Task 12 FMXs

Batch	Page	New Action Number	Old Action Number (To be removed)	Туре	Sponsor	Project	Notes	TC Rec (Y/N)	Tech Committee Rec Date	RFPG Rec (Y/N)	RFPG Rec Date
1	2	101000043	101000043	FME	Fredericksburg (Municipality)	Barons Creek Watershed	Recommend revised FME	Yes	5/15/2023		
1		101000189	101000189	NA	Edna (Municipality)	Wastewater Treatment Plant Floodproofing (Task 12) (Remove from RFP)	Recommend remove - not flood project				
1	3	103000060	101000027	FMP	Bastrop County	FM 812 at Little Alum Creek	Recommend new FMP	Yes	5/15/2023		
1	4	103000061	101000102	FMP	Bastrop County	Piney Creek Mitigation	Recommend new FMP	Yes	5/15/2023		
1	5	103000065	101000206	FMP	Fredericksburg (Municipality)	Creek Street at Barons Creek	Recommend new FMP	Yes	5/15/2023		
1	6	103000066	101000167	FMP	Marble Falls (Municipality)	Broadway Street at Whitman Branch Low Water Crossing	Recommend new FMP	Yes	5/15/2023		
1	7	103000067	101000116 and 101000165	FMP	Marble Falls (Municipality)	Whitman Branch Bypass; Oak Ridge Dr Creek, including Detention	Recommend new FMP	Yes	5/15/2023		

Floo	od Manag	geme	Lower Colorado-Lavaca REGIONAL FLOOD					
Title Barons Creek Watershed - Southwest City				I	D# 101000043	PLANNING GROUP		
Sponsor (name of ent ty) Fredericksburg (Municipality)				Com	Commitment x Yes No			
Technical commit ee recommend x Yes No RFPG				RFPG recomm	recommend X Yes No			
Study T Emer Othe	rgency preparedness	Flo	odplain modeling,	mapping and r	isk assessment x	Feasibility study Preliminary project engineering		
Probler	m Area							
City Fre	dericksburg	Cou	nty Gillespie		N			
Watersh name	ed Pedernales (s)					965 16		
Tributary	(ies) Barons Creek				A MARSH			
HUC#	12090206	Stream n	niles (est.) 1.55		WUS Highway 290	Fredericksburg		
Drainage	area: square miles, e	st 0.47	or acreage, est.	301	and the day	redenoksburg		
	Inerability index 0.1 0.0 indicates least vulne	rable; 1.0 inc	dicates most vulnerab	le.)	Carl Lak	State State		
Other D	rainage System and Ro	oadway/Cro	ossing Improvemen	ts	A CONTRACT OF A	A CARLES AND A CAR		

Flood Risk Descript on

This study evolved out of the previous Edison Street at Barons Creek Study. The project was ident f ed based on staf knowledge and was intended to reduce local street f ooding, mobility, with possible structural risk reduct on. The project was evaluated under Task 12 of the planning process. A 2D rain-on-grid model was developed to analyze proposed local drainage improvements and related alternat ves. Due to the limited local f ood risk reduct on benef ts, the city amended the act on to include a broader study area to evaluate potent al drainage system and/or roadway improvements for the resident al areas upstream of Milam Street.

Populat on at risk 13

Structures at risk 9

Crit cal facilit es at risk O

Farm/Ranch land impacted (acres) 42

Roadway(s) impacted (miles)

npacted (miles) 0.00

Scope of Study

Study will include hydrologic and hydraulic modeling (with Atlas 14 rainfall), preliminary design of improvements, risk reduct on analysis, verif cat on of no adverse impact, preparat on of cost est mate and a benef t-cost-analysis, and an evaluat on of potent al constraints (environmental, ut lity conf icts, right-of-way needs, and constructability.

Related Goal(s)

6.1 Reduce the number of structures and crit cal facilities that are at high risk of repetitive loss through the implementation of structural food mitigation project.

Est mated Study Cost

Cost \$150,000

Flood Mitigation Project (FMP) Lower Colorado-Lavaca **REGIONAL FLOOD** ANNING GROUP FM 812 at Little Alum Creek ID# 103000060 Title Sponsor (note if City or County) Bastrop County **REGION 10** Commitment X Yes No Technical committee recommend X Yes No X Yes No RFPG recommend **Project Type** STRUCTURAL Detention 🖌 Channel modification 🖌 Bridge/culvert Storm drain Levee/floodwall Other NON-STRUCTURAL Property buyouts Floodproofing Flood readiness/resilience Flood warning system/gauges Other

Problem Area

City N/A	County Bastrop						
Watershed name(s) Walnut Creek-Cedar Creek							
Tributary(ies) Little Alum Creek							
HUC#(s) 1209030103	Stream miles (est.) 0.4 mi						
Drainage area: square miles, est 1.8 sqmi or acreage, est							
Social Vulnerability Index (SVI)	0.4522, 0.1868						
(SVI score 0.0 indicates least vulnera	able; 1.0 indicates most vulnerable.)						
Other							



Flood Risk Description

Bastrop County identified FM 812 at Little Alum Creek of high importance to increase the level of service and provide safe access to residential areas to use as their primary ingress and egress. The existing structure (2 – 7' x7' box culverts) where FM 812 crosses Little Alum Creek does not have a 2-year level of service. In addition to the road overtopping, there is one residential structure located near the crossing in the FEMA effective 100-year floodplain.

Proposed level-of-service ^{100-year}

Status Preliminary Engineering

Atlas 14 rainfall used Yes

Project Description

The proposed improvements include raising FM 812 and replacing the existing $2 - 7' \times 7'$ box culverts with a 2-span bridge with each span measuring 70 feet (for a total bridge length of 140 feet) and approximately 510 feet of roadway improvements. Proposed improvements for Little Alum Creek include benching into the channel banks approximately 1,930 feet while avoiding the ordinary high water mark.

