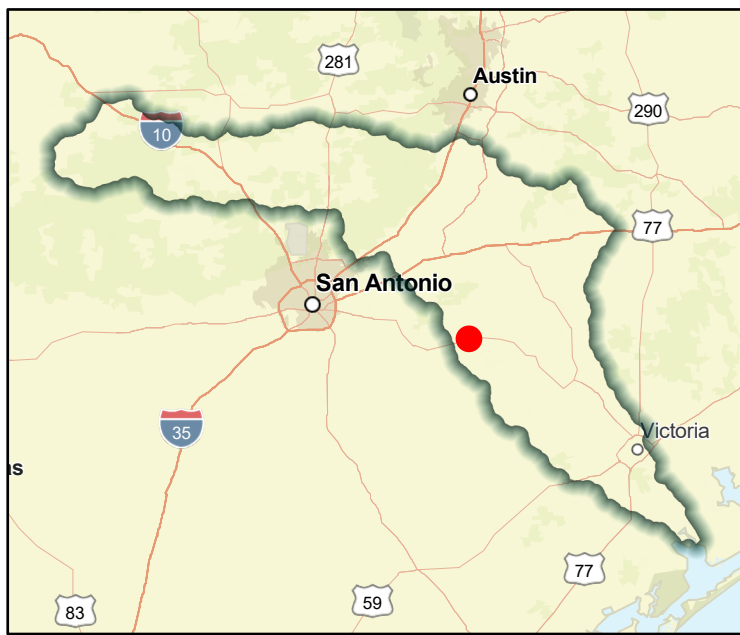
## Estimated Cost and Funding Availability

Total Cost **\$150,000** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



FME Area



Regional view of FME area

# Flood Management Evaluation (FME)



Title **City of San Marcos Regional Detention Study**

ID# **111000054**

Sponsor (name of entity, not person) **San Marcos (Municipality)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Watershed Planning**

Study description **Study of solutions for regional detention and water quality strategies.**

New Hydrologic or Hydraulic model? **Yes** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Guadalupe, Caldwell, Hays** Watershed HUC# (if known) **12100203**

Drainage area (Square miles, est.) **36** Goal(s) **11000009, 11000010**

## 100-Year Flood Risk Summary

Population at risk **12,650** # of structures **2,270** Critical facilities **14**

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

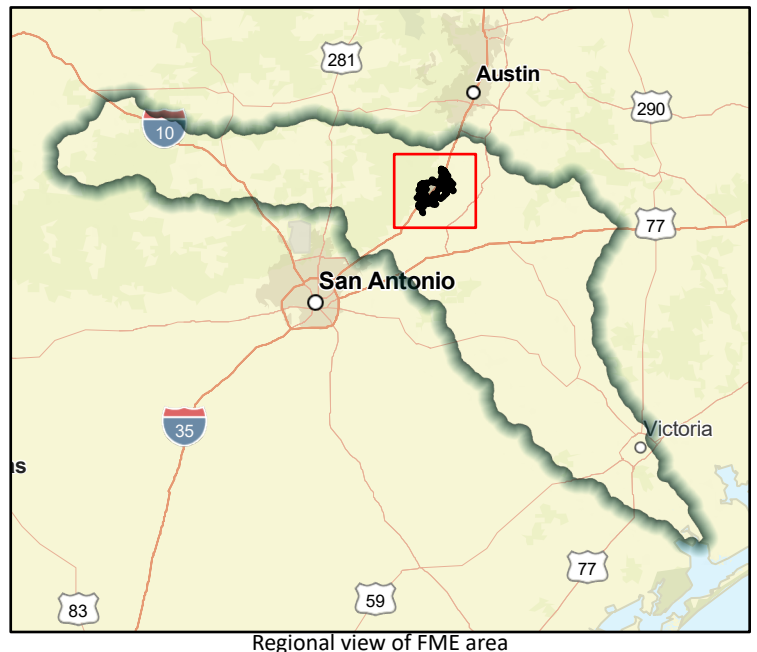
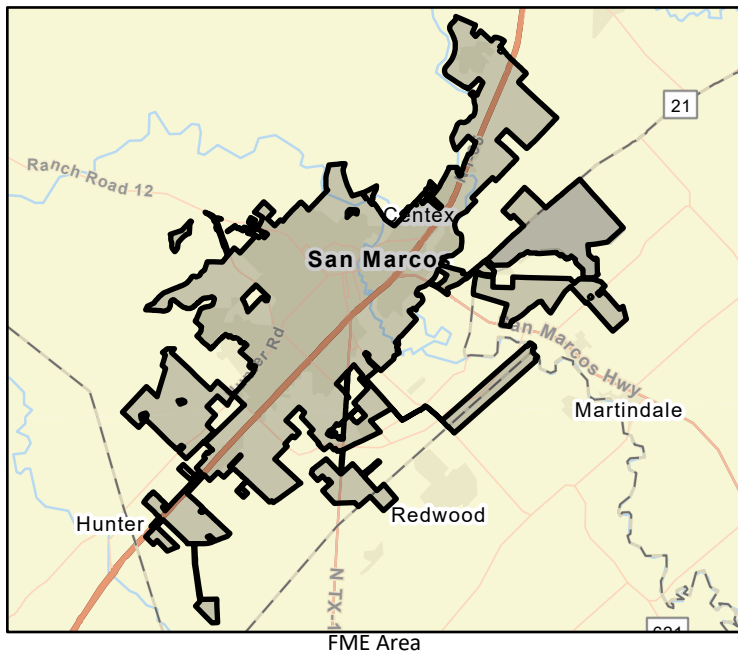
Farm/Ranch land impacted (acres) **822** Roadway(s) impacted (length) **48**

Number of low water crossings **12** Historical road closures **-**

## Estimated Cost and Funding Availability

Total Cost **\$200,000** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



# Flood Management Evaluation (FME)



Title **City of San Marcos Modeling of Purgatory Creek and Willow Springs Creek Overflow Area**

ID# **111000055**

Sponsor (name of entity, not person) **San Marcos (Municipality)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Watershed Planning**

Study description **2-Dimensional Modeling of the Purgatory Creek and Willow Springs Creek Overflow Area**

New Hydrologic or Hydraulic model? **Yes** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Hays** Watershed HUC# (if known) **12100203**

Drainage area (Square miles, est.) **0** Goal(s) **11000009, 11000010**

## 100-Year Flood Risk Summary

Population at risk **349** # of structures **159** Critical facilities **0**

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

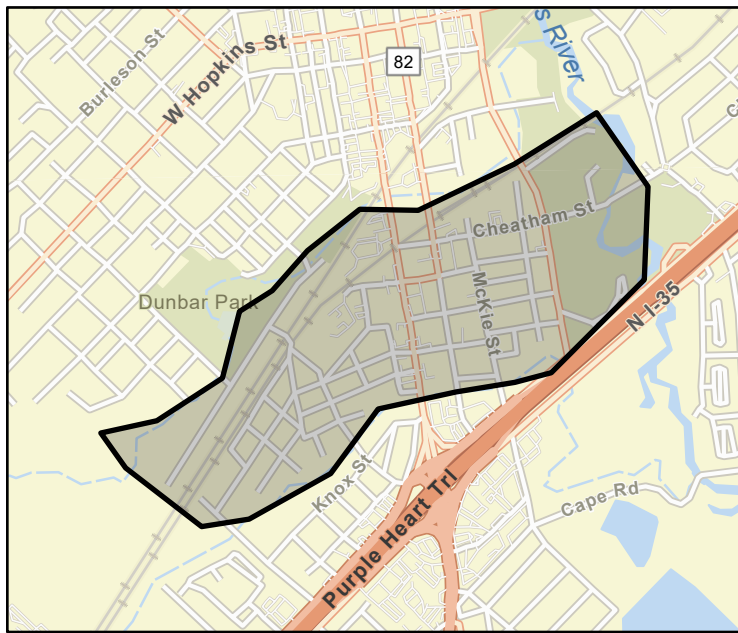
Farm/Ranch land impacted (acres) **0** Roadway(s) impacted (length) **3**

Number of low water crossings **0** Historical road closures **-**

## Estimated Cost and Funding Availability

Total Cost **\$271,000** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



FME Area



Regional view of FME area

# Flood Management Evaluation (FME)



Title **City of San Marcos Low Water Crossing at Jackman Project Planning**

ID# **111000056**

Sponsor (name of entity, not person) **San Marcos (Municipality)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Project Planning**

Study description **Project planning to replace low water crossing at Jackman**

New Hydrologic or Hydraulic model? **Yes** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Hays** Watershed HUC# (if known) **12100203**

Drainage area (Square miles, est.) **0** Goal(s) **11000001, 11000002**

## 100-Year Flood Risk Summary

Population at risk **0** # of structures **0** Critical facilities **0**

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

Farm/Ranch land impacted (acres) **0** Roadway(s) impacted (length) **0**

Number of low water crossings **0** Historical road closures **-**

## Estimated Cost and Funding Availability

Total Cost **\$150,000** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



FME Area



Regional view of FME area

# Flood Management Evaluation (FME)



Title **City of San Marcos Low Water Crossing at Mitchell and Purgatory Creek Project Planning**

ID# **111000057**

Sponsor (name of entity, not person) **San Marcos (Municipality)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Project Planning**

Study description **Project planning to replace low water crossing at Mitchell and Purgatory Creek**

New Hydrologic or Hydraulic model? **Yes** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Hays** Watershed HUC# (if known) **12100203**

Drainage area (Square miles, est.) **0** Goal(s) **11000001, 11000002**

## 100-Year Flood Risk Summary

Population at risk **0** # of structures **0** Critical facilities **0**

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

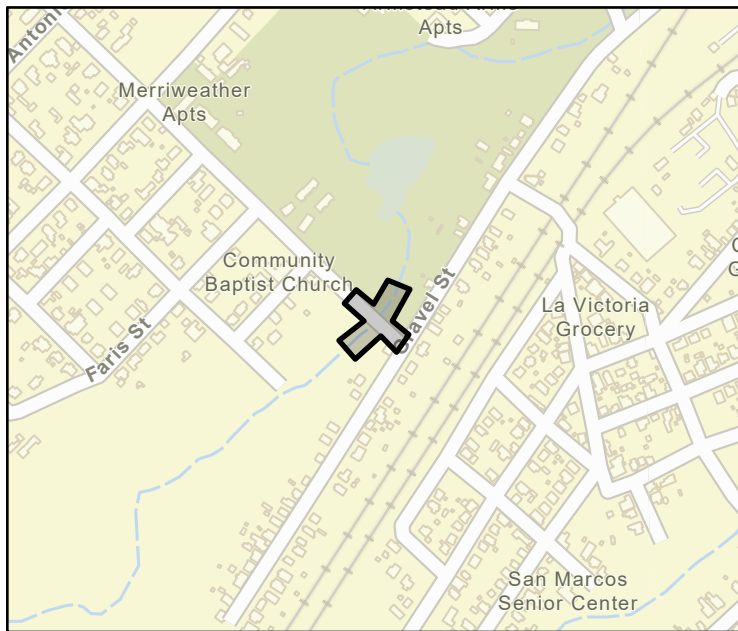
Farm/Ranch land impacted (acres) **0** Roadway(s) impacted (length) **0**

Number of low water crossings **0** Historical road closures **-**

## Estimated Cost and Funding Availability

Total Cost **\$200,000** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



FME Area



Regional view of FME area

# Flood Management Evaluation (FME)



Title **City of San Marcos LWC at River Road and Railroad Trestle/Blanco River Project Planning**

ID# **111000058**

Sponsor (name of entity, not person) **San Marcos (Municipality)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Project Planning**

Study description **Project planning to replace low water crossing at River Road and Railroad Trestle/Blanco River**

New Hydrologic or Hydraulic model? **Yes** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Hays** Watershed HUC# (if known) **12100203**

Drainage area (Square miles, est.) **0** Goal(s) **11000001, 11000002**

## 100-Year Flood Risk Summary

Population at risk **0** # of structures **0** Critical facilities **0**

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

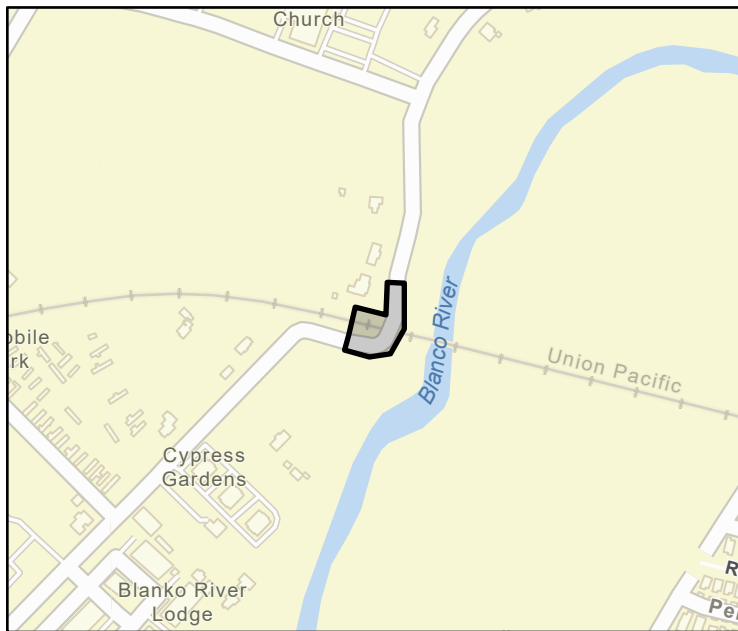
Farm/Ranch land impacted (acres) **0** Roadway(s) impacted (length) **0**

Number of low water crossings **1** Historical road closures **-**

## Estimated Cost and Funding Availability

Total Cost **\$150,000** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



FME Area



Regional view of FME area

# Flood Management Evaluation (FME)



Title **City of San Marcos LWC at S LBJ and Purgatory Creek Project Planning**

ID# **111000059**

Sponsor (name of entity, not person) **San Marcos (Municipality)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Project Planning**

Study description **Project planning to replace low water crossing at S LBJ and Purgatory Creek**

New Hydrologic or Hydraulic model? **Yes** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Hays** Watershed HUC# (if known) **12100203**

Drainage area (Square miles, est.) **0** Goal(s) **11000001, 11000002**

## 100-Year Flood Risk Summary

Population at risk **0** # of structures **0** Critical facilities **0**

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

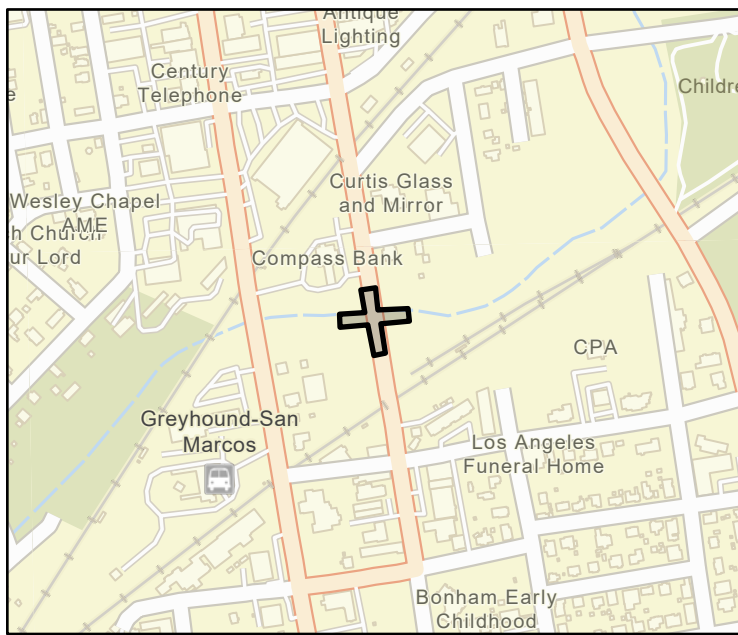
Farm/Ranch land impacted (acres) **0** Roadway(s) impacted (length) **0**

Number of low water crossings **0** Historical road closures **-**

## Estimated Cost and Funding Availability

Total Cost **\$150,000** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



FME Area



Regional view of FME area



# Flood Management Evaluation (FME)



Title **City of San Marcos - Extension of River Ridge Parkway West Project Planning**

ID# **111000060**

Sponsor (name of entity, not person) **San Marcos (Municipality)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Project Planning**

Study description **Project planning for proposed project identified through the San Marcos Transportation Plan, to increase the ability to divert traffic during flooding events**

New Hydrologic or Hydraulic model? **Yes** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Hays** Watershed HUC# (if known) **12100203**

Drainage area (Square miles, est.) **0** Goal(s) **11000009, 11000010**

## 100-Year Flood Risk Summary

Population at risk **1,288** # of structures **69** Critical facilities **1**

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

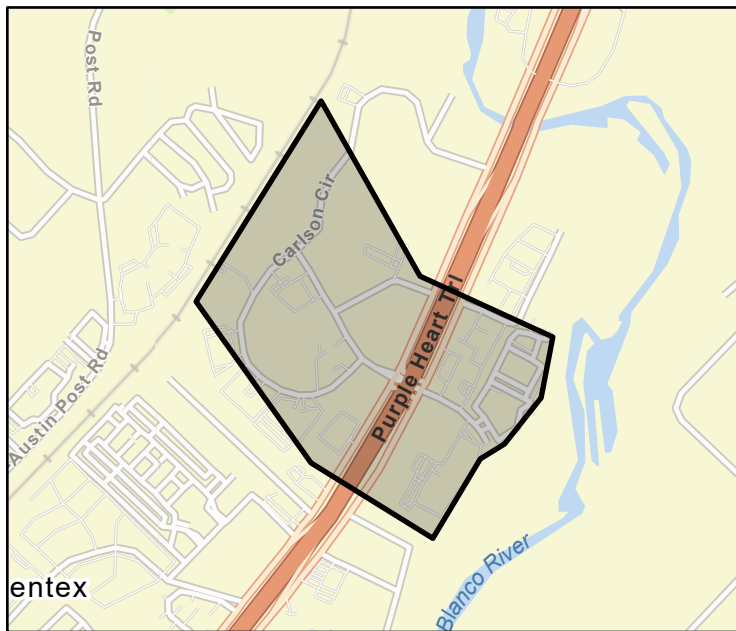
Farm/Ranch land impacted (acres) **0** Roadway(s) impacted (length) **3**

Number of low water crossings **0** Historical road closures **-**

## Estimated Cost and Funding Availability

Total Cost **\$298,000** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



# Flood Management Evaluation (FME)



Title **City of Seguin Drainage Improvements Study**

ID# **111000061**

Sponsor (name of entity, not person) **Seguin (Municipality)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Watershed Planning**

Study description **Study of solutions to increase drainage capacity, add stormwater detention and/or retention basins, and implement drainage improvements as deemed necessary to reduce flood risk.**

New Hydrologic or Hydraulic model? **Yes** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Guadalupe** Watershed HUC# (if known) **12100202**

Drainage area (Square miles, est.) **38** Goal(s) **11000009, 11000010**

## 100-Year Flood Risk Summary

Population at risk **2,283** # of structures **846** Critical facilities **5**

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

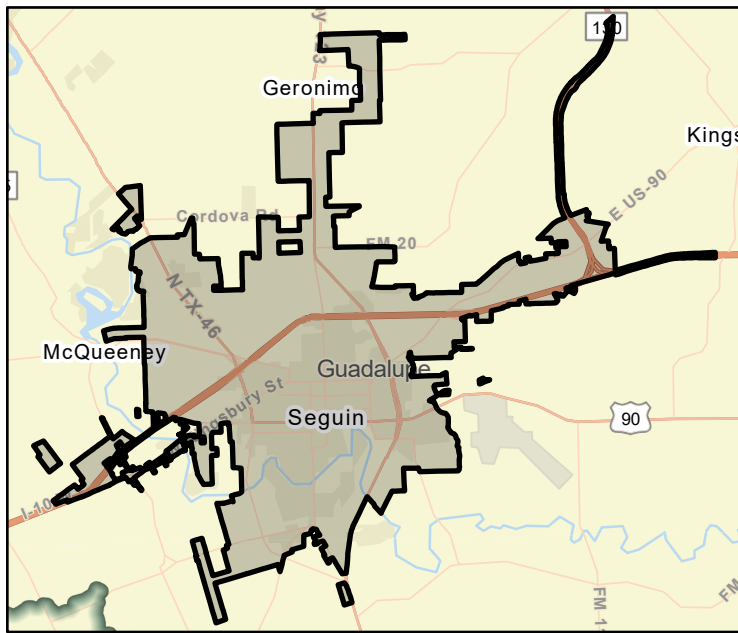
Farm/Ranch land impacted (acres) **1,157** Roadway(s) impacted (length) **25**

Number of low water crossings **8** Historical road closures **-**

## Estimated Cost and Funding Availability

Total Cost **\$1,100,000** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



FME Area



Regional view of FME area

# Flood Management Evaluation (FME)



Title **City of Seguin Low Water Crossing Improvements Study**

ID# **111000062**

Sponsor (name of entity, not person) **Seguin (Municipality)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Watershed Planning**

Study description **Study of solutions for drainage improvements at low water crossings.**

New Hydrologic or Hydraulic model? **Yes** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Guadalupe** Watershed HUC# (if known) **12100202**

Drainage area (Square miles, est.) **38** Goal(s) **11000001, 11000002**

## 100-Year Flood Risk Summary

Population at risk **2,283** # of structures **846** Critical facilities **5**

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

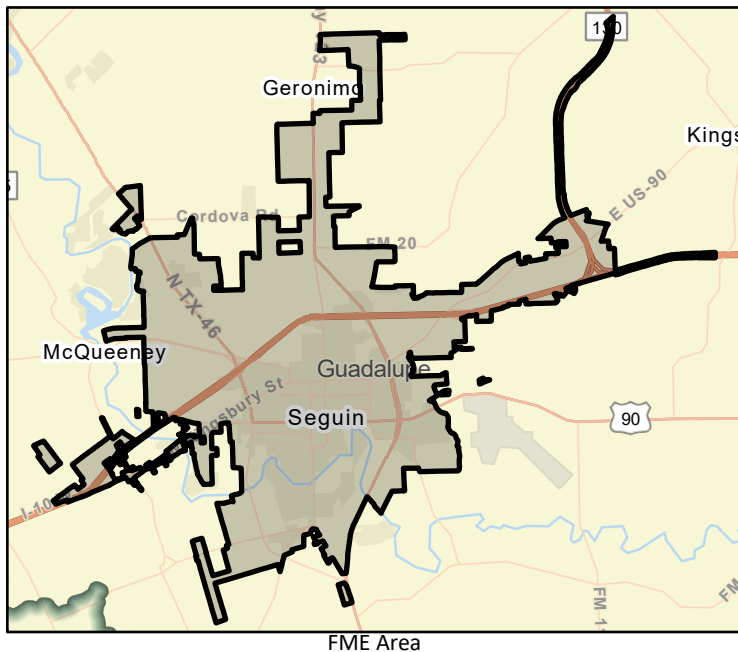
Farm/Ranch land impacted (acres) **1,157** Roadway(s) impacted (length) **25**

Number of low water crossings **8** Historical road closures **-**

## Estimated Cost and Funding Availability

Total Cost **\$1,500,000** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



# Flood Management Evaluation (FME)



Title **City of Seguin Ingress Egress Improvements Project Planning**

ID# **111000063**

Sponsor (name of entity, not person) **Seguin (Municipality)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Preparedness**

Study description **Project planning for proposed project to provide/construct additional means of access into single-entry neighborhoods; Update subdivision codes for a higher level of ingress and egress.**

New Hydrologic or Hydraulic model? **No** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Guadalupe** Watershed HUC# (if known) **12100202**

Drainage area (Square miles, est.) **38** Goal(s) **11000015, 11000016**

## 100-Year Flood Risk Summary

Population at risk **2,283** # of structures **846** Critical facilities **5**

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

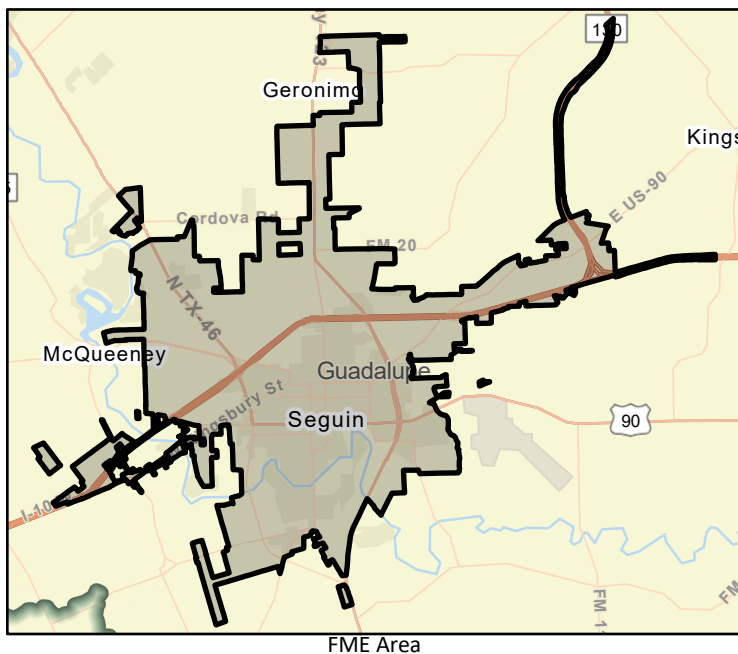
Farm/Ranch land impacted (acres) **1,157** Roadway(s) impacted (length) **25**

Number of low water crossings **8** Historical road closures **-**

## Estimated Cost and Funding Availability

Total Cost **\$250,000** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



# Flood Management Evaluation (FME)



Title **City of Seguin City-wide Drainage Improvements Project Planning**

ID# **111000064**

Sponsor (name of entity, not person) **Seguin (Municipality)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Project Planning**

Study description **Project planning to increase Regional Detention, Channel & Drainage System Improvements.**

New Hydrologic or Hydraulic model? **Yes** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Guadalupe** Watershed HUC# (if known) **12100202**

Drainage area (Square miles, est.) **38** Goal(s) **11000009, 11000010**

## 100-Year Flood Risk Summary

Population at risk **2,283** # of structures **846** Critical facilities **5**

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

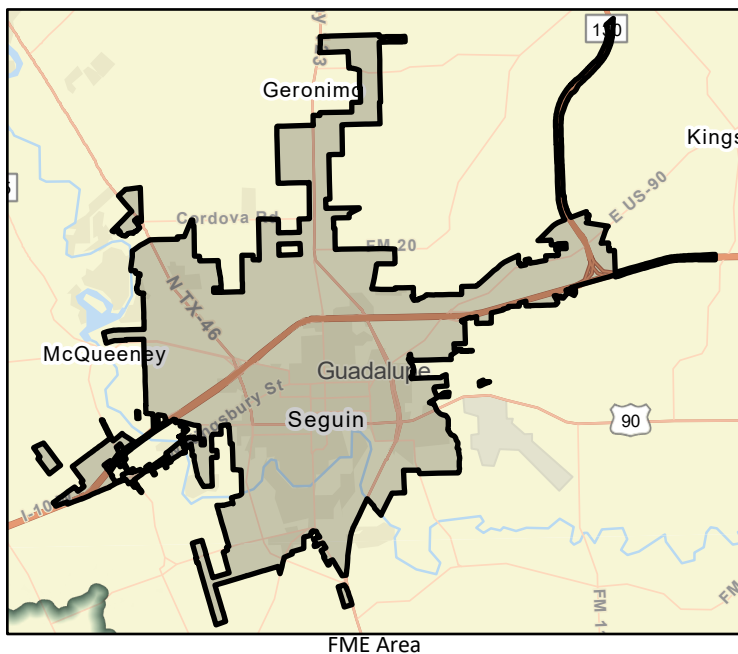
Farm/Ranch land impacted (acres) **1,157** Roadway(s) impacted (length) **25**

Number of low water crossings **8** Historical road closures **-**

## Estimated Cost and Funding Availability

Total Cost **\$200,000** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



# Flood Management Evaluation (FME)



Title **City of Seguin Voluntary Buyout Program Project Planning**

ID# **111000065**

Sponsor (name of entity, not person) **Seguin (Municipality)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Project Planning**

Study description **Project planning to develop an acquisition and elevation program in flood hazard areas. Elevate or acquire and demolish repetitive loss properties. Acquire high risk vacant land and maintain as open space.**

New Hydrologic or Hydraulic model? **Yes** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Guadalupe** Watershed HUC# (if known) **12100202**

Drainage area (Square miles, est.) **38** Goal(s) **11000009, 11000010**

## 100-Year Flood Risk Summary

Population at risk **2,283** # of structures **846** Critical facilities **5**

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

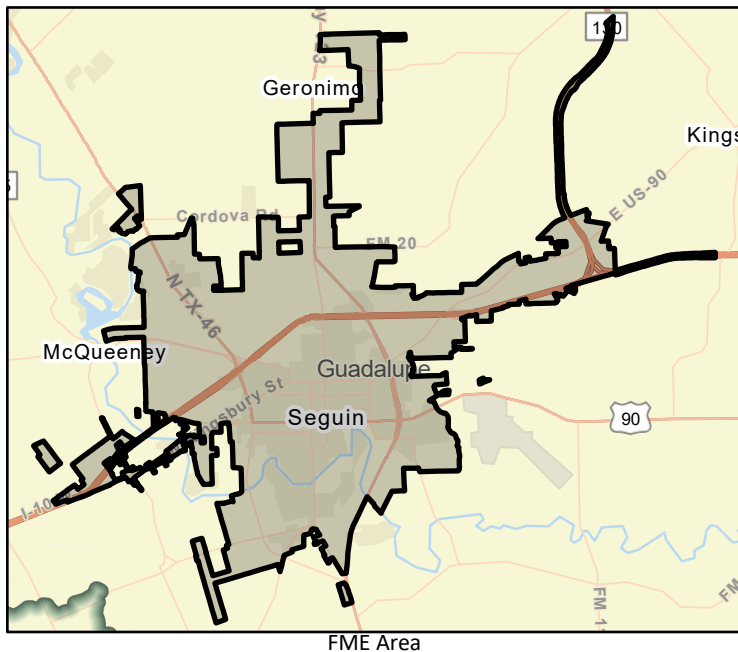
Farm/Ranch land impacted (acres) **1,157** Roadway(s) impacted (length) **25**

Number of low water crossings **8** Historical road closures **-**

## Estimated Cost and Funding Availability

Total Cost **\$300,000** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



# Flood Management Evaluation (FME)



Title **City of Seguin Citywide Drainage Project Planning**

ID# **111000066**

Sponsor (name of entity, not person) **Seguin (Municipality)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Project Planning**

Study description **Project planning for four priority drainage projects within the City of Seguin that would greatly improve the safety of their 25,520 residents. Project areas include North Guadalupe, North Heideke, Mays Creek and Walnut Branch.**

New Hydrologic or Hydraulic model? **Yes** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Guadalupe** Watershed HUC# (if known) **12100202**

Drainage area (Square miles, est.) **38** Goal(s) **11000009, 11000010**

## 100-Year Flood Risk Summary

Population at risk **2,283** # of structures **846** Critical facilities **5**

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

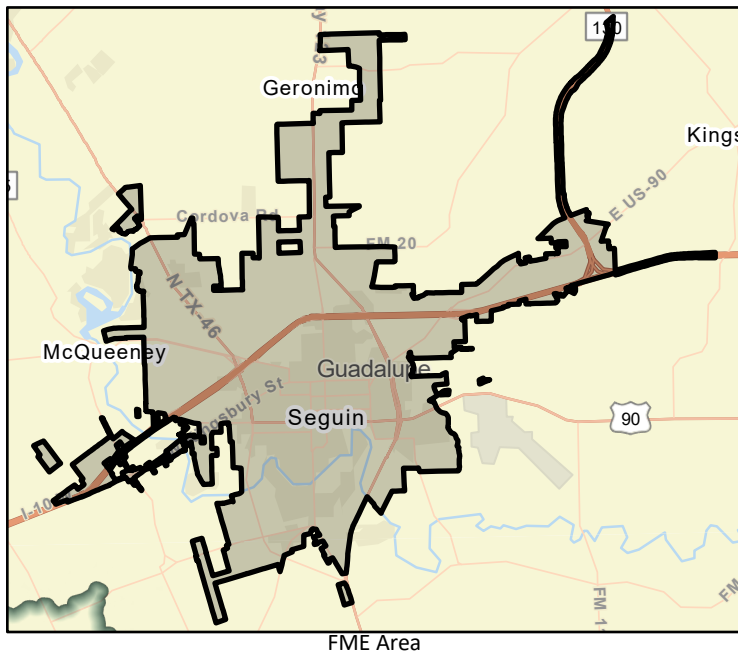
Farm/Ranch land impacted (acres) **1,157** Roadway(s) impacted (length) **25**

Number of low water crossings **8** Historical road closures **-**

## Estimated Cost and Funding Availability

Total Cost **\$4,304,000** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



# Flood Management Evaluation (FME)



Title **City of Seguin Sewage Treatment Plant Floodproofing Project Planning**

ID# **111000067**

Sponsor (name of entity, not person) **Seguin (Municipality)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Project Planning**

Study description **Project planning for proposed project to flood-proof sewage treatment plants in flood hazard / low-lying areas.**

New Hydrologic or Hydraulic model? **Yes** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Guadalupe** Watershed HUC# (if known) **12100202**

Drainage area (Square miles, est.) **0** Goal(s) **11000015, 11000016**

## 100-Year Flood Risk Summary

Population at risk **48** # of structures **8** Critical facilities **0**

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

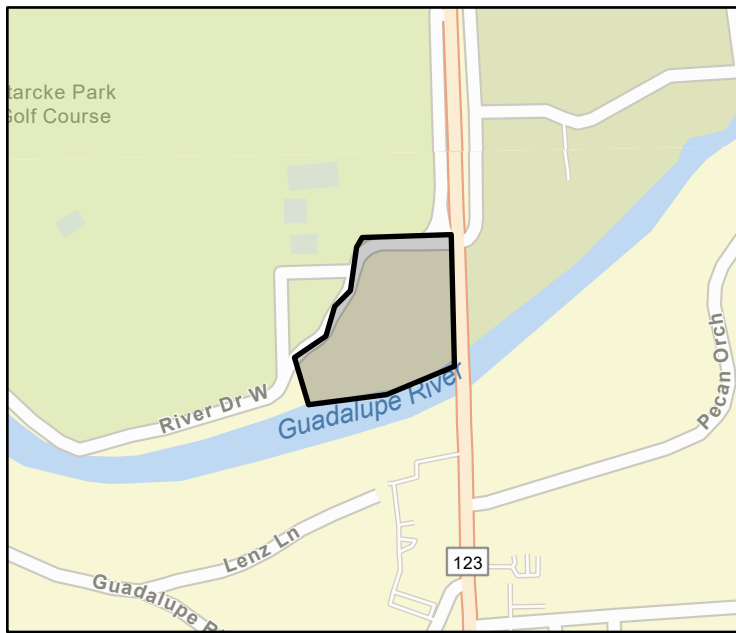
Farm/Ranch land impacted (acres) **0** Roadway(s) impacted (length) **0**

Number of low water crossings **0** Historical road closures **-**

## Estimated Cost and Funding Availability

Total Cost **\$100,000** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



FME Area



Regional view of FME area



# Flood Management Evaluation (FME)



Title **City of Uhland Drainage Improvement Project Planning**

ID# **111000068**

Sponsor (name of entity, not person) **Uhland (Municipality)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Project Planning**

Study description **Project planning for proposed project to mitigate against flooding by increasing the capacity of drainage routes to contain the storm water. Proposed drainage improvements will reduce flood waters backing up into the City.**

New Hydrologic or Hydraulic model? **Yes** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Caldwell,Hays** Watershed HUC# (if known) **12100203**

Drainage area (Square miles, est.) **3** Goal(s) **11000009, 11000010**

## 100-Year Flood Risk Summary

Population at risk **46** # of structures **27** Critical facilities **0**

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

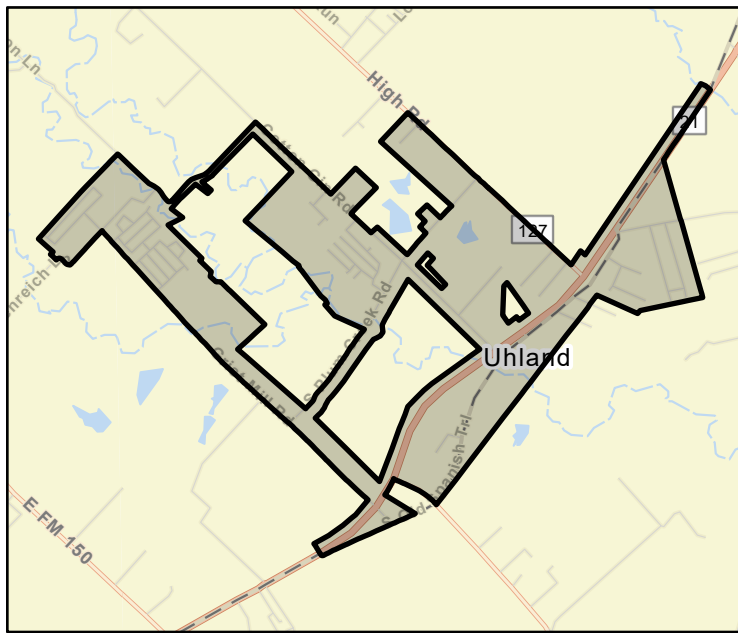
Farm/Ranch land impacted (acres) **94** Roadway(s) impacted (length) **2**

Number of low water crossings **3** Historical road closures **-**

## Estimated Cost and Funding Availability

Total Cost **\$1,334,000** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



FME Area



Regional view of FME area

# Flood Management Evaluation (FME)



Title **City of Victoria Drainage Improvement Study**

ID# **111000069**

Sponsor (name of entity, not person) **Victoria (Municipality)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Watershed Planning**

Study description **Study of solutions to increase dimensions of drainage culverts in areas prone to flooding and/or drainage problems in various City locations.**

New Hydrologic or Hydraulic model? **Yes** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Victoria** Watershed HUC# (if known) **12100204**

Drainage area (Square miles, est.) **37** Goal(s) **11000009, 11000010**

## 100-Year Flood Risk Summary

Population at risk **3,181** # of structures **1,139** Critical facilities **24**

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

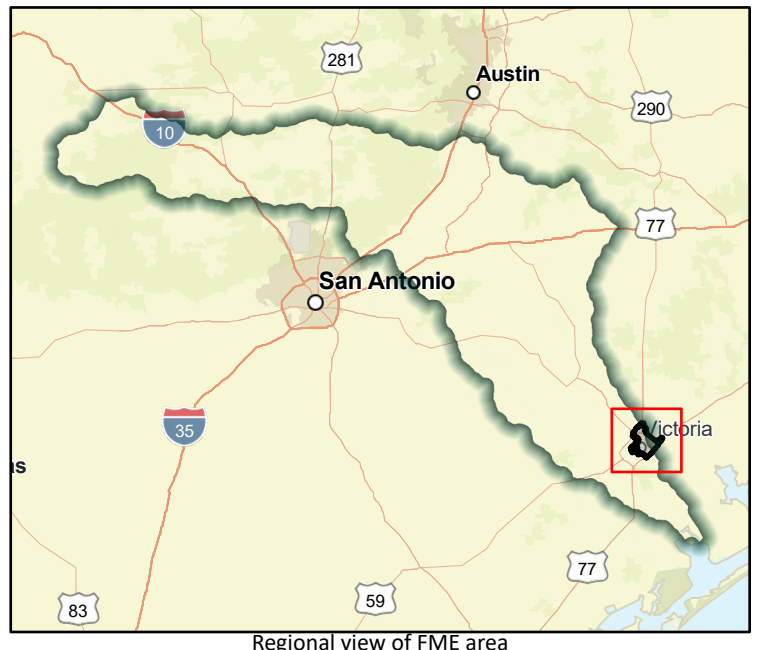
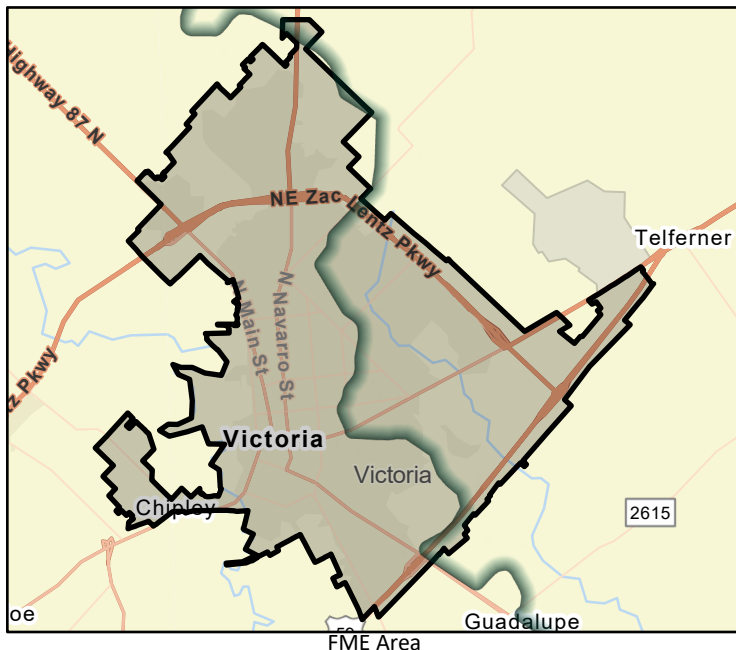
Farm/Ranch land impacted (acres) **111** Roadway(s) impacted (length) **36**

Number of low water crossings **0** Historical road closures **-**

## Estimated Cost and Funding Availability

Total Cost **\$1,000,000** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



# Flood Management Evaluation (FME)



Title **City of Victoria Harden Critical Infrastructure Project Planning**

ID# **111000070**

Sponsor (name of entity, not person) **Victoria (Municipality)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Project Planning**

Study description **Project planning to harden city buildings, critical infrastructure, and government buildings. Hardening of non-governmental facilities that have been identified as crucial in the response and recovery to/of emergencies and disasters.**

New Hydrologic or Hydraulic model? **Yes** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Victoria** Watershed HUC# (if known) **12100204**

Drainage area (Square miles, est.) **37** Goal(s) **11000015, 11000016**

## 100-Year Flood Risk Summary

Population at risk **3,181** # of structures **1,139** Critical facilities **24**

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

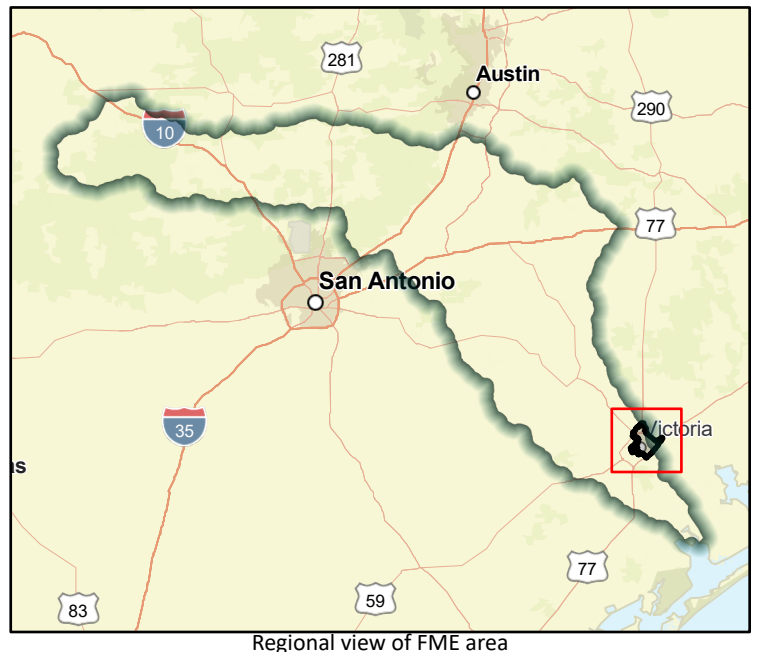
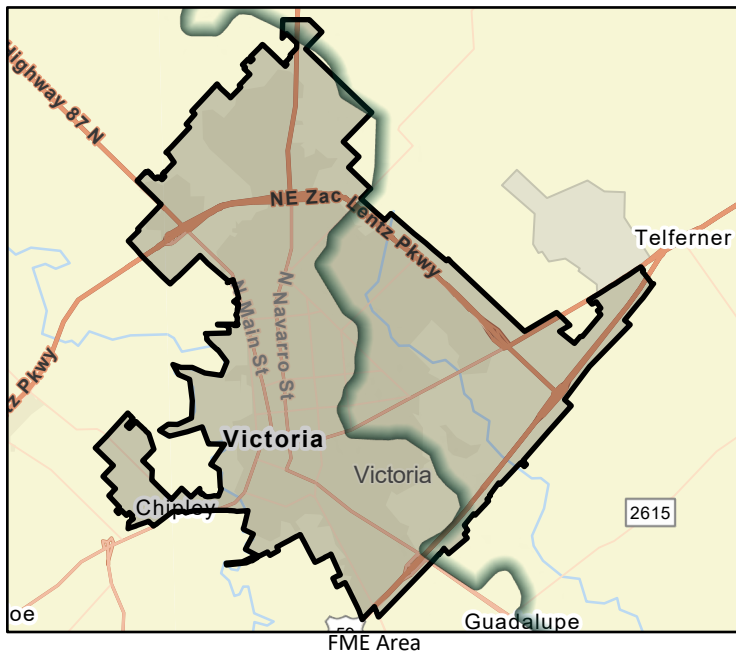
Farm/Ranch land impacted (acres) **111** Roadway(s) impacted (length) **36**

Number of low water crossings **0** Historical road closures **-**

## Estimated Cost and Funding Availability

Total Cost **\$100,000** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



# Flood Management Evaluation (FME)



Title **City of Victoria Voluntary Buyout Program Project Planning**

ID# **111000071**

Sponsor (name of entity, not person) **Victoria (Municipality)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Project Planning**

Study description **Project planning to implement a voluntary acquisition program for repetitive flood properties.**

New Hydrologic or Hydraulic model? **Yes** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Victoria** Watershed HUC# (if known) **12100204**

Drainage area (Square miles, est.) **37** Goal(s) **11000009, 11000010**

## 100-Year Flood Risk Summary

Population at risk **3,181** # of structures **1,139** Critical facilities **24**

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

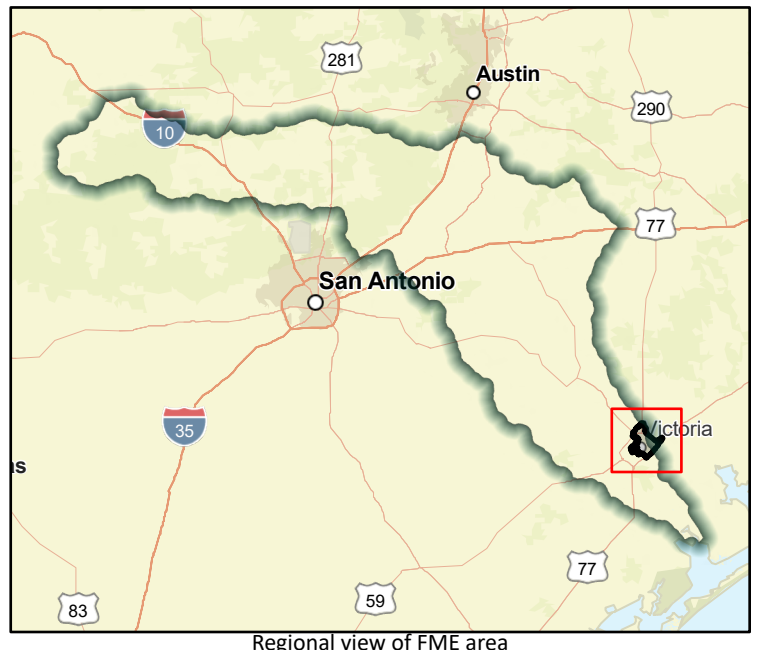
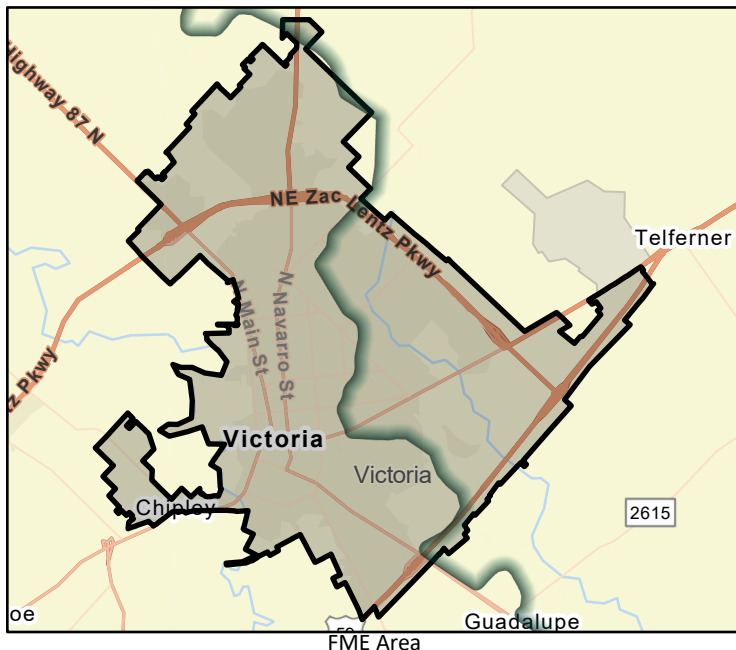
Farm/Ranch land impacted (acres) **111** Roadway(s) impacted (length) **36**

Number of low water crossings **0** Historical road closures **-**

## Estimated Cost and Funding Availability

Total Cost **\$150,000** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



# Flood Management Evaluation (FME)



Title **City of Victoria Flood Gate Project Planning**

ID# **111000072**

Sponsor (name of entity, not person) **Victoria (Municipality)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Project Planning**

Study description **Project planning for proposed project to rehabilitate, repair, or replace the City of Victoria's existing flood gates, install additional flood gates as appropriate, and construct a storm water lift station in an area to be determined by study.**

New Hydrologic or Hydraulic model? **Yes** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Victoria** Watershed HUC# (if known) **12100204**

Drainage area (Square miles, est.) **37** Goal(s) **11000009, 11000010**

## 100-Year Flood Risk Summary

Population at risk **3,181** # of structures **1,139** Critical facilities **24**

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

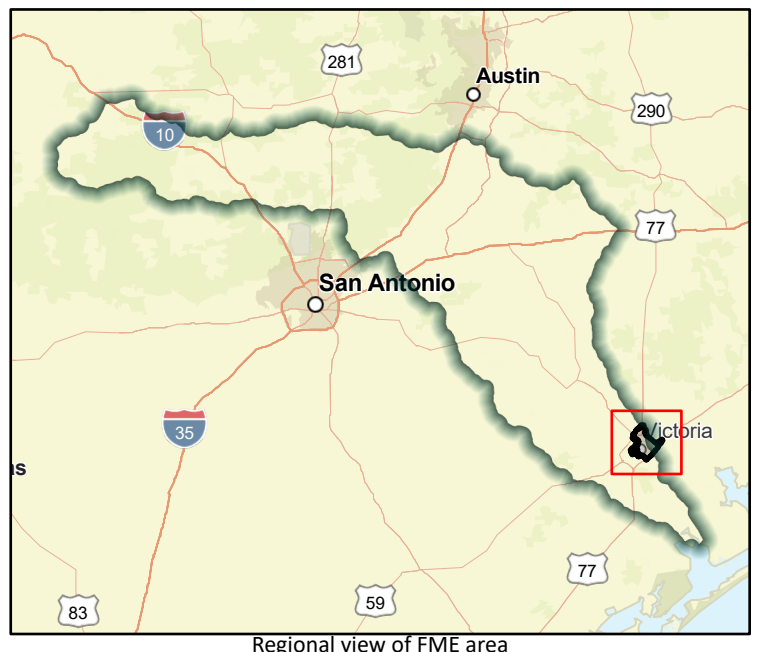
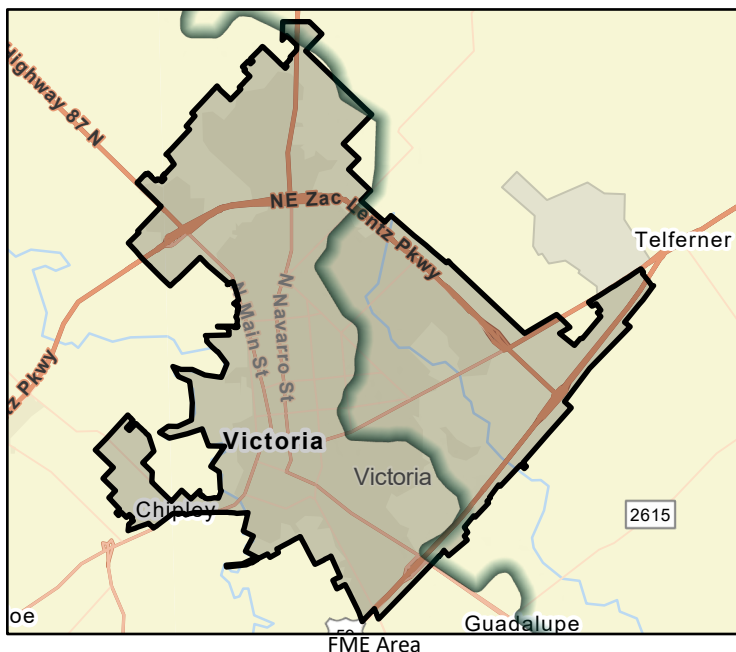
Farm/Ranch land impacted (acres) **111** Roadway(s) impacted (length) **36**

Number of low water crossings **0** Historical road closures **-**

## Estimated Cost and Funding Availability

Total Cost **\$45,000** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



# Flood Management Evaluation (FME)



Title **City of Victoria Regional Drainage Solutions Project Planning**

ID# **111000073**

Sponsor (name of entity, not person) **Victoria (Municipality)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Project Planning**

Study description **Project planning for proposed project for five regional drainage solutions within the City: the Gardens Apartment diversion, Shenandoah ditch improvements, Anthony Road outfall improvements, Lone Tree Road outfall improvements, and Clegg Ditch outfall.**

New Hydrologic or Hydraulic model? **Yes** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Victoria** Watershed HUC# (if known) **12100204**

Drainage area (Square miles, est.) **37** Goal(s) **11000009, 11000010**

## 100-Year Flood Risk Summary

Population at risk **3,181** # of structures **1,139** Critical facilities **24**

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

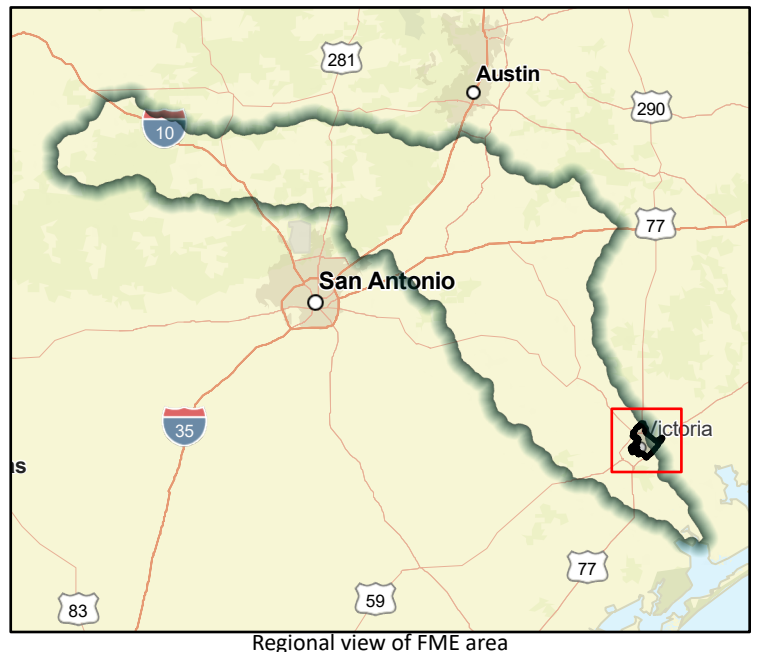
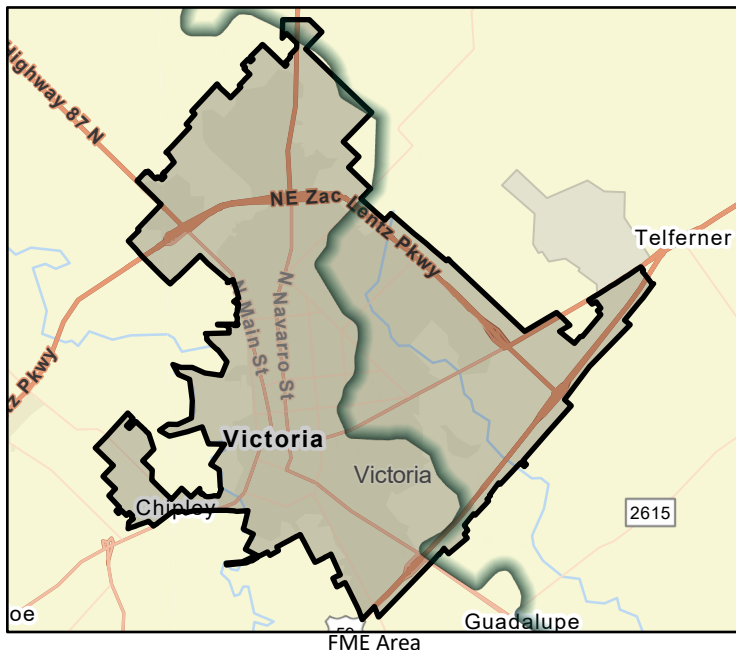
Farm/Ranch land impacted (acres) **111** Roadway(s) impacted (length) **36**

Number of low water crossings **0** Historical road closures **-**

## Estimated Cost and Funding Availability

Total Cost **\$1,327,962** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



# Flood Management Evaluation (FME)



Title **City of Victoria - Storm Sewer Improvements Project Planning**

ID# **111000074**

Sponsor (name of entity, not person) **Victoria (Municipality)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Project Planning**

Study description **Project planning for project to replace storm sewer pipe under 18-inch diameter (29.9 miles). As a result of overland flow analysis and Storm Sewer System Level of Service Analysis, it was determined to replace all pipe less than 18-inch diameter.**

New Hydrologic or Hydraulic model? **Yes** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Victoria** Watershed HUC# (if known) **12100204**

Drainage area (Square miles, est.) **37** Goal(s) **11000009, 11000010**

## 100-Year Flood Risk Summary

Population at risk **3,181** # of structures **1,139** Critical facilities **24**

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

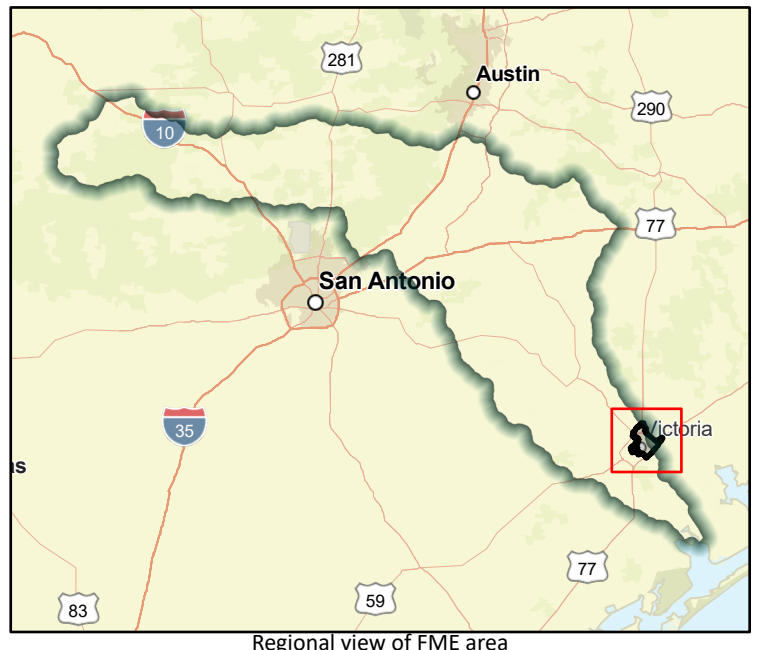
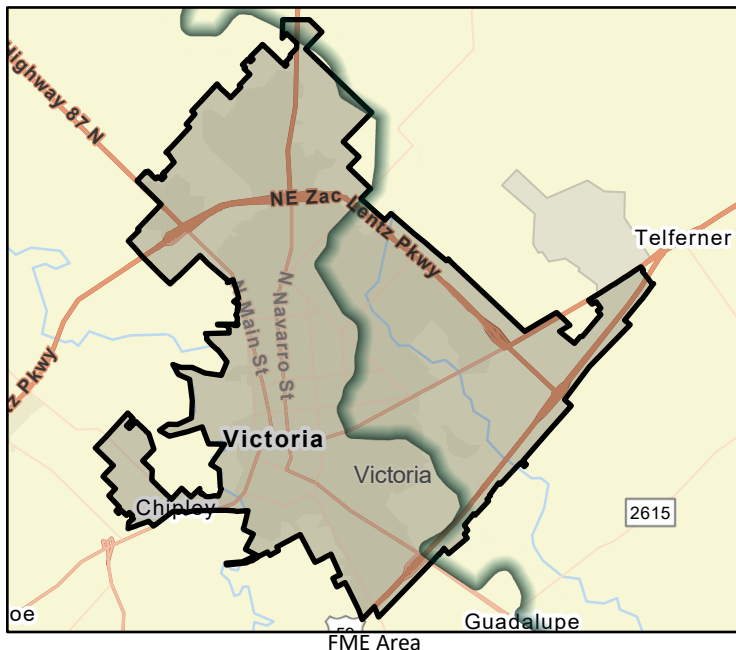
Farm/Ranch land impacted (acres) **111** Roadway(s) impacted (length) **36**

Number of low water crossings **0** Historical road closures **-**

## Estimated Cost and Funding Availability

Total Cost **\$3,946,100** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



# Flood Management Evaluation (FME)



Title **City of Victoria Clean and Televis Storm Sewers Project Planning**

ID# **111000075**

Sponsor (name of entity, not person) **Victoria (Municipality)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Project Planning**

Study description **Project planning for proposed project to clean and televis storm sewers (165.7 miles). As a result of overland flow analysis and Storm Sewer System Level of Service Analysis, it was determined to clean and televis storm sewers.**

New Hydrologic or Hydraulic model? **Yes** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Victoria** Watershed HUC# (if known) **12100204**

Drainage area (Square miles, est.) **37** Goal(s) **11000009, 11000010**

## 100-Year Flood Risk Summary

Population at risk **3,181** # of structures **1,139** Critical facilities **24**

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

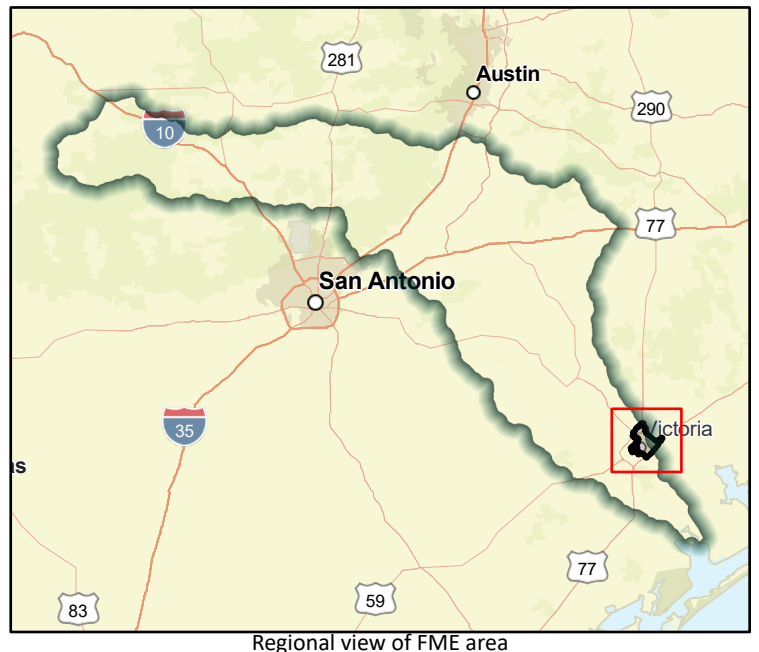
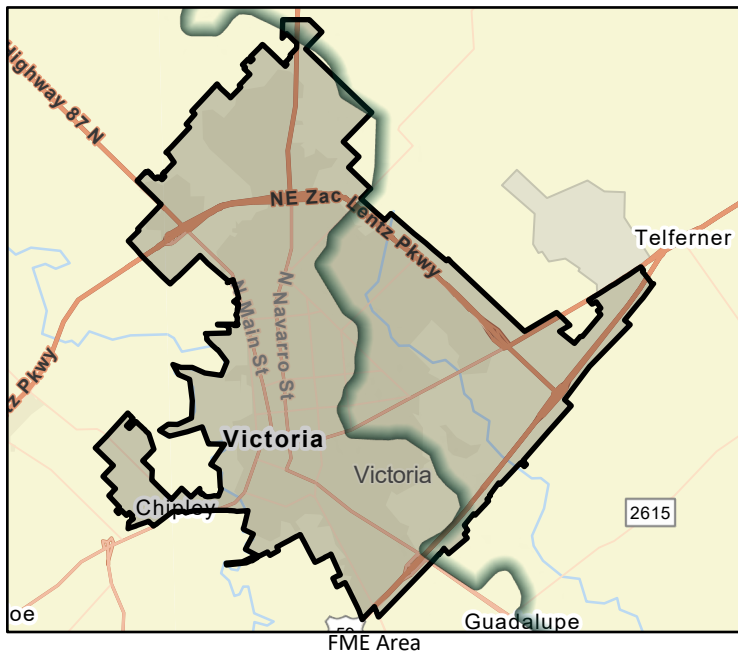
Farm/Ranch land impacted (acres) **111** Roadway(s) impacted (length) **36**

Number of low water crossings **0** Historical road closures **-**

## Estimated Cost and Funding Availability

Total Cost **\$1,662,106** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**





# Flood Management Evaluation (FME)



Title City of Victoria Regrade Priority Ditches and Driveway Culverts Project Planning

ID# 111000076

Sponsor (name of entity, not person) Victoria (Municipality)

RFPG recommend? Yes Reason for Recommendation Meets minimum TWDB requirements

## Study Details

Study type Project Planning

Study description Project planning for proposed drainage improvements. As a result of a roadside ditch capacity evaluation, it was determined that 23 miles of ditch and 669 driveway culverts are negatively impacting conveyance capacity and need to be regraded.

New Hydrologic or Hydraulic model? Yes Emergency Need? No Existing/Anticipated models in near term? Yes

County Victoria Watershed HUC# (if known) 12100204

Drainage area (Square miles, est.) 37 Goal(s) 11000009, 11000010

## 100-Year Flood Risk Summary

Population at risk 3,181 # of structures 1,139 Critical facilities 24

Flood risk type: Riverine? Yes Coastal? No Local? No Playa? No Other? No

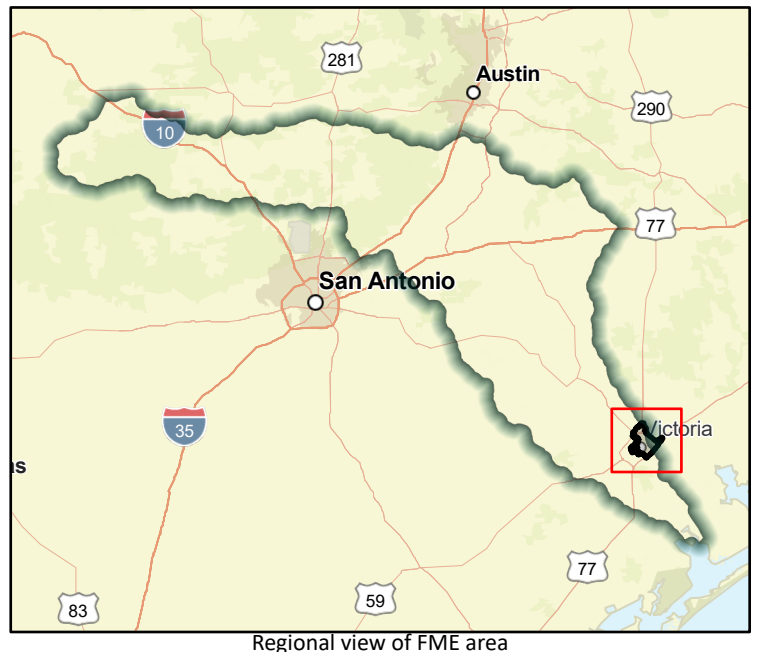
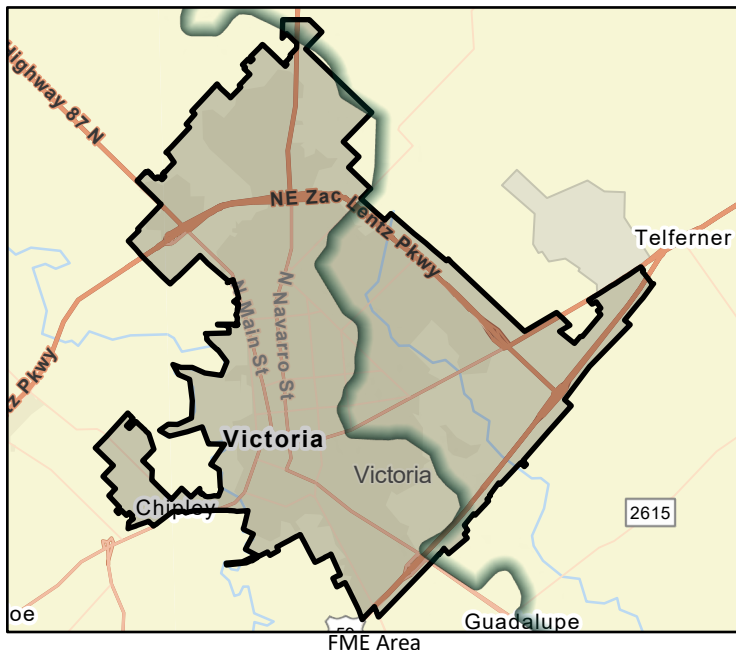
Farm/Ranch land impacted (acres) 111 Roadway(s) impacted (length) 36

Number of low water crossings 0 Historical road closures -

## Estimated Cost and Funding Availability

Total Cost \$1,165,853 Amount of Available Funding TBD Federal funding availability No

Funding source -



# Flood Management Evaluation (FME)



Title **City of Victoria Repair Channel Failures & Sediment Removal Project Planning**

ID# **111000077**

Sponsor (name of entity, not person) **Victoria (Municipality)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Project Planning**

Study description **Project planning for proposed channel improvements. Using field visits and drone footage, it was determined to repair 33,657 sq ft of concreted lined channel, 11,829 sq ft of earthen channel, and remove 227,099 sq ft of sediment.**

New Hydrologic or Hydraulic model? **Yes** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Victoria** Watershed HUC# (if known) **12100204**

Drainage area (Square miles, est.) **37** Goal(s) **11000009, 11000010**

## 100-Year Flood Risk Summary

Population at risk **3,181** # of structures **1,139** Critical facilities **24**

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

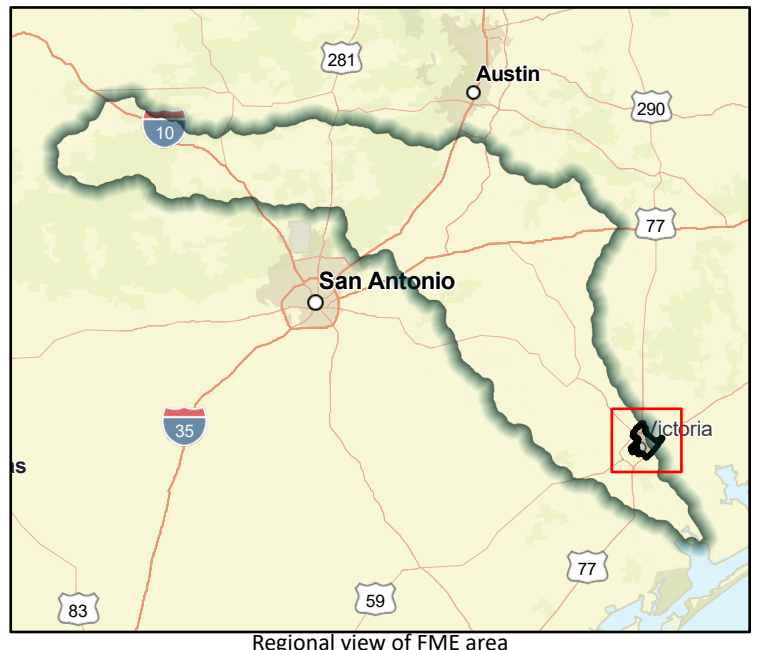
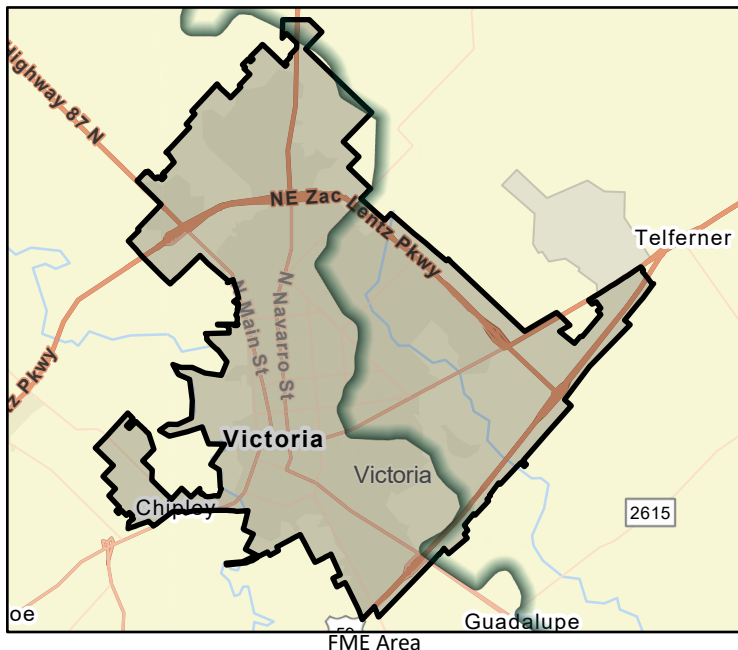
Farm/Ranch land impacted (acres) **111** Roadway(s) impacted (length) **36**

Number of low water crossings **0** Historical road closures **-**

## Estimated Cost and Funding Availability

Total Cost **\$276,201** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



# Flood Management Evaluation (FME)



Title **City of Victoria Stream Restoration Study**

ID# **111000078**

Sponsor (name of entity, not person) **Victoria (Municipality)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Watershed Planning**

Study description **Study to implement a stream restoration/channelization program to ensure adequate drainage/diversion of storm water, throughout various City low water crossings, streambeds, creek sheds, tributaries, and riverine areas.**

New Hydrologic or Hydraulic model? **Yes** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Victoria** Watershed HUC# (if known) **12100204**

Drainage area (Square miles, est.) **37** Goal(s) **11000009, 11000010**

## 100-Year Flood Risk Summary

Population at risk **3,181** # of structures **1,139** Critical facilities **24**

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

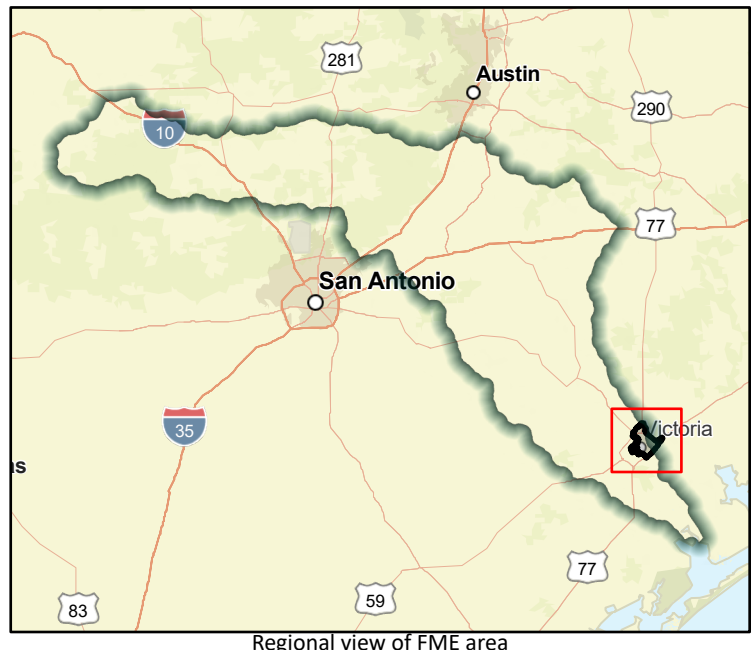
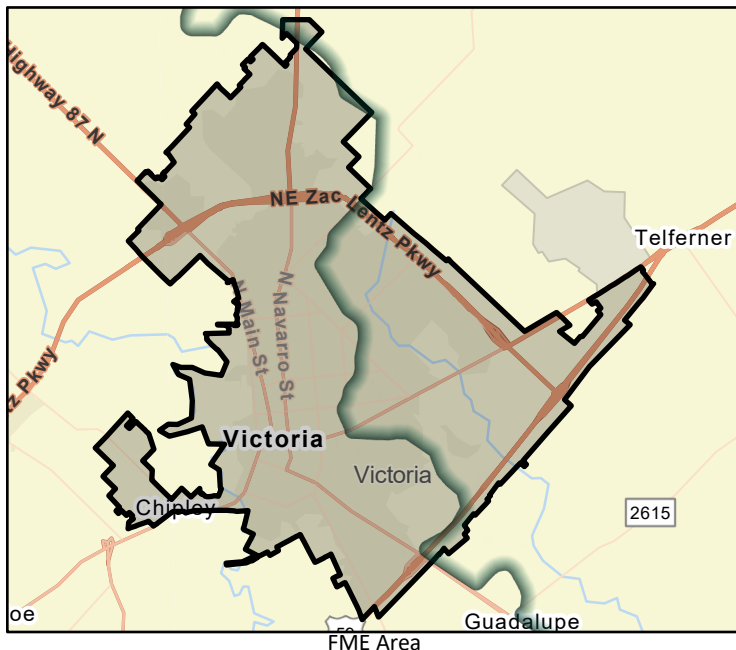
Farm/Ranch land impacted (acres) **111** Roadway(s) impacted (length) **36**

Number of low water crossings **0** Historical road closures **-**

## Estimated Cost and Funding Availability

Total Cost **\$500,000** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



# Flood Management Evaluation (FME)



Title **City of Waelder Voluntary Buyout Program Project Planning**

ID# **111000079**

Sponsor (name of entity, not person) **Waelder (Municipality)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Project Planning**

Study description **Project planning to develop and implement a program to buyout NFIP repetitive loss properties.**

New Hydrologic or Hydraulic model? **Yes** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Gonzales** Watershed HUC# (if known) **12100202**

Drainage area (Square miles, est.) **1** Goal(s) **11000009, 11000010**

## 100-Year Flood Risk Summary

Population at risk **207** # of structures **170** Critical facilities **0**

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

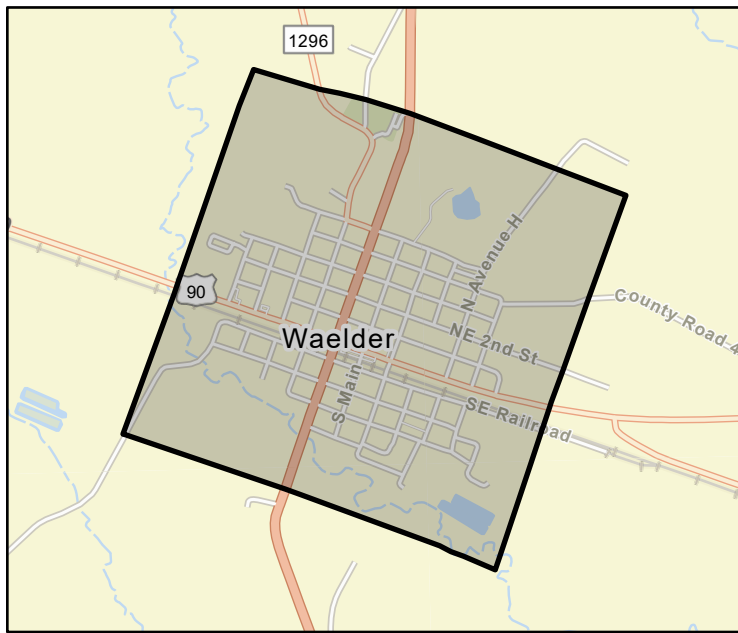
Farm/Ranch land impacted (acres) **4** Roadway(s) impacted (length) **4**

Number of low water crossings **9** Historical road closures **-**

## Estimated Cost and Funding Availability

Total Cost **\$150,000** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



FME Area



Regional view of FME area

# Flood Management Evaluation (FME)



Title **City of Wimberley Drainage Master Plan**

ID# **111000080**

Sponsor (name of entity, not person) **Wimberley (Municipality)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Watershed Planning**

Study description **Creation of drainage master plan for City of Wimberley to mitigate the flood hazard by defining priorities, policies, and strategies to address and remedy the drainage needs and challenges in Wimberley.**

New Hydrologic or Hydraulic model? **Yes** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Hays** Watershed HUC# (if known) **12100203**

Drainage area (Square miles, est.) **9** Goal(s) **11000009, 11000010**

## 100-Year Flood Risk Summary

Population at risk **1,045** # of structures **503** Critical facilities **0**

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

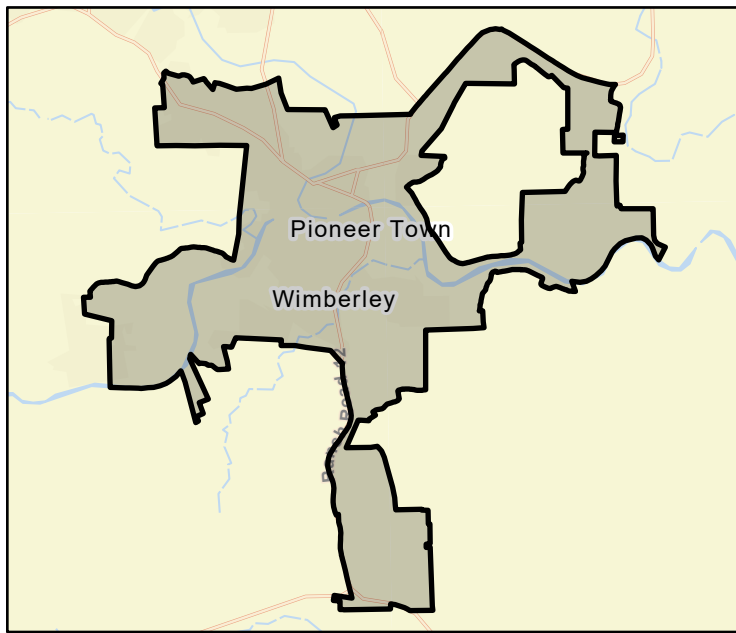
Farm/Ranch land impacted (acres) **25** Roadway(s) impacted (length) **8**

Number of low water crossings **6** Historical road closures **-**

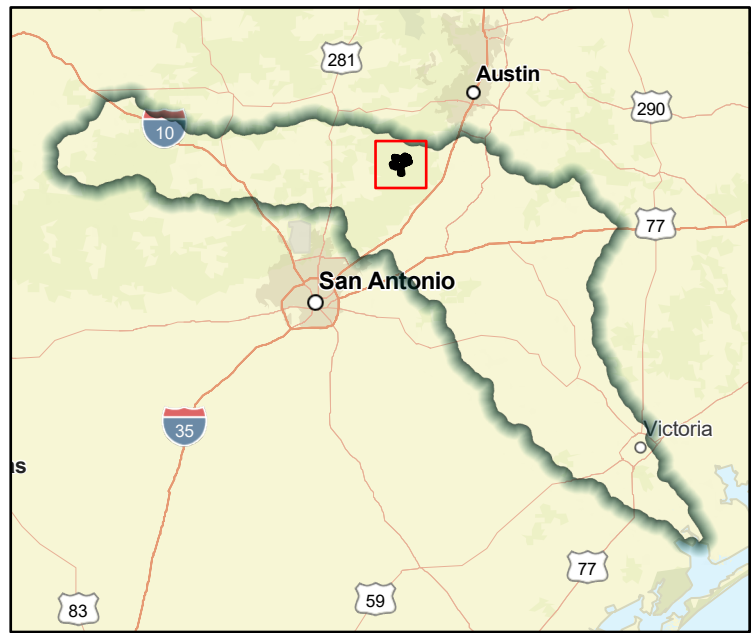
## Estimated Cost and Funding Availability

Total Cost **\$150,000** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



FME Area



Regional view of FME area

# Flood Management Evaluation (FME)



Title **City of Wimberley FM 1492 at Blanco River Low Water Crossing Project Planning**

ID# **111000081**

Sponsor (name of entity, not person) **Wimberley (Municipality)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Project Planning**

Study description **Project planning for proposed project to replace low water crossing at FM 1492 at Blanco River**

New Hydrologic or Hydraulic model? **Yes** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Hays** Watershed HUC# (if known) **12100203**

Drainage area (Square miles, est.) **0** Goal(s) **11000001, 11000002**

## 100-Year Flood Risk Summary

Population at risk **0** # of structures **0** Critical facilities **0**

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

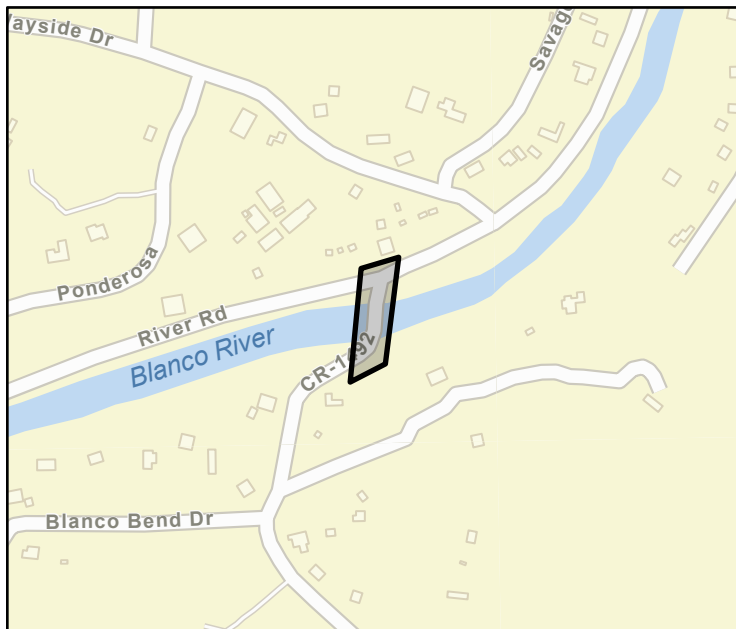
Farm/Ranch land impacted (acres) **0** Roadway(s) impacted (length) **0**

Number of low water crossings **1** Historical road closures **-**

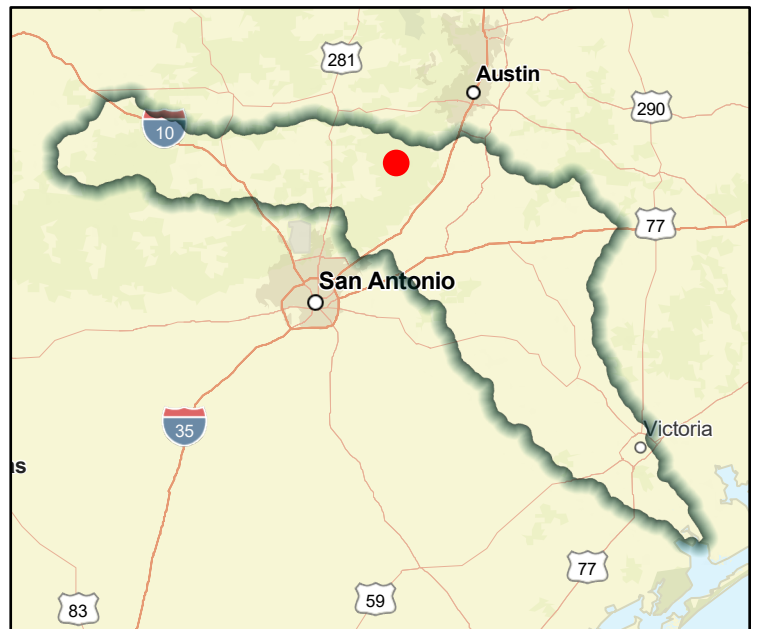
## Estimated Cost and Funding Availability

Total Cost **\$100,000** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



FME Area



Regional view of FME area

# Flood Management Evaluation (FME)



Title **City of Wimberley Hidden Valley at Blanco River Low Water Crossing Project Planning**

ID# **111000082**

Sponsor (name of entity, not person) **Wimberley (Municipality)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Project Planning**

Study description **Project planning for proposed project to replace low water crossing at Hidden Valley at Blanco River**

New Hydrologic or Hydraulic model? **Yes** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Hays** Watershed HUC# (if known) **12100203**

Drainage area (Square miles, est.) **0** Goal(s) **11000001, 11000002**

## 100-Year Flood Risk Summary

Population at risk **12** # of structures **4** Critical facilities **0**

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

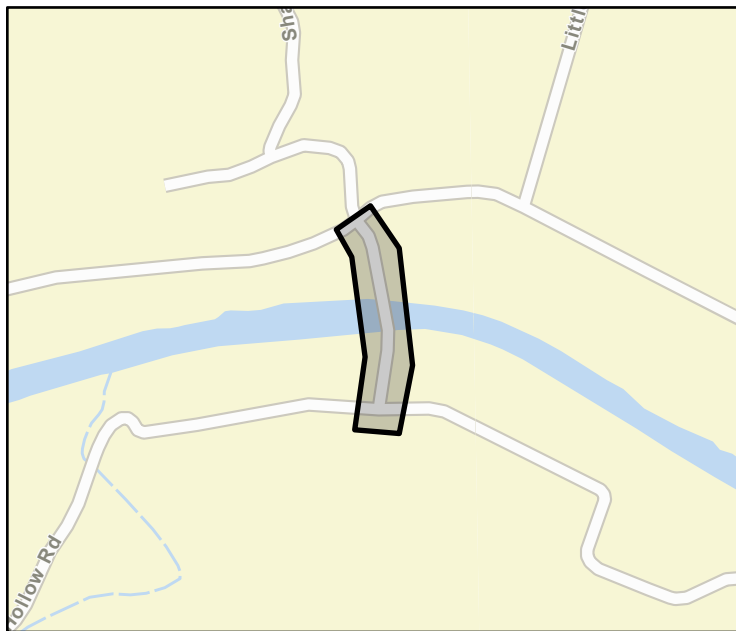
Farm/Ranch land impacted (acres) **1** Roadway(s) impacted (length) **0**

Number of low water crossings **1** Historical road closures **-**

## Estimated Cost and Funding Availability

Total Cost **\$100,000** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



# Flood Management Evaluation (FME)



Title **City of Wimberley Little Arkansas at Blanco River Low Water Crossing Project Planning**

ID# **111000083**

Sponsor (name of entity, not person) **Wimberley (Municipality)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Project Planning**

Study description **Project planning for proposed project to replace low water crossing at Little Arkansas at Blanco River**

New Hydrologic or Hydraulic model? **Yes** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Hays** Watershed HUC# (if known) **12100203**

Drainage area (Square miles, est.) **0** Goal(s) **11000001, 11000002**

## 100-Year Flood Risk Summary

Population at risk **0** # of structures **0** Critical facilities **0**

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

Farm/Ranch land impacted (acres) **1** Roadway(s) impacted (length) **0**

Number of low water crossings **0** Historical road closures **-**

## Estimated Cost and Funding Availability

Total Cost **\$100,000** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



FME Area



Regional view of FME area



# Flood Management Evaluation (FME)



Title City of Wimberley Valley Drive at Pierce Creek Low Water Crossing Project Planning

ID# 111000084

Sponsor (name of entity, not person) Wimberley (Municipality)

RFPG recommend? Yes Reason for Recommendation Meets minimum TWDB requirements

## Study Details

Study type Project Planning

Study description Project planning for proposed project to replace low water crossing at Valley Drive at Pierce Creek

New Hydrologic or Hydraulic model? Yes Emergency Need? No Existing/Anticipated models in near term? Yes

County Hays Watershed HUC# (if known) 12100203

Drainage area (Square miles, est.) 0 Goal(s) 11000001, 11000002

## 100-Year Flood Risk Summary

Population at risk 0 # of structures 0 Critical facilities 0

Flood risk type: Riverine? Yes Coastal? No Local? No Playa? No Other? No

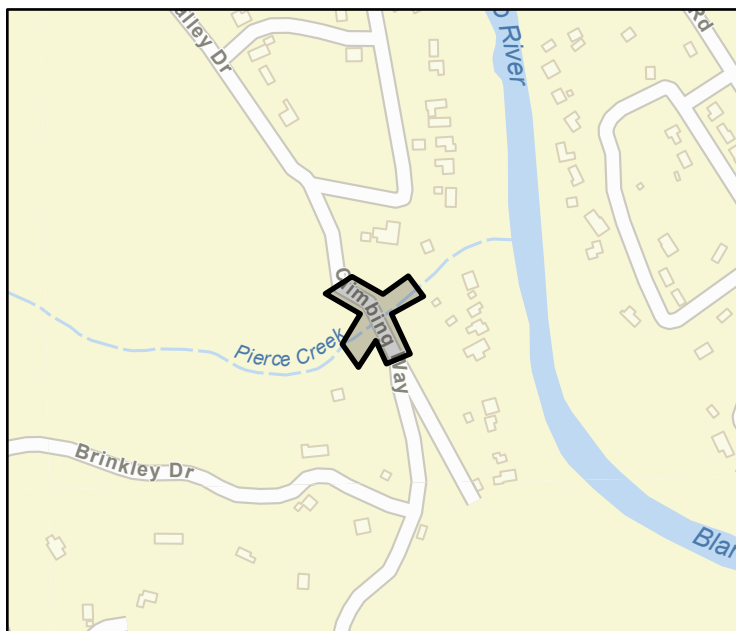
Farm/Ranch land impacted (acres) 0 Roadway(s) impacted (length) 0

Number of low water crossings 1 Historical road closures -

## Estimated Cost and Funding Availability

Total Cost \$100,000 Amount of Available Funding TBD Federal funding availability No

Funding source -



FME Area



Regional view of FME area

# Flood Management Evaluation (FME)



Title **City of Wimberley Flite Acres Road Low Water Crossing Project Planning**

ID# **111000085**

Sponsor (name of entity, not person) **Wimberley (Municipality)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Project Planning**

Study description **Project planning for proposed project to replace low water crossing at Flite Acres Road**

New Hydrologic or Hydraulic model? **Yes** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Hays** Watershed HUC# (if known) **12100203**

Drainage area (Square miles, est.) **0** Goal(s) **11000001, 11000002**

## 100-Year Flood Risk Summary

Population at risk **11** # of structures **4** Critical facilities **0**

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

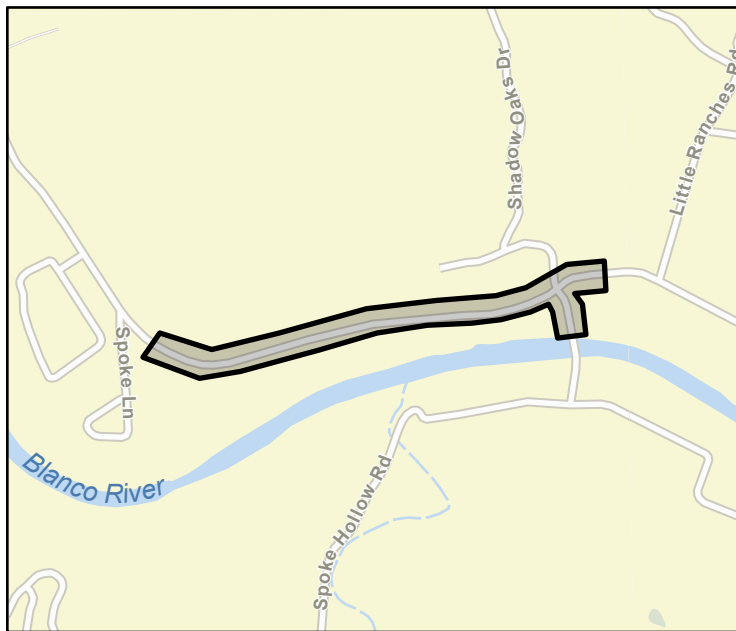
Farm/Ranch land impacted (acres) **0** Roadway(s) impacted (length) **1**

Number of low water crossings **0** Historical road closures **-**

## Estimated Cost and Funding Availability

Total Cost **\$100,000** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



FME Area



Regional view of FME area

# Flood Management Evaluation (FME)



Title **City of Wimberley FM 1492 at Pierce Creek Low Water Crossing Project Planning**

ID# **111000086**

Sponsor (name of entity, not person) **Wimberley (Municipality)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Project Planning**

Study description **Project planning for proposed project to replace low water crossing at FM 1492 at Pierce Creek**

New Hydrologic or Hydraulic model? **Yes** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Hays** Watershed HUC# (if known) **12100203**

Drainage area (Square miles, est.) **0** Goal(s) **11000001, 11000002**

## 100-Year Flood Risk Summary

Population at risk **10** # of structures **3** Critical facilities **0**

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

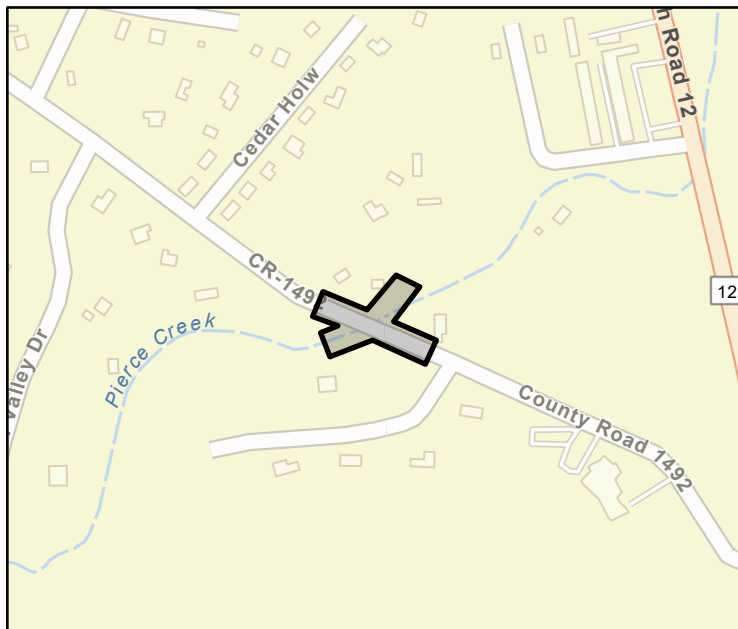
Farm/Ranch land impacted (acres) **0** Roadway(s) impacted (length) **0**

Number of low water crossings **1** Historical road closures **-**

## Estimated Cost and Funding Availability

Total Cost **\$100,000** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



FME Area



Regional view of FME area

# Flood Management Evaluation (FME)



Title City of Wimberley Wilson Creek at River Road Low Water Crossing Project Planning

ID# 111000087

Sponsor (name of entity, not person) Wimberley (Municipality)

RFPG recommend? Yes Reason for Recommendation Meets minimum TWDB requirements

## Study Details

Study type Project Planning

Study description Project planning for proposed project to replace low water crossing at Wilson Creek at River Road

New Hydrologic or Hydraulic model? Yes

Emergency Need? No

Existing/Anticipated models in near term? Yes

County Hays

Watershed HUC# (if known) 12100203

Drainage area (Square miles, est.) 0

Goal(s) 11000001, 11000002

## 100-Year Flood Risk Summary

Population at risk 0

# of structures 0

Critical facilities 0

Flood risk type: Riverine? Yes

Coastal? No

Local? No

Playa? No

Other? No

Farm/Ranch land impacted (acres) 0

Roadway(s) impacted (length) 0

Number of low water crossings 0

Historical road closures -

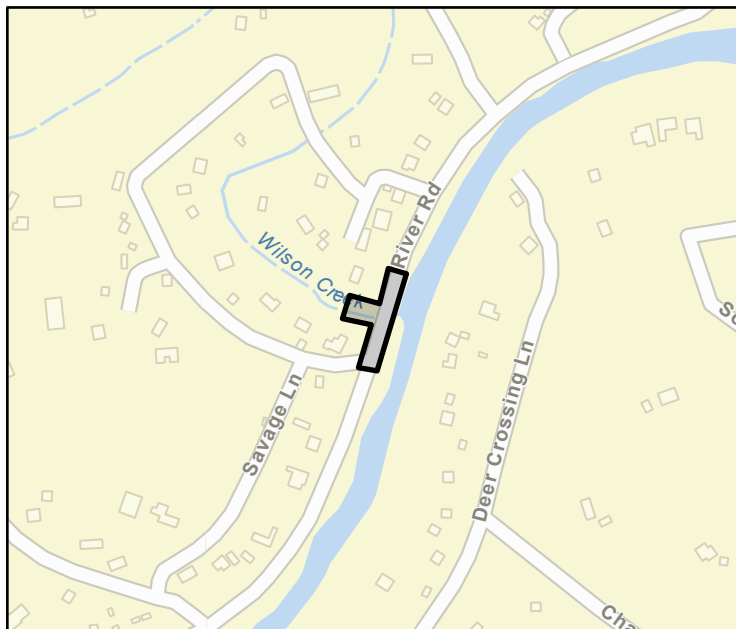
## Estimated Cost and Funding Availability

Total Cost \$100,000

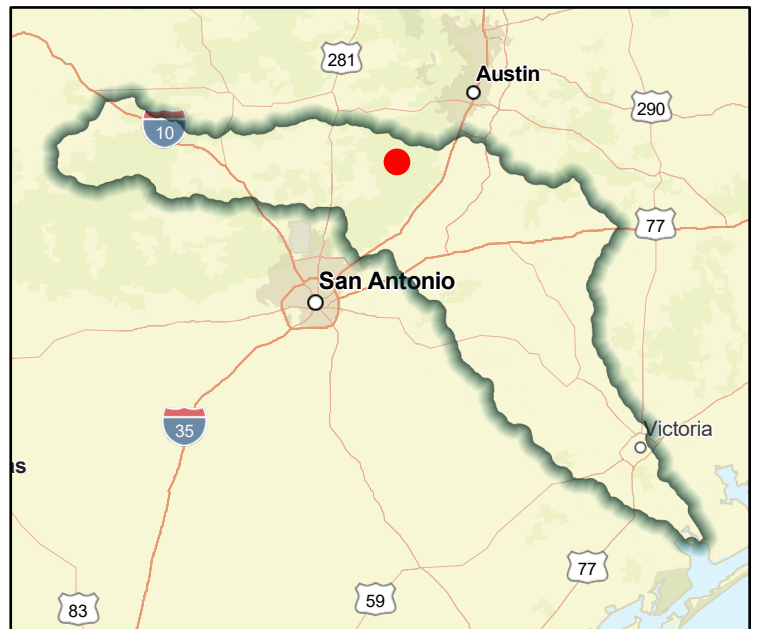
Amount of Available Funding TBD

Federal funding availability No

Funding source -



FME Area



Regional view of FME area

# Flood Management Evaluation (FME)



Title **City of Wimberley Green Acres Dr. at Fire Station Low Water Crossing Project Planning**

ID# **111000088**

Sponsor (name of entity, not person) **Wimberley (Municipality)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Project Planning**

Study description **Project planning for proposed project to replace low water crossing at Green Acres Dr. at Fire Station**

New Hydrologic or Hydraulic model? **Yes** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Hays** Watershed HUC# (if known) **12100203**

Drainage area (Square miles, est.) **0** Goal(s) **11000001, 11000002**

## 100-Year Flood Risk Summary

Population at risk **0** # of structures **0** Critical facilities **0**

Flood risk type: Riverine? **No** Coastal? **No** Local? **No** Playa? **No** Other? **No**

Farm/Ranch land impacted (acres) **0** Roadway(s) impacted (length) **0**

Number of low water crossings **0** Historical road closures **-**

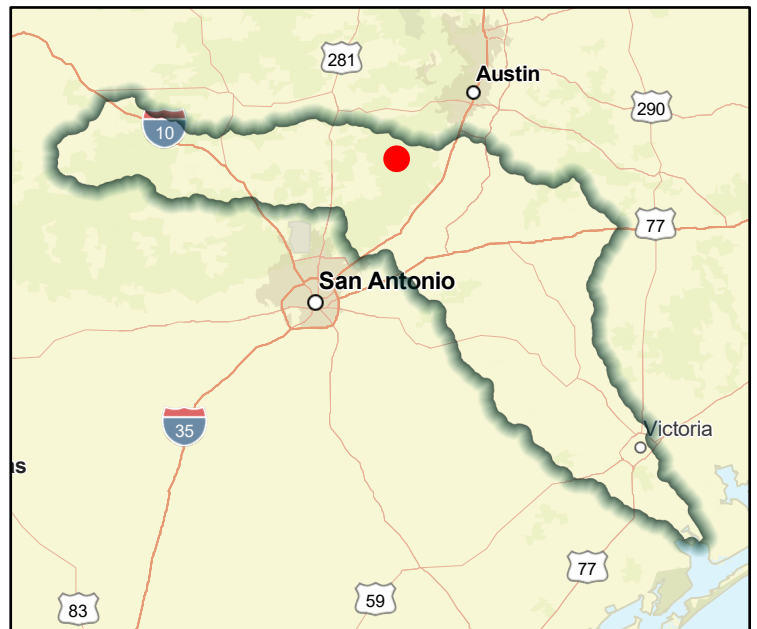
## Estimated Cost and Funding Availability

Total Cost **\$100,000** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



FME Area



Regional view of FME area

# Flood Management Evaluation (FME)



Title **City of Wimberley Leveritt's Loop Low Water Crossing Project Planning**

ID# **111000089**

Sponsor (name of entity, not person) **Wimberley (Municipality)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Project Planning**

Study description **Project planning for proposed project to replace low water crossing at Leveritt's Loop**

New Hydrologic or Hydraulic model? **Yes** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Hays** Watershed HUC# (if known) **12100203**

Drainage area (Square miles, est.) **0** Goal(s) **11000001, 11000002**

## 100-Year Flood Risk Summary

Population at risk **16** # of structures **9** Critical facilities **0**

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

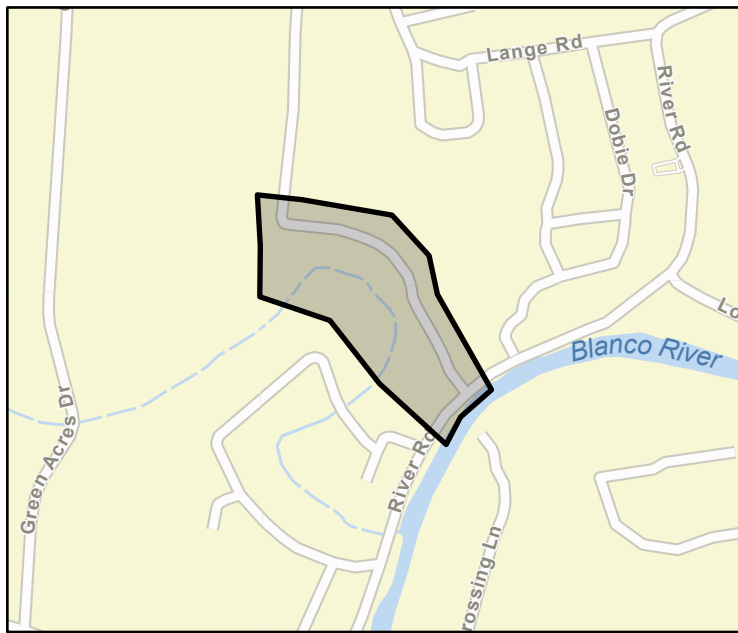
Farm/Ranch land impacted (acres) **0** Roadway(s) impacted (length) **0**

Number of low water crossings **0** Historical road closures **-**

## Estimated Cost and Funding Availability

Total Cost **\$100,000** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



FME Area



Regional view of FME area

# Flood Management Evaluation (FME)



Title **City of Wimberley Spoke Hollow Dr. at Spoke Pile Creek Low Water Crossing Project Planning**

ID# **111000090**

Sponsor (name of entity, not person) **Wimberley (Municipality)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Project Planning**

Study description **Project planning for proposed project to replace low water crossing at Spoke Hollow Dr. at Spoke Pile Creek**

New Hydrologic or Hydraulic model? **Yes** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Hays** Watershed HUC# (if known) **12100203**

Drainage area (Square miles, est.) **0** Goal(s) **11000001, 11000002**

## 100-Year Flood Risk Summary

Population at risk **0** # of structures **0** Critical facilities **0**

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

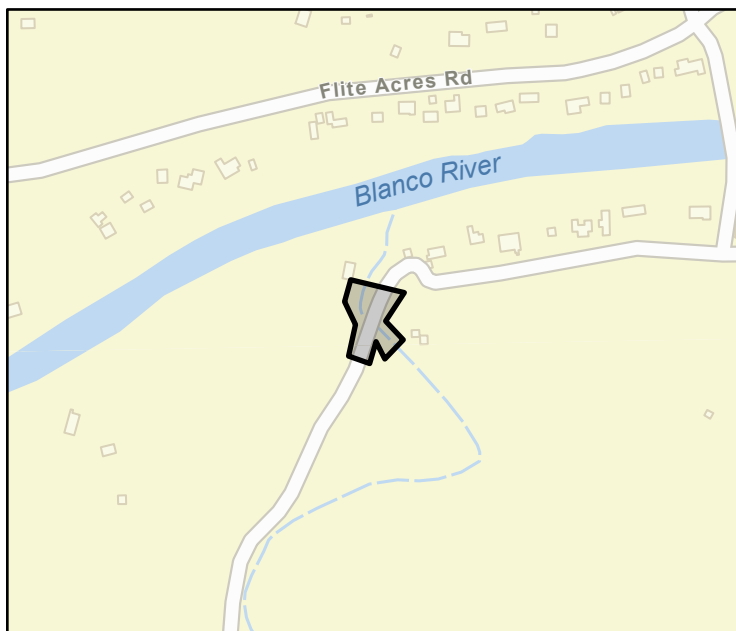
Farm/Ranch land impacted (acres) **0** Roadway(s) impacted (length) **0**

Number of low water crossings **1** Historical road closures **-**

## Estimated Cost and Funding Availability

Total Cost **\$100,000** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



FME Area



Regional view of FME area

# Flood Management Evaluation (FME)



Title **City of Wimberley River Road at Western City Limit Low Water Crossing Project Planning**

ID# **111000091**

Sponsor (name of entity, not person) **Wimberley (Municipality)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Project Planning**

Study description **Project planning for proposed project to replace low water crossing at River Road at Western City Limit**

New Hydrologic or Hydraulic model? **Yes** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Hays** Watershed HUC# (if known) **12100203**

Drainage area (Square miles, est.) **0** Goal(s) **11000001, 11000002**

## 100-Year Flood Risk Summary

Population at risk **0** # of structures **0** Critical facilities **0**

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

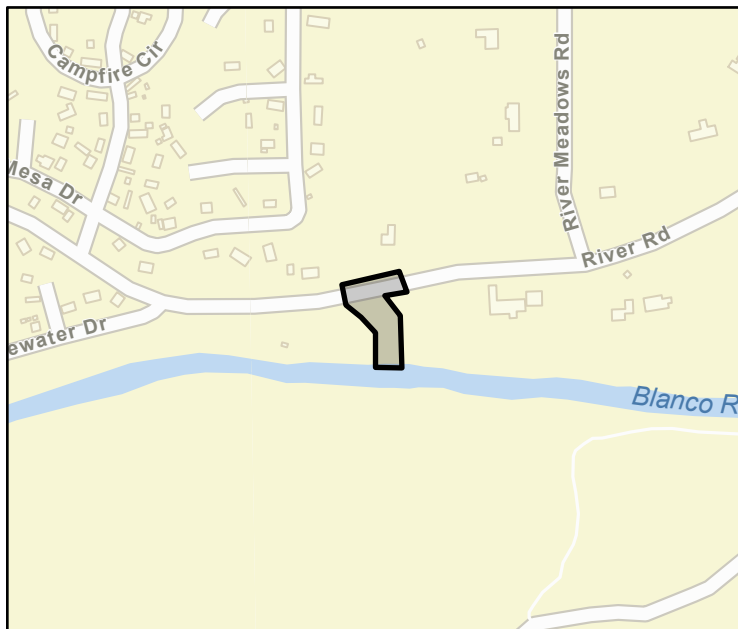
Farm/Ranch land impacted (acres) **0** Roadway(s) impacted (length) **0**

Number of low water crossings **0** Historical road closures **-**

## Estimated Cost and Funding Availability

Total Cost **\$100,000** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



FME Area



Regional view of FME area



# Flood Management Evaluation (FME)



Title **City of Wimberley Paradise Hills Low Water Crossing Project Planning**

ID# **111000092**

Sponsor (name of entity, not person) **Wimberley (Municipality)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Project Planning**

Study description **Project planning for proposed project to replace low water crossing at Paradise Hills**

New Hydrologic or Hydraulic model? **Yes** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Hays** Watershed HUC# (if known) **12100203**

Drainage area (Square miles, est.) **0** Goal(s) **11000001, 11000002**

## 100-Year Flood Risk Summary

Population at risk **0** # of structures **0** Critical facilities **0**

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

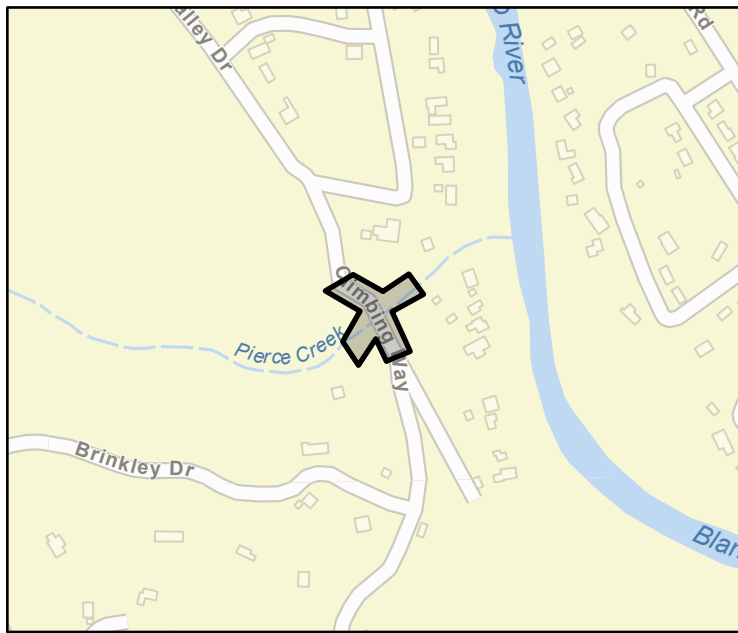
Farm/Ranch land impacted (acres) **0** Roadway(s) impacted (length) **0**

Number of low water crossings **1** Historical road closures **-**

## Estimated Cost and Funding Availability

Total Cost **\$100,000** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



FME Area



Regional view of FME area

# Flood Management Evaluation (FME)



Title **City of Wimberley River Road Reconstruction Project Planning**

ID# **111000093**

Sponsor (name of entity, not person) **Wimberley (Municipality)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Project Planning**

Study description **Project planning for proposed project to reconstruct roadway along Blanco River**

New Hydrologic or Hydraulic model? **Yes** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Hays** Watershed HUC# (if known) **12100203**

Drainage area (Square miles, est.) **0** Goal(s) **11000009, 11000010**

## 100-Year Flood Risk Summary

Population at risk **41** # of structures **23** Critical facilities **0**

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

Farm/Ranch land impacted (acres) **4** Roadway(s) impacted (length) **2**

Number of low water crossings **0** Historical road closures **-**

## Estimated Cost and Funding Availability

Total Cost **\$100,000** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



FME Area



Regional view of FME area

# Flood Management Evaluation (FME)



Title **City of Wimberley Little Ranches at Panther Creek Low Water Crossing Project Planning**

ID# **111000094**

Sponsor (name of entity, not person) **Wimberley (Municipality)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Project Planning**

Study description **Project planning for proposed project to reconstruct low water crossing and roadway at Little Ranches at Panther Creek**

New Hydrologic or Hydraulic model? **Yes** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Hays** Watershed HUC# (if known) **12100203**

Drainage area (Square miles, est.) **0** Goal(s) **11000001, 11000002**

## 100-Year Flood Risk Summary

Population at risk **0** # of structures **0** Critical facilities **0**

Flood risk type: Riverine? **No** Coastal? **No** Local? **No** Playa? **No** Other? **No**

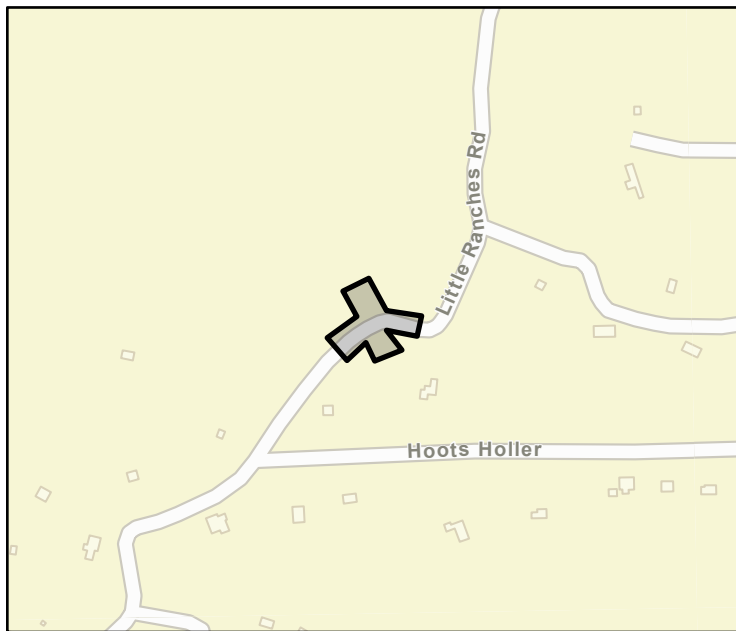
Farm/Ranch land impacted (acres) **0** Roadway(s) impacted (length) **0**

Number of low water crossings **0** Historical road closures **-**

## Estimated Cost and Funding Availability

Total Cost **\$100,000** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



FME Area



Regional view of FME area

# Flood Management Evaluation (FME)



Title **City of Wimberley Hoots Holler Low Water Crossing Project Planning**

ID# **111000095**

Sponsor (name of entity, not person) **Wimberley (Municipality)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Project Planning**

Study description **Project planning for proposed project to reconstruct low water crossing and roadway at Hoots Holler**

New Hydrologic or Hydraulic model? **Yes** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Hays** Watershed HUC# (if known) **12100203**

Drainage area (Square miles, est.) **0** Goal(s) **11000001, 11000002**

## 100-Year Flood Risk Summary

Population at risk **0** # of structures **0** Critical facilities **0**

Flood risk type: Riverine? **No** Coastal? **No** Local? **No** Playa? **No** Other? **No**

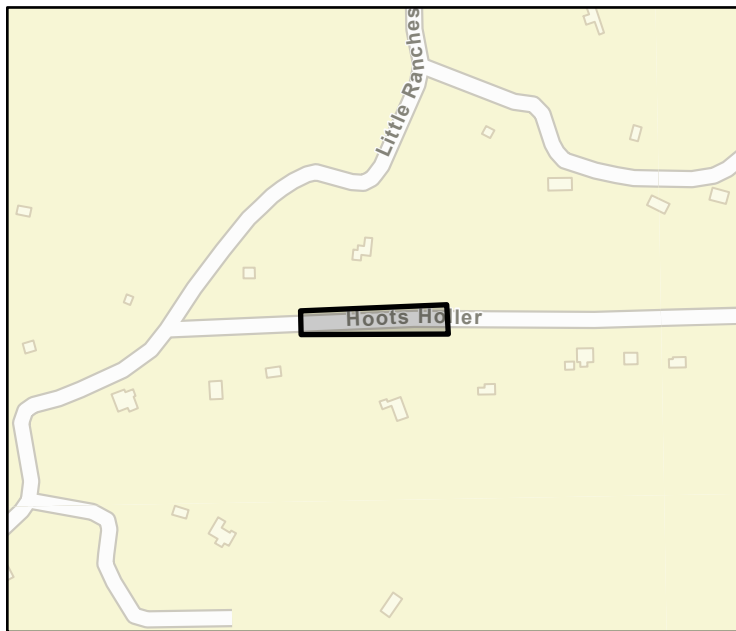
Farm/Ranch land impacted (acres) **0** Roadway(s) impacted (length) **0**

Number of low water crossings **0** Historical road closures **-**

## Estimated Cost and Funding Availability

Total Cost **\$100,000** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



FME Area



Regional view of FME area

# Flood Management Evaluation (FME)



Title **Comal County Evacuation and Dam Safety Plan**

ID# **111000096**

Sponsor (name of entity, not person) **Comal (County)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Preparedness**

Study description **Develop evacuation and dam safety plan for coordination with USACE and dam re-enforcement.**

New Hydrologic or Hydraulic model? **No** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Comal** Watershed HUC# (if known) **12100202,12100203,12100201**

Drainage area (Square miles, est.) **573** Goal(s) **11000015, 11000016**

## 100-Year Flood Risk Summary

Population at risk **9,129** # of structures **3,677** Critical facilities **6**

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

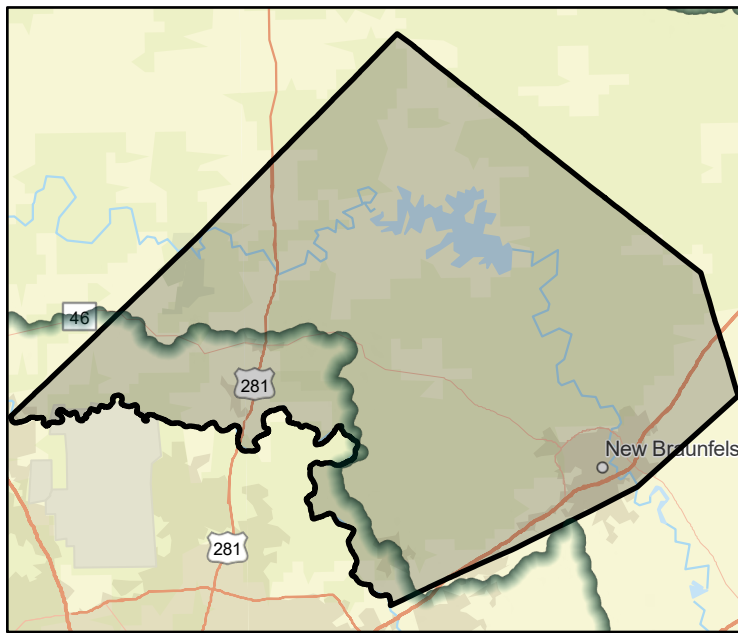
Farm/Ranch land impacted (acres) **9,463** Roadway(s) impacted (length) **93**

Number of low water crossings **77** Historical road closures **-**

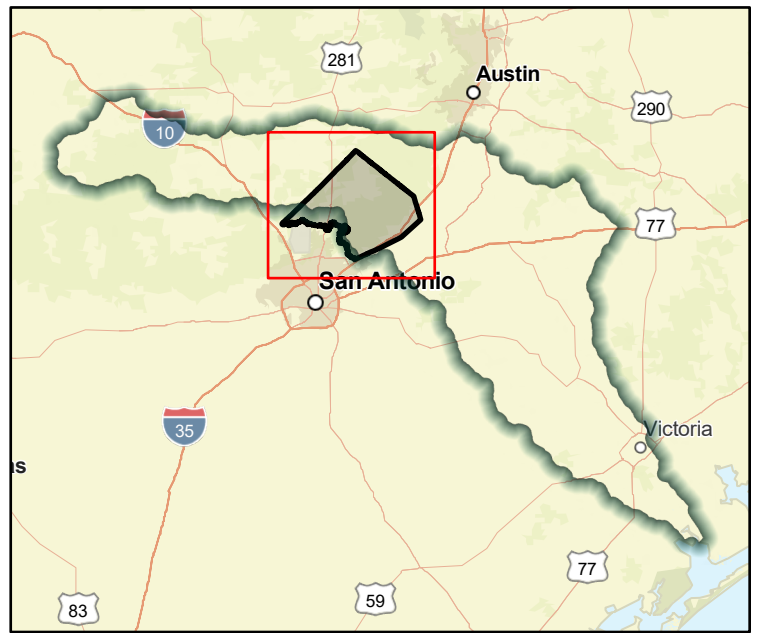
## Estimated Cost and Funding Availability

Total Cost **\$50,000** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



FME Area



Regional view of FME area

# Flood Management Evaluation (FME)



Title **Comal County Low Water Crossing Improvements Project Planning**

ID# **111000097**

Sponsor (name of entity, not person) **Comal (County)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Project Planning**

Study description **Project planning to upgrade low water crossings with larger culverts and elevated roadways where feasible. Acquire easement and/or right of ways adjacent to River Road for first responder access**

New Hydrologic or Hydraulic model? **Yes** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Comal** Watershed HUC# (if known) **12100202,12100203,12100201**

Drainage area (Square miles, est.) **573** Goal(s) **11000001, 11000002**

## 100-Year Flood Risk Summary

Population at risk **9,129** # of structures **3,677** Critical facilities **6**

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

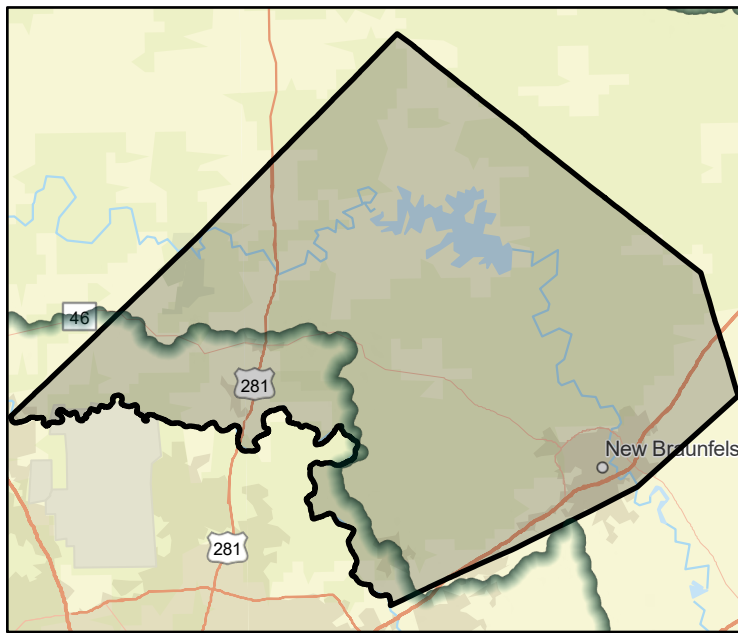
Farm/Ranch land impacted (acres) **9,463** Roadway(s) impacted (length) **93**

Number of low water crossings **77** Historical road closures **-**

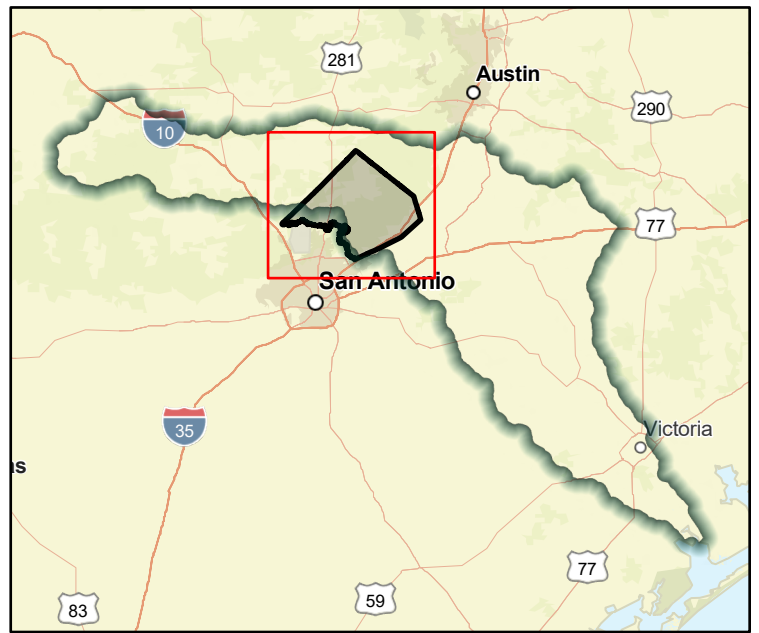
## Estimated Cost and Funding Availability

Total Cost **\$150,000** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



FME Area



Regional view of FME area

# Flood Management Evaluation (FME)



Title **Comal County Voluntary Buyout Program Project Planning**

ID# **111000098**

Sponsor (name of entity, not person) **Comal (County)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Project Planning**

Study description **Project planning to remediate repetitive losses along the Guadalupe River by acquiring flood damaged structures and converting acquired land to open(green)space.**

New Hydrologic or Hydraulic model? **Yes** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Comal** Watershed HUC# (if known) **12100202,12100203,12100201**

Drainage area (Square miles, est.) **573** Goal(s) **11000003, 11000004, 11000009, 11000010**

## 100-Year Flood Risk Summary

Population at risk **9,129** # of structures **3,677** Critical facilities **6**

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

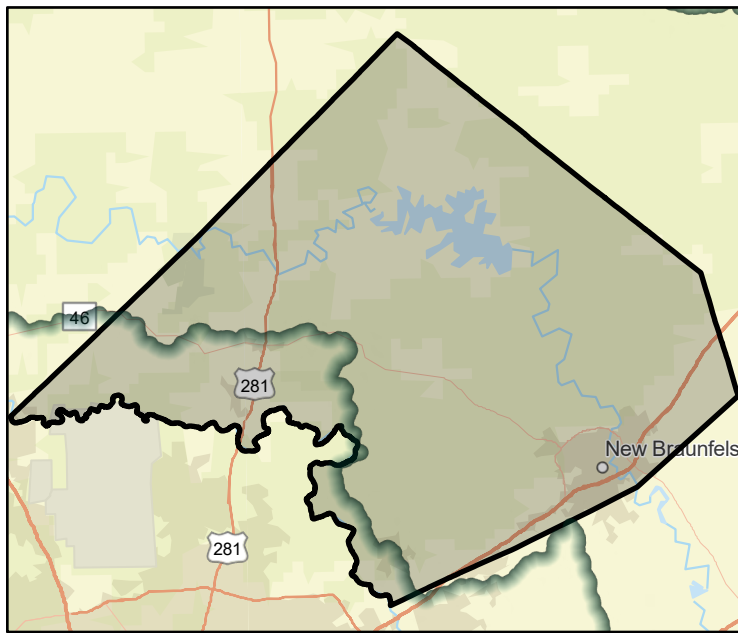
Farm/Ranch land impacted (acres) **9,463** Roadway(s) impacted (length) **93**

Number of low water crossings **77** Historical road closures **-**

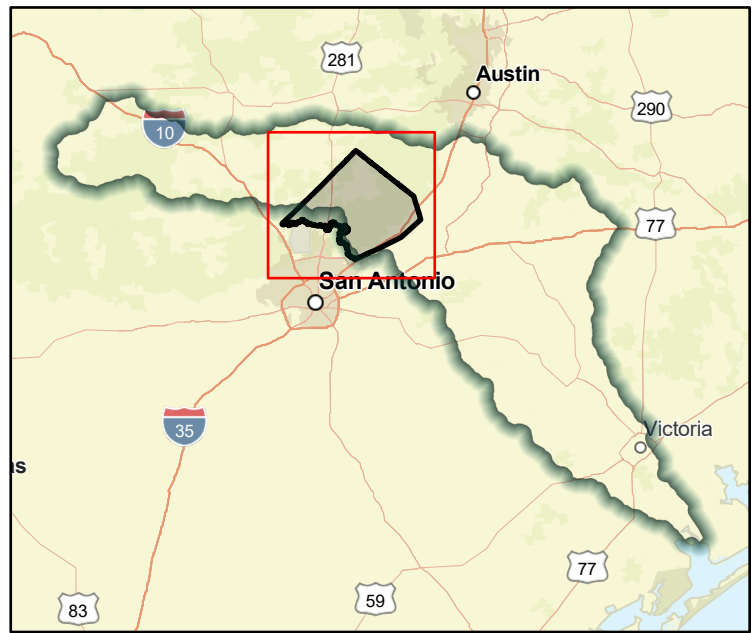
## Estimated Cost and Funding Availability

Total Cost **\$357,000** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



FME Area



Regional view of FME area

# Flood Management Evaluation (FME)



Title **Comal County Retention Dam Project Planning**

ID# **111000099**

Sponsor (name of entity, not person) **Comal (County)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Project Planning**

Study description **Project planning for proposed project to design and construct 4 retention dams to assist in controlling flash flooding in municipalities and unincorporated areas of the county.**

New Hydrologic or Hydraulic model? **Yes** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Comal** Watershed HUC# (if known) **12100202,12100203,12100201**

Drainage area (Square miles, est.) **573** Goal(s) **11000009, 11000010**

## 100-Year Flood Risk Summary

Population at risk **9,129** # of structures **3,677** Critical facilities **6**

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

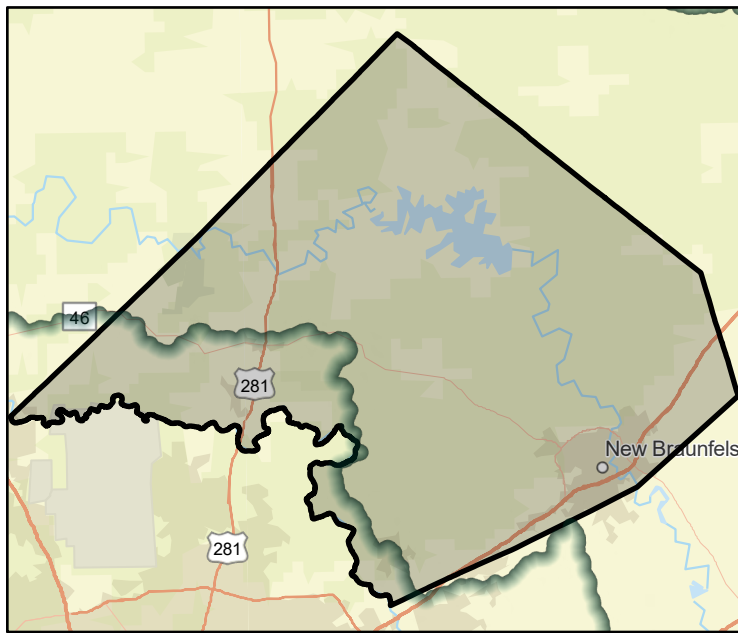
Farm/Ranch land impacted (acres) **9,463** Roadway(s) impacted (length) **93**

Number of low water crossings **77** Historical road closures **-**

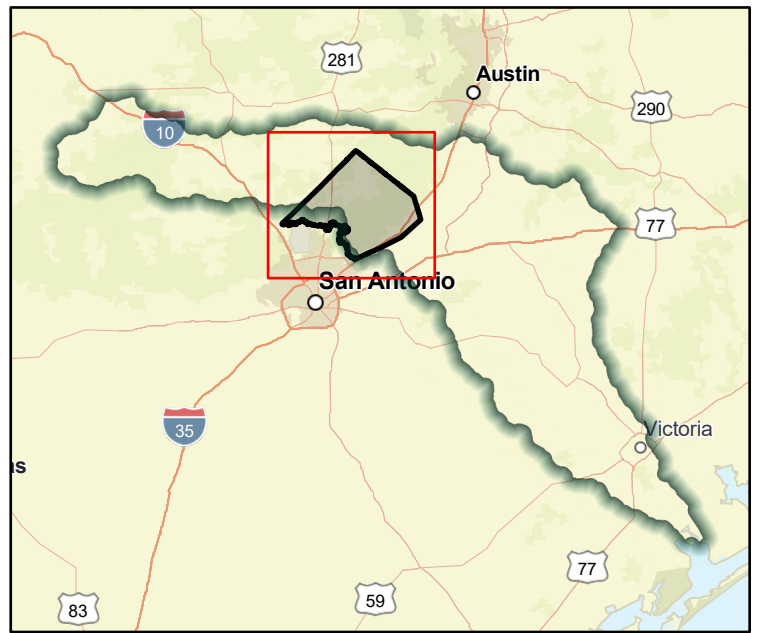
## Estimated Cost and Funding Availability

Total Cost **\$8,000,000** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



FME Area



Regional view of FME area



# Flood Management Evaluation (FME)



Title **Comal County Master WID River Road Low Water Crossing Improvement Project Planning**

ID# **111000100**

Sponsor (name of entity, not person) **Comal Master WID**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Project Planning**

Study description **Project planning for proposed project to implement low water crossing improvements at River Road.**

New Hydrologic or Hydraulic model? **Yes** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Comal** Watershed HUC# (if known) **12100202**

Drainage area (Square miles, est.) **3** Goal(s) **11000009, 11000010**

## 100-Year Flood Risk Summary

Population at risk **282** # of structures **139** Critical facilities **0**

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

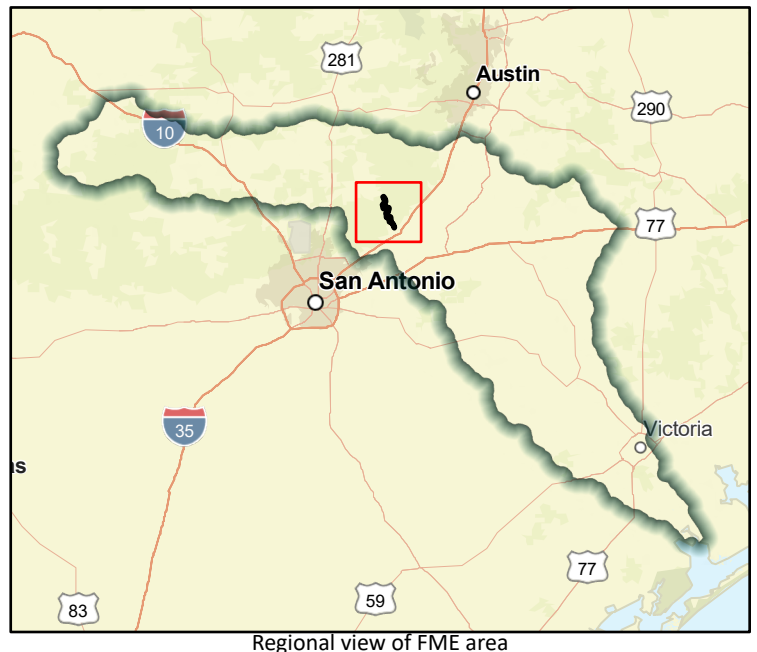
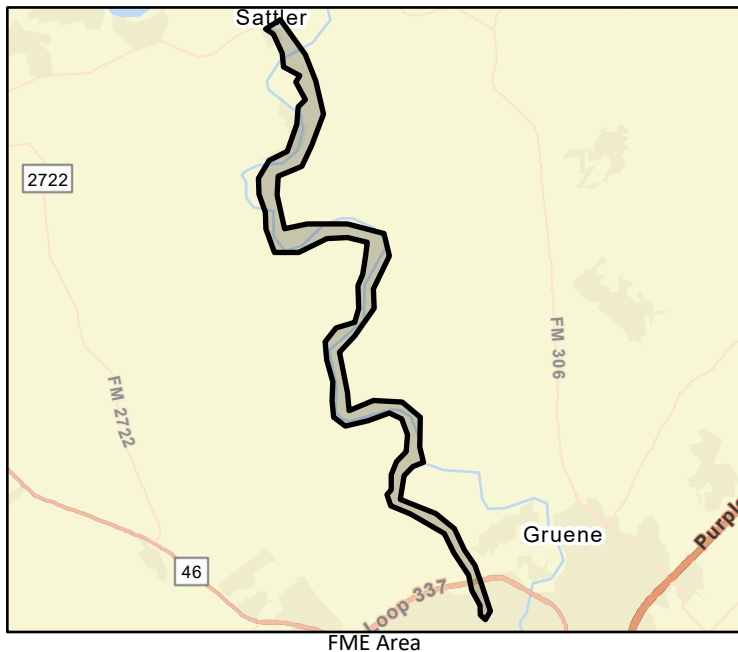
Farm/Ranch land impacted (acres) **98** Roadway(s) impacted (length) **6**

Number of low water crossings **8** Historical road closures **-**

## Estimated Cost and Funding Availability

Total Cost **\$700,000** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



# Flood Management Evaluation (FME)



Title **City of Cuero Drainage Improvements Study**

ID# **111000101**

Sponsor (name of entity, not person) **Cuero (Municipality)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Watershed Planning**

Study description **Study of solutions to improve drainage and stormwater system to reduce drainage and flooding issues.**

New Hydrologic or Hydraulic model? **Yes** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **De Witt** Watershed HUC# (if known) **12100202,12100204**

Drainage area (Square miles, est.) **7** Goal(s) **11000009, 11000010**

## 100-Year Flood Risk Summary

Population at risk **3,213** # of structures **1,991** Critical facilities **10**

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

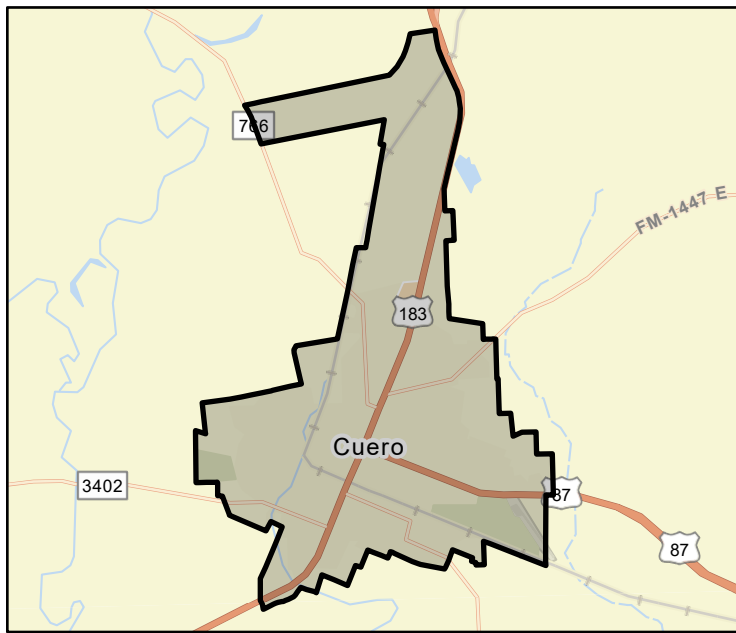
Farm/Ranch land impacted (acres) **116** Roadway(s) impacted (length) **35**

Number of low water crossings **2** Historical road closures **-**

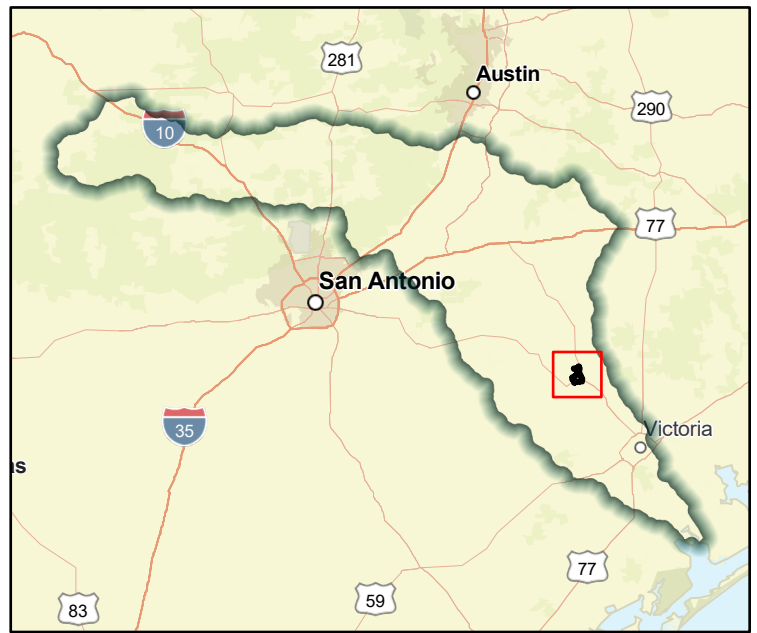
## Estimated Cost and Funding Availability

Total Cost **\$150,000** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



FME Area



Regional view of FME area

# Flood Management Evaluation (FME)



Title **City of Cuero City Public Service Station Project Planning**

ID# **111000102**

Sponsor (name of entity, not person) **Cuero (Municipality)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Project Planning**

Study description **Project planning for proposed project to retrofit or floodproof City Public Service Station currently under renovation. Facility will serve as secondary location for community offices and critical utility service data and equipment**

New Hydrologic or Hydraulic model? **Yes** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **De Witt** Watershed HUC# (if known) **12100202,12100204**

Drainage area (Square miles, est.) **7** Goal(s) **11000015, 11000016**

## 100-Year Flood Risk Summary

Population at risk **3,213** # of structures **1,991** Critical facilities **10**

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

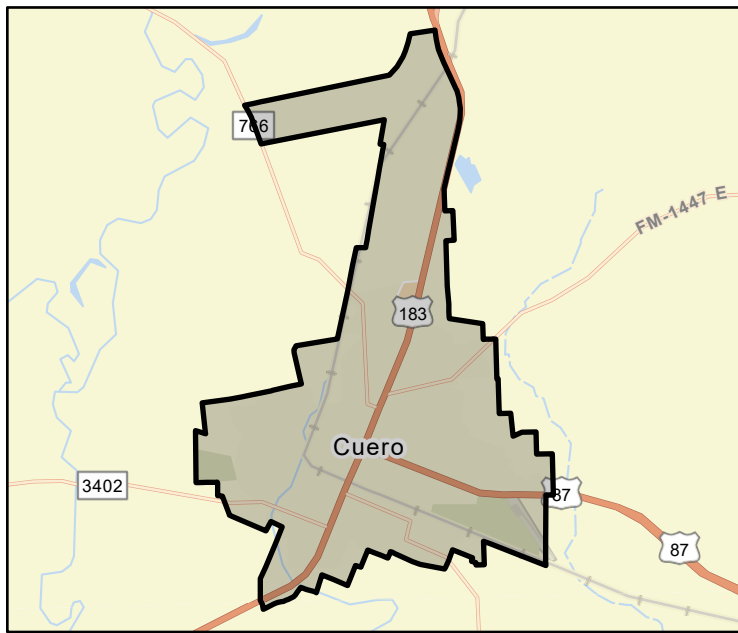
Farm/Ranch land impacted (acres) **116** Roadway(s) impacted (length) **35**

Number of low water crossings **2** Historical road closures **-**

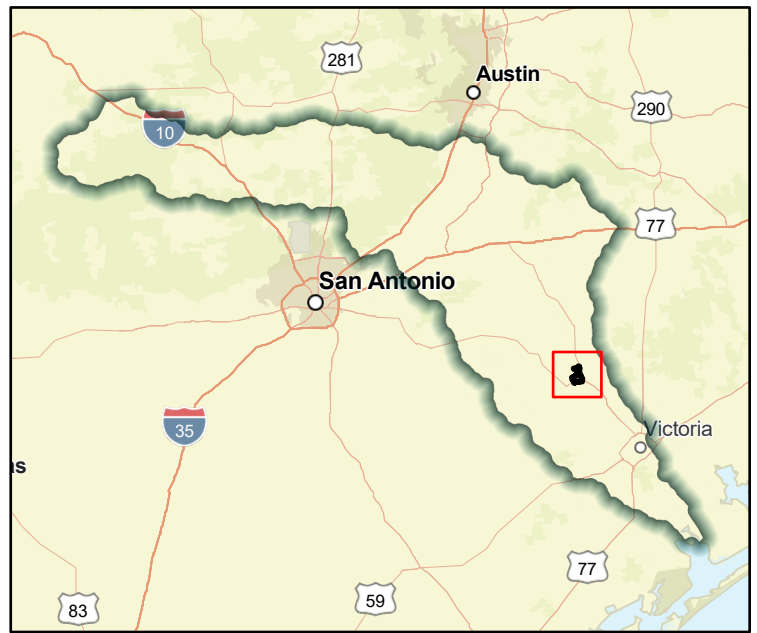
## Estimated Cost and Funding Availability

Total Cost **\$100,000** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



FME Area



Regional view of FME area

# Flood Management Evaluation (FME)



Title **City of Cuero WWTP Floodproofing Project Planning**

ID# **111000103**

Sponsor (name of entity, not person) **Cuero (Municipality)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Project Planning**

Study description **Project planning to floodproof/retrofit older components of the Cuero Wastewater Treatment Plant subject to flooding.**

New Hydrologic or Hydraulic model? **Yes** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **De Witt** Watershed HUC# (if known) **12100204**

Drainage area (Square miles, est.) **0** Goal(s) **11000015, 11000016**

## 100-Year Flood Risk Summary

Population at risk **2** # of structures **4** Critical facilities **0**

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

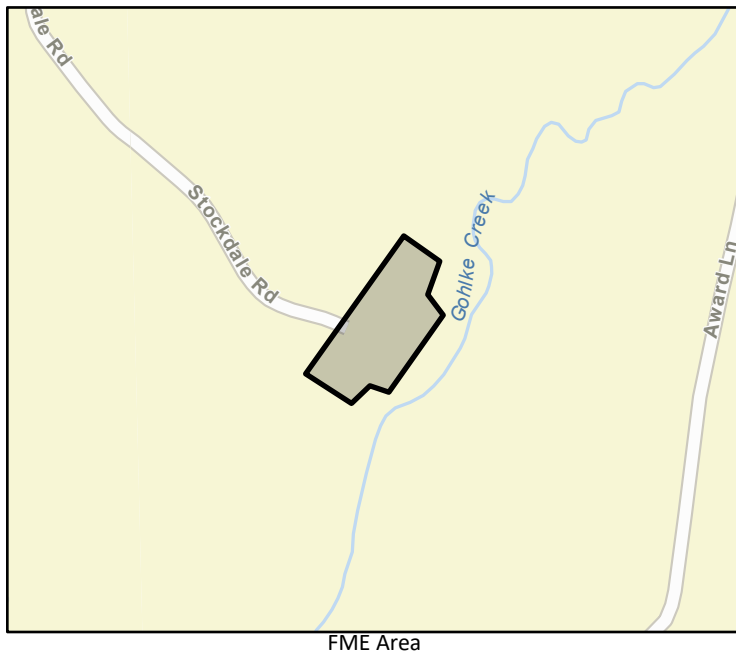
Farm/Ranch land impacted (acres) **2** Roadway(s) impacted (length) **0**

Number of low water crossings **0** Historical road closures **-**

## Estimated Cost and Funding Availability

Total Cost **\$100,000** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



# Flood Management Evaluation (FME)



Title **Dewitt County Drainage District Channel Improvements Project Planning**

ID# **111000104**

Sponsor (name of entity, not person) **Dewitt County Drainage District 1**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Project Planning**

Study description **Project planning for proposed project to install drop basket structure and reconstruct drainage channels to control flooding and erosion. Structure will assist in stabilizing banks and holding bottoms of channel on grade**

New Hydrologic or Hydraulic model? **Yes** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **De Witt** Watershed HUC# (if known) **12100202,12100204**

Drainage area (Square miles, est.) **7** Goal(s) **11000009, 11000010**

## 100-Year Flood Risk Summary

Population at risk **3,213** # of structures **1,991** Critical facilities **10**

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

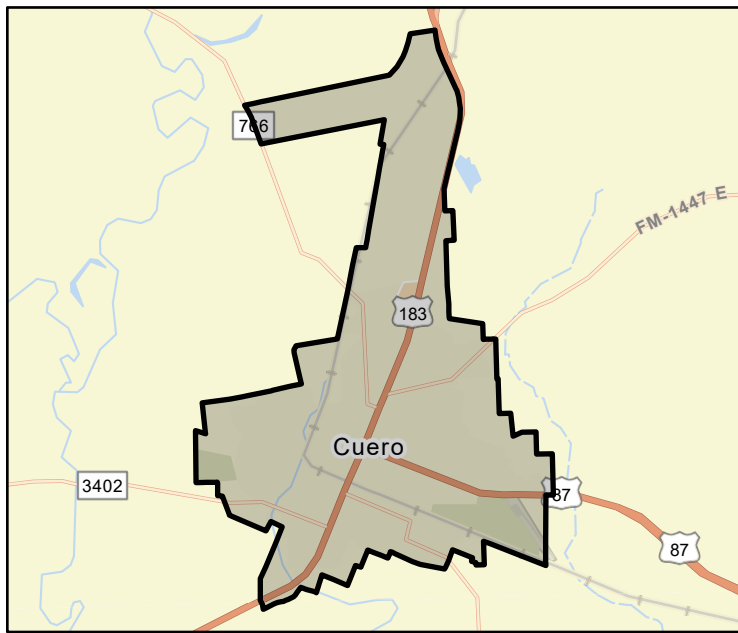
Farm/Ranch land impacted (acres) **116** Roadway(s) impacted (length) **35**

Number of low water crossings **2** Historical road closures **-**

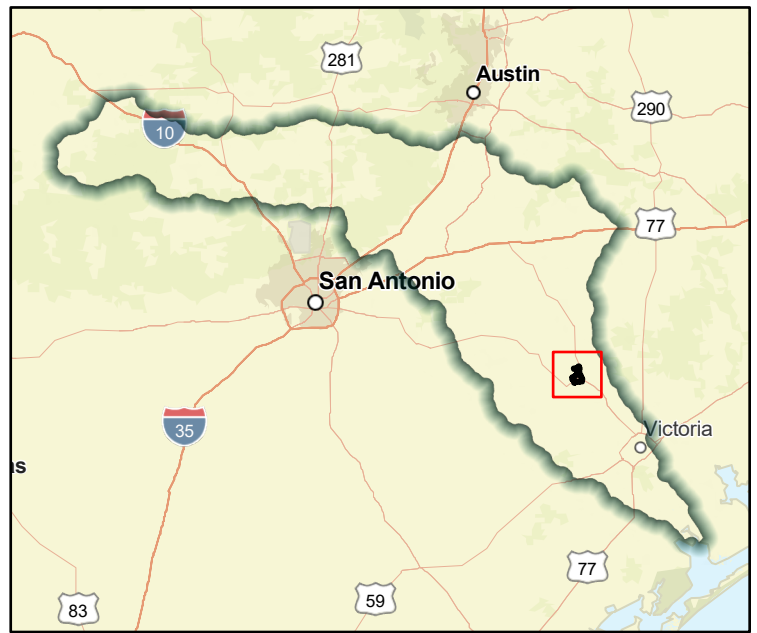
## Estimated Cost and Funding Availability

Total Cost **\$250,000** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



FME Area



Regional view of FME area

# Flood Management Evaluation (FME)



Title **DeWitt County (City of Nordheim) Flash Flood Mitigation Project Planning**

ID# **111000105**

Sponsor (name of entity, not person) **Nordheim (Municipality)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Project Planning**

Study description **Project planning for proposed project to construct necessary barriers or berms to reduce impact of runoff from flash floods onto neighborhoods, streams, and impacting community water wells from proposed Pilot Knob landfill.**

New Hydrologic or Hydraulic model? **Yes** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **De Witt** Watershed HUC# (if known) **12100204**

Drainage area (Square miles, est.) **0** Goal(s) **11000009, 11000010**

## 100-Year Flood Risk Summary

Population at risk **0** # of structures **0** Critical facilities **0**

Flood risk type: Riverine? **No** Coastal? **No** Local? **No** Playa? **No** Other? **No**

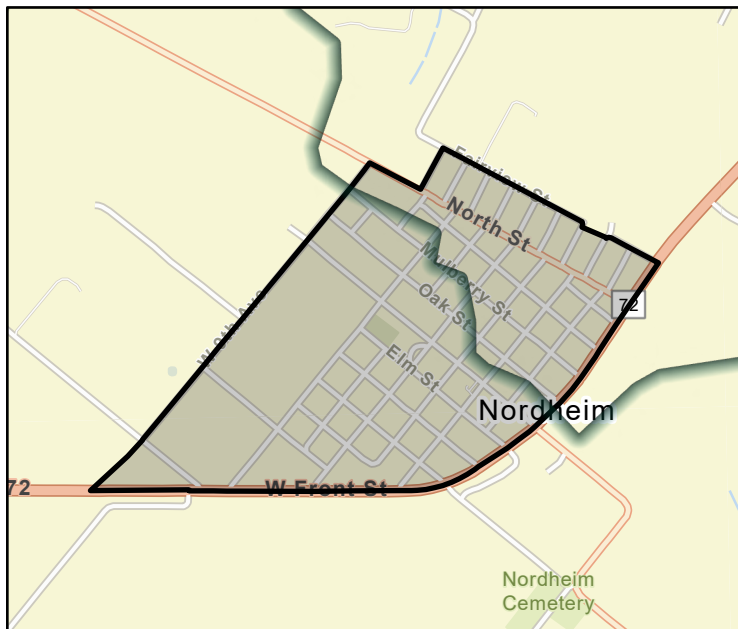
Farm/Ranch land impacted (acres) **0** Roadway(s) impacted (length) **0**

Number of low water crossings **0** Historical road closures **-**

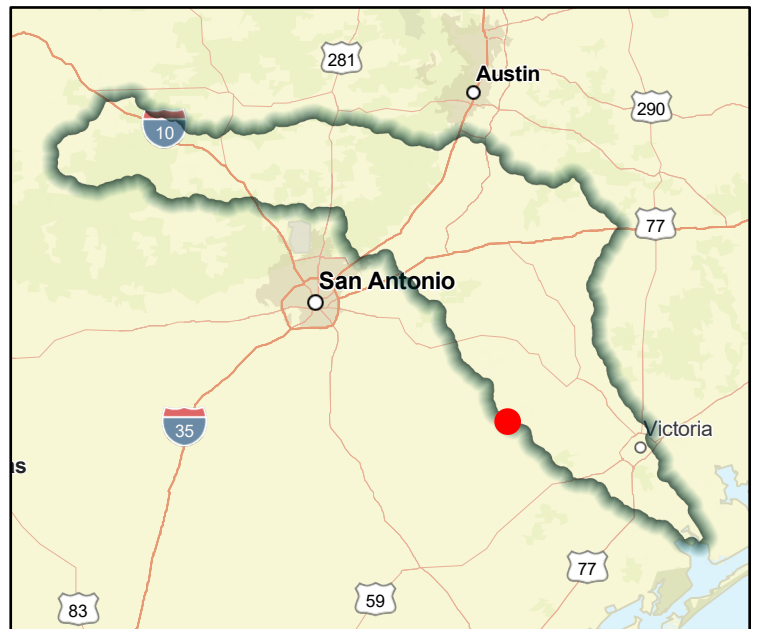
## Estimated Cost and Funding Availability

Total Cost **\$150,000** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



FME Area



Regional view of FME area

# Flood Management Evaluation (FME)



Title **Gillespie County Low Water Crossing Improvements Project Planning**

ID# **111000106**

Sponsor (name of entity, not person) **Gillespie (County)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Project Planning**

Study description **Project planning to place automatic warning signs at 35 documented low water crossings in the county**

New Hydrologic or Hydraulic model? **Yes** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Gillespie** Watershed HUC# (if known) **12100203,12100201**

Drainage area (Square miles, est.) **1,057** Goal(s) **11000001, 11000002**

## 100-Year Flood Risk Summary

Population at risk **22** # of structures **8** Critical facilities **0**

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

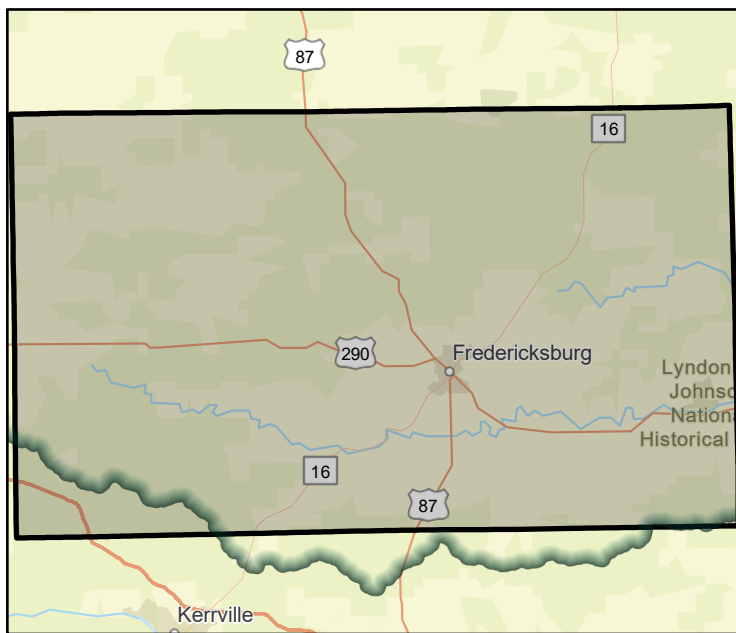
Farm/Ranch land impacted (acres) **348** Roadway(s) impacted (length) **0**

Number of low water crossings **0** Historical road closures **-**

## Estimated Cost and Funding Availability

Total Cost **\$50,000** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



FME Area



Regional view of FME area

# Flood Management Evaluation (FME)



Title **Gonzales County Voluntary Buyout Program Project Planning**

ID# **111000107**

Sponsor (name of entity, not person) **Gillespie (County)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Project Planning**

Study description **Project planning to develop and implement a program to buyout NFIP repetitive loss properties.**

New Hydrologic or Hydraulic model? **Yes** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Gonzales** Watershed HUC# (if known) **12100203,12100201**

Drainage area (Square miles, est.) **1,067** Goal(s) **11000009, 11000010**

## 100-Year Flood Risk Summary

Population at risk **2,086** # of structures **1,649** Critical facilities **4**

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

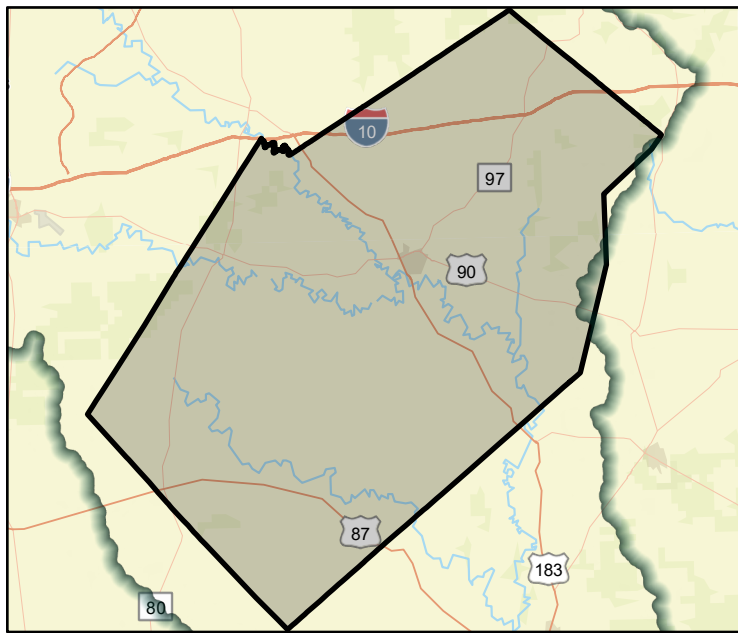
Farm/Ranch land impacted (acres) **101,450** Roadway(s) impacted (length) **124**

Number of low water crossings **55** Historical road closures **-**

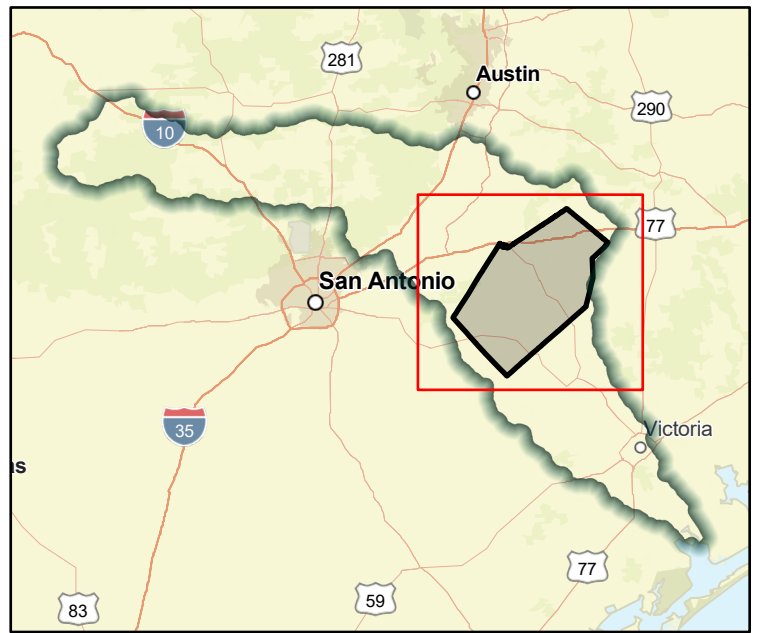
## Estimated Cost and Funding Availability

Total Cost **\$150,000** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



FME Area



Regional view of FME area



# Flood Management Evaluation (FME)



Title **GBRA FEMA Cooperating Technical Partners (CTP) Modeling and Mapping**

ID# **111000108**

Sponsor (name of entity, not person) **Guadalupe-Blanco River Authority**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Watershed Planning**

Study description **GBRA has entered into a partnership with FEMA by which GBRA commissions an engineering firm to perform flood inundation modeling and mapping, and dams in series modeling.**

New Hydrologic or Hydraulic model? **Yes** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Bandera,Bastrop,Blanco,Caldwell,Calhoun,** Watershed HUC# (if known) **12100203,12100201**

Drainage area (Square miles, est.) **7,876** Goal(s) **11000009, 11000010**

## 100-Year Flood Risk Summary

Population at risk **55,779** # of structures **22,831** Critical facilities **126**

Flood risk type: Riverine? **Yes** Coastal? **Yes** Local? **No** Playa? **No** Other? **No**

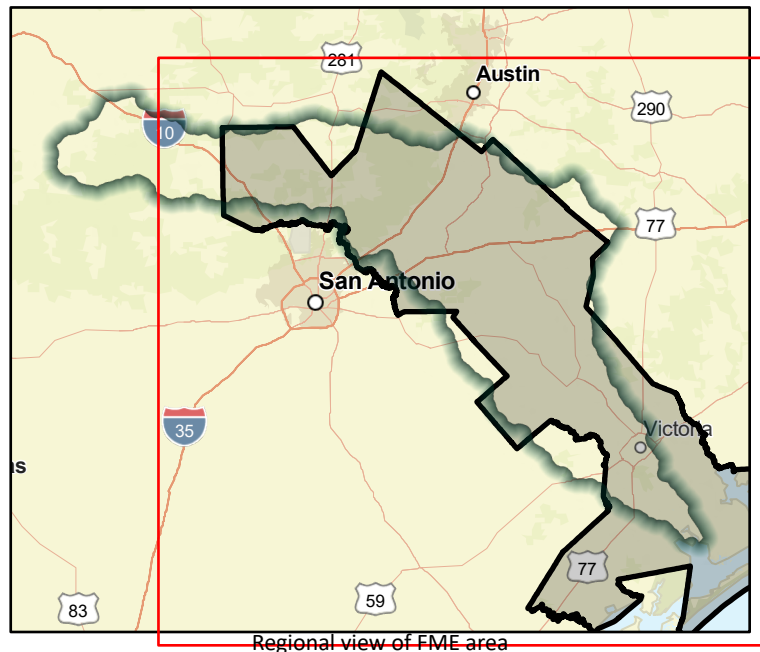
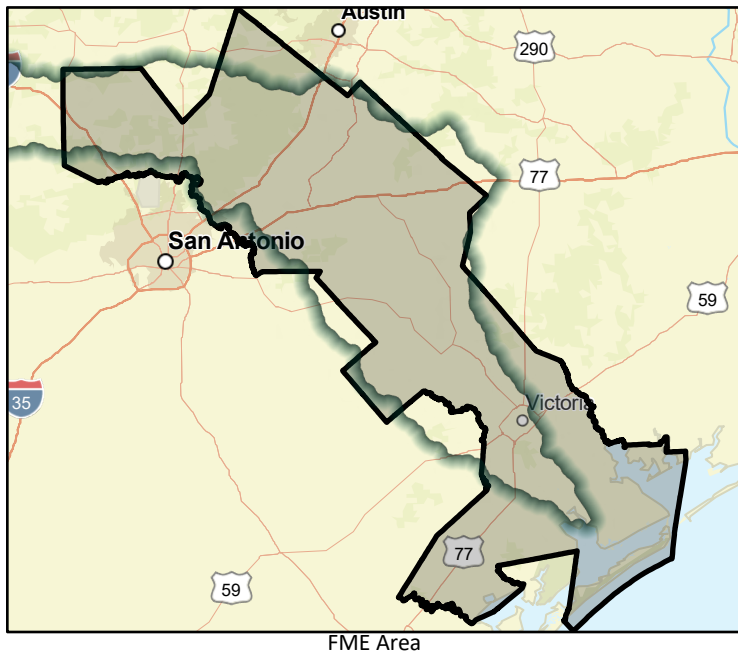
Farm/Ranch land impacted (acres) **304,947** Roadway(s) impacted (length) **767**

Number of low water crossings **467** Historical road closures **-**

## Estimated Cost and Funding Availability

Total Cost **\$250,000** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



# Flood Management Evaluation (FME)



Title **Guadalupe County Drainage Improvements Study**

ID# **111000109**

Sponsor (name of entity, not person) **Guadalupe (County)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Watershed Planning**

Study description **Study of solutions to upgrade undersized stormwater drains and culverts.**

New Hydrologic or Hydraulic model? **Yes** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Guadalupe** Watershed HUC# (if known) **12100202,12100203**

Drainage area (Square miles, est.) **713** Goal(s) **11000009, 11000010**

## 100-Year Flood Risk Summary

Population at risk **14,109** # of structures **5,822** Critical facilities **14**

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

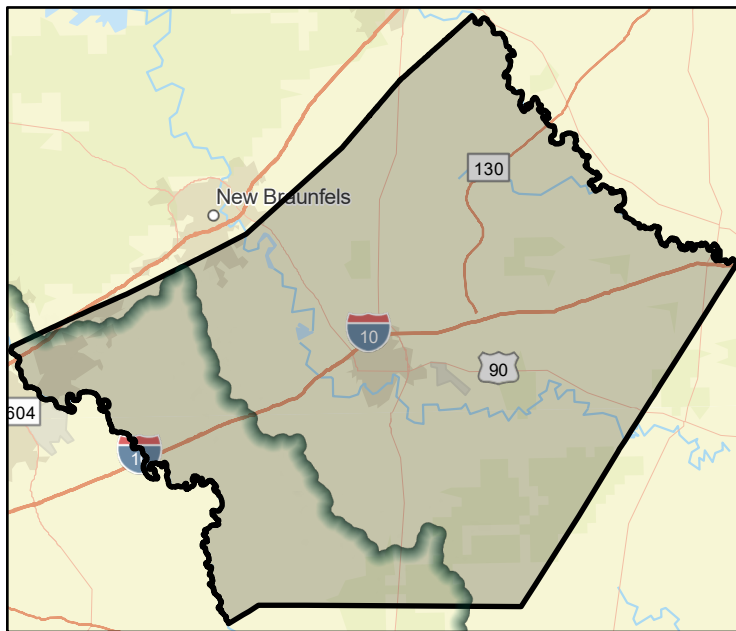
Farm/Ranch land impacted (acres) **25,477** Roadway(s) impacted (length) **117**

Number of low water crossings **130** Historical road closures **-**

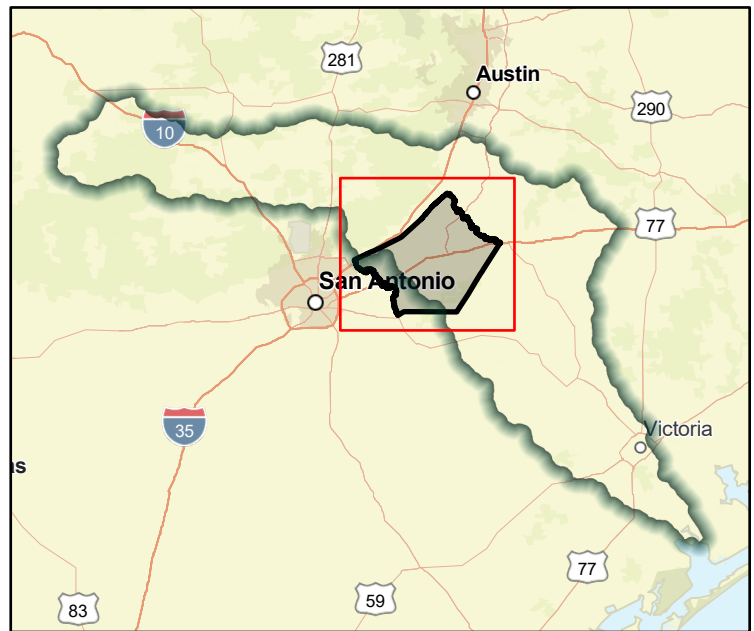
## Estimated Cost and Funding Availability

Total Cost **\$3,000,000** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



FME Area



Regional view of FME area

# Flood Management Evaluation (FME)



Title **Guadalupe County Voluntary Buyout Program Project Planning**

ID# **111000110**

Sponsor (name of entity, not person) **Guadalupe (County)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Project Planning**

Study description **Project planning to develop a land acquisition program in flood hazard areas. Acquire and demolish repetitive loss properties. Acquire high risk vacant land and maintain as open space.**

New Hydrologic or Hydraulic model? **Yes** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Guadalupe** Watershed HUC# (if known) **12100202,12100203**

Drainage area (Square miles, est.) **713** Goal(s) **11000009, 11000010**

## 100-Year Flood Risk Summary

Population at risk **14,109** # of structures **5,822** Critical facilities **14**

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

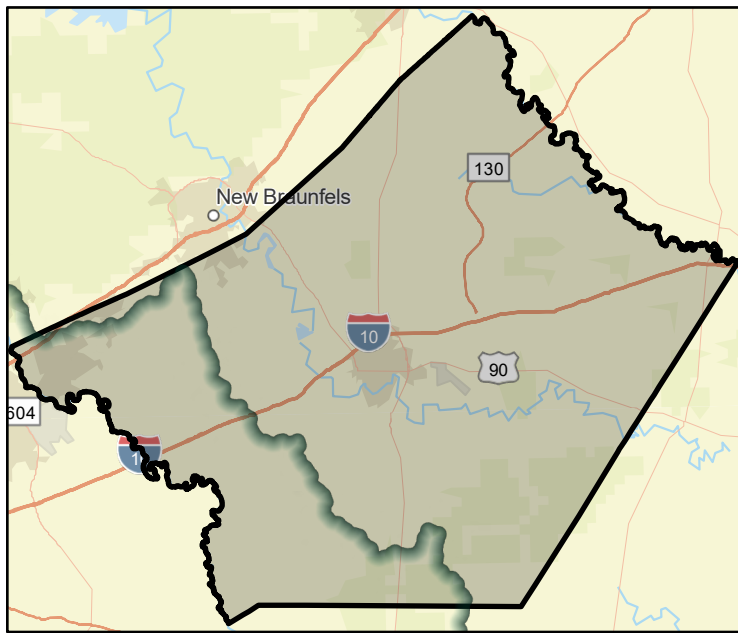
Farm/Ranch land impacted (acres) **25,477** Roadway(s) impacted (length) **117**

Number of low water crossings **130** Historical road closures **-**

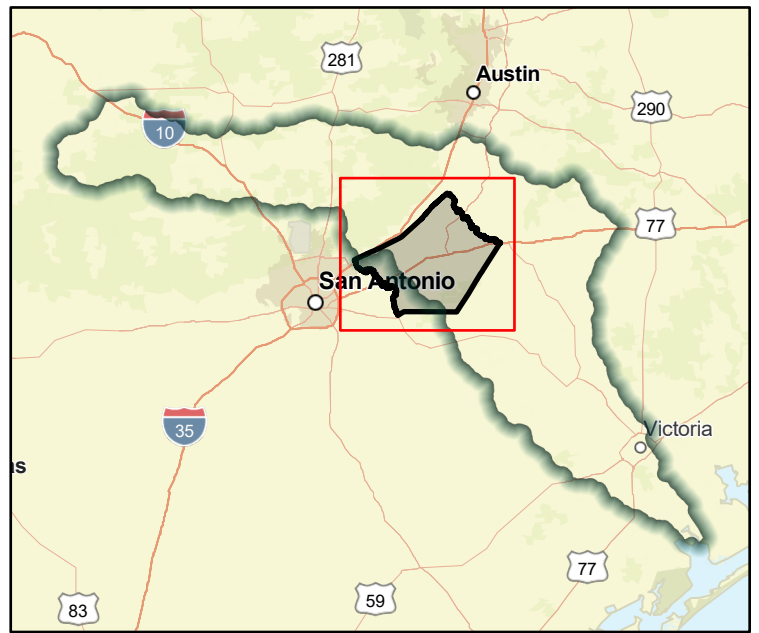
## Estimated Cost and Funding Availability

Total Cost **\$150,000** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



FME Area



Regional view of FME area

# Flood Management Evaluation (FME)



Title **Guadalupe County LWC Project Planning**

ID# **111000111**

Sponsor (name of entity, not person) **Guadalupe (County)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Project Planning**

Study description **Project planning for proposed project to mark and place electric gates at low water crossings.**

New Hydrologic or Hydraulic model? **Yes** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Guadalupe** Watershed HUC# (if known) **12100202,12100203**

Drainage area (Square miles, est.) **713** Goal(s) **11000001, 11000002**

## 100-Year Flood Risk Summary

Population at risk **14,109** # of structures **5,822** Critical facilities **14**

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

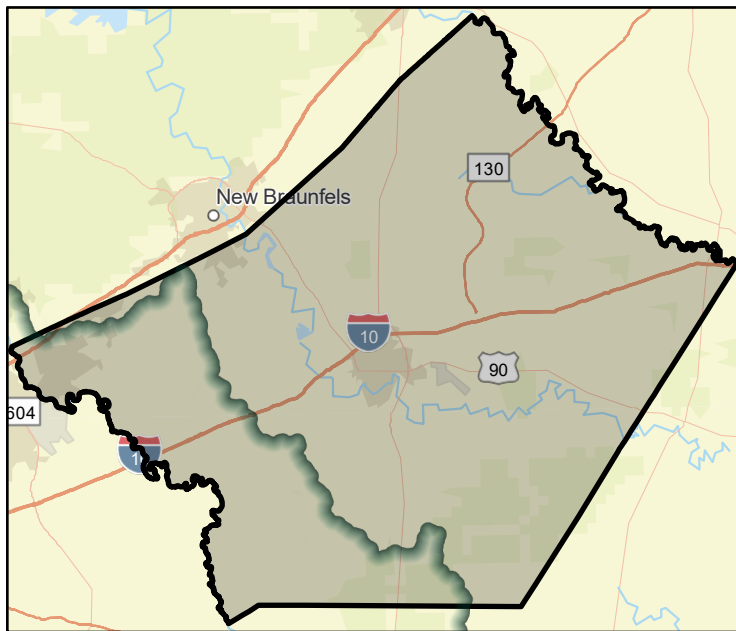
Farm/Ranch land impacted (acres) **25,477** Roadway(s) impacted (length) **117**

Number of low water crossings **130** Historical road closures **-**

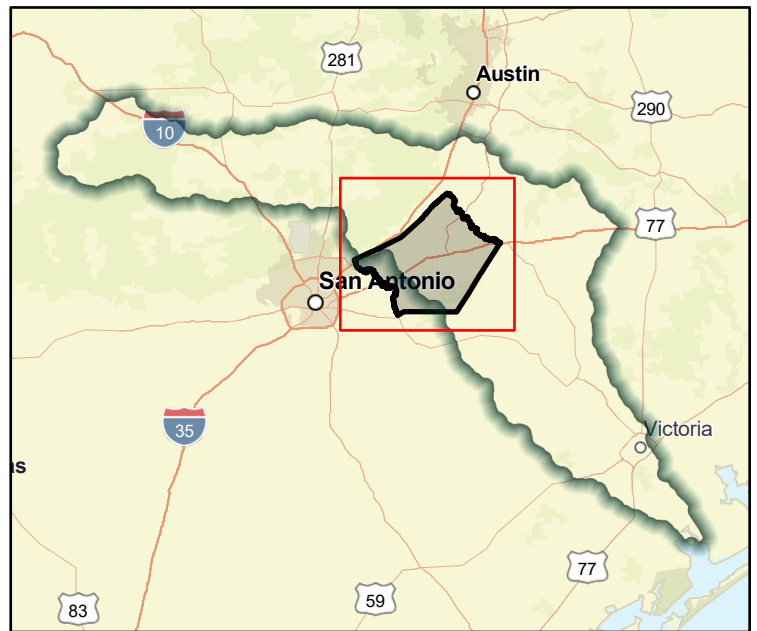
## Estimated Cost and Funding Availability

Total Cost **\$2,000,000** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



FME Area



Regional view of FME area

# Flood Management Evaluation (FME)



Title **Hays County Dam Inundation Maps**

ID# **111000112**

Sponsor (name of entity, not person) **Hays (County)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Preparedness**

Study description **Conduct study and work with TCEQ to continue to develop inundation maps for all High Hazard dams.**

New Hydrologic or Hydraulic model? **Yes** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Hays** Watershed HUC# (if known) **12100203**

Drainage area (Square miles, est.) **676** Goal(s) **11000009, 11000010**

## 100-Year Flood Risk Summary

Population at risk **17,721** # of structures **4,359** Critical facilities **15**

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

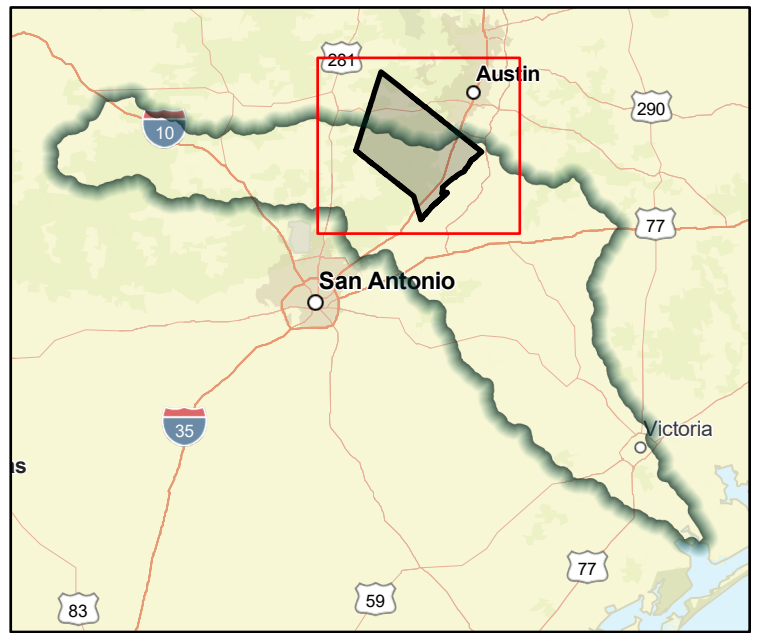
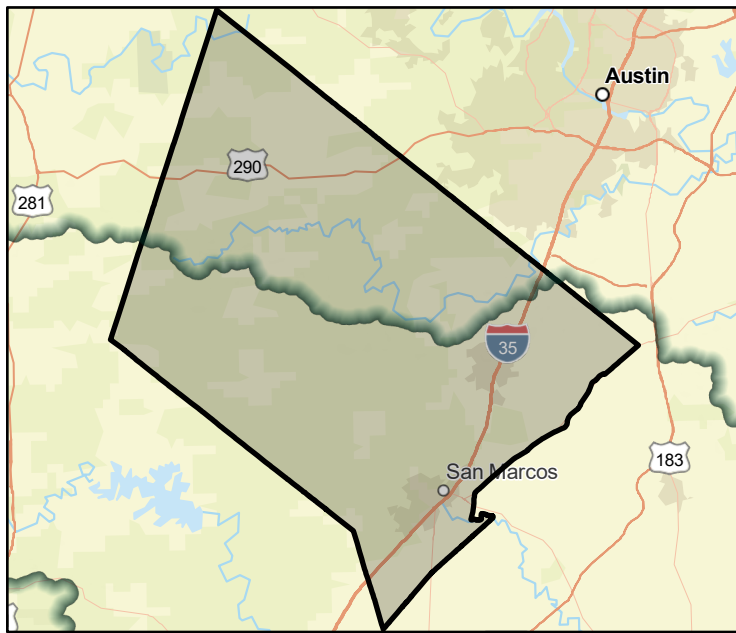
Farm/Ranch land impacted (acres) **10,537** Roadway(s) impacted (length) **100**

Number of low water crossings **117** Historical road closures **-**

## Estimated Cost and Funding Availability

Total Cost **\$500,000** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



# Flood Management Evaluation (FME)



Title **Hays County Harden Critical Infrastructure Project Planning**

ID# **111000113**

Sponsor (name of entity, not person) **Hays (County)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Project Planning**

Study description **Project planning to ensure new structures are structurally reinforced against natural hazards. To include, flood-proofing (if needed), freeboard, higher levels of soil compaction and proper perimeter drainage systems.**

New Hydrologic or Hydraulic model? **Yes** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Hays** Watershed HUC# (if known) **12100203**

Drainage area (Square miles, est.) **676** Goal(s) **11000015, 11000016**

## 100-Year Flood Risk Summary

Population at risk **17,721** # of structures **4,359** Critical facilities **15**

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

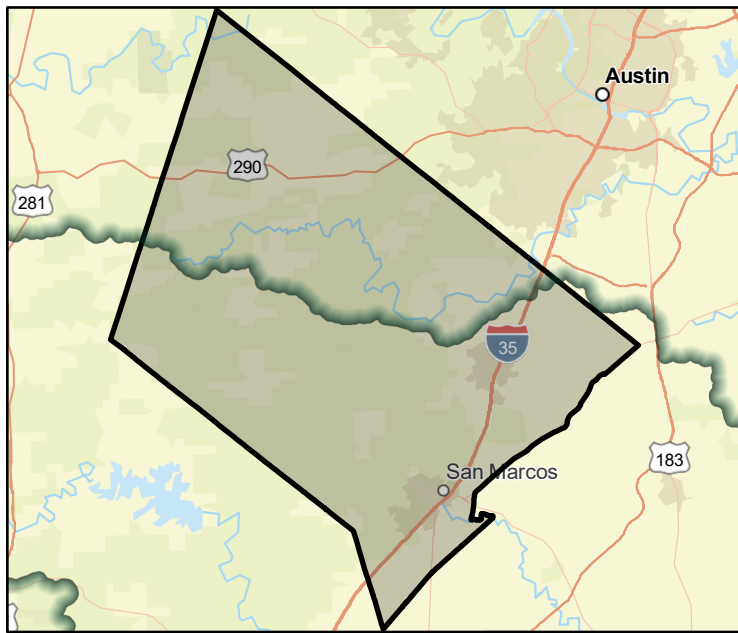
Farm/Ranch land impacted (acres) **10,537** Roadway(s) impacted (length) **100**

Number of low water crossings **117** Historical road closures **-**

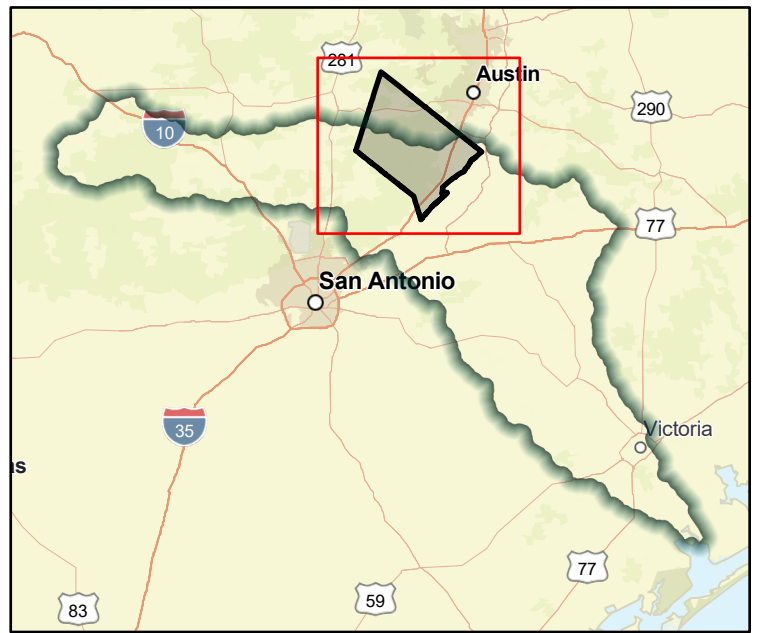
## Estimated Cost and Funding Availability

Total Cost **\$100,000** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



FME Area



Regional view of FME area

# Flood Management Evaluation (FME)



Title **Hays County Drainage Project Planning (Willow Springs Creek between McCarty Lane and Hunter Road)**

ID# **111000114**

Sponsor (name of entity, not person) **Hays (County)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Project Planning**

Study description **Project planning for channel improvement and/or property acquisition project to reduce flood damages along Willow Springs Creek from McCarty Lane to Hunter Road.**

New Hydrologic or Hydraulic model? **Yes** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Hays** Watershed HUC# (if known) **12100203**

Drainage area (Square miles, est.) **1** Goal(s) **11000009, 11000010**

## 100-Year Flood Risk Summary

Population at risk **3** # of structures **4** Critical facilities **0**

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

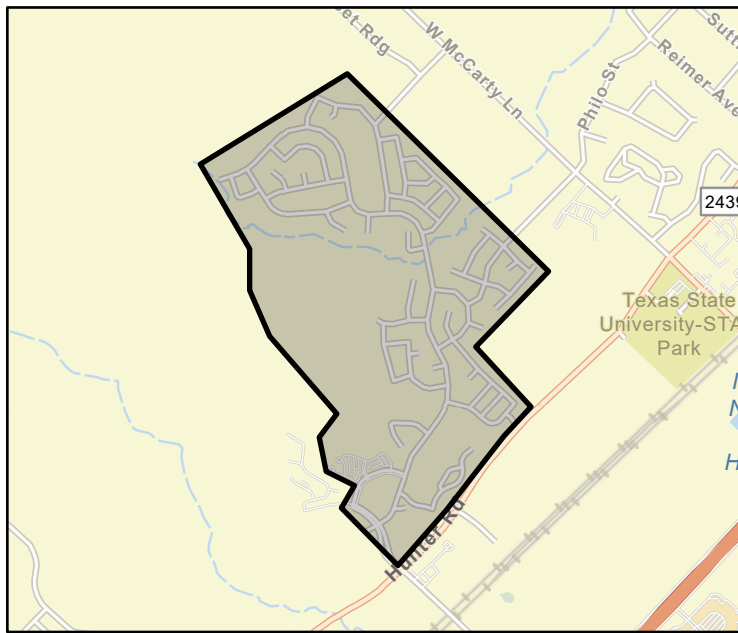
Farm/Ranch land impacted (acres) **0** Roadway(s) impacted (length) **0**

Number of low water crossings **0** Historical road closures **-**

## Estimated Cost and Funding Availability

Total Cost **\$800,000** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



FME Area



Regional view of FME area

# Flood Management Evaluation (FME)



Title **Hays County Drainage Project Planning (Willow Springs Creek between Hunter Rd and the Railroad)**

ID# **111000115**

Sponsor (name of entity, not person) **Hays (County)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Project Planning**

Study description **Project planning for detention project to reduce flood damages along Willow Springs Creek from Hunter Road to the railroad.**

New Hydrologic or Hydraulic model? **Yes** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Hays** Watershed HUC# (if known) **12100203**

Drainage area (Square miles, est.) **0** Goal(s) **11000009, 11000010**

## 100-Year Flood Risk Summary

Population at risk **8** # of structures **3** Critical facilities **0**

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

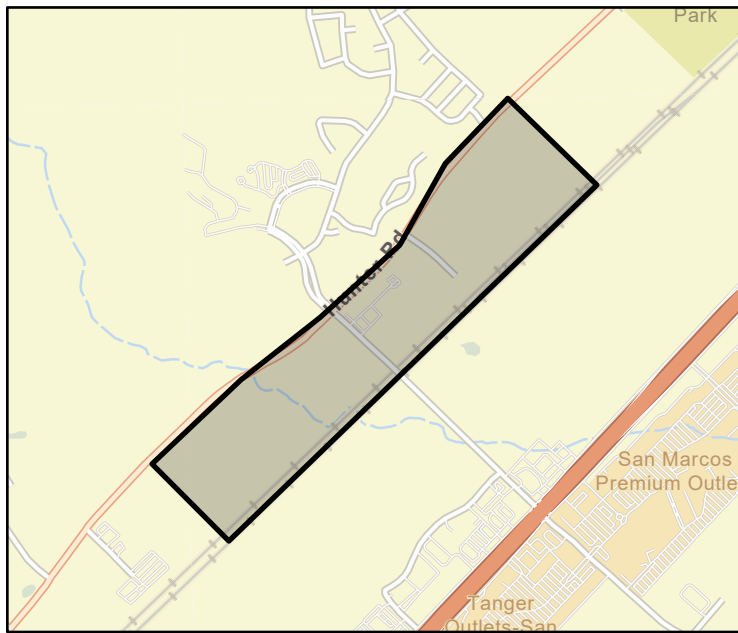
Farm/Ranch land impacted (acres) **8** Roadway(s) impacted (length) **0**

Number of low water crossings **0** Historical road closures **-**

## Estimated Cost and Funding Availability

Total Cost **\$1,200,000** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



FME Area



Regional view of FME area



# Flood Management Evaluation (FME)



Title **Hays County Southeastern Property Acquisition Project Planning**

ID# **111000116**

Sponsor (name of entity, not person) **Hays (County)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Project Planning**

Study description **Project planning for property acquisition project to mitigate repetitive loss flooding where drainage projects were analyzed and deemed ineffective for cost/ benefit reasons in southeastern Hays County.**

New Hydrologic or Hydraulic model? **Yes** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Hays** Watershed HUC# (if known) **12100202,12100203**

Drainage area (Square miles, est.) **49** Goal(s) **11000009, 11000010**

## 100-Year Flood Risk Summary

Population at risk **6,688** # of structures **1,420** Critical facilities **12**

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

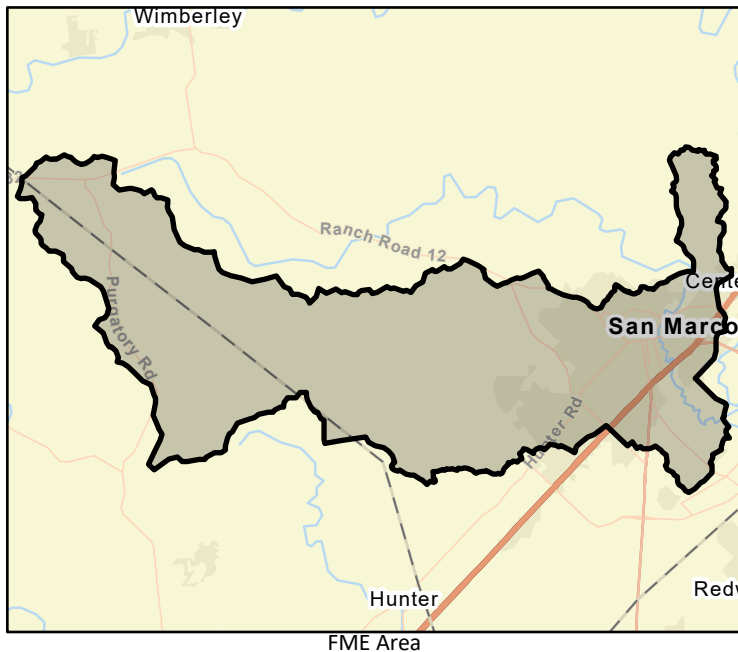
Farm/Ranch land impacted (acres) **1,058** Roadway(s) impacted (length) **25**

Number of low water crossings **14** Historical road closures **-**

## Estimated Cost and Funding Availability

Total Cost **\$800,000** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



# Flood Management Evaluation (FME)



Title **Hays County Community Flood Mitigation Project Planning**

ID# **111000118**

Sponsor (name of entity, not person) **Hays (County)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Project Planning**

Study description **Hays County Community Flood Mitigation Project Planning**

New Hydrologic or Hydraulic model? **Yes** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Hays** Watershed HUC# (if known) **12100203**

Drainage area (Square miles, est.) **676** Goal(s) **11000009, 11000010**

## 100-Year Flood Risk Summary

Population at risk **17,721** # of structures **4,359** Critical facilities **15**

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

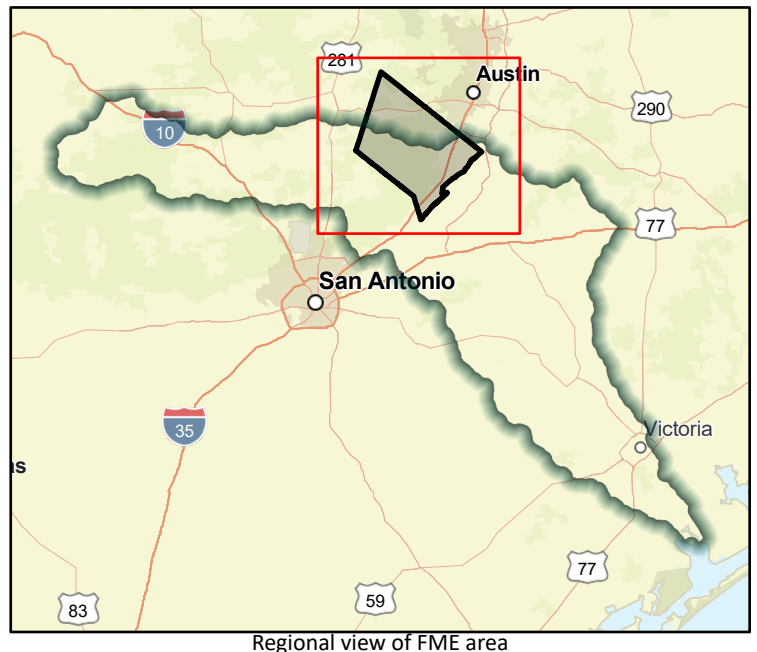
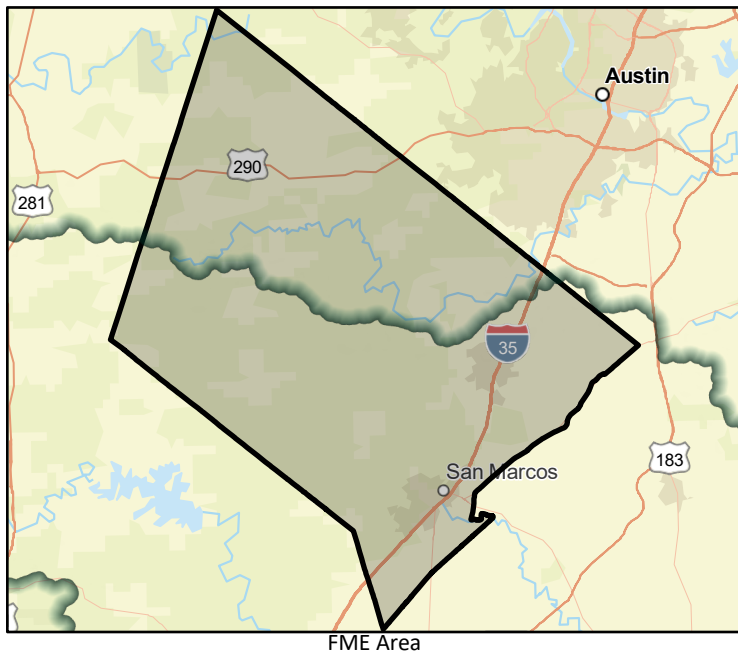
Farm/Ranch land impacted (acres) **10,537** Roadway(s) impacted (length) **100**

Number of low water crossings **117** Historical road closures **-**

## Estimated Cost and Funding Availability

Total Cost **\$238,035** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



# Flood Management Evaluation (FME)



Title **Hunts ISD Storm Drainage Infrastructure Project Planning**

ID# **111000119**

Sponsor (name of entity, not person) **Hunt ISD**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Project Planning**

Study description **Project planning to construct new storm drainage infrastructure to reduce the potential impacts of future flood events.**

New Hydrologic or Hydraulic model? **Yes** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Kerr** Watershed HUC# (if known) **12100201**

Drainage area (Square miles, est.) **174** Goal(s) **11000009, 11000010**

## 100-Year Flood Risk Summary

Population at risk **744** # of structures **629** Critical facilities **1**

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

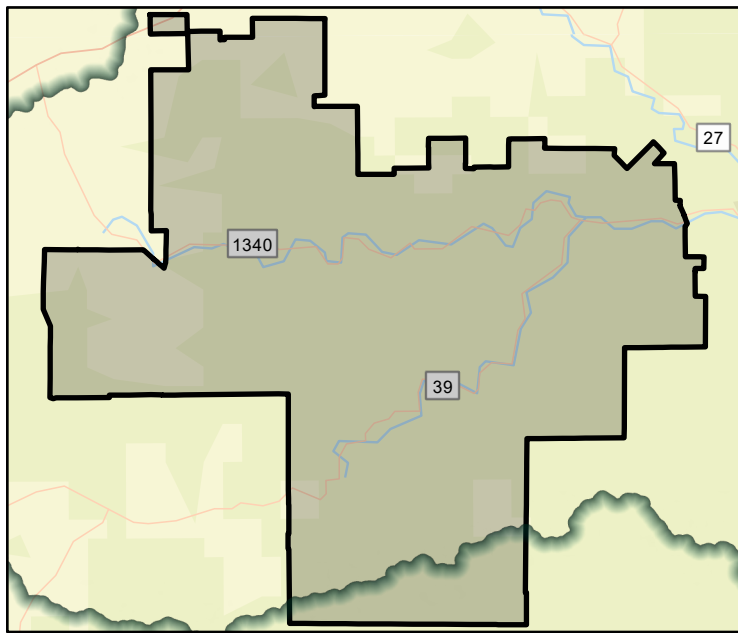
Farm/Ranch land impacted (acres) **5,502** Roadway(s) impacted (length) **26**

Number of low water crossings **41** Historical road closures **-**

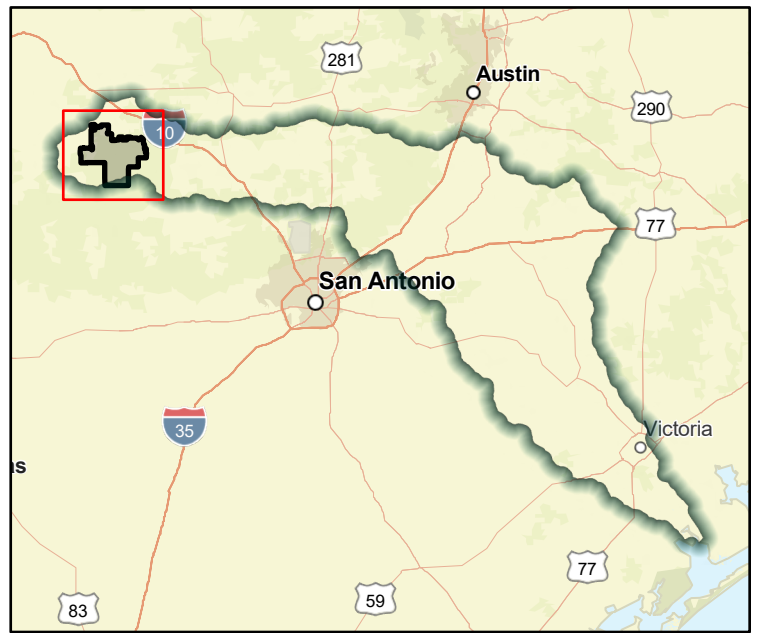
## Estimated Cost and Funding Availability

Total Cost **\$100,000** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



FME Area



Regional view of FME area

# Flood Management Evaluation (FME)



Title **Ingram ISD Construct New Storm Drainage Infrastructure**

ID# **111000120**

Sponsor (name of entity, not person) **Ingram ISD**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Project Planning**

Study description **Project planning to construct new storm drainage infrastructure to reduce the potential impacts of future flood events.**

New Hydrologic or Hydraulic model? **Yes** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Kerr** Watershed HUC# (if known) **12100201**

Drainage area (Square miles, est.) **208** Goal(s) **11000009, 11000010**

## 100-Year Flood Risk Summary

Population at risk **844** # of structures **606** Critical facilities **1**

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

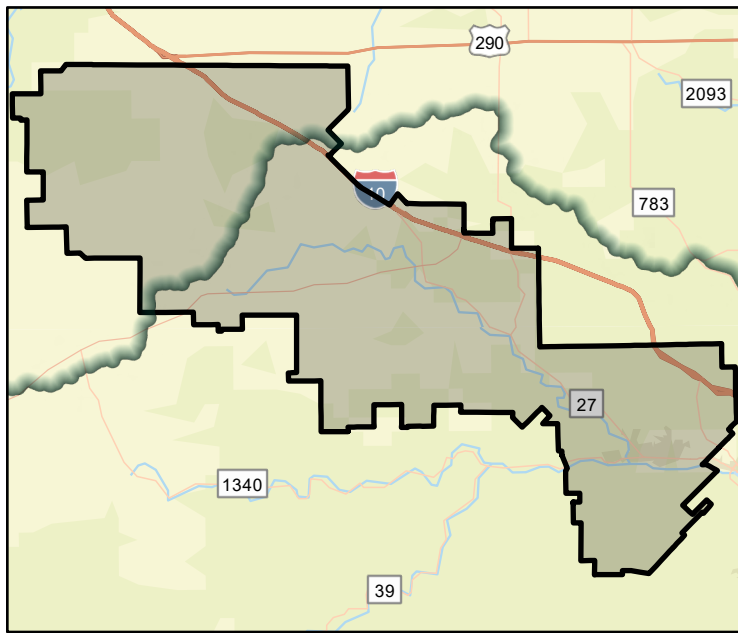
Farm/Ranch land impacted (acres) **4,971** Roadway(s) impacted (length) **19**

Number of low water crossings **24** Historical road closures **-**

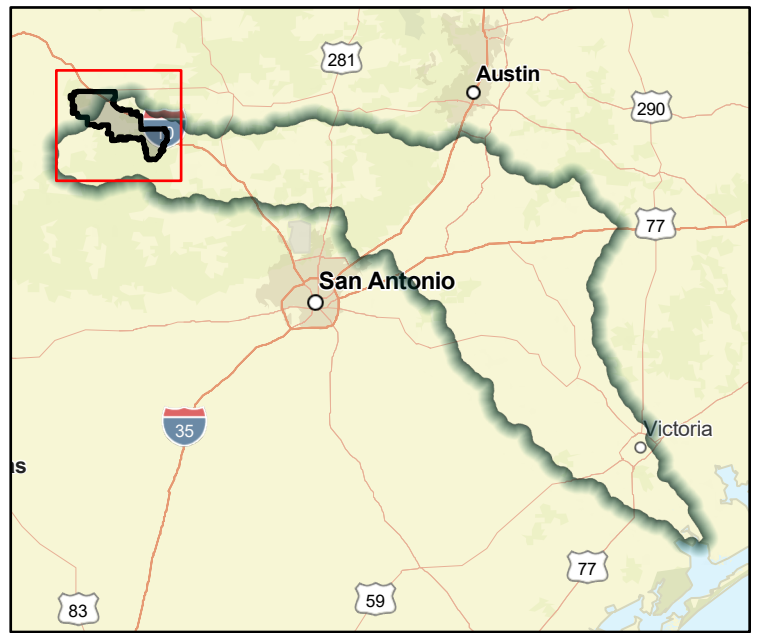
## Estimated Cost and Funding Availability

Total Cost **\$100,000** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



FME Area



Regional view of FME area

# Flood Management Evaluation (FME)



Title **Ingram ISD Improve Existing Storm Drainage Infrastructure**

ID# **111000121**

Sponsor (name of entity, not person) **Ingram ISD**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Project Planning**

Study description **Project planning to upgrade existing storm drainage infrastructure to reduce the potential impacts of future flood events.**

New Hydrologic or Hydraulic model? **Yes** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Kerr** Watershed HUC# (if known) **12100201**

Drainage area (Square miles, est.) **208** Goal(s) **11000009, 11000010**

## 100-Year Flood Risk Summary

Population at risk **844** # of structures **606** Critical facilities **1**

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

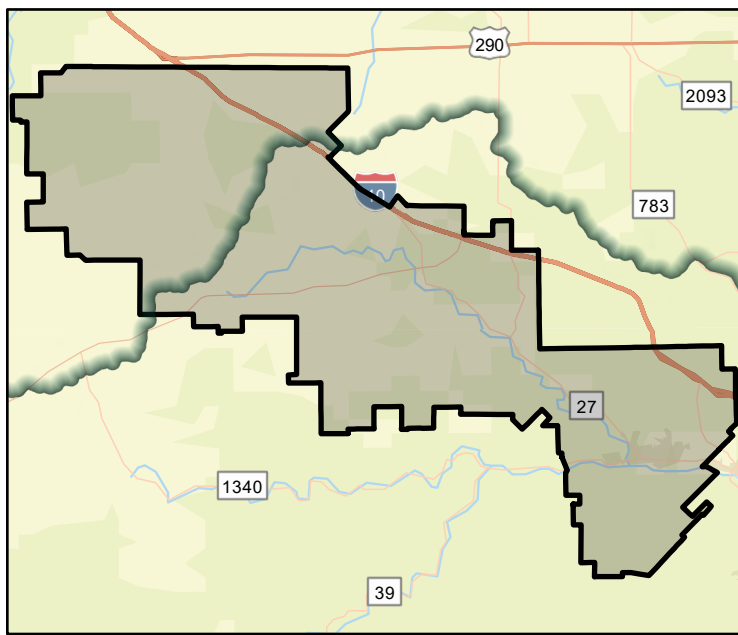
Farm/Ranch land impacted (acres) **4,971** Roadway(s) impacted (length) **19**

Number of low water crossings **24** Historical road closures **-**

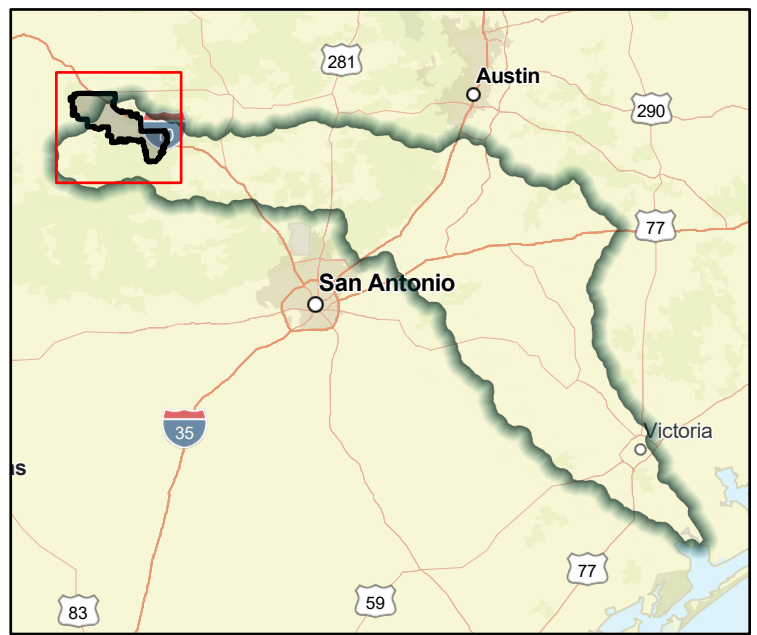
## Estimated Cost and Funding Availability

Total Cost **\$100,000** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



FME Area



Regional view of FME area

# Flood Management Evaluation (FME)



Title **Kerr County Center Point Storm Drainage Infrastructure Project Planning**

ID# **111000122**

Sponsor (name of entity, not person) **Kerr (County)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Project Planning**

Study description **Project planning to construct new storm drainage infrastructure to reduce the potential impacts of future flood events.**

New Hydrologic or Hydraulic model? **Yes** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Kerr** Watershed HUC# (if known) **12100201**

Drainage area (Square miles, est.) **1,103** Goal(s) **11000009, 11000010**

## 100-Year Flood Risk Summary

Population at risk **7,415** # of structures **3,833** Critical facilities **6**

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

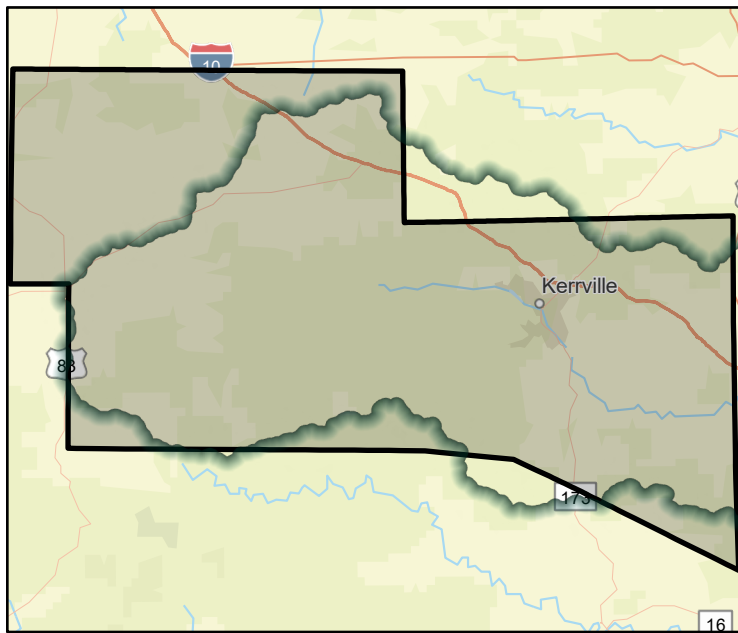
Farm/Ranch land impacted (acres) **28,070** Roadway(s) impacted (length) **124**

Number of low water crossings **158** Historical road closures **-**

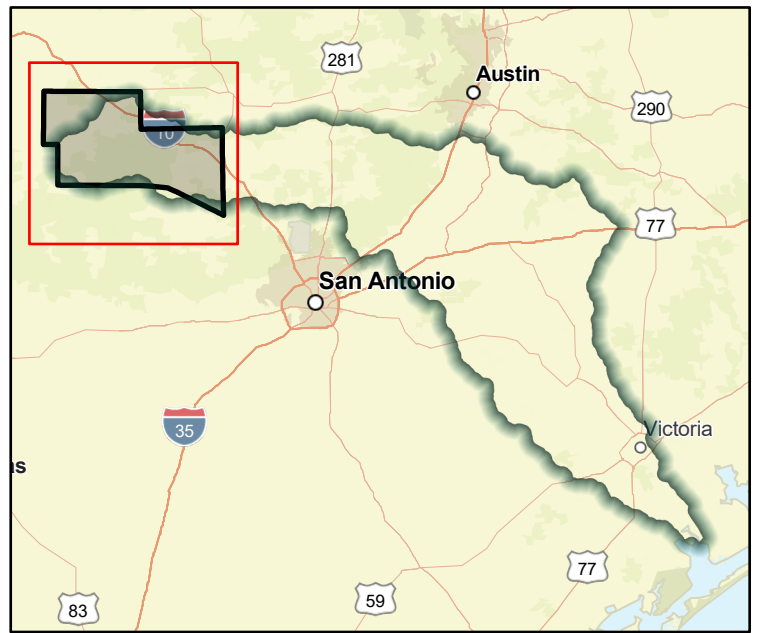
## Estimated Cost and Funding Availability

Total Cost **\$125,000** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



FME Area



Regional view of FME area

# Flood Management Evaluation (FME)



Title **Kerr County Dam Integrity Study**

ID# **111000123**

Sponsor (name of entity, not person) **Kerr (County)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Preparedness**

Study description **Create a dam integrity study and identify repairs to be made to County dams as necessary.**

New Hydrologic or Hydraulic model? **Yes** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Kerr** Watershed HUC# (if known) **12100201**

Drainage area (Square miles, est.) **1,103** Goal(s) **11000009, 11000010**

## 100-Year Flood Risk Summary

Population at risk **7,415** # of structures **3,833** Critical facilities **6**

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

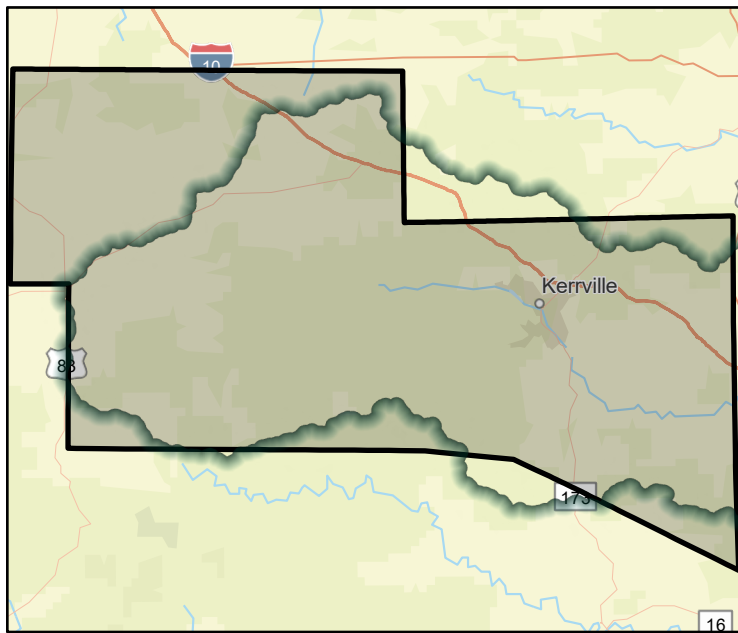
Farm/Ranch land impacted (acres) **28,070** Roadway(s) impacted (length) **124**

Number of low water crossings **158** Historical road closures **-**

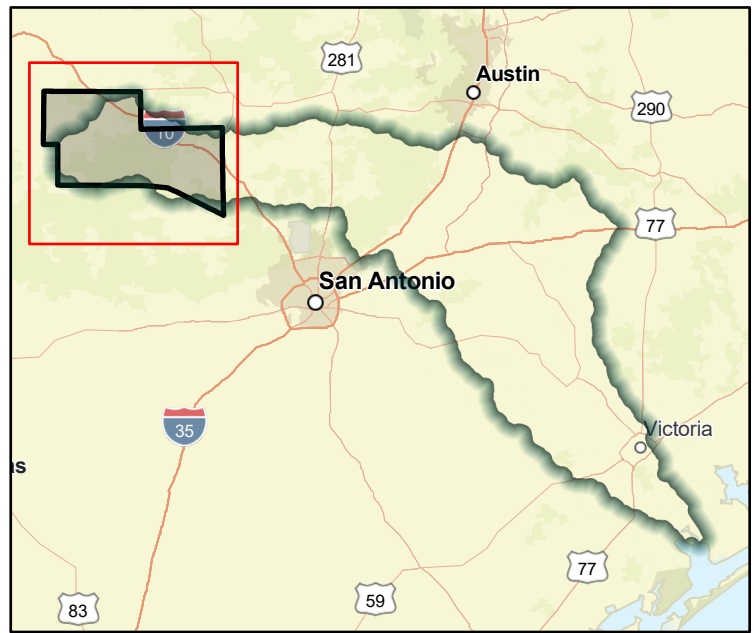
## Estimated Cost and Funding Availability

Total Cost **\$500,000** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



FME Area



Regional view of FME area

# Flood Management Evaluation (FME)



Title **Kerr ISD Storm Drainage Infrastructure Project Planning**

ID# **111000124**

Sponsor (name of entity, not person) **Kerrville ISD**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Project Planning**

Study description **Project planning for proposed project to construct new storm drainage infrastructure to reduce the potential impacts of future flood events.**

New Hydrologic or Hydraulic model? **Yes** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Kerr** Watershed HUC# (if known) **12100201**

Drainage area (Square miles, est.) **165** Goal(s) **11000009, 11000010**

## 100-Year Flood Risk Summary

Population at risk **6,355** # of structures **1,968** Critical facilities **4**

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

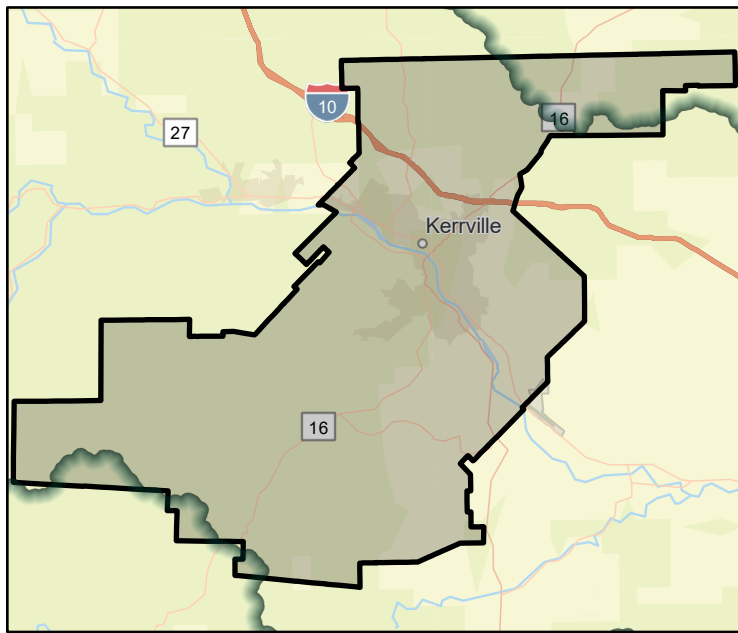
Farm/Ranch land impacted (acres) **2,782** Roadway(s) impacted (length) **41**

Number of low water crossings **43** Historical road closures **-**

## Estimated Cost and Funding Availability

Total Cost **\$100,000** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



FME Area



Regional view of FME area



# Flood Management Evaluation (FME)



Title **Travis County Voluntary Buyout Program Project Planning**

ID# **111000126**

Sponsor (name of entity, not person) **Travis (County)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Project Planning**

Study description **Project planning to identify and prioritize structures for elevation as flood mitigation. Elevate flood prone structures throughout unincorporated Travis County.**

New Hydrologic or Hydraulic model? **Yes** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Travis** Watershed HUC# (if known) **12100203**

Drainage area (Square miles, est.) **1,021** Goal(s) **11000009, 11000010**

## 100-Year Flood Risk Summary

Population at risk **18** # of structures **7** Critical facilities **0**

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

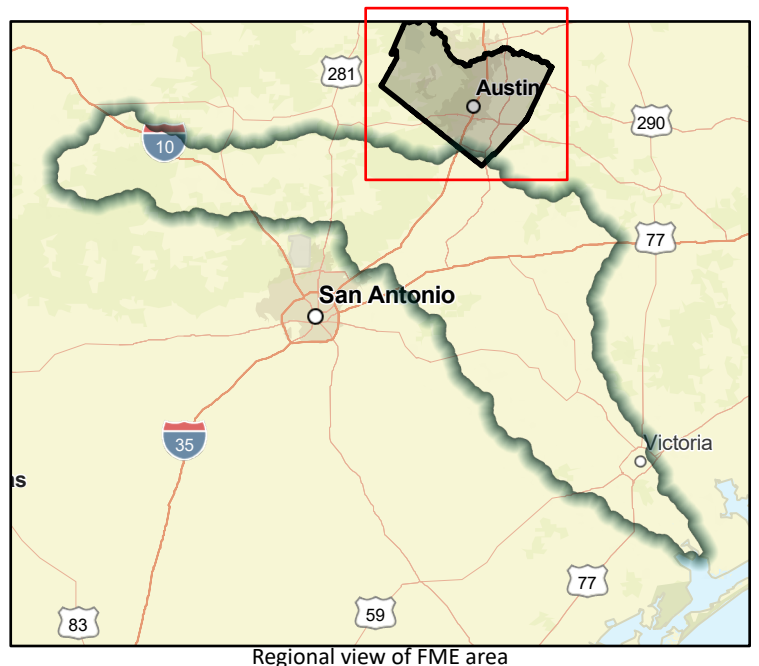
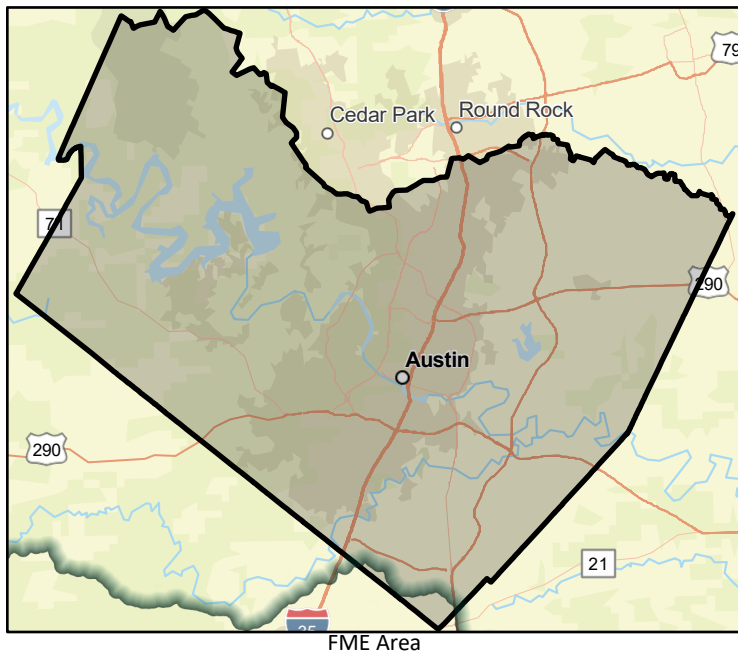
Farm/Ranch land impacted (acres) **99** Roadway(s) impacted (length) **0**

Number of low water crossings **1** Historical road closures **-**

## Estimated Cost and Funding Availability

Total Cost **\$300,000** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



# Flood Management Evaluation (FME)



Title **Upper Guadalupe River Authority Evaluation of Water and Sediment Control Facilities**

ID# **111000127**

Sponsor (name of entity, not person) **Upper Guadalupe River Authority**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Watershed Planning**

Study description **Study to evaluate the flood benefits and cost-effectiveness of UGRA's existing nine Kerr County facilities. Evaluation would include H&H modeling and financial data to determine flood risk reduction. Results could guide decisions on future facilities.**

New Hydrologic or Hydraulic model? **Yes** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Kerr** Watershed HUC# (if known) **12100201**

Drainage area (Square miles, est.) **1,103** Goal(s) **11000009, 11000010**

## 100-Year Flood Risk Summary

Population at risk **7,415** # of structures **3,833** Critical facilities **6**

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

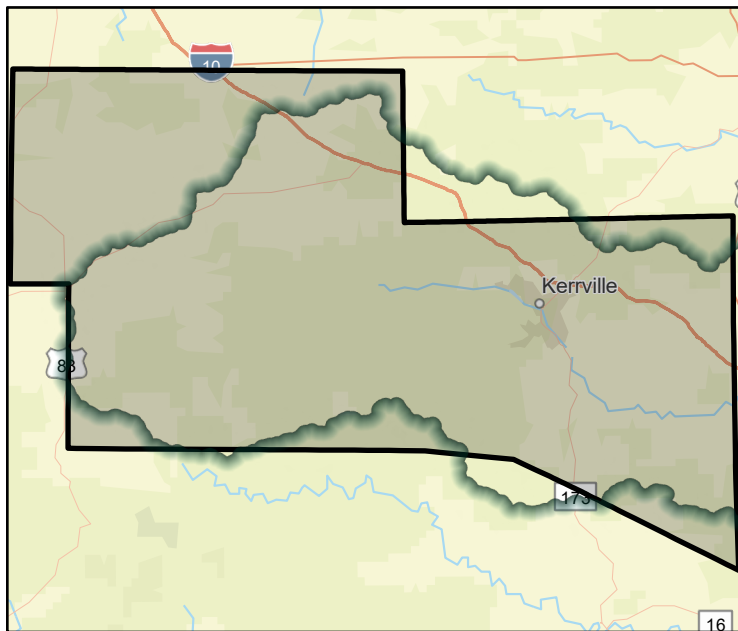
Farm/Ranch land impacted (acres) **28,070** Roadway(s) impacted (length) **124**

Number of low water crossings **158** Historical road closures **-**

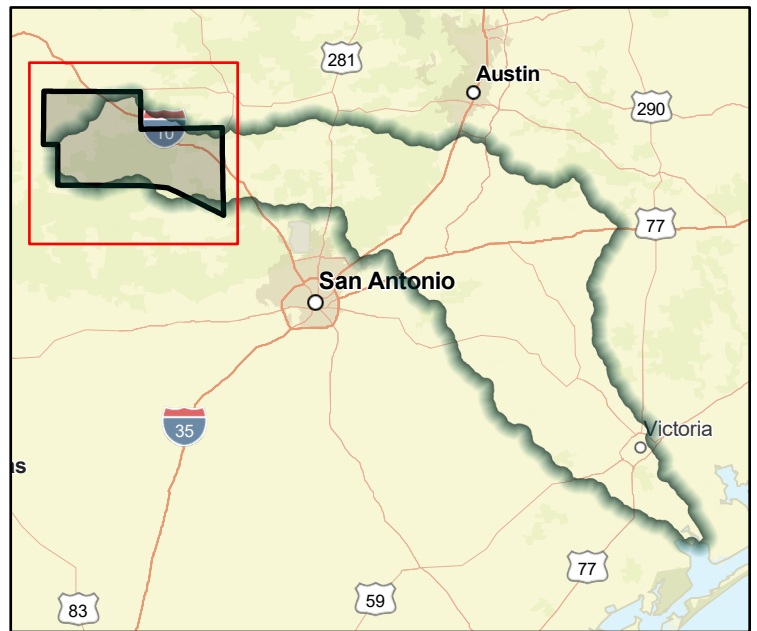
## Estimated Cost and Funding Availability

Total Cost **\$250,000** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



FME Area



Regional view of FME area

# Flood Management Evaluation (FME)



Title **Victoria County Planning and Development Standards Study**

ID# **111000128**

Sponsor (name of entity, not person) **Victoria (County)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Watershed Planning**

Study description **Conduct study for the development and implementation of county wide planning & development standards, sub-division rules, infrastructure rules and building / construction codes.**

New Hydrologic or Hydraulic model? **No** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Victoria** Watershed HUC# (if known) **12100303,12100204,12100403**

Drainage area (Square miles, est.) **887** Goal(s) **11000005, 11000006**

## 100-Year Flood Risk Summary

Population at risk **4,019** # of structures **1,808** Critical facilities **60**

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

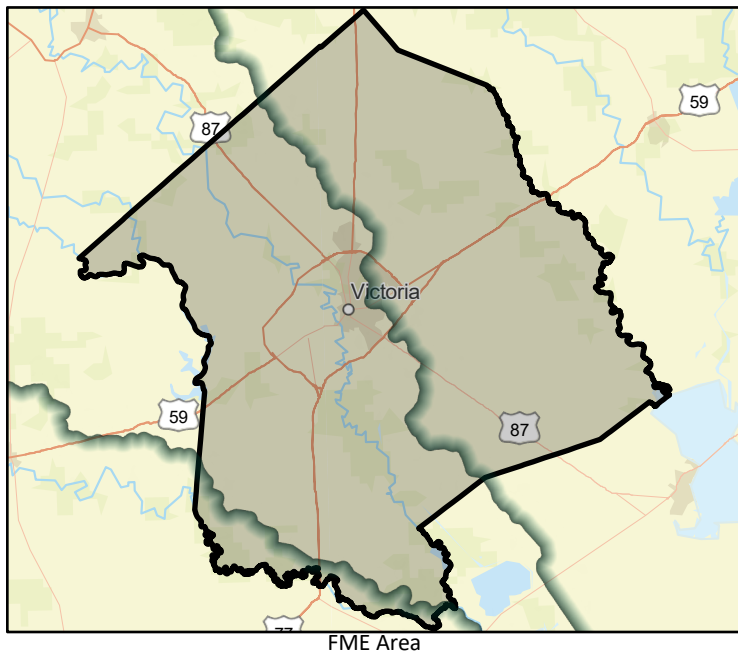
Farm/Ranch land impacted (acres) **33,696** Roadway(s) impacted (length) **99**

Number of low water crossings **5** Historical road closures **-**

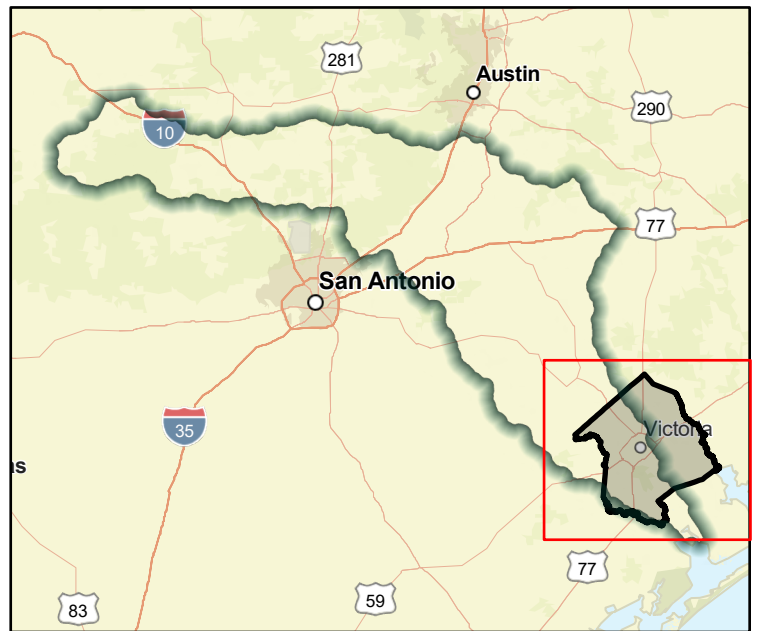
## Estimated Cost and Funding Availability

Total Cost **\$100,000** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



FME Area



Regional view of FME area

# Flood Management Evaluation (FME)



Title **Victoria County Drainage Improvements Study**

ID# **111000129**

Sponsor (name of entity, not person) **Victoria (County)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Watershed Planning**

Study description **Study of solutions to increase dimensions of drainage culverts in areas prone to flooding and/or drainage problems, in various county locations.**

New Hydrologic or Hydraulic model? **Yes** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Victoria** Watershed HUC# (if known) **12100303,12100204,12100403**

Drainage area (Square miles, est.) **887** Goal(s) **11000009, 11000010**

## 100-Year Flood Risk Summary

Population at risk **4,019** # of structures **1,808** Critical facilities **60**

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

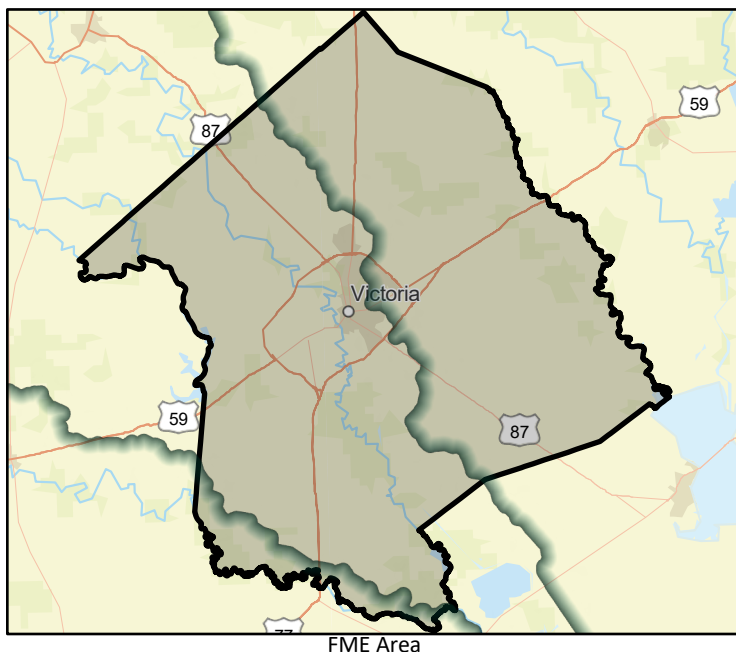
Farm/Ranch land impacted (acres) **33,696** Roadway(s) impacted (length) **99**

Number of low water crossings **5** Historical road closures **-**

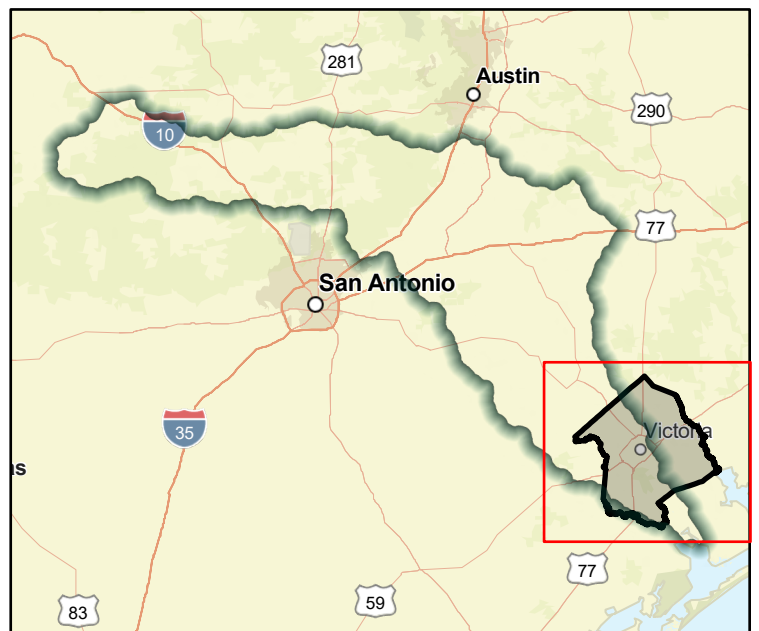
## Estimated Cost and Funding Availability

Total Cost **\$150,000** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



FME Area



Regional view of FME area

# Flood Management Evaluation (FME)



Title **Victoria County FIRMs**

ID# **111000130**

Sponsor (name of entity, not person) **Victoria (County)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Watershed Planning**

Study description **Engineering Studies to revise Flood Insurance Rate Maps (FIRMs) throughout the County to establish Base Flood Elevations (BFE) in areas that are currently identified as unstudied Zone As.**

New Hydrologic or Hydraulic model? **Yes** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Victoria** Watershed HUC# (if known) **12100303,12100204,12100403**

Drainage area (Square miles, est.) **887** Goal(s) **11000009, 11000010**

## 100-Year Flood Risk Summary

Population at risk **4,019** # of structures **1,808** Critical facilities **60**

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

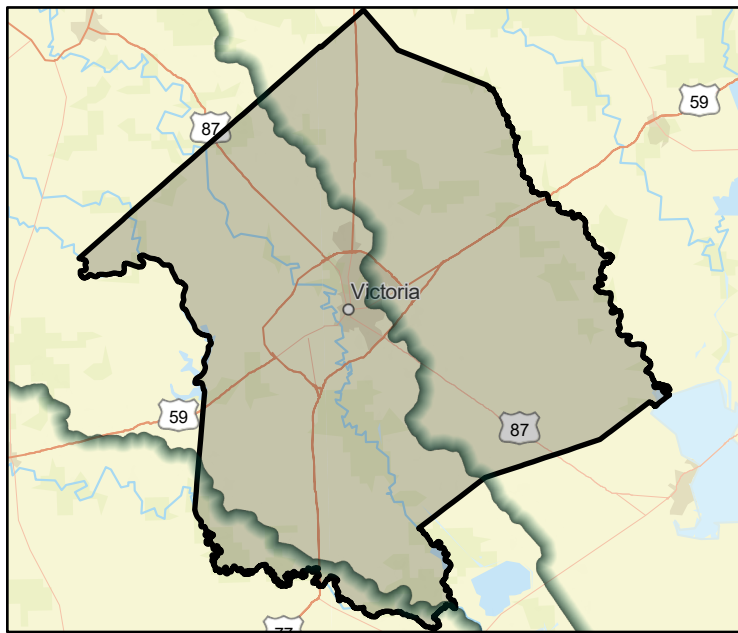
Farm/Ranch land impacted (acres) **33,696** Roadway(s) impacted (length) **99**

Number of low water crossings **5** Historical road closures **-**

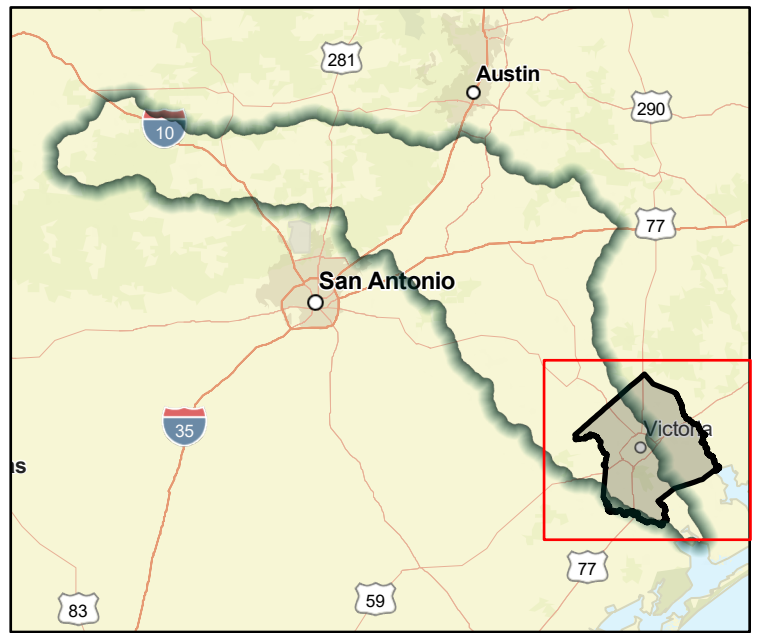
## Estimated Cost and Funding Availability

Total Cost **\$500,000** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



FME Area



Regional view of FME area

# Flood Management Evaluation (FME)



Title **Victoria County Drainage Improvements around County EOC Project Planning**

ID# **111000131**

Sponsor (name of entity, not person) **Victoria (County)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Project Planning**

Study description **Project planning to improve drainage around County EOC and flood-proof facilities as necessary.**

New Hydrologic or Hydraulic model? **Yes** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Victoria** Watershed HUC# (if known) **12100204**

Drainage area (Square miles, est.) **0** Goal(s) **11000009, 11000010**

## 100-Year Flood Risk Summary

Population at risk **0** # of structures **0** Critical facilities **0**

Flood risk type: Riverine? **No** Coastal? **No** Local? **No** Playa? **No** Other? **No**

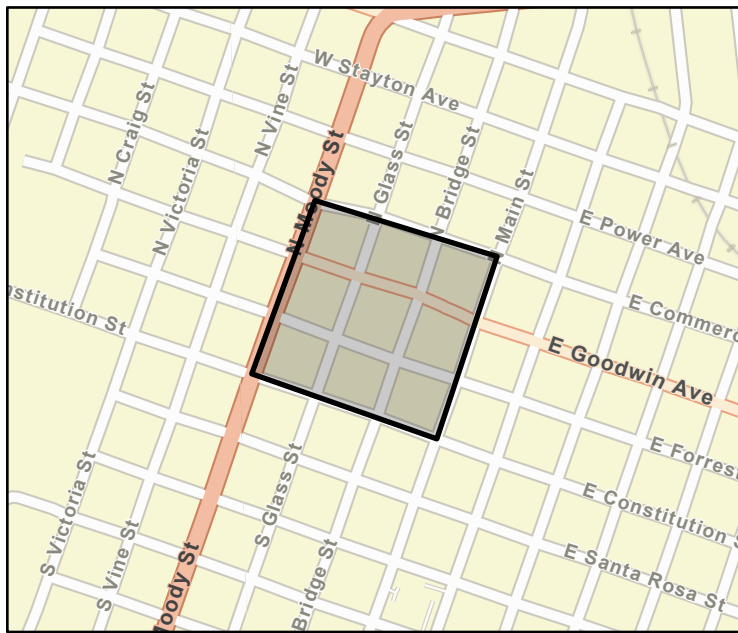
Farm/Ranch land impacted (acres) **0** Roadway(s) impacted (length) **0**

Number of low water crossings **0** Historical road closures **-**

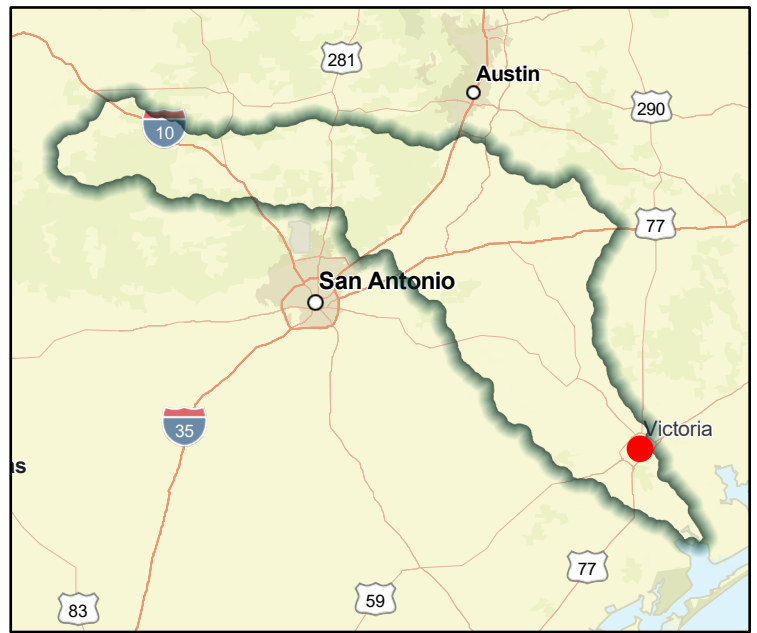
## Estimated Cost and Funding Availability

Total Cost **\$100,000** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



FME Area



Regional view of FME area

# Flood Management Evaluation (FME)



Title **Victoria County Bridge Improvements Project Planning**

ID# **111000132**

Sponsor (name of entity, not person) **Victoria (County)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Project Planning**

Study description **Project planning to raise various County bridges above current Base Flood Elevation (BFE) levels to include such improvements as: box culverts, wingback walls, rip rap, channelization, and road base improvement.**

New Hydrologic or Hydraulic model? **Yes** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Victoria** Watershed HUC# (if known) **12100303,12100204,12100403**

Drainage area (Square miles, est.) **887** Goal(s) **11000001, 11000002, 11000015, 11000016**

## 100-Year Flood Risk Summary

Population at risk **4,019** # of structures **1,808** Critical facilities **60**

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

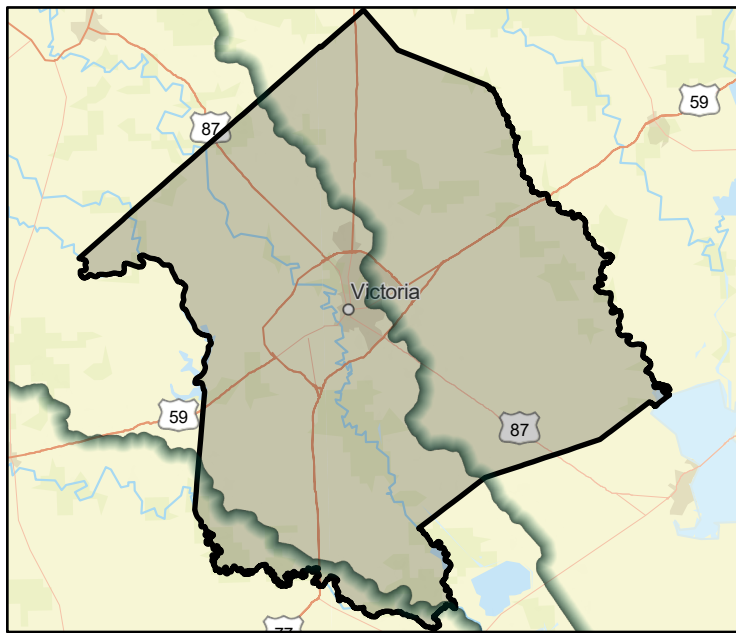
Farm/Ranch land impacted (acres) **33,696** Roadway(s) impacted (length) **99**

Number of low water crossings **5** Historical road closures **-**

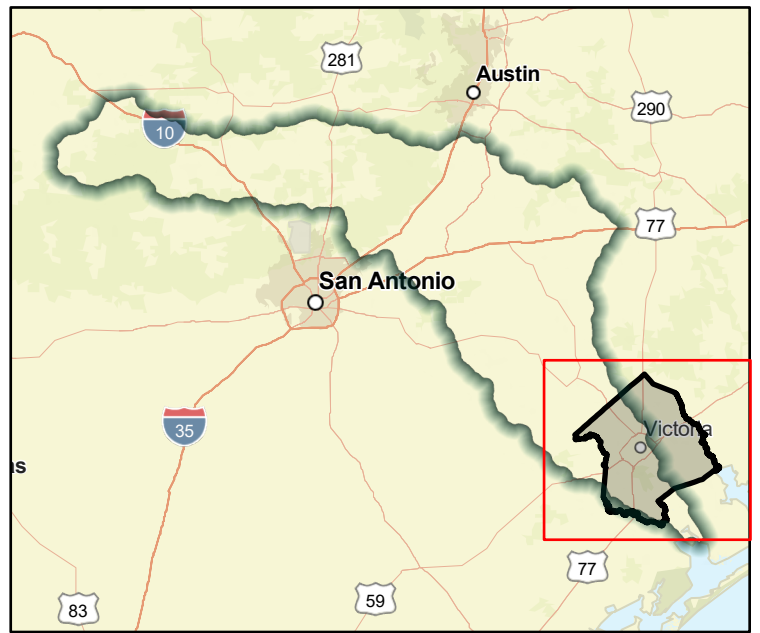
## Estimated Cost and Funding Availability

Total Cost **\$500,000** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



FME Area



Regional view of FME area

# Flood Management Evaluation (FME)



Title **Victoria County Voluntary Buyout Program Project Planning**

ID# **111000133**

Sponsor (name of entity, not person) **Victoria (County)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Project Planning**

Study description **Project planning to implement a voluntary acquisition program for repetitive flood properties.**

New Hydrologic or Hydraulic model? **Yes** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Victoria** Watershed HUC# (if known) **12100303,12100204,12100403**

Drainage area (Square miles, est.) **887** Goal(s) **11000009, 11000010**

## 100-Year Flood Risk Summary

Population at risk **4,019** # of structures **1,808** Critical facilities **60**

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

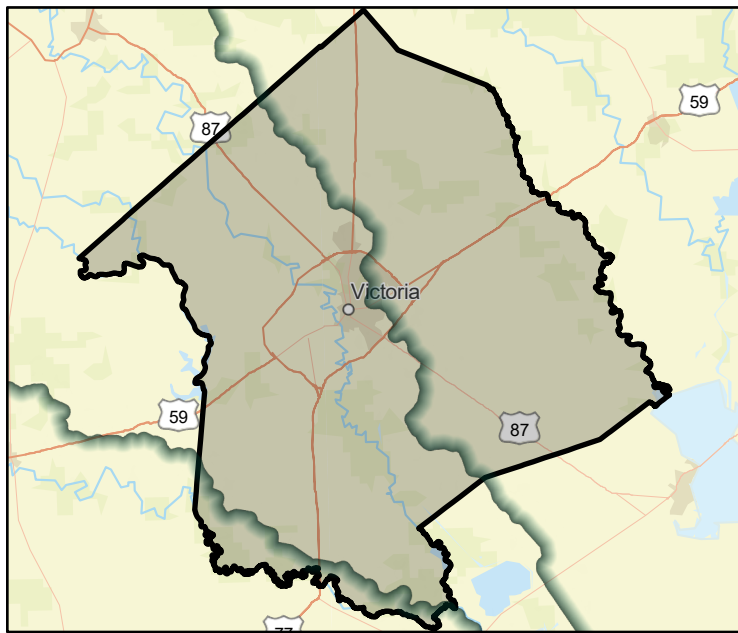
Farm/Ranch land impacted (acres) **33,696** Roadway(s) impacted (length) **99**

Number of low water crossings **5** Historical road closures **-**

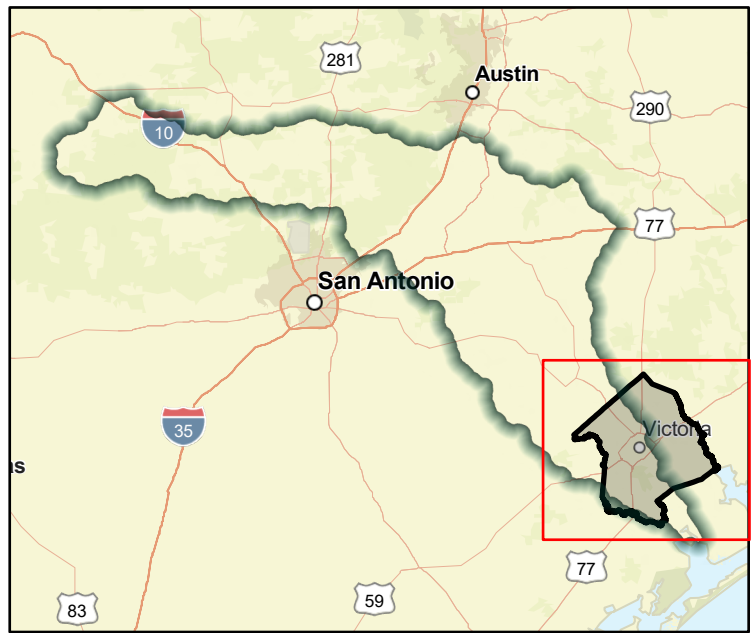
## Estimated Cost and Funding Availability

Total Cost **\$300,000** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



FME Area



Regional view of FME area



# Flood Management Evaluation (FME)



Title **Wilson County Stormwater Management Plan**

ID# **111000134**

Sponsor (name of entity, not person) **Wilson (County)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Watershed Planning**

Study description **Develop flood hazard information by collecting information, high water marks, and conduct engineering studies to develop the 100 year and 500 year flood elevation levels.**

New Hydrologic or Hydraulic model? **Yes** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Wilson** Watershed HUC# (if known) **12100202**

Drainage area (Square miles, est.) **806** Goal(s) **11000015, 11000016**

## 100-Year Flood Risk Summary

Population at risk **33** # of structures **18** Critical facilities **0**

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

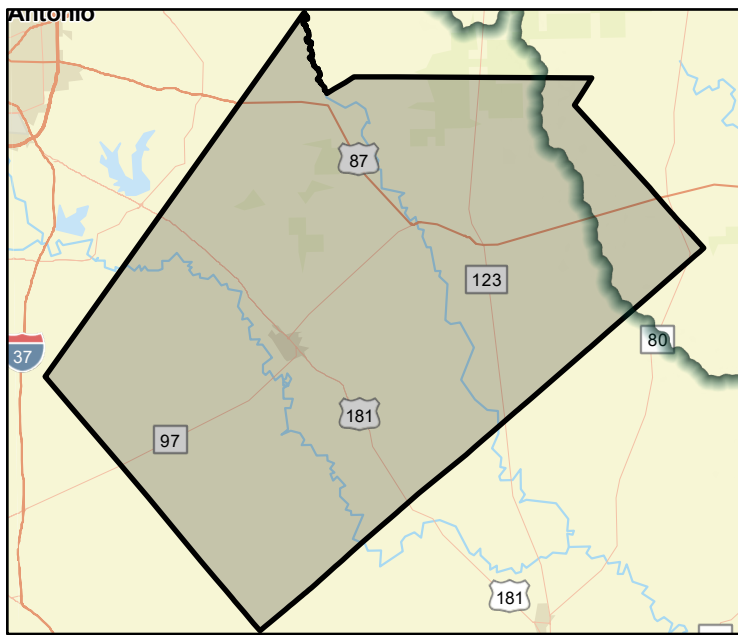
Farm/Ranch land impacted (acres) **2,120** Roadway(s) impacted (length) **4**

Number of low water crossings **0** Historical road closures **-**

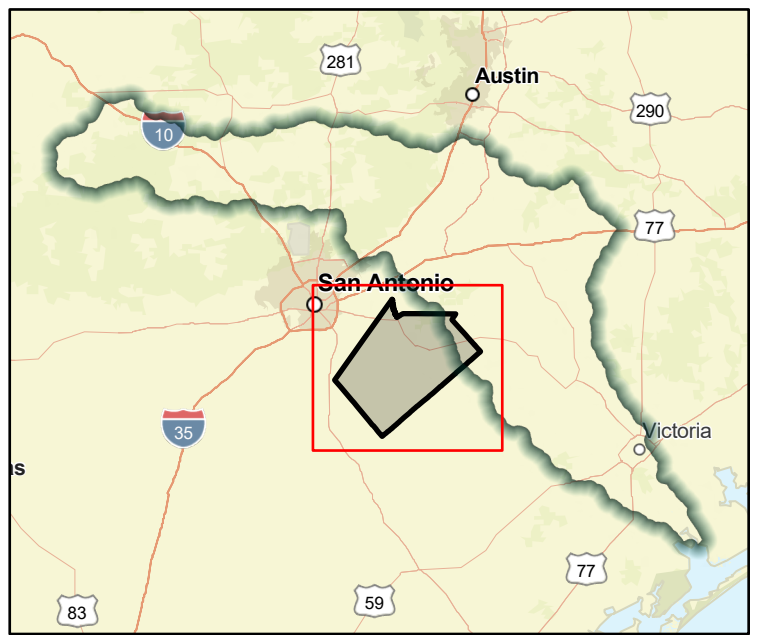
## Estimated Cost and Funding Availability

Total Cost **\$500,000** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



FME Area



Regional view of FME area

# Flood Management Evaluation (FME)



Title **Wilson County Low Water Crossing Improvements Project Planning**

ID# **111000135**

Sponsor (name of entity, not person) **Wilson (County)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Project Planning**

Study description **Project planning to upgrade infrastructure at low water crossings to provide unimpeded access during 100 year base flood event to facilitate evacuation and response by emergency vehicles**

New Hydrologic or Hydraulic model? **Yes** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Wilson** Watershed HUC# (if known) **12100202**

Drainage area (Square miles, est.) **806** Goal(s) **11000001, 11000002**

## 100-Year Flood Risk Summary

Population at risk **33** # of structures **18** Critical facilities **0**

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

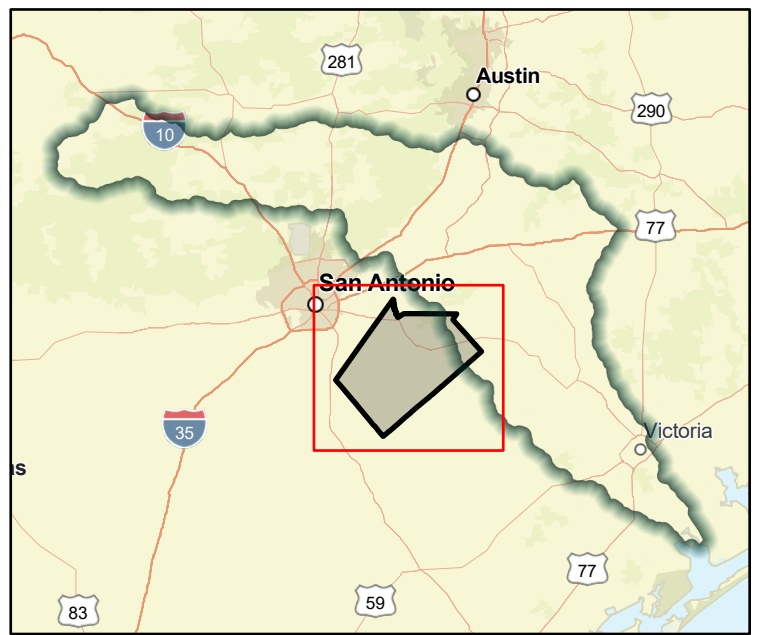
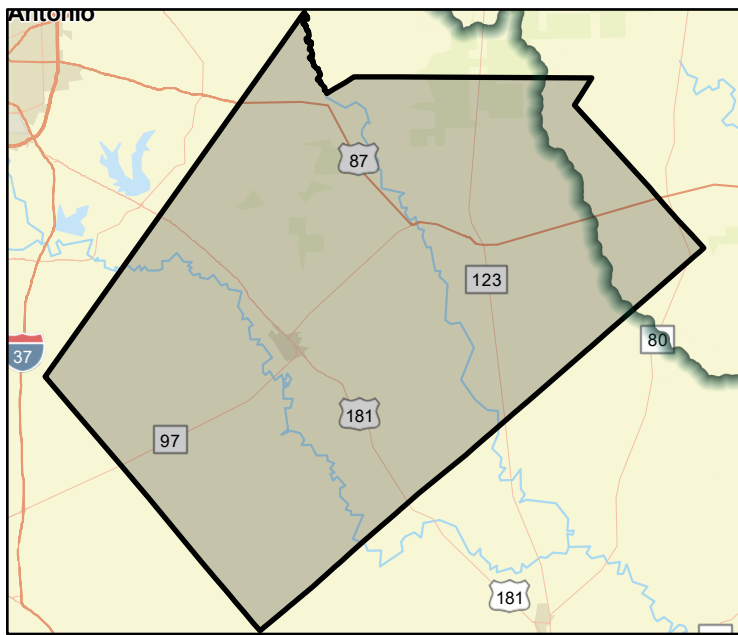
Farm/Ranch land impacted (acres) **2,120** Roadway(s) impacted (length) **4**

Number of low water crossings **0** Historical road closures **-**

## Estimated Cost and Funding Availability

Total Cost **\$150,000** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



# Flood Management Evaluation (FME)



Title **Wilson County Voluntary Buyout Program Project Planning**

ID# **111000136**

Sponsor (name of entity, not person) **Wilson (County)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Project Planning**

Study description **Project planning to establish of a voluntary aquisition and demolition program, structure relocation program, and structure elevation program to address repetitive loss, floodprone properties. Keep a database of properties.**

New Hydrologic or Hydraulic model? **Yes** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Wilson** Watershed HUC# (if known) **12100202**

Drainage area (Square miles, est.) **806** Goal(s) **11000009, 11000010**

## 100-Year Flood Risk Summary

Population at risk **33** # of structures **18** Critical facilities **0**

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

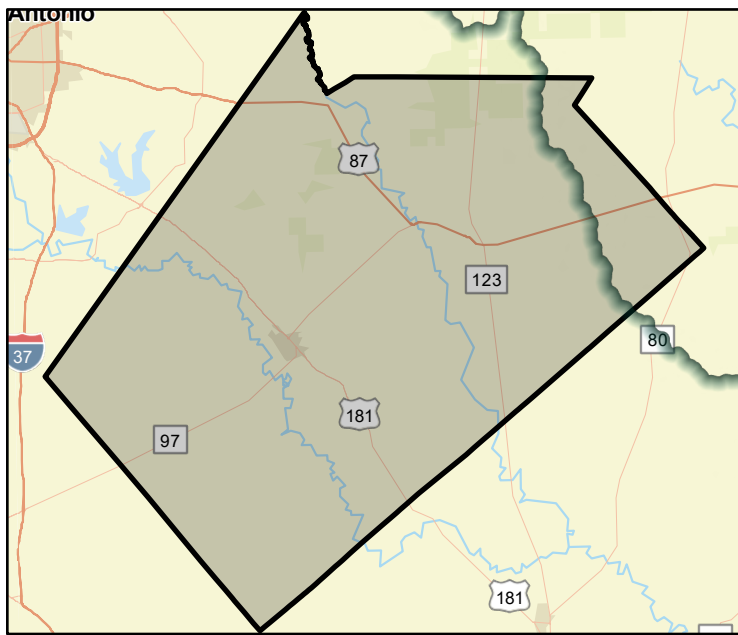
Farm/Ranch land impacted (acres) **2,120** Roadway(s) impacted (length) **4**

Number of low water crossings **0** Historical road closures **-**

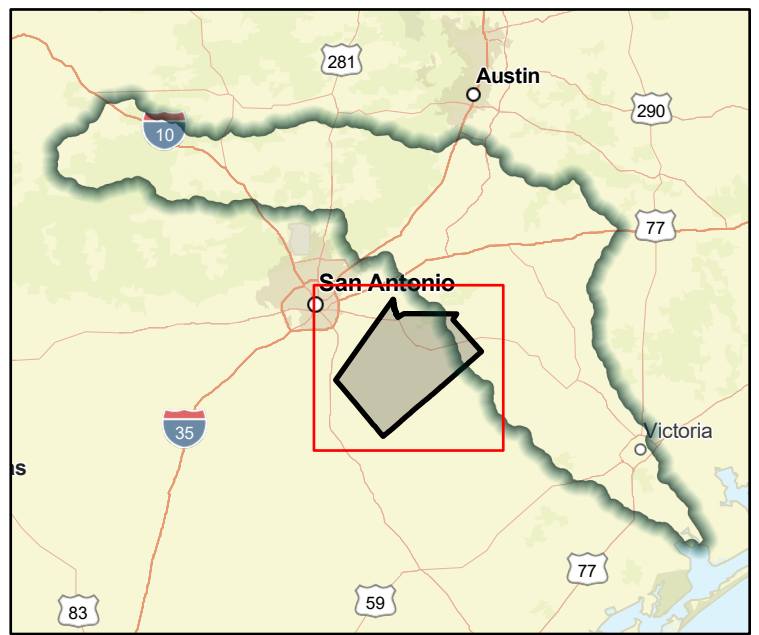
## Estimated Cost and Funding Availability

Total Cost **\$150,000** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



FME Area



Regional view of FME area

# Flood Management Evaluation (FME)



Title **Emergency power generators at critical infrastructure/key resource locations project planning**

ID# **111000137**

Sponsor (name of entity, not person) **Blanco (County)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Project Planning**

Study description **Project planning to install emergency generators at critical facilities to provide back-up power from hazard events.**

New Hydrologic or Hydraulic model? **Yes** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Blanco** Watershed HUC# (if known) **12100203,12100201**

Drainage area (Square miles, est.) **711** Goal(s) **11000015, 11000016**

## 100-Year Flood Risk Summary

Population at risk **256** # of structures **167** Critical facilities **0**

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

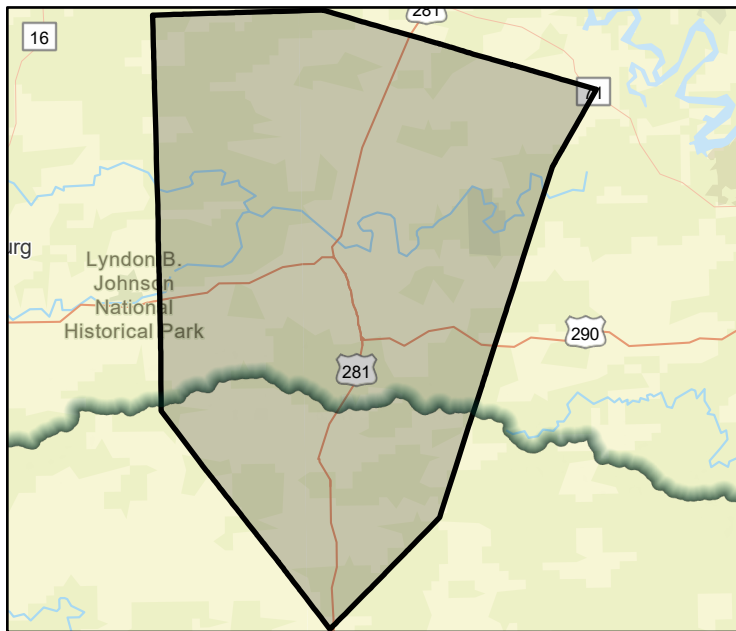
Farm/Ranch land impacted (acres) **4,092** Roadway(s) impacted (length) **14**

Number of low water crossings **30** Historical road closures **-**

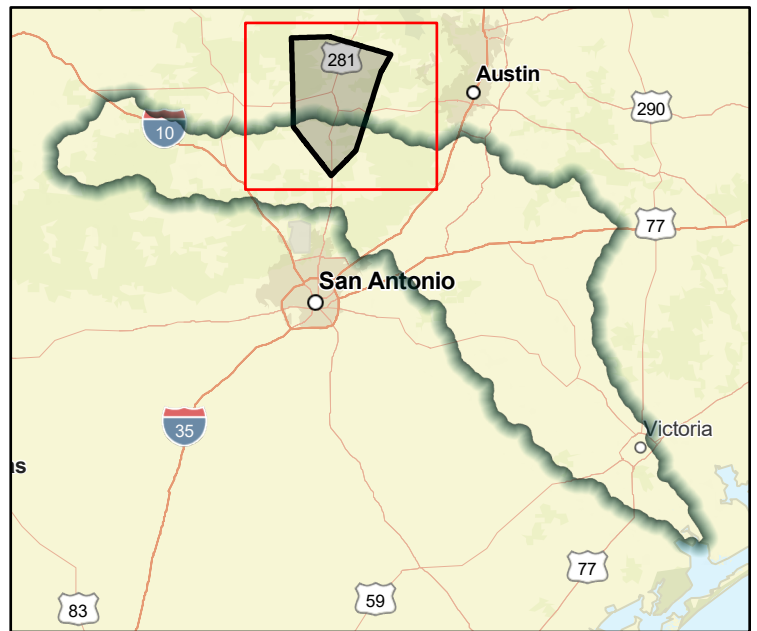
## Estimated Cost and Funding Availability

Total Cost **\$100,000** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



FME Area



Regional view of FME area

# Flood Management Evaluation (FME)



Title **Cypress Creek Regional detention**

ID# **111000138**

Sponsor (name of entity, not person) **Kendall (County)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Project Planning**

Study description **Project planning for regional detention project on Cypress Creek that will reduce flooding through the unincorporated town of Comfort, TX and possibly provide enhanced aquifer recharge.**

New Hydrologic or Hydraulic model? **Yes** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Kendall** Watershed HUC# (if known) **12100201**

Drainage area (Square miles, est.) **3** Goal(s) **11000003, 11000004**

## 100-Year Flood Risk Summary

Population at risk **574** # of structures **439** Critical facilities **0**

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

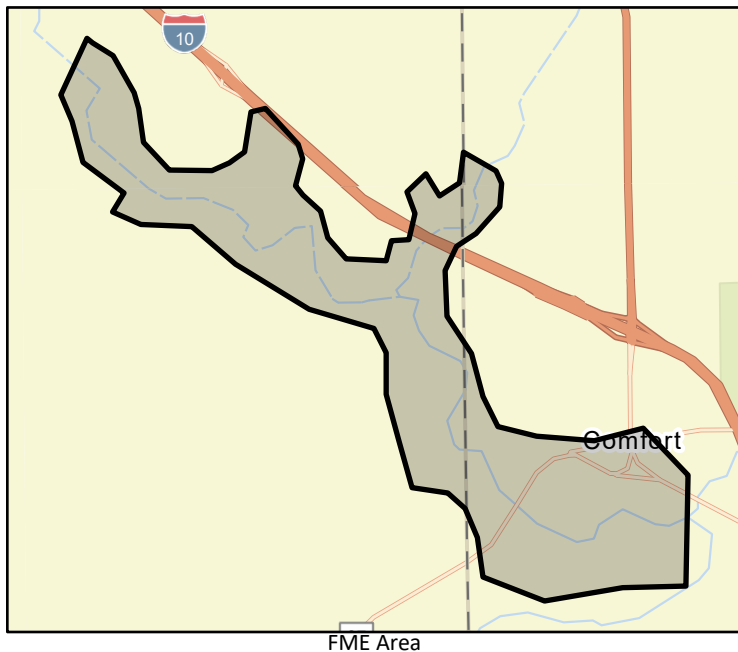
Farm/Ranch land impacted (acres) **745** Roadway(s) impacted (length) **11**

Number of low water crossings **5** Historical road closures **-**

## Estimated Cost and Funding Availability

Total Cost **\$113,855** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



# Flood Management Evaluation (FME)



Title **Technical Study to Enhance Great Springs Project Regional Flood Mitigation**

ID# **111000139**

Sponsor (name of entity, not person) **Edwards Aquifer Authority**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Watershed Planning**

Study description **The study will assess and quantify the flood mitigation impacts of an additional 50,000 acres of land conservation and trail development and identify possible modifications of open space and trail features to enhance flood mitigation.**

New Hydrologic or Hydraulic model? **No** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Comal,Hays** Watershed HUC# (if known) **12100202,12100203**

Drainage area (Square miles, est.) **275** Goal(s) **11000003**

## 100-Year Flood Risk Summary

Population at risk **802** # of structures **382** Critical facilities **3**

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

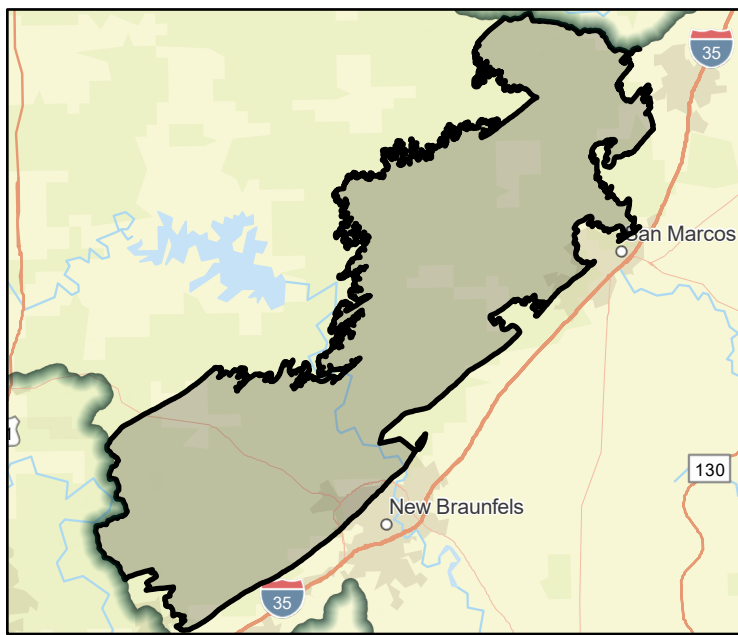
Farm/Ranch land impacted (acres) **6,858** Roadway(s) impacted (length) **19**

Number of low water crossings **44** Historical road closures **-**

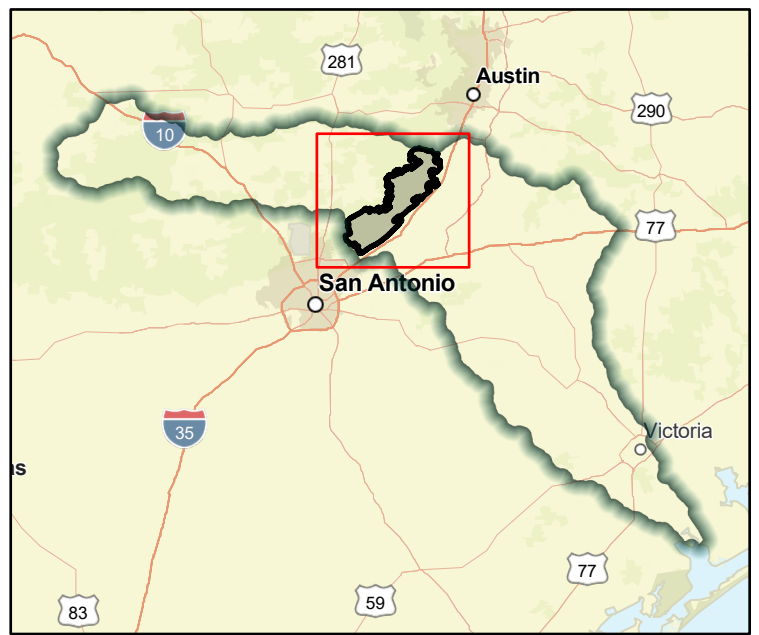
## Estimated Cost and Funding Availability

Total Cost **\$250,000** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



FME Area



Regional view of FME area

# Flood Management Evaluation (FME)



Title **City of Victoria WWTP Protection Project**

ID# **111000140**

Sponsor (name of entity, not person) **Victoria (Municipality)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Project Planning**

Study description **Project planning for potential erosion protection and streambank stabilization project intended to protect the levee around the City's wastewater plant.**

New Hydrologic or Hydraulic model? **Yes** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Victoria** Watershed HUC# (if known) **12100204**

Drainage area (Square miles, est.) **0** Goal(s) **11000009, 11000010**

## 100-Year Flood Risk Summary

Population at risk **13** # of structures **11** Critical facilities **11**

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

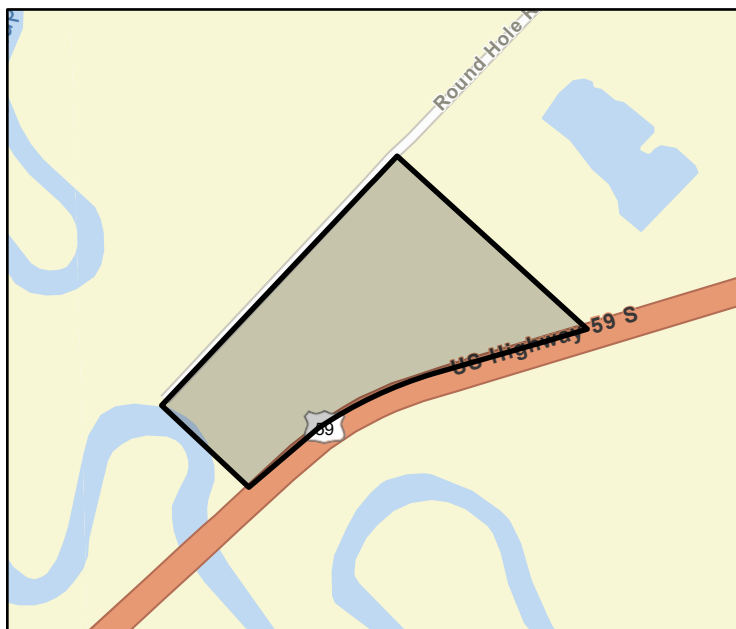
Farm/Ranch land impacted (acres) **27** Roadway(s) impacted (length) **0**

Number of low water crossings **0** Historical road closures **-**

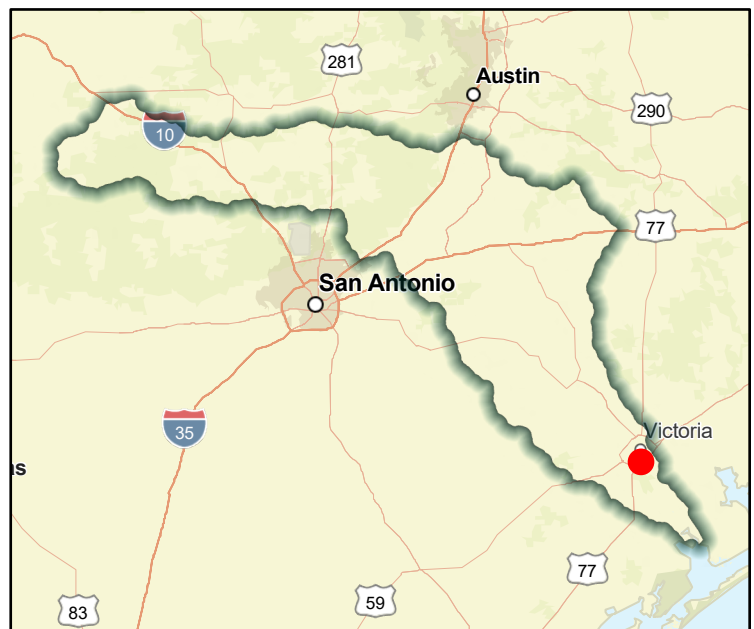
## Estimated Cost and Funding Availability

Total Cost **\$300,000** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



FME Area



Regional view of FME area

# Flood Management Evaluation (FME)



Title **City of San Marcos McKie Street at Willow Springs Creek Project Planning**

ID# **111000141**

Sponsor (name of entity, not person) **San Marcos (Municipality)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Project Planning**

Study description **Alternatives analysis to determine if a feasible FMP exists at this location. Develop technical data required for FMPs.**

New Hydrologic or Hydraulic model? **Yes** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Hays** Watershed HUC# (if known) **12100203**

Drainage area (Square miles, est.) **0** Goal(s) **11000001, 11000002**

## 100-Year Flood Risk Summary

Population at risk **0** # of structures **0** Critical facilities **0**

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

Farm/Ranch land impacted (acres) **0** Roadway(s) impacted (length) **0**

Number of low water crossings **1** Historical road closures **-**

## Estimated Cost and Funding Availability

Total Cost **\$50,000** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



FME Area



Regional view of FME area



# Flood Management Evaluation (FME)



Title **City of San Marcos South LBJ Drive at Willow Springs Creek Project Planning**

ID# **111000142**

Sponsor (name of entity, not person) **San Marcos (Municipality)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Project Planning**

Study description **Alternatives analysis to determine if a feasible FMP exists at this location. Develop technical data required for FMPs.**

New Hydrologic or Hydraulic model? **Yes** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Hays** Watershed HUC# (if known) **12100203**

Drainage area (Square miles, est.) **0** Goal(s) **11000001, 11000002**

## 100-Year Flood Risk Summary

Population at risk **0** # of structures **0** Critical facilities **0**

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

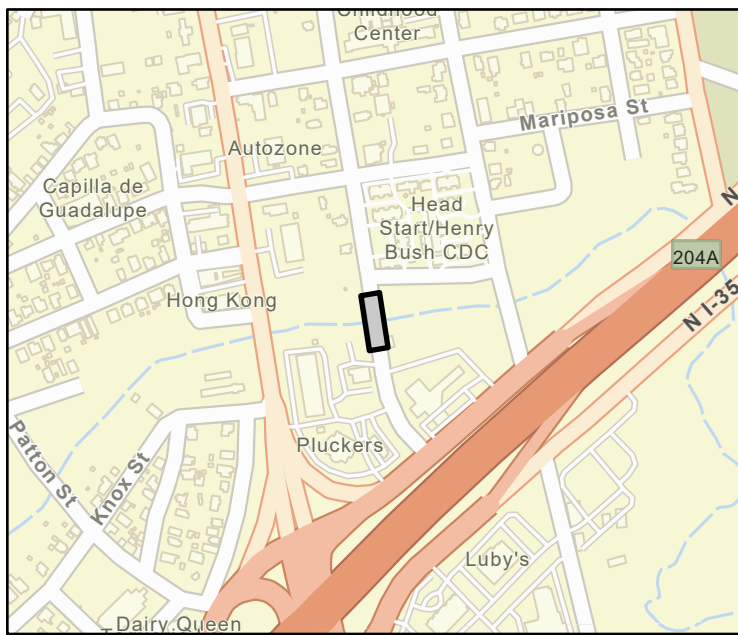
Farm/Ranch land impacted (acres) **0** Roadway(s) impacted (length) **0**

Number of low water crossings **1** Historical road closures **-**

## Estimated Cost and Funding Availability

Total Cost **\$50,000** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



FME Area



Regional view of FME area

# Flood Management Evaluation (FME)



Title **Dewitt County Drainage District 1 Cuero Levee Study**

ID# **111000143**

Sponsor (name of entity, not person) **Dewitt County Drainage District 1**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Project Planning**

Study description **Feasibility study of potential levee to protect City from river flooding with risk to life/safety and catastrophic damage, as has been experienced in Cuero on numerous occasions.**

New Hydrologic or Hydraulic model? **Yes** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **De Witt** Watershed HUC# (if known) **12100202,12100204**

Drainage area (Square miles, est.) **7** Goal(s) **11000009, 11000010**

## 100-Year Flood Risk Summary

Population at risk **3,213** # of structures **1,991** Critical facilities **10**

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

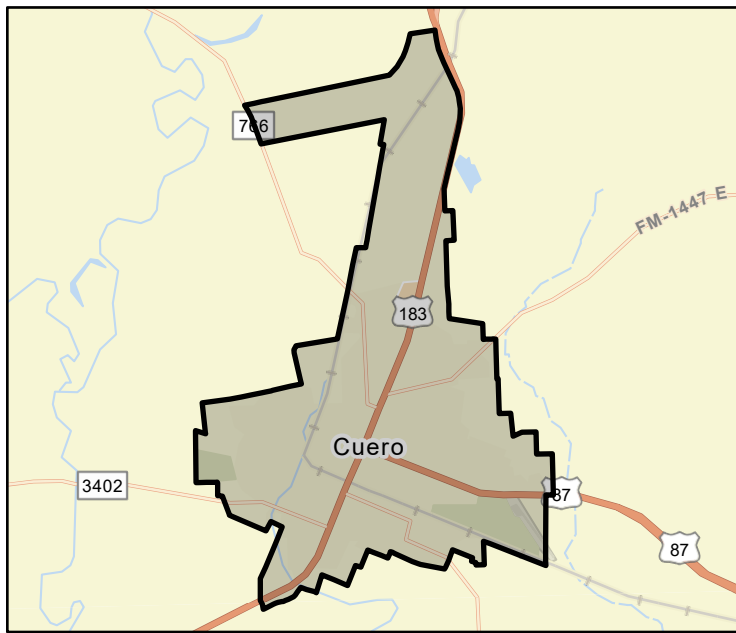
Farm/Ranch land impacted (acres) **116** Roadway(s) impacted (length) **35**

Number of low water crossings **2** Historical road closures **-**

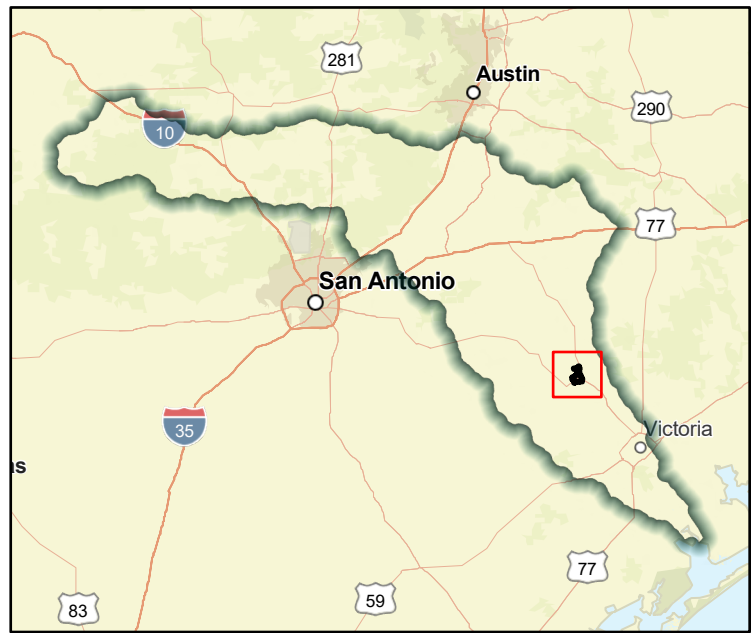
## Estimated Cost and Funding Availability

Total Cost **\$250,000** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



FME Area



Regional view of FME area

# Flood Management Evaluation (FME)



Title **City of New Braunfels Wood Road/Landa Street Drainage Improvement**

ID# **111000144**

Sponsor (name of entity, not person) **New Braunfels (Municipality)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Project Planning**

Study description **Project planning for drainage improvement project to capture runoff east of Walnut Avenue and detains it in a 12-acre detention pond with 144 acre-feet of storage capacity. The pond outfall structure discharges to an existing channel south of Wood Road.**

New Hydrologic or Hydraulic model? **Yes** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Comal** Watershed HUC# (if known) **12100202**

Drainage area (Square miles, est.) **0** Goal(s) **11000009, 11000010**

## 100-Year Flood Risk Summary

Population at risk **523** # of structures **47** Critical facilities **0**

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

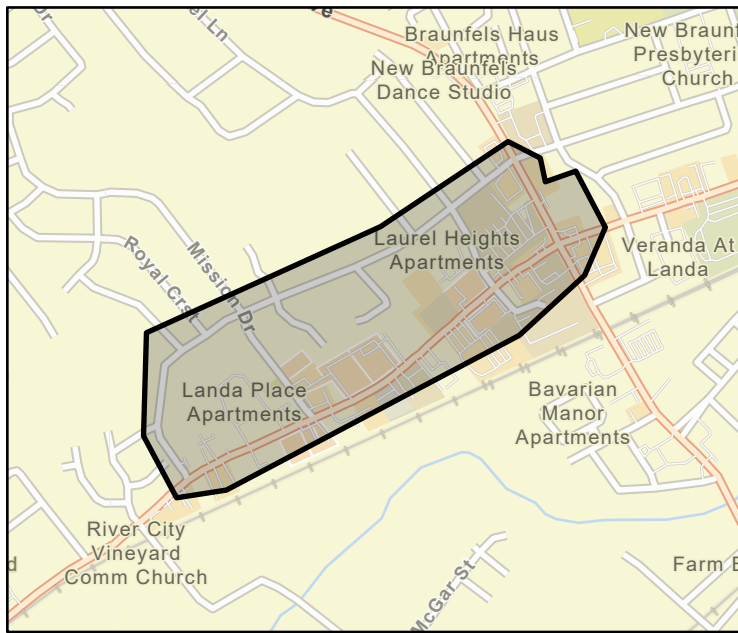
Farm/Ranch land impacted (acres) **0** Roadway(s) impacted (length) **1**

Number of low water crossings **0** Historical road closures **-**

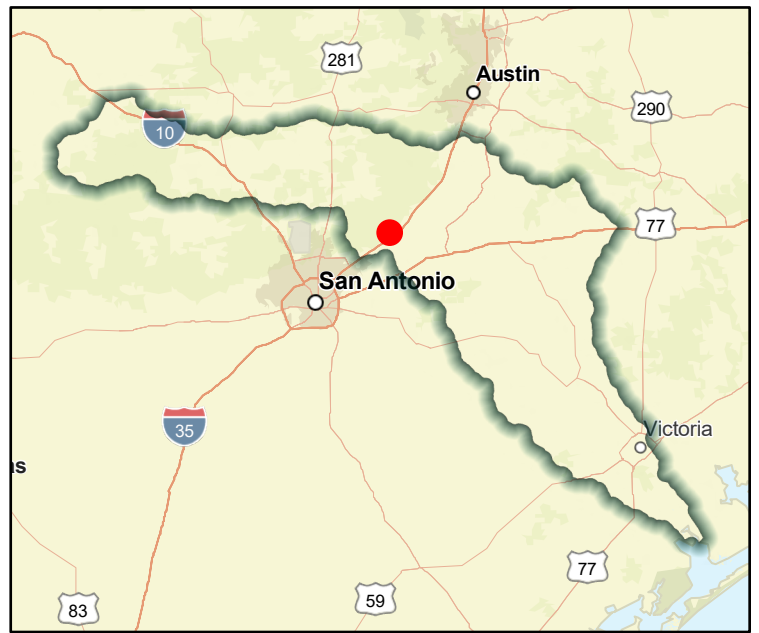
## Estimated Cost and Funding Availability

Total Cost **\$3,575,700** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



FME Area



Regional view of FME area

# Flood Management Evaluation (FME)



Title **Kendall County Guadalupe River Model Study**

ID# **111000145**

Sponsor (name of entity, not person) **Kendall (County)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Watershed Planning**

Study description **Study to complete an HH model for all of the Guadalupe River within Kendall County.**

New Hydrologic or Hydraulic model? **Yes** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Kendall** Watershed HUC# (if known) **12100201,12100203**

Drainage area (Square miles, est.) **661** Goal(s) **11000009, 11000010**

## 100-Year Flood Risk Summary

Population at risk **1,964** # of structures **1,374** Critical facilities **3**

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

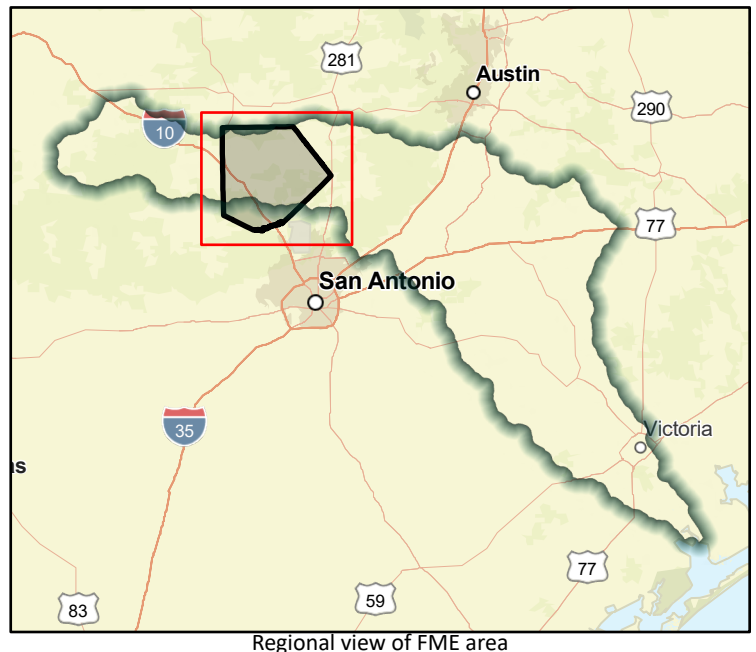
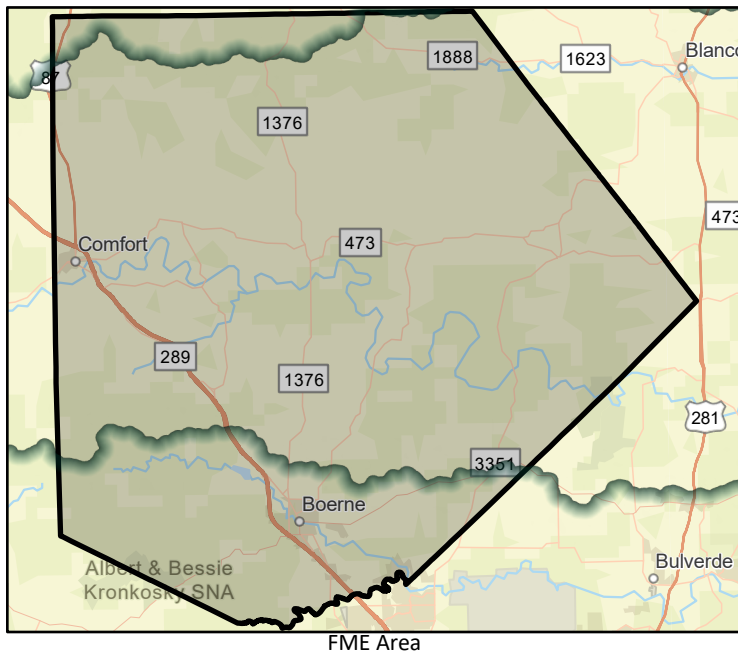
Farm/Ranch land impacted (acres) **24,198** Roadway(s) impacted (length) **44**

Number of low water crossings **28** Historical road closures **-**

## Estimated Cost and Funding Availability

Total Cost **\$250,000** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



# Flood Management Evaluation (FME)



Title **Kendall County Stream Gauges and Flood Hazard Beacons**

ID# **111000146**

Sponsor (name of entity, not person) **Kendall (County)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Preparedness**

Study description **Study to evaluate locations for stream gauges and flood hazard beacons.**

New Hydrologic or Hydraulic model? **Yes** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Kendall** Watershed HUC# (if known) **12100201,12100203**

Drainage area (Square miles, est.) **661** Goal(s) **11000001, 11000002**

## 100-Year Flood Risk Summary

Population at risk **1,964** # of structures **1,374** Critical facilities **3**

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

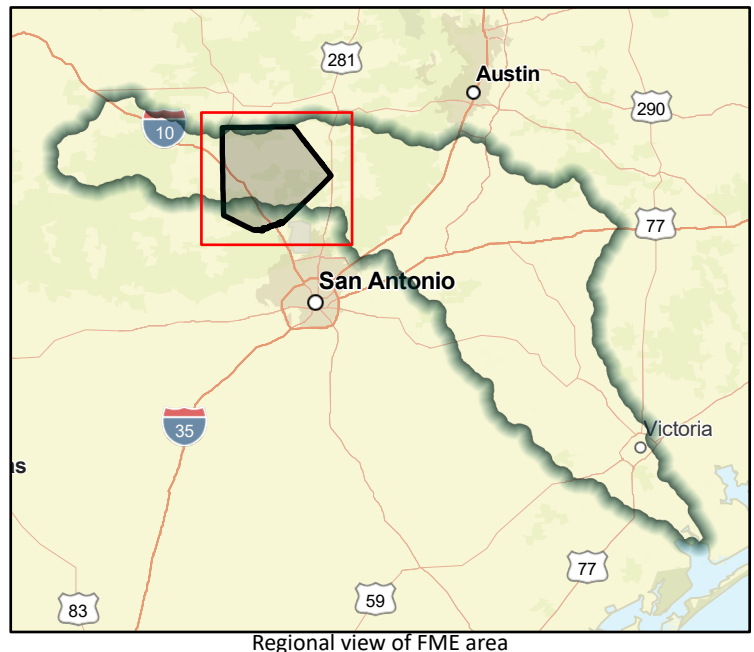
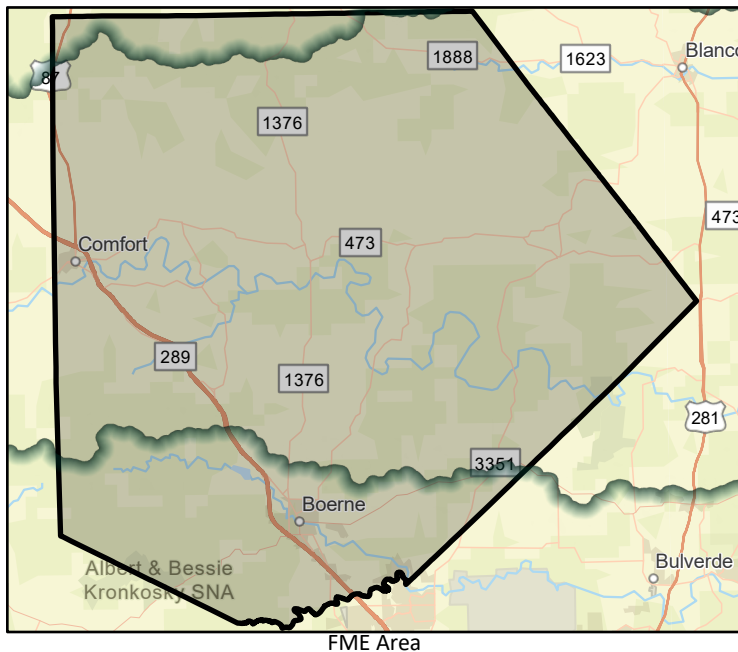
Farm/Ranch land impacted (acres) **24,198** Roadway(s) impacted (length) **44**

Number of low water crossings **28** Historical road closures **-**

## Estimated Cost and Funding Availability

Total Cost **\$150,000** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



# Flood Management Evaluation (FME)



Title **City of Kerrville Spring Street Project**

ID# **111000147**

Sponsor (name of entity, not person) **Kerrville (Municipality)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Project Planning**

Study description **Develop required technical data for FMP. Project planning for storm drain and channel improvement project.**

New Hydrologic or Hydraulic model? **Yes** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Kerr** Watershed HUC# (if known) **12100201**

Drainage area (Square miles, est.) **0** Goal(s) **11000009, 11000010**

## 100-Year Flood Risk Summary

Population at risk **0** # of structures **0** Critical facilities **0**

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

Farm/Ranch land impacted (acres) **0** Roadway(s) impacted (length) **0**

Number of low water crossings **0** Historical road closures **-**

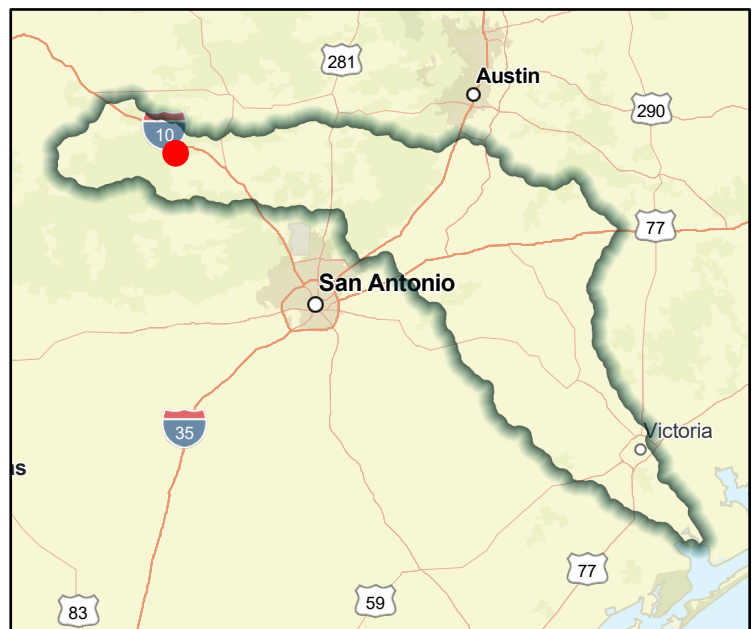
## Estimated Cost and Funding Availability

Total Cost **\$15,000** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



FME Area



Regional view of FME area

# Flood Management Evaluation (FME)



Title **City of Kerrville Clay Street Drainage and Kroc Center Detention Pond Spillway Improvements**

ID# **111000148**

Sponsor (name of entity, not person) **Kerrville (Municipality)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Project Planning**

Study description **Develop required technical data for FMP. Project planning for detention pond spillway improvement project.**

New Hydrologic or Hydraulic model? **Yes** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Kerr** Watershed HUC# (if known) **12100201**

Drainage area (Square miles, est.) **0** Goal(s) **11000001, 11000002, 11000009, 11000010**

## 100-Year Flood Risk Summary

Population at risk **0** # of structures **0** Critical facilities **0**

Flood risk type: Riverine? **No** Coastal? **No** Local? **No** Playa? **No** Other? **No**

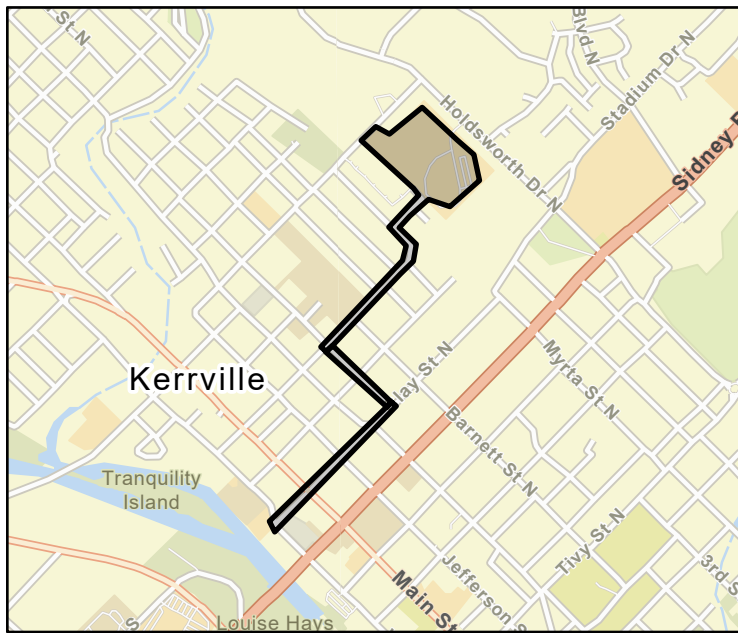
Farm/Ranch land impacted (acres) **0** Roadway(s) impacted (length) **0**

Number of low water crossings **0** Historical road closures **-**

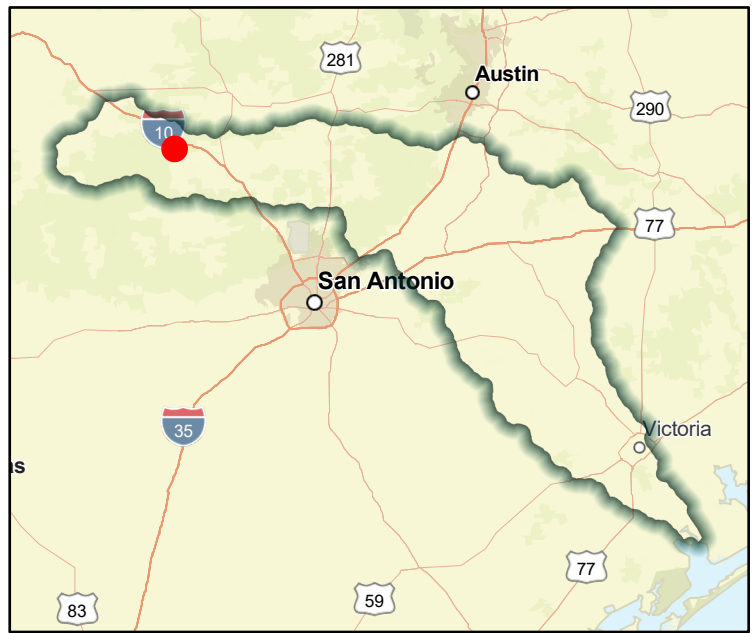
## Estimated Cost and Funding Availability

Total Cost **\$15,000** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



FME Area



Regional view of FME area

# Flood Management Evaluation (FME)



Title **City of Kerrville Coronado Drive and Junction Highway Drainage Improvements**

ID# **111000149**

Sponsor (name of entity, not person) **Kerrville (Municipality)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Study Details

Study type **Project Planning**

Study description **Develop required technical data for FMP. Project planning for street and drainage improvement project.**

New Hydrologic or Hydraulic model? **Yes** Emergency Need? **No** Existing/Anticipated models in near term? **Yes**

County **Kerr** Watershed HUC# (if known) **12100201**

Drainage area (Square miles, est.) **0** Goal(s) **11000001, 11000002, 11000009, 11000010**

## 100-Year Flood Risk Summary

Population at risk **70** # of structures **9** Critical facilities **0**

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

Farm/Ranch land impacted (acres) **0** Roadway(s) impacted (length) **0**

Number of low water crossings **0** Historical road closures **-**

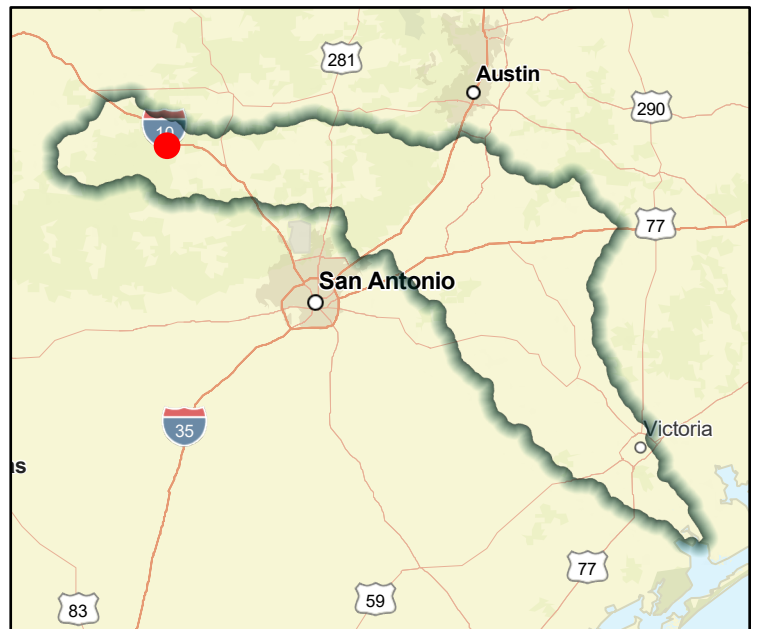
## Estimated Cost and Funding Availability

Total Cost **\$15,000** Amount of Available Funding **TBD** Federal funding availability **No**

Funding source **-**



FME Area



Regional view of FME area



# Flood Management Strategy (FMS)



Title **Education and Outreach**

ID# **112000186** Sponsor **Guadalupe Regional Flood Planning Group**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Strategy Details

Strategy type	Education and Outreach		
Strategy description	Activities not limited to implementing/improving flood education and awareness programs for residents, elected officials, and real estate agents/developers; and flood insurance campaigns to reduce flood risk and increase NFIP participation.		
County	Lavaca, Gonzales, Guadalupe, Bandera, Comal, Real, Caldwell, Kendall, Fayette, Kerr, Hays, Bastrop, Gillespie, Blanco, Travis, Refugio, Calhoun, Goliad, Victoria, Karnes, De Witt, Wilson	Associated FMP's	-
		Associated FME's	-
		Associated FMS's	-
Watershed HUC# (if known)	12100201,12100202,12100203,12100204,12100303,12100403	Drainage area (mi <sup>2</sup> , est.)	6,010

## Existing 100-Year Flood Risk

Population at risk	62,638	# of structures	27,069	Critical facilities	127
Flood risk type:	Riverine? <b>Yes</b>	Coastal? <b>Yes</b>	Local? <b>No</b>	Playa? <b>No</b>	Other? <b>No</b>
Farm/Ranch land impacted (acres)	360,251	Roadway(s) impacted (miles)	935		
Number of low water crossings	661	Historical road closures	-		

## 100-Year Flood Risk Reduction

Population removed from 100-yr	-	# of structures removed from 100-yr	-
Critical facilities removed from 100-yr	-	Farm/Ranch land removed from 100-yr (acres)	-
Road removed from 100-yr (miles)	-	Low water crossings removed from 100-yr	-
Other benefits	Flood risk reduction, increased participation in the NFIP	Reduction in # of road closures over 10 years	-

## Impacts

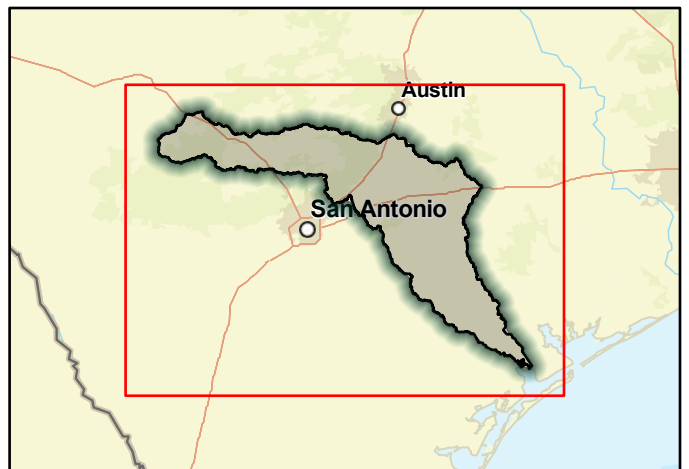
Negative impacts?	<b>No</b>	Negative impacts description	N/A
Water supply contributions?	<b>No</b>	Water supply contribution description	N/A

## Estimated Cost

Strategy Cost	\$978,000	Amount of available funding	-	% Nature-Based	-
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FMS area



Regional view of FMS area

# Flood Management Strategy (FMS)



Title **Property Acquisitions and Structural Elevation**

ID# **112000187** Sponsor **Guadalupe Regional Flood Planning Group**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Strategy Details

Strategy type	Property Acquisition and Structural Elevation		
Strategy description	Develop and implement a voluntary buyout or structural elevation assistance programs to eliminate repetitive loss structures and implementing programs to purchase/preserve open space to protect riparian corridors.		
County	Lavaca, Gonzales, Guadalupe, Bandera, Comal, Real, Caldwell, Kendall, Fayette, Kerr, Hays, Bastrop, Gillespie, Blanco, Travis, Refugio, Calhoun, Goliad, Victoria, Karnes, De Witt, Wilson	Associated FMP's	-
		Associated FME's	-
		Associated FMS's	-
Watershed HUC# (if known)	12100201,12100202,12100203,12100204,12100303,12100403	Drainage area (mi <sup>2</sup> , est.)	6,010

## Existing 100-Year Flood Risk

Population at risk	62,638	# of structures	27,069	Critical facilities	127
Flood risk type:	Riverine? <b>Yes</b>	Coastal? <b>Yes</b>	Local? <b>No</b>	Playa? <b>No</b>	Other? <b>No</b>
Farm/Ranch land impacted (acres)	360,251	Roadway(s) impacted (miles)	935		
Number of low water crossings	661	Historical road closures	-		

## 100-Year Flood Risk Reduction

Population removed from 100-yr	-	# of structures removed from 100-yr	-
Critical facilities removed from 100-yr	-	Farm/Ranch land removed from 100-yr (acres)	-
Road removed from 100-yr (miles)	-	Low water crossings removed from 100-yr	-
Other benefits	Flood risk reduction and nature based solutions	Reduction in # of road closures over 10 years	-

## Impacts

Negative impacts?	<b>No</b>	Negative impacts description	N/A
Water supply contributions?	<b>No</b>	Water supply contribution description	N/A

## Estimated Cost

Strategy Cost	\$1,250,000	Amount of available funding	-	% Nature-Based	-
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FMS area



Regional view of FMS area

# Flood Management Strategy (FMS)



Title **Regulatory and Guidance**

ID# **112000188** Sponsor **Guadalupe Regional Flood Planning Group**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Strategy Details

Strategy type	Regulatory and Guidance		
Strategy description	Regularly review and update floodplain ordinances, land use/zoning, development criteria, and enforcement. Develop and implement higher standards, green infrastructure program, and use best available data (eg. BLE) to manage floodplains		
County	Lavaca, Gonzales, Guadalupe, Bandera, Comal, Real, Caldwell, Kendall, Fayette, Kerr, Hays, Bastrop, Gillespie, Blanco, Travis, Refugio, Calhoun, Goliad, Victoria, Karnes, De Witt, Wilson	Associated FMP's	-
		Associated FME's	-
		Associated FMS's	-
Watershed HUC# (if known)	12100201,12100202,12100203,12100204,12100303,12100403	Drainage area (mi <sup>2</sup> , est.)	6,010

## Existing 100-Year Flood Risk

Population at risk	62,638	# of structures	27,069	Critical facilities	127
Flood risk type:	Riverine? <b>Yes</b>	Coastal? <b>Yes</b>	Local? <b>No</b>	Playa? <b>No</b>	Other? <b>No</b>
Farm/Ranch land impacted (acres)	360,251	Roadway(s) impacted (miles)	935		
Number of low water crossings	661	Historical road closures	-		

## 100-Year Flood Risk Reduction

Population removed from 100-yr	-	# of structures removed from 100-yr	-
Critical facilities removed from 100-yr	-	Farm/Ranch land removed from 100-yr (acres)	-
Road removed from 100-yr (miles)	-	Low water crossings removed from 100-yr	-
Other benefits	Flood risk reduction and nature based solutions	Reduction in # of road closures over 10 years	-

## Impacts

Negative impacts?	<b>No</b>	Negative impacts description	N/A
Water supply contributions?	<b>No</b>	Water supply contribution description	N/A

## Estimated Cost

Strategy Cost	\$93,000	Amount of available funding	-	% Nature-Based	-
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FMS area



Regional view of FMS area

# Flood Management Strategy (FMS)



Title **Flood Measurement and Warning**

ID# **112000189** Sponsor **Guadalupe Regional Flood Planning Group**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Strategy Details

Strategy type	Flood Measurement and Warning		
Strategy description	Develop or implement programs to increase flood warning including reverse 911 systems; evacuation/emergency management plans and personnel training; NOAA all-hazards radios, and programs to increase safety at low water crossings (signs, flashers, gages)		
County	Lavaca, Gonzales, Guadalupe, Bandera, Comal, Real, Caldwell, Kendall, Fayette, Kerr, Hays, Bastrop, Gillespie, Blanco, Travis, Refugio, Calhoun, Goliad, Victoria, Karnes, De Witt, Wilson	Associated FMP's	-
		Associated FME's	-
		Associated FMS's	-
Watershed HUC# (if known)	12100201,12100202,12100203,12100204,12100303,12100403	Drainage area (mi <sup>2</sup> , est.)	6,010

## Existing 100-Year Flood Risk

Population at risk	62,638	# of structures	27,069	Critical facilities	127
Flood risk type:	Riverine? <b>Yes</b>	Coastal? <b>Yes</b>	Local? <b>No</b>	Playa? <b>No</b>	Other? <b>No</b>
Farm/Ranch land impacted (acres)	360,251	Roadway(s) impacted (miles)	935		
Number of low water crossings	661	Historical road closures	-		

## 100-Year Flood Risk Reduction

Population removed from 100-yr	-	# of structures removed from 100-yr	-
Critical facilities removed from 100-yr	-	Farm/Ranch land removed from 100-yr (acres)	-
Road removed from 100-yr (miles)	-	Low water crossings removed from 100-yr	-
Other benefits	Public safety	Reduction in # of road closures over 10 years	-

## Impacts

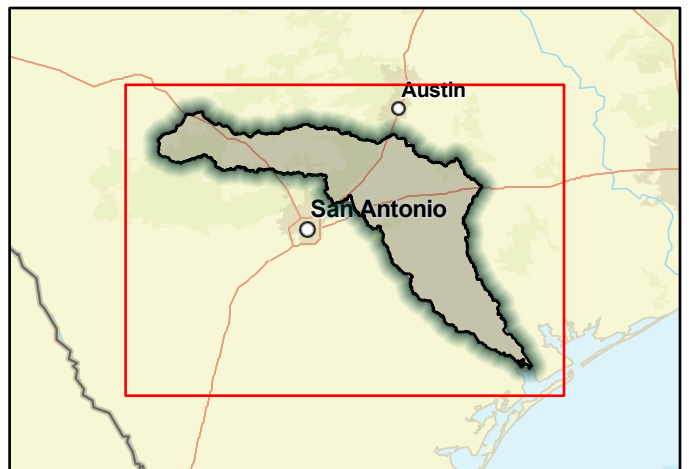
Negative impacts?	<b>No</b>	Negative impacts description	N/A
Water supply contributions?	<b>No</b>	Water supply contribution description	N/A

## Estimated Cost

Strategy Cost	\$9,541,000	Amount of available funding	-	% Nature-Based	-
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FMS area



Regional view of FMS area

# Flood Management Strategy (FMS)



Title **Infrastructure Projects**

ID# **112000190** Sponsor **Guadalupe Regional Flood Planning Group**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Strategy Details

Strategy type	Infrastructure Projects		
Strategy description	Develop programs to preserve system functionality (storm drains, culverts, bridges); enhance riparian corridors & preserve floodplain capacity; and infrastructure improvements programs that identify and prioritize flood risk reduction projects		
County	Lavaca, Gonzales, Guadalupe, Bandera, Comal, Real, Caldwell, Kendall, Fayette, Kerr, Hays, Bastrop, Gillespie, Blanco, Travis, Refugio, Calhoun, Goliad, Victoria, Karnes, De Witt, Wilson	Associated FMP's	-
		Associated FME's	-
		Associated FMS's	-
Watershed HUC# (if known)	12100201,12100202,12100203,12100204,12100303,12100403	Drainage area (mi <sup>2</sup> , est.)	6,010

## Existing 100-Year Flood Risk

Population at risk	62,638	# of structures	27,069	Critical facilities	127
Flood risk type:	Riverine? <b>Yes</b>	Coastal? <b>Yes</b>	Local? <b>No</b>	Playa? <b>No</b>	Other? <b>No</b>
Farm/Ranch land impacted (acres)	360,251	Roadway(s) impacted (miles)	935		
Number of low water crossings	661	Historical road closures	-		

## 100-Year Flood Risk Reduction

Population removed from 100-yr	-	# of structures removed from 100-yr	-
Critical facilities removed from 100-yr	-	Farm/Ranch land removed from 100-yr (acres)	-
Road removed from 100-yr (miles)	-	Low water crossings removed from 100-yr	-
Other benefits	Flood Risk Reduction and Public safety	Reduction in # of road closures over 10 years	-

## Impacts

Negative impacts?	<b>No</b>	Negative impacts description	N/A
Water supply contributions?	<b>No</b>	Water supply contribution description	N/A

## Estimated Cost

Strategy Cost	\$21,611,000	Amount of available funding	-	% Nature-Based	-
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FMS area



Regional view of FMS area

# Flood Mitigation Project (FMP)



Title **Detention on the Blanco River**

ID# **113000001** Sponsor **Blanco (County)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Project Description

The proposed dam height of 102 ft. and dam length of 1,840 ft. will provide a maximum storage capacity of approximately 1128 ac-ft.

Watershed HUC# (if known) **12100203** Emergency Need? **No**

Drainage area (mi<sup>2</sup> est.) **6**

Associated FME's **-** County **Blanco, Hays**

Associated FMS's **-** Associated FMP's **-**

## Existing 100-Year Flood Risk

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

Population at risk **1,044** # of structures **508** Critical facilities **0**

Farm/Ranch land impacted (acres) **978** Roadway(s) impacted (length) **8**

Number of low water crossings **10** Historical road closures **-**

## 100-Year Flood Risk Reduction

Population removed from 100-yr **375** # of structures removed from 100-yr **131**

Critical facilities removed from 100-yr **0** Farm/Ranch land removed from 100-yr (acres) **0**

Road removed from 100-yr (miles) **0** Low water crossings removed from 100-yr **0**

Other benefits **None** Reduction in # of road closures over 10 years **0**

## Impacts

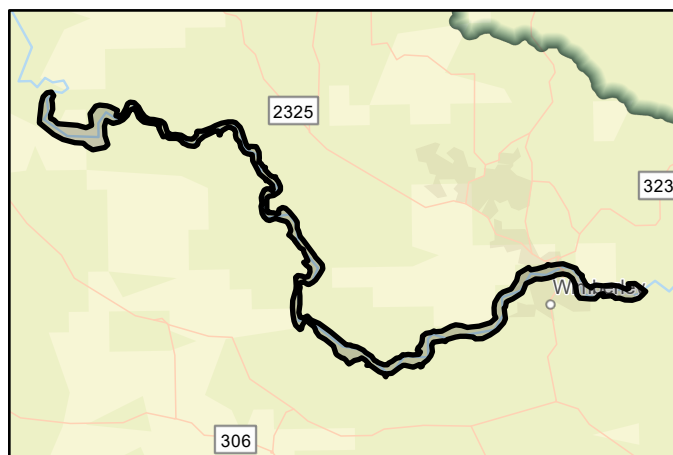
Negative impacts? **No** Negative impacts description **No**

Water supply contributions? **No** Water supply contribution description **-**

## Estimated Cost

Project Cost **\$9,338,000** % Nature-Based **0** BCR **1**

Recurring costs **47000** Issues **Land aquisition cost not included**



FMP area



Regional view of FMP area

# Flood Mitigation Project (FMP)



Title **Plum Creek Tributary 3 Arbor Knot Dr. Improvement**

ID# **113000006** Sponsor **Kyle (Municipality)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Project Description

A proposed culvert improvement has been developed to convey a 1% ACE event. The proposed culvert improvement is to add one additional 8ft x 4ft culvert totaling three culverts at this location, and raising the finished deck elevation by 0.5ft.

Watershed HUC# (if known) **12100203** Emergency Need? **No**

Drainage area (mi<sup>2</sup> est.) **0**

Associated FME's **-** County **Hays**

Associated FMS's **-** Associated FMP's **-**

## Existing 100-Year Flood Risk

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

Population at risk **4** # of structures **2** Critical facilities **0**

Farm/Ranch land impacted (acres) **0** Roadway(s) impacted (length) **0**

Number of low water crossings **0** Historical road closures **-**

## 100-Year Flood Risk Reduction

Population removed from 100-yr **0** # of structures removed from 100-yr **0**

Critical facilities removed from 100-yr **0** Farm/Ranch land removed from 100-yr (acres) **0**

Road removed from 100-yr (miles) **1** Low water crossings removed from 100-yr **0**

Other benefits **Potentially less road closings** Reduction in # of road closures over 10 years **1**

## Impacts

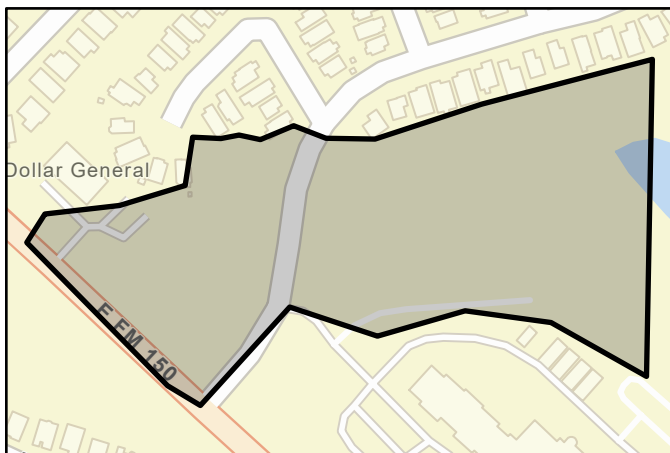
Negative impacts? **No** Negative impacts description **No**

Water supply contributions? **No** Water supply contribution description **-**

## Estimated Cost

Project Cost **\$557,000** % Nature-Based **0** BCR **0**

Recurring costs **3000** Issues **None**



FMP area



Regional view of FMP area

# Flood Mitigation Project (FMP)

Title **Plum Creek Tributary 4 Sledge Rd. Improvement**

ID# **113000007** Sponsor **Kyle (Municipality)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Project Description

The proposed culvert improvement resulted in eight (7ft x 4ft) box culverts, needed to clear the roadway and to alleviate additional backwater flooding.

Watershed HUC# (if known) **12100203** Emergency Need? **No**

Drainage area (mi<sup>2</sup> est.) **0**

Associated FME's **-** County **Hays**

Associated FMS's **-** Associated FMP's **-**

## Existing 100-Year Flood Risk

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

Population at risk **0** # of structures **0** Critical facilities **0**

Farm/Ranch land impacted (acres) **3** Roadway(s) impacted (length) **0**

Number of low water crossings **0** Historical road closures **-**

## 100-Year Flood Risk Reduction

Population removed from 100-yr **0** # of structures removed from 100-yr **0**

Critical facilities removed from 100-yr **0** Farm/Ranch land removed from 100-yr (acres) **0**

Road removed from 100-yr (miles) **1** Low water crossings removed from 100-yr **0**

Other benefits **Improve emergency access** Reduction in # of road closures over 10 years **0**

## Impacts

Negative impacts? **No** Negative impacts description **No**

Water supply contributions? **No** Water supply contribution description **-**

## Estimated Cost

Project Cost **\$1,149,000** % Nature-Based **0** BCR **0**

Recurring costs **6000** Issues **None**



FMP area



Regional view of FMP area



# Flood Mitigation Project (FMP)

Title **65ft Channel Modification and Additional Culvert**

ID# **113000010** Sponsor **Kyle (Municipality)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Project Description

The channel modifications consists of 65-ft bottom width channel modifications with 4:1 side slopes spanning from the North I-35 frontage road down past Goforth Road to Kym Way.

Watershed HUC# (if known) **12100203** Emergency Need? **No**

Drainage area (mi<sup>2</sup> est.) **0**

Associated FME's **-** County **Hays**

Associated FMS's **-** Associated FMP's **-**

## Existing 100-Year Flood Risk

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

Population at risk **165** # of structures **39** Critical facilities **0**

Farm/Ranch land impacted (acres) **2** Roadway(s) impacted (length) **1**

Number of low water crossings **1** Historical road closures **-**

## 100-Year Flood Risk Reduction

Population removed from 100-yr **16** # of structures removed from 100-yr **4**

Critical facilities removed from 100-yr **0** Farm/Ranch land removed from 100-yr (acres) **0**

Road removed from 100-yr (miles) **0** Low water crossings removed from 100-yr **0**

Other benefits **Alleviate ponding, improve conveyance** Reduction in # of road closures over 10 years **0**

## Impacts

Negative impacts? **No** Negative impacts description **No**

Water supply contributions? **No** Water supply contribution description **-**

## Estimated Cost

Project Cost **\$589,000** % Nature-Based **18** BCR **2**

Recurring costs **3000** Issues **Possible wetland restrictions, utility relocation, SWPPP implementation**



FMP area



Regional view of FMP area

# Flood Mitigation Project (FMP)

Title **Plum Creek Detention Pond Upstream of IH35**

ID# **113000011** Sponsor **Kyle (Municipality)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Project Description

This project consists of a detention pond between the railroad track and the South bound I-35 frontage road. Under this proposed alternative a 13-ft high dam wall would be placed on Plum Creek near Kyle Center Drive.

Watershed HUC# (if known) **12100203** Emergency Need? **No**

Drainage area (mi<sup>2</sup> est.) **0**

Associated FME's **-** County **Hays**

Associated FMS's **-** Associated FMP's **-**

## Existing 100-Year Flood Risk

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

Population at risk **207** # of structures **49** Critical facilities **0**

Farm/Ranch land impacted (acres) **8** Roadway(s) impacted (length) **1**

Number of low water crossings **2** Historical road closures **-**

## 100-Year Flood Risk Reduction

Population removed from 100-yr **2** # of structures removed from 100-yr **1**

Critical facilities removed from 100-yr **0** Farm/Ranch land removed from 100-yr (acres) **0**

Road removed from 100-yr (miles) **0** Low water crossings removed from 100-yr **0**

Other benefits **None** Reduction in # of road closures over 10 years **0**

## Impacts

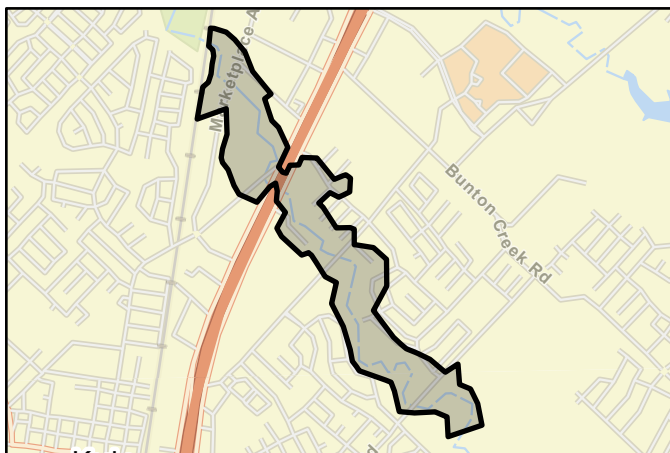
Negative impacts? **No** Negative impacts description **No**

Water supply contributions? **No** Water supply contribution description **-**

## Estimated Cost

Project Cost **\$864,000** % Nature-Based **8** BCR **2**

Recurring costs **4000** Issues **SWPPP implementation, utility relocation, geotechnical analysis**



FMP area



Regional view of FMP area

# Flood Mitigation Project (FMP)



Title **Improve Flood Warning Systems**

ID# **113000015** Sponsor **San Marcos (Municipality)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Project Description

Enhancing stream flow gage network by increasing number of gages throughout community by at least six

Watershed HUC# (if known) **12100203** Emergency Need? **No**

Drainage area (mi<sup>2</sup> est.) **26**

Associated FME's **-** County **Hays**

Associated FMS's **-** Associated FMP's **-**

## Existing 100-Year Flood Risk

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

Population at risk **12,618** # of structures **2,278** Critical facilities **14**

Farm/Ranch land impacted (acres) **388** Roadway(s) impacted (length) **47**

Number of low water crossings **12** Historical road closures **-**

## 100-Year Flood Risk Reduction

Population removed from 100-yr **0** # of structures removed from 100-yr **0**

Critical facilities removed from 100-yr **0** Farm/Ranch land removed from 100-yr (acres) **0**

Road removed from 100-yr (miles) **0** Low water crossings removed from 100-yr **0**

Other benefits **None** Reduction in # of road closures over 10 years **0**

## Impacts

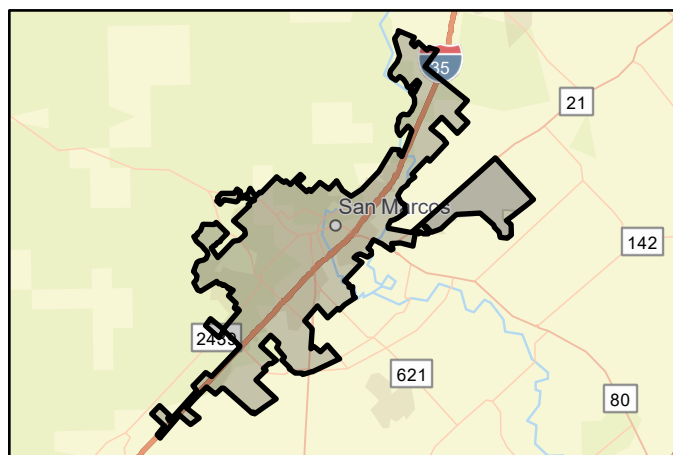
Negative impacts? **No** Negative impacts description **No**

Water supply contributions? **No** Water supply contribution description **-**

## Estimated Cost

Project Cost **\$339,000** % Nature-Based **0** BCR **-**

Recurring costs **39000** Issues **None**



FMP area



Regional view of FMP area

# Flood Mitigation Project (FMP)



Title **Purgatory Creek Channel Improvement**

ID# **113000026** Sponsor **San Marcos (Municipality)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Project Description

Purgatory Creek Channel Improvement Project Preliminary Engineering Report

Watershed HUC# (if known) **12100203** Emergency Need? **No**

Drainage area (mi<sup>2</sup> est.) **0**

Associated FME's **-** County **Hays**

Associated FMS's **-** Associated FMP's **-**

## Existing 100-Year Flood Risk

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

Population at risk **319** # of structures **73** Critical facilities **0**

Farm/Ranch land impacted (acres) **0** Roadway(s) impacted (length) **1**

Number of low water crossings **1** Historical road closures **-**

## 100-Year Flood Risk Reduction

Population removed from 100-yr **56** # of structures removed from 100-yr **27**

Critical facilities removed from 100-yr **0** Farm/Ranch land removed from 100-yr (acres) **0**

Road removed from 100-yr (miles) **1** Low water crossings removed from 100-yr **5**

Other benefits **Added natural features** Reduction in # of road closures over 10 years **0**

## Impacts

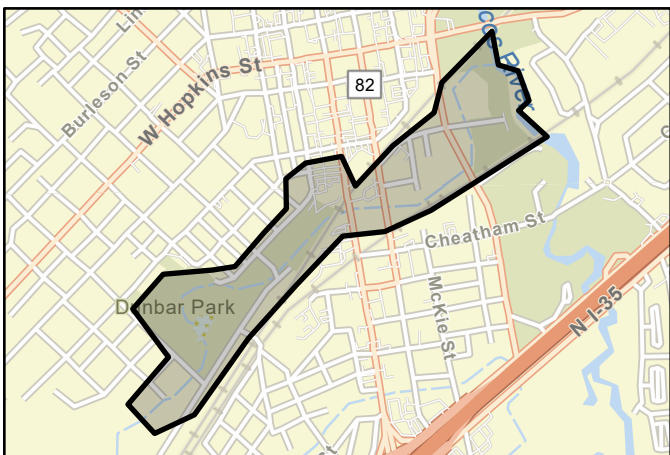
Negative impacts? **No** Negative impacts description **No**

Water supply contributions? **No** Water supply contribution description **-**

## Estimated Cost

Project Cost **\$22,391,000** % Nature-Based **2** BCR **0**

Recurring costs **112000** Issues **Utility Relocation, Underground telecom, permitting**



FMP area



Regional view of FMP area

# Flood Mitigation Project (FMP)



Title **Sherwood/Kingwood Drainage Improvements**

ID# **113000027** Sponsor **San Marcos (Municipality)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Project Description

Sherwood Drive and Kingwood Street Improvements Preliminary Engineering Report

Watershed HUC# (if known) **12100203** Emergency Need? **No**

Drainage area (mi<sup>2</sup> est.) **0**

Associated FME's **-** County **Hays**

Associated FMS's **-** Associated FMP's **-**

## Existing 100-Year Flood Risk

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

Population at risk **55** # of structures **17** Critical facilities **0**

Farm/Ranch land impacted (acres) **0** Roadway(s) impacted (length) **0**

Number of low water crossings **0** Historical road closures **-**

## 100-Year Flood Risk Reduction

Population removed from 100-yr **32** # of structures removed from 100-yr **1**

Critical facilities removed from 100-yr **0** Farm/Ranch land removed from 100-yr (acres) **0**

Road removed from 100-yr (miles) **0** Low water crossings removed from 100-yr **0**

Other benefits **None** Reduction in # of road closures over 10 years **0**

## Impacts

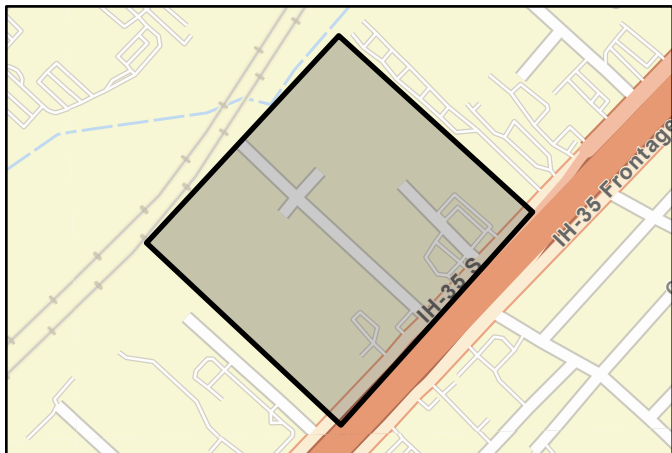
Negative impacts? **No** Negative impacts description **No**

Water supply contributions? **No** Water supply contribution description **-**

## Estimated Cost

Project Cost **\$5,644,000** % Nature-Based **2** BCR **1**

Recurring costs **3000** Issues **None**



FMP area



Regional view of FMP area

# Flood Mitigation Project (FMP)



Title

ID#  Sponsor

RFPG recommend?  Reason for Recommendation

## Project Description

Place automatic flood gates with vehicle detection on inside of flooded area to allow for egress.

Watershed HUC# (if known)  Emergency Need?

Drainage area (mi<sup>2</sup> est.)

Associated FME's  County

Associated FMS's  Associated FMP's

## Existing 100-Year Flood Risk

Flood risk type: Riverine?  Coastal?  Local?  Playa?  Other?

Population at risk  # of structures  Critical facilities

Farm/Ranch land impacted (acres)  Roadway(s) impacted (length)

Number of low water crossings  Historical road closures

## 100-Year Flood Risk Reduction

Population removed from 100-yr  # of structures removed from 100-yr

Critical facilities removed from 100-yr  Farm/Ranch land removed from 100-yr (acres)

Road removed from 100-yr (miles)  Low water crossings removed from 100-yr

Other benefits  Reduction in # of road closures over 10 years

## Impacts

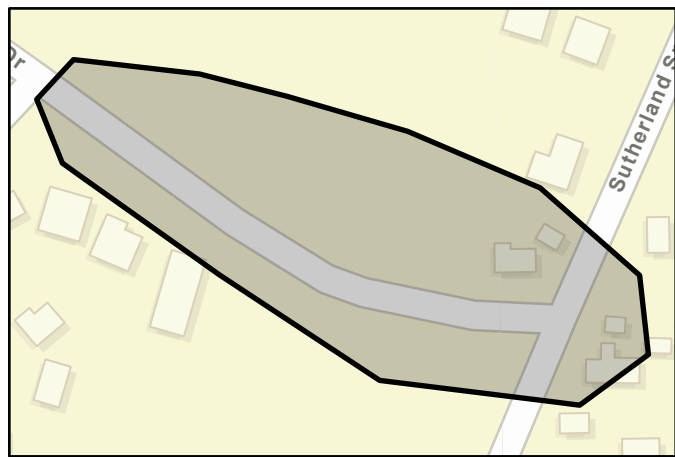
Negative impacts?  Negative impacts description

Water supply contributions?  Water supply contribution description

## Estimated Cost

Project Cost  % Nature-Based  BCR

Recurring costs  Issues



FMP area



Regional view of FMP area

# Flood Mitigation Project (FMP)



Title **Baldrige Creek Regional Detention Pond**

ID# **113000036** Sponsor **Waelder (Municipality)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Project Description

The scope of work includes constructing a regional detention pond on Baldrige Creek upstream of the City. The proposed pond would be located northwest of the City and would release runoff at a substantially lower flowrate, resulting in lower flood eleva

Watershed HUC# (if known) **12100202** Emergency Need? **No**

Drainage area (mi<sup>2</sup> est.) **1**

Associated FME's **-** County **Gonzales**

Associated FMS's **-** Associated FMP's **-**

## Existing 100-Year Flood Risk

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

Population at risk **172** # of structures **132** Critical facilities **0**

Farm/Ranch land impacted (acres) **128** Roadway(s) impacted (length) **2**

Number of low water crossings **5** Historical road closures **-**

## 100-Year Flood Risk Reduction

Population removed from 100-yr **72** # of structures removed from 100-yr **48**

Critical facilities removed from 100-yr **0** Farm/Ranch land removed from 100-yr (acres) **0**

Road removed from 100-yr (miles) **1** Low water crossings removed from 100-yr **3**

Other benefits **None** Reduction in # of road closures over 10 years **0**

## Impacts

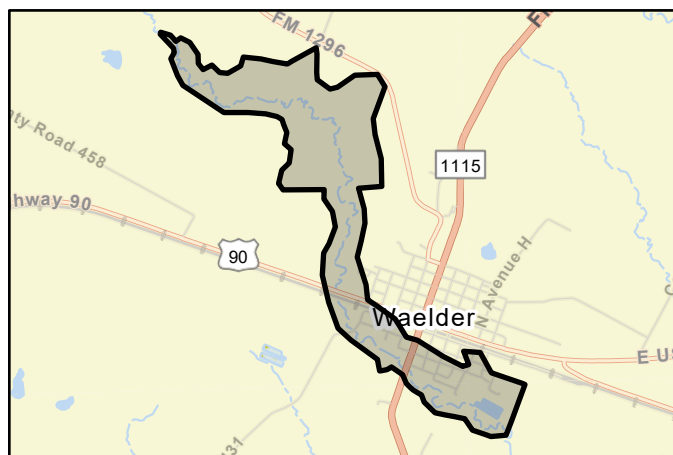
Negative impacts? **No** Negative impacts description **No**

Water supply contributions? **No** Water supply contribution description **-**

## Estimated Cost

Project Cost **\$2,573,000** % Nature-Based **2** BCR **1**

Recurring costs **14000** Issues **SWPPP, utility relocation**



FMP area



Regional view of FMP area

# Flood Mitigation Project (FMP)



Title **Baldrige Creek Channel and Culvert Improvement and Detention Pond**

ID# **113000037** Sponsor **Waelder (Municipality)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Project Description

A combination of a 50 ft. bottom width channel modification with 3:1 side slopes downstream of SH 97 and the addition of two 10 foot by 10 foot concrete box culverts was determined to be the most effective flood mitigation solution for the area. The propo

Watershed HUC# (if known) **12100202** Emergency Need? **No**

Drainage area (mi<sup>2</sup> est.) **0**

Associated FME's **-** County **Gonzales**

Associated FMS's **-** Associated FMP's **-**

## Existing 100-Year Flood Risk

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

Population at risk **169** # of structures **122** Critical facilities **0**

Farm/Ranch land impacted (acres) **7** Roadway(s) impacted (length) **2**

Number of low water crossings **4** Historical road closures **-**

## 100-Year Flood Risk Reduction

Population removed from 100-yr **131** # of structures removed from 100-yr **87**

Critical facilities removed from 100-yr **0** Farm/Ranch land removed from 100-yr (acres) **0**

Road removed from 100-yr (miles) **1** Low water crossings removed from 100-yr **7**

Other benefits **None** Reduction in # of road closures over 10 years **0**

## Impacts

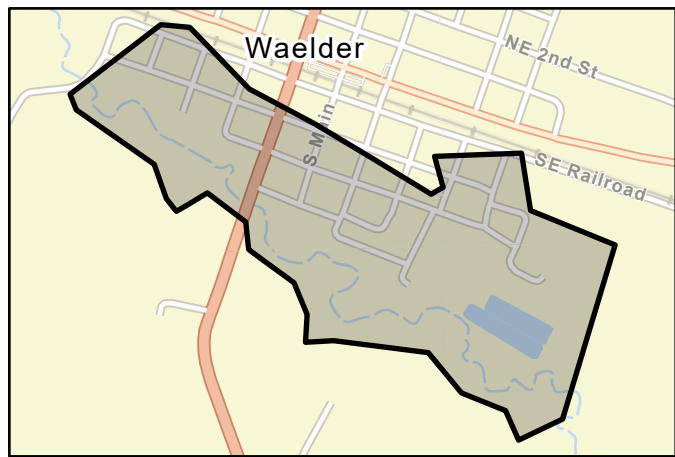
Negative impacts? **No** Negative impacts description **No**

Water supply contributions? **No** Water supply contribution description **-**

## Estimated Cost

Project Cost **\$3,928,000** % Nature-Based **2** BCR **1**

Recurring costs **20000** Issues **permitting, jurisdictional waters, SWPPP implementation, utility relocation,**



FMP area



Regional view of FMP area



# Flood Mitigation Project (FMP)



Title

ID#  Sponsor

RFPG recommend?  Yes Reason for Recommendation

## Project Description

A proposed updated culvert geometry consists of 11 box culverts (10ft-12ft) and a raised finished deck elevation (3ft rise).

Watershed HUC# (if known)  Emergency Need?

Drainage area (mi<sup>2</sup> est.)

Associated FME's  County

Associated FMS's  Associated FMP's

## Existing 100-Year Flood Risk

Flood risk type: Riverine?  Yes Coastal?  No Local?  No Playa?  No Other?  No

Population at risk  # of structures  Critical facilities

Farm/Ranch land impacted (acres)  Roadway(s) impacted (length)

Number of low water crossings  Historical road closures

## 100-Year Flood Risk Reduction

Population removed from 100-yr  # of structures removed from 100-yr

Critical facilities removed from 100-yr  Farm/Ranch land removed from 100-yr (acres)

Road removed from 100-yr (miles)  Low water crossings removed from 100-yr

Other benefits  Reduction in # of road closures over 10 years

## Impacts

Negative impacts?  Negative impacts description

Water supply contributions?  Water supply contribution description

## Estimated Cost

Project Cost  % Nature-Based  BCR

Recurring costs  Issues



FMP area



Regional view of FMP area

# Flood Mitigation Project (FMP)

Title **Regional Detention South of Mountain Crest Drive**

ID# **113000040** Sponsor **Woodcreek (Municipality)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Project Description

The alternative consists of a 20 ft. tall detention structure with a 175 ac-ft detention capacity. The outflow control would consist of culverts for low flow and an overflow weir for high flow.

Watershed HUC# (if known) **12100203** Emergency Need? **No**

Drainage area (mi<sup>2</sup> est.) **0**

Associated FME's **-** County **Hays**

Associated FMS's **-** Associated FMP's **-**

## Existing 100-Year Flood Risk

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

Population at risk **64** # of structures **33** Critical facilities **0**

Farm/Ranch land impacted (acres) **0** Roadway(s) impacted (length) **1**

Number of low water crossings **0** Historical road closures **-**

## 100-Year Flood Risk Reduction

Population removed from 100-yr **17** # of structures removed from 100-yr **8**

Critical facilities removed from 100-yr **0** Farm/Ranch land removed from 100-yr (acres) **0**

Road removed from 100-yr (miles) **0** Low water crossings removed from 100-yr **0**

Other benefits **Reduce severity and frequency of flooding along Hog** Reduction in # of road closures over 10 years **0**

## Impacts

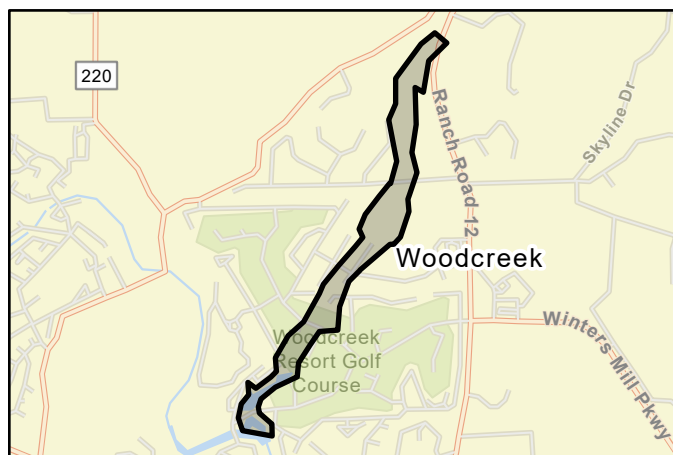
Negative impacts? **No** Negative impacts description **No**

Water supply contributions? **No** Water supply contribution description **-**

## Estimated Cost

Project Cost **\$964,000** % Nature-Based **0** BCR **1**

Recurring costs **5000** Issues **None**



FMP area



Regional view of FMP area

# Flood Mitigation Project (FMP)



Title

ID#  Sponsor

RFPG recommend?  Reason for Recommendation

## Project Description

The culvert opening will be increased to three 36" concrete pipes to match the culvert capacity just downstream at Brook Meadow Dr. and also involve some minimal re-grading of the stream flowline.

Watershed HUC# (if known)  Emergency Need?

Drainage area (mi<sup>2</sup> est.)

Associated FME's  County

Associated FMS's  Associated FMP's

## Existing 100-Year Flood Risk

Flood risk type: Riverine?  Coastal?  Local?  Playa?  Other?

Population at risk  # of structures  Critical facilities

Farm/Ranch land impacted (acres)  Roadway(s) impacted (length)

Number of low water crossings  Historical road closures

## 100-Year Flood Risk Reduction

Population removed from 100-yr  # of structures removed from 100-yr

Critical facilities removed from 100-yr  Farm/Ranch land removed from 100-yr (acres)

Road removed from 100-yr (miles)  Low water crossings removed from 100-yr

Other benefits  Reduction in # of road closures over 10 years

## Impacts

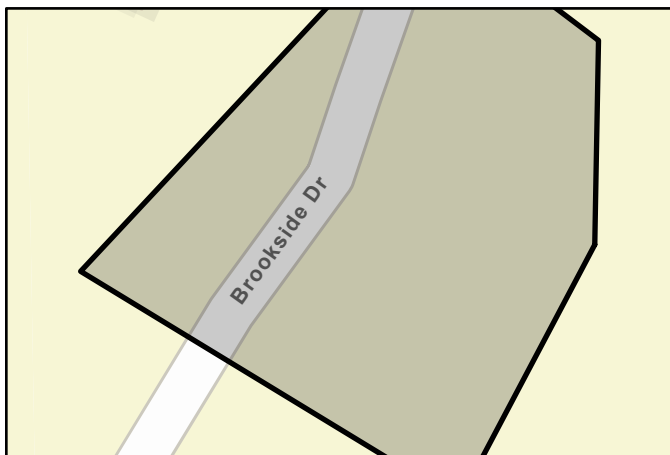
Negative impacts?  Negative impacts description

Water supply contributions?  Water supply contribution description

## Estimated Cost

Project Cost  % Nature-Based  BCR

Recurring costs  Issues



FMP area



Regional view of FMP area

# Flood Mitigation Project (FMP)



Title

ID#  Sponsor

RFPG recommend?  Yes Reason for Recommendation

## Project Description

The proposed alternative consists of a rip rap ditch along the south side of Brookmeadow Drive, under Overbrook Court and down to Hog Creek. The capacity of the ditch would be enough to hold the most frequent flows

Watershed HUC# (if known)  Emergency Need?

Drainage area (mi<sup>2</sup> est.)

Associated FME's  County

Associated FMS's  Associated FMP's

## Existing 100-Year Flood Risk

Flood risk type: Riverine?  Yes Coastal?  No Local?  No Playa?  No Other?  No

Population at risk  # of structures  Critical facilities

Farm/Ranch land impacted (acres)  Roadway(s) impacted (length)

Number of low water crossings  Historical road closures

## 100-Year Flood Risk Reduction

Population removed from 100-yr  # of structures removed from 100-yr

Critical facilities removed from 100-yr  Farm/Ranch land removed from 100-yr (acres)

Road removed from 100-yr (miles)  Low water crossings removed from 100-yr

Other benefits  Reduction in # of road closures over 10 years

## Impacts

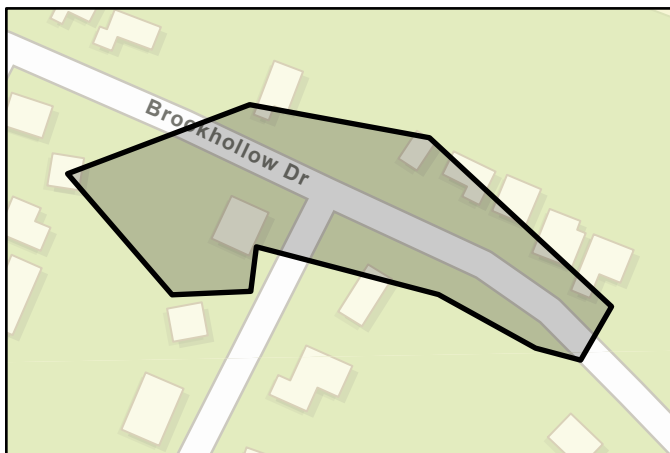
Negative impacts?  Negative impacts description

Water supply contributions?  Water supply contribution description

## Estimated Cost

Project Cost  % Nature-Based  BCR

Recurring costs  Issues



FMP area



Regional view of FMP area

# Flood Mitigation Project (FMP)



Title

ID#  Sponsor

RFPG recommend?  Yes Reason for Recommendation

## Project Description

The proposed dam height of 85 ft. and dam length of 620 ft. will provide a maximum storage capacity of approximately 3,375 ac-ft.

Watershed HUC# (if known)  Emergency Need?

Drainage area (mi<sup>2</sup> est.)

Associated FME's  County

Associated FMS's  Associated FMP's

## Existing 100-Year Flood Risk

Flood risk type: Riverine?  Yes Coastal?  Yes Local?  No Playa?  No Other?  No

Population at risk  # of structures  Critical facilities

Farm/Ranch land impacted (acres)  Roadway(s) impacted (length)

Number of low water crossings  Historical road closures

## 100-Year Flood Risk Reduction

Population removed from 100-yr  # of structures removed from 100-yr

Critical facilities removed from 100-yr  Farm/Ranch land removed from 100-yr (acres)

Road removed from 100-yr (miles)  Low water crossings removed from 100-yr

Other benefits  Reduction in # of road closures over 10 years

## Impacts

Negative impacts?  Negative impacts description

Water supply contributions?  Water supply contribution description

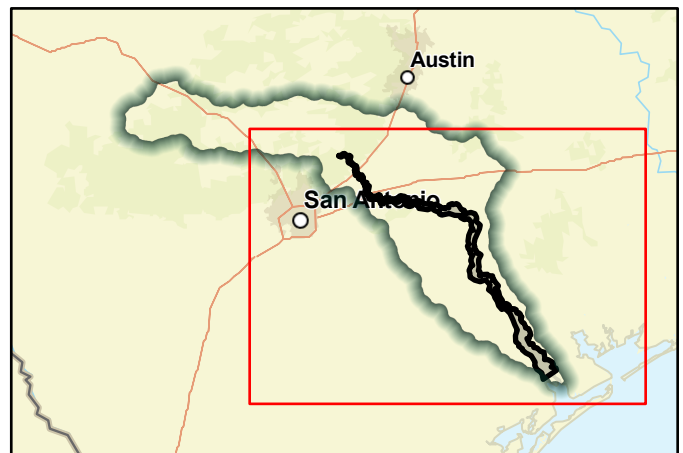
## Estimated Cost

Project Cost  % Nature-Based  BCR

Recurring costs  Issues



FMP area



Regional view of FMP area

# Flood Mitigation Project (FMP)



Title **Regional Detention on Peach Creek**

ID# **113000047** Sponsor **Gonzales (County)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Project Description

A 29 ft. high dam with a length of 5780 ft. would provide approximately 41,774 ac-ft of storage. This site would be able to store a large volume of water and greatly reduce the peak from the Peach Creek watershed.

Watershed HUC# (if known) **12100202** Emergency Need? **No**

Drainage area (mi<sup>2</sup> est.) **313**

Associated FME's **-** County **Gonzales**

Associated FMS's **-** Associated FMP's **-**

## Existing 100-Year Flood Risk

Flood risk type: Riverine? **Yes** Coastal? **Yes** Local? **No** Playa? **No** Other? **No**

Population at risk **6,140** # of structures **3,965** Critical facilities **71**

Farm/Ranch land impacted (acres) **65,348** Roadway(s) impacted (length) **157**

Number of low water crossings **12** Historical road closures **-**

## 100-Year Flood Risk Reduction

Population removed from 100-yr **34** # of structures removed from 100-yr **12**

Critical facilities removed from 100-yr **0** Farm/Ranch land removed from 100-yr (acres) **0**

Road removed from 100-yr (miles) **0** Low water crossings removed from 100-yr **0**

Other benefits **None** Reduction in # of road closures over 10 years **0**

## Impacts

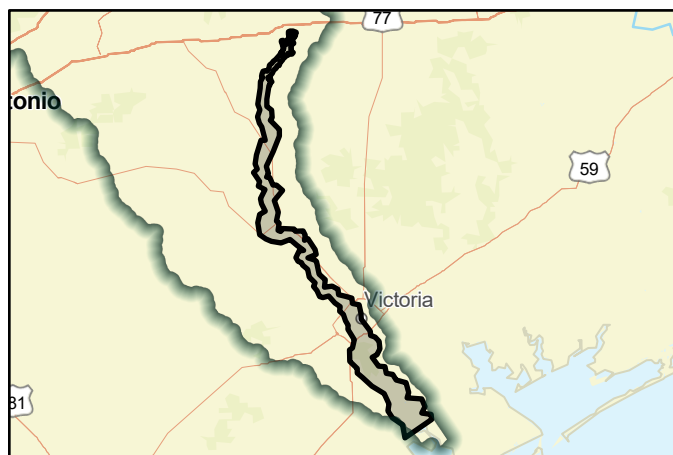
Negative impacts? **No** Negative impacts description **No**

Water supply contributions? **No** Water supply contribution description **-**

## Estimated Cost

Project Cost **\$7,821,000** % Nature-Based **0** BCR **1**

Recurring costs **39000** Issues **Cost of land acquisition is not included**



FMP area



Regional view of FMP area

# Flood Mitigation Project (FMP)



Title

ID#  Sponsor

RFPG recommend?  Reason for Recommendation

## Project Description

Installing generators at critical facilities will help ensure physical safety for facility occupants and maintain electronic systems functionality during power outages. Portable generators will maintain additional systems functionality

Watershed HUC# (if known)  Emergency Need?

Drainage area (mi<sup>2</sup> est.)

Associated FME's  County

Associated FMS's  Associated FMP's

## Existing 100-Year Flood Risk

Flood risk type: Riverine?  Coastal?  Local?  Playa?  Other?

Population at risk  # of structures  Critical facilities

Farm/Ranch land impacted (acres)  Roadway(s) impacted (length)

Number of low water crossings  Historical road closures

## 100-Year Flood Risk Reduction

Population removed from 100-yr  # of structures removed from 100-yr

Critical facilities removed from 100-yr  Farm/Ranch land removed from 100-yr (acres)

Road removed from 100-yr (miles)  Low water crossings removed from 100-yr

Other benefits  Reduction in # of road closures over 10 years

## Impacts

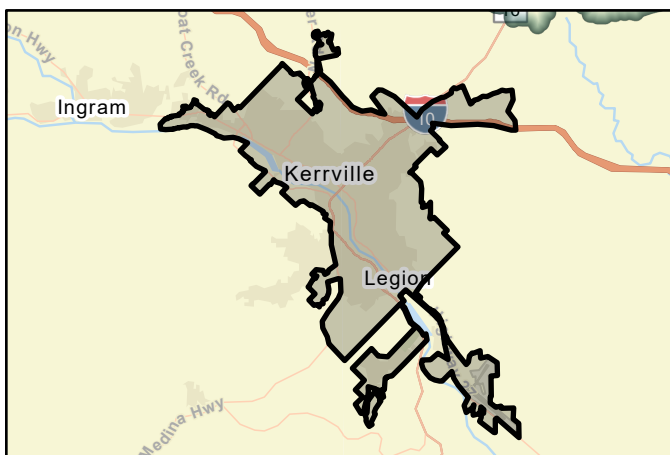
Negative impacts?  Negative impacts description

Water supply contributions?  Water supply contribution description

## Estimated Cost

Project Cost  % Nature-Based  BCR

Recurring costs  Issues



FMP area



Regional view of FMP area

# Flood Mitigation Project (FMP)



Title

ID#  Sponsor

RFPG recommend?  Reason for Recommendation

## Project Description

Install emergency generators and quick connects on all buildings, critical infrastructure, and government buildings.

Watershed HUC# (if known)  Emergency Need?

Drainage area (mi<sup>2</sup> est.)

Associated FME's  County

Associated FMS's  Associated FMP's

## Existing 100-Year Flood Risk

Flood risk type: Riverine?  Coastal?  Local?  Playa?  Other?

Population at risk  # of structures  Critical facilities

Farm/Ranch land impacted (acres)  Roadway(s) impacted (length)

Number of low water crossings  Historical road closures

## 100-Year Flood Risk Reduction

Population removed from 100-yr  # of structures removed from 100-yr

Critical facilities removed from 100-yr  Farm/Ranch land removed from 100-yr (acres)

Road removed from 100-yr (miles)  Low water crossings removed from 100-yr

Other benefits  Reduction in # of road closures over 10 years

## Impacts

Negative impacts?  Negative impacts description

Water supply contributions?  Water supply contribution description

## Estimated Cost

Project Cost  % Nature-Based  BCR

Recurring costs  Issues



FMP area



Regional view of FMP area



# Flood Mitigation Project (FMP)

Title **City of Buda-Lifschutz Headwaters Voluntary Buyout**

ID# **113000061** Sponsor **Buda (Municipality)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Project Description

Voluntary, targeted buyouts for 1 or more affected properties. (November 11, 2016 Preliminary Engineering Report)

Watershed HUC# (if known) **12100203** Emergency Need? **No**

Drainage area (mi<sup>2</sup> est.) **10**

Associated FME's **-** County **Hays**

Associated FMS's **-** Associated FMP's **-**

## Existing 100-Year Flood Risk

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

Population at risk **59** # of structures **22** Critical facilities **0**

Farm/Ranch land impacted (acres) **10** Roadway(s) impacted (length) **1**

Number of low water crossings **1** Historical road closures **-**

## 100-Year Flood Risk Reduction

Population removed from 100-yr **0** # of structures removed from 100-yr **1**

Critical facilities removed from 100-yr **0** Farm/Ranch land removed from 100-yr (acres) **0**

Road removed from 100-yr (miles) **0** Low water crossings removed from 100-yr **0**

Other benefits **None** Reduction in # of road closures over 10 years **0**

## Impacts

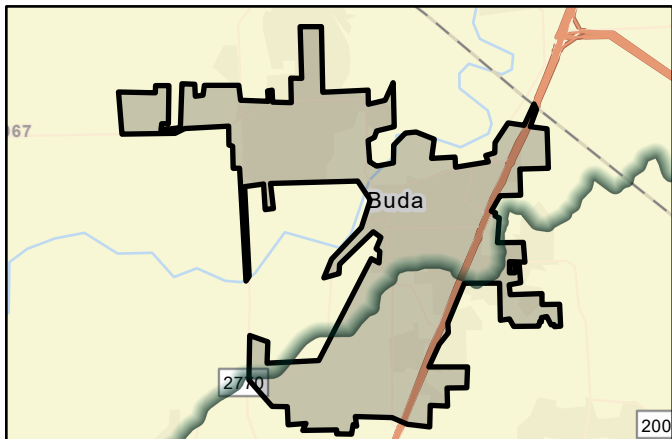
Negative impacts? **No** Negative impacts description **No**

Water supply contributions? **No** Water supply contribution description **-**

## Estimated Cost

Project Cost **\$565,000** % Nature-Based **0** BCR **0**

Recurring costs **3000** Issues **None**



FMP area



Regional view of FMP area

# Flood Mitigation Project (FMP)



Title

ID#  Sponsor

RFPG recommend?  Reason for Recommendation

## Project Description

The WWTP lift station and 8th Avenue lift station have experienced inundation and caused overflows as a result of stormwater inflow into the wastewater system. Also need a new generator & SCADA System Improvements at the City's WWTP, Water Well 6/Water PI

Watershed HUC# (if known)  Emergency Need?

Drainage area (mi<sup>2</sup> est.)

Associated FME's  County

Associated FMS's  Associated FMP's

## Existing 100-Year Flood Risk

Flood risk type: Riverine?  Coastal?  Local?  Playa?  Other?

Population at risk  # of structures  Critical facilities

Farm/Ranch land impacted (acres)  Roadway(s) impacted (length)

Number of low water crossings  Historical road closures

## 100-Year Flood Risk Reduction

Population removed from 100-yr  # of structures removed from 100-yr

Critical facilities removed from 100-yr  Farm/Ranch land removed from 100-yr (acres)

Road removed from 100-yr (miles)  Low water crossings removed from 100-yr

Other benefits  Reduction in # of road closures over 10 years

## Impacts

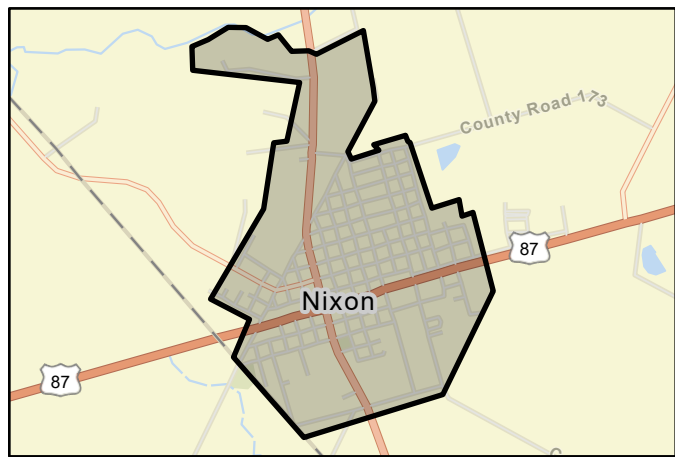
Negative impacts?  Negative impacts description

Water supply contributions?  Water supply contribution description

## Estimated Cost

Project Cost  % Nature-Based  BCR

Recurring costs  Issues



FMP area



Regional view of FMP area

# Flood Mitigation Project (FMP)



Title

ID#  Sponsor

RFPG recommend?  Reason for Recommendation

## Project Description

Purchase and installation of generators for temporary sheltering efforts in all public facilities capable of housing citizens.

Watershed HUC# (if known)  Emergency Need?

Drainage area (mi<sup>2</sup> est.)

Associated FME's  County

Associated FMS's  Associated FMP's

## Existing 100-Year Flood Risk

Flood risk type: Riverine?  Coastal?  Local?  Playa?  Other?

Population at risk  # of structures  Critical facilities

Farm/Ranch land impacted (acres)  Roadway(s) impacted (length)

Number of low water crossings  Historical road closures

## 100-Year Flood Risk Reduction

Population removed from 100-yr  # of structures removed from 100-yr

Critical facilities removed from 100-yr  Farm/Ranch land removed from 100-yr (acres)

Road removed from 100-yr (miles)  Low water crossings removed from 100-yr

Other benefits  Reduction in # of road closures over 10 years

## Impacts

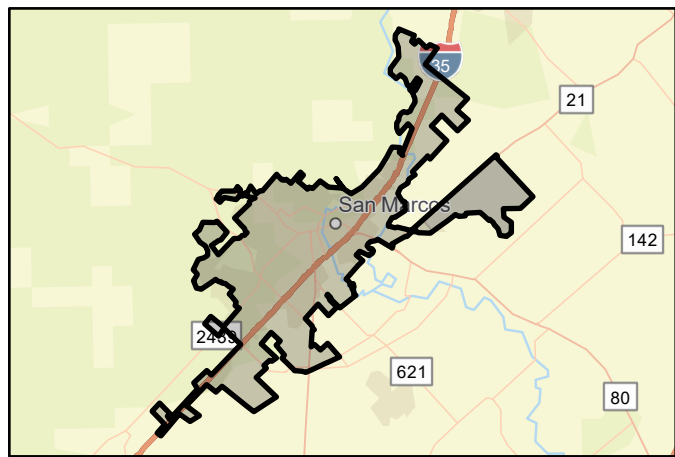
Negative impacts?  Negative impacts description

Water supply contributions?  Water supply contribution description

## Estimated Cost

Project Cost  % Nature-Based  BCR

Recurring costs  Issues



FMP area



Regional view of FMP area

# Flood Mitigation Project (FMP)



Title **Victoria County-Emergency Generators**

ID# **113000064** Sponsor **Victoria (Municipality)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Project Description

Install emergency generators at critical facilities.

Watershed HUC# (if known) **12100204** Emergency Need? **No**

Drainage area (mi<sup>2</sup> est.) **37**

Associated FME's **-** County **Victoria**

Associated FMS's **-** Associated FMP's **-**

## Existing 100-Year Flood Risk

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

Population at risk **3,167** # of structures **1,135** Critical facilities **24**

Farm/Ranch land impacted (acres) **102** Roadway(s) impacted (length) **36**

Number of low water crossings **0** Historical road closures **-**

## 100-Year Flood Risk Reduction

Population removed from 100-yr **0** # of structures removed from 100-yr **0**

Critical facilities removed from 100-yr **0** Farm/Ranch land removed from 100-yr (acres) **0**

Road removed from 100-yr (miles) **0** Low water crossings removed from 100-yr **0**

Other benefits **None** Reduction in # of road closures over 10 years **0**

## Impacts

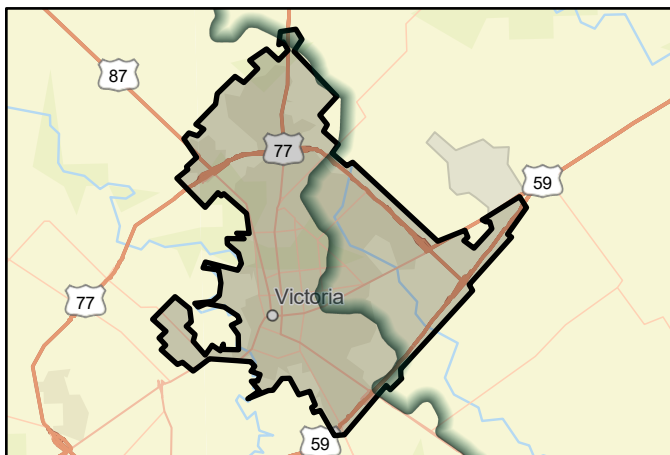
Negative impacts? **No** Negative impacts description **No**

Water supply contributions? **No** Water supply contribution description **-**

## Estimated Cost

Project Cost **\$551,000** % Nature-Based **0** BCR **-**

Recurring costs **2500** Issues **None**



FMP area



Regional view of FMP area

# Flood Mitigation Project (FMP)

Title **City of Seguin Regional Detention Southwest of Seguin City Limits Project**

ID# **113000065** Sponsor **Seguin (Municipality)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Project Description

Proposed regional detention detention project on Mays Creek.

Watershed HUC# (if known) **12100202** Emergency Need? **No**

Drainage area (mi<sup>2</sup> est.) **0**

Associated FME's **-** County **Guadalupe**

Associated FMS's **-** Associated FMP's **-**

## Existing 100-Year Flood Risk

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

Population at risk **42** # of structures **20** Critical facilities **0**

Farm/Ranch land impacted (acres) **28** Roadway(s) impacted (length) **0**

Number of low water crossings **1** Historical road closures **-**

## 100-Year Flood Risk Reduction

Population removed from 100-yr **19** # of structures removed from 100-yr **8**

Critical facilities removed from 100-yr **0** Farm/Ranch land removed from 100-yr (acres) **0**

Road removed from 100-yr (miles) **1** Low water crossings removed from 100-yr **1**

Other benefits **prevent road overtopping** Reduction in # of road closures over 10 years **0**

## Impacts

Negative impacts? **No** Negative impacts description **No**

Water supply contributions? **No** Water supply contribution description **-**

## Estimated Cost

Project Cost **\$2,015,000** % Nature-Based **2** BCR **1**

Recurring costs **10000** Issues **None**



FMP area



Regional view of FMP area

# Flood Mitigation Project (FMP)



Title

ID#  Sponsor

RFPG recommend?  Yes Reason for Recommendation

## Project Description

Proposed project to add two additional 10 ft. by 10 ft. reinforced concrete box culverts on either side of the existing two- 10ft. by 10ft. box culverts at Guadalupe River Dr.

Watershed HUC# (if known)  Emergency Need?

Drainage area (mi<sup>2</sup> est.)

Associated FME's  County

Associated FMS's  Associated FMP's

## Existing 100-Year Flood Risk

Flood risk type: Riverine?  Yes Coastal?  No Local?  No Playa?  No Other?  No

Population at risk  # of structures  Critical facilities

Farm/Ranch land impacted (acres)  Roadway(s) impacted (length)

Number of low water crossings  Historical road closures

## 100-Year Flood Risk Reduction

Population removed from 100-yr  # of structures removed from 100-yr

Critical facilities removed from 100-yr  Farm/Ranch land removed from 100-yr (acres)

Road removed from 100-yr (miles)  Low water crossings removed from 100-yr

Other benefits  Reduction in # of road closures over 10 years

## Impacts

Negative impacts?  Negative impacts description

Water supply contributions?  Water supply contribution description

## Estimated Cost

Project Cost  % Nature-Based  BCR

Recurring costs  Issues



FMP area



Regional view of FMP area

# Flood Mitigation Project (FMP)



Title **City of Victoria Channel and Bridge Modifications on State Highway 87 Project**

ID# **113000067** Sponsor **Victoria (Municipality)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Project Description

Proposed channel and bridge modification project. The design modification consists of adding two additional piers to the right and left overbanks of the bridge.

Watershed HUC# (if known) **12100204** Emergency Need? **No**  
 Drainage area (mi<sup>2</sup> est.) **0**  
 Associated FME's **-** County **Victoria**  
 Associated FMS's **-** Associated FMP's **-**

## Existing 100-Year Flood Risk

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**  
 Population at risk **2** # of structures **2** Critical facilities **0**  
 Farm/Ranch land impacted (acres) **68** Roadway(s) impacted (length) **0**  
 Number of low water crossings **0** Historical road closures **-**

## 100-Year Flood Risk Reduction

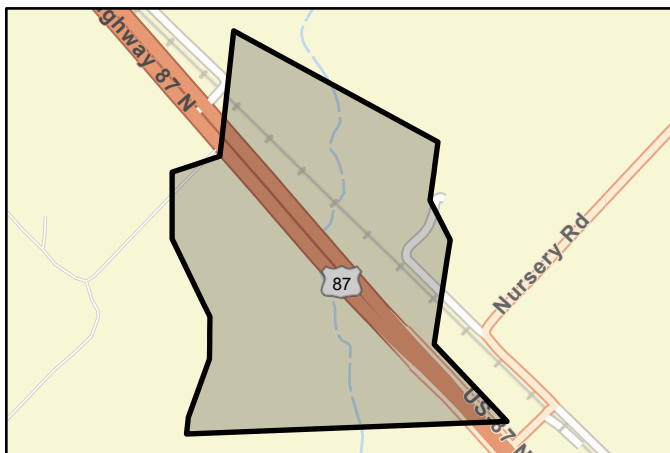
Population removed from 100-yr **4** # of structures removed from 100-yr **2**  
 Critical facilities removed from 100-yr **0** Farm/Ranch land removed from 100-yr (acres) **0**  
 Road removed from 100-yr (miles) **0** Low water crossings removed from 100-yr **0**  
 Other benefits **Reduces severity and frequency of flooding along SH** Reduction in # of road closures over 10 years **0**

## Impacts

Negative impacts? **No** Negative impacts description **No**  
 Water supply contributions? **No** Water supply contribution description **-**

## Estimated Cost

Project Cost **\$8,350,000** % Nature-Based **2** BCR **0**  
 Recurring costs **42000** Issues **SWPP implementation, utility relocation, geotechnical analysis**



FMP area



Regional view of FMP area

# Flood Mitigation Project (FMP)



Title **City of Victoria Detention Structure Located Upstream of State Highway 87 Project**

ID# **113000068** Sponsor **Victoria (Municipality)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Project Description

Proposed detention structure located upstream of State Highway 87. The detention basin has a proposed height of 11ft from crest to inlet structure. The dam has a proposed capacity of 3700 ac-ft. Three culvert outlet structures are proposed to be used for

Watershed HUC# (if known) **12100204** Emergency Need? **No**

Drainage area (mi<sup>2</sup> est.) **3**

Associated FME's **-** County **Victoria**

Associated FMS's **-** Associated FMP's **-**

## Existing 100-Year Flood Risk

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

Population at risk **146** # of structures **56** Critical facilities **0**

Farm/Ranch land impacted (acres) **641** Roadway(s) impacted (length) **3**

Number of low water crossings **3** Historical road closures **-**

## 100-Year Flood Risk Reduction

Population removed from 100-yr **52** # of structures removed from 100-yr **38**

Critical facilities removed from 100-yr **0** Farm/Ranch land removed from 100-yr (acres) **0**

Road removed from 100-yr (miles) **0** Low water crossings removed from 100-yr **0**

Other benefits **None** Reduction in # of road closures over 10 years **0**

## Impacts

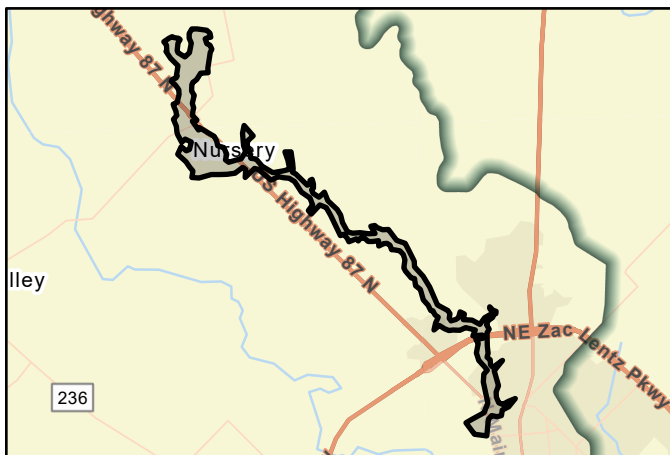
Negative impacts? **No** Negative impacts description **No**

Water supply contributions? **No** Water supply contribution description **-**

## Estimated Cost

Project Cost **\$58,395,000** % Nature-Based **1** BCR **0**

Recurring costs **292000** Issues **higher cost for excavation due to ground elevations close to sea level**



FMP area



Regional view of FMP area



# Flood Mitigation Project (FMP)



Title **Guadalupe County Detention on York Creek Project**

ID# **113000069** Sponsor **Guadalupe (County)**

RFPG recommend? **Yes** Reason for Recommendation **Meets minimum TWDB requirements**

## Project Description

Project for detention on York Creek. The currently proposed dam height of 48 ft. and dam length of 4800 ft. will provide a maximum storage capacity of approximately 48,130 ac-ft.

Watershed HUC# (if known) **12100203** Emergency Need? **No**

Drainage area (mi<sup>2</sup> est.) **365**

Associated FME's **-** County **Guadalupe**

Associated FMS's **-** Associated FMP's **-**

## Existing 100-Year Flood Risk

Flood risk type: Riverine? **Yes** Coastal? **Yes** Local? **No** Playa? **No** Other? **No**

Population at risk **7,280** # of structures **4,637** Critical facilities **75**

Farm/Ranch land impacted (acres) **85,276** Roadway(s) impacted (length) **189**

Number of low water crossings **16** Historical road closures **-**

## 100-Year Flood Risk Reduction

Population removed from 100-yr **287** # of structures removed from 100-yr **100**

Critical facilities removed from 100-yr **0** Farm/Ranch land removed from 100-yr (acres) **0**

Road removed from 100-yr (miles) **0** Low water crossings removed from 100-yr **0**

Other benefits **Reduces flooding along San Marcos and Guadalupe** Reduction in # of road closures over 10 years **0**

## Impacts

Negative impacts? **No** Negative impacts description **No**

Water supply contributions? **No** Water supply contribution description **-**

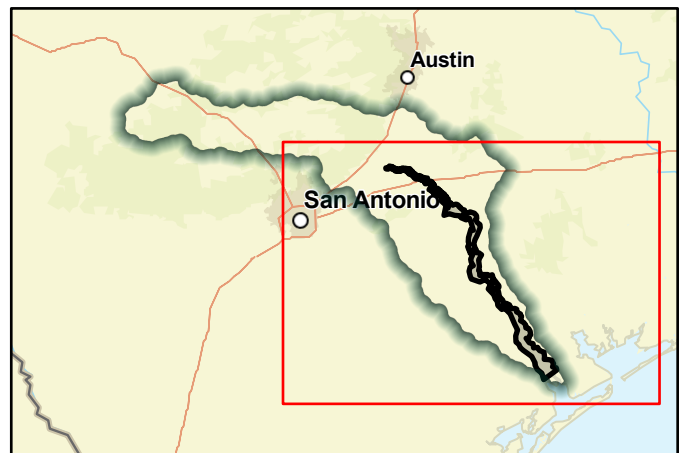
## Estimated Cost

Project Cost **\$15,133,000** % Nature-Based **0** BCR **2**

Recurring costs **76000** Issues **None**



FMP area



Regional view of FMP area

**Appendix 9-A |**

**Table 19: FME, FMS, FMP Funding Survey**

RFP#	Sponsor Entity Name	FMS or	FMS FMP FME - Name	Regional Plan's	Target Year of Full	Estimated Costs in Plan			Sponsor Funding		Other Funding	TOTAL
						Non-	Construction	Total Estimated	Anticipated Source of	Funding to be Financed		
11	Blanco County	FME	Blanco County Low Water Crossing Improvements Study	111000001	TBD	\$250,000		\$250,000	TBD	10%*	90%*	100%*
11	Blanco County	FME	Blanco County Soil Conservation Plan	111000002	TBD	\$100,000		\$100,000	TBD	10%*	90%*	100%*
11	Caldwell County	FME	Caldwell County Bridge Improvements Project Planning	111000003	TBD	\$256,000	\$2,560,000	\$2,816,000	TBD	0%	100%	100%
11	Blanco County	FME	Emergency power generators at critical infrastructure/key resource locations project planning	111000137	TBD	\$100,000		\$100,000	TBD	10%*	90%*	100%*
11	Blanco County	FMP	Detention on the Blanco River	113000001	TBD			\$9,338,000	TBD	10%*	90%*	100%*
11	Buda	FME	City of Buda Dam Study	111000012	TBD	\$500,000		\$500,000	TBD	10%*	90%*	100%*
11	Caldwell County Emergency Service District #4	FME	Caldwell County Emergency Service District #4 Fire Station 2 Project Planning	111000007	TBD	\$100,000		\$100,000	TBD	0%	100%	100%
11	Canyon Regional WA	FME	Canyon Regional WA Hays Caldwell Water Treatment Plant Floodwall Project Planning	111000008	TBD	\$159,355	\$1,593,553	\$1,752,908	TBD	0%	100%	100%
11	Buda	FMP	City of Buda-Lifschutz Headwaters Voluntary Buyout	113000061	TBD			\$565,000	TBD	10%*	90%*	100%*
11	Bulverde	FME	City of Bulverde Drainage Improvements Study	111000013	TBD	\$150,000	\$1,000,000	\$1,150,000	TBD	10%*	90%*	100%*
11	Bulverde	FME	City of Bulverde Local Flooding Study	111000014	TBD	\$100,000	\$1,000,000	\$1,100,000	TBD	10%*	90%*	100%*
11	Caldwell County Emergency Service District #1	FME	Caldwell County Emergency Service District #1 Drainage and Utility Plan	111000004	TBD	\$100,000		\$100,000	TBD	10%*	90%*	100%*
11	Caldwell County Emergency Service District #3	FME	Caldwell County Emergency Service District #3 River Crossing Improvements Study	111000005	TBD	\$1,000,000	\$10,000,000	\$11,000,000	TBD	10%*	90%*	100%*
11	Caldwell County Emergency Service District #3	FME	Caldwell County Emergency Service District #3 Repetitive Loss Property Mitigation Study	111000006	TBD	\$1,000,000	\$10,000,000	\$11,000,000	TBD	10%*	90%*	100%*
11	Center Point ISD	FME	Center Point ISD Drainage Improvements Study	111000009	TBD	\$100,000	\$250,000	\$350,000	TBD	10%*	90%*	100%*
11	Cibolo, Seguin	FME	City of Cibolo and Seguin Road Access and Conditions Study	111000010	TBD	\$500,000		\$500,000	TBD	10%*	90%*	100%*
11	Cibolo, Seguin	FME	City of Cibolo and Seguin USACE Study	111000011	TBD	\$1,000,000		\$1,000,000	TBD	10%*	90%*	100%*
11	Comal County	FME	Comal County Evacuation and Dam Safety Plan	111000096	TBD	\$50,000		\$50,000	TBD	10%*	90%*	100%*
11	Comal County	FME	Comal County Low Water Crossing Improvements Project Planning	111000097	TBD	\$150,000		\$150,000	TBD	10%*	90%*	100%*
11	Comal County	FME	Comal County Voluntary Buyout Program Project Planning	111000098	TBD	\$357,000	\$3,564,000	\$3,921,000	TBD	10%*	90%*	100%*
11	Comal County	FME	Comal County Retention Dam Project Planning	111000099	TBD	\$8,000,000	\$80,000,000	\$88,000,000	TBD	10%*	90%*	100%*
11	Comal County	FMP	Regional Detention on Bear Creek	113000044	TBD			\$6,973,000	TBD	10%*	90%*	100%*
11	Comal County Master WID	FME	Comal County Master WID River Road Low Water Crossing Improvement Project Planning	111000100	TBD	\$700,000	\$7,000,000	\$7,700,000	TBD	10%*	90%*	100%*
11	Cuero	FME	City of Cuero Drainage Improvements Study	111000101	TBD	\$150,000	\$1,000,000	\$1,150,000	TBD	10%*	90%*	100%*
11	Cuero	FME	City of Cuero City Public Service Station Project Planning	111000102	TBD	\$100,000		\$100,000	TBD	10%*	90%*	100%*
11	Cuero	FME	City of Cuero WWTP Floodproofing Project Planning	111000103	TBD	\$100,000		\$100,000	TBD	10%*	90%*	100%*
11	Dewitt County Drainage District	FME	Dewitt County Drainage District Channel Improvements Project Planning	111000104	TBD	\$250,000		\$250,000	taxes	10%	90%	100%
11	DeWitt County, Nordheim	FME	DeWitt County (City of Nordheim) Flash Flood Mitigation Project Planning	111000105	TBD	\$150,000		\$150,000	TBD	10%*	90%*	100%*
11	Edwards Aquifer Authority	FME	Technical Study to Enhance Great Springs Project Regional Flood Mitigation	111000139	TBD	\$250,000		\$250,000	TBD	10%*	90%*	100%*
11	Flatonia	FME	City of Flatonia Drainage Project Planning	111000015	TBD	\$2,739,000	\$27,390,000	\$30,129,000	TBD	10%*	90%*	100%*
11	Flatonia	FME	City of Flatonia WWTP Floodproofing Project Planning	111000016	TBD	\$100,000		\$100,000	TBD	10%*	90%*	100%*
11	Lockhart	FME	City of Lockhart Drainage Improvements Study	111000035	TBD	\$2,400,000	\$2,400,000	\$4,800,000	TBD	1%	99%	100%
11	Lockhart	FME	City of Lockhart USACE Study	111000036	TBD	\$360,000		\$360,000	TBD	1%	99%	100%
11	Garden Ridge	FME	City of Garden Ridge Drainage Improvements Project Planning	111000017	TBD	\$100,000		\$100,000	TBD	10%*	90%*	100%*
11	Martindale	FME	City of Martindale Drainage Improvements Study	111000038	TBD	\$100,000	\$250,000	\$350,000	taxes	1%	99%	100%
11	Gillespie County	FME	Gillespie County Low Water Crossing Improvements Project Planning	111000106	TBD	\$50,000		\$50,000	TBD	10%*	90%*	100%*

\*Assume 10% funding to be financed by local sponsor and 90% other funding needed (state and federal) when there was no sponsor response.  
**Bolded rows indicate a sponsor response.**

RFPG	Sponsor Entity Name	FMS or	FMS FMP FME - Name	Regional Plan's	Target Year of Full	Estimated Costs in Plan			Sponsor Funding			TOTAL
						Non-	Construction	Total Estimated	Anticipated Source of	Funding to be Financed	Other Funding	
11	New Braunfels	FME	City of New Braunfels - Box Culvert Installation to Reduce Flood Risk on Blieders Creek, Comal River and Landa Park Project Planning	111000043	TBD	\$878,000	\$10,888,000	\$11,766,000	agreement with developer	42%	58%	100%
11	New Braunfels	FME	City of New Braunfels Faust St / Nacogdoches Ave Improvements Project Planning	111000044	TBD	\$1,102,000	\$12,425,000	\$13,527,000	TBD	0%	100%	100%
11	New Braunfels	FME	City of New Braunfels Dry Comal Creek Tributary East Watershed Project Planning	111000045	TBD	\$344,000	\$4,464,000	\$4,808,000	TBD	0%	100%	100%
11	New Braunfels	FME	City of New Braunfels Hunters Creek Regional Project Planning	111000047	TBD	\$211,000		\$211,000	TBD	0%	100%	100%
11	New Braunfels	FME	City of New Braunfels South Guadalupe Tributary Watershed Project Planning	111000048	TBD	\$168,000	\$1,512,000	\$1,680,000	TBD	0%	100%	100%
11	New Braunfels	FME	City of New Braunfels Dry Comal Creek West Watershed Project Planning	111000049	TBD	\$126,000	\$1,459,000	\$1,585,000	TBD	0%	100%	100%
11	Gonzales	FME	City of Gonzales Tinsley Creek Improvement Project Planning	111000018	TBD	\$600,000	\$6,000,000	\$6,600,000	TBD	10%*	90%*	100%*
11	Gonzales	FME	City of Gonzales Tinsley Creek Flood Mitigation Project Planning	111000019	TBD	\$430,000	\$4,293,000	\$4,723,000	TBD	10%*	90%*	100%*
11	San Marcos	FME	City of San Marcos Regional Detention Study	111000054	TBD	\$200,000		\$200,000	TBD	0%	100%	100%
11	Gonzales County	FME	Gonzales County Voluntary Buyout Program Project Planning	111000107	TBD	\$150,000		\$150,000	TBD	10%*	90%*	100%*
11	San Marcos	FME	City of San Marcos Low Water Crossing at Jackman Project Planning	111000056	TBD	\$150,000	\$800,000	\$950,000	TBD	0%	100%	100%
11	San Marcos	FME	City of San Marcos Low Water Crossing at Mitchell and Purgatory Creek Project Planning	111000057	TBD	\$200,000	\$2,000,000	\$2,200,000	TBD	0%	100%	100%
11	San Marcos	FME	City of San Marcos LWC at River Road and Railroad Trestle/Blanco River Project Planning	111000058	TBD	\$150,000		\$150,000	TBD	0%	100%	100%
11	San Marcos	FME	City of San Marcos LWC at S LBJ and Purgatory Creek Project Planning	111000059	TBD	\$150,000		\$150,000	TBD	0%	100%	100%
11	San Marcos	FME	City of San Marcos - Extension of River Ridge Parkway West Project Planning	111000060	TBD	\$298,000	\$2,979,000	\$3,277,000	TBD	0%	100%	100%
11	Gonzales County	FMP	Regional Detention on Peach Creek	113000047	TBD			\$7,821,000	TBD	10%*	90%*	100%*
11	Green DeWitt County Drainage District 1	FME	Dewitt County Drainage District 1 Cuero Levee Study	111000143	TBD	\$250,000		\$250,000	TBD	10%*	90%*	100%*
11	Guadalupe Blanco RA	FME	GBRA FEMA Cooperating Technical Partners (CTP) Modeling and Mapping	111000108	TBD	\$250,000		\$250,000	TBD	10%*	90%*	100%*
11	Guadalupe County	FME	Guadalupe County Drainage Improvements Study	111000109	TBD	\$3,000,000	\$3,000,000	\$6,000,000	TBD	10%*	90%*	100%*
11	Guadalupe County	FME	Guadalupe County Voluntary Buyout Program Project Planning	111000110	TBD	\$150,000	\$1,000,000	\$1,150,000	TBD	10%*	90%*	100%*
11	Guadalupe County	FME	Guadalupe County LWC Project Planning	111000111	TBD	\$2,000,000	\$20,000,000	\$22,000,000	TBD	10%*	90%*	100%*
11	Guadalupe County	FMP	Guadalupe County Detention on York Creek Project	113000069	TBD			\$15,133,000	TBD	10%*	90%*	100%*
11	Guadalupe RFPG	FMS	Education and Outreach	112000186	TBD			\$978,000	TBD	10%*	90%*	100%*
11	Guadalupe RFPG	FMS	Property Acquisition and Structural Elevation	112000187	TBD			\$1,250,000	TBD	10%*	90%*	100%*
11	Guadalupe RFPG	FMS	Regulatory and Guidance	112000188	TBD			\$93,000	TBD	10%*	90%*	100%*
11	Guadalupe RFPG	FMS	Flood Measurement and Warning	112000189	TBD			\$9,541,000	TBD	10%*	90%*	100%*
11	Guadalupe RFPG	FMS	Infrastructure Projects	112000190	TBD			\$21,611,000	TBD	10%*	90%*	100%*
11	Hunts ISD	FME	Hunts ISD Storm Drainage Infrastructure Project Planning	111000119	TBD	\$100,000		\$100,000	TBD	10%*	90%*	100%*
11	Ingram	FME	City of Ingram Drainage Improvements Study	111000020	TBD	\$100,000	\$250,000	\$350,000	TBD	10%*	90%*	100%*
11	Ingram ISD	FME	Ingram ISD Construct New Storm Drainage Infrastructure	111000120	TBD	\$100,000		\$100,000	TBD	10%*	90%*	100%*
11	Ingram ISD	FME	Ingram ISD Improve Existing Storm Drainage Infrastructure	111000121	TBD	\$100,000		\$100,000	TBD	10%*	90%*	100%*
11	Kendall County	FME	Cypress Creek regional detention	111000138	TBD	\$113,855	\$15,000,000	\$15,113,855	TBD	10%*	90%*	100%*
11	Kendall County	FME	Kendall County Guadalupe River Model Study	111000145	TBD	\$250,000		\$250,000	TBD	10%*	90%*	100%*
11	Kendall County	FME	Kendall County Stream Gauges and Flood Hazard Beacons	111000146	TBD	\$150,000		\$150,000	TBD	10%*	90%*	100%*
11	Kerr County	FME	Kerr County Dam Integrity Study	111000123	TBD	\$500,000		\$500,000	taxes	10%	90%	100%
11	Kerr County	FMP	Kerr County Back-up Power Generators	113000052	TBD			\$806,000	taxes	10%	90%	100%
11	Kerr ISD	FME	Kerr ISD Storm Drainage Infrastructure Project Planning	111000124	TBD	\$100,000		\$100,000	TBD	10%*	90%*	100%*

\*Assume 10% funding to be financed by local sponsor and 90% other funding needed (state and federal) when there was no sponsor response.  
**Bolded rows indicate a sponsor response.**

RFPG	Sponsor Entity Name	FMS or	FMS FMP FME - Name	Regional Plan's	Target Year of Full	Estimated Costs in Plan			Sponsor Funding		Other Funding	TOTAL
						Non-	Construction	Total Estimated	Anticipated Source of	Funding to be Financed		
11	Kerrville	FME	City of Kerrville Pinto Trail Project Planning	111000022	TBD	\$100,000	\$1,000,000	\$1,100,000	TBD	10%*	90%*	100%*
11	Kerrville	FME	City of Kerrville Park Street Low Water Crossing Project Planning	111000023	TBD	\$340,000	\$3,400,000	\$3,740,000	TBD	10%*	90%*	100%*
11	Kerrville	FME	City of Kerrville First Street Low Water Crossing Project Planning	111000024	TBD	\$510,000	\$5,100,000	\$5,610,000	TBD	10%*	90%*	100%*
11	Kerrville	FME	City of Kerrville Fourth Street Low Water Crossing Project Planning	111000025	TBD	\$180,000	\$1,800,000	\$1,980,000	TBD	10%*	90%*	100%*
11	Kerrville	FME	City of Kerrville Hill Country Drive at SH 16 Project Planning	111000026	TBD	\$245,000	\$2,450,000	\$2,695,000	TBD	10%*	90%*	100%*
11	Kerrville	FME	City of Kerrville Harper Street between Culberson Avenue and Lewis Avenue Project Planning	111000028	TBD	\$180,000	\$1,800,000	\$1,980,000	TBD	10%*	90%*	100%*
11	Kerrville	FME	City of Kerrville Circle Avenue Drainage Channel Project Planning	111000029	TBD	\$100,000	\$190,000	\$290,000	TBD	10%*	90%*	100%*
11	Kerrville	FME	City of Kerrville Jack Drive - Undersized Inlet Project Planning	111000030	TBD	\$240,000	\$2,400,000	\$2,640,000	TBD	10%*	90%*	100%*
11	Kerrville	FME	City of Kerrville Harper Road to Town Creek (Fay Drive) Drainage Improvements Study	111000031	TBD	\$150,000		\$150,000	TBD	10%*	90%*	100%*
11	Kerrville	FME	City of Kerrville Spring Street Project	111000147	TBD	\$15,000	\$800,000	\$815,000	TBD	10%*	90%*	100%*
11	Kerrville	FME	City of Kerrville Clay Street Drainage and Kroc Center Detention Pond Spillway Improvements	111000148	TBD	\$15,000	\$9,561,000	\$9,576,000	TBD	10%*	90%*	100%*
11	Kerrville	FME	City of Kerrville Coronado Drive and Junction Highway Drainage Improvements	111000149	TBD	\$15,000	\$528,000	\$543,000	TBD	10%*	90%*	100%*
11	Kyle	FME	City of Kyle Prairie and Woodland Restoration Plan	111000033	TBD	\$250,000		\$250,000	TBD	10%*	90%*	100%*
11	Kyle	FME	City of Kyle - N. Burleson Street Drainage Improvements Project Planning	111000034	TBD	\$983,000	\$9,830,000	\$10,813,000	TBD	10%*	90%*	100%*
11	Kyle	FMP	Plum Creek Tributary 3 Arbor Knot Dr. Improvement	113000006	TBD			\$557,000	TBD	10%*	90%*	100%*
11	Kyle	FMP	Plum Creek Tributary 4 Sledge Rd. Improvement	113000007	TBD			\$1,149,000	TBD	10%*	90%*	100%*
11	Kyle	FMP	65ft Channel Modification and Additional Culvert	113000010	TBD			\$589,000	TBD	10%*	90%*	100%*
11	Kyle	FMP	Plum Creek Detention Pond Upstream of IH35	113000011	TBD			\$864,000	TBD	10%*	90%*	100%*
11	Luling	FME	City of Luling Drainage Improvements Study	111000037	TBD	\$150,000	\$1,000,000	\$1,150,000	TBD	10%*	90%*	100%*
11	Mountain City	FME	City of Mountain City Repetitive Loss Structure Mitigation Study	111000039	TBD	\$150,000		\$150,000	TBD	10%*	90%*	100%*
11	New Braunfels	FME	City of New Braunfels Wood Road/Landa Street Drainage Improvement	111000144	TBD	\$3,575,700	\$35,757,000	\$39,332,700	TBD	10%*	90%*	100%*
11	Niederwald	FME	City of Niederwald Engineering Review of City Hall	111000051	TBD	\$10,000		\$10,000	TBD	10%*	90%*	100%*
11	Nixon	FME	City of Nixon Voluntary Buyout Program Project Planning	111000052	TBD	\$150,000		\$150,000	TBD	10%*	90%*	100%*
11	Nixon	FMP	City of Nixon-Wastewater System Flood Improvements	113000062	TBD			\$3,949,000	TBD	10%*	90%*	100%*
11	San Marcos	FME	City of San Marcos Modeling of Purgatory Creek and Willow Springs Creek Overflow Area	111000055	TBD	\$271,000		\$271,000	TBD	10%*	90%*	100%*
11	San Marcos	FME	City of San Marcos McKie Street at Willow Springs Creek Project Planning	111000141	TBD	\$50,000		\$50,000	TBD	10%*	90%*	100%*
11	San Marcos	FME	City of San Marcos South LBJ Drive at Willow Springs Creek Project Planning	111000142	TBD	\$50,000		\$50,000	TBD	10%*	90%*	100%*
11	San Marcos	FMP	Improve Flood Warning Systems	113000015	TBD			\$339,000	TBD	10%*	90%*	100%*
11	San Marcos	FMP	Purgatory Creek Channel Improvement	113000026	TBD			\$22,391,000	TBD	10%*	90%*	100%*
11	Hays County	FME	Hays County Dam Inundation Maps	111000112	TBD	\$500,000		\$500,000	General fund	25%	75%	100%
11	Hays County	FME	Hays County Harden Critical Infrastructure Project Planning	111000113	TBD	\$100,000		\$100,000	General fund	25%	75%	100%
11	Hays County	FME	Hays County Drainage Project Planning (Willow Springs Creek between McCarty Lane and Hunter Road)	111000114	TBD	\$800,000	\$8,000,000	\$8,800,000	General fund or bonds	25%	75%	100%
11	Hays County	FME	Hays County Drainage Project Planning (Willow Springs Creek between Hunter Rd and the Railroad)	111000115	TBD	\$1,200,000	\$12,000,000	\$13,200,000	General fund or bonds	25%	75%	100%
11	Hays County	FME	Hays County Southeastern Property Acquisition Project Planning	111000116	TBD	\$800,000	\$8,000,000	\$8,800,000	General fund or bonds	25%	75%	100%
11	Hays County	FME	Hays County Community Flood Mitigation Project Planning	111000118	TBD	\$238,035		\$238,035	General fund	25%	75%	100%

\*Assume 10% funding to be financed by local sponsor and 90% other funding needed (state and federal) when there was no sponsor response.  
**Bolded rows indicate a sponsor response.**

RFPG	Sponsor Entity Name	FMS or	FMS FMP FME - Name	Regional Plan's	Target Year of Full	Estimated Costs in Plan			Sponsor Funding		Other Funding	TOTAL
						Non-	Construction	Total Estimated	Anticipated Source of	Funding to be Financed		
11	San Marcos	FMP	Sherwood/Kingwood Drainage Improvements	11300027	TBD			\$5,644,000	TBD	10%*	90%*	100%*
11	Seguin	FME	City of Seguin Drainage Improvements Study	111000061	TBD	\$1,100,000	\$11,000,000	\$12,100,000	TBD	10%*	90%*	100%*
11	Seguin	FME	City of Seguin Low Water Crossing Improvements Study	111000062	TBD	\$1,500,000	\$15,000,000	\$16,500,000	TBD	10%*	90%*	100%*
11	Kerr County	FME	Kerr County Storm Drainage Infrastructure Project Planning	111000122	TBD	\$125,000	\$1,250,000	\$1,375,000	taxes, bonds	25%	75%	100%
11	Seguin	FME	City of Seguin Ingress Egress Improvements Project Planning	111000063	TBD	\$250,000		\$250,000	TBD	10%*	90%*	100%*
11	Seguin	FME	City of Seguin City-wide Drainage Improvements Project Planning	111000064	TBD	\$200,000	\$2,000,000	\$2,200,000	TBD	10%*	90%*	100%*
11	Seguin	FME	City of Seguin Voluntary Buyout Program Project Planning	111000065	TBD	\$300,000	\$3,000,000	\$3,300,000	TBD	10%*	90%*	100%*
11	Upper Guadalupe River Authority	FME	Upper Guadalupe River Authority Evaluation of Water and Sediment Control Facilities	111000127	TBD	\$250,000		\$250,000	TBD	0%	100%	100%
11	Seguin	FME	City of Seguin Citywide Drainage Project Planning	111000066	TBD	\$4,304,000	\$43,038,000	\$47,342,000	TBD	10%*	90%*	100%*
11	Seguin	FME	City of Seguin Sewage Treatment Plant Floodproofing Project Planning	111000067	TBD	\$100,000	\$250,000	\$350,000	TBD	10%*	90%*	100%*
11	Seguin	FMP	Guadalupe Street Automatic Flood Gates	113000035	TBD			\$115,000	TBD	10%*	90%*	100%*
11	Seguin	FMP	City of Seguin Regional Detention Southwest of Seguin City Limits Project	113000065	TBD			\$2,015,000	TBD	10%*	90%*	100%*
11	Seguin	FMP	City of Seguin - Culvert Improvements at Guadalupe River Drive Project	113000066	TBD			\$594,000	TBD	10%*	90%*	100%*
11	Travis County	FME	Travis County Voluntary Buyout Program Project Planning	111000126	TBD	\$300,000	\$3,000,000	\$3,300,000	TBD	10%*	90%*	100%*
11	Uhland	FME	City of Uhland Drainage Improvement Project Planning	111000068	TBD	\$1,334,000	\$13,331,000	\$14,665,000	TBD	10%*	90%*	100%*
11	Victoria	FME	City of Victoria Drainage Improvement Study	111000069	TBD	\$1,000,000	\$1,000,000	\$2,000,000	TBD	10%*	90%*	100%*
11	Victoria	FME	City of Victoria Harden Critical Infrastructure Project Planning	111000070	TBD	\$100,000		\$100,000	TBD	10%*	90%*	100%*
11	Victoria	FME	City of Victoria Voluntary Buyout Program Project Planning	111000071	TBD	\$150,000	\$1,000,000	\$1,150,000	TBD	10%*	90%*	100%*
11	Victoria	FME	City of Victoria Flood Gate Project Planning	111000072	TBD	\$45,000	\$5,000,000	\$5,045,000	TBD	10%*	90%*	100%*
11	Victoria	FME	City of Victoria Regional Drainage Solutions Project Planning	111000073	TBD	\$1,327,962	\$13,279,625	\$14,607,587	TBD	10%*	90%*	100%*
11	Victoria	FME	City of Victoria - Storm Sewer Improvements Project Planning	111000074	TBD	\$3,946,100	\$39,461,000	\$43,407,100	TBD	10%*	90%*	100%*
11	Victoria	FME	City of Victoria Clean and Televis Storm Sewers Project Planning	111000075	TBD	\$1,662,106	\$16,621,061	\$18,283,167	TBD	10%*	90%*	100%*
11	Victoria	FME	City of Victoria Regrade Priority Ditches and Driveway Culverts Project Planning	111000076	TBD	\$1,165,853	\$11,658,531	\$12,824,384	TBD	10%*	90%*	100%*
11	Victoria	FME	City of Victoria Repair Channel Failures & Sediment Removal Project Planning	111000077	TBD	\$276,201	\$2,762,014	\$3,038,215	TBD	10%*	90%*	100%*
11	Victoria	FME	City of Victoria Stream Restoration Study	111000078	TBD	\$500,000	\$5,000,000	\$5,500,000	TBD	10%*	90%*	100%*
11	Victoria	FME	City of Victoria WWTP Protection Project	111000140	TBD	\$300,000		\$300,000	TBD	10%*	90%*	100%*
11	Victoria	FMP	City of Victoria Back-up Power Generators	113000060	TBD			\$551,000	TBD	10%*	90%*	100%*
11	Victoria	FMP	City of Victoria Channel and Bridge Modifications	113000067	TBD			\$8,350,000	TBD	10%*	90%*	100%*
11	Victoria	FMP	City of Victoria Detention Structure Located	113000068	TBD			\$58,395,000	TBD	10%*	90%*	100%*
11	Victoria County	FME	Victoria County Planning and Development	111000128	TBD	\$100,000		\$100,000	TBD	10%*	90%*	100%*
11	Victoria County	FME	Victoria County Drainage Improvements Study	111000129	TBD	\$150,000	\$1,000,000	\$1,150,000	TBD	10%*	90%*	100%*
11	Victoria County	FME	Victoria County FIRMs	111000130	TBD	\$500,000		\$500,000	TBD	10%*	90%*	100%*
11	Victoria County	FME	Victoria County Drainage Improvements around	111000131	TBD	\$100,000	\$250,000	\$350,000	TBD	10%*	90%*	100%*
11	Victoria County	FME	Victoria County Bridge Improvements Project	111000132	TBD	\$500,000	\$5,000,000	\$5,500,000	TBD	10%*	90%*	100%*
11	Victoria County	FME	Victoria County Voluntary Buyout Program	111000133	TBD	\$300,000	\$3,000,000	\$3,300,000	TBD	10%*	90%*	100%*
11	Victoria County	FMP	Victoria County-Emergency Generators	113000064	TBD			\$551,000	TBD	10%*	90%*	100%*
11	Waelder	FME	City of Waelder Voluntary Buyout Program	111000079	TBD	\$150,000		\$150,000	TBD	10%*	90%*	100%*
11	Waelder	FMP	Baldrige Creek Regional Detention Pond	113000036	TBD			\$2,573,000	TBD	10%*	90%*	100%*
11	Waelder	FMP	Baldrige Creek Channel and Culvert	113000037	TBD			\$3,928,000	TBD	10%*	90%*	100%*
11	Wilson County	FME	Wilson County Stormwater Management Plan	111000134	TBD	\$500,000		\$500,000	taxes	10%	90%	100%
11	Wilson County	FME	Wilson County Low Water Crossing	111000135	TBD	\$150,000	\$1,200,000	\$1,350,000	taxes	10%	90%	100%
11	Wilson County	FME	Wilson County Voluntary Buyout Program Project	111000136	TBD	\$150,000	\$850,000	\$1,000,000	taxes	10%	90%	100%
11	Wimberley	FME	City of Wimberley Drainage Master Plan	111000080	TBD	\$150,000		\$150,000	TBD	10%*	90%*	100%*
11	Wimberley	FME	City of Wimberley FM 1492 at Blanco River Low	111000081	TBD	\$100,000	\$1,000,000	\$1,100,000	TBD	10%*	90%*	100%*
11	Wimberley	FME	City of Wimberley Hidden Valley at Blanco River	111000082	TBD	\$100,000	\$800,000	\$900,000	TBD	10%*	90%*	100%*

\*Assume 10% funding to be financed by local sponsor and 90% other funding needed (state and federal) when there was no sponsor response.  
 Bolded rows indicate a sponsor response.

RFPG	Sponsor Entity Name	FMS or	FMS FMP FME - Name	Regional Plan's	Target Year of Full	Estimated Costs in Plan			Sponsor Funding		Other Funding	TOTAL
						Non-	Construction	Total Estimated	Anticipated Source of	Funding to be Financed		
11	San Marcos	FMP	City of San Marcos-Emergency Generators	113000063	TBD			\$58,000	TBD	<b>0%</b>	<b>100%</b>	<b>100%</b>
11	Wimberley	FME	City of Wimberley Little Arkansas at Blanco River	111000083	TBD	\$100,000	\$1,000,000	\$1,100,000	TBD	10%*	90%*	100%*
11	Wimberley	FME	City of Wimberley Valley Drive at Pierce Creek	111000084	TBD	\$100,000	\$500,000	\$600,000	TBD	10%*	90%*	100%*
11	Wimberley	FME	City of Wimberley Flite Acres Road Low Water	111000085	TBD	\$100,000	\$500,000	\$600,000	TBD	10%*	90%*	100%*
11	Wimberley	FME	City of Wimberley FM 1492 at Pierce Creek Low	111000086	TBD	\$100,000	\$250,000	\$350,000	TBD	10%*	90%*	100%*
11	Wimberley	FME	City of Wimberley Wilson Creek at River Road	111000087	TBD	\$100,000		\$100,000	TBD	10%*	90%*	100%*
11	Wimberley	FME	City of Wimberley Green Acres Dr. at Fire Station	111000088	TBD	\$100,000	\$250,000	\$350,000	TBD	10%*	90%*	100%*

\*Assume 10% funding to be financed by local sponsor and 90% other funding needed (state and federal) when there was no sponsor response.  
**Bolded rows indicate a sponsor response.**



**Appendix 10-A | Summary Memorandum of  
Pre-Planning Meeting August 4, 2021**

# Memorandum

**To:** Lauren Willis –Director of Regulatory & Customer Affairs, Guadalupe-Blanco River Authority  
Jay Scanlon, PE, CFM, ENV SP – Project Manager, Freese & Nichols, Inc.  
Adam Conner – Assistant Project Manager, Freese & Nichols, Inc.

**From:** Velma R. Danielson, Project Manager/Public Involvement Lead, Blanton & Associates  
Alicia Reinmund-Martinez, Deputy Project Manager

**Date:** August 17, 2021

**Re:** **Summary Report – Guadalupe Regional Flood Planning Group Pre-Planning Public Meeting – August 4, 2021**

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The Region 11 Guadalupe Regional Flood Planning Group (RFPG) held their second pre-planning public meeting on Wednesday, August 4, 2021 as an item on their regular monthly RFPG meeting agenda. The purpose of this agenda item was to solicit public input regarding suggestions and recommendations on the development of the Guadalupe Regional Flood Plan. Below is a summary of the meeting discussion related to this agenda item.

## **Meeting Attendance**

There were 61 attendees, (16 RFPG members, seven elected officials, 32 members of the public, one Guadalupe-Blanco River Authority (GBRA) staff member and eight members of the consultant team assisting the Guadalupe RFPG with developing the 2023 Guadalupe Regional Flood Plan), at the August 4, 2021 Guadalupe RFPG Meeting. Sign-in sheets are included in **Appendix A**.

## **Pre-Planning Public Meeting Format**



















While the Guadalupe RFPG regular monthly meeting began at 4:02 p.m., the pre-planning public meeting agenda item began at approximately 5:20 p.m. Chairman Doug Miller reviewed the guidelines for those wanting to provide public comments. Chairman Miller also stated that RFPG members would not be addressing comments during the meeting as this was their opportunity to hear from the public. He then opened the meeting for public input. Eleven individuals spoke and provided comments, with one speaker submitting copies of emails and letters concerning flood planning and potential solutions. A matrix of the stakeholder and public comments received is found in **Appendix B**, and the emails and letters submitted are found in **Appendix C**. The meeting adjourned at 6:02 p.m.

If you have any questions, please let us know.

# **Appendix A**

## **Sign-In Sheets**

**Region 11 Guadalupe Regional Flood Planning Group  
Wednesday, August 4, 2021**

Last Name	First Name	Organization	Email	Signature
Brzozowski	Patrick	Region 10 Liaison	<a href="mailto:pbrzozowski@lnra.org">pbrzozowski@lnra.org</a>	
Buck	Ray	River Authorities	<a href="mailto:rbuck@ugra.org">rbuck@ugra.org</a>	
Christmas	Bobby	Electric Generating	<a href="mailto:bchristmas@gvec.org">bchristmas@gvec.org</a>	
Conner	Adam	FNI	<a href="mailto:adam.conner@freese.com">adam.conner@freese.com</a>	
Danielson	Velma	Blanton	<a href="mailto:velma.danielson@blantonassociates.com">velma.danielson@blantonassociates.com</a>	
Durden	Don	Public	<a href="mailto:don.durden@co.kendall.tx.us">don.durden@co.kendall.tx.us</a>	
Fieseler	Ron	Water Districts	<a href="mailto:manager@blancogw.org">manager@blancogw.org</a>	
Gill	Ken	Municipalities	<a href="mailto:kgill@victoriatx.gov">kgill@victoriatx.gov</a>	
Harris	Daniel	Scheibe Consulting		
Hegemier	Tom	Doucet & Associates	<a href="mailto:thegemier@doucetengineers.com">thegemier@doucetengineers.com</a>	
Johnson	Natalie	TDEM	<a href="mailto:natalie.johnson@tdem.texas.gov">natalie.johnson@tdem.texas.gov</a>	
Johnston	John	Counties	<a href="mailto:johnston@vctx.org">johnston@vctx.org</a>	
Klumpp	Joel	TCEQ	<a href="mailto:joel.klumpp@tceq.texas.gov">joel.klumpp@tceq.texas.gov</a>	
McCool	Jami	Texas Agriculture	<a href="mailto:Jami.McCool@TexasAgriculture.gov">Jami.McCool@TexasAgriculture.gov</a>	
McDaniel	Joseph	Water Utilities	<a href="mailto:jimcdaniel@aquaaamerica.com">jimcdaniel@aquaaamerica.com</a>	
Meitzen	Kimberly	Public	<a href="mailto:kmeitzen@txstate.edu">kmeitzen@txstate.edu</a>	
Miller	Doug	Agricultural	<a href="mailto:doug@miller-miller.com">doug@miller-miller.com</a>	
Nash	Allen	TSSWCB	<a href="mailto:anash@tsswcb.texas.gov">anash@tsswcb.texas.gov</a>	
Pantalion	Joe	Municipalities	<a href="mailto:jpantalion@sanmarcostx.gov">jpantalion@sanmarcostx.gov</a>	
Parker	Beth	Flood Districts	<a href="mailto:bparker@dcdd1.com">bparker@dcdd1.com</a>	
Peace	Annalisa	Environmental	<a href="mailto:annalisa@aquiferalliance.org">annalisa@aquiferalliance.org</a>	
Perkins	Brian	River Authorities	<a href="mailto:bperkins@gbra.org">bperkins@gbra.org</a>	Present
Reilly	Sue	TPWD	<a href="mailto:Sue.Reilly@TPWD.Texas.gov">Sue.Reilly@TPWD.Texas.gov</a>	
Robles	Kris	GLO	<a href="mailto:kris.robles.glo@recovery.texas.gov">kris.robles.glo@recovery.texas.gov</a>	
Ryan	Robert	Blanton	<a href="mailto:rryan@blantonassociates.com">rryan@blantonassociates.com</a>	
Scanlon	Jay	FNI	<a href="mailto:jay.scanlon@freese.com">jay.scanlon@freese.com</a>	
Scott	Suzanne	Region 12 Liaison	<a href="mailto:suzanne.scott@tnc.org">suzanne.scott@tnc.org</a>	
Sethness	Doug	Flood Districts	<a href="mailto:dsethness@reagan.com">dsethness@reagan.com</a>	
Shell	Lon	Counties	<a href="mailto:lon.shell@co.hays.tx.us">lon.shell@co.hays.tx.us</a>	Present
Stone	Kevin	Industries	<a href="mailto:kevin.stone@martinmarietta.com">kevin.stone@martinmarietta.com</a>	
Villarreal	Gian	Small Business	<a href="mailto:GVILLARREAL@seagulpme.com">GVILLARREAL@seagulpme.com</a>	
White	Morgan	TWDB	<a href="mailto:morgan.white@twdb.texas.gov">morgan.white@twdb.texas.gov</a>	

# SIGN-IN SHEET – GENERAL PUBLIC

## Region 11 Guadalupe Regional Flood Planning Group

August 4, 2021

Wimberley Community Center 14068 Ranch Rd 12, Wimberley, TX 78676

Name (Print)	Affiliation	Address, Email or Phone Number	How did you hear about the meeting? (Email, Social Media post, Website, other?)	Comment during the meeting? Yes or No
John Espinoza	City of San Marcos <sup>TFMA</sup>	512 393 8241 jespinoza@sanmarco.tx.gov	Other	No
KEN BENNETT	Center Point	KBENNETT4834@GMAIL.COM 830-456-5010	Email	NO
MIKE JONES	HAYS Co. OR S	810 S. STAGG ROAD TX. SENWIKRCS MIKE.JONES@ci.hays.tx.us		no
Dianne Wassenich	individual	11 Tanglewood Tr San Marcos TX 78666	email facebook	yes
Melissa Zariche	Guadalupe Co.	2605 N. Guadalupe St 880-303-8858	email	NO
Shelly Jackson	Guadalupe Co	"	email	NO
GARY LOUIE	KENDALL	POB 905 COMFORT gary.a.louie@gmail	email	Yes
Vivian Maldonado	PEC	512-755-2446	Email	No
Kurt Buckner	PEC	830-330-0655	Email	NO
* Dennis Engelke	Caldwell County	dennis.engelke@co.caldwell.tx.us	Email <sup>Added</sup>	no yes *
Nathan Glaiser	City of Wimberley	nglaiser@cityofwimberley.com	Email	no

# SIGN-IN SHEET – GENERAL PUBLIC

## Region 11 Guadalupe Regional Flood Planning Group

August 4, 2021

Wimberley Community Center 14068 Ranch Rd 12, Wimberley, TX 78676

Name (Print)	Affiliation	Address, Email or Phone Number	How did you hear about the meeting? (Email, Social Media post, Website, other?)	Comment during the meeting? Yes or No
Michael BOESE	City of Wimberley	mboese@cityofwimberley.com	Email invite	NO
Charlie Flatten	Hays Trinity CCD	gm@haysgroundwater.com		No
Eugenie Schieve	Rep. Zwiener	Eugenie.schieve@house.texas.gov	Email	NO
Joyce Yannuzzi	Sen. Campbell	joyce.yannuzzi@senate.texas.gov	email	NO
Diana Gonzales	PEC	PO Box 1, Johnson City TX	email	NO
Blake Pedford	City of Buda	bpedford@ci.buda.tx.us	email	No
* Jim Guin	TDEM	James.guin@tdem.texas.gov	Email <u>Added</u>	NO <u>yes</u> *
Marcus Pacheco	Hays County	marcus.pacheco@hays.co.tx	email	NO
Bob Mayo	land owner Gypack	robertmayo43@yahoo.com	neighbor	Yes
LINDA Bishop	H-4 Lake Gonzales	meme8@austin.rr.com		Yes
Delton Bishop	U			

# SIGN-IN SHEET – GENERAL PUBLIC

## Region 11 Guadalupe Regional Flood Planning Group

August 4, 2021

Wimberley Community Center 14068 Ranch Rd 12, Wimberley, TX 78676

Name (Print)	Affiliation	Address, Email or Phone Number	How did you hear about the meeting? (Email, Social Media post, Website, other?)	Comment during the meeting? Yes or No
Humberto Rivas	CNWA	humberto@cnwa.com		
MICHAEL SHARP Dishman	CITY OF SEGUIN	108 E MOUNTAIN TRAIL		
<del>Sheila Stiles</del>	<del>Wimberley</del>	<del>103 Freedom Dr. Wimberley</del>	<del>News paper</del>	
Sheila Stiles		422 Chiwa St Central TX TX 78010	FRIENDS	No

# SIGN-IN SHEET – GENERAL PUBLIC

## Region 11 Guadalupe Regional Flood Planning Group

August 4, 2021

Wimberley Community Center 14068 Ranch Rd 12, Wimberley, TX 78676

Name (Print)	Affiliation	Address, Email or Phone Number	How did you hear about the meeting? (Email, Social Media post, Website, other?)	Comment during the meeting? Yes or No
* Kari Potter		428 China St. 830-285 center point, TX 2684 kari.potter94@yahoo.com	Added Analisa Peace	yes NO
Eric VAN GRASSBECK	Harris CO.		e-mail	NO
Ray Don Tilley	WVWA	125 Augusta Dr 78626	email	No
Jonathan Letz	New County			yes



# SIGN-IN SHEET – GENERAL PUBLIC

## Region 11 Guadalupe Regional Flood Planning Group

August 4, 2021

Wimberley Community Center 14068 Ranch Rd 12, Wimberley, TX 78676

Name (Print)	Affiliation	Address, Email or Phone Number	How did you hear about the meeting? (Email, Social Media post, Website, other?)	Comment during the meeting? Yes or No
KURT SOLIS	COMFORT FLOOD PLANNING COALITION CITIZEN	KURT SOLIS@OUTLOOK.COM	EMAIL	
Christina Lopez	Plum Creek Watershed	Clopez@plumcreekwatershed.org	email	no

# SIGN-IN SHEET – ELECTED OFFICIALS

## Region 11 Guadalupe Regional Flood Planning Group

August 4, 2021

Wimberley Community Center 14068 Ranch Rd 12, Wimberley, TX 78676

Name (Print)	Representing	Address, Email or Phone Number	How did you hear about the meeting? (Email, Social Media post, Website, other?)	Comment during the meeting? Yes or No
<i>Count</i> Drew Engelke	Guadalupe County	drew.engelke@co.guadalupe.tx.us	email	N
<i>Count</i> Jen Crownover	Comal County	jencrownover@mycomalcounty.com	Email	N
<i>Asst</i> Anita Collins	Hays Co	anita.collins@co.hays.tx.us	"	N
<i>Co.</i> Judge Ruben Becerra	"	judge.becerra@co.hays.tx.us	"	N
Mark Gleason	City of San Marcos	mgleason@sanmarco.tx.gov	email	N

# SIGN-IN SHEET – ELECTED OFFICIALS

## Region 11 Guadalupe Regional Flood Planning Group

August 4, 2021

Wimberley Community Center 14068 Ranch Rd 12, Wimberley, TX 78676

Name (Print)	Representing	Address, Email or Phone Number	How did you hear about the meeting? (Email, Social Media post, Website, other?)	Comment during the meeting? Yes or No
Christine Byrne	COW Place 3	place3@cityofwimberley.com	email	NO
Joyce Yannuzzi	Sen. Campbell			

## **Appendix B**

### Matrix – Stakeholder/Public Comment

NAME/AFFILIATION	STAKEHOLDER/PUBLIC COMMENTS
<p style="text-align: center;">Dianne Wassenich/ Individual</p>	<ul style="list-style-type: none"> <li>• Mrs. Wassenich is a resident of San Marcos. She indicated that she was very interested and concerned about recreational development within floodplain.</li> <li>• She noted that during future flooding events, debris from these developments could potentially become a “battering ram” downstream.</li> <li>• Mrs. Wassenich also emphasized that land conservation measures, especially of riparian areas and in the 100-year flood plain, need to be implemented.</li> <li>• She suggested that these lands should be bought, and that funding for this measure should be the highest priority.</li> <li>• Mrs. Wassenich also suggested that land at higher elevations should be open and undeveloped.</li> <li>• Mrs. Wassenich stated that the City of San Marcos did a “sensible” thing by increasing the elevation at which development can occur and changing the floodplain elevation from 1ft to 2ft.</li> <li>• She would like the floodplain raised from 1ft to 2ft elsewhere.</li> <li>• Lastly, Mrs. Wassenich emphasized the importance of purchasing land.</li> </ul>
<p style="text-align: center;">Gary Louie/Individual</p>	<ul style="list-style-type: none"> <li>• Mr. Gary Louie is a resident of Comfort, Texas.</li> <li>• Mr. Louie noted that the funding for an early warning system is of importance.</li> <li>• Mr. Louie provided several letters to the RFPG regarding an early warning system and concern for loss of life, and he stated that the funding of an early warning system is affordable and timely.</li> <li>• Mr. Louie also stated that restrictors and retention devices will result in less property damage and provide some long-term economic benefits.</li> <li>• Mr. Louie would like to ensure that any projects keep the downstream in mind.</li> </ul>

NAME/AFFILIATION	STAKEHOLDER/PUBLIC COMMENTS
<p style="text-align: center;">Bob Mayo/ Individual</p>	<ul style="list-style-type: none"> <li>• Mr. Bob Mayo is a resident of Comfort.</li> <li>• Mr. Mayo was interested to know how much funding is available for these projects.</li> <li>• Mr. Mayo also mentioned that people have been getting drinking water out of Cypress Creek.</li> <li>• He noted that development on the land between the Cypress Creek and the river is not possible and suggested turning the area in to a lake.</li> <li>• Mr. Mayo also cited a concern over the pumping of water to the cities.</li> <li>• Mr. Mayo asked if desalination studies have been completed.</li> <li>• Mr. Mayo would like to keep farmland in consideration during flood planning.</li> </ul>
<p style="text-align: center;">Linda Bishop/ Individual</p>	<ul style="list-style-type: none"> <li>• Mrs. Linda Bishop, a landowner on Lake Gonzales, expressed concern regarding a non-responsive gate on the dam.</li> <li>• She stated that the gates were up and down throughout the day of August 4th.</li> <li>• Mrs. Bishop also noted that a news service came to her property to report on the issues at the dam.</li> <li>• Mrs. Bishop also expressed concern over the homes in Gonzales and Cuero that were destroyed and is afraid that will happen to her property.</li> <li>• She stated that as of August 3<sup>rd</sup>, both gates were down at the Lake Gonzales Dam.</li> <li>• Mrs. Bishop stated that “those dams need to be in place for the next flood. Now there is no H-5, and no dam for Lake Gonzales.”</li> <li>• Mrs. Bishop noted that she is afraid Lake Gonzales will be drained like Lake Dunlap.</li> <li>• Mrs. Bishop wanted to clarify that she did not contact the news service to come to her property.</li> </ul>

NAME/AFFILIATION	STAKEHOLDER/PUBLIC COMMENTS
<p style="text-align: center;">Sara Dishman/ Individual and former City of Wimberley Councilmember</p>	<ul style="list-style-type: none"> <li>• Mrs. Sara Dishman stated that she is a Hays County resident and a former City of Wimberley Councilmember.</li> <li>• Mrs. Dishman noted that rock wall structures with stairs have been built along the river to create easy access to the river.</li> <li>• Mrs. Dishman emphasized that this development was dangerous.</li> <li>• Mrs. Dishman stated that she was present during the flood in 2015. She noted that six years have passed, and people have forgotten.</li> <li>• Mrs. Dishman commented that current officials are not making flood planning a priority.</li> <li>• Mrs. Dishman emphasized the importance of disseminating information to local governments, and said that communication is lacking, and that city elected officials are not aware of flooding issues.</li> <li>• She then cited the lack of communication has led to local governments not enforcing rules, which would have prevented the development of the rock walls along the river.</li> <li>• Mrs. Dishman wanted construction activities along the river to be better enforced and regulated.</li> <li>• Mrs. Dishman wanted to ensure that municipalities have the information needed so that the rules don't change when the people in charge change.</li> <li>• Mrs. Dishman wanted rule enforcement to be more consistent from the City of Wimberley and believed there is a gap in communication between the City of Wimberley and the citizens.</li> </ul>
<p style="text-align: center;">Commissioner Jonathan Letz/ Kerr County</p>	<ul style="list-style-type: none"> <li>• Commissioner Letz noted that Kerr County is part of five river basins, making it difficult to plan for. He encouraged that there should be direct communication with county judges and mayors.</li> <li>• Commissioner Letz stated that conservation priorities will have a huge impact on water quality and runoff.</li> <li>• Commissioner Letz noted that he would like to take into consideration conservation efforts, partner with NRCS, and keep water quality in mind.</li> <li>• Commissioner Letz also noted that RV parks need to be looked at.</li> <li>• Commissioner Letz notified the RFPG that Kerr County will be submitting three flood planning projects, and he wanted to know how to do that and what the deadline for submission was.</li> <li>• He also stated that there will be two joint projects from Kendall/Kerr counties that will be submitted to the RFPG.</li> </ul>

NAME/AFFILIATION	STAKEHOLDER/PUBLIC COMMENTS
<p style="text-align: center;">Dennis Engelke/ Caldwell County staff</p>	<ul style="list-style-type: none"> <li>• Mr. Engelke stated that Caldwell County has been identified as a natural disaster county many times.</li> <li>• Mr. Engelke stated that flood planning will take a collaborative effort. He wanted to work collaboratively with this RFPG.</li> <li>• He encouraged county officials to get involved in the flood planning process.</li> <li>• Mr. Engelke noted that Caldwell County has applied for a grant to develop a (flood) management plan and has utilized existing resources.</li> <li>• He suggested that others take advantage of the existing resources, such as TWDB grants.</li> <li>• Mr. Engelke also noted that Caldwell County is involved in a buy-out program to turn previously flooded properties into green space.</li> <li>• Mr. Engelke wanted to encourage local governments to work together to solve this problem and thanked the RFPG for being an available collaborative resource.</li> <li>• Mr. Engelke also made note of the growth in Caldwell County.</li> </ul>
<p style="text-align: center;">Raymond Slade/Individual</p>	<ul style="list-style-type: none"> <li>• Mr. Slade submitted his comments through the Guadalupe RFPG Virtual Public Meeting website. He requested that the following comments be read to the RFPG: “As a hydrologist my studies have included the Guadalupe River. I published a report about flood peaks on the river. The study documents that annual peaks have increased 38 % for the river at Spring Branch. Because of this the 100-year flood plain as published is too low. This is because the flood plain is based on historic data but does not represent increased floods. I was in contact with NOAA about Atlas 14 which represents the current floodplain. They agree with me about this problem but do not have the authority to include increased floods in the creation of the current Guadalupe River floodplains. Any questions about this can be sent to me.”</li> </ul>
<p style="text-align: center;">Kari Potter/Individual</p>	<ul style="list-style-type: none"> <li>• Mrs. Potter was concerned about proposed high density developments in eastern Kerr County near the Guadalupe River.</li> <li>• She expressed concern that these developments and their impervious cover will have runoff that will go directly into the Guadalupe River and potentially impact drinking water downstream She noted that there will be 300 houses and RV lots.</li> <li>• Mrs. Potter commented that high density developments could be an issue and was concerned about their environmental impact.</li> </ul>



<b>NAME/AFFILIATION</b>	<b>STAKEHOLDER/PUBLIC COMMENTS</b>
<p style="text-align: center;">Mark Gleason/ City of San Marcos Councilmember</p>	<ul style="list-style-type: none"> <li>• Mr. Gleason stated that he was acting on his own behalf. His property was flooded twice in 2015.</li> <li>• He mentioned that the Blanco River doesn't have any flood control measures and wanted to know if there have been any studies completed.</li> <li>• Mr. Gleason stated that "we should be looking at this (flood planning) regionally."</li> <li>• Mr. Gleason wanted the group to look at the Blanco River. He noted that the Blanco River has thousands of structures built within the floodplain that can't be bought out.</li> <li>• He emphasized that there is a need to implement projects for the Blanco.</li> </ul>
<p>Jim Huen/Texas Division of Emergency Management</p>	<ul style="list-style-type: none"> <li>• Mr. Huen is the Region 6 floodplain coordinator. He mentioned that he can offer help with hazard mitigation grants.</li> </ul>

## **Appendix C**

Emails and letters submitted to RFPG on August 4, 2021

Beth Bourland  
#10 High Street Road  
Comfort, Texas 78013  
[bethbourland@hotmail.com](mailto:bethbourland@hotmail.com)

August 4, 2021

Don Durden,  
Kendall County Commissioner Precinct 4  
201 E. San Antonio Ave.  
Boerne, TX 78006  
[don.durden@co.kendall.tx.us](mailto:don.durden@co.kendall.tx.us)

**Via email**

Dear Don,

I have lived in Comfort for 36 years. My husbands' family has lived here since the early late 1900s. Our interest in flood management planning arises from both personal observation and historic understanding of the confluence of the Guadalupe River and Cypress Creek. We applaud comprehensive floodplain management strategies that consider structural and nonstructural programs on both waterways.

We support state and local flood mitigation plans that can reduce disaster losses and break the cycle of disaster damage, reconstruction, and repeated damage. Measures that arise from this work will save lives and advance community endorsed initiatives such as capital improvements, economic development, environmental quality, and riparian preservation.

Stream monitoring and early warning notification systems for flash flooding on Cypress Creek would be relatively low-cost and life saving measures that would allow residents and emergency services to respond quickly and appropriately. We consider this to be a priority.

Given that increased development along the Cypress Creek is occurring and will continue to escalate, stream monitoring will also allow us to better understand the impact of growth on the nature of flooding and quality of the water source.

Flood control on the Guadalupe River is also critical to the community. Of particular concern are the effects of high magnitude, low frequency flooding that damages the bedrock channel stream of the river. The effects of gravel deposits over time in the base flow channel chokes effective drainage at meanders and tributaries such as the point of confluence of the Guadalupe River and Cypress Creek. This increases the threat of flooding in the community and forces flood water to scour the natural riparian functions of the banks on both water ways.

Structural methods such as retention ponds or levees, and diversion channels along the Guadalupe River and the Cypress Creek, where feasible, would provide an opportunity to control rising water more effectively reducing damage to properties. Integrating retention and detention measures into developments, using floodplains for green space or parks that will hold and spread out water during floods could be beneficial. Such measures provide improved safety of all downstream communities, offer a chance to develop alternative water sources for residents of the area or enhance recreational options.

Thank you for the opportunity to address the Guadalupe Region 11 Flood Planning Group through this letter and your volunteer service on the committee.

Sincerely,

*Beth Bourland*

Commissioner Durden,

3 August 2021

I am writing as an individual stakeholder and as an interested party of the Comfort Floodplain Coalition to voice my support for stream monitoring stations & early high water/flood warning systems in and around Comfort and upstream on the Cypress and Guadalupe stream/river systems. As you are aware, in our community Cypress Creek has no flow or height monitoring installations, resulting in deadly surprises, giving emergency services little to no warning to evacuate residents, close roads and save lives. Early warning and stream monitoring may be considered small, but it can be very effective at saving lives and providing important historical data to improve future decision making.

At the same time, I believe no flood mitigation project In the Guadalupe River Basin (GRB) should be disregarded because of cost. The various projects underway and the execution of a GRB Flood Master Plan will be critical to all entities in the GRB, especially Kendall County. Easier said than done because of the many jurisdictions involved.

For our community, I believe an early warning system is our closest “alligator to the boat” and the most cost-effective item of the many other projects, such as retention dams, that may take years or even decades to implement.

Sincerely,  
Craig McDonald  
409 Broadway  
Comfort, TX

# GARY A. LOUIE

P.O. Box 905 \* 126 Idlewilde Blvd \* Comfort, TX 78013  
281-221-0132 \* [gary.a.louie@gmail.com](mailto:gary.a.louie@gmail.com)

August 4, 2021

Doug Miller, Chair  
Guadalupe Regional Flood Planning Group #11

cc: Kendall County Commissioner Don Durden

Chairman Miller and Planning Group,

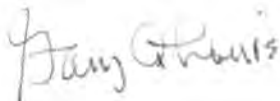
Even though my wife and I do not live directly in the floodplain or floodway of the Guadalupe River or associated tributaries, we are quite concerned about the safety, security, and general economic impact of flooding along the watershed in Comfort.

I appreciate that issues of drainage, retention, and flooding can be complicated and expensive. The heavy rain events during the past few months have brought to light how quickly streams and tributaries can fill, causing dangerous situations for residents and travelers, especially at low water crossings.

My first suggestion for the Planning Group is to consider **funding of an Early Warning System** to protect lives. My understanding is that a system of this nature is affordable and can be implemented in at reasonable time frame.

Longer term, I hope that the Planning Group will **invest in flood control measures** that eventually will help control problems downstream. Thoughtful development of restrictors and retention devices both save lives and protect property, but have the added benefits of creating much needed water supplies as well as economic benefits for the region and state.

Your efforts to address flooding is much appreciated,



Gary A. Louie

Guadalupe Regional Planning Group  
August 2, 2021

Dear Committee Members:

As property owners in Comfort, Texas, and more specifically, property owners affected by potential flooding of Cypress Creek, my wife and I encourage the committee to seriously support all efforts to mitigate flooding of this waterway. Our property is located at 228 Broadway Street.

Due to the history of flooding on Cypress Creek, structural mitigation projects are definitely the most advantageous actions to be taken to alleviate this problem. Such projects can potentially reduce the flooding itself, while also providing additional fresh water supply for the Comfort area. Such structural mitigation could go far to prevent loss of life and property damage.

Additionally, the installation of stream monitoring stations and early warning systems on Cypress Creek will provide emergency services time to warn and evacuate those residents living nearby. My wife's mother and step-father were evacuated on two separate occasions from this property when Cypress Creek flooded during night time hours.

Based upon historical events, the Cypress Creek area should be a prime candidate to receive funds to finance drainage, flood mitigation, and flood control projects along this waterway.

Sincerely,



William G. Mears



Kathryn B. Mears

**don.durden@co.kendall.tx.us**

---

**From:** Marcy Downey Dunn <marcyrdowney@yahoo.com>  
**Sent:** Saturday, July 24, 2021 7:57 AM  
**To:** don.durden@co.kendall.tx.us  
**Subject:** Flood planning meeting

Don, please push for a complete and safe flood resolution. I have lived on the Guadalupe river since I was 8 years old and have dealt with it's flooding for years, I'm 72 now. For the protection of our homes, animals, human life, our businesses...we must improve things!

Thanks you for all your hard work and dedication to our community needs.

Marcy and Neil Dunn

**don.durden@co.kendall.tx.us**

---

**From:** Steve Spence <saspence@hctc.net>  
**Sent:** Sunday, July 25, 2021 9:02 AM  
**To:** don.durden@co.kendall.tx.us  
**Subject:** Ref: Flood protection in the Comfort area

Dear Commissioner Durden,

Many thanks for your continued efforts to promote flood mitigation and early warning systems in the elevations above Comfort. The recent establishment of the Guadalupe Regional Flood Planning Group give us a great opportunity to present our ideas and eventually get the appropriate funding to relieve property damage and loss of life as the result of flooding on the Guadalupe River and Cypress Creek.

I suggest the first order of business would be to install automated early warning systems which can be done at minimal expense then followed by structural solutions such as off channel reservoirs, aquifer storage and recharge wells, and aquifer recharge dams.

During heavy rains the Highway 27 bridge across Cypress Creek always gets blocked by dead trees creating a dam that backs up water into the nearby homes and businesses. An effort should be made to clear out the creek bed (with the consent of the landowners) for some distance, say a quarter of a mile, upstream of the bridge.

Thanks again for your help.

Steve Spence



**From:** ctrono@gmail.com  
**Sent:** Monday, July 26, 2021 11:30 AM  
**To:** don.durden@co.kendall.tx.us  
**Subject:** Region 11 Flood Planning Group

Dear Commissioner Durden:

I am writing to urge the Regional Planning Group 11 to address the flooding issues, lack of early warning and need for surface water supply in the Comfort area, especially relating to Cypress Creek.

Specific items I urge the Group to consider include the following:

- To prevent loss of life and property, structural mitigation is the preferred type of project, especially when constructed in such a way that the structure not only reduces flooding, but also adds a new fresh water supply and potential recreational benefits.
- To prevent loss of life only, stream monitoring stations & early warning systems are essential and very cost effective. Large tributaries, such as the Cypress Creek, have no flow or height monitoring installations, resulting in deadly surprises, giving emergency services little to no warning to evacuate residents, close roads and save lives. These devices will also provide historical data to better understand flooding in Texas.
- Cost benefit calculations must take into account flood impact mitigation/protection in downstream communities all the way to the coast, as well as any benefits related to increased fresh water supply, quality of life and recreational implications. Reducing flooding in Comfort reduces flooding dangers in Sisterdale, Bergheim, Spring Branch, Canyon Lake, San Marcos, etc., and those benefits should be taken into account.
- Taking water supply into account is essential and will show that many structural flood mitigation projects are economically feasible due to the multiple positive effects of said structures. You cannot ignore the water supply benefits when areas such as Western Kendall County are forecast to suffer severe water shortages over the next 40 years, according to the 2010 Regional Water and Wastewater Study conducted by AECOM.
- No minimum project should be disregarded. Early warning and stream monitoring may be inexpensive and considered small, but it is very effective at saving lives and providing important historical data to improve decision making in the future.

Thank you for your time and consideration of these suggestions and issues.

Regards,

Carol & Ruben Trono

160 Antler Falls Run

Comfort Texas 78013

July 25<sup>th</sup>, 2021

Maria C. Villanueva  
618 Water St.  
Comfort, Texas

Alfredo and Yolanda Arizola  
612 Water St.  
Comfort, Texas

To Regional Planning  
Group 11.

*First, we would like to extend our appreciation with the volunteers, who in their efforts, are committed to the general management of problem solving, strategizing and striving for improvements dealing with pre and post flood consequences.*

*We are aware of the negative impacts with flooding in our community and have directly experienced the destruction of our homes on Water Street, Broadway and surrounding neighborhoods, which caused displacement and loss of property. The loss of loved ones, although indirectly, had a deeper impact that was traumatic for all of us in the years past. The experience of hesitation, fear and facing an indecisive state of mind during impending floods has been emotionally overwhelming for many residents. In the past and present we rely on communication from local news-worthy channels, community fire departments, networking and other resources of information focusing on current weather conditions, flood warnings, etc. Those of us living in the flood zone areas rely on the senses of past experiences and can determine a more rapid direction of thought, however, they must still follow direction from local emergency organizations and responders connected with the community.*

*In 2016, Comfort, Texas experienced a flash flood event that completely overwhelmed the community, without warning, no communication of evacuation within flood zone, no efforts in providing barriers, no visible signs of responders going door to door reaching out to evacuate, as in the past. We all know how devastating it is to succumb to these forces of nature beyond our control.*

*Regarding "who" should be responsible in providing flood warning systems is still uncertain to most of us. We truly believe that Education should be an important variable in allowing influences on all opinions, setting clear lines of responsibility, coordinating flood information that dispenses heightened awareness within the local flood zone community. Our families have been to Town meetings when topics are introduced for the purpose of communication or Q & A's involving community input. Comfort flood zone residents would have a better outcome and be more effective in understanding the strategies and preparing ahead with group meetings such as Comfort Floodplain Coalition provides. This group is a new avenue for our family and will certainly take the opportunity to be more proactive in the involvement and information it provides.*

*Our opinion...We need a more reliable flood warning system along with better flood preparedness measures so that people in this community can take action that further minimizes flood destruction of life and property. Too many years have passed in the attempts of minimizing flood impacts. Why are the creek beds and rivers still without sensors, devices and dams that could minimize the flow of flood waters and send out alerts? We understand the funding issues, budgets and constraints along with all the Regional and State involvement; however, the frustration lies within those who can make decisive action plans. We need greater clarity on responsibility for issuing effective flood warnings.*

*Thank you for the opportunity in hearing our sincere opinions and thoughts relating to Flood issues at hand.*

*Respectfully,*

*Yolanda Arizola*  
Yolanda Arizola

*Alfredo V. Arizola*  
Alfredo Arizola

*Maria C. Villanueva*  
Maria C. Villanueva

August 1<sup>st</sup>, 2021

Emmanuel Flatten  
417 Water St.  
Comfort, Texas

To Regional Planning Group 11:

Thank you for your efforts to improve Texans' safety and security by addressing the significant flood dangers along the Guadalupe River and major tributaries. To achieve such ends, I believe stream monitoring, early warning and structural flood mitigation are necessary on the Cypress Creek, upstream of Comfort, Texas.

In 2016, a flash flood on the Cypress Creek surprised residents sleeping in their beds and emergency responders alike. With no warning, everyone was caught off guard, resulting in the death of a young woman. Her car was swept away less than thirty feet from my property line. A small memorial near my home reminds me of her family's loss daily. Had flow monitoring and early warning been in place, their tragic loss may have been avoided. Had structural mitigation been in place, the waters might never have reached homes in the first place.

I implore you to prioritize projects near the community of Comfort, and take the following into account:

Prevent loss of life by implementing stream monitoring stations & early warning systems, which are essential and very cost effective. Large tributaries, such as the Cypress Creek, have no flow or height monitoring installations, resulting in deadly surprises, giving emergency services little to no warning to evacuate residents, close roads and save lives. These devices will also provide data to better understand flooding in Texas.

Prevent loss of life and property by implementing structural flood mitigation. Cost benefit calculations should consider flood protection in downstream communities all the way to the coast, as well as any benefits related to increased fresh water supply, quality of life and recreation. Peak flow reduction in Comfort reduces flood dangers in Sisterdale, Bergheim, Spring Branch, Canyon Lake, etc.

Structural flood mitigation projects are economically feasible when the multiple positive effects are considered. The potential increase to water supply should not be ignored when areas such as Western Kendall County are forecast to suffer a 50% water supply shortfall by 2040, according to the 2010 Regional Water and Wastewater Study conducted by AECOM.

Thank you for the opportunity to make our voices heard and for working toward the betterment of Texan lives.

Sincerely,

Emmanuel Flatten

3 August 2021

To: Region 11 Flood Planning Group, Meeting 8/4/2021, Wimberly TX

Subject: Proposition 8 legislation, "The constitutional amendment providing for the creation of the flood infrastructure fund to assist in the financing of drainage, flood mitigation, and flood control projects."

My spouse and I are long-time residents of Kendall County, residing in Comfort near the confluence of the Guadalupe River and Cypress Creek. Our residence/property is on Cypress Creek (highway 27 bridge). I am also a 'grassroots' member of the Comfort Floodplain Coalition (CFC) which, since its inception in 2011, has been seeking ways to mitigate flooding in the greater Comfort area, which as you know is subject to significant flooding events resulting in property damage and most importantly, loss of lives.

To that end I offer some feedback/comments as requested by the organizers of this Region 11 Planning Group:

Structural mitigation, e.g. upstream dam(s), retention ponds (in Kerr County) is the preferred type of project, especially when constructed in such a way that the structure not only reduces flooding, but also adds a new fresh water supply and potential recreational benefits.

To prevent/minimize loss of life, stream monitoring stations & early warning systems are essential and very cost effective. Large tributaries, such as Cypress Creek, have no flow or height monitoring installations, resulting in deadly surprises, giving emergency services little to no warning to evacuate residents, close roads, etc. No minimum project should be disregarded. Early warning and stream monitoring may be relatively inexpensive, but it is very effective at saving lives.

As well, reducing flooding in Comfort reduces downstream flooding/dangers in Sisterdale, Bergheim, Spring Branch, Canyon Lake, San Marcos, etc.

These measurement systems/devices will also provide historical data to better understand flooding in Texas.

Upstream structural flood mitigation projects will concurrently enhance the water supply and benefits areas of Western Kendall County which are forecast to suffer severe water shortages over the next 40 years (according to the 2010 Regional Water and Wastewater Study conducted by AECOM).

I trust that the above comments are of considered value to the Region 11 Flood Planning group work efforts.

Sincerely,  
Kurt Solis  
4 Country Lane  
Comfort, Texas 78013  
(832) 489-6236

Amy Sinclair  
Comfort, TX 78013

August 1, 2021

Regional Planning Group 11:

I appreciate your efforts to address flooding issues affecting communities along the Guadalupe River. Living on Cypress Creek for 17 years, I've experienced two significant floods and can attest to the need for reliable early warning systems in our area. Every time we have substantial rainfall, I suffer anxiety knowing there is no flood protection whatsoever, and I might receive no warning before the floodwaters enter my bedroom.

As I'm sure you're aware, Comfort's population has been growing faster than our local water supply can keep up with, which is another major concern in our area. Building a dual-purpose flood mitigation / water retention structure upstream of Comfort would benefit our community in multiple ways. I urge you to investigate every possible means to implement such a structure.

Thank you again for your attention to these important steps toward a safer future.

Sincerely,

Amy Sinclair

**Appendix 10-B** | Guadalupe RFPG Stakeholder  
Survey Form



## Guadalupe Regional Flood Plan Survey

### Introduction

**Tell us about yourself and your community.**

*The deadline to provide input for this planning cycle is Thursday, September 30, 2021. Comments provided after September 30, 2021 will be considered in the next planning cycle.*

### Contact Information (Optional)

Email Address

Phone Number

### 1. Which of the following best describes you?

- I am the floodplain manager for a community participating in the National Flood Insurance Program.
- I am a public-sector employee with flood-related responsibilities.
- I am an elected or appointed official with flood-related responsibilities.
- I am a person interested in the regional flood planning process.
- Other (describe)

# Guadalupe Regional Flood Plan Survey

## Introduction

**Tell us about yourself and your community.**

### 2. What type of entity do you represent?

- |   |   |
|---|---|
| <input type="checkbox"/> Myself/General Public    | <input type="checkbox"/> Electrical Utilities |
| <input type="checkbox"/> County                   | <input type="checkbox"/> Water Utilities      |
| <input type="checkbox"/> Municipality             | <input type="checkbox"/> Water Districts      |
| <input type="checkbox"/> Industrial Interests     | <input type="checkbox"/> River Authorities    |
| <input type="checkbox"/> Agricultural Interests   | <input type="checkbox"/> Flood Districts      |
| <input type="checkbox"/> Environmental Interests  | <input type="checkbox"/> State/Federal        |
| <input type="checkbox"/> Small Business Interests |   |
| <input type="checkbox"/> Other (please specify)   |   |

### 3. What is the name of your entity?

### 4. What is your job title?

### 5. In which county is your entity located?

- |                                   |                                    |                                    |
|-----------------------------------|------------------------------------|------------------------------------|
| <input type="checkbox"/> Bandera  | <input type="checkbox"/> Gillespie | <input type="checkbox"/> Lavaca    |
| <input type="checkbox"/> Bastrop  | <input type="checkbox"/> Goliad    | <input type="checkbox"/> Real      |
| <input type="checkbox"/> Blanco   | <input type="checkbox"/> Gonzales  | <input type="checkbox"/> Refugio   |
| <input type="checkbox"/> Caldwell | <input type="checkbox"/> Guadalupe | <input type="checkbox"/> Travis    |
| <input type="checkbox"/> Calhoun  | <input type="checkbox"/> Hays      | <input type="checkbox"/> Victoria  |
| <input type="checkbox"/> Comal    | <input type="checkbox"/> Karnes    | <input type="checkbox"/> Wilson    |
| <input type="checkbox"/> DeWitt   | <input type="checkbox"/> Kendall   | <input type="checkbox"/> Van Zandt |
| <input type="checkbox"/> Fayette  | <input type="checkbox"/> Kerr      |                                    |

**6. In which city is your entity located?**

- |  |                                     |                                     |
|--|-------------------------------------|-------------------------------------|
| <input type="radio"/> Belmont                | <input type="radio"/> Kerrville     | <input type="radio"/> Schertz       |
| <input type="radio"/> Blanco                 | <input type="radio"/> Kingsbury     | <input type="radio"/> Seguin        |
| <input type="radio"/> Canyon Lake            | <input type="radio"/> Kyle          | <input type="radio"/> Sisterdale    |
| <input type="radio"/> Center Point           | <input type="radio"/> Lockhart      | <input type="radio"/> Smiley        |
| <input type="radio"/> Comfort                | <input type="radio"/> Luling        | <input type="radio"/> Spring Branch |
| <input type="radio"/> Cost                   | <input type="radio"/> Martindale    | <input type="radio"/> Stairtown     |
| <input type="radio"/> Cuero                  | <input type="radio"/> McQueeney     | <input type="radio"/> Uhland        |
| <input type="radio"/> Fentress               | <input type="radio"/> Monthalia     | <input type="radio"/> Victoria      |
| <input type="radio"/> Flatonina              | <input type="radio"/> Mountain City | <input type="radio"/> Waelder       |
| <input type="radio"/> Geronimo               | <input type="radio"/> New Braunfels | <input type="radio"/> Wimberley     |
| <input type="radio"/> Gonzales               | <input type="radio"/> Niederwald    | <input type="radio"/> Woodcreek     |
| <input type="radio"/> Hochheim               | <input type="radio"/> Nixon         | <input type="radio"/> Yorktown      |
| <input type="radio"/> Hunt                   | <input type="radio"/> Nolte         | <input type="radio"/> Zipp          |
| <input type="radio"/> Ingram                 | <input type="radio"/> Prairie Lea   |                                     |
| <input type="radio"/> Kendalia               | <input type="radio"/> San Marcos    |                                     |
| <input type="radio"/> Other (please specify) |                                     |                                     |

**7. Are you aware of any other jurisdiction beyond cities and counties with flood-related responsibilities in your area, such as drainage districts, levee districts, flood control districts, etc.?**

- Yes  
 No

**8. If yes, please provide the name of the entity, the name of the contact person, contact information for that entity.**

## Guadalupe Regional Flood Plan Survey

### Inventory

**The Regional Flood Plan will develop an inventory of natural features and major flood infrastructure within the region. The following section will help us identify and evaluate key features in your community.**

**9. Does your entity maintain GIS datasets or other digital inventories for any of the following natural features in your jurisdiction? Select all that apply.**

*If so, please provide this information by utilizing the [Upload Data](#) engagement tool at VPM Station 9 to provide any supporting data and documentation.*

- Rivers, creeks, tributaries, and functioning floodplains
- Wetlands
- Sinkholes
- Alluvial fans
- Vegetated dunes
- No digital inventory of natural features
- This has already been provided to GLO
- Other (please specify)

**10. Does your entity maintain GIS datasets or other digital inventories of the following constructed features in your jurisdiction? Select all that apply.**

*If so, please provide this information by utilizing the Upload Data engagement tool at VPM Station 9 to provide any supporting data and documentation.*

- Levees
- Sea barriers, walls and revetments
- Tidal barriers and gates
- Stormwater tunnels
- Stormwater canals
- Flood protection dams
- Detention/retention ponds
- Weirs
- Storm drain systems
- No digital inventory of constructed features
- This has already been provided to GLO
- Other (please specify)

**11. If available, provide a link to the location of the data on your entity's website.**

**12. What percentage of the following infrastructure or natural features within your jurisdiction would you consider non-functional?**

*Non-functional: The infrastructure is not providing its intended or design level of service.*

	N/A	0%	25%	75%	100%
Stormwater tunnels	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Stormwater canals	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Flood protection dams	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Weirs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Storm drain systems	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Levees	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sea barriers, walls, revetments	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Tidal barriers and gates	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Rivers, creeks, tributaries, and functioning floodplains	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Wetlands	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sink holes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Alluvial fans	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Vegetated dunes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>







**14. What percentage of the following infrastructure or natural feature within your jurisdiction would you consider deficient?**

*Deficient: The infrastructure or natural feature is in poor structural or non-structural condition and needs replacement, restoration, or rehabilitation.*

	N/A	0%	25%	75%	100%
Stormwater tunnels	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Stormwater canals	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Flood protection dams	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Weirs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Storm drain systems	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Levees	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sea barriers, walls, revetments	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Tidal barriers and gates	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Rivers, creeks, tributaries, and functioning floodplains	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Wetlands	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sink holes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Alluvial fans	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Vegetated dunes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>





## Guadalupe Regional Flood Plan Survey

### Flood Prone Areas

**The Regional Flood Plan will identify flood hazards and vulnerability in the region. The following section will help us identify who and what might be harmed by flooding in your community.**

**16. Provide a list of historical flood events that have affected your jurisdiction. Please provide as much information as possible, such as the date(s), specific location(s) (if appropriate), newspaper articles, the financial value damages (if known).**

*Identify areas on the [Interactive Comment Map](#), and/or upload historical information through the [Upload Data](#) page.*



## Guadalupe Regional Flood Plan Survey

### Floodplain Management

**The Regional Flood Plan will consider how current floodplain management practices and regulations impact flood risks. The following section will help us evaluate these practices and identify specific flood mitigation and management goals appropriate for this region.**

**17. Does your community participate in the following programs?**

*Select all that apply.*

- National Flood Insurance Program (NFIP)
- Community Rating System (CRS)
- Do not participate but interested in National Flood Insurance Program (NFIP)
- Do not participate but interested in Community Rating System (CRS)
- I don't know
- Do not participate in either program and not currently interested (Please Describe)

Describe here

**18. Does your community participate in the following floodplain management activities?**

*Select all that apply.*

- Development review/regulation
- Floodplain or drainage capital projects
- Local assistance with home elevation
- Acquisition of repetitive loss properties
- Flood risk communication campaigns and public outreach
- Flood warning systems (Examples: flashers or staff gages)
- Emergency alert systems
- Priority evacuation areas
- Identification of vulnerable populations
- Programmed operations & maintenance
- Reactive maintenance following complaints or damages after a storm
- Programmed inspection/repair/rehab
- Asset inventory and comprehensive condition assessments
- Ordinance enforcement
- None of the above
- Other (please specify)

**19. Development standards**

- Floodplain ordinance
- Drainage ordinance
- Stormwater management ordinances
- Building standards for flood proofing and flood protection
- Consideration for fully developed or future conditions land use
- Zoning/land use regulations
- None of the above
- Other (please specify)

**20. Infrastructure engineering design standards or Drainage Criteria Manual**

- Roadway
- Crossings (bridges and culverts)
- Storm drainage systems
- Detention facilities
- Dams
- Levees/Floodwalls
- None of the above
- Other (please specify)

**21. Higher standards**

- Freeboard
- Detention policy
- Fill restrictions
- Other (please specify)

- None of the above

**22. What future conditions scenarios are required to be evaluated for flood protection projects in your jurisdiction?**

*Please provide this information by utilizing the [Upload Data](#) engagement tool at VPM Station 9 to provide any supporting data and documentation.*

- Existing development
- Projected development over a future time horizon
- Fully developed areas
- 0.2% ACE or 500-year Floodplain as proxy
- We do not use future conditions considerations for flood projection projects
- Other (please specify)

**23. Identify the resources your jurisdiction uses to predict future land use and development.**

Please provide this information by utilizing the Upload Data engagement tool at VPM Station 9 to provide any supporting data and documentation.

- TX Demographic Center Population Projections
- Future Land Use Plan from Comprehensive Plan
- Annexation Plans
- Utility CCNs
- Public Improvement Districts
- Texas Enterprise Zones
- Transportation Plans
- None of the above
- Other (please specify)

**24. Which of the following best describes how your community enforces its Floodplain Management practices?**

Select one.

- We actively enforce the entire floodplain management ordinance, perform many inspections throughout construction process, issue fines, violations, and Section 1316s where appropriate, and enforce substantial damage and substantial improvement.
- We enforce much of the ordinance, perform limited inspections and are limited in issuance of fines and violations.
- We provide permitting of development in the floodplain, may not perform inspections, may not issue fines or violations.
- We do not currently enforce floodplain management regulations.

**Additional comments on enforcement:**

The Regional Flood Plan Group (RFPG) will consider recommending or adopting consistent minimum standards across the entire region. "Recommended" standards would not require the communities to adopt the minimum standards to have projects included in the Regional Flood Plan and to be eligible for funding. "Adopted" standards would require the communities to adopt the minimum standards to have projects included in the Regional Flood Plan and to be eligible for funding. Recommended and Adopted standards can consider the unique needs of urban vs. rural, geographic needs, or other subregions defined by the RFPG.



**25. Should the Regional Flood Planning Group (RFPG) "recommend" consistent minimum flood risk management standards across the entire Region?**

*These standards would be considered regional best practices, but would not be required to be adopted by local communities to participate in the Plan and be eligible for funding.*

- Yes
- No

Please describe

**26. What are some minimum flood risk management standards the Regional Flood Planning Group (RFPG) should consider *recommending*?**

*Select all that apply.*

- Participation in the NFIP or equivalent standards
- Regulate development in the FEMA floodplain or other floodplain designation identified by the RFPG
- Establish higher standards for development or freeboard (additional feet above) known floodplain (Examples: Future Conditions BFE (base flood elevation), feet above existing BFE, 0.2% ACE (500-year floodplain) BFE, feet above street or curb)
- Establish infrastructure protection standards, minimum design criteria for buildings, critical facilities (hospitals, schools, fire stations, etc.), roadways, drainage infrastructure (culverts, bridges, storm drain, detention facilities, dams, or levees), property acquisition, and open space
- The RFPG should not recommend minimum flood risk management standards
- Other (please specify)

**27. Should the Regional Flood Planning Group (RFPG) "adopt" consistent minimum flood risk management standards across the entire Region?**

*These standards would be required to be adopted by local communities to participate in the Plan and be eligible for funding.*

- Yes
- No

Please describe

**28. What are some minimum flood risk management standards the Regional Flood Planning Group (RFPG) should consider *adopting*?**

- Participation in the NFIP or equivalent standards
- Regulate development in the FEMA floodplain or other floodplain designation identified by the RFPG
- Establish higher standards for development or freeboard (additional feet above) known floodplain (Examples: Future Conditions BFE (base flood elevation), feet above existing BFE, 0.2% ACE (500-year floodplain) BFE, feet above street or curb
- Establish infrastructure protection standards, minimum design criteria for buildings, critical facilities (hospitals, schools, fire station, etc.), roadways, drainage infrastructure (culverts, bridges, storm rain, detention facilities, dams, or levees), property acquisition, and open space
- The RFPG should not adopt minimum flood risk management standards.
- Other (please specify)

**29. Please provide any additional thoughts on minimum flood risk management standards for the Regional Flood Planning Group (RFPG) to consider.**

**30. What are the top 3 priorities the Regional Flood Planning Group (RFPG) should include in the establishment of regional goals?**

*Select up to 3*

- Implement protective standards and policies
- Identify and communicate flood risk
- Quantify potential reduction in risk to life and property
- Restore failing/aging infrastructure
- Implement flood warning and response mechanisms
- Provide or enhance inter-jurisdictional cooperation
- Other (please specify)

**31. Are there any certain areas within the region that have especially unique circumstances that warrant their own sub-regional goals?**

*For example, the RFPGs may wish to consider the unique needs of coastal vs. inland, urban vs. rural areas, areas with detailed vs. approximate floodplain mapping and modeling, or upstream vs. downstream areas.*

Yes

No

Please describe

**32. Do you have any suggestions in the categories of Legislative, Regulatory/Administrative, or Revenue Generation that could help the region in the areas of floodplain management, flood mitigation planning, and mitigation, and/or reducing flooding impacts to life and property?**

Legislative

Regulatory/  
Administrative

Revenue Generation

## Guadalupe Regional Flood Plan Survey

### Flood Planning

**The Regional Flood Plan will identify potential study needs and potentially feasible flood management strategies and projects. The following section will help us incorporate the needs of your community.**

**33. What types of local and regional flood planning information does your jurisdiction have?**

*Check all that apply and utilize the [Upload Data](#) engagement tool at VPM Station 9 to provide any supporting data and documentation.*

- Hazard Mitigation Plan
- Master Drainage Plans/Stormwater Drainage Plans
- Flood Protection Plans
- Flood Studies/Flood Risk Assessments
- Watershed Plans
- CRS Plans
- Floodplain Management Plan
- Flood risk screening tools
- Models, including hydrology, hydraulics or any available screening level models
- None of the above

**34. What additional relevant planning documents or information does your jurisdiction have?**

*Check all that apply and utilize the [Upload Data](#) engagement tool at VPM Station 9 to provide any supporting data and documentation.*

- Flood disaster reports
- Coastal resiliency master plans
- Transportation plans
- Substantial Damage Estimation (SDE) forms
- Emergency Action Plans (flood-related portions)
- Other information relevant to the RFPG
- None of the above

**35. Are there priority areas in your community with no inundation maps or detailed studies that could benefit from a flood study? If yes, please describe the reason for the need.**

Please use the *Interactive Comment Map* to identify specific areas.

- No or limited inundation maps
- Outdated maps in need of updates study
- Need maps to identify flooding for urban areas, low lying areas, and/or streets
- No areas in need of study

**36. Is there funding in your community for the necessary flood studies?**

- No funding identified
- Partial local funding available
- Full funding identified
- Full funding secured
- Other (please specify)

**37. Have grants or loans been secured for all or a portion of this funding?**

- Yes
- No

If yes, please describe

**38. Identify the resources your jurisdiction uses to identify how physical changes to the land might affect future flood risk.**

Please provide this information by utilizing the Upload Data engagement tool at VPM Station 9 to provide any supporting data and documentation.

- |  |  |
|--|--|
| <input type="checkbox"/> Subsidence studies                                    | <input type="checkbox"/> Studies on geomorphic changes                     |
| <input type="checkbox"/> Sea level rise studies                                | <input type="checkbox"/> Watershed studies with future conditions analysis |
| <input type="checkbox"/> Analysis of sedimentation of flood control structures | <input type="checkbox"/> None of the above                                 |
| <input type="checkbox"/> Other (please specify)                                |  |

**39. What has your jurisdiction done to address flooding concerns?**

- |   |   |
|---|---|
| <input type="checkbox"/> Nothing yet  | <input type="checkbox"/> Upgraded existing drainage infrastructure  |
| <input type="checkbox"/> Performed existing drainage system maintenance                                   | <input type="checkbox"/> Constructed new drainage systems   |
| <input type="checkbox"/> Performed project identification and planning activities                         | <input type="checkbox"/> Wetland/floodplain/open space restoration/preservation                           |
| <input type="checkbox"/> Performed more detailed analyses of areas to identify the source of the flooding | <input type="checkbox"/> Implemented and enforced drainage design criteria/floodplain management policies |
| <input type="checkbox"/> Other (please specify)   |   |

**40. What, if any, major infrastructure or flood mitigation projects are currently under development?**

Select all of the projects that apply. If so, provide this information by utilizing the Upload Data engagement tool at VPM Station 9 to provide any supporting data and documentation.

- Levees
- Stormwater canals
- Sea barriers, walls and revetments
- Flood protection dams
- Tidal barriers and gates
- Weirs
- Stormwater tunnels
- Storm drain systems
- Other (please specify)

**41. What is the current status of the major infrastructure or flood mitigation projects currently under development?**

Describe the project location(s) using the Interactive Comment Map. Please utilize the Upload Data engagement tool at VPM Station 9 to provide any supporting data and documentation.

- Project identified
- Project in Preliminary Design
- Project in conceptual planning phase
- Project in Final Design
- Project in feasibility analysis phase
- Project in Construction
- Other (please specify)

**42. Is there funding in your community for the necessary engineering evaluations and/or design and construction of proposed flood mitigation projects?**

*Select one.*

- No funding identified
- Partial funding available
- Full funding identified
- Full funding secured
- Other (please specify)

**43. Have grants or loans been secured for all or a portion of this funding?**

- Yes
- No
- N/A

**44. Are there non-structural flood mitigation projects in your community with funding needs? If so, what level of funding is there in your community for these projects?**

- |   |   |
|---|---|
| <input type="checkbox"/> No non-structural flood mitigation projects are needed in my community               | <input type="checkbox"/> Projects are identified with partial funding available |
| <input type="checkbox"/> There is a need to identify non-structural flood mitigation projects in my community | <input type="checkbox"/> Projects are identified with full funding secured      |
| <input type="checkbox"/> Projects are identified with no funding identified                                   |   |
| <input type="checkbox"/> Other (please specify)   |   |



## Guadalupe Regional Flood Plan Survey

### Funding

**Flood studies (evaluations), management strategies, and projects identified in the Regional Flood Plan will be eligible for TWDB funding through grants and loans. The following section will help us understand the current funding mechanisms in your community and identify the proposed role of State financing.**

**45. Which of the following describes your local funding sources for flood management activities?**

*Select all that apply.*

- |   |  |
|---|--|
| <input type="checkbox"/> General Fund                       | <input type="checkbox"/> Permitting Fees   |
| <input type="checkbox"/> Bond Program                       | <input type="checkbox"/> Ad Valorem Tax  |
| <input type="checkbox"/> Stormwater utility or Drainage fee | <input type="checkbox"/> I don't know  |
| <input type="checkbox"/> Special Tax Districts              | <input type="checkbox"/> No current dedicated funding but interested                           |
| <input type="checkbox"/> Impact Fees                        | <input type="checkbox"/> We do not have a local funding source for flood management activities |
| <input type="checkbox"/> Other (please specify)             |  |

**46. Have you ever applied for Federal or State grants or loan programs?**

*If yes, please select which ones below.*

- Flood Infrastructure Fund (FIF) [TWDB]
- Building Resilient Infrastructure and Communities Program (BRIC) [FEMA]
- Hazard Mitigation Grant Program (HMGP) [FEMA, TDEM]
- Pre-Disaster Mitigation (PDM) [FEMA, TDEM]
- U.S. Department of Agriculture - Natural Resources Conservation Service (NRCS)
- Community Development Block Grant-Disaster Recovery (CDBG-DR) [HUD, GLO]
- U.S. Army Corps of Engineers Small Continuing Authorities Program (USACE CAP)
- Cooperating Technical Partners Program (CTP) [TWDB]
- State Water Implementation Fund for Texas (SWIFT) [TWDB]
- Flood Protection Planning Grant [TWDB]
- Texas Water Development Fund (DFund) [TWDB]
- Clear Water State Revolving Fund (CWSRF) [TWDB]
- I don't know
- Other (please specify)

**47. If you have not considered applying for Federal or State grant/loan programs, please state main reasons below.**

## Guadalupe Regional Flood Plan Survey

### Flood Response

**The Regional Flood Plan will document the existing flood response preparations in the region. The following section will help us understand the practices your community uses for emergency response.**

**48. Select the flood response measures your jurisdiction uses for emergency response:**

*Select all that apply.*

- |   |   |
|---|---|
| <input type="checkbox"/> Public Emergency Alert System (i.e. reverse 911) | <input type="checkbox"/> Flood forecasting tool                   |
| <input type="checkbox"/> Flood warning signs                              | <input type="checkbox"/> Crew(s) set up barricades or close gates |
| <input type="checkbox"/> Flood warning signs with flashing lights         | <input type="checkbox"/> Automatic low water crossing gates       |
| <input type="checkbox"/> Flood gauges                                     | <input type="checkbox"/> Outdoor siren/message speaker system     |
| <input type="checkbox"/> Rain/stream gauges with alerts                   | <input type="checkbox"/> Swift water rescue team                  |
| <input type="checkbox"/> Public-facing website                            | <input type="checkbox"/> Cameras                                  |
| <input type="checkbox"/> Portable/temporary traffic message boards        | <input type="checkbox"/> None of the above                        |
| <input type="checkbox"/> Other (please specify)                           |   |

**49. If your jurisdiction plans to implement changes or additions to the emergency response system over the next five years, select the measures that you anticipate implementing:**

Select all that apply.

- Public Emergency Alert System (i.e. reverse 911)
- Flood forecasting tool
- Flood warning signs
- Crew(s) set up barricades or close gates
- Flood warning signs with flashing lights
- Automatic low water crossing gates
- Flood gauges
- Outdoor siren/message speaker system
- Rain/stream gauges with alerts
- Swift water rescue team
- Public-facing website
- Cameras
- Portable/temporary traffic message boards
- None of the above
- Other (please specify)

**50. Does your community have staff dedicated to flood response activities during emergency situations?**

- No
- Yes (Please describe)

**51. Are the staff embedded within the emergency operations center (or similar centralized location) during the event?**

- No
- Yes (Please describe)

**52. Indicate the entities with whom you coordinate actions related to flood events (preparation, response, recovery, and cleanup).**

*Select all that apply.*

	Before	During	After	N/A
Flood Control District	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
City	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
County	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
USACE	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TxDOT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
NOAA/NWS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Local dam owner/operator	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Local levee owner/operator	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TDEM	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ag Extension Agents	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Brush/bulk debris contractor (on-call)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Consultant engineer (on-call)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Local or regional assistance through existing MOUs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**53. Any suggestions/recommendations to improve flood response?**

## **Appendix 10-C | Public Comments**

C.1 – Public Comments at Pre-Planning Meeting (August 4, 2021)

C.2 – Public Comments at Regular RFPG Meetings

C.3 – Compilation of Comment Tracking Matrices provided at Regular RFPG Meetings

## Appendix C.1

Public Comments During Pre-Planning Public Meeting (August 4, 2021) and Virtual Public Meeting Room/ Interactive Comment Map (Aug 4 – 18, 2021)

<b>Commenter Name</b>	<b>Commenter Affiliation</b>	<b>Nature of Comment</b>	<b>Method of Comment</b>
<b>Dianne Wassenich</b>	Individual	Would like consideration of recreation activities in the floodplain. Would like to see the buying of land in the riparian area. To promote land conservation. Would like to see the Flood Plain elevation changed from 1ft to 2ft. The City of San Marcos took this approach	In - person
<b>Gary Louie</b>	Kendal	Emphasized loss of life and property; Provided letters from community; Would like consideration of funding for an early warning system; Would like to ensure that any projects keep the downstream in mind	In - person
<b>Bob Mayo</b>	Individual	Mentioned several projects for drinking water supply; Asked if Desalination studies have been done; Would like to keep farmland in consideration when flood planning	In - person
<b>Linda Bishop</b>	Individual	Would like to see the repair of the Lake Gonzales dam; Emphasized the importance of the Lake	In - person
<b>Sara Dishman</b>	City of Wimberley	Would like for construction activities along the river to be better enforced; Would like the enforcing of rules to be more consistent from the City of Wimberley; Believes there is a gap in	In - person

		communication between the City of Wimberley and the citizens	
<b>Commissioner Jonathan Letz</b>	Kerr County	Mentioned the struggles with Kerr County being in multiple watersheds; Would like to see Mayors and County Judges participating since these entities will need to apply for funding; Would like to take into consideration conservation efforts, partner with NRCS and keep water quality in mind; Would like to consider the RV Parks along the river; Kerr County would be submitting 3 projects and 2 joint projects from Kendall/Kerr County would be submitted to the RFPG.	In - person
<b>Kari Potter</b>	Individual	Would like to keep in mind the effect of high-density Developments and the additional impervious cover	In - person
<b>Dennis Engelke</b>	Caldwell County	Mentioned that Caldwell County has had multiple natural disasters from flood, fire and COVID-19; Would like for County, City and Local entities to stay involved and would like to ensure that this is a collaborative effort; Spoke of the growth in Caldwell County	In - person
<b>Mark Gleason</b>	San Marcos City Council	Mentioned that he was flooded twice in 2015; Mentioned that the Blanco River doesn't have any flood control and would like to know if there have been any studies done; Thanked the committee for their service	In - person



<b>Jim Guin</b>	TDEM	Introduced himself and informed the group that he is the individual that will be applying for hazard mitigation grants	In - person
<b>Raymond Slade</b>	Hydrogeologist	He shared information from published reports about flood peaks on the river at Spring Branch. He expressed concerns about the historic flood data not accurately representing the current flood plain.	VPM online
<b>Tatjana Walker</b>	Public Citizen	He shared opinions on recommended priorities for flood control which included increase in open space and park lands, development regulations in the flood plain, regulatory authority for counties, and protection of karst features.	VPM online
<b>Holly Veselka</b>	Public Citizen	She shared opinions on recommended nature based mitigation strategies. She also recommended priorities for flood control which included increase in open space and park lands, development regulations in the flood plain, regulatory authority for counties, and protection of karst features.	VPM online
<b>Steven Fonville</b>	Public Citizen	He shared concerns regarding the level of development currently allowed in floodway designated areas on the banks of the San Marcos River in Guadalupe Co.	VPM online
<b>Shannon Curtice</b>	Public Citizen	She shared recommendations on nature based solutions and watershed protection strategies.	VPM online

<b>Eric Telford</b>	Public Citizen	He expressed concerns over the floodplain designation on his property.	VPM online
<b>Laurie Moyer</b>	City of San Marcos	Identified multiple flood drainage channels and impacted roadways areas.	Interactive Comment Map
<b>Thomas Manes</b>	Public Citizen	Identified a flood drainage channel on the map.	Interactive Comment Map
<b>Neil Rose</b>	City of New Braunfels	Provided GIS data	Interactive Comment Map

## Appendix C.2

Table C.2 Public Comments Made During Regular Guadalupe RFPG Meetings

<b>Commenter Name</b>	<b>Commenter Affiliation</b>	<b>Nature of Comment</b>	<b>Date of Regular Meeting</b>
<i>TBD</i>	<i>TBD</i>	<i>TBD</i>	<i>TBD</i>
<b>Ben Eldredge</b>	Cibolo Center for Conservation	Would like the RFPG to consider the importance of natural infrastructure, such as riparian areas	March 30, 2022
<b>Ben Eldredge</b>	Cibolo Center for Conservation and Cow Creek GCD	Mentioned the importance of natural infrastructure, especially within the recharge zone.	February 9, 2022
<b>Ben Eldredge</b>	Cibolo Center for Conservation	Spoke about the San Antonio RFPG and Dr. Dorman's work with the City of Boerne on stormwater ordinances. The San Antonio RFPG has suggested recommendations/ordinances based on the work done for the City of Boerne. The recommendations were created to improve stormwater quality for cities. Region 11 "would be interested in Dr. Dorman presenting at the February meeting".	December 1, 2022
<b>Alan Montemayor</b>	Chairman of the Alamo Group of the Sierra Club	Spoke of green infrastructure/nature base solutions being made a priority. Mr. Montemayor provided a letter.	November 3, 2021

<p><b>Virginia Conde</b></p>	<p>Executive Director of the San Marcos River Foundation</p>	<p>Two comments. Comment 1: Since the majority of the San Marcos River is not within the city limits, floodplain management falls to the county, which has had issues with grazing practices. It would be nice for counties to have more jurisdiction with regards to management. Comment 2: There are many break away structures within the floodplain, which has led to objects such as picnic tables ending up in the river during flood events.</p>	<p>November 3, 2021</p>
<p><b>Michael Pieprzica</b></p>	<p>N/A</p>	<p>Comment 1: Questions about flood planning process, rules, and recommendations. Comment 2: Has experience in the San Antonio area/Bexar County flood control district. Mentioned that frequently flooded soils area important variables, and talked about the money San Antonio has spent removing homes from the floodplain. Asked about any assistance that can help reviewers of subdivisions. Hopes that Region 11 can learn from San Antonio. Comment 3: mentioned the importance of natural methods for treating/controlling flood waters. Comment 4: Mentioned development upstream of a quarry and resulting flooding. Wants Region 11 to consider regional effects. Comment 5: Spoke about detention ponds and soil types for future developments.</p>	<p>September 8, 2021</p>

N/A	N/A	<i>No public comments were provided at the Regular RFPG Meetings occurring November 4, 2021 – June 30, 2021.</i>	November 4, 2021 – June 30, 2021
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### **Appendix C.3**

Compilation of Comment Tracking Matrices provided at Regular RFPG Meetings

*Insert pdf of All Comment Tracking Matrices here.*

# Guadalupe Regional Flood Plan Public Comment Tracking Matrix

Comments Received Via [comments@guadaluperfpg.org](mailto:comments@guadaluperfpg.org)

July 14, 2021 – August 4, 2021

Date	Name/Affiliation	Comment/Question	Assigned to GBRA/FNI Team Member and Response
8/4/21	Raymond Slade	<p>Requested his comment that follows be shared with the RFPG at the 8/4/21 meeting:</p> <p>As a hydrologist my studies have included the Guadalupe River. I published a report about flood peaks on the river. The study documents that annual peaks have increased 38 % for the river at Spring Branch. Because of this the 100-year flood plain as published is too low. This is because the flood plain is based on historic data but does not represent increased floods. I was in contact with NOAA about Atlas 14 which represents the current floodplain. They agree with me about this problem but do not have the authority to include increased floods in the creation of the current Guadalupe River floodplains. Any questions about this can be sent to me.</p>	<p>Assigned to: B&amp;A Response: Comment read before the RFPG on 8/4/21.</p>
8/4/21	James Blakey/ Councilmember District 6/ New Braunfels, TX	Are both meetings open to the public tonight?	Assigned to: FNI Response: Yes
7/30/21	Charlie Hastings/Kerr County	Can I join 8/4/21 meeting via zoom or other?	Assigned to: B&A

# Guadalupe Regional Flood Plan Public Comment Tracking Matrix

## Comments Received Via [comments@guadaluperfpg.org](mailto:comments@guadaluperfpg.org)

July 14, 2021 – August 4, 2021

Date	Name/Affiliation	Comment/Question	Assigned to GBRA/FNI Team Member and Response
			Response: No Zoom capability and provided the VPM link for 8/4/21 – 8/18/21 VPM.
7/30/21	Virginia Condie/San Marcos River Foundation	Is there a Zoom link to the 8/4/21 meeting?	Assigned to: B&A Response: No Zoom capability and provided the VPM link for 8/4/21 – 8/18/21 VPM.
7/29/21	Tracy Denton/ Fayette Electric Cooperative	We are located in La Grange, Texas. I do not think this affects our area. Please remove.	Assigned to: B&A Response: Thank you for your email. We will remove from our email list. (Note: Email address removed).
7/29/21	James Blakey/ Councilmember District 6/ New Braunfels, TX	Thank you for reminder email about the 8/4/21 meeting. I will try to attend.	Assigned to: B&A Response: Thank you for email response, and we look forward to seeing him at the meeting.
7/26/21	David Pipes	As someone who has been trained in riparian corridors we try to protect the native and natural habitat within the first 200 feet from the river. This transition zone is critical to protect river banks from erosion. When at all possible encourage developers or landowners to protect the banks.	Assigned to: FNI Response: FNI responded on 8/6/21.
7/15/21	Dianne Wassenich/San Marcos River Foundation	Could not find list of public hearings that may have been referenced in other emails from L. Wills or on Facebook. This list is not on the website for flood planning. Did	Assigned to: B&A Response: Clarification request regarding email question.



# Guadalupe Regional Flood Plan Public Comment Tracking Matrix

Comments Received Via [comments@guadaluperfpg.org](mailto:comments@guadaluperfpg.org)

July 14, 2021 – August 4, 2021

Date	Name/Affiliation	Comment/Question	Assigned to GBRA/FNI Team Member and Response
		these dates get sent out to the public and/or members on your email list?	
7/14/21	Jimmy Harless/ Floodplain Administrator Gonzales County	Will there be another RFPG meeting a little closer to the lower Guadalupe River basin?	Assigned to: FNI Response: The Guadalupe RFPG intends to host a meeting in the lower Guadalupe River basin; has initiated the planning for a meeting in Victoria and could explore potential of hosting a meetings in Gonzales as well. The RFPG monthly meetings are generally held in Seguin at the Guadalupe-Blanco River Authority and all planning group meetings have opportunities for public input.

# Guadalupe Regional Flood Plan Public Comment Tracking Matrix

Comments Received Via [comments@guadaluperfpg.org](mailto:comments@guadaluperfpg.org)

August 5, 2021 – September 8, 2021

Date	Name/Affiliation	Comment/Question	Assigned to GBRA/FNI Team Member and Response
9/3/2021	Dan Gibson	<p>I am unable to attend in person or remotely due to the heavy workload in my office. We are having to decline any meetings that are not direction related to our core functions at this time.</p> <p>DAN GIBSON, AICP City Planner</p>	<p>Assigned to: Response:</p>
9/1/2021	Lance Kyle	<p>Dear GRFPG- I got your contact info from Annalisa Peace at the GEAA. I've got two questions:</p> <p>1) Can the GRFPG provide state or federal aid to fix the stormwater time bomb in the Cascade Caverns Watershed in Boerne, Texas?</p> <p>2) Can the GRFPG arrange funding to purchase critical recharge areas in Kendall County like the Pfeiffer Tract which are being threatened by development? Please see attached. Thanks.</p> <p>Lance Kyle   LinkedIn (703) 785-7953</p> <p>**Attached two pdfs (Boerne Flood History and Pfeiffer's Water Cave) and an</p>	<p>Assigned to: FNI Response:</p> <p>The Guadalupe RFPG appreciates your interest in the flood planning process, and was happy that your analysis of the frequency of major flood events agrees with ours. We will present to the next planning group meeting.</p> <p>Guadalupe RFPG cannot provide/arrange funding, only tasked with estimating the funding required to implement Flood Management Strategies and Flood Management Projects. Your proposals can be considered for inclusion in the plan, which would make them eligible for some TWDB funding. A member of our team will reach out to arrange a chance</p>

# Guadalupe Regional Flood Plan Public Comment Tracking Matrix

Comments Received Via [comments@guadaluperfpg.org](mailto:comments@guadaluperfpg.org)

August 5, 2021 – September 8, 2021

Date	Name/Affiliation	Comment/Question	Assigned to GBRA/FNI Team Member and Response
		aerial image of the Cascade Caverns Watershed.	to visit and gather additional information.
8/18/2021	Marjorie Lucey	Hi! I recently started getting your newsletter and I think it is great! It is a true service to those of us who care about the environment. I have a complaint about TXDOT. I never realized how bad for the environment they are. When they were trying to push through the changes to Wurzbach Pkway the plan involved the destruction of the mature trees along the parkway. I was appalled! At a time when the western US is experiencing horrendous fires it really hit home what they wanted to do! Not to mention I live right off of Wurzbach! We cannot let private and public entities destroy our mature trees! We have to stop the destruction of our planet and slowing TXDOT is a step in the right direction.	Assigned to: B&A Response: The Guadalupe Regional Flood Planning Group appreciates your interest in the regional flood planning process. Thank you for these comments and input.
8/16/2021	Elizabeth (Lisa) Arceneaux, P.E., CISEC, CPESC/City of San Marcos	Hi Lauren, You know me and how I'm a big proponent of using green infrastructure to protect our streams from receiving too much volume, and also stormwater with pollutant loading. So I would like to	Assigned to: B&A Response: From Alicia- The RFPG appreciates your interest in the regional flood planning process. Thank you for taking the time to provide us with these comments and input

# Guadalupe Regional Flood Plan Public Comment Tracking Matrix

Comments Received Via [comments@guadaluperfpg.org](mailto:comments@guadaluperfpg.org)

August 5, 2021 – September 8, 2021

Date	Name/Affiliation	Comment/Question	Assigned to GBRA/FNI Team Member and Response
		<p>include lots of options for green infrastructure in the plan to filter, infiltrate and detain storm water runoff. Here are some other suggestions that I think would help with inland flooding in cities like San Marcos:</p> <ol style="list-style-type: none"> <li>1. Purchase flood-prone lands for parks and open space- make the parks infiltration areas that also provide recreational space and connected by trails.</li> <li>2. Place more stringent building rules and regulations within the flood way and floodplain- do not allow exceptions to the rules like many land development codes do.</li> <li>3. Give more power to the counties to regulate things like break-away structures and activities in the floodplain and flood way</li> <li>4. Allow lots to be stormwater management lots by building the structure on pier and beam or elevated and allowing the stormwater to flow under the house. Allows stormwater to spread out over a larger area of lot when it rains</li> </ol>	<p>Added email address to stakeholder list.</p>

# Guadalupe Regional Flood Plan Public Comment Tracking Matrix

Comments Received Via [comments@guadaluperfpg.org](mailto:comments@guadaluperfpg.org)  
August 5, 2021 – September 8, 2021

Date	Name/Affiliation	Comment/Question	Assigned to GBRA/FNI Team Member and Response
		<p>5. Increase protection of karst recharge features in the Guadalupe River basin</p> <p>6. Add more green infrastructure and low impact development in urbanized areas through permeable pavement, cisterns, rain gardens, and green roofs. Incentivize these projects for funding with lower qualifying percentage of the total project (5% instead of 30%) and increasing the amount subsidized to 80-100% for up to \$500,000 or some other maximum deemed reasonable.</p> <p>7. Require 2D flood modeling with the NOAA Atlas 14 updated rainfall runoff predictions for the entire watershed basin</p> <p>8. Include future development and land cover change scenarios that come with population growth in the modeling.</p> <p>9. Fund 100% Green Infrastructure Master Plans and Green Infrastructure Implementation Plans for those cities that have a Watershed Protection Department</p> <p>10. Incentivize projects with higher subsidy that have triple bottom line benefits: environment, economic, equity.</p>	

# Guadalupe Regional Flood Plan Public Comment Tracking Matrix

Comments Received Via [comments@guadaluperfpg.org](mailto:comments@guadaluperfpg.org)

August 5, 2021 – September 8, 2021

Date	Name/Affiliation	Comment/Question	Assigned to GBRA/FNI Team Member and Response
		<p>We have a great project that is being discussed but not committed to by city staff in San Marcos called the Green Alley Initiative that would convert 2.5 acres of underutilized downtown alleys into permeable paved alleys that are activated for public use and environmental benefit. The FIF would be a great option that the San Marcos City Council could consider to help get this off of the conceptual phase and into a preliminary engineering report. The options mentioned above could really benefit this kind of project and show the potential of activating alleys in this manner to store large volumes of stormwater (up to 475,000 gallons per rain event) while giving the downtown area a real boost in appearance and social function. This green infrastructure could alleviate the grey infrastructure by holding rainfall and reducing the height of the peak flow reaching the grey infrastructure piping. The end result is cleaner water to the river, and not having to upsize the grey infrastructure, plus economic benefit to downtown. I hope you all can consider</p>	

# Guadalupe Regional Flood Plan Public Comment Tracking Matrix

## Comments Received Via [comments@guadaluperfpg.org](mailto:comments@guadaluperfpg.org)

August 5, 2021 – September 8, 2021

Date	Name/Affiliation	Comment/Question	Assigned to GBRA/FNI Team Member and Response
		some of these options for the plan. Thanks!	
8/16/2021	Melissa Reynolds/ First Assistant City Engineer of New Braunfels	Jay,  Our team uploaded low water crossings, MS4, historic flood closures, and drainage as both shapefiles and in a database format. The map upload was a bit confusing for municipal data so we also included some contact information. We have a great deal of data available for open download on our webpage which is how GLO retrieved most of it. We are open to meeting (Teams works well for us) if that would help facilitate any other data needed by the RFPG.  Please let me know if we can be of further assistance.	Assigned to: FNI Response: From Jay Scanlon – Recognition that the data had been received, and that a teams meeting would be scheduled to discuss data and ways to improve the upload function in the interactive tool.
8/7/21	Shirley Solis/ Greater Comfort Area Chamber of Commerce	Please add my email address to your mailing list.	Assigned to: B&A Response: Added email address to stakeholder list.
8/7/21	Margaret Gomez/Travis County	Referred the RFPG to <a href="mailto:Shawn.snyder@traviscountytx.gov">Shawn.snyder@traviscountytx.gov</a> since she is up with all our records on flooding	Assigned to: B&A Response: Pending. Added Ms. Snyder to contact list.

**Guadalupe Regional Flood Plan  
Public Comment Tracking Matrix**  
**Comments Received Via [comments@guadaluperfpg.org](mailto:comments@guadaluperfpg.org)**

August 5, 2021 – September 8, 2021

Date	Name/Affiliation	Comment/Question	Assigned to GBRA/FNI Team Member and Response
		in my precinct as well as wherever it happens in Travis County. Continues to have interest in addressing flooding and process.	



## Guadalupe Regional Flood Planning Group - Public Comment Tracking Matrix

For Public Meeting October 6, 2021

Comments received September 9, 2021 – September 24, 2021

Comments Received Via [comments@guadalupefpg.org](mailto:comments@guadalupefpg.org)

Date Comment Received	Name/Affiliation of Commenter	Comment/Question	Respondent and Response Date
9/16/2021	Commissioner Jonathan Letz Kerr County	<p>To: FNI Project Team Re: Data Submission</p> <p>Adam,</p> <p>I sent in the questionnaire.</p> <p>At the public meeting in Seguin, I mentioned again that Kerr County had five projects we would like to submit. One on these projects was presented to the board. I was under the impression that projects were to be submitted by 8/31/2021. We never heard what to submit or in what format.</p> <p>Kerr County will likely be the sponsor for any flood mitigation project in the county. Kerr County Commissioners Court does not have a seat on the flood planning board. Therefore, it is critical that that we be kept in the loop outside meetings.</p> <p>To date no consultant for the planning group has contacted anyone at our county level. This is becoming a concern.</p> <p>Thanks, Jonathan Letz</p>	Respondent: FNI Staff (Adam) Response Date: 9/17/21
9/16/2021	Raymond Buck Jr. General Manager Upper Guadalupe River Authority	<p>To: FNI Project Team Re: Data Submission</p> <p>Adam,</p> <p>I spoke with Commissioner Letz today about materials he was going to submit to the consultants. I understand he did not receive a reply to his email query on how to do so. I hope he can still submit and copied him on this email so you can reply directly.</p> <p>Thanks for taking care of this.</p>	Respondent: FNI Staff (Adam) Response Date: 9/17/21

## Guadalupe Regional Flood Planning Group - Public Comment Tracking Matrix

For Public Meeting October 6, 2021

Comments received September 9, 2021 – September 24, 2021

Comments Received Via [comments@guadaluperfpg.org](mailto:comments@guadaluperfpg.org)

		Ray	
9/12/2021	James 'JP' Fancher, DDS, PhD General Public	<p>To: Region 11 Regional Flood Planning Group Re: Meeting 8 September 2021</p> <p>Thank you for the opportunity to observe this regularly scheduled meeting. I hope to be able to observe and participate in all meetings in the future. My wife and I live on the banks of the San Marcos River in Guadalupe County across the stream from Martindale. We both have a great interest in issues concerning local and regional water management, flood plain and land management. I reviewed the online presentations in August. I added comments and also completed the online survey. I appreciate the time and effort that this working group is committed to completing in the next many months. It appeared to me that this group is still in the early stages of forming and developing a consensus to carry out the mandates and create deliverables. I was particularly glad to hear that the general purpose of this working group is to develop ideas and plans for action, not just recommendations for concrete projects. It is also my understanding that this group has no approval authority for projects but is a regional voice to gather information for further coordination. I have many ideas to share with you as this group progresses. The first is to consider that water management is much more than planning for floods. It also involves conserving a key resource that is in high demand 24/7 throughout this region and the entire state. I urge you to keep in mind that aquifer protection must work hand-in-hand with flood management. Retaining water for daily use as a key community resource is part of the solution to flood management. Please consider such innovations as swell and berm construction throughout the savannah, woodlands, and developed areas that make up the majority of this region's landscape; an innovation that will slow the runoff of water and charge the aquifer systems. I look forward to the next meeting when it is scheduled.</p>	<p>Respondent: Blanton &amp; Associate Staff (Vanessa) Response Date: 9/14/21</p>
9/9/2021	Ken Gill County of Victoria	<p>Provided documents relating to Victoria County's Storm Drainage Master Plan (including pdf maps) and Drainage Criteria Manual. link to the Spring Creek Study for Victoria County</p>	<p>Respondent: Blanton &amp; Associate Staff (Vanessa) Response Date: 9/14/21</p>

## Guadalupe Regional Flood Planning Group - Public Comment Tracking Matrix

For Public Meeting October 6, 2021

Comments received September 9, 2021 – September 24, 2021

Comments Received Via [comments@guadalupefpg.org](mailto:comments@guadalupefpg.org)

9/9/2021	John Johnston County of Victoria	Provided a link to the Spring Creek Study for Victoria County	Respondent: Blanton & Associate Staff (Vanessa) Response Date: 9/14/21
9/9/2021	John Johnston County of Victoria	Provided map kmz dataset related to flood impact resources used by the City and County during a forecasted flood of the Guadalupe river.	Respondent: Blanton & Associate Staff (Vanessa) Response Date: 9/14/21

## Guadalupe Regional Flood Planning Group - Public Comment Tracking Matrix

For Public Meeting November 3, 2021

Comments received September 25, 2021 – October 25, 2021

Comments Received Via [comments@guadaluperfpg.org](mailto:comments@guadaluperfpg.org)

Date Comment Received	Name/Affiliation of Commenter	Comment/Question	Respondent and Response Date
10/20/2021	Elizabeth Yakubik Public Citizen	<p><b>From:</b> Elizabeth Yakubik  <b>Sent:</b> Wednesday, October 20, 2021 7:43 AM  <b>To:</b> Guadalupe Regional Flood Planning Group &lt;<a href="mailto:comments@guadaluperfpg.org">comments@guadaluperfpg.org</a>&gt;  <b>Subject:</b> Re: Thank you for Your Comments in the Region 11 Interactive Map!</p> <p>Yes, I'm available to talk next week. Would Monday at 10:30am work for you? I'll try to gather pictures and videos of flood events in my neighborhood as well, if that would be helpful!</p> <p><b>On Mon, Oct 18, 2021, 4:57 PM Guadalupe Regional Flood Planning Group &lt;<a href="mailto:comments@guadaluperfpg.org">comments@guadaluperfpg.org</a>&gt; wrote:</b></p> <p>Good evening Ms. Yakubik. We have reviewed all map comments and yours is one that we've flagged to incorporate into the Guadalupe Flood Plan. Thank you for making us aware of this flood risk that our preliminary map did not capture.</p> <p>Are you available sometime this week or next, so that a member of our Technical Consultant team can talk with you to identify specific areas of flooding that you have witnessed? It could be between 8:00 AM and 5:00 PM or after 5:00 PM if you'd prefer, we just ask that you be in front of a computer with Internet connection, so that we can interactively view the areas that experienced flooding in October 2015.</p> <p>Please be assured that this modification to Region 11's flood hazard area will not change the regulatory floodplain. We are simply using citizen science to see where additional data might improve flood risk, health and safety.</p> <p>Thank you.</p>	Respondent: FNI Staff (Adam) Response Date: 10/20/21 Call on: 10/25/2021

## Guadalupe Regional Flood Planning Group - Public Comment Tracking Matrix

For Public Meeting November 3, 2021

Comments received September 25, 2021 – October 25, 2021

Comments Received Via [comments@guadalupefpg.org](mailto:comments@guadalupefpg.org)

10/15/2021	Lance Kyle Public Citizen	<p><b>From:</b> LB Kyle  <b>Sent:</b> Friday, October 15, 2021 4:53 PM  <b>To:</b> Guadalupe Regional Flood Planning Group &lt;comments@guadalupefpg.org&gt;  <b>Subject:</b> Re: Guadalupe Regional Flood Plan Group (GRFPG)</p> <p>Is there a video of the last GRFPG meeting?  <a href="#">Lance Kyle   LinkedIn</a>  (703) 785-7953</p>	Respondent: B&A Staff (Vanessa) Response Date: 10/16/21
10/13/2021	Sherry Walden Comfort Floodplain Coalition	<p><b>From:</b> Sherry Walden  <b>Sent:</b> Wednesday, October 13, 2021 11:40 AM  <b>To:</b> Lauren Willis &lt;lwillis@gbra.org&gt;; Sundancecsc Info &lt;info@sundancecsc.com&gt;  <b>Subject:</b> Fw: Region 11 Guadalupe Regional Flood Planning - project list</p> <p>+Emmanuel “Mani” Flatten (<a href="mailto:info@sundancecsc.com">info@sundancecsc.com</a>) Mani is the spokesperson for the Comfort Floodplain Coalition, a grass roots, volunteer group formed to consolidate our efforts.</p> <p>Thank you Lauren! You are correct, you made clear the group did not have a list of projects yet -- I mis-typed when I sent my reminder email. Last Friday, I asked about the input process, specifically where were the 11 letters our group had submitted as we didn't see any comments for Kendall county via the interactive tool. You clarified they were in meeting notes and the team was organizing that information manually. I asked how they are tracking it and what visibility do we have? You offered to send me the list ... that is what I was expecting, a work-in-progress list of requirements and comments. Did I misunderstand?</p> <p>Thanks! sherry</p>	Respondent: GBRA Staff (Lauren) Response Date: 10/13/21
10/12/2021	Sherry Walden Comfort Floodplain Coalition	<p><b>From:</b> Sherry Walden  <b>Sent:</b> Tuesday, October 12, 2021 8:07 AM  <b>To:</b> Lauren Willis &lt;lwillis@gbra.org&gt;  <b>Subject:</b> Region 11 Guadalupe Regional Flood Planning - project list</p>	Respondent: GBRA Staff (Lauren) Response Date: 10/13/21

## Guadalupe Regional Flood Planning Group - Public Comment Tracking Matrix

For Public Meeting November 3, 2021

Comments received September 25, 2021 – October 25, 2021

Comments Received Via [comments@guadalupefpg.org](mailto:comments@guadalupefpg.org)

		<p>Hi Lauren, when you get a chance, please reply to this email with the list of projects for Region 11 GRFP. Thank you!!</p> <p>Sherry Walden (281) 910-3620</p>	
10/7/2021	Joyce Yannuzzi Office of State Senator Donna Campbell M.D.	<p><b>From:</b> Joyce Yannuzzi <b>Sent:</b> Thursday, October 7, 2021 3:19 PM <b>To:</b> Guadalupe Regional Flood Planning Group &lt;comments@guadalupefpg.org&gt; <b>Subject:</b> RE: Upcoming October 6th Public Meeting of Guadalupe Regional Flood Planning Group</p> <p>Good afternoon -</p> <p>I was hoping to make yesterday's meeting and my afternoon got away from me. Please keep me on the email for future meetings.</p> <p>Thank you!</p> <p>Warm regards-</p> <p><b>Joyce Yannuzzi</b> District Director State Senator Donna Campbell, M.D. Texas Senate District 25 District Office: (830)-626-0065</p>	<p>Respondent: B&amp;A Staff (Vanessa) Response Date: 10/7/21</p>
10/2/2021	Tara Thompson Public Citizen	<p><b>From:</b> Tara Thomason <b>Sent:</b> Saturday, October 2, 2021 11:21 PM <b>To:</b> Guadalupe Regional Flood Planning Group &lt;comments@guadalupefpg.org&gt; <b>Subject:</b> Meetings</p>	<p>Respondent: B&amp;A Staff (Vanessa) Response Date: 10/4/21</p>

## Guadalupe Regional Flood Planning Group - Public Comment Tracking Matrix

For Public Meeting November 3, 2021

Comments received September 25, 2021 – October 25, 2021

Comments Received Via [comments@guadaluperfpg.org](mailto:comments@guadaluperfpg.org)

		<p>How can you possibly expect responsible public participation in a meeting held at 2:00 in the afternoon while the majority of homeowners in the region are working to pay for their homes that are affected by these floods? It would be greatly appreciated if these meetings were held after 5:00 or on weekends, so those of us who work can attend.</p>	
9/30/21	Laurie Moyer City of San Marcos	<p><b>From:</b> Moyer, Laurie  <b>Sent:</b> Thursday, September 30, 2021 5:01 PM  <b>To:</b> Lauren Willis &lt;<a href="mailto:lwillis@gbra.org">lwillis@gbra.org</a>&gt;  <b>Cc:</b> Pantalion, Joe  <b>Subject:</b> RE: [EXTERNAL] Region 11 Guadalupe RFPG Meeting Materials</p> <p>Lauren:</p> <p>I was reviewing the packet material for next weeks meeting. Included in the backup were comments received for August/Sept. I was wondering if this reflected the information for the data collection as requested by Sept 3<sup>rd</sup>? I provided on-line mapping comments and we also uploaded shape files of proposed projects. I just want to make sure these were received as it appeared there was documentation submitted from NB &amp; Victoria using the comments email. Thanks!</p> <p>Laurie A Moyer, P.E.</p>	<p>Respondent: GBRA Staff (Lauren)  Response Date: 9/30/21</p> <p>Respondent: FNI Staff (Jay)  Response Date: 10/1/21</p>

## Guadalupe Regional Flood Planning Group - Public Comment Tracking Matrix

For Public Meeting December 1, 2021

Comments received October 26, 2021 – November 19, 2021

Comments Received Via [comments@guadaluperfg.org](mailto:comments@guadaluperfg.org) or via [lwillis@gbra.org](mailto:lwillis@gbra.org)

Date Comment Received	Name/Affiliation of Commenter	Comment/Question	Respondent and Response Date
11/15/2021	Virginia Condie San Marcos River Foundation	<p><b>See attached photo series enclosed with commenter's email.</b></p> <p><b>From:</b> Virginia Condie &lt;<a href="mailto:virginia@sanmarcosriver.org">virginia@sanmarcosriver.org</a>&gt;  <b>Sent:</b> Monday, November 15, 2021 2:49 PM  <b>To:</b> Lauren Willis &lt;<a href="mailto:lwillis@gbra.org">lwillis@gbra.org</a>&gt;  <b>Subject:</b> Fwd: Son's blue River video of rising water 12,000 cfs</p> <p>Hello Lauren!</p> <p>I'm sorry it took so long to send you the documentation about the debris issues we are having along the floodplain and flood way on the San Marcos River. I am going to forward you several emails with my photos, but this first one will show you approximately where the water was at 12,000 cfs on the San Marcos River. This is by no means a large flood on this river and you can see how high the water got.</p> <p>My next emails will show you</p> <ol style="list-style-type: none"> <li>1) A normal water level at Son's Blue River in Prairie Lea on the San Marcos River</li> <li>2) The items they normally have on their gravel bar</li> <li>3) The items that were located in the flood waters</li> <li>4) Some of the items that floated downstream in the small flood.</li> </ol> <p>My hope is that the flood board can help the counties prevent some of these issues for both the health of the river and the downstream neighbors. The potential for loss of life is concerning, along with the risk to the structural integrity of the downstream bridges due to the added materials in the river during high water.</p> <p>Please let me know if there is anything else you need from me or any of the downstream landowners. Thank you! -Virginia</p>	Respondent: GBRA Staff (Lauren) Response Date: 11/16/21



## Guadalupe Regional Flood Planning Group - Public Comment Tracking Matrix

For Public Meeting December 1, 2021

Comments received October 26, 2021 – November 19, 2021

Comments Received Via [comments@guadaluperfpg.org](mailto:comments@guadaluperfpg.org) or via [lwillis@gbra.org](mailto:lwillis@gbra.org)

11/10/2021	Bill Barker, Great Springs Project	<p><b>See attached letter enclosed with commenter’s email.</b></p> <p><b>From:</b> Bill Barker &lt;<a href="mailto:barker@greatspringsproject.org">barker@greatspringsproject.org</a>&gt;  <b>Sent:</b> Wednesday, November 10, 2021 3:22 PM  <b>To:</b> Lauren Willis &lt;<a href="mailto:lwillis@gbra.org">lwillis@gbra.org</a>&gt;  <b>Subject:</b> Great Springs Project (GSP) and the current Texas State Flood Planning effort.</p> <p>Ms. Willis,</p> <p>Please find attached a letter from the Great Springs Project regarding collaboration with the Region 11 Regional Flood Planning.</p> <p>Please let me know if you have any questions. Thank you for your attention to this matter.</p> <p>Bill Barker</p>	Respondent: GBRA Staff (Lauren) Response Date: 11/11/21
11/6/2021	Doug Sethness, Flood Planning Group Member	<p>From: Doug Sethness <a href="mailto:dsethness@reagan.com">dsethness@reagan.com</a>  Sent: Saturday, November 6, 2021 10:30 AM  To: Guadalupe Regional Flood Planning Group &lt;<a href="mailto:comments@guadaluperfpg.org">comments@guadaluperfpg.org</a>&gt;  Cc: Lauren Willis <a href="mailto:lwillis@gbra.org">lwillis@gbra.org</a> ; 'Jay Scanlon' <a href="mailto:JWS@freese.com">JWS@freese.com</a> ; Velma Danielson <a href="mailto:velma.danielson@blantonassociates.com">velma.danielson@blantonassociates.com</a> ; 'Morgan White' <a href="mailto:Morgan.White@twdb.texas.gov">Morgan.White@twdb.texas.gov</a>  Subject: RE: Follow up Answers to Questions from November 3 RFPG Meeting</p> <p>With reference to the question on the definition of LWC:</p> <ol style="list-style-type: none"> <li>1. Is “overtopping” defined? For example, is it any amount of water across the travel way?</li> <li>2. Where roads are used to channel water to a drainage location, is a road considered flooded with any amount of water across the travel way, whether from a 10-year event or less?</li> </ol> <p>I believe there needs to be some defining of terms to differentiate the typical LWC which would be commonly thought of as an at-grade dip in a road intended to allow</p>	Respondent: FNI Staff (Jay) Response Date: 11/16/21

## Guadalupe Regional Flood Planning Group - Public Comment Tracking Matrix

For Public Meeting December 1, 2021

Comments received October 26, 2021 – November 19, 2021

Comments Received Via [comments@guadalupefpg.org](mailto:comments@guadalupefpg.org) or via [lwillis@gbra.org](mailto:lwillis@gbra.org)

		<p>passage of water over the roadway running across a recognized “stream” bed in rain events instead of building a bridge. There are also roads (mostly county and FMs) with curbs where water gets trapped and also areas where the road gets flooded from ponding water, both of which cause accidents but these areas are typically not thought of as low water crossings. Is the data we are using differentiating between these different “road flooding” conditions?</p>	
11/3/2021	<p>Alan Montemayor Alamo Group of Sierra Club</p>	<p>Written Public Comment Received at Nov 3<sup>rd</sup> Flood Planning Group Public Meeting. <b>See attached written comments.</b></p>	<p>Respondent: GBRA Staff (Lauren) Response Date: 11/3/21</p>

## Guadalupe Regional Flood Planning Group - Public Comment Tracking Matrix

For Public Meeting February 9, 2022

[Comments received November 20, 2021 – February 1, 2022](#)

Comments Received Via [comments@guadalupefpg.org](mailto:comments@guadalupefpg.org) or via [lwillis@gbra.org](mailto:lwillis@gbra.org)

Date Comment Received	Name/Affiliation of Commenter	Comment/Question	Respondent and Response Date
12/7/21	Rick Tobolka Kendall County	<p><b>From:</b> Rick Tobolka &lt;<a href="mailto:rtobolka@co.kendall.tx.us">rtobolka@co.kendall.tx.us</a>&gt;  <b>Sent:</b> Tuesday, December 7, 2021 4:40 PM  <b>To:</b> Jay Scanlon &lt;<a href="mailto:JWS@freese.com">JWS@freese.com</a>&gt;  <b>Subject:</b> Cypress Creek Feasibility Study</p> <p>Mr. Scanlon,</p> <p>Thank you for returning my call.</p> <p>Kendall County wishes to propose a project consisting of a feasibility study on Cypress Creek and North Creek (tributaries of the Guadalupe River). I believe the study would be classified as a FME. Possibly a future FMP depending on the benefit cost analysis. The proposed study is substantially situated in Kerr County. Kendall County has coordinated with Kerr County Commissioner, Pct. #3, Jonathan Letz pertaining to the proposed study. Commissioner Letz supports the feasibility study.</p> <p>I have attached a proposed scope and location map of the proposed project. Kendall County planned to move forward with the feasibility study in the next 12 months.</p> <p>Please let me know if you have any questions or comments or need additional information.</p> <p>Thank you for your consideration,</p> <p>Richard Tobolka, P.E.                  201 East San Antonio Avenue, Suite 101                  Boerne, Texas 78006                  830-331-8250</p>	Respondent: FNI (Jay) Response Date: 12/7/21

## Guadalupe Regional Flood Planning Group - Public Comment Tracking Matrix

For Public Meeting February 9, 2022

Comments received November 20, 2021 – February 1, 2022

Comments Received Via [comments@guadalupefpg.org](mailto:comments@guadalupefpg.org) or via [lwillis@gbra.org](mailto:lwillis@gbra.org)

<p>11/20/21 to 12/1/21</p>	<p>Voting Members, Non-Voting Members and Public</p>	<p>The following individuals provided written comments to the technical consultant on the draft technical memorandum:</p> <p><u>Voting Members</u></p> <ul style="list-style-type: none"> <li>• 11/23/21 Brian Perkins – GBRA</li> <li>• 11/29/21 Annalisa Peace – Great Edwards Aquifer Alliance</li> <li>• 11/30/21 Ken Gill – City of Victoria</li> <li>• 12/1/21 Gian Villarreal – WEAT/Seagull PME</li> <li>• 12/1/21 Joe Pantalion – City of San Marcos</li> </ul> <p><u>Non-Voting Member</u></p> <ul style="list-style-type: none"> <li>• 12/7/21 Don Durden – Kendall County</li> </ul> <p><u>Public</u></p> <ul style="list-style-type: none"> <li>• None</li> </ul>	<p>Respondent: FNI (Jay) Response Dates: 11/20 to 12/1</p>
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## Guadalupe Regional Flood Planning Group (RFPG) - Public Comment Tracking Matrix

For RFPG Public Meeting March 30, 2022

Comments received February 2, 2022 – March 22, 2022

Comments Received Via [comments@guadaluperfpg.org](mailto:comments@guadaluperfpg.org) or via [lwillis@gbra.org](mailto:lwillis@gbra.org)

Date Comment Received	Name/Affiliation of Commenter	Comment/Question	Respondent and Response Date
3/16/22	JP Fancher Private Citizen	<p><b>SEE ATTACHED ARTICLE IN BACKUP MATERIALS</b></p> <p><b>From:</b> <a href="mailto:jpfancher@earthlink.net">jpfancher@earthlink.net</a> &lt;<a href="mailto:jpfancher@earthlink.net">jpfancher@earthlink.net</a>&gt;  <b>Sent:</b> Wednesday, March 16, 2022 10:59 AM  <b>To:</b> Sarah Weber &lt;<a href="mailto:sweber@doucetengineers.com">sweber@doucetengineers.com</a>&gt;  <b>Subject:</b> RE: Guadalupe Regional Flood Planning Group--Requesting Your Feedback</p> <p>Howdy!                      Today's SA Express-News has a lead article on conservation efforts around the region of Camp Bullis that is important to this group. The boundaries discussed border on the Guadalupe region, and the efforts to encourage rainwater retention by berms and other means throughout the region are very important. Please pass on to all involved! The article starts on Page 1. Thanks!</p> <p><i>JP Fancher paradox out</i></p>	Respondent: Doucet Engineers (Sarah) Response Date: 3/16/22
3/6/22	JP Fancher Private Citizen	<p><b>From:</b> <a href="mailto:jpfancher@earthlink.net">jpfancher@earthlink.net</a> &lt;<a href="mailto:jpfancher@earthlink.net">jpfancher@earthlink.net</a>&gt;  <b>Sent:</b> Sunday, March 6, 2022 9:35 AM  <b>To:</b> Sarah Weber &lt;<a href="mailto:sweber@doucetengineers.com">sweber@doucetengineers.com</a>&gt;  <b>Subject:</b> RE: Guadalupe Regional Flood Planning Group--Requesting Your Feedback</p> <p>Howdy!                      I do not represent a governmental, public, or business entity that can give specific feedback to the planning group document. However, my views as a private citizen who lives on a water way reflects public concerns in the planning process. A key concept that is on the dance floor is simply that historic floods are the result of heavy rains in unpopulated areas of the Guadalupe regions, largely open ranch/farming land that has never been included in the planning process. Water runs off into the natural drainage conduits that are thousands of years old. There is now rampant development, especially in these natural drainage plains. Getting a</p>	Respondent: Doucet Engineers (Sarah) Response Date: 3/7/22

## Guadalupe Regional Flood Planning Group (RFPG) - Public Comment Tracking Matrix

For RFPG Public Meeting March 30, 2022

Comments received February 2, 2022 – March 22, 2022

Comments Received Via [comments@guadalupefpg.org](mailto:comments@guadalupefpg.org) or via [lwillis@gbra.org](mailto:lwillis@gbra.org)

		<p>piece of the hill country is a goal of real estate development in this region, as fast as possible before regulations can shift the burden of responsible planning. Rainfall that lands in and around Blanco and Johnson City flows into the river basins and drops ~1000 ft of elevation as it rushes through the exploding communities along the I-35 corridor. Most of the actions planned are aimed at protecting these communities, not preventing the spread of flood risk.</p> <p>We have a double entendre of water management: #1 not enough potable water due to over pumping of our aquifers and periodic drought and #2 Poor to non-existent flood planning, especially in the rural areas and overdeveloped basins. Somehow these problems can be married to some common solutions; slowing and retaining rainwater to mitigate flooding and increase availability of potable water at the same time. This will be a lot less expensive than massive ditch and concrete projects and buyouts. Unfortunately, I see none of these concepts in the planning document.</p> <p>I attended several meetings last fall, and I will attempt to attend meetings in the future to monitor progress in this planning group. So far I simply have seen very little substantial progress in public. I hope there is more to come!</p> <p><i>JP Fancher, DDS, PhD 210-896-8575 345 Buie Lane Guadalupe County, TX 78655 paradox out</i></p>	
3/6/22	Lisa Arceneaux EA Environmental Consulting	<p><b>From:</b> Lisa Arceneaux &lt;<a href="mailto:lisa@eaenvironmental.net">lisa@eaenvironmental.net</a>&gt;  <b>Sent:</b> Sunday, March 6, 2022 11:34 AM  <b>To:</b> Sarah Weber &lt;<a href="mailto:sweber@doucetengineers.com">sweber@doucetengineers.com</a>&gt;  <b>Cc:</b> 'Moyer, Laurie' &lt;<a href="mailto:lmoyer@sanmarcostx.gov">lmoyer@sanmarcostx.gov</a>&gt;; 'Sarah Simpson' &lt;<a href="mailto:ssimpson@color-space.com">ssimpson@color-space.com</a>&gt;; 'Navarro, Aspen' &lt;<a href="mailto:aspennavarro@txstate.edu">aspennavarro@txstate.edu</a>&gt;  <b>Subject:</b> RE: Guadalupe Regional Flood Planning Group Requesting Your Feedback</p> <p>Hi Sarah,</p>	Respondent: Doucet Engineers (Sarah) Response Date: 3/7/22

## Guadalupe Regional Flood Planning Group (RFPG) - Public Comment Tracking Matrix

For RFPG Public Meeting March 30, 2022

Comments received February 2, 2022 – March 22, 2022

Comments Received Via [comments@guadaluperfpg.org](mailto:comments@guadaluperfpg.org) or via [lwillis@gbra.org](mailto:lwillis@gbra.org)


		<p>It was great talking to you last week about your understanding of the list being compiled for the Guadalupe Regional Flood Planning Group. I mentioned an initiative here in San Marcos that is vetting through a pilot scale test that is in process to build in 2023. The concept is to activate San Marcos Alleys using permeable pavers as a baseline to improve storage of rain events that cause localized flooding (24-hour 2-5 year return frequency). Sarah Simpson, Aspen Navarro and myself were the primary contributors to the voluntarily prepared initiative (they are cc'ed here).</p> <p>Kissing Alley (<a href="https://downtownsmtx.squarespace.com/kissing-alley">https://downtownsmtx.squarespace.com/kissing-alley</a>) in San Marcos is the pilot scale project and the larger vision is called The San Marcos Green Alley Initiative (<a href="https://www.color-space.com/the-san-marcos-green-alley-initiative">https://www.color-space.com/the-san-marcos-green-alley-initiative</a>). If fully implemented the alley network with permeable pavers could capture, slow down, clean and slowly release up to 500,000 gallons of rainfall and runoff each rain event. By using stormwater mitigation funding, the downtown area could realize economic vitality, and improvements to pedestrian mobility all while managing/mitigating localized flooding. A win-win project that would be a good example for the TWDB to support and others communities to consider.</p> <p>It may be too soon to add this initiative, but if you need projects, it could be perfect timing. The city of course will want to chime in to say if they want it include now or not. I'm including Laurie Moyer, P.E. on this e-mail to comment, and for my part, I'm just providing the link (above). I would love to meet up with you when you get the Doucet office set up on Corporate Drive and we can walk through Kissing Alley and see the vision of the initiative together. Plus answer questions.</p> <p>Thank you!</p> <p><i>Lisa Arceneaux, P.E., CISEC, CPESC</i> 512-644-1927 (cell)</p>	
2/28/22	Sydney Beckner Hill Country Alliance	<p><b>SEE ATTACHED LETTER IN BACKUP MATERIALS</b></p> <p><b>From:</b> Sydney Beckner &lt;<a href="mailto:Sydney@hillcountryalliance.org">Sydney@hillcountryalliance.org</a>&gt;  <b>Sent:</b> Monday, February 28, 2022 1:45 PM  <b>To:</b> Lauren Willis &lt;<a href="mailto:lwillis@gbra.org">lwillis@gbra.org</a>&gt;</p>	Respondent: GBRA (Lauren) Response Date: 2/28/22

## Guadalupe Regional Flood Planning Group (RFPG) - Public Comment Tracking Matrix

For RFPG Public Meeting March 30, 2022

Comments received February 2, 2022 – March 22, 2022

Comments Received Via [comments@guadaluperfpg.org](mailto:comments@guadaluperfpg.org) or via [lwillis@gbra.org](mailto:lwillis@gbra.org)

		<p><b>Cc:</b> Annalisa Peace &lt;<a href="mailto:annalisa@aquiferalliance.org">annalisa@aquiferalliance.org</a>&gt;; Daniel Oppenheimer &lt;<a href="mailto:Daniel@hillcountryalliance.org">Daniel@hillcountryalliance.org</a>&gt;; <a href="mailto:suzanne.scott@TNC.ORG">suzanne.scott@TNC.ORG</a>; <a href="mailto:manager@blancogw.org">manager@blancogw.org</a>; <a href="mailto:lon.shell@co.hays.tx.us">lon.shell@co.hays.tx.us</a></p> <p><b>Subject:</b> RFPG 11 Comments</p> <p>Hi Lauren,</p> <p>You'll find attached the Hill Country Alliance's comments to the Regional Flood Planning Group 11. We really appreciate the opportunity to provide comments and the work this group does to create a comprehensive flood plan for the Guadalupe River Basin planning area. I'm happy to answer any questions you may have.</p> <p>Gratefully, Sydney</p> <p><b>Sydney Beckner</b> Water Program Manager</p>  <p><b>Hill Country Alliance</b>   P.O. Box 151675   Austin, TX 78715 (cell) 903-238-3179   <a href="mailto:sydney@hillcountryalliance.org">sydney@hillcountryalliance.org</a>   she/her</p>	
2/8/22 to 2/11/22	Voting Members, Non-Voting Members and Public	<p>The following individuals provided written comments to the technical consultant on the draft technical memorandum #2:</p> <p><u>Voting Members</u></p> <ul style="list-style-type: none"> <li>• 2/11/22 John Espinoza /Joe Pantalion – City of San Marcos</li> <li>• 2/8/22 Brian Perkins – GBRA</li> </ul> <p><u>Non-Voting Member</u></p> <ul style="list-style-type: none"> <li>• None</li> </ul> <p><u>Public</u></p> <ul style="list-style-type: none"> <li>• None</li> </ul>	Respondent: FNI (Jay) Response Dates: 2/2/22 to 2/14/22



## Guadalupe Regional Flood Planning Group (RFPG) - Public Comment Tracking Matrix

For RFPG Public Meeting May 10, 2022

Comments received March 23, 2022 – May 2, 2022

Comments Received Via [comments@guadalupefpg.org](mailto:comments@guadalupefpg.org) or via [lwillis@gbra.org](mailto:lwillis@gbra.org)

Date Comment Received	Name/Affiliation of Commenter	Comment/Question	Respondent and Response Date
4/1/22	Karen Brennan Private Citizen	<p><b>From:</b> <a href="mailto:kbrennan@hhep.com">kbrennan@hhep.com</a>  <b>Sent:</b> Friday, April 1, 2022 2:38 PM  <b>To:</b> <a href="mailto:comments@guadalupefpg.org">comments@guadalupefpg.org</a></p> <p>Comment: City of New Braunfels - Notice of Public Hearing 740 &amp; 750 Rusk. SUP22-073 requested rezoning from R2 to SUP to allow 440 plus RV park and event center on Guadalupe waterfront approximately 50% is floodway and 50% is 100 year flood zone. Please join us in opposition to this SUP. Public Hearing before Planning Commission Tuesday April 5, 2022 @ 6 pm. This development would be in district 5 Jason Hurta, phone - (830) 221-4659 then press option 4 Email - <a href="mailto:jhurta@nbtexas.org">jhurta@nbtexas.org</a></p>	Respondent: Lauren Response Date: 4/1/2022
4/1/22 to 4/18/22	Voting Members, Non-Voting Members and Public	<p>The following individuals provided written comments to Draft Chapter 1:</p> <p><u>Voting Members</u></p> <ul style="list-style-type: none"> <li>• 4/17/22 Gian Villarreal – Seagull PME</li> <li>• 4/15/22 Brian Perkins – Guadalupe-Blanco River Authority</li> <li>• 4/14/22 Raymond Buck/ Tara Bushnoe – Upper Guadalupe River Authority</li> <li>• 4/14/22 Joe Pantalion/John Espinoza – City of San Marcos</li> <li>• 4/14/22 Steven Fonville – Martindale Water Supply Corporation</li> </ul> <p><u>Non-Voting Member</u></p> <ul style="list-style-type: none"> <li>• 4/15 Sue Reilly – Texas Parks and Wildlife Department</li> </ul> <p><u>Public</u></p> <ul style="list-style-type: none"> <li>• None</li> </ul>	Respondent: FNI Response Dates: 4/1/22 to 4/18/22

## Guadalupe Regional Flood Planning Group (RFPG) - Public Comment Tracking Matrix

For RFPG Public Meeting June 1, 2022

Comments received May 3, 2022 – May 26, 2022

Comments Received Via [comments@guadalupefpg.org](mailto:comments@guadalupefpg.org) or via [lwillis@gbra.org](mailto:lwillis@gbra.org)

Date Comment Received	Name/Affiliation of Commenter	Comment/Question	Respondent and Response Date
5/18/22	Virginia Parker	<p><b>SEE ATTACHMENT IN BACKUP</b>  <b>From:</b> Virginia Parker &lt;<a href="mailto:virginia@sanmarcosriver.org">virginia@sanmarcosriver.org</a>&gt;  <b>Sent:</b> Wednesday, May 18, 2022 1:03 PM  <b>To:</b> Lauren Willis &lt;<a href="mailto:lwillis@gbra.org">lwillis@gbra.org</a>&gt;  <b>Subject:</b> Updated SMRF Flood Group Project proposals</p> <p>Hello Lauren!</p> <p>Based on my conversation with Freese and Nichols last week I wanted to update the projects SMRF is putting forward.</p> <p>Since a few of the "projects" I proposed were actually tactics, I'd like to put them forth here in the email so that they are recorded.</p> <ol style="list-style-type: none"> <li>1) Coordinate with other flood groups to propose legislation that allows counties the ability to be more protective with regards to flood mitigation and water quality. (An example of this would be to allow counties the opportunity to prevent breakaway structures in the floodplain.)</li> <li>2) Require all commercial outfitters to properly store equipment (such as busses, tubes, tents, pop-up tents, picnic tables, kayaks, trailers, hammocks and stands, coolers, etc) out of the floodplain during non-working hours.</li> <li>3) Require commercial outfitters to bring equipment (listed above) out of the floodplain during major rain events, and fine operators if this does not occur.</li> <li>4) Collaborate with Texas Parks and Wildlife Dept, or another state agency, to create a policy that allows 30 foot wide access points to the river, and restricts mechanical grazing of the riparian zone within 100 feet of the river elsewhere. Create a maximum number of access points per property (such as 2 per every 0.5 mile of river frontage) in order to properly protect the riparian zone to mitigate flood impacts due to sheetflow runoff.</li> <li>5) Create a list of appropriate nature-based solutions along streams and rivers, and allocate funding for these processes in order to mitigate flood impacts before it occurs.</li> </ol> <p>-Virginia  Thank you!  Executive Director, San Marcos River Foundation  P.O. Box 1393, San Marcos, TX 78667, 210-860-4575</p>	Respondent: Lauren (GBRA) Response Date: 5/18/2022

## Guadalupe Regional Flood Planning Group (RFPG) - Public Comment Tracking Matrix

For RFPG Public Meeting June 29, 2022

Comments received May 27, 2022 – June 22, 2022

Comments Received Via [comments@guadaluperfpg.org](mailto:comments@guadaluperfpg.org) or via [lwillis@gbra.org](mailto:lwillis@gbra.org)


Date Comment Received	Name/Affiliation of Commenter	Comment/Question	Respondent and Response Date
6/8/2022	Frank Davis Hill Country Conservancy	<p><b>From:</b> Frank Davis &lt;<a href="mailto:frank@hillcountryconservancy.org">frank@hillcountryconservancy.org</a>&gt;  <b>Sent:</b> Wednesday, June 8, 2022 4:48 PM  <b>To:</b> Lauren Willis &lt;<a href="mailto:lwillis@gbra.org">lwillis@gbra.org</a>&gt;  <b>Cc:</b> Virginia Condie (<a href="mailto:virginia@sanmarcosriver.org">virginia@sanmarcosriver.org</a>) &lt;<a href="mailto:virginia@sanmarcosriver.org">virginia@sanmarcosriver.org</a>&gt;  <b>Subject:</b> Application for funding: Edwards Aquifer Recharge Conservation Easement</p> <p>Hello,</p> <p>Please accept this application for funding a critical conservation project in the Edwards Aquifer Recharge Zone, in San Marcos. Details follow.                      Project Sponsor: Hill Country Conservancy                      Project Name: Wootan Recharge Conservation Property                      Hays County CAD: R16076                      Property Description: A0287 ISAAC LOWE SURVEY, TRACT 5, ACRES 84.49                      Project Description: Funding to assist with the acquisition of a conservation easement on the Wootan property, which sits over the Edwards Aquifer Recharge Zone. This property is in downtown San Marcos and adjacent to a pending conservation project on 1,068 acres of critical recharge land, and in close proximity to numerous residential subdivisions which greatly jeopardize the health of the Aquifer and local watersheds. Protection of the Wootan property is imperative to intercept rainfall, and reduce erosive sheet flow runoff, thus mitigating future floods in San Marcos. The conservation easement would be drafted in accordance with strict limits on increased impervious cover to protect the area in perpetuity.                      Estimated Property Value: (30K/acre) \$2,534,700                      Estimated Easement Value: (60% of Property Value) \$1,520,820                      Estimated Project Cost: (50% of Easement Value plus transaction expenses) \$860,410                      Flood Mitigation Benefits: Recharge to the Edwards Aquifer, Edwards Aquifer Water Supply Protection, Rainwater Infiltration, Wildlife Corridor Protection, Flood Mitigation.</p> <p>Thank you for your consideration,                      Frank</p>	Respondent: Lauren (GBRA) Response Date: 6/9/2022

## Guadalupe Regional Flood Planning Group (RFPG) - Public Comment Tracking Matrix

For RFPG Public Meeting June 29, 2022

Comments received May 27, 2022 – June 22, 2022

Comments Received Via [comments@guadaluperfpg.org](mailto:comments@guadaluperfpg.org) or via [llwillis@gbra.org](mailto:llwillis@gbra.org)

		<p>Frank H. Davis                  Chief Conservation Officer  <a href="http://www.hillcountryconservancy.org">www.hillcountryconservancy.org</a>                  Cell: 512-947-3920</p> <p>Mail: PO Box 163125                  Austin, TX 78716-3125</p> 	
5/31/22	Lyda Creus Molanphy Great Springs Project	<p><b>SEE ATTACHMENT</b></p> <p><b>From:</b> Lyda Creus Molanphy &lt;<a href="mailto:lyda@greatspringsproject.org">lyda@greatspringsproject.org</a>&gt;  <b>Sent:</b> Tuesday, May 31, 2022 3:43 PM  <b>To:</b> Lauren Willis &lt;<a href="mailto:llwillis@gbra.org">llwillis@gbra.org</a>&gt;  <b>Subject:</b> Great Springs Project submission of FME for Region 11</p> <p>Good afternoon Lauren,</p> <p>Attached please find a Flood Management Evaluation (FME) proposal to the Region 11 Guadalupe Flood Planning Group. We understand proposals are due today but may be updated in the coming weeks should that be necessary.</p> <p>We appreciate consideration of this FME and look forward to next steps.</p> <p>Please advise if we need to provide any additional information.</p> <p>Thank you,</p> <p>Lyda</p>	Respondent: Lauren (GBRA) Response Date: 5/31/2022

## **Appendix 10-D** | Notice and Documentation of September 7, 2022, Public Hearing on Draft Flood Plan

D.1 – Legal Notice for September 7, 2022, Public Hearing on Draft Flood Plan

D.2 – Public Presentation for September 7, 2022, Public Hearing on Draft Flood Plan

D.3 – Minutes for September 7, 2022, Public Hearing on Draft Flood Plan

Region 11. Guadalupe Flood Planning Group Meeting  
Wednesday, September 7, 2022  
4:30 PM

Upper Guadalupe River Authority (UGRA) Auditorium  
125 Lehmann Dr.  
Kerrville, TX 78028

**Agenda:**

1. Call to Order
2. Welcome
3. Approval of minutes from the July 27, 2022 Region 11 RFPG meeting
4. Region 11 Guadalupe RFPG Chair Updates
5. Texas Water Development Board (TWDB) Updates
6. Guadalupe Region 11 RFPG Sponsor Guadalupe-Blanco River Authority (GBRA) Updates
7. Discussion regarding Region 11 RFPG Technical Consultants work and schedule.
  - a. Discussion and possible action approving the list of Flood Mitigation Evaluations (FMEs) for Task 12.
8. Consider date and agenda items for next meeting
9. Presentation: Overview of Regional Flood Planning Process and Draft Guadalupe Regional Flood Plan, Chairman Doug Miller and Jay Scanlon, PE, CFM, ENV-SP - Freese & Nichols
10. Public Input: The RFPG is soliciting public input regarding the Draft Region 11 Guadalupe Regional Flood Plan (as required per Texas Water Code §16.062(f) and 31 Texas Administrative Code §361.21(h)(3) (A, F)).
11. Public general comments – limit 3 minutes per person
12. Adjourn

If you wish to provide written comments prior to or after the meeting, please email your comments to [comments@guadaluperfpg.org](mailto:comments@guadaluperfpg.org) and include “Region 11 Flood Planning Group Meeting” in the subject line of the email.

Additional information may be obtained from: Lauren Willis, Director of Regulatory & Customer Affairs, 830-379-5822, [lwillis@gbra.org](mailto:lwillis@gbra.org), 933 East Court Street, Seguin, TX



# Region 11: Guadalupe Regional Flood Planning Group Meeting

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Wednesday, September 7, 2022  
4:30pm

# Agenda Item 1

## Call to Order

1. Attendance
2. Individuals attending in-person, please sign-in



# Agenda Item 2

Welcome

## Agenda Item 3

### Approval of Meeting Minutes

1. Approval of meeting minutes from July 27, 2022 Region 11 RFPG Meeting

**Meeting Minutes**  
**Region 11 Guadalupe Regional Flood Planning Group Meeting**  
**July 27, 2022 at 3:30 PM**

**Guadalupe-Blanco River Authority River Annex (905 Nolan Street, Seguin, TX 78155)**

**Roll Call:**

<u>Voting Member</u>	<u>Interest Category</u>	<u>Present (x) / Absent ( ) / Alternate Present (*)</u>
Doug Miller Melissa Reynolds*	<i>Agricultural</i>	X (arrived at 3:35pm)
John Johnston	<i>Counties</i>	X
Lon Shell	<i>Counties</i>	X
Bobby Christmas	<i>Electric Generating Utilities</i>	
Annalisa Peace Bill Barker*	<i>Environmental</i>	X (arrived at 3:37pm)
Doug Sethness Jennifer Urban*	<i>Flood districts</i>	X
Kevin Stone	<i>Industries</i>	
Joseph Pantalion John Espinoza*	<i>Municipalities</i>	X
Ken Gill	<i>Municipalities</i>	X
Dr. Kimberly Meitzen	<i>Public</i>	X
R. Brian Perkins Charlie Hickman*	<i>River Authorities</i>	X
Ray Buck Tara Bushnoe*	<i>River Authorities</i>	*
Gian Villarreal Tami Norton*	<i>Small Business</i>	X (arrived at 3:41pm)
Ronald (Ron) Fieseler Ben Eldridge*	<i>Water Districts</i>	X
Steven Fonville	<i>Water Utilities</i>	X

<u>Non-voting Member</u>	<u>Agency</u>	<u>Present(x)/Absent( )/ Alternate Present (*)</u>
Sue Reilly Beth Bendik*	Texas Parks and Wildlife Department	X
Hollie Hischer Bierbauer	Texas Division of Emergency Management	
Jami McCool Kristin Lambrecht*	Texas Department of Agriculture	X
Allen Nash	Texas State Soil and Water Conservation Board	
Kris Robles Teresa Williams*	General Land Office	
Ryke Moore	Texas Water Development Board (TWDB)	X
Joel Klumpp	Texas Commission on Environmental Quality	
Don Durden	Public	X
Doris Cooksey	Region 12 Liaison	
Patrick Brzozowski Scott Hartl*	Region 10 Liaison	

**Quorum:**

Quorum: **Yes**

Number of voting members or alternates representing voting members present: **13**

Number required for quorum per current voting positions of 15: **8**

**Other Meeting Attendees:**

Lauren Willis, GBRA (Facilitator)

Ram Mendoza, GBRA (IT)

Jay Scanlon, Freese & Nichols, Inc.

Adam Conner, Freese & Nichols, Inc.

Velma Danielson, Blanton & Associates

Sarah Weber, Doucet & Associates

Ben Eldridge, Cibolo Center

Ken Motl, GBRA Director

Ryan DeCamp, City of Luling

John Westbrook, City of Luling

*All meeting materials are available for the public at: <http://www.quadalupeRFPG.org>*

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

Vice Chairman Johnston called the meeting to order at 3:31PM. Lauren Willis called roll of the planning group members to record attendance and a quorum was established.

**AGENDA ITEM NO. 2: Welcome**

Vice Chairman Johnston welcomed members to the meeting.

**AGENDA ITEM NO. 3: Approval of Minutes from the June 29, 2022 Region 11 RFPG Meeting**

Vice Chairman Johnston opened discussion on approving the minutes from the June 29, 2022 Region 11 RFPG Meeting.

A motion was made by Ken Gill to approve the June 29, 2022 Region 11 RFPG Meeting minutes. Doug Sethness seconded the motion. The meeting minutes were approved by consensus.

**AGENDA ITEM NO. 4: Region 11 Guadalupe RFPG Chair Updates**

Vice Chairman Johnston did not have any updates for the RFPG.

**AGENDA ITEM NO. 5: Texas Water Development Board (TWDB) Updates**

Ryke Moore reviewed the following items:

- Looking forward to reviewing the Draft Plans that are due on August 1, 2022
- GBRA to turn in next payment request
- Working on sub-contract amendments

**AGENDA ITEM NO. 6: Guadalupe Region 11 RFPG Sponsor Guadalupe-Blanco River Authority (GBRA) Updates**

Lauren Willis reviewed the following items:

- GBRA will be submitting FY22Q3 invoice reimbursement to TWDB
- Continue to check the website [quadalupeRFPG.org](http://www.quadalupeRFPG.org) for updates and materials

**AGENDA ITEM NO. 7: Discussion and potential action regarding administrative expenses to be submitted to the Texas Water Development Board for reimbursement.**

Lauren Willis reviewed the administrative costs for FY22Q3 (March 1, 2022 – May 31, 2022).

A motion was made by Joe Pantalione to approve the administrative expenses for FY22Q3 for reimbursement. Ron Fieseler seconded the motion. The motion was approved by consensus.

**AGENDA ITEM NO. 8: Discussion and potential action regarding Region 11 RFPG Technical Consultants work and schedule.**

Jay Scanlon overviewed the agenda, reviewed the process for Task 12 on recommendations of FMEs and reviewed the Look Ahead calendar. Velma Danielson, Blanton & Associates reviewed the comments matrix and provided updates and notice requirements for outreach of the Draft Flood Plan. Two meetings to be held in September, one in Kerrville on September 7th and one in Victoria on September 21st. The official comment period is August 8, 2022 – October 7, 2022. GBRA will provide any Press Releases and Public Service Announcements to the RFPG to help with distribution.

**a. Discussion and potential action approving the Draft Guadalupe Regional Flood Plan to be submitted to the TWDB by August 1, 2022**

Jay Scanlon reviewed the changes in Chapter 8. A discussion occurred about the recommendation combining Regional Water Planning and the Regional Flood Planning.

Chairman Miller opened the floor for discussion of approving the Draft Guadalupe Regional Flood Plan.

A motion was made by Doug Sethness to approve the Draft Guadalupe Regional Flood Plan. Ron Fieseler seconded the motion. The vote passed by a vote of 13 Ayes and 0 Nays.

**b. Discussion and possible action approving the list of Flood Mitigation Evaluations (FMEs) for Task 12.**

Jay Scanlon reviewed Task 12 and the objectives to identify FMEs that can be turned into a Flood Mitigation Projects (FMPs) for the amended plan. The list will be brought to the September 7<sup>th</sup> meeting. No action was taken on this item.

**AGENDA ITEM NO.9: Consider date and agenda items for next meeting**

The next meeting will be held on Wednesday, September 7th at 4:30pm at the Upper Guadalupe River Authority (UGRA) Auditorium, 125 Lehmann Dr, Kerrville, TX 78028.

**AGENDA ITEM NO. 10: Public General comments (Public comments limited to 3 minutes per speaker)**

Brian Perkins mentioned that GBRA is the Cooperative Technical Partner for the Guadalupe River Basin with FEMA. GBRA is taking ideas for Fiscal Year 2023 for updating flood models and mapping.

**AGENDA ITEM NO. 11: Adjourn**

Brian Perkins made a motion to adjourn. The motion was seconded by Doug Sethness. The motion passed by unanimous consent.

The meeting adjourned at 4:19 PM by Doug Miller.

*Approved by the Region 11 Guadalupe RFGP at a meeting held on September 7, 2022.*

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Brian Perkins, SECRETARY

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Doug Miller, CHAIR

Region 11 Guadalupe RFPG Chair Updates

## Agenda Item 4

Texas Water Development Board Updates

## Agenda Item 5



# Agenda Item 6

Guadalupe Region 11 RFPG Sponsor – GBRA  
Updates

# Agenda Item 7

Discussion regarding Region 11 RFPG Technical Consultants work and schedule.

A. Discussion and potential action approving the list of Flood Mitigation Evaluations (FMEs) for Task 12.

An aerial photograph of a vast wetland area. The landscape is a mix of green marshland and blue water channels. The water reflects the sky, which appears overcast. The vegetation is dense and green, interspersed with winding waterways. The overall scene is a natural, undisturbed wetland environment.

# **Region 11 Guadalupe**

Regional Flood Planning Group Meeting  
September 7, 2022

Item 7



# Agenda



Public Outreach Update

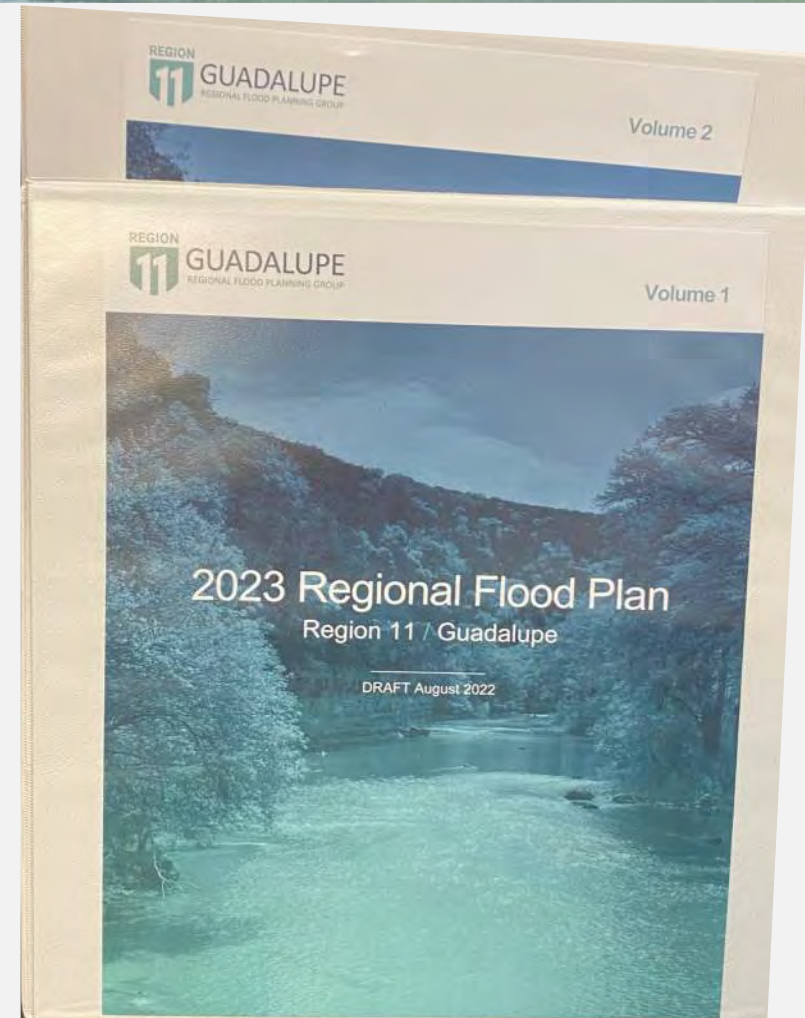
Task 12 Discussion



Look Ahead

# Public Outreach

## Draft Regional Flood Plan

- Submitted to TWDB (August 1, 2022)
- 60-day Review Underway (August 8 to October 7)
- Public Meetings
  - Public/RFPG Meeting (Items 9-11 Today)
  - September 21 (Victoria)
- No comments received to date





## Task 12 FMEs to be Performed

- **Flood Mitigation Evaluations to:**
  - Evaluate Flood Risk in Areas with limited data
  - Evaluate Flood Risk Solutions / Alternatives
  - Preliminary Engineering
- **More information / Time to bring RFPG Recommendations**
  - Overview of potential FMEs
  - RFPG input
  - Decision/vote at next RFPG Meeting
- **Types of FMEs (shortlist):**
  - Types of Projects:
    - Channel Improvements
    - Critical Infrastructure
    - Detention
    - Street and Drainage
    - Low Water Crossings
    - Larger/Systems
  - FMEs with Preliminary Engineering (13)
  - Some FMEs “In-Design” (fill gaps if need FIF funding)

# Task 12 FMEs to be Performed

## MEMORANDUM



Freese & Nichols  
Specialty Engineers  
Environmental Engineers

10431 Morado Circle, Suite 300 • Austin, Texas 78759 • 512-517-3100 • FAX 817-735-7491

[www.fn.com](http://www.fn.com)

**TO:** Region 11 Regional Flood Planning Group  
**CC:** Project Files  
**FROM:** Jay Scanlon, P.E., Adam Conner  
**SUBJECT:** Task 12 Potential FMEs  
**DATE:** 8/29/2022  
**PROJECT:** GBA21362

As discussed at the previous Flood Planning Group meetings, the Texas Water Development Board Amendment includes funding in Task 12 for the purpose of performing Flood Management Evaluations (FMEs) recommended in the Draft Regional Flood Plan, with the goal of advancing those to Flood Mitigation Projects (FMPs) in the July 2023 Amended Regional Flood Plan. The funding is limited, thus the number of FMEs that can be completed is limited and the Planning Group must approve the FMEs to be done.

Our Team is working through the FMEs to generate a list of recommended FMEs to be completed. We planned to present the initial list in September 2022; however, as we are reviewing the list we recognize the need to reach out to local communities for additional information and clarification. The additional information will allow us to better assess the level of effort needed, determine if the sponsor supports development of the FMP, and/or determine if the sponsor plans to apply for future Flood Infrastructure Funds (FIF) to implement the project.

We have narrowed the FME list to about 50 potential FMEs (attached). As we work to develop the recommended list we would appreciate your guidance/preferences for how we do so. Here are some common threads we are seeing and contemplating as part of the decision:

- Ten (10) of the FMEs were identified as having completed preliminary engineering reports; however, these FMEs are concentrated in Kerrville and Victoria.
- Eight (8) FMEs are in design so detailed engineering is complete; however, these are generally missing benefit-cost-analyses needed to be shown as an FMP. Depending on the timing of construction and whether or not the sponsor plans to apply for future FIF money these may fall off the list of be considered low hanging fruit.
- Twenty-three (23) Low Water Crossings identified but some additional crossings may have been identified in the Victoria PER.

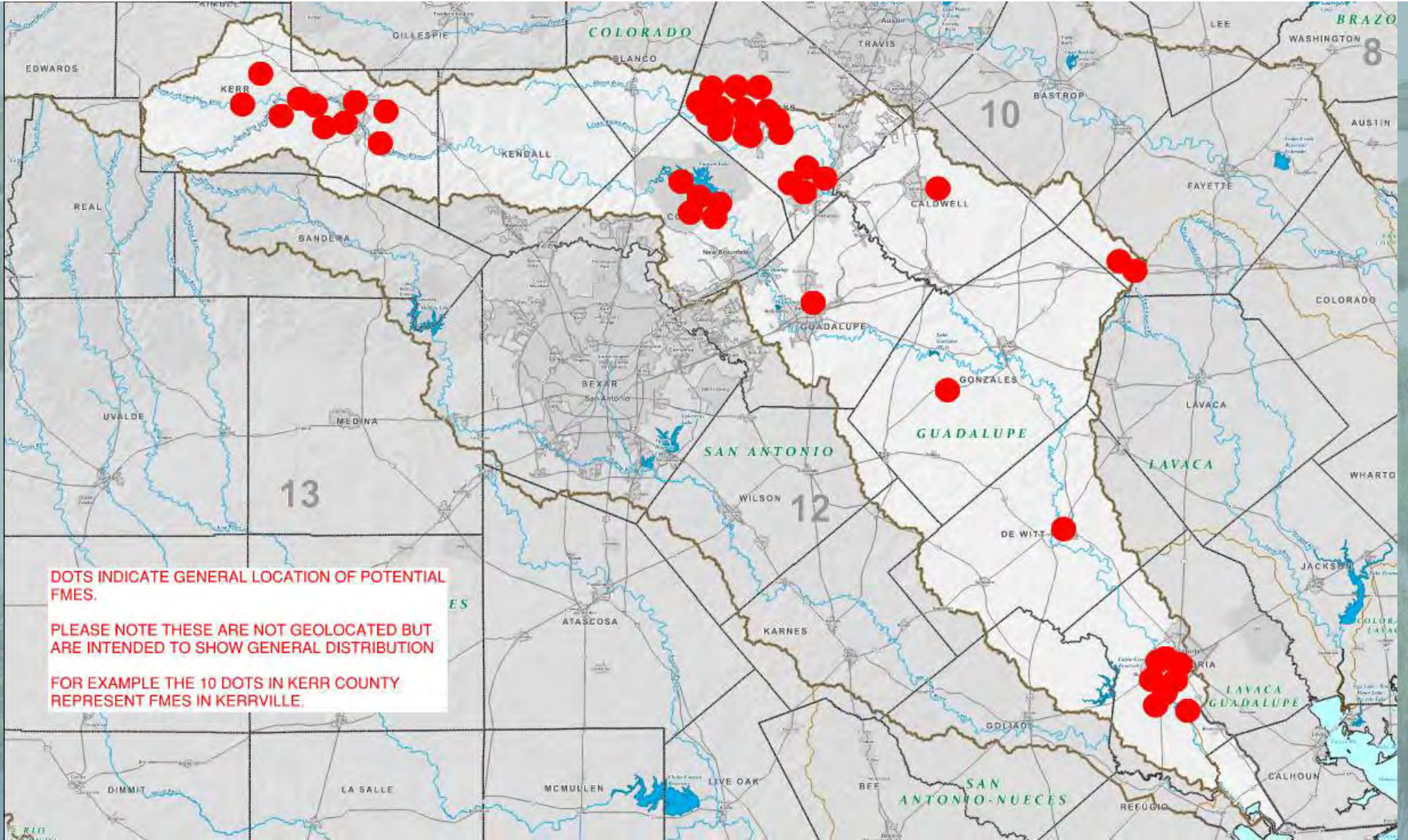
While we continue to vet the potential FMEs we wanted to request your input/guidance to develop the list of recommended FMEs. Based on preliminary estimates of effort we anticipate that the team will be able to complete 5 or 6 FMEs but that number could increase or decrease depending on the actual FME. To that end, we have attached a template scope and budget form we will use to document the FMEs to be performed as well as our "working list" for your review and input.

FME ID	FME Name	Description	Counties	Sponsor	Status	Notes
11100007	Caldwell County Emergency Service District #4 Fire Station 2 Project Planning	Planning for proposed project to build a well and raise driveway of Fire Station 2 to prevent inundation of facility and to keep station in service during major storm events.	Caldwell	Caldwell County Emergency Service District #4	Unknown	No information
11100043	City of New Braunfels - Box Culvert Installation to Reduce Flood Risk on Blieders Creek, Comal River and Landa Park Project Planning	Project planning for proposed drainage improvements project to reduce flooding in the Blieders Creek and German Creek watersheds by conveying flows to the Guadalupe River. The project is also intended to relieve flooding in the Landa Park area.	Comal	New Braunfels	Unknown	Part of FIF? Timing?
11100044	City of New Braunfels Faust St / Nacogdoches Ave Improvements Project Planning	Study to analyze drainage conveyance and flooding issues within the Faust Street and Nacogdoches Avenue area and project planning for solutions within project area.	Comal	New Braunfels	Unknown	Part of FIF? Timing?
111000100	Comal County Master WID River Road Low Water Crossing Improvement Project Planning	Project planning for proposed project to implement low water crossing improvements at River Road.	Comal	Comal Master WID	Unknown	No information
111000103	City of Cuero WWTP Floodproofing Project Planning	Project planning to floodproof/retrofit older components of the Cuero Wastewater Treatment Plant subject to flooding.	De Witt	Cuero	Unknown	Determine conceptual project and effort to model/design
111000015	City of Flatonia Drainage Project Planning	Project planning for proposed project to make culvert and drainage ditch improvements from just south of the Union Pacific Railroad at US 90 to the north side frontage road of I-10.	Fayette	Flatonia	Unknown	Are there existing models or conceptual/preliminary design
111000016	City of Flatonia WWTP Floodproofing Project Planning	Project planning for proposed project to floodproof Waste Water Treatment Plant	Fayette	Flatonia	Unknown	Determine conceptual project and effort to model/design
111000008	Canyon Regional WA Hays Caldwell Water Treatment Plant Floodwall Project Planning	Project planning for Canyon Regional WA - Hays Caldwell Water Treatment Plant Floodwall Project	Guadalupe	Canyon Regional Water Authority	In Design	Depends on timing of construction and funding needs (need FIF funding or not)
111000067	City of Seguin Sewage Treatment Plant Floodproofing Project Planning	Project planning for proposed project to flood-proof sewage treatment plants in flood hazard / low-lying areas.	Guadalupe	Seguin	Unknown	Determine conceptual project and effort to model/design
111000054	City of San Marcos Regional Detention Study	Study of solutions for regional detention and water quality strategies.	Guadalupe,Caldwell,Hays	San Marcos	In Design	Depends on timing of construction and funding needs (need FIF funding or not)
111000056	City of San Marcos Low Water Crossing at Jackman Project Planning	Project planning to replace low water crossing at Jackman	Hays	San Marcos	In Design	Depends on timing of construction and funding needs (need FIF funding or not)
111000057	City of San Marcos Low Water Crossing at Mitchell and Purgatory Creek Project Planning	Project planning to replace low water crossing at Mitchell and Purgatory Creek	Hays	San Marcos	In Design	Depends on timing of construction and funding needs (need FIF funding or not)
111000058	City of San Marcos LWC at River Road and Railroad Trestle/Blanco River Project Planning	Project planning to replace low water crossing at River Road and Railroad Trestle/Blanco River	Hays	San Marcos	In Design	Depends on timing of construction and funding needs (need FIF funding or not)
111000059	City of San Marcos LWC at S LBJ and Purgatory Creek Project Planning	Project planning to replace low water crossing at S LBJ and Purgatory Creek	Hays	San Marcos	In Design	Depends on timing of construction and funding needs (need FIF funding or not)
111000114	Hays County Drainage Project Planning (Willow Springs Creek between McCarty Lane and Hunter Road)	Project planning for channel improvement and/or property acquisition project to reduce flood damages along Willow Springs Creek from McCarty Lane to Hunter Road.	Hays	Hays Co	Unknown	Are there existing models or conceptual/preliminary design
111000115	Hays County Drainage Project Planning (Willow Springs Creek between Hunter Rd and the Railroad)	Project planning for detention project to reduce flood damages along Willow Springs Creek from Hunter Road to the railroad.	Hays	Hays Co	Unknown	Are there existing models or conceptual/preliminary design
111000093	City of Wimberley River Road Reconstruction Project Planning	Project planning for proposed project to reconstruct roadway along Blanco River	Hays	Wimberley	Unknown	Appears to be parallel road rather than LWC



FME ID	FME Name	Description	Counties	Sponsor	Status	Notes
111000081	City of Wimberley FM 1492 at Blanco River Low Water Crossing Project Planning	Project planning for proposed project to replace low water crossing at FM 1492 at Blanco River	Hays	Wimberley	Unknown	Atlas 14 updates and preliminary design
111000082	City of Wimberley Hidden Valley at Blanco River Low Water Crossing Project Planning	Project planning for proposed project to replace low water crossing at Hidden Valley at Blanco River	Hays	Wimberley	Unknown	Atlas 14 updates and preliminary design
111000083	City of Wimberley Little Arkansas at Blanco River Low Water Crossing Project Planning	Project planning for proposed project to replace low water crossing at Little Arkansas at Blanco River	Hays	Wimberley	Unknown	Atlas 14 updates and preliminary design
111000084	City of Wimberley Valley Drive at Pierce Creek Low Water Crossing Project Planning	Project planning for proposed project to replace low water crossing at Valley Drive at Pierce Creek	Hays	Wimberley	Unknown	Atlas 14 updates and preliminary design
111000086	City of Wimberley FM 1492 at Pierce Creek Low Water Crossing Project Planning	Project planning for proposed project to replace low water crossing at FM 1492 at Pierce Creek	Hays	Wimberley	Unknown	Atlas 14 updates and preliminary design
111000087	City of Wimberley Wilson Creek at River Road Low Water Crossing Project Planning	Project planning for proposed project to replace low water crossing at Wilson Creek at River Road	Hays	Wimberley	Unknown	Atlas 14 updates and preliminary design
111000088	City of Wimberley Green Acres Dr. at Fire Station Low Water Crossing Project Planning	Project planning for proposed project to replace low water crossing at Green Acres Dr. at Fire Station	Hays	Wimberley	Unknown	Atlas 14 updates and preliminary design
111000089	City of Wimberley Leveritt's Loop Low Water Crossing Project Planning	Project planning for proposed project to replace low water crossing at Leveritt's Loop	Hays	Wimberley	Unknown	Atlas 14 updates and preliminary design
111000090	City of Wimberley Spoke Hollow Dr. at Spoke Pile Creek Low Water Crossing Project Planning	Project planning for proposed project to replace low water crossing at Spoke Hollow Dr. at Spoke Pile Creek	Hays	Wimberley	Unknown	Atlas 14 updates and preliminary design
111000091	City of Wimberley River Road at Western City Limit Low Water Crossing Project Planning	Project planning for proposed project to replace low water crossing at River Road at Western City Limit	Hays	Wimberley	Unknown	Atlas 14 updates and preliminary design
111000092	City of Wimberley Paradise Hills Low Water Crossing Project Planning	Project planning for proposed project to replace low water crossing at Paradise Hills	Hays	Wimberley	Unknown	Atlas 14 updates and preliminary design
111000094	City of Wimberley Little Ranches at Panther Creek Low Water Crossing Project Planning	Project planning for proposed project to reconstruct low water crossing and roadway at Little Ranches at Panther Creek	Hays	Wimberley	Unknown	Atlas 14 updates and preliminary design
111000095	City of Wimberley Hoots Holler Low Water Crossing Project Planning	Project planning for proposed project to reconstruct low water crossing and roadway at Hoots Holler	Hays	Wimberley	Unknown	Atlas 14 updates and preliminary design
111000085	City of Wimberley Flite Acres Road Low Water Crossing Project Planning	Project planning for proposed project to replace low water crossing at Flite Acres Road	Hays	Wimberley	Unknown	Atlas 14 updates and preliminary design
111000031	City of Kerrville Harper Road to Town Creek (Fay Drive) Drainage Improvements Study	Study of solutions to implement drainage improvements on Harper Road to Town Creek (Fay Drive).	Kerr	Kerrville	Concept	Concept - determine how much preliminary engineering done
111000122	Kerr County Center Point Storm Drainage Infrastructure Project Planning	Project planning to construct new storm drainage infrastructure to reduce the potential impacts of future flood events.	Kerr	Kerr Co	In Design	Depends on timing of construction and funding needs (need FIF funding or not)
111000022	City of Kerrville Pinto Trail Project Planning	Project planning for proposed project to provide flood relief to the properties adjacent to the channel at risk of flooding, including widening existing channels, constructing a grass-lined trapezoidal channel, and seeding the proposed earthen channels.	Kerr	Kerrville	Performed Prelim Engineering Report	Has PER - Atlas14 update and fill gaps

FME ID	FME Name	Description	Counties	Sponsor	Status	Notes
111000029	City of Kerrville Circle Avenue Drainage Channel Project Planning	Project planning for proposed channel and street improvement project to alleviate sedimentation and erosion issues at the intersection of Culberson Avenue and Circle Avenue.	Kerr	Kerrville	Performed Prelim Engineering Report	Has PER - Atlas14 update and fill gaps
111000028	City of Kerrville Harper Street between Culberson Avenue and Lewis Avenue Project Planning	Project planning for proposed storm drain system project to relieve localized flooding and excessive ponding that occurs throughout Harper Street.	Kerr	Kerrville	Performed Prelim Engineering Report	Has PER - Atlas14 update and fill gaps
111000030	City of Kerrville Jack Drive - Undersized Inlet Project Planning	Project planning for proposed street and drainage improvements project to relieve road and property flooding from occurring directly downstream of Jack Drive's existing undersized inlet.	Kerr	Kerrville	Performed Prelim Engineering Report	Has PER - Atlas14 update and fill gaps
111000023	City of Kerrville Park Street Low Water Crossing Project Planning	Project planning for proposed project to improve or replace the Park Street Low Water Crossing.	Kerr	Kerrville	Performed Prelim Engineering Report	Has PER - Atlas14 update and fill gaps
111000024	City of Kerrville First Street Low Water Crossing Project Planning	Project planning for proposed project to improve or replace the First Street Low Water Crossing.	Kerr	Kerrville	Performed Prelim Engineering Report	Has PER - Atlas14 update and fill gaps
111000025	City of Kerrville Fourth Street Low Water Crossing Project Planning	Project planning for proposed project to improve or replace the Park Street Low Water Crossing.	Kerr	Kerrville	Performed Prelim Engineering Report	Has PER - Atlas14 update and fill gaps
111000026	City of Kerrville Hill Country Drive at SH 16 Project Planning	Project planning for proposed project to raise the roadway profile and regrade Hill Country Drive, and increase the downstream pipe capacity at Hill Country Drive.	Kerr	Kerrville	Performed Prelim Engineering Report	Has PER - Atlas14 update and fill gaps
111000072	City of Victoria Flood Gate Project Planning	Project planning for proposed project to rehabilitate, repair, or replace the City of Victoria's existing flood gates, install additional flood gates as appropriate, and construct a storm water lift station in an area to be determined by study.	Victoria	Victoria	Design Complete	<b>Depends on timing of construction and funding needs (need FIF funding or not)</b>
111000069	City of Victoria Drainage Improvement Study	Study of solutions to increase dimensions of drainage culverts in areas prone to flooding and/or drainage problems in various City locations.	Victoria	Victoria	Performed Prelim Engineering Report	Has PER - Atlas14 update and fill gaps. Identify a specific crossing(s) from the list?
111000073	City of Victoria Regional Drainage Solutions Project Planning	Project planning for proposed project for five regional drainage solutions within the City: the Gardens Apartment diversion, Shenandoah ditch improvements, Anthony Road outfall improvements, Lone Tree Road outfall improvements, and <del>Close Ditch outfall</del>	Victoria	Victoria	Performed Prelim Engineering Report	Has PER - Atlas14 update and fill gaps. Identify a specific project from the list?
111000074	City of Victoria - Storm Sewer Improvements Project Planning	Project planning for project to replace storm sewer pipe under 18-inch diameter (29.9 miles). As a result of overland flow analysis and Storm Sewer System Level of Service Analysis, it was determined to replace all pipe less than 18-inch <del>diameter</del>	Victoria	Victoria	Performed Prelim Engineering Report	Has PER - Atlas 14 and determine what gaps remain? Potentially high effort to complete due to size
111000076	City of Victoria Regrade Priority Ditches and Driveway Culverts Project Planning	Project planning for proposed drainage improvements. As a result of a roadside ditch capacity evaluation, it was determined that 23 miles of ditch and 669 driveway culverts are negatively impacting conveyance capacity and need to be <del>replaced</del>	Victoria	Victoria	Performed Prelim Engineering Report	Has PER - Atlas 14 and determine what gaps remain? Potentially high effort to complete due to size
111000078	City of Victoria Stream Restoration Study	Study to implement a stream restoration/channelization program to ensure adequate drainage/diversion of storm water, throughout various City low water crossings, streambeds, creek sheds, tributaries, and riverine areas.	Victoria	Victoria	Performed Prelim Engineering Report	Has PER - Atlas 14 and determine what gaps remain? Potentially high effort to complete due to size
111000077	City of Victoria Repair Channel Failures & Sediment Removal Project Planning	Project planning for proposed channel improvements. Using field visits and drone footage, it was determined to repair 33,657 sq ft of concreted lined channel, 11,829 sq ft of earthen channel, and remove 227,099 sq ft of sediment.	Victoria	Victoria	Unknown	Any engineering studies / Maintenance vs improvements



**DOTS INDICATE GENERAL LOCATION OF POTENTIAL FMES.**

**PLEASE NOTE THESE ARE NOT GEOLOCATED BUT ARE INTENDED TO SHOW GENERAL DISTRIBUTION**

**FOR EXAMPLE THE 10 DOTS IN KERR COUNTY REPRESENT FMES IN KERRVILLE.**



# Look Ahead

Meeting	Milestone Goals
September	<b>September 21</b> Second Public Meeting (Victoria)
October	<b>October 7</b> Close 60-day Review / Review and collate comments
November	<b>November 2</b> Discuss Comments and Responses / Task 12 Selection
December	<b>December 7</b> Approve (pending no substantive changes)
January 2023	<b>January 7</b> Submit 2023 Reginal Flood Plan (due January 10)
July 2023	<b>July 14</b> Amended Regional Flood Plan Due

## Agenda Item 8

Consider date and agenda items for next meeting

Wednesday, September 21<sup>st</sup> at 4:30pm – UHV, Victoria

Wednesday, October 5<sup>th</sup> at 2pm – GBRA, Seguin

Wednesday, November 2<sup>nd</sup> at 2pm – GBRA, Seguin

Wednesday, December 7<sup>th</sup> at 2pm – GBRA, Seguin

# Agenda Item 9

## Presentation

Presentation: Overview of Regional Flood Planning Process and Draft Guadalupe Regional Flood Plan

Chairman Doug Miller and Jay Scanlon,  
PE, CFM, ENV-SP | Freese & Nichols, Inc.

An aerial photograph of a vast wetland area. The landscape is a mix of green marshland and blue water channels. The water reflects the sky, which appears overcast. The vegetation is dense and green, interspersed with winding waterways. The overall scene is a natural, undisturbed wetland environment.

# **Region 11 Guadalupe**

Regional Flood Planning Group Meeting  
September 7, 2022

Item 9

# Regional Flood Planning Overview

- **15 regional plans:** 1 plan for each watershed-based region, all rolled up into 1 state flood plan.
- **Bottom-up approach:** Groups governed by local, volunteer members.
- **Open Process:** Ample opportunities for public input at RFPG meetings, comment on plans, written comments.





# Who prepared the plan?

- The RFPG was responsible for developing this regional flood plan; however, the **implementation of specific recommendations and flood mitigation actions included in this plan will require action by local communities in the region.**

Interest Group	Member Name
Agricultural	Doug Miller
Counties	John Johnston, PE, CFM
Counties	Lon Shell
Electric Generating Utilities	Bobby Christmas
Environmental	Annalisa Peace
Flood Districts	Doug Sethness
Industries	Kevin Stone
Municipalities	Joe Pantalione, PE
Municipalities	Ken Gill, PE
Public	Kimberly Meitzen, PhD
River Authorities	Brian Perkins, PE
River Authorities	Ray Buck
Small Business	Gian Villarreal, PE, CFM
Water Districts	Ronald (Ron) Fieseler
Water Utilities	Steven Fonville
Non-Voting, Counties	Don Durden

618,874 People

2020 Population of the region



22 Counties

22 counties, or portions of them, make up the basin



21%

36 Major Disaster Declarations

36 major and 8 emergency declarations between 1953 and 2020, 21% occurring since 2000



42 Flood Events

42 major flood events since 1913 with significant losses to life and property

FEMA Flood Claims

(1975-Present)

6,248  
Flood  
Claims

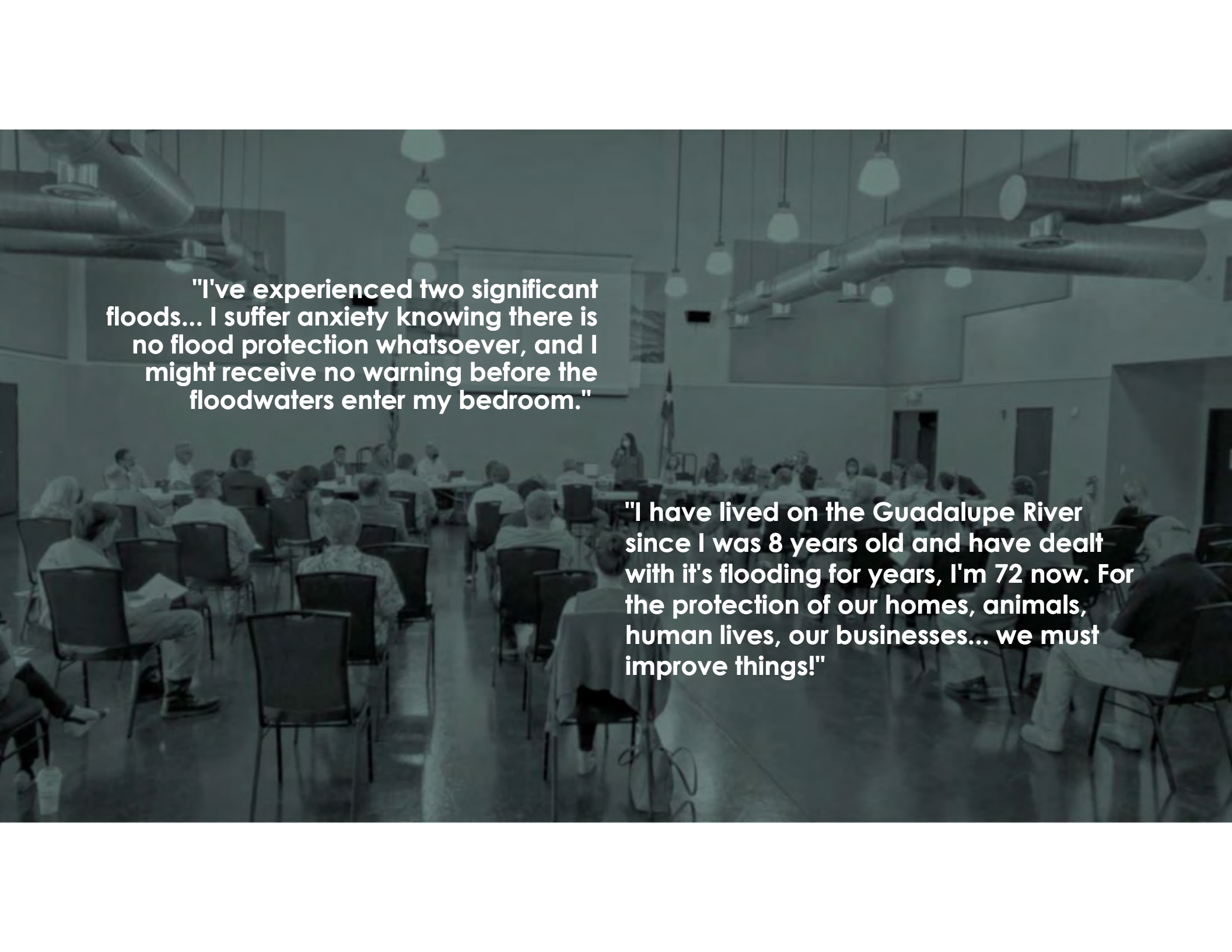
\$261.7M  
Flood  
Claims  
Paid



# Task 1: Planning Area Description

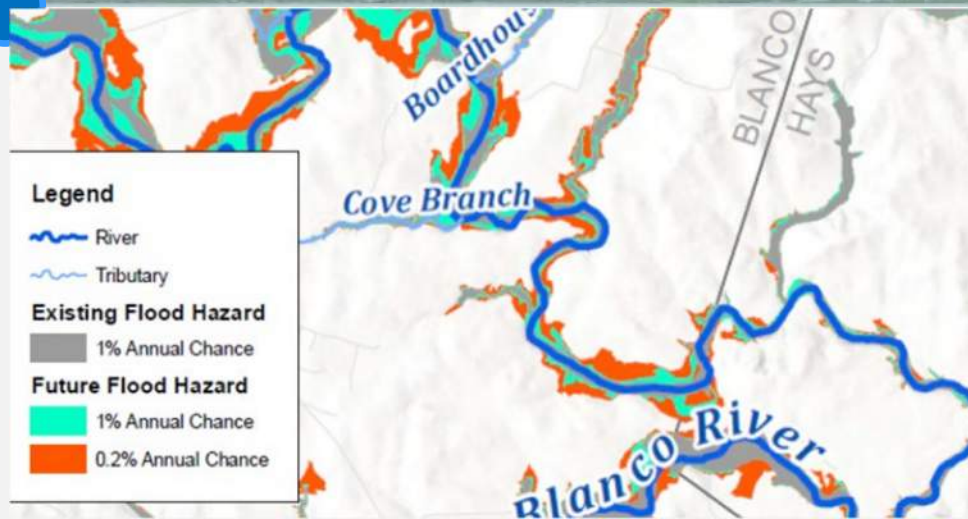
## Existing Flood Infrastructure

Features	Region Counts	Features	Region Counts
Rivers, tributaries	6,851	Levees	10
Major lakes, reservoirs	7	Dams	220
Parks, preserves, natural areas	90	Pond structures $\geq$ 1 acre	3,870
Wetlands and marshes	5,217	Local stormwater systems, including tunnels, canals	5
Caves, sinkholes, springs	1,956	Low-water crossings	815
Barriers, gates	1		



**"I've experienced two significant floods... I suffer anxiety knowing there is no flood protection whatsoever, and I might receive no warning before the floodwaters enter my bedroom."**

**"I have lived on the Guadalupe River since I was 8 years old and have dealt with it's flooding for years, I'm 72 now. For the protection of our homes, animals, human lives, our businesses... we must improve things!"**



Flood Hazard Frequency	Flood Hazard Area (in square miles)		Change (%)
	Existing	Future	
1%	986	1,169	18.6%
0.2%	183	215	17.5%
<b>Total</b>	<b>1,169</b>	<b>1,384</b>	<b>18.4%</b>

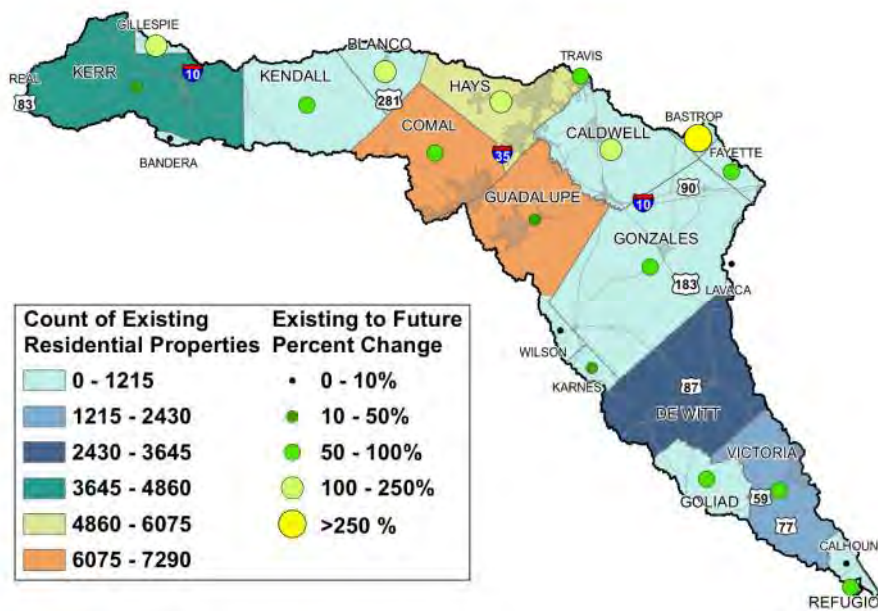
## Task 2: Flood Risk Analyses

- Flood risks evaluated for current and future condition 1% and .2% annual chance flood events.
- Utilized best-available data
- Future condition based on 30-year no-action scenario

# Task 2: Flood Risk Analyses

The RFPG conducted:

- Flood exposure analyses to identify who and what might be harmed from a flood event within the region; and
- Vulnerability analyses to identify vulnerabilities of communities and critical facilities



Total Structures	<b>45,801</b>
Structures: Residential	<b>32,101</b>
Structures: Non-Residential	<b>13,700</b>
Population	<b>166,622</b>
Critical Facilities	<b>214</b>
Roadway- Stream Crossings (count)	<b>3,206</b>
Roadway-Stream Crossings (miles)	<b>1,379.5</b>
Agricultural Land (sq. miles)	<b>689.6</b>



All 22 counties and 31 out of 32 eligible cities within the region are participants in the National Flood Insurance Program (NFIP).



Many communities only adopt minimum flood development standards and are not pro-active in their approach to floodplain development. Many counties are not aware of their authority to implement floodplain development standards higher than NFIP minimums.



The RFPG encourages local governments throughout the region to adopt higher standards and consider CRS participation.

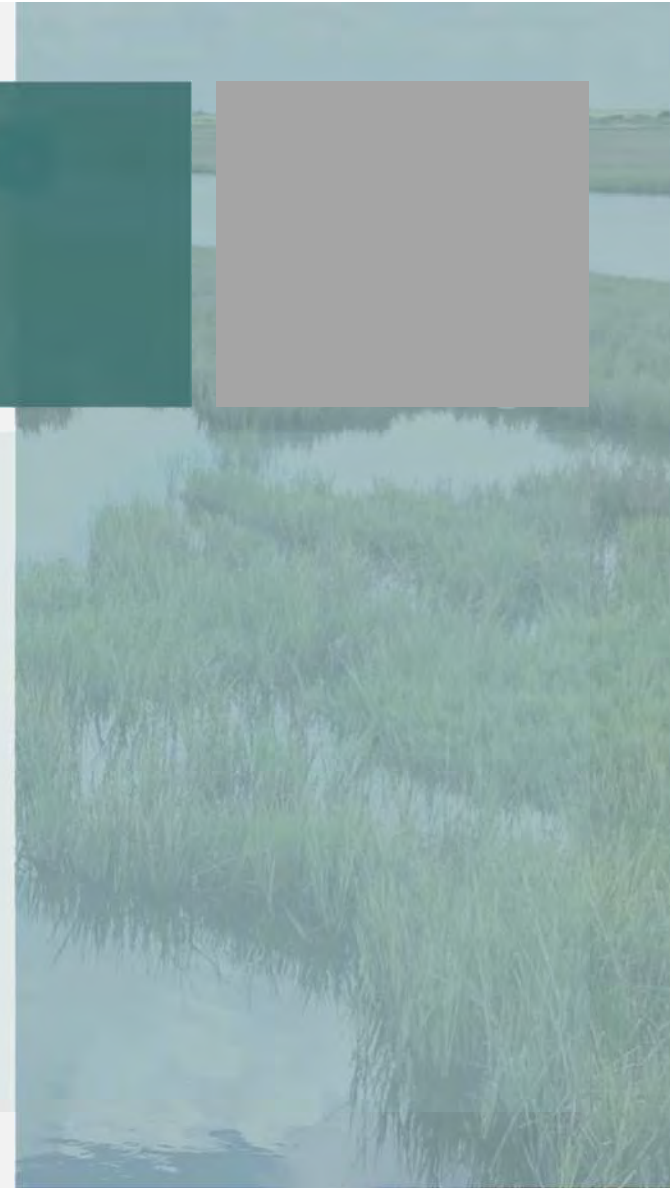


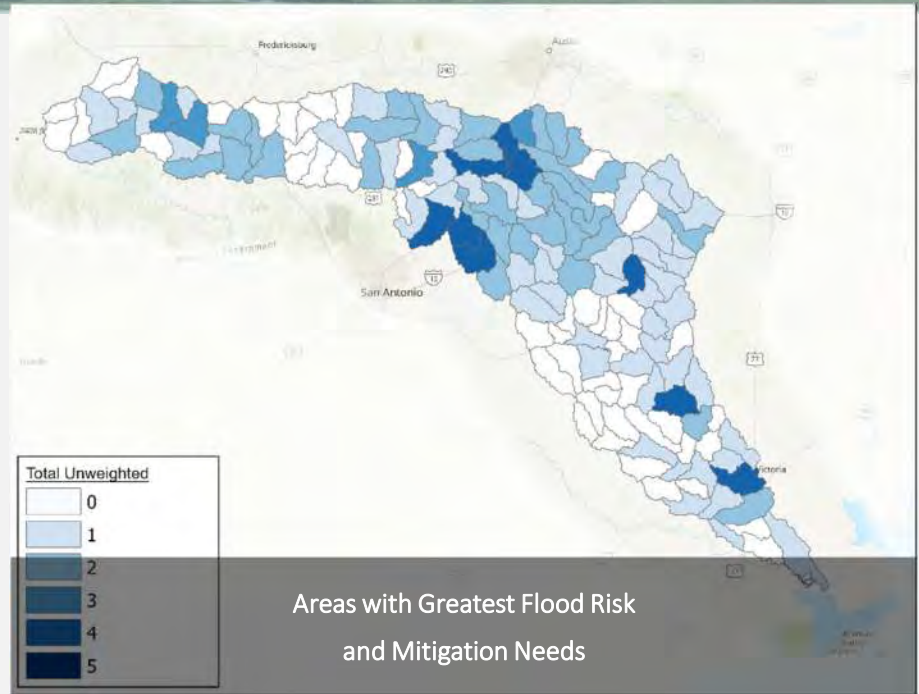
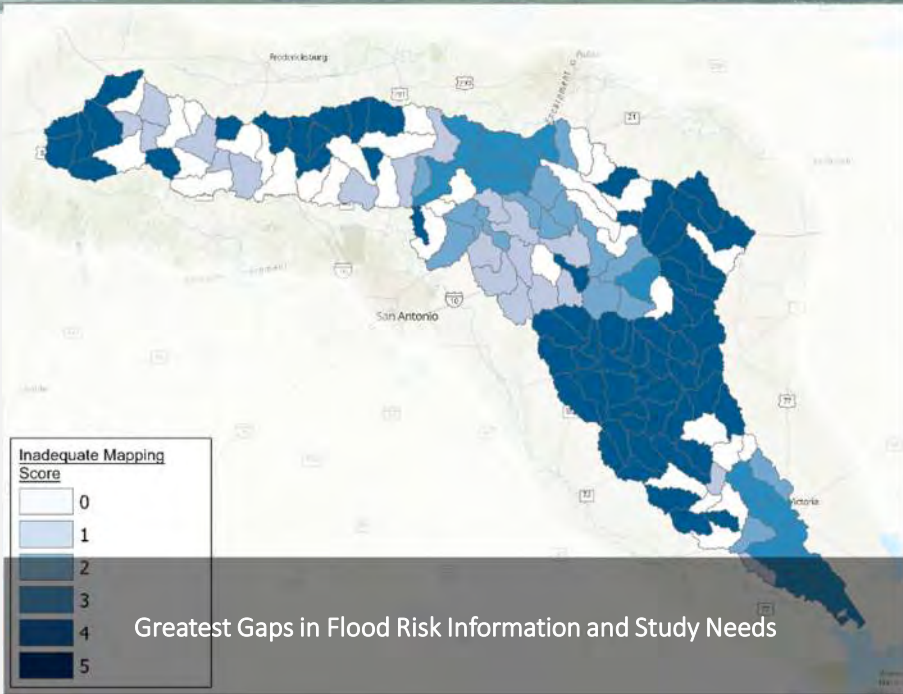
## Task 3A: Floodplain Management Practices and Recommendations

## Task 3B: Flood Protection Goals

The RFPG adopted goals, related to six topics:

- improved low water crossing safety
- consideration of nature-based practices
- adoption of higher floodplain management standards
- participation in FEMA's Community Rating System
- reduction of structures at flood risk, and
- increasing local dedicated funding sources for flood-related infrastructure.





# Task 4A: Needs Analysis





**FME:** an engineering study to:

define or update flood risk information

perform alternatives analysis, feasibility assessments, or preliminary engineering of project



**FMP:** a flood mitigation project, structural or non-structural, to reduce flood risk to people and property.

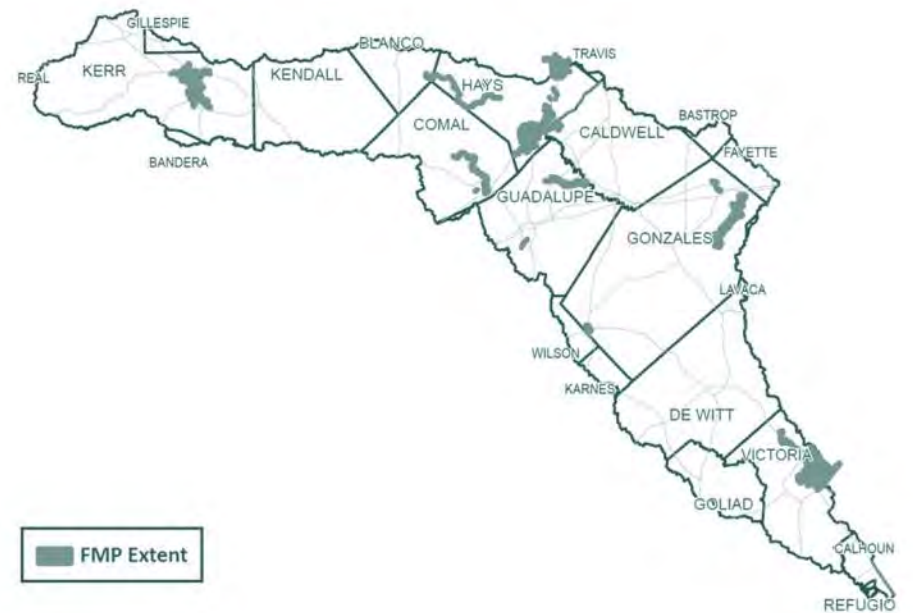
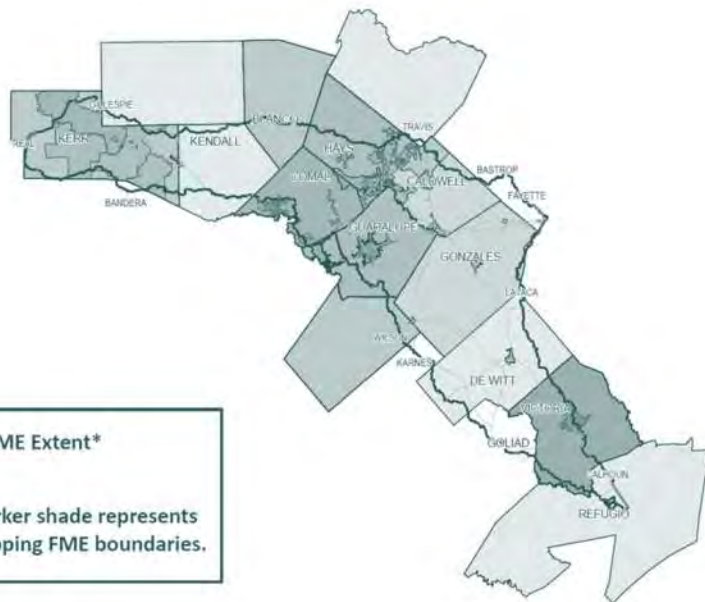


**FMS:** Anything that is not an FME (engineering study) or FMP (project). Examples include education campaigns, non-engineering studies on flood authority or revenue-raising opportunities

# Task 4B/5: FMEs, FMSs, and FMPs

The Guadalupe RFPG recommends:

- 127 flood studies (FME)
- 32 flood projects (FMP), and
- 5 regional flood strategies (FMS).





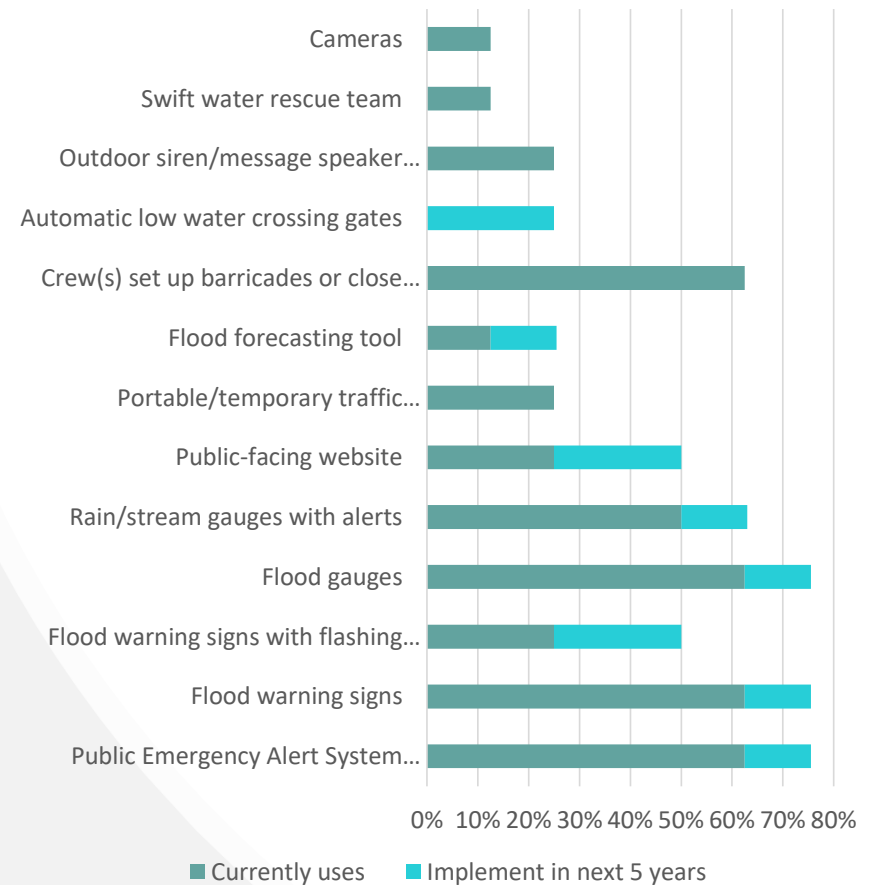
## Task 6: Impacts of the Plan

- The recommended flood projects (FMP) would provide for the removal of 1,169 structures from flood risk, protecting approximately 1,864 people, and preventing 24 road closure occurrences.
- The flood studies (FME) recommended in this plan would provide updated data and information for the region and include planning activities for 87 future flood projects.
- The flood strategies (FMS) recommended in this plan would advance the region's capabilities and involvement in public outreach, floodplain management, and flood preparedness.

# Task 7: Flood Response and Recovery

- The Guadalupe region's ability to prepare, respond, recover, and mitigate disaster events is determined by several factors. With a clear understanding of the plans that determine a community's capabilities, a recognition of the entities with whom coordination is key, and knowledge of the actions sustained to promote resiliency, the Guadalupe FPR can be better equipped to implement sound measures for flood mitigation and preparedness.

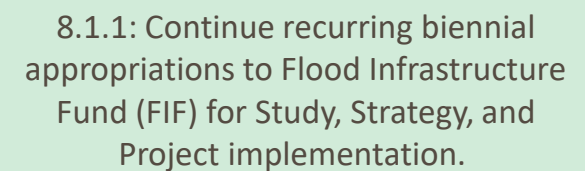
Flood Response Measures Utilized by Communities in Region 11





## Task 8: Recommendations

The RFPG recommends 10 legislative, 12 administrative, and 3 regulatory recommendations.

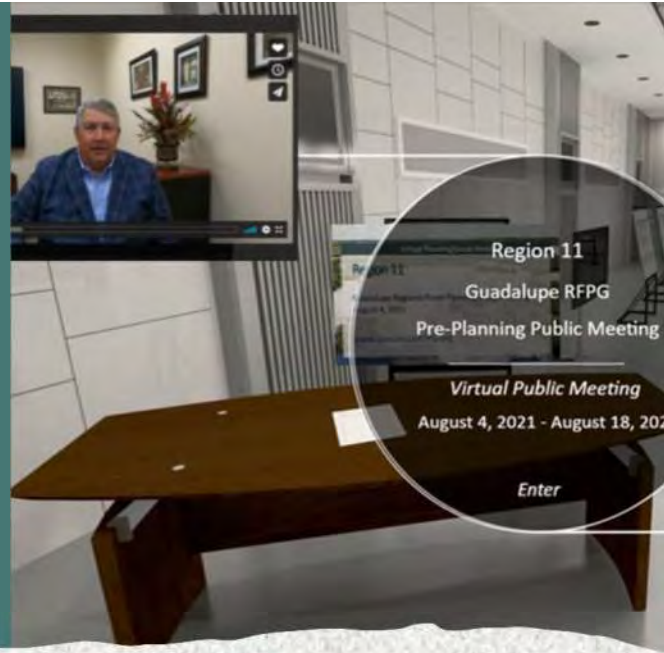


8.1.1: Continue recurring biennial appropriations to Flood Infrastructure Fund (FIF) for Study, Strategy, and Project implementation.



## Task 9: Funding

- Overall, there is an estimated **\$782 million** needed to implement the recommended FMEs, FMSs, and FMPs in this regional flood plan.
- Of that amount, approximately **\$703 million** in state and federal funding is projected to be needed (89.8%).
- A combination of **increased local capabilities** to self-fund flood-related activities and projects and **increased funding from state and federal sources** are needed to address the flood risk reduction needs.
- Future cycles of regional flood planning will continue to identify more projects and studies needed to further flood mitigation efforts in the Guadalupe FPR.



**Notice of Public Meeting**

**Region 11 - Guadalupe RFG**  
Wednesday, October 6, 2021, at 2:00 PM  
Guadalupe-Blanco River Authority River Annex  
905 Nolan Street, Seguin, TX 7815

The Region 11 Guadalupe Regional Flood Planning Group will be holding this public meeting both virtually and in-person. There will be a focused discussion on **management practices, goals, and targets**.

The meeting agenda, materials, and details on how to attend or log into the meeting can be found at <http://guadalupefpg.org/Meetings.aspx>.

Public comments on this topic are encouraged. If you would like to provide comments and input into this part of the planning process, or if you want to request more information on the flood planning process, please send a note to: [comments@guadalupeRFG.org](mailto:comments@guadalupeRFG.org)

Photo Courtesy of Cotton Ladd 2020

**Notice of Public Meeting**

**Region 11 - Guadalupe Flood Planning Group Meeting**

**When:** Wednesday, June 29, 2022, at 1:00 PM  
**Where:** Guadalupe-Blanco River Authority River Annex  
905 Nolan Street  
Seguin, TX 78155

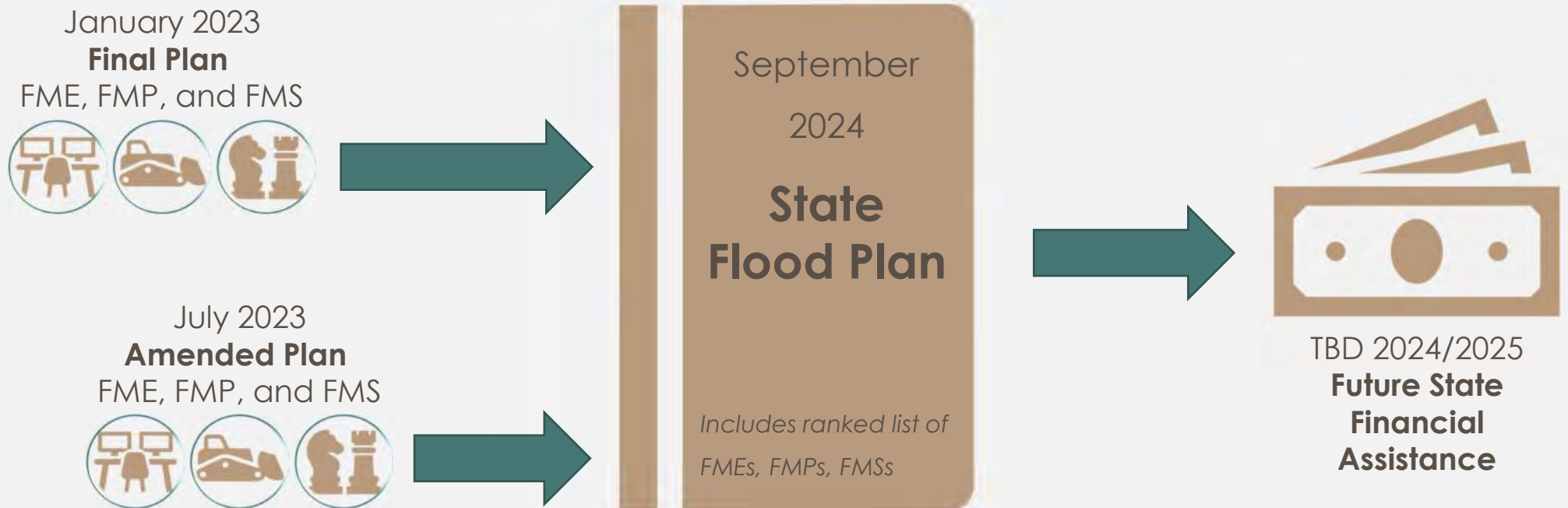
The Region 11 Guadalupe Regional Flood Planning Group will be holding this public meeting **in-person**. The meeting agenda, materials, and other details can be found at <http://guadalupefpg.org/Meetings.aspx>.

If you wish to provide written comments prior to or after the meeting, please email your comments to [comments@guadalupefpg.org](mailto:comments@guadalupefpg.org) and include

## Task 10: Public Participation

- 24 public meetings to date
- Public website - [www.guadalupefpg.org](http://www.guadalupefpg.org)
- Social media posts, eblasts, press releases, etc.

# Looking Ahead: Amended Regional Flood Plan







## **Public Input (Item 10)**

The Regional Flood Planning Group is soliciting public input regarding the Draft Region 11 Guadalupe Regional Flood Plan (as required per Texas Water Code §16.062(f) and 31 Texas Administrative Code §361.21(h)(3) (A, F)).

# Public Input (Item 10)

- Receive written and/or oral comments today
- Second Public Meeting September 21 (Victoria)
- Send Comments to: [Comments@GuadalupeRFPG.org](mailto:Comments@GuadalupeRFPG.org)

# Agenda Item 10

## Public Input

The RFPG is soliciting public input regarding the Draft Region 11 Guadalupe Regional Flood Plan (as required per Texas Water Code §16.062(f) and 31 Texas Administrative Code §361.21(h)(3)(A,F))

# Agenda Item 11

## Public General Comments

Public Comments limited to 3 minutes per speaker

# Agenda Item 12

Adjourn

**TO:** Region 11 Regional Flood Planning Group

**CC:** Project Files

**FROM:** Jay Scanlon, P.E., Adam Conner

**SUBJECT:** Task 12 Potential FMEs

**DATE:** 8/29/2022

**PROJECT:** GBA21362

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As discussed at the previous Flood Planning Group meetings, the Texas Water Development Board Amendment includes funding in Task 12 for the purpose of performing Flood Management Evaluations (FMEs) recommended in the Draft Regional Flood Plan, with the goal of advancing those to Flood Mitigation Projects (FMPs) in the July 2023 Amended Regional Flood Plan. The funding is limited, thus the number of FMEs that can be completed is limited and the Planning Group must approve the FMEs to be done.

Our Team is working through the FMEs to generate a list of recommended FMEs to be completed. We planned to present the initial list in September 2022; however, as we are reviewing the list we recognize the need to reach out to local communities for additional information and clarification. The additional information will allow us to better assess the level of effort needed, determine if the sponsor supports development of the FMP, and/or determine if the sponsor plans to apply for future Flood Infrastructure Funds (FIF) to implement the project.

We have narrowed the FME list to about 50 potential FMEs (attached). As we work to develop the recommended list we would appreciate your guidance/preferences for how we do so. Here are some common threads we are seeing and contemplating as part of the decision:

- Ten (10) of the FMEs were identified as having completed preliminary engineering reports; however, these FMEs are concentrated in Kerrville and Victoria.
- Eight (8) FMEs are in design so detailed engineering is complete; however, these are generally missing benefit-cost-analyses needed to be shown as an FMP. Depending on the timing of construction and whether or not the sponsor plans to apply for future FIF money these may fall off the list of be considered low hanging fruit.
- Twenty-three (23) Low Water Crossings identified but some additional crossings may have been identified in the Victoria PER.

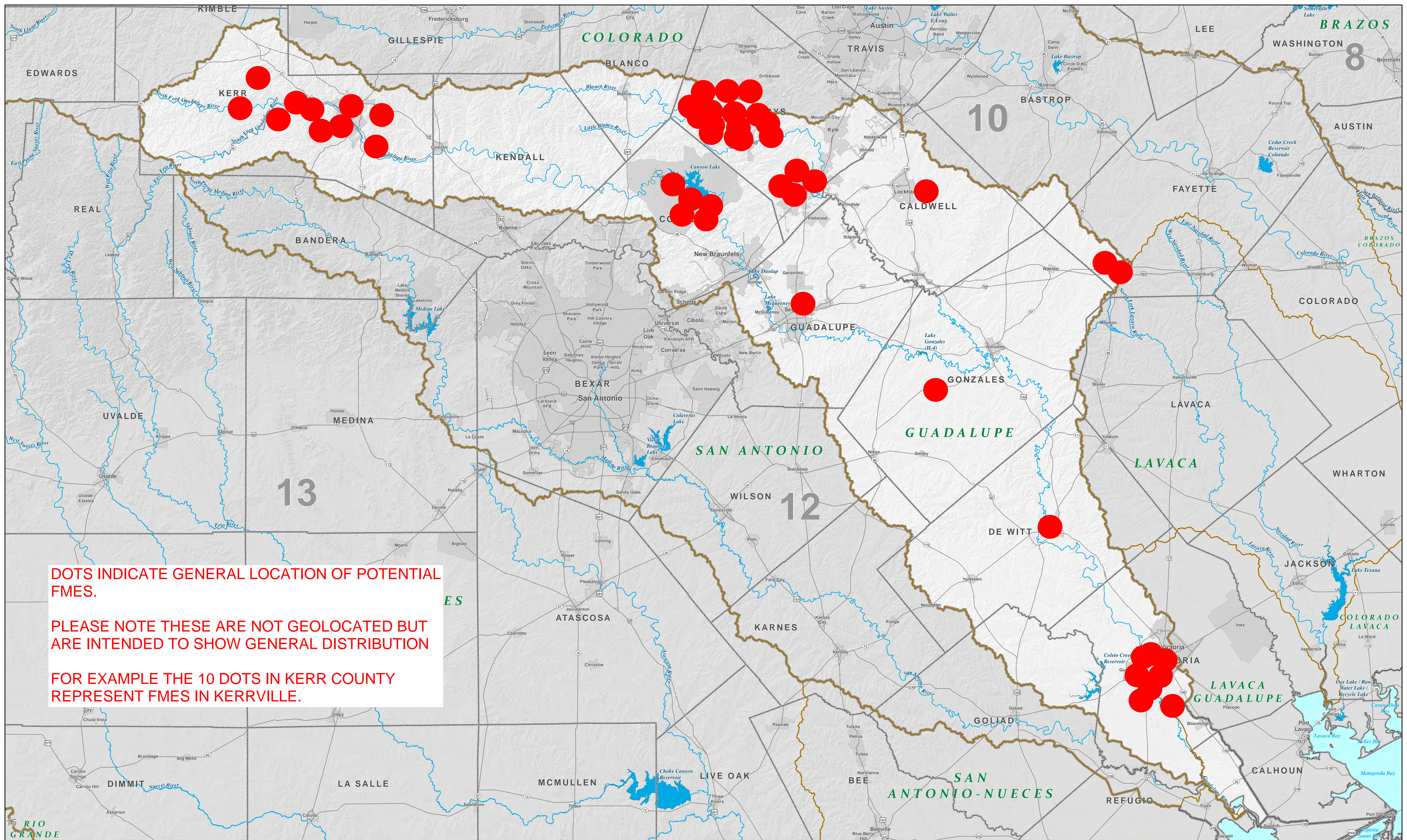
While we continue to vet the potential FMEs we wanted to request your input/guidance to develop the list of recommended FMEs. Based on preliminary estimates of effort we anticipate that the team will be able to complete 5 or 6 FMEs but that number could increase or decrease depending on the actual FME. To that end, we have attached a template scope and budget form we will use to document the FMEs to be performed as well as our “working list” for your review and input.

FME ID	FME Name	Description	Counties	Sponsor	Staus	Notes
11100007	Caldwell County Emergency Service District #4 Fire Station 2 Project Planning	Planning for proposed project to build a swell and raise driveway of Fire Station 2 to prevent inundation of facility and to keep station in service during major storm events.	Caldwell	Caldwell County Emergency Service District #4	Unknown	No informaiton
11100043	City of New Braunfels - Box Culvert Installation to Reduce Flood Risk on Blieders Creek, Comal River and Landa Park Project Planning	Project planning for proposed drainage improvements project to reduce flooding in the Blieders Creek and German Creek watersheds by conveying flows to the Guadalupe River. The project is also intended to relieve flooding in the Landa Park area.	Comal	New Braunfels	Unknown	Part of FIF? Timing?
11100044	City of New Braunfels Faust St / Nacogdoches Ave Improvements Project Planning	Study to analyze drainage conveyance and flooding issues within the Faust Street and Nacogdoches Avenue area and project planning for solutions within project area.	Comal	New Braunfels	Unknown	Part of FIF? Timing?
111000100	Comal County Master WID River Road Low Water Crossing Improvement Project Planning	Project planning for proposed project to implement low water crossing improvements at River Road.	Comal	Comal Master WID	Unknown	No informaiton
111000103	City of Cuero WWTP Floodproofing Project Planning	Project planning to floodproof/retrofit older components of the Cuero Wastewater Treatment Plant subject to flooding.	De Witt	Cuero	Unknown	Determine conceptual project and effort to model/design
111000015	City of Flatonia Drainage Project Planning	Project planning for proposed project to make culvert and drainage ditch improvements from just south of the Union Pacific Railroad at US 90 to the north side frontage road of I-10.	Fayette	Flatonia	Unknown	Are there existing models or conceptual/preliminary deisgn
111000016	City of Flatonia WWTP Floodproofing Project Planning	Project planning for proposed project to floodproof Waste Water Treatment Plant	Fayette	Flatonia	Unknown	Determine conceptual project and effort to model/design
111000008	Canyon Regional WA Hays Caldwell Water Treatment Plant Floodwall Project Planning	Project planning for Canyon Regional WA - Hays Caldwell Water Treatment Plant Floodwall Project	Guadalupe	Canyon Regional Water Authority	In Design	<b>Depends on timing of construction and funding needs (need FIF funding or not)</b>
111000067	City of Seguin Sewage Treatment Plant Floodproofing Project Planning	Project planning for proposed project to flood-proof sewage treatment plants in flood hazard / low-lying areas.	Guadalupe	Seguin	Unknown	Determine conceptual project and effort to model/design
111000054	City of San Marcos Regional Detention Study	Study of solutions for regional detention and water quality strategies.	Guadalupe,Caldwell,Hays	San Marcos	In Design	<b>Depends on timing of construction and funding needs (need FIF funding or not)</b>
111000056	City of San Marcos Low Water Crossing at Jackman Project Planning	Project planning to replace low water crossing at Jackman	Hays	San Marcos	In Design	<b>Depends on timing of construction and funding needs (need FIF funding or not)</b>
111000057	City of San Marcos Low Water Crossing at Mitchell and Purgatory Creek Project Planning	Project planning to replace low water crossing at Mitchell and Purgatory Creek	Hays	San Marcos	In Design	<b>Depends on timing of construction and funding needs (need FIF funding or not)</b>
111000058	City of San Marcos LWC at River Road and Railroad Trestle/Blanco River Project Planning	Project planning to replace low water crossing at River Road and Railroad Trestle/Blanco River	Hays	San Marcos	In Design	<b>Depends on timing of construction and funding needs (need FIF funding or not)</b>
111000059	City of San Marcos LWC at S LBJ and Purgatory Creek Project Planning	Project planning to replace low water crossing at S LBJ and Purgatory Creek	Hays	San Marcos	In Design	<b>Depends on timing of construction and funding needs (need FIF funding or not)</b>
111000114	Hays County Drainage Project Planning (Willow Springs Creek between McCarty Lane and Hunter Road)	Project planning for channel improvement and/or property acquisition project to reduce flood damages along Willow Springs Creek from McCarty Lane to Hunter Road.	Hays	Hays Co	Unknown	Are there existing models or conceptual/preliminary deisgn
111000115	Hays County Drainage Project Planning (Willow Springs Creek between Hunter Rd and the Railroad)	Project planning for detention project to reduce flood damages along Willow Springs Creek from Hunter Road to the railroad.	Hays	Hays Co	Unknown	Are there existing models or conceptual/preliminary deisgn
111000093	City of Wimberley River Road Reconstruction Project Planning	Project planning for proposed project to reconstruct roadway along Blanco River	Hays	Wimberley	Unknown	Appears to be parallel road rather than LWC

FME ID	FME Name	Description	Counties	Sponsor	Staus	Notes
11100081	City of Wimberley FM 1492 at Blanco River Low Water Crossing Project Planning	Project planning for proposed project to replace low water crossing at FM 1492 at Blanco River	Hays	Wimberley	Unknown	Atlas 14 updates and preliminary design
11100082	City of Wimberley Hidden Valley at Blanco River Low Water Crossing Project Planning	Project planning for proposed project to replace low water crossing at Hidden Valley at Blanco River	Hays	Wimberley	Unknown	Atlas 14 updates and preliminary design
11100083	City of Wimberley Little Arkansas at Blanco River Low Water Crossing Project Planning	Project planning for proposed project to replace low water crossing at Little Arkansas at Blanco River	Hays	Wimberley	Unknown	Atlas 14 updates and preliminary design
11100084	City of Wimberley Valley Drive at Pierce Creek Low Water Crossing Project Planning	Project planning for proposed project to replace low water crossing at Valley Drive at Pierce Creek	Hays	Wimberley	Unknown	Atlas 14 updates and preliminary design
11100086	City of Wimberley FM 1492 at Pierce Creek Low Water Crossing Project Planning	Project planning for proposed project to replace low water crossing at FM 1492 at Pierce Creek	Hays	Wimberley	Unknown	Atlas 14 updates and preliminary design
11100087	City of Wimberley Wilson Creek at River Road Low Water Crossing Project Planning	Project planning for proposed project to replace low water crossing at Wilson Creek at River Road	Hays	Wimberley	Unknown	Atlas 14 updates and preliminary design
11100088	City of Wimberley Green Acres Dr. at Fire Station Low Water Crossing Project Planning	Project planning for proposed project to replace low water crossing at Green Acres Dr. at Fire Station	Hays	Wimberley	Unknown	Atlas 14 updates and preliminary design
11100089	City of Wimberley Leveritt's Loop Low Water Crossing Project Planning	Project planning for proposed project to replace low water crossing at Leveritt's Loop	Hays	Wimberley	Unknown	Atlas 14 updates and preliminary design
11100090	City of Wimberley Spoke Hollow Dr. at Spoke Pile Creek Low Water Crossing Project Planning	Project planning for proposed project to replace low water crossing at Spoke Hollow Dr. at Spoke Pile Creek	Hays	Wimberley	Unknown	Atlas 14 updates and preliminary design
11100091	City of Wimberley River Road at Western City Limit Low Water Crossing Project Planning	Project planning for proposed project to replace low water crossing at River Road at Western City Limit	Hays	Wimberley	Unknown	Atlas 14 updates and preliminary design
11100092	City of Wimberley Paradise Hills Low Water Crossing Project Planning	Project planning for proposed project to replace low water crossing at Paradise Hills	Hays	Wimberley	Unknown	Atlas 14 updates and preliminary design
11100094	City of Wimberley Little Ranches at Panther Creek Low Water Crossing Project Planning	Project planning for proposed project to reconstruct low water crossing and roadway at Little Ranches at Panther Creek	Hays	Wimberley	Unknown	Atlas 14 updates and preliminary design
11100095	City of Wimberley Hoots Holler Low Water Crossing Project Planning	Project planning for proposed project to reconstruct low water crossing and roadway at Hoots Holler	Hays	Wimberley	Unknown	Atlas 14 updates and preliminary design
11100085	City of Wimberley Flite Acres Road Low Water Crossing Project Planning	Project planning for proposed project to replace low water crossing at Flite Acres Road	Hays	Wimberley	Unknown	Atlas 14 updates and preliminary design
11100031	City of Kerrville Harper Road to Town Creek (Fay Drive) Drainage Improvements Study	Study of solutions to implement drainage improvements on Harper Road to Town Creek (Fay Drive).	Kerr	Kerrville	Concept	Concept - determine how much preliminary engineering done
11100122	Kerr County Center Point Storm Drainage Infrastructure Project Planning	Project planning to construct new storm drainage infrastructure to reduce the potential impacts of future flood events.	Kerr	Kerr Co	In Design	<b>Depends on timing of construction and funding needs (need FIF funding or not)</b>
11100022	City of Kerrville Pinto Trail Project Planning	Project planning for proposed project to provide flood relief to the properties adjacent to the channel at risk of flooding, including widening existing channels, constructing a grass-lined trapezoidal channel, and seeding the proposed earthen channels	Kerr	Kerrville	Performed Prelim Engineering Report	Has PER - Atlas14 update and fill gaps



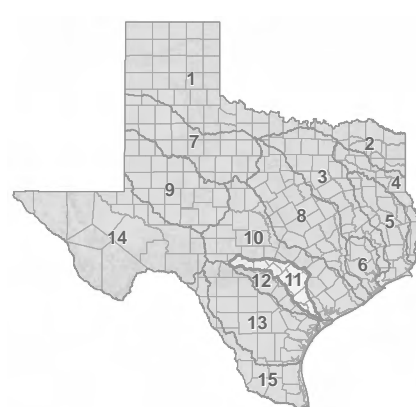
FME ID	FME Name	Description	Counties	Sponsor	Status	Notes
111000029	City of Kerrville Circle Avenue Drainage Channel Project Planning	Project planning for proposed channel and street improvement project to alleviate sedimentation and erosion issues at the intersection of Culberson Avenue and Circle Avenue.	Kerr	Kerrville	Performed Prelim Engineering Report	Has PER - Atlas14 update and fill gaps
111000028	City of Kerrville Harper Street between Culberson Avenue and Lewis Avenue Project Planning	Project planning for proposed storm drain system project to relieve localized flooding and excessive ponding that occurs throughout Harper Street.	Kerr	Kerrville	Performed Prelim Engineering Report	Has PER - Atlas14 update and fill gaps
111000030	City of Kerrville Jack Drive - Undersized Inlet Project Planning	Project planning for proposed street and drainage improvements project to relieve road and property flooding from occurring directly downstream of Jack Drive's existing undersized inlet.	Kerr	Kerrville	Performed Prelim Engineering Report	Has PER - Atlas14 update and fill gaps
111000023	City of Kerrville Park Street Low Water Crossing Project Planning	Project planning for proposed project to improve or replace the Park Street Low Water Crossing.	Kerr	Kerrville	Performed Prelim Engineering Report	Has PER - Atlas14 update and fill gaps
111000024	City of Kerrville First Street Low Water Crossing Project Planning	Project planning for proposed project to improve or replace the First Street Low Water Crossing.	Kerr	Kerrville	Performed Prelim Engineering Report	Has PER - Atlas14 update and fill gaps
111000025	City of Kerrville Fourth Street Low Water Crossing Project Planning	Project planning for proposed project to improve or replace the Park Street Low Water Crossing.	Kerr	Kerrville	Performed Prelim Engineering Report	Has PER - Atlas14 update and fill gaps
111000026	City of Kerrville Hill Country Drive at SH 16 Project Planning	Project planning for proposed project to raise the roadway profile and regrade Hill Country Drive, and increase the downstream pipe capacity at Hill Country Drive.	Kerr	Kerrville	Performed Prelim Engineering Report	Has PER - Atlas14 update and fill gaps
111000072	City of Victoria Flood Gate Project Planning	Project planning for proposed project to rehabilitate, repair, or replace the City of Victoria's existing flood gates, install additional flood gates as appropriate, and construct a storm water lift station in an area to be determined by study.	Victoria	Victoria	Design Complete	<b>Depends on timing of construction and funding needs (need FIF funding or not)</b>
111000069	City of Victoria Drainage Improvement Study	Study of solutions to increase dimensions of drainage culverts in areas prone to flooding and/or drainage problems in various City locations.	Victoria	Victoria	Performed Prelim Engineering Report	Has PER - Atlas14 update and fill gaps. Identify a specific crossing(s) from the list?
111000073	City of Victoria Regional Drainage Solutions Project Planning	Project planning for proposed project for five regional drainage solutions within the City: the Gardens Apartment diversion, Shenandoah ditch improvements, Anthony Road outfall improvements, Lone Tree Road outfall improvements, and Clear Ditch outfall.	Victoria	Victoria	Performed Prelim Engineering Report	Has PER - Atlas14 update and fill gaps. Identify a specific project from the list?
111000074	City of Victoria - Storm Sewer Improvements Project Planning	Project planning for project to replace storm sewer pipe under 18-inch diameter (29.9 miles). As a result of overland flow analysis and Storm Sewer System Level of Service Analysis, it was determined to replace all pipe less than 18-inch diameter.	Victoria	Victoria	Performed Prelim Engineering Report	Has PER - Atlas 14 and determine what gaps remain? Potentially high effort to complete due to size
111000076	City of Victoria Regrade Priority Ditches and Driveway Culverts Project Planning	Project planning for proposed drainage improvements. As a result of a roadside ditch capacity evaluation, it was determined that 23 miles of ditch and 669 driveway culverts are negatively impacting conveyance capacity and need to be regraded.	Victoria	Victoria	Performed Prelim Engineering Report	Has PER - Atlas 14 and determine what gaps remain? Potentially high effort to complete due to size
111000078	City of Victoria Stream Restoration Study	Study to implement a stream restoration/channelization program to ensure adequate drainage/diversion of storm water, throughout various City low water crossings, streambeds, creek sheds, tributaries, and riverine areas.	Victoria	Victoria	Performed Prelim Engineering Report	Has PER - Atlas 14 and determine what gaps remain? Potentially high effort to complete due to size
111000077	City of Victoria Repair Channel Failures & Sediment Removal Project Planning	Project planning for proposed channel improvements. Using field visits and drone footage, it was determined to repair 33,657 sq ft of concreted lined channel, 11,829 sq ft of earthen channel, and remove 227,099 sq ft of sediment.	Victoria	Victoria	Unknown	Any engineering studies / Maintenance vs improvements



**DOTS INDICATE GENERAL LOCATION OF POTENTIAL FMES.**

**PLEASE NOTE THESE ARE NOT GEOLOCATED BUT ARE INTENDED TO SHOW GENERAL DISTRIBUTION**

**FOR EXAMPLE THE 10 DOTS IN KERR COUNTY REPRESENT FMES IN KERRVILLE.**



- Regional Flood Planning Groups**
1. Canadian Upper Red
  2. Lower Red Sulphur Cypress
  3. Nueces
  4. Brazos
  5. Neches
  6. San Jacinto
  7. Upper Brazos
  8. Lower Brazos
  9. Upper Colorado
  10. Lower Colorado-Lavaca
  11. Guadalupe
  12. San Antonio
  13. Nueces
  14. Upper Rio Grande
  15. Lower Rio Grande

- Guadalupe Counties (full and partial)**
- Bandera
  - Bastrop
  - Blanco
  - Caldwell
  - Comal
  - De Witt
  - Fayette
  - Gillespie
  - Goliad
  - Gonzales
  - Guadalupe
  - Hays
  - Karnes
  - Kendall
  - Ken
  - Lavaca
  - Real
  - Refugio
  - Travis
  - Victoria
  - Wilson

# GUADALUPE

Flood Planning Region - 11

- FPR 11 Boundary
- Adjacent FPR Boundaries
- Major River Basin Boundaries
- County Boundaries
- Cities, Towns, Villages, & CDPs
- Major Reservoirs and Lakes
- Major and Minor Rivers
- Major Roadways

Map Scale = 1:450,000

DISCLAIMER: This data was generated by the Texas Water Development Board using GIS (Geographic Information System) software. No claims are made for the accuracy or completeness of the information shown here nor for its suitability for a particular use. The names and locations of all mapped data are approximate. 10/01/2020

DATA SOURCES: Regional Flood Planning Groups (RFP): Texas Water Development Board (TWDB); Counties, Cities & Towns: Texas Department of Transportation (TxDOT); Census Designated Places: United States Census Bureau (USCB); Hydrography: Texas State Geographical Survey (TSGS); National Hydrography Data Set (NHDS) & TWDB. All data are in the public domain.

Texas Water Development Board - 1700 North Congress Avenue, Austin, TX 78701 - www.twdb.texas.gov



**Meeting Minutes**  
**Region 11 Guadalupe Regional Flood Planning Group Meeting**  
**September 7, 2022 at 4:30 PM**

**Upper Guadalupe River Authority Auditorium (125 Lehmann Dr., Kerrville, TX 78028)**

**Roll Call:**

<u>Voting Member</u>	<u>Interest Category</u>	<u>Present (x) / Absent ( ) / Alternate Present (*)</u>
Doug Miller Melissa Reynolds*	<i>Agricultural</i>	X
John Johnston	<i>Counties</i>	X
Lon Shell	<i>Counties</i>	X
Bobby Christmas	<i>Electric Generating Utilities</i>	
Annalisa Peace Bill Barker*	<i>Environmental</i>	X
Doug Sethness Jennifer Urban*	<i>Flood districts</i>	X
Kevin Stone	<i>Industries</i>	
Joseph Pantalion John Espinoza*	<i>Municipalities</i>	X
Ken Gill	<i>Municipalities</i>	
Dr. Kimberly Meitzen	<i>Public</i>	X
R. Brian Perkins Charlie Hickman*	<i>River Authorities</i>	X
Ray Buck Tara Bushnoe*	<i>River Authorities</i>	*
Gian Villarreal Tami Norton*	<i>Small Business</i>	
Ronald (Ron) Fieseler Ben Eldridge*	<i>Water Districts</i>	X
Steven Fonville	<i>Water Utilities</i>	

<u>Non-voting Member</u>	<u>Agency</u>	<u>Present(x)/Absent( ) / Alternate Present (*)</u>
Sue Reilly Beth Bendik*	Texas Parks and Wildlife Department	X
Hollie Hischer Bierbauer	Texas Division of Emergency Management	
Jami McCool Kristin Lambrecht*	Texas Department of Agriculture	X
Allen Nash	Texas State Soil and Water Conservation Board	
Kris Robles Teresa Williams*	General Land Office	
Ryke Moore	Texas Water Development Board (TWDB)	X
Joel Klumpp	Texas Commission on Environmental Quality	
Don Durden	Public	X
Doris Cooksey	Region 12 Liaison	
Patrick Brzozowski Scott Hartl*	Region 10 Liaison	

**Quorum:**

Quorum: Yes

Number of voting members or alternates representing voting members present: 10

Number required for quorum per current voting positions of 15: 8

**Other Meeting Attendees:**

Lauren Willis, GBRA (Facilitator)

Jay Scanlon, Freese & Nichols, Inc.

Adam Conner, Freese & Nichols, Inc.

Velma Danielson, Blanton & Associates

Alicia Reinmund-Martinez, Blanton & Associates

Jonathan Letz, Kerr County

Rosa, Lavender Hill Country Community Journal

Kurt Solis, Comfort Citizen

Shirley Solis Comfort Chamber

Kyle Burow City of Kerrville

Kelly, Kerr County

Scott Loveland, City of Kerrville

Amy Sinclair, Comfort Citizen

Mandy & Emmanuel Flatten, Comfort Citizen

Betty Murphy, Citizen

R. Murphy, Citizen

Doris & James Reeh, Citizen

Larry Luttrell, Assistant Fire Chief

T. Beck Gipson, Kerry County

Donald Jackson, Broker/Owner

Carly Farmer, City of New Braunfels

Charlie Hastings, Kerr County

Diane McMahon, UGRA

William B. Thomas

Roger D. Mathews, Kerrville Daily Times

Irene Van Winkle, West Kerr Current

Jose Morales, Hill Country Community Journal

Frank Chamberlain, Kendall County WCID #1

*All meeting materials are available for the public at: <http://www.quadalupeRFPG.org>*

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

Chairman Miller called the meeting to order at 4:35PM. Lauren Willis called roll of the planning group members to record attendance and a quorum was established.

**AGENDA ITEM NO. 2: Welcome**

Chairman Miller welcomed members to the meeting.

**AGENDA ITEM NO. 3: Approval of Minutes from the July 27, 2022 Region 11 RFPG Meeting**

Chairman Miller opened discussion on approving the minutes from the July 27, 2022 Region 11 RFPG Meeting.

A motion was made by Doug Sethness to approve the July 27, 2022 Region 11 RFPG Meeting minutes. John Johnston seconded the motion. The meeting minutes were approved by consensus.

**AGENDA ITEM NO. 4: Region 11 Guadalupe RFPG Chair Updates**

Chairman Miller did not have any updates for the RFPG.

**AGENDA ITEM NO. 5: Texas Water Development Board (TWDB) Updates**

Ryke Moore stated that TWDB staff is reviewing the Draft Plan that was submitted by Region 11.

**AGENDA ITEM NO. 6: Guadalupe Region 11 RFPG Sponsor Guadalupe-Blanco River Authority (GBRA) Updates**

Lauren Willis did not have any updates for the RFPG.

**AGENDA ITEM NO. 7: Discussion and potential action regarding Region 11 RFPG Technical Consultants work and schedule.**

**a. Discussion and possible action approving the list of Flood Mitigation Evaluations (FMEs) for Task 12.**

Jay Scanlon reviewed Task 12 and the objectives to identify FMEs that can be turned into a Flood Mitigation Projects (FMPs) for the amended plan. The list will be brought to the November 2, meeting. No action was taken on this item.

**AGENDA ITEM NO.8: Consider date and agenda items for next meeting**

The next meeting will be held on November 2, 2022. A meeting will not be held in October.

**AGENDA ITEM NO. 9: Presentation: Overview of Regional Flood Planning Process and Draft Guadalupe Regional Flood Plan, Chairman Doug Miller and Jay Scanlan, PE, CFM, ENV-SP – Freese & Nichols**

Chairman Miller welcomed members to the meeting and reviewed the planning process of the Region 11 RFPG. Jay Scanlan can an overview of the components making up the Draft Regional Flood Plan.

**AGENDA ITEM NO. 10: Public Input: The RFPG is soliciting public input regarding the Draft Region 11 Guadalupe Regional Flood Plan (as required per Texas Water Code §16.062(f) and 31 Texas Administrative Code §361.21(h)(3) (A, F)).**

Chairman Miller reviewed the process for giving public comments and opened the floor to attendees. Two public comments were received by Betty Murphy and Emmanuel Flatten.

Betty Murphy:

- Planning group must consider the small towns.
- In 1978, Comfort was under water- 3 lives lost and millions of dollars of property damage.
- Nothing has been done to prevent a similar flood from happening again.
- If another flood happens, there will be a loss of 100 lives.
- Recommends that sensors (from USGS) should be installed in Cypress Creek in Comfort. These sensors could provide an early warning system for local officials to learn about a possible flood.
- USGS has determined the best location and determine the costs of a sensor.

Emmanuel Flatten:

- Something needs to be done in Comfort
- In 2011 he became President of the Comfort floodplain coalition.

- The issues are bifurcated – split between Kerr & Kendall counties with Comfort being an unincorporated town.
- This makes it hard to get things done. So, the solution must be approached on a regional level.
- As mentioned by the previous speaker, Comfort officials needs an early warning system.
- In 2016, Hwy 27 bridge, a woman drowned during the flood outside of his door.
- Volunteer fire department staff had no warning on the last flood. They need an early warning system.
- No cost/benefit analysis for human life. Pamphlets telling us to move to somewhere else.

**AGENDA ITEM NO. 11: Public general comments – limit 3 minutes per person**

Chairman Miller opened the floor for any additional public comments. One additional comment was received by Emmanuel Flatten.

- When they built the Hwy 27 bridge, a dam was created, which forces water to go around. This situation is what killed the woman in 2016. There are 2 dams In Comfort - a dam upstream and a dam downstream. These dams have led to the flooding in Comfort in 1978 and 2016.

**AGENDA ITEM NO. 12: Adjourn**

Doug Sethness made a motion to adjourn. The motion was seconded by Ron Fieseler. The motion passed by unanimous consent.

The meeting adjourned at 6:15 PM by Doug Miller.

*Approved by the Region 11 Guadalupe RFPG at a meeting held on November 2, 2022.*



Brian Perkins, SECRETARY

  
Doug Miller, CHAIR

**Appendix 10-E | Public and State Agency  
Comments on Draft Flood Plan and RFPG  
Responses**

TWDB Comment No.	Public Comment No.	Task No.	Type of Comment	Level 1 or 2	Description	Response
1	N/A	All	TWDB comment	1	Please ensure that all "Submittal requirements" identified in each of the Exhibit C Guidance document sections are submitted in the final flood plan.	We ensured all required elements have been submitted.
2	N/A	1	TWDB comment	1	Entities GIS Feature Class, Entities: It appears that some fields contain invalid entries, including 'ACTIVE'. Please leave NULL to represent either "not applicable" or "unknown". Please review fields, as appropriate, and populate with valid entries as referenced in Exhibit D Table 3 [31 TAC §361.30(4) & (5)].	NULL was used in place of Unknown.
3a	N/A	1	TWDB comment	1	Existing Flood Projects GIS Feature Class, ExFldProjs: a. Please refrain from using numeric placeholders (such as "999999") in numeric fields such as 'COMP_YR' as this causes errors in calculations.	NULL was used in place of numeric placeholders.
3b	N/A	1	TWDB comment	1	Existing Flood Projects GIS Feature Class, ExFldProjs: Please include the expected year of completion for all ongoing projects in the 'COMP_YR' field. Please leave NULL to represent either "not applicable" or "unknown". Please populate all required fields with valid entries per Exhibit D Table 8 [31 TAC §361.32].	In the Draft Plan, four projects had completion years identified and were filled accordingly in the geodatabase. For the remaining three projects with unknown completion years, we reached out to Sponsors to try and identify completion years. We were able to obtain this information for two of the projects and filled this into the geodatabase. We were not able to obtain this information for the final remaining project, so NULL was used.
4	N/A	1	TWDB comment	1	Existing Flood Infrastructure GIS Feature Class, ExFldInfraPt: Please include all low water crossings (LWCs) identified during the flood planning process in this feature class. The ExFldExpAll feature class appears to contain LWCs that are not included in the ExFldInfraPt feature class. Note: This is required in contrast to the optional LWC feature class. Please reconcile [31 TAC §361.31].	As described on page 2-8, "A total of 815 low-water crossings were identified in the region as part of the data collection and outreach described in Chapter 1... Approximately 661 of the low-water crossings were determined to be within existing condition flood hazard areas though this analysis." All LWC, regardless of whether they are in the hazard area, are within the ExFldInfraPt feature class and only the LWC within the hazard area are included in the ExFldExpAll feature class. We verified that there are no LWC within the ExFldExpAll that are not within the ExFldInfraPt.  No additional changes were needed.
5	N/A	2A	TWDB comment	1	Existing Condition Flood Hazard GIS Feature Class, ExFldHazard: The Total Hazard Area in Table 3 and the ExFldHazard feature class do not appear to match for "Possible flood prone areas" and "Unknown" flood risks. Please review for accuracy. Please ensure that the hazard area in Table 3 matches the area in ExFldHazard [31 TAC §361.33(b)].	The sum of "Possible flood prone areas" in Table 3 is 1.2669 sq mi. Sum of the AREA_SQMI in ExFldHazard for FLOOD_FREQ = 'Unknown' is 1.27. We modified the number of significant digits in Table 3 and it is now showing a sum of 1.27.  No further changes were needed.



TWDB Comment No.	Public Comment No.	Task No.	Type of Comment	Level 1 or 2	Description	Response
6	N/A	2A	TWDB comment	1	Existing Condition Flood Hazard Analysis, Text: Please include total land areas (square miles) of each flood risk by flood risk type, county, region, and frequency as per guidance document (Exhibit C page 24): Submittal requirement number 2 [31 TAC §361.33(a)].	Land area by flood risk type was added under Figure 2-3. Land area at risk by county is found on Figure 2-6 and the accompanying text on page 2-8. Land area at risk by frequency is found in various places in the chapter, including in Table 2-2 and on page 2-4.
7a	N/A	2A	TWDB comment	1	Existing Condition Flood Vulnerability GIS Feature Class, ExFldExpAll: a. Please check that the population count in Table 3 is the maximum of day and night population. The population count in Table 3 does not appear to match either the total day population or total night population from the ExFldExpAll feature class and appears to be higher than both. "Population (daytime)" and "Population (nighttime)" columns are not included in the table but can be added to the left of "Population" in Table 3 to facilitate this check.	We revised our methodology in accordance with the guidance provided in the consultant conference call on 11/9/22. Table 3 was updated.
7b	N/A	2A	TWDB comment	1	Existing Condition Flood Vulnerability GIS Feature Class, ExFldExpAll: Please use the updated 'CRIT_TYPE' valid entry list: "Medical, Police, Fire, EMS, Shelter, School, Infrastructure, Water Treatment, Wastewater Treatment, Power Generation, Other". The entry "Emergency" has been removed from the list of valid entries. Please refer to the Summary of Updates to Exhibit D document available on the TWDB website.	This changes was incorporated.
7c	N/A	2A	TWDB comment	1	Existing Condition Flood Vulnerability GIS Feature Class, ExFldExpAll: If the 'CRITICAL' field contains a 'No' entry, then please leave 'CRIT_TYPE' as NULL [31 TAC §361.33(a)].	This was reconciled.
8a	N/A	2A	TWDB comment	1	Model Coverage GIS Feature Class, ModelCoverage: It appears that several entries for 'MODEL_NAME' include "Data.gdb", "unknown", or other non-unique names. Please reconcile.	This was reconciled.
8b	N/A	2A	TWDB comment	1	Model Coverage GIS Feature Class, ModelCoverage: It appears that 'MODEL_DESCR' for some entries do not describe the model or scenario modeled. Please include a description of the model and the scenario modeled in 'MODEL_DESCR'. Please review and revise for accuracy [31 TAC §361.33(b)(2)].	Reviewed and revised.
9	N/A	2B	TWDB comment	1	Future Condition Flood Hazard Analysis, Text: Please include total land areas (square miles) of each flood risk by flood risk type, county, region, and frequency as required (Exhibit C page 33): Submittal requirement number 3 [31 TAC §361.34].	Land area by flood risk type in future conditions was added to Section 2.1.2. Land area at risk by county is found on Figure 2-6 and the accompanying text on page 2-8. Land area at risk by frequency is found in various places in the chapter, including in Table 2-2.
10	N/A	2B	TWDB comment	1	Future Condition Flood Exposure Table (Exhibit C Table 5): There appears to be a discrepancy between counts in the FutFldExpAll feature class (366 structures in the 1% annual chance flood risk) and the Table 5 values (362 structures in the 1% annual chance flood risk) for Blanco County. Please reconcile [31 TAC §361.34 & Exhibit C 2.2.B.3].	We calculated 38 agricultural, 26 commercial, 272 residential, and 26 vacant buildings, with a total of 362 in both the feature class and Table 5. No changes were needed.
11a	N/A	2B	TWDB comment	1	Future Condition Flood Vulnerability GIS Feature Class, FutFldExpAll: Please use the updated 'CRIT_TYPE' valid entry list: "Medical, Police, Fire, EMS, Shelter, School, Infrastructure, Water Treatment, Wastewater Treatment, Power Generation, Other". The entry "Emergency" has been removed from the list of valid entries. Please refer to the Summary of Updates to Exhibit D document available on the TWDB website.	This was reconciled.

TWDB Comment No.	Public Comment No.	Task No.	Type of Comment	Level 1 or 2	Description	Response
11b	N/A	2B	TWDB comment	1	Future Condition Flood Vulnerability GIS Feature Class, FutFldExpAll: For 'CRITICAL' fields containing a 'No' entry, then please leave 'CRIT_TYPE' as NULL [31 TAC §361.33(c)].	NULL was used in place of 'No' entries for CRIT_TYPE.
12	N/A	3B	TWDB comment	1	Goals Table (Exhibit C Table 11): Table 11 appears to be missing fields for "Residual Risk" and "How will the Goal be Measured". Please add and populate these required fields for Table 11 [31 TAC §361.36 & Exhibit C 2.3.B].	Missing fields were added to the table and populated.
13a	N/A	4B	TWDB comment	1	Flood Management Evaluations (FME) GIS Feature Class, FME: a. Please refrain from using numeric placeholders (such as '999999') in numeric fields such as 'STRUCT_100' as this causes errors in calculations. Please leave NULL when the field is not applicable or unknown.	NULL was used in place of numeric placeholders.
13b	N/A	4B	TWDB comment	1	Flood Management Evaluations (FME) GIS Feature Class, FME: It appears that some fields contain invalid entries, including 'FUND' and 'REGULATORY'. Please review certain fields, as appropriate, and populate with valid entries as referenced in Exhibit D Table 23. Please leave NULL when the field is not applicable or unknown [31 TAC §361.38(i) & Exhibit D 3.10].	NULL was used in place of Unknown in the Regulatory field and in place of TBD in the FUND field.
14	N/A	4B	TWDB comment	1	Flood Mitigation Projects (FMP) GIS Feature Class, FMP: Please refrain from using numeric placeholders (such as '999999') in numeric fields such as 'STRUCT_100' as this causes errors in calculations. Please leave NULL when the field is not applicable or unknown [31 TAC §361.38(c-e) & Exhibit D 3.11.1].	Missing values were updated with current information or NULL was used in place of numeric placeholders.
15	N/A	4B	TWDB comment	1	Flood Mitigation Projects (FMP) Table (Exhibit C Table 13): The format of Associated Goals (ID) for FMP_ID 113000035 appears to be set to scientific number formatting and is currently shown as "1.1 E+14". Please update to reflect the required GOAL_ID format as required in Exhibit D Table 2 [31 TAC §361.38(c-e) & Exhibit C 2.4.B].	We updated to reflect the required GOAL_ID format.
16a	N/A	4B	TWDB comment	1	Flood Management Strategies (FMS) GIS Feature Class, FMS: It appears that some fields contain invalid entries, including 'FUND' and 'FMS_COST'. Please consider reviewing certain fields, as appropriate, and populate with valid entries as referenced in Exhibit D Table 26. Please leave NULL when the field is not applicable or unknown.	NULL was used in place of Unknown in the FUND field. FMS_COST was updated with the correct values per related TWDB comment.
16b	N/A	4B	TWDB comment	1	Flood Management Strategies (FMS) GIS Feature Class, FMS: Please refrain from using numeric placeholders (such as '999999') in numeric fields such as 'STRUCT_100' as this causes errors in calculations. Please leave NULL when the field is not applicable or unknown [31 TAC §361.38(d) & Exhibit D].	NULL was used in place of numeric placeholders.
19a	N/A	4B	TWDB comment	1	Flood Management Strategy (FMS) Recommendations Table (Exhibit C Table 17): The Nonrecurring, Noncapital Cost field appears to be missing. Please add and populate this field in Table 17 to match the amounts in the 'NRNC_COST' field entries in the FMS feature class.	The missing field was added and populated.
19b	N/A	4B	TWDB comment	1	Flood Management Strategy (FMS) Recommendations Table (Exhibit C Table 17): Some FMSs list \$0 for the Estimated Total Strategy Cost field. Please make sure this field at least matches the amounts contained in the Nonrecurring, Noncapital Cost field [31 TAC §361.39 & Exhibit C 2.5.C].	Reviewed for accuracy and revised.
20	N/A	5	TWDB comment	1	Flood Management Evaluation (FME) Recommendations GIS Feature Class, FME: Please refrain from using numeric placeholders (such as '999999') in numeric fields such as 'STRUCT_100' as this causes errors in calculations. Please leave NULL when the field is not applicable or unknown [31 TAC §361.39(c), (f) & Exhibit D 3.10].	Missing values were updated with current information or NULL was used in place of numeric placeholders.

TWDB Comment No.	Public Comment No.	Task No.	Type of Comment	Level 1 or 2	Description	Response
21a	N/A	5	TWDB comment	1	Flood Mitigation Project (FMP) Recommendations, Text: Each recommended FMP must be accompanied with an associated model or supporting documentation to show no negative impact. Please confirm that this was done and provide reference to supporting materials. As per the draft report (page 6-2), "The RFPG reviewed previous assessments of impact to upstream or downstream areas or neighboring regions, and deferred to the professional engineering judgement expressed in those assessments to determine whether no negative impact exists." For each recommended FMP, please identify in the plan how no negative impact was determined as required by the Exhibit C Section 3.6.A (page 108), either via a model or a study, and submit the associated model, include the study name, or identify previous assessment name and associated engineering judgement in tabular format.	Models or studies demonstrating no negative affect were submitted for each FMP included in the final plan. FMPs related to generators or other non-conveyance projects do not have supporting modeling data provided (TWDB indicated this is acceptable).  A list of related studies and/or models was added to Appendix 1 List of Previous Studies.
21b	N/A	5	TWDB comment	1	Flood Mitigation Project (FMP) Recommendations, Text: It appears that the cost for FMP_ID 113000001 in Table 5-2 does not match what is in the FMP feature class and Table 16. Please reconcile [31 TAC §361.39 & Exhibit C 2.5.B].	The FMP table was updated to match the final GDB.
22a	N/A	5	TWDB comment	1	Flood Mitigation Project (FMP) Recommendations GIS Feature Class, FMP: Please refrain from using numeric placeholders (such as '999999') in numeric fields such as 'STRUCT_100' and 'BC_RATIO' as this causes errors in calculations. Please leave NULL when the field is not applicable or unknown [31 TAC §361.38(c-e) & Exhibit D 3.11.1].	Reviewed for accuracy and revised.
22b	N/A	5	TWDB comment	1	Flood Mitigation Project (FMP) Recommendations GIS Feature Class, FMP: It appears that some fields are missing entries, including 'BC_RATIO'. Please ensure all required fields are populated with valid entries per Exhibit D Table 24.	Per guidance received from TWDB, 0 BCR values were used for certain project types, such as generators and FEWS. For all other types of FMPs, BCR values were populated in the tables and database.
23	N/A	5	TWDB comment	1	Flood Management Strategy (FMS) Recommendations, Text: The cost in Table 5-3 "Education and Outreach" does not appear to not match the costs included in the FMS feature class. Please reconcile [31 TAC §361.39 & Exhibit D 3.11.1].	Reviewed for accuracy and revised.
24a	N/A	6	TWDB comment	1	Contributions to and Impacts on Water Supply Development and the State Water Plan, Text: a. Section 6.2.5 notes that the plan does not include recommended FMSs or FMPs for large detention structures that will have a water supply component. However, Table 16 appears to indicate that several recommended FMPs with detention components may have a water supply benefit. "Ordinances and Criteria", "Recharge Enhancement" and other subsections appear to also describe potential water supply benefits. Please clarify which recommended FMSs or FMPs would measurably contribute to water supply if implemented and, if appropriate, include a single table that lists all recommended FMSs or FMPs that would measurably contribute to water supply and provides the information outlined in Exhibit C Section 2.6.B.	We revised the language in Section 6.2.5 to reflect that while some FMPs have the potential to provide water supply benefits, they are not quantified at this time. Because the benefits are not yet quantified, we marked WATER_SUP as No for all FMPs in the geodatabase.
24b	N/A	6	TWDB comment	1	Contributions to and Impacts on Water Supply Development and the State Water Plan, Text: The plan does not appear to present a summary of negative impacts of the flood plan on the state water plan. Please provide a summary of negative impacts of the flood plan on the state water plan and a table listing recommended FMSs and FMPs that would negatively impact or measurably reduce water availability volumes or water supply volumes in accordance with Exhibit C, Section 2.6.B. If no negative impacts are identified, please include a statement to that effect [31 TAC §361.41 & Exhibit C 2.6.B].	We revised language in Section 6.1.1, 6.1.2, and 6.1.4 to state none of the FMSs or FMPs recommended in the plan will negatively impact or measurably reduce water availability or water supply volumes and will not impact the State Water Plan.

TWDB Comment No.	Public Comment No.	Task No.	Type of Comment	Level 1 or 2	Description	Response
25	N/A	7	TWDB comment	1	Flood Response Information and Activities, Text: The plan does not appear to contain a written summary in Chapter 7 of entities involved and actions taken or planned for recovery from past flood disasters in the region. Please reconcile [31 TAC §361.42 & Exhibit C 2.7].	Reviewed and revised.
26	N/A		TWDB comment	2	Please consider including appropriate bookmarks in the pdf of the report.	Bookmarks were included for the Region 11 Final Regional Flood Plan.
27	N/A	1	TWDB comment	2	Planning Area Description, Text: Please consider providing a summary for agricultural and natural resources specific to Region 11 that are most impacted by flooding.	Agricultural land uses in Region 11 can be found on pages 1-17 and 1-18. Time and resources did not allow for a new analysis of what types of crops and specific types of agricultural land are most exposed to flooding, separate from the analysis required in Task 2 and described in Chapter 2. The RFPG will consider performing additional analyses in the second cycle to understand specific agricultural and natural resources impacted by flooding in the region.
28	N/A	1	TWDB comment	2	Existing Flood Infrastructure, Text: Please provide a description of how Low Water Crossings were identified within the text of Chapter 1.	The additional information from Chapter 2, page 2-17 was added to Chapter 1.
29	N/A	1	TWDB comment	2	Deficient Infrastructure Map (Exhibit C Map 3): Please consider modifying the color scheme to help differentiate between tributaries, rivers, and infrastructure lines on the map.	Currently, all tributaries and rivers are included in the infrastructure line layer with an unknown condition and functionality. Because of this, only the infrastructure lines (drawing in GIS on top of the tributaries and rivers) are showing on the map. No changes were needed.
30	N/A	2	TWDB comment	2	Existing Condition Flood Exposure, Text: Please consider updating the naming convention for Table 2-3 and 2-4 in the text when describing exposure between the 1% and 0.2% events. Currently the exposure from the 1% and 0.2% are added together for the "TOTAL" count. From the values the 0.2% field includes "Additional structures" exposed, rather than "Total structures" impacted by the 0.2% event.	Table columns were updated for clarity.
31	N/A	2	TWDB comment	2	Existing Condition Flood Exposure Table (Exhibit C Table 3): Please consider adding an additional column of "Total Exposure" that adds 1% and 0.2% exposure values in Table 3. As presented, it is unclear what values are being used to create the rankings of counties with the most exposure.	Total Exposure columns were added as requested.
32	N/A	2	TWDB comment	2	Existing Condition Flood Exposure GIS Feature Class, ExFldExpLn: It appears that this feature class contains several extremely short road segments (<0.05 meters). Please consider merging and consolidating these together to reduce the number of features.	52 of 8596 ExFldExpLn are <0.5m. The ExFldExpLn was intersected with the ExFldHazard layer which created a separate line for each SOURCE & FLOOD_FREQ.  Due to time restrictions, the RFPG will consider changes to the way the ExFldHazard layer is created and how the ExFldExpLn intersect is performed to reduce small road segments in the second cycle of regional flood planning.

TWDB Comment No.	Public Comment No.	Task No.	Type of Comment	Level 1 or 2	Description	Response
33	N/A	2	TWDB comment	2	Existing Condition Flood Vulnerability, Text: Please consider providing further descriptions on how vulnerability was assessed. Consider providing more details about if proximity to a floodplain, proximity to other bodies of water, past flooding issues, emergency management plans, and location of critical systems like primary and back-up power were assessed.	The vulnerability analysis considered identification of critical facilities and SVI, as required per Exhibit C Section 2.2.A.3 and did not include analysis of other elements such as proximity to water, flooding issues, etc.
34	N/A	2	TWDB comment	2	Existing Condition Flood Vulnerability GIS Feature Class, ExFldExpAll: Page 2-16 of the text mentions electrical facilities, however, there doesn't appear to be any power generation or related facilities included in this feature class. Please consider including power generation and related facilities in the ExFldExpAll feature class.	Power Generation was added as a type in ExFldExpAll in accordance with Level 1 TWDB comments.
35	N/A	2	TWDB comment	2	Model Coverage GIS Feature Class, ModelCoverage: For BLE mapping coverage areas please consider labeling 'MODEL_NAME' with "ESTBFE <Model date>" and the 'MODEL_DESCR' field with "Base Level Engineering model".	Based on TWDB clarification during the November 9, 2022 TC call, "Model Coverage" was updated to identify models used to justify recommended FMPs (if available). See comment 8a and 8b.
36a	N/A	2	TWDB comment	2	Future Condition Flood Exposure, Text: Please consider clarifying the sentence on Page 2-13, "Then, additional building footprints within the future condition floodplains were generated for the future condition flood exposure analysis." It appears unclear whether additional building footprints were added to approximate areas through some logical methodology and then counted if they intersect with the future condition flood hazard floodplain, or if those footprints were all added to the projected future condition flood hazard floodplain directly.	Clarifying language regarding the methodology used to locate future buildings was added to Section 2.2.2
36b	N/A	2	TWDB comment	2	Future Condition Flood Exposure, Text: Please consider including in the text on Pages 2-13 and 2-14 the estimated number of occupants used for these additional future buildings.	The HUC10 population growth data was refined based on Water User Groups to provide a more granular estimate. As a result the number of occupants varies. Clarifying text and a Figure showing the density was added to Chapter 2.
37	N/A	2	TWDB comment	2	Future Condition Flood Exposure GIS Feature Class, FutFldExpLn: It appears that this feature class contains several extremely short road segments (<0.05 meters). Please consider merging and consolidating these together to reduce the number of features.	See response to TWDB comment #32.
38	N/A	2	TWDB comment	2	Future Condition Flood Vulnerability, Text: Please consider providing further descriptions on how vulnerability was assessed. Consider providing more details about if proximity to a floodplain, proximity to other bodies of water, past flooding issues, emergency management plans, and location of critical systems like primary and back-up power were assessed.	The vulnerability analysis considered identification of critical facilities and SVI, as required per Exhibit C Section 2.2.B.3 and did not include analysis of other elements such as proximity to water, flooding issues, etc.
39a	N/A	5	TWDB comment	2	Flood Management Evaluations (FME), Text: Please consider reviewing and comparing FMEs with TWDB-funded, FIF Projects 40085, 40012, and 40133.	Reviewed and additional language was added to Section 5.3.

TWDB Comment No.	Public Comment No.	Task No.	Type of Comment	Level 1 or 2	Description	Response
39a	N/A	5	TWDB comment	2	Please verify whether there are capital costs with FME_ID 111000138 Cypress Regional Detention. If capital costs are included, please review and consider if this FME should be classified as an FMP. If this is a study, please add additional description to the text and geodatabase to clarify the study need and alignment with flood risk reduction.	We revised the description to reflect the FME is for activities needed to generate additional technical data required for recommendation as an FMP.
39b	N/A	5	TWDB comment	2	Flood Management Evaluations (FME), Text: For county-wide FMEs where most of the county falls outside of the RFPG boundary, please include justification of how the FME benefits the region and please coordinate with other RFPGs to make sure the efforts are not duplicated.	Justification of the benefits of multi-region FMEs was added to Section 5.3.
40	N/A	5	TWDB comment	2	Flood Management Evaluations (FME) Map (Exhibit C Map 16): Please consider including TWDB-funded, FIF Category 1 studies in the indication of previously studied areas.	Due to time restrictions, the RFPG will consider changes to the previously studied areas are shown in the second cycle of regional flood planning.
41	N/A	5	TWDB comment	2	Flood Mitigation Projects (FMP) GIS Table, FMP_HazPost: Please consider developing an FMP_HazPost feature class showing an updated hazard area that accounts for the impact of recommended FMPs.	We do not currently have the post-project floodplains for all of the FMPs. We added what is available to the FMP_HazPost layer.
42a	N/A	5	TWDB comment	2	Flood Management Evaluation (FME) Recommendations, Text: Please consider organizing Table 5-1 by increasing ID number.	We organized Table 5-1 by increasing ID number.
42b	N/A	5	TWDB comment	2	Flood Management Evaluation (FME) Recommendations, Text: For projects that overlap with an existing TWDB-funded, FIF Category 1 Study, please state how the FME will expand on the existing study. Examples include but are not limited to FME_IDs 11100098, 111000126, and 11100003. TWDB-funded FIF Projects 40085, 40012, and 40133 should be reviewed.	See response to #39 above
43	N/A	5	TWDB comment	2	Flood Mitigation Projects (FMP) Details GIS Table, FMP_Details: 'FMP_COST' values appear to be rounded differently within same field (some to decimal, some to dollar). Please consider using consistent approaches to rounding.	These were rounded to nearest dollar.
44	N/A	9	TWDB comment	2	Flood Infrastructure Financing, Text: For clarity, please consider providing additional details regarding the "other means of collecting the required information" for the survey.	The sentence that contains the text "other means..." is referring to the requirement for Task 9 and mirrors the language in Exhibit C Section 2.9. Additional clarifying text was added to the last paragraph of page 9-10 to clarify that the data was gathered via email and, in some cases, by follow up phone calls.
N/A	1	N/A	Public	N/A	Comment from Betty Murphy (Private Citizen, verbal comments provided at public meeting held in Kerrville): <ul style="list-style-type: none"> <li>• Planning group must consider the small towns.</li> <li>• In 1978, Comfort was under water- 3 lives lost and millions of dollars of property damage.</li> <li>• Nothing has not been to prevent a similar flood from happening again.</li> <li>• If another flood happens, there will be a loss of 100 lives.</li> <li>• Recommends that sensors (from USGS) should be installed in Cypress Creek in Comfort. These sensors could provide an early warning system for local officials to learn about a possible flood.</li> <li>• USGS has determined the best location and determine the costs of a sensor.</li> </ul>	The draft and final regional flood plans include FME ID 111000138 to perform project planning activities for a regional detention project on Cypress Creek that will reduce flooding through the unincorporated town of Comfort, TX and possibly provide enhanced aquifer recharge. The Technical Consultant will follow up with the County sponsors to assess interest in including an FME for early warning system sensors in the Amended Plan.

TWDB Comment No.	Public Comment No.	Task No.	Type of Comment	Level 1 or 2	Description	Response
N/A	2	N/A	Public	N/A	<p>Comment from Emanuel Manny Flatten (Private Citizen, verbal comments provided at public meeting held in Kerrville):</p> <ul style="list-style-type: none"> <li>• Something needs be done in Comfort.</li> <li>• In 2016, at the Hwy 27 bridge, a woman drowned during the flood outside of his door.</li> <li>• The Comfort volunteer fire department staff had no warning on the last flood.</li> <li>• As mentioned by the previous speaker, Comfort officials needs an early warning system.</li> <li>• But, Comfort, an unincorporated town, is in two counties - Kerr and Kendall counties.</li> <li>• This makes it hard to get things done. So, the solution must be approached on a regional level.</li> <li>• No cost/benefit analysis for human life. Pamphlets telling us to move to somewhere else.</li> </ul>	The draft and final regional flood plans include FME ID 111000138 to perform project planning activities for a regional detention project on Cypress Creek that will reduce flooding through the unincorporated town of Comfort, TX and possibly provide enhanced aquifer recharge. The Technical Consultant will follow up with the County sponsors to assess interest in including an FME for early warning system sensors in the Amended Plan.
N/A	3	N/A	Public	N/A	<p>Comment from Carly Farmer (City of New Braunfels, written comments provided at public meeting held in Kerrville):</p> <p>I will send further documentation for projects for New Braunfels and will want to include changes for the revised regional flood plan. (See Ms. Farmer's written comments on next row.)</p>	N/A
N/A	4	N/A	Public	N/A	<p>Comment from Carly Farmer (City of New Braunfels):</p> <p>On behalf of the City of New Braunfels, I have reviewed the Draft Region 11 Guadalupe Regional Flood Plan. I had a few comments I wanted to share with you about the efforts listed for New Braunfels. Based on our previous conversations, it is my understanding that most of these revisions won't be able to be made until the amended plan next summer.</p> <p>FMPs</p> <ul style="list-style-type: none"> <li>• The Wood Road/Landa Street Drainage Improvement requires further evaluation and study, so we would request it be included as an FME instead</li> <li>• The following projects are wrapping up preliminary engineering this month and we feel would be better included as FMPs: <ul style="list-style-type: none"> <li>oThe drainage improvements associated with the Castell Avenue Corridor Plan</li> <li>oLanda Lake Dam and Spillway Improvements</li> <li>oFaust/Nacogdoches Drainage Improvements</li> </ul> </li> </ul> <p>FMEs</p> <ul style="list-style-type: none"> <li>• We are good with the projects listed under FME but request to move Faust/Nacogdoches to FMP as we are wrapping up preliminary engineering this month</li> </ul> <p>FMSs</p> <ul style="list-style-type: none"> <li>• The City of New Braunfels is kicking off our Drainage Area Master Plan. This plan includes extensive modeling of streams in the HUCs in our City Limits, ETJ, and beyond, and identification of potential regional drainage projects. Is this project captured in the FMS section of the Draft Plan, or should it be included elsewhere?</li> </ul>	RFPG Technical Consultant had a follow-up phone call with New Braunfels on 11/4/22. The Wood Road/Landa Street Drainage Improvement Project was reclassified as an FME in the Final Regional Flood Plan. TC will reach out to New Braunfels in January or February 2023 to see which of the other three projects, if any, the City would like to pursue generating the necessary data and information for consideration/classification as FMPs in the Amended Regional Flood Plan, based on whether the projects are expected to be funded via City bonds.
N/A	5	N/A	Public	N/A	<p>Comment from Marvin Bruce Miller (Private Citizen, verbal comments provided at public meeting held in Victoria):</p> <ul style="list-style-type: none"> <li>• For 46 years he's been battling the river water. While things have improved - not flooding property and business - there is one spot that still floods under the railroad tracks, which flows into the city drains and eventually into his property.</li> <li>• Would want to have somebody talk to railroad company to plug the hole under the tracks.</li> <li>• In 1998, when river rose 34 feet it washed the railroad tracks away and he had 4ft of flooding in his building.</li> </ul>	This comment has been documented in the appendix of the Final Flood Plan.

TWDB Comment No.	Public Comment No.	Task No.	Type of Comment	Level 1 or 2	Description	Response
N/A	6	N/A	Public	N/A	<p>Comment from Grace Renken (Renken Nursery/Private Citizen, verbal comments provided at public meeting held in Victoria):</p> <ul style="list-style-type: none"> <li>• Purchased property in the 80's. She wanted to know when the last flood plain map was created.</li> <li>• Drainage was put in and elevations taken. A corner of her property is in the floodplain. When TxDOT built an intersection near her property, the water drained away from her property in another direction. The TxDOT engineers eventually agreed with her.</li> <li>• Therefore, Ms. Renken objected to the boundaries of the current flood plain map and would like to have the map corrected.</li> </ul>	This has been recorded as a potential action. Technical Consultant will contact the potential sponsor to inquire about presenting this to the RFPG for consideration for inclusion in the Amended Flood Plan (July 2023)
N/A	7	N/A	Public	N/A	<p>Comment from Kenneth Schustereit (Private Citizen, verbal comments provided at public meeting held in Victoria):</p> <ul style="list-style-type: none"> <li>• His family has lived on the Guadalupe since 1939. Need to clean up the river channel will help the Guadalupe River basin. This is the most important thing to prevent flooding.</li> <li>• Between Guadalupe and the San Antonio rivers lies a verdant cotton field. This land is now four feet of silt, where it is used to be 25,000 acres of agricultural land. This land is now out of production due to uncontrolled flooding. To clean out the silt from the river channel, Mr. Schustereit suggested to pull the plugs out of the river - the saltwater barrier, the dams in Goff and Hog Bayous, and the log jams. This will prevent the flooding.</li> <li>• He has learned that if there is a repeat of the 1998 flood it will have worse effects. Since that flood, the amount of impermeable ground in the basin has increased resulting in greater flooding. It is mathematically indisputable; it will be a worse flooding. GBRA has promoted the growth in this basin.</li> </ul>	This has been recorded as a potential action. Technical Consultant will contact the potential sponsor to inquire about presenting this to the RFPG for consideration for inclusion in the Amended Flood Plan (July 2023)
N/A	8a	N/A	Public	N/A	<p>Comment from Jerry Cotter (USACE):</p> <p>Table 8.1: Legislative Recommendations:</p> <p>Non regulatory regional flood control or drainage districts should be established and funded for rapidly growing urban areas such as DFW, Houston, San Antonio, etc. Responsibility would be to provide consistency, technical resources, funding, and reviews in support of FME's, FMS's. These organizations would also implement or support implementation of FMP's. These organizations would augment communities and counties that just don't have the resources and expertise to manage flooding. Rapidly developing areas surrounding larger urban centers are at greater risk of having runoff patterns increasing because of development. These urban areas are comprised of many communities and unincorporated county areas. Many of the smaller communities are not funded or resourced to deal with the complexities of floodplain management and therefore there is a lack of or inconsistencies in floodplain management practices.</p>	RFPG considered this recommendation at the December 7, 2022 meeting and voted not to include this recommendation in the final regional flood plan.
N/A	8b	N/A	Public	N/A	<p>Comment from Jerry Cotter (USACE):</p> <p>Table 8.1: Legislative Recommendations:</p> <p>Although state legislation was passed in the early 2000's which gave counties the ability to regulate floodplains, interpretation of these regulations varies widely from county to county. The legislate bill lacks implementation guidance in the form of administrative rules. If development is occurring in unincorporated areas, this development can dynamically impact flood risk.</p> <p>Clarify the early 2000's, state legislation that provides counties the authority to regulate floodplains to explicitly allow and encourage activities associated with floodplain management such as development of land use plans, regulatory authorities, such as permitting.</p>	RFPG considered this recommendation at the December 7, 2022 meeting and voted to include this recommendation in the final regional flood plan.



TWDB Comment No.	Public Comment No.	Task No.	Type of Comment	Level 1 or 2	Description	Response
N/A	8c	N/A	Public	N/A	<p>Comment from Jerry Cotter (USACE): Table 8.2 Administrative Recommendations: Require the use of n-values and channel conditions which would likely result if the channel or project were not maintained. Exceptions would be golf courses or other areas where an organization exists which would maintain the channel in perpetuity. Disallow maintenance by marginal organizations such as homeowners' associations to justify acceptance of lower n-values as this is an unrealistic expectation.</p> <p>When channels are constructed, most often channel bed, banks and overbanks are cleared; however, with many miles of these channels, it is often difficult for communities to maintain those beds, banks, and overbanks at their design conditions. Generally, there is a lack of channel maintenance to ensure flood conveyance areas, established as part of a development or improvement projects, to retain their design level n-values. This results in unexpected changes in channel conveyance and increased flooding. Channel maintenance is very expensive activity that can trigger environmental permitting requirements.</p>	Due to time constraints, Legislative Recommendations will be considered by the RFPG for the Final Regional Flood Plan (January 2023), so these could be considered during the 2023 Legislative Session. New Administrative and Regulatory Recommendations will be considered by the RFPG for the Amended Regional Flood Plan or in the next cycle of regional flood planning.
N/A	8d	N/A	Public	N/A	<p>Comment from Jerry Cotter (USACE): Table 8.2 Administrative Recommendations: Use of ultimate development land use conditions in the development of future flows. Require use of future flows for regulation of floodplains and development of FMP's.</p>	Due to time constraints, Legislative Recommendations will be considered by the RFPG for the Final Regional Flood Plan (January 2023), so these could be considered during the 2023 Legislative Session. New Administrative and Regulatory Recommendations will be considered by the RFPG for the Amended Regional Flood Plan or in the next cycle of regional flood planning.
N/A	8e	N/A	Public	N/A	<p>Comment from Jerry Cotter (USACE): Potential FMS: Encourage storm shifting to validate 100-yr estimates and to provide a broader understanding of communities' actual flood risk. Storms identified and cataloged as part of the GLO funded USACE led Texas Storm Study could be the primary source of storms to be shifted.</p> <p>Notes: Great deal of uncertainty in 100-yr estimates. Use of observed storms that approximately match depth duration data from NOAA Atlas 14 or other precipitation frequency sources validates 100-yr estimates. Additionally wet, dry, and average conditions as well as conditions at the time the storm occurred can be presented. Additionally, communities have and can experience storms that exceed the 100-yr. While not regulatory, this information will provide additional hazard mitigation data so communities can address critical infrastructure impacts and be better prepared.</p> <p>Add detail to Watershed Hydrology Assessments (WHA) for communities within basins with completed WHA's. The WHA for the Trinity has been completed.</p> <p>The WHA's, funded by FEMA, are considered the best available flood flow frequency estimates, e.g., 100-yr. These estimates consider the latest precipitation frequencies, the variations in watershed response and determine critical flood drivers by employing a wide range of sensitivity analysis for each computation point.</p> <p>Update WHA's when future precipitation frequency estimates become available. Efforts to develop future precipitation frequency estimates for Texas are starting.</p> <p>Establish regional efforts, for large urban centers to develop future land use data for all developing areas, not just incorporated areas, for use in developing future flood flow frequency estimates and future 100-yr (and other recurrence interval) hazard boundaries.</p>	<p>Due to time constraints, Legislative Recommendations will be considered by the RFPG for the Final Regional Flood Plan (January 2023), so these could be considered during the 2023 Legislative Session. New Administrative and Regulatory Recommendations will be considered by the RFPG for the Amended Regional Flood Plan or in the next cycle of regional flood planning.</p> <p>Potential New FMSs will be considered for inclusion in the Amended Regional Flood Plan (or next planning cycle).</p>

TWDB Comment No.	Public Comment No.	Task No.	Type of Comment	Level 1 or 2	Description	Response
N/A	9a	N/A	Public	N/A	<p>Comment from Doug Sethness (Green DeWitt Drainage District &amp; R11 RFPG Member):</p> <p>Comment 1 - Background  The DCDD1 performs drainage activities throughout its authorized area of operation, an area initially described in the enabling legislation as the city limits of Cuero, Texas and has remained constricted by this designation. The flooding which the DCDD1 was required to mitigate does not occur because of rainfall or runoff coming solely from within the city boundaries. The flow of water is a result of the topography given the truth that water flows downhill regardless of whether it crosses a city limit boundary or not. Thus, the ability of the DCDD1 to undertake provisions to provide efficient and effective control of flood waters is limited without any authority to mitigate the flow of water into the city from outside the city limits. Other states and jurisdictions have recognized this truth and have provided for drainage districts to expand to the limits of the watershed directs affecting the flooding the district is required to control. DCDD1 has authority only within approximately one-third of the area contributing to the flooding of Cuero, Texas. It is recommended the State of Texas pass legislation to allow the DCDD1 to expand its boundaries to include the total of the areas contributing to the flooding of Cuero, Texas.</p> <p>Comment 1:  Change the legislation pertaining to Drainage Districts to allow the expansion of the authorized area of the Drainage District, specifically DeWitt County Drainage District No. 1, to expand to the watershed boundaries, instead of the current restriction to city. I think this should be a legislative action. I believe this issue may fit into the category of Flood Management Strategy.</p>	RFPG considered this recommendation at the December 7, 2022 meeting and voted to include this recommendation in the final regional flood plan.
N/A	9b	N/A	Public	N/A	<p>Comment from Doug Sethness (Green DeWitt Drainage District &amp; R11 RFPG Member):</p> <p>Comment 2:  Past and current funds being routed down from the State (Community Development Block Grant Mitigation Action Plan funds) to the Golden Crescent Regional Planning Commission for distribution to include programs to abate flooding issues (including "Buy Outs") do not identify Drainage Districts as a qualified entity for receipt in the distribution of funds although Drainage Districts are designated by the State for flood control, community health, and safety. In the past, a county or a city was qualified but not a drainage district. This is unreasonable and the designation of entities qualified to receive this funding should include Drainage Districts. I am not sure if this is an administrative or legislative issue. I believe this issue may fit into the category of Flood Management Strategy.</p>	RFPG considered this recommendation at the December 7, 2022 meeting and voted to include this recommendation in the final regional flood plan, with modifications to the language submitted based on new information regarding eligibility.

TWDB Comment No.	Public Comment No.	Task No.	Type of Comment	Level 1 or 2	Description	Response
N/A	9c	N/A	Public	N/A	<p>Comment from Doug Sethness (Green DeWitt Drainage District &amp; R11 RFPG Member):</p> <p>Comment 3 – Background:  The City of Cuero has flooded numerous times. Most remembered of the more recent events resulted from Hurricane Harvey and in the 1998 Flood. Located in very close proximity to the Guadalupe River and being at a low elevation relative to the river at flood stage, the City of Cuero is very subject to flooding resulting from extreme events in other parts of the Guadalupe River watershed resulting is a significant rise in river elevation causing flood waters to go directly from the river into the city. A cursory review of the topography along the riverbank above and below the City of Cuero create an interest in the possibility of the construction of a levee to prevent a swollen, out of (natural) bank Guadalupe River from causing extreme flooding in Cuero as occurred in 1998.</p> <p>Comment 3:  Identify the need for an engineering study to determine the potential of significant benefit to Cuero from a levee protecting the city from a swollen, out of bank, flooded river from causing extreme life safety and catastrophic damage as has been experienced in Cuero on numerous occasions. I believe this issue may fit into the category of Flood Management Evaluation.</p>	RFPG recommended this FME for inclusion in the final regional flood plan.
N/A	9d	N/A	Public	N/A	<p>Comment from Doug Sethness (Green DeWitt Drainage District &amp; R11 RFPG Member):</p> <p>Comment 4 - Background  Many governmental and civic organizations rely on data provided by governmental agencies and departments to evaluate various aspects of their services. In the area of flood prevention, the Federal Emergency Management Agency, FEMA, is one agency which provides data on flooding to include, among many other things, the number of homes and businesses flooded and the total cost of the flood damage. It has been found that FEMA uses other data in this evaluation specifically that FEMA uses the number of Flood Insurance Claims filed as an indicator of the number of homes and businesses flooded. Then, other agencies use these numbers when evaluating the severity of an event to a particular location. These data are used in evaluating applicants for grants to be used to mitigate flood damages. However, as reasonable as this might seem, it is not accurate and penalized the most needy. In one flood event in Cuero, Texas there was only ONE reported insurance claim although there were just over 250 flooded homes. Because FEMA only reported one home flooded, funds to assist were denied. The truth was the families in the other homes were not wealthy enough to afford flood insurance, or the damage was not enough to sufficiently exceed the insurance deductible to go through the effort of filing a claim. These homes and businesses were left out of the data, both as to being flooded and as to the total cost of the event, as a result.</p> <p>Comment 4: It is recommended the method of the identification and counting of the number of flooded homes and the financial cost of the damage be revised to a method of identification which would include homes and businesses which do not have flood insurance.</p>	RFPG considered this recommendation at the December 7, 2022 meeting and voted to include this recommendation in the final regional flood plan.

TWDB Comment No.	Public Comment No.	Task No.	Type of Comment	Level 1 or 2	Description	Response
N/A	10a	N/A	Public	N/A	<p>Comment from Annalisa Peace (GEAA &amp; R11 RFPG Member): These comments are submitted on behalf of the fifty-five member groups of the Greater Edwards Aquifer Alliance and the undersigned supporting organizations.</p> <p>Background State legislation enabling the Regional Flood Plan process provided guidelines and deliverables to be accomplished by each flood planning group, with regional plans becoming the basis of a state flood plan. Included in deliverable was the request for proposed flood mitigation projects to be considered for future funding. Enabling legislation also directed the Texas Water Development Board (TWDB) to identify and evaluate natural flood mitigation features and include Nature Based Solutions (NBS) within proposed flood mitigation projects.</p> <p>While TWDB has been very responsive to the questions and concerns expressed by the various Regional Flood Planning Groups (RFPG), the process highlighted several areas of concern regarding the evaluation of natural flood mitigation features for their level of function and use in flood mitigation. This process highlighted the current lack of data specific to Texas regions needed to accurately evaluate natural flood mitigation features and, therefore, the need for methods beyond a traditional Hydrologic Engineering Center's - River Analysis System (HEC-RAS) approach. In addition, Technical Consultant outreach to communities demonstrated the need to increase knowledge on incorporating not only the protection and restoration of natural flood mitigation features but also in general, NBS into flood control strategies.</p> <p>Nature Based Solutions will need to be woven into every facet of this program and incorporated into future policies and strategies to empower community collaboration and leverage the state's vast <u>network of natural ecosystems in building resilient communities.</u></p>	Background - no response needed (comments on following rows)
N/A	10b	N/A	Public	N/A	<p>Comment from Annalisa Peace (GEAA &amp; R11 RFPG Member): Recommendations Broad and specific recommendations have been collected from RFPG committee members and collaborators across the state, including:</p> <p>1. Increase funding for and use of Nature Based Solutions, and reduce hurdles to their incorporation into the Regional Flood Plans as Flood Mitigation Strategies, Evaluations and Projects by: a. Increasing number of trainings and workshops on accurate cost benefit analysis and use of NBS; b. Improving modeling methods to provide greater sensitivity beyond traditional hydrological models to include soil porosity and moisture holding capacity, plant interception, evaporation, and transpiration; and other processes that affect flows and interactions with groundwater; as well as water quality improvements and groundwater recharge that can be realized with NBS; c. Expanding the TWDB's concept of "adverse impact" to include loss of functioning floodplains and the resiliency that they provide; d. Incentivizing collaboration across watersheds and jurisdictions towards a regional approach to floodplain management using NBS by prioritizing such projects.</p>	<p>Due to time constraints, Legislative Recommendations will be considered by the RFPG for the Final Regional Flood Plan (January 2023), so these could be considered during the 2023 Legislative Session. New Administrative and Regulatory Recommendations will be considered by the RFPG for the Amended Regional Flood Plan. Appears to be Administrative and will be considered by the RFPG for the Amended Regional Flood Plan or future planning cycles. Note some elements are touched on in the plan but could be revised/clarified/expanded: 8.2.3 - consider non-traditional benefits/impacts 8.2.8 - GI training 8.2.9 - Selection criteria 8.2.10 - Riparian Management 8.1.12 - Regional cooperation Note TWDB is starting a project to develop NBS guidance and training document.</p>

TWDB Comment No.	Public Comment No.	Task No.	Type of Comment	Level 1 or 2	Description	Response
N/A	10c	N/A	Public	N/A	<p>Comment from Annalisa Peace (GEAA &amp; R11 RFPG Member):</p> <p>2. Ensure that the TWDB's cost benefit analysis appropriately weights projects offering:</p> <ul style="list-style-type: none"> <li>a. Increased social and environmental benefits,</li> <li>b. Reduced negative environmental impact,</li> <li>c. Reduced cost avoidance for infrastructure replacement (for data on gray infrastructure replacement costs: <a href="https://mediaspace.du.edu/media/David+Skuodas+-+Seeing+the+Forest+and+the+Trees/1_g90zp1xz">https://mediaspace.du.edu/media/David+Skuodas+-+Seeing+the+Forest+and+the+Trees/1_g90zp1xz</a>), and</li> <li>d. Increased flood prevention for future conditions while also creating resiliency to recover after natural disasters.</li> </ul>	<p>This comment appears to be an Administrative Recommendation and will be considered by the RFPG for the Amended Regional Flood Plan or future planning cycles. Note some elements are touched on in the plan but could be revised/clarified/expanded: 8.2.3 and 8.2.8 address non-traditional BCR and GI training.</p> <p>TWDB will be publishing draft project scoring for public comment in early 2023 (anticipated) and this could be relevant to that conversation</p>
N/A	10d	N/A	Public	N/A	<p>Comment from Annalisa Peace (GEAA &amp; R11 RFPG Member):</p> <p>3. Recognize the role that land development codes and location of infrastructure have on flood impacts:</p> <ul style="list-style-type: none"> <li>a. Educate on the need for counties to use their ability provided by the State to exert authority to influence development and reduce negative impacts to natural features that mitigate flooding and enable counties to levy stormwater/drainage utility fees to retrofit and maintain natural flood infrastructure,</li> <li>b. Promote and fund the use of NBS throughout watersheds with the understanding that most natural flood mitigation features, including floodplains, are in some state of degradation and can be improved with appropriate land use policies,</li> <li>c. Recommend policy changes that enable Counties or Groundwater Conservation Districts to protect Natural Aquifer Storage and Recovery features (e.g., karst, fracture zones, and sinkholes) that help mitigate flood severity while transferring potential flood water into aquifers, and</li> <li>d. Partner with other agencies to incorporate flood considerations into applicable agency activities (e.g., ensure TxDOT builds to 1% annual probability ("100-year") standards and uses updated flood maps defined by the National Oceanic and Atmospheric Administration (currently the Atlas 14 data) and that such infrastructure does not increase downstream flooding nor damage floodplains and riparian corridors.</li> </ul>	<p>Due to time constraints, Legislative Recommendations will be considered by the RFPG for the Final Regional Flood Plan (January 2023), so these could be considered during the 2023 Legislative Session. New Administrative and Regulatory Recommendations will be considered by the RFPG for the Amended Regional Flood Plan.</p> <p>This comment appears to be an Administrative Recommendation and will be considered for the Amended Regional Flood Plan or next Planning Cycle. Note some elements are touched on in the plan but could be revised/clarified/expanded: 8.2.11 Encourages Counties and Cities to use authority</p> <p>Potential new legislative recommendation (above) to clarify County authority.</p> <p>TWDB is developing NBS guidance.</p>

TWDB Comment No.	Public Comment No.	Task No.	Type of Comment	Level 1 or 2	Description	Response
N/A	10e	N/A	Public	N/A	<p>Comment from Annalisa Peace (GEAA &amp; R11 RFPG Member):</p> <p>4. Specific project recommendations:</p> <p>a. Fund a Texas Watershed Initiative similar to Louisiana’s with a robust program on use and adoption of NBS,</p> <p>b. Provide training and technical resources to flood districts, river authorities, municipal utility districts, water control and improvement districts, and municipal and county floodplain managers to advance understanding and adoption of NBS and best practices for maintaining floodplains and other natural flood mitigation features to fully realize potential benefits,</p> <p>c. Use all available federal and state programs to prioritize the preservation and restoration of natural flood mitigation features throughout watersheds,</p> <p>d. Develop a compendium of Nature-Based resources for non-coastal communities, and</p> <p>e. Review submitted FMPs, FMEs and FMSs submitted for this first 5-year cycle to determine the feasibility to augment with NBS aspects.</p> <p>Conversely, strategically protecting natural infrastructure and placing Nature Based Solutions throughout a watershed can significantly reduce flood risks along tributaries and major riverine systems alike.</p> <p>Conclusions</p> <p>If preventative flood mitigation strategies are not prioritized for funding, then flood events will be more frequent and will cause greater harm, leading to much higher costs for Texas taxpayers. Similarly, if natural infrastructure that mitigates flooding is degraded, undoing the damage to many of these features may be cost-prohibitive or otherwise impossible. Retrofitting with flood control projects is also short sighted as opposed to incorporating pathways for prevention such as those already in use in many other states.</p>	<p>Due to time constraints, Legislative Recommendations will be considered by the RFPG for the Final Regional Flood Plan (January 2023), so these could be considered during the 2023 Legislative Session. New Administrative and Regulatory Recommendations will be considered by the RFPG for the Amended Regional Flood Plan.</p> <p>This comment appears to be an Administrative Recommendation and will be considered for the Amended Regional Flood Plan or next Planning Cycle. Note some elements are touched on in the plan but could be revised/clarified/expanded:</p> <p>Recommendations 8.1.5 and 8.1.8 recommend an increase in funding to preserve and restore natural flood mitigation features.</p> <p>Recommendations 8.2.8 and 8.2.10 recommend creation of materials to provide resources for NBS.</p>
N/A	11a	N/A	Public	N/A	<p>Comment from Arsum Pathak and Danielle Goshen (NWF):</p> <p>We are encouraged by the following items included in Region 11’s draft Regional Flood Plan:</p> <ul style="list-style-type: none"> <li>o Adopted short-term and long-term flood mitigation and floodplain management goals</li> <li>o incorporating nature-based practices when acreage exceeds one acre;</li> <li>o increasing higher standards in high growth counties; and</li> <li>o increasing high growth community CRS participation;</li> </ul>	Background - no response needed (comments on following rows)

TWDB Comment No.	Public Comment No.	Task No.	Type of Comment	Level 1 or 2	Description	Response
N/A	11b	N/A	Public	N/A	<p>Comment from Arsum Pathak and Danielle Goshen (NWF): We are encouraged by the following items included in Region 11's draft Regional Flood Plan:</p> <p>Legislative recommendations:</p> <ul style="list-style-type: none"> <li>o 8.1.1. (continue recurring biennial appropriations to FIF);</li> <li>o 8.1.2 (expand municipal and county authority to regulate land use and development in floodplains);</li> <li>o 8.1.3 (Expand city and county authority to ensure that new development does not increase downstream flooding);</li> <li>o 8.1.4 (State adoption of higher flood standards – e.g., 2018 edition of the IBC);</li> <li>o 8.1.7 (Provide guidance and funding for “buy out” programs to remove repetitive loss structures and potentially convert flood prone neighborhoods into green space/parkland); and</li> <li>o 8.1.10 (provide funding to increase the number of conservation easements for riparian areas and land in the 100-year floodplains);</li> </ul> <p>Administrative Recommendations</p> <ul style="list-style-type: none"> <li>o 8.2.1. (develop model ordinances for general law cities);</li> <li>o 8.2.3. (modify the selection process for flood projects so that project selection is not scored or awarded only on a traditional benefit-cost ratio);</li> <li>o 8.2.4. (continue and increase funding and/or technical assistance to develop updated floodplain maps);</li> <li>o 8.2.7. (provide incentives to local governments to participate in the FEMA Community Rating System program);</li> <li>o 8.2.8. (TWDB, TFMA, river authorities, and local governments should provide Green Infrastructure training to agencies, local governments, engineers, planners and encourage this practice in flood mitigation efforts);</li> <li>o 8.2.9. (TWDB Flood Infrastructure Fund (FIF) project selection process should place additional emphasis on social vulnerability, sustainability, environmental resilience, etc. in addition to benefit cost analysis to guide the funding and implementation of multi-dimensional projects that can provide</li> </ul>	Background - no response needed (comments on following rows)
N/A	11c	N/A	Public	N/A	<p>Comment from Arsum Pathak and Danielle Goshen (NWF): We are encouraged by the following items included in Region 11's draft Regional Flood Plan:</p> <p>Regulatory Recommendations:</p> <ul style="list-style-type: none"> <li>o 8.3.1 (TxDOT design criteria should include stormwater detention requirements to not increase downstream flooding from new highway projects);</li> <li>o 8.3.2 (Statewide detention and/or verification of no downstream impact from new development for design storms ranging from the 2-year to the 100-year storm); and</li> <li>o 8.3.3 (State should provide guidance and/or authority to local governments to manage proposed RV parks in the floodplain).</li> </ul>	Background - no response needed (comments on following rows)

TWDB Comment No.	Public Comment No.	Task No.	Type of Comment	Level 1 or 2	Description	Response
N/A	11d	N/A	Public	N/A	<p>Comment from Arsum Pathak and Danielle Goshen (NWF):</p> <p>While Region 11 and the TWDB has been very responsive to the questions and concerns expressed by the public and various RFPGs, the process and initial regional planning round has highlighted several areas of concern regarding the evaluation of natural flood mitigation features for their level of function and the incorporation of NBS into flood control strategies. This process highlighted the current lack of data specific to Texas regions needed to accurately evaluate natural flood mitigation features and, therefore, the need for methods beyond a traditional Hydrologic Engineering Center's - River Analysis System (HEC-RAS) approach. In addition, Technical Consultant outreach to communities demonstrated the need to increase knowledge on incorporating Nature Based Solutions into flood control strategies.</p> <p>Equity and nature-based solutions will need to be woven into every facet of this program and incorporated into future policies and strategies in order to empower community collaboration and leverage the state's vast network of natural ecosystems in building resilient communities. Indeed, this sentiment was reflected in the Region, when the Region ranked floodplain practices. During this polling, natural infrastructure and nature-based practices ranked high on the list, while traditional flood infrastructure such as dams, levees, and channel modifications were last.</p>	Background - no response needed (comments on following rows)
N/A	11e	N/A	Public	N/A	<p>Comment from Arsum Pathak and Danielle Goshen (NWF):</p> <p>The following comments and recommendations specific to Region 11 seek to better ensure an equitable flood plan, and one that centers natural infrastructure and nature-based projects. We recognize that the region will not be able to address some comments provided, however it is our hope that during subsequent rounds, these comments will be taken into consideration.</p> <p>1. Refine "future conditions analysis" to better incorporate climate change  Future conditions analysis is a vital component in the Regional Flood Planning Process. A 2020 report published by the Association of State Floodplain Managers highlighted the following statistics: by 2100, the 1% annual chance floodplain would increase in size by 45% in riverine areas and of that growth, 30% would be attributable to development and 70% to climate change; coastal special flood hazard areas would increase by as much as 55% by 2100; and Sea level rise is accelerating and a majority of coastal communities will experience 30 days of high tide flooding annually by 2050.</p> <p>These are just a few statistics that show just how quickly floodplains are changing both due to development and climate change. This makes future conditions analysis critical in determining the flood needs of the region.</p> <p>Region 11 used Method 2 to develop the future condition flood hazard data, using the existing 0.2% ACE floodplain as a proxy for the future 1% ACE floodplain. As noted, using this proxy to determine future conditions analysis has some flaws – including that it does not create a new .2% ACE. Further, climate change impacts such as increased precipitation are not adequately taken into consideration through this proxy.</p> <p>No local studies have been considered for present or future flood risks. Where local models exist, for instance in Austin, TX, the flood risks should be discussed in the light of these existing, refined studies that align with local flood mitigation needs.</p>	<p>The RFPG will consider refining the future conditions analysis in the next planning cycle.</p> <p>Please see Section 2.2.1 for a discussion related to the development/approximation of both the future 1% and 0.2% ACE flood hazard areas.</p>



TWDB Comment No.	Public Comment No.	Task No.	Type of Comment	Level 1 or 2	Description	Response
N/A	11f	N/A	Public	N/A	<p>Comment from Arsum Pathak and Danielle Goshen (NWF):</p> <p>2. Incorporate minimum floodplain management standards such as NFIP participation and enforceable building code standards for Municipalities</p> <p>Region 11 did not incorporate any floodplain management standards into its draft plan. Minimum floodplain management standards can be adopted by the region, which local entities must adopt before a FME, FMS, or FMP is included under the Regional Flood Plan, and therefore eligible for funding under FIF. Region 11 stated that it wanted the first planning cycle to be as inclusive as possible, and therefore opted out of adopting any minimum floodplain management standards. We encourage Region 11 to consider NFIP participation as a minimum floodplain management standard. In the Guadalupe FPR, 96.8% of eligible municipalities and 100% of eligible counties participate in the National Flood Insurance Program (NFIP). Participation in the NFIP requires participants to “adopt a floodplain management ordinance and to designate a floodplain administrator who is responsible for understanding and interpreting local floodplain management regulations and reviewing them for compliance with NFIP standards.” Since floodplain management ordinances and designation of a floodplain administrator are essential to proper flood planning at the local level, requiring the remaining municipalities to participate in the NFIP seems like an appropriate baseline, before entities can potentially receive funding for flood mitigation projects.</p> <p>Texas Floodplain Management Association (TFMA) developed a guide for communities to implement higher floodplain management standards which reduce flood damage and the overall impacts of floods.</p>	<p>This appears to be a potential regulatory requirement. The RFPG made the decision not to include mandatory higher standards this planning cycle, but it may be considered during the next cycle.</p> <p>Please note that NFIP participation is required for communities that are seeking future Flood Infrastructure Funds. In addition the RFPG recommend the State consider adoption of higher standards (8.1.2), and provide incentives for local governments to participate in the FEMA Community Rating system (8.2.7).</p>
N/A	11g	N/A	Public	N/A	<p>Comment from Arsum Pathak and Danielle Goshen (NWF):</p> <p>3. Refine Assessment and Identification of Flood Mitigation Needs</p> <p>Critical facilities in particular need additional attention when assessing and identifying flood mitigation needs. Certain critical facilities pose higher risk to surrounding communities during flooding, such as superfund sites and refineries. We recommend that the Region include in its weighted approach risks based on the number of industrial facilities that pose environmental justice risks to neighboring and fenceline communities. If facilities are identified that are within floodplains and are not adequately protected, the region should propose legislative, administrative, and regulatory recommendations to better ensure facilities do not pose a risk to neighboring communities during flooding.</p>	<p>Due to time constraints, Legislative Recommendations will be considered by the RFPG for the Final Regional Flood Plan (January 2023), so these could be considered during the 2023 Legislative Session. New Administrative and Regulatory Recommendations will be considered by the RFPG for the Amended Plan.</p> <p>The RFPG will consider changes to the risk assessment in the next planning cycle and may consider including additional recommendations</p>

TWDB Comment No.	Public Comment No.	Task No.	Type of Comment	Level 1 or 2	Description	Response
N/A	11h	N/A	Public	N/A	<p>Comment from Arsum Pathak and Danielle Goshen (NWF):</p> <p>4. Increase public participation and outreach through virtual options and translation services The Regional Flood Planning process is intended to be a bottom-up approach that continuously seeks and incorporates feedback from the public. While the plan details a list of outreach activities (Chapter 10, p. 10-23), the information might not reach all members of the community. To ensure an equitable plan, we recommend promoting outreach events with equity-based organizations, community leaders from underrepresented and marginalized communities and using a combination of in-person and virtual activities to combat broadband connectivity challenges. Region 11 can also work to increase public participation and input by providing virtual options for its meetings. These virtual options are especially important, given the geographic scope of the Region’s jurisdiction. Further, Spanish translation of materials and use of translation services during public meetings can increase accessibility for the public.</p> <p>The Guadalupe Regional Flood Plan Comment Map provides an opportunity for community members to share their flood concerns, however, the Draft Plan does not include any information on how these comments are incorporated in the flood risk maps. These citizen science type of data collection is an efficient approach to quantify flood risks that are outside of top-down models and including</p>	<p>RFPG may consider this for future meetings.</p> <p>Page 2-4 provides a description of the process used to collect comments and data using the Comment Map, and summarizes the findings and extent of edits to the floodplain derived from those comments.</p>
N/A	11i	N/A	Public	N/A	<p>Comment from Arsum Pathak and Danielle Goshen (NWF):</p> <p>5. Refine the determination of “no negative impact” to include no impact to natural infrastructure; As it stands, the concept of proving a particular FMP causes “no negative impact” is limited and typically means that a project will “not increase flood risk to surrounding properties (upstream or downstream).” Further, “analysis must be based on best available data and be sufficiently detailed to demonstrate that the post-project flood hazard is no greater than the existing (pre-project) flood hazard.” Communities however, as the Region notes, have different thresholds for defining what level of impact is adverse, while the Technical Guidelines and Rules governing state flood planning require 5 specific criteria to be met to establish no negative flood impact.</p> <p>Unfortunately, the Board’s criteria to determine no negative flood impact does not adequately consider the impact a FMP may have on functioning floodplains and fails to consider the resiliency they provide. Region 11, along with the TWDB should expand the determination of “no negative</p>	<p>Due to time constraints, Legislative Recommendations will be considered by the RFPG for the Final Regional Flood Plan (January 2023), so these could be considered during the 2023 Legislative Session. New Administrative and Regulatory Recommendations will be considered by the RFPG for the Amended Regional Flood Plan.</p> <p>Appears to be Administrative and will be considered for the Amended Regional Flood Plan or next Planning Cycle.</p>
N/A	12a	N/A	Public	N/A	<p>Comment from Marty Kelly (TPWD, sent after deadline for comments):</p> <p>1. Please include Texas Parks and Wildlife Department (TPWD) in the list of acronyms.</p>	<p>TPWD was added to the list of acronyms.</p>

TWDB Comment No.	Public Comment No.	Task No.	Type of Comment	Level 1 or 2	Description	Response
N/A	12b	N/A	Public	N/A	<p>Comment from Marty Kelly (TPWD, sent after deadline for comments):</p> <p>2. The Guadalupe RFPG recommended 127 flood studies (evaluations), 32 flood projects, and 5 regional flood strategies for funding. Regarding the Flood Management Evaluations, Plans, and Strategies (FMXs, all together) chosen for recommendation, TPWD would like to encourage all the FMX proponents to consider stream crossing designs that allow for sediment transport and passage of aquatic organisms and do not impound water. Basically, designs that are invisible to the creek. This includes bridges that span the creek where possible or culverted crossings designed with the culvert(s) in the active channel area lower than those in the floodplain benches so that the flow in the channel is not overly spread out. The central/low-flow culvert(s) should be large enough to handle a 1.5-year flow without backing up water. The bottoms of these lower culverts should be set at least a foot below grade (i.e. recessed) to allow natural substrate to cover the culvert bottom and to allow for aquatic organism passage. These lower, recessed culverts should be installed in the thalweg or deepest part of the channel and be aligned with the low flow channel (Clarkin et al., 2006).</p>	This comment has been documented in the appendix of the Final Flood Plan.
N/A	12c	N/A	Public	N/A	<p>Comment from Marty Kelly (TPWD, sent after deadline for comments):</p> <p>3. Texas Conservation Action Plan (TCAP) is a guiding document for conservation in the state of Texas, with the goals of realizing conservation benefits, preventing species listings, and preserving our natural heritage for future generations. Species of Greatest Conservation Need (SGCN) include numerous aquatic species such as fish, freshwater mussels, and salamanders. The TCAP handbook (Texas Parks and Wildlife Department, 2012) includes six types of priority habitats, three of which are aquatic: water resources; riparian and floodplains; and caves and karst. Issues affecting these environments include environmental flows, impoundments and dam operations, and water quality issues (including stormwater runoff). The Guadalupe RFPG plan aligns with many of the goals in the TCAP in its assessment of the importance of undisturbed landscape features such as karst features, floodplains, and wetlands.</p>	This comment has been documented in the appendix of the Final Flood Plan.
N/A	12d	N/A	Public	N/A	<p>Comment from Marty Kelly (TPWD, sent after deadline for comments):</p> <p>4. The proposed FMXs include numerous infrastructure projects that may affect the aquatic habitats that are prioritized in the TCAP. For example, the removal of low-water crossings can benefit rare species such as mussels and fish if the crossing is replaced with a bridge or culvert that does not form a barrier to species movement (see comment 2). Conversely, building dams and channelizing streams can adversely affect aquatic habitats and species. As such, TPWD requests that a technical committee be formed to review FMXs. An Environmental Review Technical Committee could provide input on avoiding impacts to rare species and habitats, ensuring that the projects align with the TCAP. An environmental review at early stages of projects can benefit the project later at the permitting stage as well.</p>	This comment has been documented in the appendix of the Final Flood Plan. RFPG may consider this for future planning cycles; however, it is important to note that the Sponsors are responsible for developing and implementing projects (including environmental reviews and permitting). As such, the RFPG would need to determine if this falls within its authority prior to initiating action.
N/A	12e	N/A	Public	N/A	<p>Comment from Marty Kelly (TPWD, sent after deadline for comments):</p> <p>5. If environmental issues that would be a hurdle to permitting are recognized and addressed in advance of the permit application. TPWD is working to prevent the need for a federal listing of rare species and has found that working in collaboration with developers can minimize impacts to rare species and habitats.</p>	This comment has been documented in the appendix of the Final Flood Plan.

TWDB Comment No.	Public Comment No.	Task No.	Type of Comment	Level 1 or 2	Description	Response
N/A	12f	N/A	Public	N/A	<p>Comment from Marty Kelly (TPWD, sent after deadline for comments):</p> <p>6. The draft report's legislative recommendation 8.1.10 for additional funding for conservation easements along streams and in floodplains is especially beneficial for Texas wildlife and plants, including SGCNs. The administrative and regulatory recommendations include many nature-based solutions for flood control that will benefit wildlife, fish, and plants. TPWD supports these recommendations and appreciates their inclusion in the plan.</p>	This comment has been documented in the appendix of the Final Flood Plan.
N/A	12g	N/A	Public	N/A	<p>Comment from Marty Kelly (TPWD, sent after deadline for comments):</p> <p>7. The Draft Guadalupe Flood Plan includes a number of channel improvement projects which may include widening, deepening, and straightening streams. Channelization and over-widening of streams slows flow, which increases deposition of sediment, decreases fish habitat, increases water temperatures, and can result in channel erosion. Streams in good condition naturally reach bank-full and start spilling onto the floodplain during a 1.5 to 2-year flood event. Widening and deepening a stream channel to force it to contain the 100-year flow negatively impacts the adjacent water table and riparian area and has geomorphic effects upstream and downstream of the modification. If channelization is necessary, constructing a two-stage channel with a low-flow channel and a floodplain allows for the continued transport of sediment, habitat for aquatic wildlife, and can reduce maintenance (Rosgen 1996). TPWD encourages the RFPG to protect existing streams, riparian areas, and floodplains.</p>	This comment has been documented in the appendix of the Final Flood Plan.
N/A	12h	N/A	Public	N/A	<p>Comment from Marty Kelly (TPWD, sent after deadline for comments):</p> <p>8. Based on the document cross-reference supplied by Texas Water Development Board in April 2021, it appears that Task 4B is meant to go in Chapter 5 rather than Chapter 4.</p>	No response needed - TWDB did not provide comments on suggested changes to the organization of the Draft Plan.

TWDB Comment No.	Public Comment No.	Task No.	Type of Comment	Level 1 or 2	Description	Response
N/A	13	N/A	Public	N/A	<p>Comment from Marisa Bruno and Cliff Kaplan (HCA, sent after deadline for comments):            Nature-based strategies for flood mitigation tend to be highly effective and less costly than construction-based solutions, while providing additional benefits to local communities and natural systems. For instance, smart floodplain protection policies are not only cost-effective and impactful strategies for flood mitigation, but they also tend to provide the additional benefits of improving aquifer recharge and expanding healthy recreational opportunities for nearby communities and visitors. As such, we strongly recommend the implementation of nature-based solutions to flood mitigation whenever possible.</p> <p>Our partners at the Greater Edwards Aquifer Alliance have written comprehensive recommendations for how we might advance nature-based solutions and protect natural infrastructure through the flood planning process. Their recommendations fully capture our own views on Region 11's Draft Regional Flood Plan, and we endorse them completely. Those recommendations are attached:</p> <p>Recommendations Broad and specific recommendations have been collected across the state from RFPG committee members and collaborators, including: 1. increased use and funding for Nature Based Solutions that appropriately weights projects that offer</p> <ul style="list-style-type: none"> <li>i. social and environmental benefits,</li> <li>ii. reduced environmental impact,</li> <li>iii. cost avoidance for infrastructure replacement, for example  <a href="https://mediaspace.du.edu/media/David+Skudodas+-+Seeing+the+Forest+and+the+Trees/1_g90zp1xz">https://mediaspace.du.edu/media/David+Skudodas+-+Seeing+the+Forest+and+the+Trees/1_g90zp1xz</a></li> <li>iv. future flood prevention while also creating resiliency to recover after a natural disaster</li> </ul> <p>b. Increased number of trainings and workshops on the use and cost benefit analysis of Nature Based Solutions.</p> <p>c. Improve the modeling software to include soil absorption, geologic porosity, plant interception,</p>	See response to GEAA comments (#76 above)

TWDB Comment No.	Public Comment No.	Task No.	Type of Comment	Level 1 or 2	Description	Response
N/A	14	N/A	Public	N/A	<p>Comment from Tara Bushnoe (UGRA &amp; R11 RFPG Member, sent after deadline for comments): ES-1: It says, "The Upper Guadalupe River Authority has also constructed several impoundments in the upper basin". We did construct Nimitz dam and then sold that to the City of Kerrville, but that is the only on river impoundment we constructed. I think this sentence was added in reference to a comment we made on chapter 1 mentioning that there are four small impoundments in Kerr County. UGRA did not construct all of these. Could the sentence be changed to "There are also several smaller impoundments in the upper basin as well."</p> <p>Section (Page) 1-3: Same comment as above. Consider changing last sentence to: "There are also several smaller impoundments in the upper basin that have an impact on flood storage as well."</p> <p>Section (Page) 1-52: I know we made the comment on chapter 1 to add the last sentence, but it sounds like those are on channel dams instead of the small water and sediment control basins that are on dry draws. Consider changing to: Many of the remaining dams in the Guadalupe River Basin are NRCS regional flood control structures and water and sediment control basins constructed by UGRA based on the NRCS model for regional flood control structures.</p>	Wording in the executive summary and Chapter 1 was revised.

## **Appendix 10-F | Public Involvement Plan**

# REGION 11 GUADALUPE REGIONAL FLOOD PLANNING GROUP – PUBLIC INVOLVEMENT PLAN

*Prepared for the Guadalupe Regional Flood Planning Group*

*Prepared by Freese and Nichols, Inc.*



**Blanton & Associates, Inc.**  
ENVIRONMENTAL CONSULTING • PLANNING • PROJECT MANAGEMENT

*TWDB Contract No. 2101792496*

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## 1.0 INTRODUCTION

The Freese and Nichols, Inc. Team (FNI Team) was retained by the Guadalupe-Blanco River Authority (GBRA), on behalf of the Region 11 Guadalupe Regional Flood Planning Group (RFPG), to develop the 2023 Guadalupe Regional Flood Plan (the Project) through a transparent process where public input and participation is welcomed and encouraged. GBRA is the project sponsor. As part of this process, the Texas Water Code (TWC) Section 16.062 and Title 31 Texas Administrative Code (TAC) Chapter 361 require public notice and input opportunities. GBRA is responsible for ensuring all public notice and participation activities are carried out as required by the TWC and 31 TAC. The FNI Team prepared this Public Involvement Plan (PIP) for the RFPG to supplement those legally required efforts with opportunities to encourage and obtain meaningful public and stakeholder input throughout the planning process. As a member of the FNI Team, Blanton & Associates, Inc. (B&A) will provide support in implementation of this PIP.

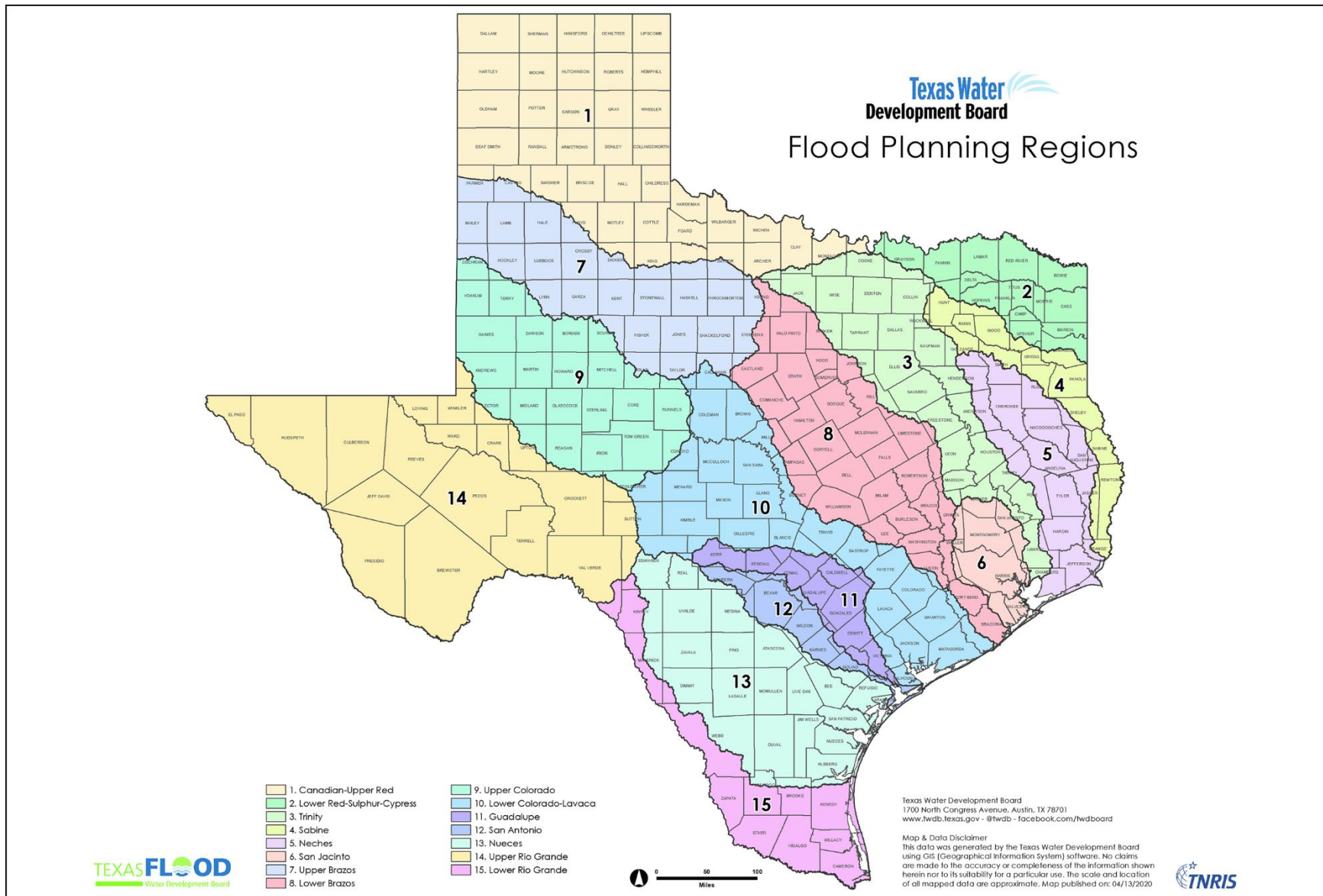
### 1.1 Background

In 2019, the Texas Legislature created and funded the first-ever regional and state flood planning process in response to historic flooding and the need for flood planning. The regional flood plans are to be delivered to the Texas Water Development Board (TWDB) by January 10, 2023, and then every five years thereafter. The state flood plan will be adopted by September 1, 2024, and then every five years thereafter. The planning process is intended to be a “bottom up” approach with the regional flood plans informed by the local communities. The planning process is also intended to be a transparent process with opportunities for public input. The objectives of the regional flood plans (RFPs) are to: 1) document existing flood infrastructure and preparedness; 2) identify current and future flood risk and hazard; 3) develop flood mitigation/management goals; 4) identify and evaluate flood management strategies and mitigation projects; and 5) evaluate benefits/impacts to the water supply, environment, and economics. Through this process administered by the TWDB, the state designated 15 flood planning area regions, including the Region 11 Guadalupe Flood Planning Region (see **Figure 1**). The planning area boundaries for each region are based upon watersheds (e.g., river basins) rather than political boundaries. The Project study area extends from the Hill Country in Real and Kerr counties in the northern part of the river basin, southeastward to the Texas Coast in Calhoun County (See **Figure 2**).

The flood planning process for Region 11 is administered by GBRA and led by a committee of volunteer members, or the RFPG. The RFPG is composed of 15 members, with one member representing each of the following interests: general public, agriculture, small business, industries, environmental, electric generating utility, water utility, flood districts, and water districts; and two members representing each of the following interests: municipalities, counties, and river authorities. The members represent the interests of organizations throughout the Guadalupe River Basin. The RFPG meetings are held monthly.

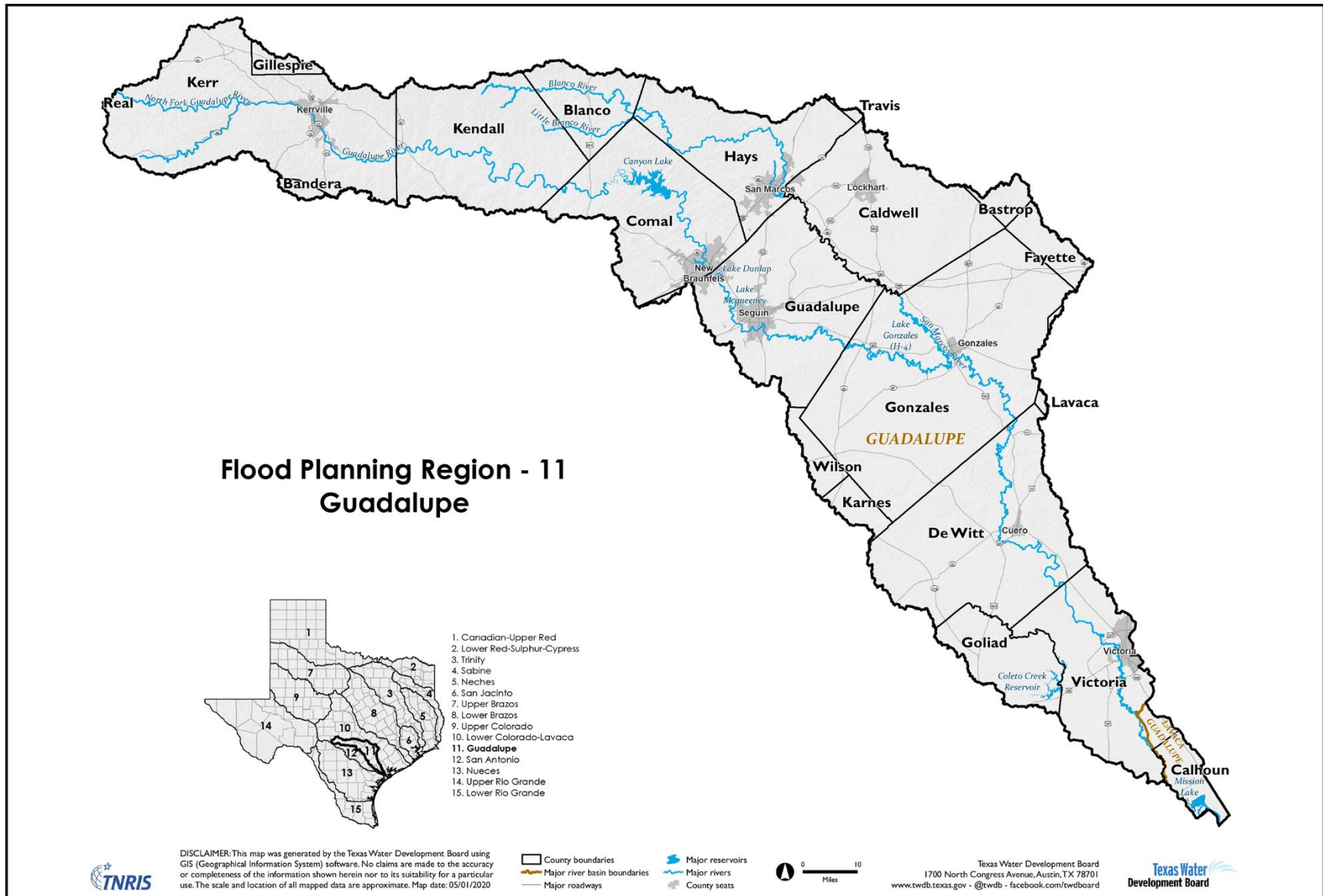
### 1.2 Public Involvement Summary

Public involvement and participation are critical to the success of the regional flood planning process. The *Regional Flood Planning Public Notification Quick Reference (Attachment A)* was prepared by the TWDB and identifies all of the TWC and 31 TAC requirements for public notice and public comment.



**Figure 1. Fifteen Flood Planning Regions in Texas**

Source: TWDB 2020 [https://data.tnris.org/894ad055-a134-470a-a133-55f0818aaceb/assets/7452fc9b-4848-4630-88b2-1476123a9680-FPR\\_8.5x11.pdf](https://data.tnris.org/894ad055-a134-470a-a133-55f0818aaceb/assets/7452fc9b-4848-4630-88b2-1476123a9680-FPR_8.5x11.pdf)



**Figure 2. Region 11 Guadalupe Flood Planning Region**

Source: TWDB 2020 [https://data.tnris.org/894ad055-a134-470a-a133-55f0818aaceb/assets/35b2e2ad-4c5b-4df6-8f0f-8528f17af542-FPR\\_11\\_Guadalupe\\_8.5x11.pdf](https://data.tnris.org/894ad055-a134-470a-a133-55f0818aaceb/assets/35b2e2ad-4c5b-4df6-8f0f-8528f17af542-FPR_11_Guadalupe_8.5x11.pdf)

As mentioned previously, all legal notice requirements are being met by the GBRA<sup>1</sup>. In addition, the RFPG has expressed a desire to encourage public input and comment in a manner that exceeds the requirements in the TWC and 31 TAC. Towards this end, the FNI Team will implement the following strategies:

- Develop an extensive public and stakeholder contact list;
- Develop and implement an interactive map tool to place on the RFPG website to gather information about flood prone areas and existing flood management efforts through the use of forms and surveys;
- Identify and evaluate opportunities to enhance available information on the RFPG website;
- Use social media accounts to post messages about upcoming RFPG meetings and activities;
- Develop and implement a virtual public meeting tool to supplement the in-person RFPG meetings, as applicable; and
- Review and report on all public comments received through either the RFPG website.

Each of these strategies are discussed in detail below in **Section 3.0**.

## **2.0 PUBLIC AND STAKEHOLDER INVOLVEMENT STRATEGIES**

The public and stakeholder involvement will emphasize two-way communication between the public and stakeholders and the RFPG. The RFPG will strive to maintain proactive communication and information dissemination during the planning process so the public and stakeholders are informed and know where to find information or who to speak with should they have any information, comments, questions, or concerns.

Through this PIP, the public and stakeholders will be informed and provided opportunities to express their views, opinions, and concerns, and to share data and information relevant to the flood planning process. This PIP provides an outline of proposed public and stakeholder involvement throughout the planning process. A general list of RFPG, GBRA and FNI Team roles and responsibilities is included as **Attachment B**. A public and stakeholder involvement schedule for each meeting or hearing, as discussed below, will be refined throughout the process. This PIP will be implemented through the strategies and activities described below, which are intended to provide a broad range of opportunities to reinforce public and stakeholder engagement and participation. Adhering to COVID-19 safety protocols for these meetings will be encouraged.

### **2.1 Public and Stakeholder Contact List**

So as not to duplicate efforts with the Texas General Land Office (GLO) regional flood study that includes the Guadalupe River Basin, the FNI Team will prepare a public and stakeholder contact list by starting with

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<sup>1</sup> This PIP does not address efforts to comply with the legal requirements for notices in the TWC and the TAC, nor the FNI Team's efforts to draft Chapter 10 of the RFP related to documenting and responding to all comments received during the 60-day public comment period required by TWC §16.062(f) - (g) and 31 TAC §361.21(h)(3).

the list compiled by the GLO. Consistent contacts (e.g., county judges, mayors, etc.) with those included in the GLO study area counties will be added to the list for those counties outside of the GLO study area (e.g., Bandera, Blanco, Gillespie, Hays, Kendall, Kerr, Real, and Wilson counties). The team will also review the list for contact categories that may need to be added (e.g., legislators).

To date, the list includes approximately 400 contacts and reflects the following public and stakeholder contact categories:

- Legislators – Governor, Lieutenant Governor, Speaker of the House of Representatives, Senators, and Representatives.
- County Judges and County Commissioners
- Mayors, City Councilmembers, and City Administrators/Managers
- County Floodplain Administrators
- Emergency Management staff
- County Engineers
- County Public Works Directors
- City Public Works Directors
- Fire Chiefs
- River Authorities
- Groundwater Conservation Districts
- Regional Water Planning Group members
- Environmental Organizations

This list will continue to be updated as the Project proceeds and more of the public and stakeholders become aware of the RFPG’s efforts and request to be added to the list. This extensive list will be used to carry out the public outreach activities noted below for RFPG meetings.

## **2.2 Interactive Mapping Tool and Surveys**

The FNI Team will create an interactive tool consisting of a map of the Guadalupe River basin. The map will be accompanied by either 1) a form for the public to complete to add their comments and information regarding flood prone areas and flood strategies or projects in their communities; or 2) a survey for agency representatives to complete providing more detailed information about flood risks and projects in their communities. The interactive tool will be linked on the RFPG website and will be “live” for the duration of the Project. Information uploaded to the interactive tool beyond a date to be determined by the FNI Team will not be considered for the 2023 Regional Flood Plan and will be stored for use in the next regional flood planning cycle.

### **2.3 GBRA Website Information**

In addition to the interactive tool to be linked to the Region 11 Guadalupe Regional Flood Plan website, the FNI Team will also look for opportunities to supplement information on the website with information or announcements that will help to inform the public and stakeholders. These include posting a summary announcement of upcoming RFPG meetings and the Project schedule to provide the public and stakeholders information on project progress and opportunities for participation.

### **2.4 Social Media**

The FNI Team will work with GBRA staff to create posts for project social media accounts that are established by GBRA. The FNI Team will submit drafts of the posts to GBRA staff at least ten days before each meeting so that GBRA staff can review and approve the drafts and then post them at least seven days before the event.

### **2.5 Virtual Public Meeting Format**

One of the strategies for this PIP is to support certain in-person RFPG public meetings by enabling participation across the entire Project area through a Virtual Public Meeting (VPM) format. The FNI Team, at the direction of the RFPG, will present the RFPG in-person meeting content (Project information) in a “virtual meeting room” with information stations located throughout the room. At the start of the meeting, meeting attendees (e.g., elected officials, agency representatives, members of the public, etc.) will enter the meeting on-line at the “sign-in” station, where they will be asked to sign in to record their attendance. They will be greeted by a narrator who will guide them through the virtual meeting room and provide information regarding the meeting content (e.g., presentations, display boards, videos, etc.) presented at each station. The meeting attendees will move through the meeting content at their own pace, including re-visiting stations as needed. The final station will provide an opportunity for meeting attendees to post questions or comments. The meeting content can be made available in Spanish or other languages, if requested. This meeting option will go “live” as close to the in-person meeting time as possible and will remain active for two weeks after the date of the in-person meeting.

### **2.6 Public Comment Tracking, Response, and Reporting**

The FNI Team will develop a system for receiving and reviewing all public and stakeholder comments received through either the RFPG website or during a RFPG meeting, responding to each comment, and providing monthly reports to the RFPG of comments and responses. A system for providing a written update to the RFPG and a complete summary of all comments received will be developed.

## **3.0 GUADALUPE REGIONAL FLOOD PLANNING GROUP MEETINGS**

### **3.1 Monthly Meetings**

Awareness of RFPG monthly meetings, which will typically be held on the first Wednesday of every month at GBRA’s offices, is critical to encouraging and obtaining public and stakeholder input and support, and

the meetings provide an understandable and convenient means to comment and ask questions. The public and stakeholders will be notified of the opportunity to visit the RFPG's website (<http://guadaluperfpg.org/Meetings.aspx>) for specific dates, times and locations of all meetings.

To supplement the seven-day meeting notices required by the TWC and 31 TAC and to promote awareness, the FNI Team may perform the following tasks:

Seven days in advance of the meeting:

- Send an email meeting announcement to those on the public and stakeholder distribution list;
- Send an email to the councils of governments that cover some portion of Region 11 to request they post the announcement on their websites;
- Send an email to the San Antonio River Authority, as the South Central Texas Regional Water Planning Group (Region L) Administrator, to request that they post the announcement of the upcoming meeting on the Region L website, and send a copy of the announcement to their Region L members;
- Send an email to the Lower Colorado River Authority, as the Region 10 Lower Colorado River Basin RFPG (Region 10) Sponsor and the San Antonio River Authority as the Region 12 San Antonio River Basin RFPG (Region 12) Sponsor to request that they post the announcement of the upcoming meeting on their websites, and send a copy of the announcement to their RFPG members;
- Send meeting announcement text to GBRA for both the Region 11 RFPG and the GBRA websites; and
- Draft social media post text for GBRA to post on their social media accounts and distribute the message to the RFPG members for them to post on their accounts.

The FNI Team may prepare draft email announcements listed above for each monthly meeting. The team will submit each announcement to GBRA staff for review prior to their notice deadline. The announcements will include information about the meeting, a link to the Region 11 website, and an email address for submitting comments or questions, as applicable. After GBRA staff has approved each announcement, the team will work with GBRA staff to distribute the email announcements. Requests to receive announcements by USPS mail, if any, will be handled accordingly.

### **3.2 Supplemental Support for Pre-Planning Public Meetings and Other Required Meetings**

Texas Water Code §16.062(d), and 31 TAC §§361.12(a)(4) and 361.21(h)(2)(A) require the RFPG to hold two or more pre-planning public meetings to obtain input from the public regarding suggestions and recommendations as to issues, provisions, projects, and strategies to be considered for inclusion during the flood planning cycle and the regional flood plan.

In addition to the pre-planning public meetings, the TWDB's *Technical Guidelines for Regional Flood Planning*, the TWC and/or 31 TAC require the RFPG to obtain public input on: 1) identified flood risk in the region and developed a map summarizing the risk; 2) flood mitigation and floodplain management goals



as they relate to existing flood risk per the TWC; 3) a process for identifying potential flood management evaluations (FMEs) and potentially feasible flood management strategies (FMSs) and flood management projects (FMPs); 4) the final RFP; 5) amendments to the RFP; and 6) changes to the RFPG membership.

To supplement the 14-day meeting notices required by the TWC and 31 TAC, to promote awareness of these public meetings, and to help encourage public and stakeholder participation and input, the FNI Team may perform the following tasks:

21 days in advance of the meeting:

- Send an email meeting announcement to those on the public and stakeholder distribution list;

Seven days in advance of the meeting

- Send a reminder email meeting announcement to those on the public and stakeholder distribution list;
- Send an email to the councils of governments that cover some portion of Region 11 to request they post the announcement on their websites;
- Send an email to the San Antonio River Authority, as the South Central Texas Regional Water Planning Group (Region L) Administrator, to request that they post the announcement of the upcoming meeting on the Region L website, and send a copy of the announcement to their Region L members;
- Send an email to the Lower Colorado River Authority, as the Region 10 Lower Colorado River Basin RFPG (Region 10) Sponsor and the San Antonio River Authority as the Region 12 San Antonio River Basin RFPG (Region 12) Sponsor to request that they post the announcement of the upcoming meeting on their websites, and send a copy of the announcement to their RFPG members;
- Send meeting announcement text to GBRA for both the Region 11 RFPG and the GBRA websites; and
- Draft social media post text for GBRA to post on their social media accounts and distribute the message to the RFPG members for them to post on their accounts.

Three days in advance of the meeting

- Send text to GBRA staff to incorporate into media advisories announcing upcoming meeting.

The FNI Team may prepare draft email announcements listed above for each pre-planning public meeting. The team will submit each announcement to GBRA staff for review prior to their notice deadline. The announcements will include information about the meeting, a link to the RFPG website, and an email address for submitting comments or questions, as applicable. After GBRA staff has approved each announcement, the team will work with GBRA staff to distribute the email announcements. Requests to receive announcements by USPS mail, if any, will be handled accordingly.

A general checklist of action items to be completed and RFPG, GBRA and FNI Team roles and responsibilities are included as **Attachment B**. The meeting facilities will be selected and reserved by GBRA staff, in close coordination with the RFPG. GBRA will attempt to identify facilities that provide adequate capacity, ample parking, and ample room/space to disseminate information, and ideally, the meeting facilities will be located within the Project study area. The team will endeavor to secure meeting facilities that are free of charge.

These meetings will be conducted so that attending stakeholders and the public can listen to the information being presented and view the presentation by the FNI Team. The team may distribute informational materials, such as Project-related handouts, and may present Project exhibits/display boards, etc. Informed and easily identifiable FNI Team members will register attendees, address questions and comments, and guide attendees through the public meeting process at the in-person meetings. These meetings will be convened in-person to take place after business hours and may be supplemented by a VPM format.<sup>2</sup> The RFPG will determine when the meetings will go “live.” During the two-week VPM comment period, the public and stakeholders will be able to view the same information that was reviewed during the in-person meeting and will be able to leave comments or add their contact information in the virtual meeting room for the Project. After the two-week comment period, the virtual public meeting room information will remain accessible through the RFPG website so people can view the information; however, adding comments or contact information will not be possible after the end of the comment period. The virtual public meeting room information will be available for educational purposes only after the two-week comment period closes (see discussion above in **Section 2.5**).

The virtual public meeting room information will encourage the public and stakeholders to use the interactive map tool (discussed above in **Section 2.2**) to enter comments and sign up to receive information through a link to the RFPG website.

### **3.3 Draft Regional Flood Plan Public Meeting**

Texas Water Code §16.062(f) - (g) and 31 TAC §361.21(h)(3) require the RFPG to hold one or more public meetings to obtain input from the public on the draft RFP. To supplement the 30-day meeting notice and the 60-day public comment period required by the TWC and 31 TAC, to promote awareness of the public meeting(s), and to help encourage public and stakeholder participation and input, the FNI Team may perform the following tasks:

Seven days in advance of the 30-day meeting notice and the beginning of the 60-day public comment period:

- Send an email announcement to those on the public and stakeholder distribution list;

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<sup>2</sup>This VPM supplement will need to be reviewed with TWDB staff to determine if a virtual meeting option is possible and what meeting notice requirements will apply.

Seven days in advance of the meeting:

- Send a reminder email meeting announcement to those on the public and stakeholder distribution list;
- Send an email to the councils of governments that cover some portion of Region 11 to request that they post the announcement on their websites;
- Send an email to the San Antonio River Authority, as the South Central Texas Regional Water Planning Group (Region L) Administrator, to request that they post the announcement of the upcoming meeting on the Region L website, and send a copy of the announcement to their Region L members;
- Send an email to the Lower Colorado River Authority, as the Region 10 Lower Colorado River Basin RFPG (Region 10) Sponsor and the San Antonio River Authority as the Region 12 San Antonio River Basin RFPG (Region 12) Sponsor to request that they post the announcement of the upcoming meeting on their websites, and send a copy of the announcement to their RFPG members;
- Send meeting announcement text to GBRA for both the Region 11 RFPG and the GBRA websites; and
- Draft social media post text for GBRA to post on their social media accounts and distribute the message to the RFPG members for them to post on their accounts.

Three days in advance of the meeting:

- Send text to GBRA staff to incorporate into media advisories announcing upcoming meeting.

The FNI Team may prepare draft email announcements listed above for the public meeting. The team will submit each announcement to GBRA staff for review prior to their notice deadline. The announcements will include information about the meeting, a link to the draft RFP on the RFPG website, and an email address for submitting comments or questions, as applicable. After GBRA staff has approved each announcement, the team will work with GBRA staff to distribute the email announcements. Requests to receive announcements by USPS mail, if any, will be handled accordingly.

This plan presumes that at least one in-person meeting will be held for this purpose after hours. A general checklist of action items to be completed and RFPG, GBRA and FNI Team roles and responsibilities are included as **Attachment B**. The meeting facility will be selected and reserved by GBRA staff, in close coordination with the RFPG.

The public meeting will be conducted so that attending stakeholders and the public can listen to the information being presented and view the presentation by the FNI Team. The team may distribute informational materials, such as Project-related handouts, and may present Project exhibits/display boards, etc. Informed and easily identifiable FNI Team members will register attendees, address questions and comments, and guide attendees through the public meeting process at the in-person meeting.

The in-person meeting may also be supplemented by a virtual public meeting.<sup>3</sup> The virtual public meeting will be made available to access so the “meeting room” content is accessible for the entire 60-day public comment period. During the comment period, the public and stakeholders will be able to view the same information that was reviewed during the in-person meeting and will be able to leave comments or add their contact information in the virtual meeting room.

#### **4.0 CONCLUSION**

Flood planning for the Guadalupe River Basin is a transparent, public process where public and stakeholder participation is welcome and encouraged. It is the intent of the RFPG that the public and stakeholders understand that their insight is valuable and with it, the RFPG will be better able to address the flood needs of all communities in the Guadalupe River Basin, and to help identify potential funding for these much-needed projects.

The outreach activities included in this PIP for the Project will allow the public and stakeholders to be informed about the Project and will encourage their interaction with the RFPG, GBRA, and the FNI Team. Overall, implementation of this PIP is intended to increase awareness of the regional flood planning process and allow any interested parties to play a role in the development of the 2023 Guadalupe Regional Flood Plan.

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<sup>3</sup>This virtual public meeting supplement will need to be reviewed with TWDB staff to determine if a virtual meeting option is possible and what meeting notice requirements will apply.

## **Attachment A**

### *TWDB Regional Flood Planning Public Notification Quick Reference*

# Regional Flood Planning Public Notification Quick Reference\*

Note: Consult 31 Texas Administrative Code (TAC) Chapters 361 and 362 and Texas Open Meetings Act for details.



Public Notifications		TAC Rule	Regional Flood Planning Group (RFPG) Action														
			Regular RFPG meetings	RFPG committee, subcommittee, and subgoup meetings	Requesting funds from the Board	Amendments to the RFP scope of work or budget	Submitting established deliverables to the Board or EA including technical memorandums	Selecting RFPG members to fill voting and non-voting position vacancies	Pre-planning public meetings to obtain input on development of the next RFP	Determining flood mitigation and floodplain management goals	Approving process for identifying potential FMEs and potentially feasible FMSs and FMPs	Adoption of the final RFP	Amendments to RFPs	Changing the number of and representation make-up of RFPG membership	First meeting at which the planning group will take public input related to the RFPG's draft RFP	Subsequent meetings at which the planning group will take public input related to the RFPG's draft RFP	
<b>Meeting Notice Requirements</b>																	
<b>OPEN MEETINGS &amp; PUBLIC INFORMATION ACTS</b>	Each RFPG and any committee or subcommittee of an RFPG are subject to Chapters 551 [Open Meetings Act] and 552 [Public Information Act], Government Code.	361.21(a)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	<b>MINIMUM NOTICE</b> (calendar days)																
	7 days prior to the meeting	361.21(h)(1)	✓	✓	✓	✓	✓	✓									✓
	14 days prior to the meeting	361.21(h)(2)							✓	✓	✓	✓	✓	✓			
	30 days prior to the meeting	361.21(h)(3)														✓	
<b>CONTENT TO INCLUDE</b>	Date, time, and location of the public meeting or hearing; Summary of the proposed action to be taken; The name, telephone number, email, and address of a RFPG contact to whom questions or requests for additional information may be submitted; A statement of how and when comments will be received from the members and public.	361.21(g)(1-4)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Information on how the public may submit comments	361.21(h)(3)(E)														✓	✓
	Summary of the regional flood plan	361.21(h)(3)(D)														✓	✓
<b>ENTITIES TO NOTIFY</b>	All voting and non-voting RFPG members	361.21(f)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Any person or entity who has requested notice of RFPG activities	361.21(f)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	All adjacent RFPGs	361.21(h)(3)(C)														✓	✓
<b>WHERE TO POST</b>	On the website of the RFPG	361.21(g)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Texas Secretary of State website	361.21(g)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
<b>Other Rule Requirements</b>																	
<b>WRITTEN COMMENT PERIOD**</b> (calendar days)	14 days prior to the meeting	361.21(h)(2)							✓	✓	✓	✓	✓	✓			
	30 days prior to and 30 days following the meeting	361.21(h)(3)														✓	
<b>MEETING MATERIALS POSTING</b> (calendar days)	3 days prior to and 7 days following the meeting	361.21(h)(2)	✓	✓	✓	✓	✓	✓									✓
	7 days prior and 14 days following the meeting	361.21(h)(2)							✓	✓	✓	✓	✓	✓			
<b>DOCUMENT PROVISION</b>	The draft plan must be made available for public inspection online and a hard copy of the draft plan must be made available for public inspection in at least three publicly accessible locations within the region for at least 30 days prior to the first meeting and 30 days following the first meeting.	361.21(h)(3)(A,F)														✓	

**\*IMPORTANT NOTES**  
 All meetings of subsets of the RFPG that constitute a quorum of the RFPG must be noticed appropriately.  
 The best reference material for RFPG members to ensure that they are in compliance with notice requirements is the Texas Attorney General Office "Open Meetings Handbook 2020" available at: [https://www.texasattorneygeneral.gov/sites/default/files/files/divisions/open-government/openmeetings\\_hb.pdf](https://www.texasattorneygeneral.gov/sites/default/files/files/divisions/open-government/openmeetings_hb.pdf)  
 The Attorney General's Open Records Division maintains an Open Government Hotline to answer questions regarding open government laws. The Hotline can be reached at (877) 673-6839 (OPENTEX).  
 To the extent an action by the RFPG could qualify under more than one row of this matrix (for instance, a regular meeting), the stricter notice requirements should be used.  
 RFPGs may provide notice for various actions in a single notice. However, a document providing notice for multiple actions should describe all actions individually.  
 RFPGs shall also provide additional region-specific public notice, if any, in accordance with their decision under §361.11(d)(6), including provision of print notices, if applicable.  
 \*\*RFPGs must provide a means by which it will accept written public comment prior to and after all meetings. Specific timelines prescribed by rule are noted in this section.

## **Attachment B**

### List of RFPG, GBRA and FNI Team Roles and Responsibilities

## Attachment B

### List of RFPG, GBRA and FNI Team Roles and Responsibilities

Tasks	Notes/Questions	Lead	Deadline	Comments
<b>Region 11: Public meeting - Insert date ___ at insert location _____</b>				
<b>Notification &amp; Location</b>				
Venue	Confirm reservation.	GBRA		
Gather Stakeholder mailing list		B&A		
Develop Legally Required Notice (comply with notification requirements)	B&A to provide input. 31 TAC 361.21 (g)(1-4)	GBRA		
Translate Legally Required Notice	TBD			
Publish Legally Required Notice	31 TAC 361.21(h)(2) and 31 TAC 361.21 (h)(3) requires 14 days prior to pre-planning meeting and 30 days prior to public input meetings.	GBRA		
Draft Email Announcement		B&A		
Email Announcement to Stakeholders	21 days (pre-planning meeting) or 37 days (input on draft plan meeting) in advance	B&A		
Identify key stakeholders to post announcement at their office and website		B&A		
Draft Reminder Email Announcement		B&A		
Email Reminder Announcement	7 days in advance	B&A		
Draft Media Advisory		GBRA		
Draft Social Media Posts		B&A		
Social Media blast		GBRA and flood planning group members		
Post Meeting Materials	31 TAC 361.21(h)(2) requires to post meeting materials 7 days prior and 14 days following the meeting. Also, post media advisory	GBRA and FNI		
<b>Meeting Materials</b>				
Draft sign-in sheets (public, elected officials, media)		B&A		
Sign-in sheets for Public		B&A		
Sign-in sheets for Elected Officials		B&A		
Sign-in sheets for Media		B&A		
Draft Interactive Tool Questionnaire (English)		FNI and B&A		
Hard Copy of Interactive Tool Questionnaire - English		FNI and B&A		
Draft Interactive Tool Questionnaire (Spanish)	TBD			



## Attachment B

### List of RFPG, GBRA and FNI Team Roles and Responsibilities

Tasks	Notes/Questions	Lead	Deadline	Comments
Hard Copy of Interactive Tool Questionnaire - Spanish	TBD			
Name Tags (if needed)				
Door Signs (if needed)		B&A		
Draft script for Doug Miller	live and virtual	B&A		
Doug Miller Video	Virtual room	B&A		
Draft Presentation		FNI		
Presentation	live and virtual	FNI		
Draft Welcome Board		FNI and GBRA		
Welcome Board	live and virtual	FNI and GBRA		
Draft Map Display Board		B&A		
Map Display Board	live and virtual	FNI and B&A		
Hard Copy of Presentation	for planning group members. Jay to talk to Lauren	GBRA		
Website Postings	B&A to develop the content.	GBRA		
Handouts		GBRA		
<b>Pre Meeting Room Setup</b>				
Tables		All		
Chairs		All		
Computer		FNI		
Back-up Computer		B&A		
Projectors	Need to confirm			
Back-up Projector		FNI		
Projector Cables	Need to confirm			
Power Extension Cords		FNI		
Clicker		FNI		
Microphones (Sound System)	Need to confirm			
Easels	how many?	B&A		
Pens		B&A		
Laptops for Web Tool Stations (2)	Confirm with F&N	B&A		
Internet Hotspot	Need to confirm			
<b>During Meeting</b>				
Help at Sign In Tables and Distribute Handouts		B&A		
Facilitate Discussion	Coordinate with Doug Miller and GBRA.	GBRA		
Develop Meeting Facilitation Guidelines for Doug Miller	Need to confirm with GBRA.	B&A		
Note Taking		B&A		
Take Photos		GBRA and B&A		

## Attachment B

### List of RFPG, GBRA and FNI Team Roles and Responsibilities

Tasks	Notes/Questions	Lead	Deadline	Comments
Audio Recording for note taking purposes		B&A		
<b>COVID-19 Protocol (if required by venues)</b>				
Masks	Masks should be provided at sign-in desk with hand sanitizers.	B&A		
Hand Sanitizers		B&A		
6ft Social Distance Tape Markers	B&A will bring if necessary.	B&A		
Disinfectant Wipes		B&A		
<b>Virtual Meeting (360 room) live August 3</b>	<i>Virtual room will be left online for educational purposes after the two week comment period.</i>			
Exhibits (same as in-person)	B&A would like materials 30-45 days prior to going live.	B&A		
Electronic Comment/Survey form	Comment period will be open for two weeks after the last in-person meeting	B&A		
Electronic Sign-in form		B&A		
Interactive Comment Map		B&A		
<b>Post Planning and Input Meetings and Virtual Meeting</b>				
Compile Meeting Notes		B&A		
Compile Attendee List		B&A		
Gather Comments provided in-person and electronically		B&A		
Provide Meeting Summary		B&A		