Related Goal(s)

6.1 Reduce the number of structures and critical facilities that are at high risk through the implementation of structural flood mitigation projects. 6.2 Increase the number of entities that mitigate flood risk at vulnerable roadways or waterways.

Estimated Project Cost

 Capital cost
 \$8,288,617
 Ongoing O&M costs
 TBD
 Cost/benefit analysis
 0.5

 Potential funding source(s)
 Federal/state grants and/or local funds
 Federal/state grants and/or local funds
 0.5

		DLANNING CDOUD
Title Piney Creek Mitigation	ID# 103000061	PLANNING GROUP
Sponsor (note if City or County) City of Bastrop Technical committee recommend X Yes No RFPG recomm	Commitment X Yes No end X Yes No	REGION 10
Project Type		
STRUCTURAL		
Detention 🗸 Channel modification 🖌 Bridge/culvert 📃 Sto	orm drain 📃 Levee/floodwall	
Other		
NON-STRUCTURAL		
Property buyouts Floodproofing Flood readiness/resilience	e Flood warning system/gauges	
Other		

Problem Area

City Bastrop	County Bastrop					
Watershed name(s) Piney Creek-Colorado River						
		010				
Tributary(ies) Piney Creek						
HUC#(s) 1209030102	Stream miles (est.) ²	and the				
Drainage area: square miles, est	49.6 sqmi or acreage, est					
Social Vulnerability Index (SVI)	0.5979, 0.5304					
(SVI score 0.0 indicates least vulnera		Col				
Other						



Lower Colorado-Lavaca

REGIONAL FLOOD

Flood Risk Description

The existing condition flood risk includes three road crossings that overtop and two subdivisions that flood during the 100-year storm event. Overtopping roads include SH 95, Main Street, and Reids Bend. These roads are access routes for residents in and out of the City of Bastrop. The two subdivisions that are located in close proximity to the channel banks of Piney Creek are Bastrop Estates Mobile Home Park and Mercedes Cove subdivision, both of which are located in the FEMA regulated 100-year floodplain.

Proposed level-of-service 100-year

Status Preliminary engineering

Atlas 14 rainfall used Yes

Project Description

The proposed improvements provide an all-weather access (100-year level of service) at SH 95 and reduces overtoping at Main Street and Reids Bend during the 100-year storm event. The project improvements include approximately 4,150 LF of channel benching, 2,200 LF of channel clearing or vegetation thinning, and bridge improvements at UPRR bridge, Main Street and pedestrian bridge, and SH 95. UPRR bridge is proposed to be widened from a 150 foot span to a 300 foot span. Main Street bridge is currently a 100 foot span and is being proposed to a 300 foot span. The pedestrian bridge at Main Street is a 50 foot span and is proposed to be a 300 foot span to match Main Street. And finally, SH 95 is currently a 60 foot span and is proposed to be a 250 foot span.

Related Goal(s)

6.1 Reduce the number of structures and critical facilities that are at high risk through the implementation of structural flood mitigation projects. 6.2 Increase the number of entities that mitigate flood risk at vulnerable roadways or waterways.

Estimated Project Cost

 Capital cost
 \$23,991,550
 Ongoing O&M costs
 TBD
 Cost/benefit analysis
 0.6

 Potential funding source(s)
 Federal/state grants and/or local funds
 Federal/state grants and/or local funds
 0.6

Title						ID#			P
Sponsor (note if City or County)					Commit	ment	Yes	No	
Technical committee recommend	Yes	No	RFPG red	commend	Yes	No			
Project Type									
STRUCTURAL									
Detention Channel modifie	cation	Bridge/	/culvert	Storm dra	in Le	evee/flo	odwall		
Other									
NON-STRUCTURAL									
Property buyouts Floodpro	oofing	Flood re	adiness/res	silience	Flood wa	rning sy	stem/ga	uges	
Other									
Problem Area									
City	Co	ounty		1	N	eet St	10.2	ZA	FIN
Watershed name(s)						See.			1
						110	12		
Tributary(ies)					C Sol		6.1	Creek &	212
HUC#(s)	Stre	am miles ((est.)						
Drainage area: square miles, est		or acreage	e, est			2	-		A

Other

Proposed level-of-service

Status

Atlas 14 rainfall used

Project Description

Social Vulnerability Index (SVI)

Flood Risk Description

(SVI score 0.0 indicates least vulnerable; 1.0 indicates most vulnerable.)

Related Goal(s)

Estimated Project Cost

Capital cost Potential funding source(s) Ongoing O&M costs

Cost/benefit analysis



Lower Colorado-Lavaca REGIONAL FLOOD PLANNING GROUP

REGION 10

Title ID# PLANNING GR	OUP
Sponsor (note if City or County) Commitment Yes No REGION 10	
Technical committee recommend Yes No RFPG recommend Yes No	
Project Type	
STRUCTURAL	
Detention Channel modification Bridge/culvert Storm drain Levee/floodwall	
Other	
NON-STRUCTURAL	
Property buyouts Floodproofing Flood readiness/resilience Flood warning system/gauges	
Other	
Problem Area	1 m
Problem Area	3
City County	Streets
Watershed name(s)	- A - Control
State States and States	and an a
Tributary(ies)	77
HUC#(s) Stream miles (est.)	
Drainage area: square miles, est or acreage, est	1
Social Vulnerability Index (SVI)	Stores
(SVI score 0.0 indicates least vulnerable; 1.0 indicates most vulnerable.)	esri
Other Approximate location based on user liquit <u>Approximate location based on user liquit <u>Withingto Base Flows Elevation (#FD <u>withingto Elevation (#FD </u>withingto Elevation (</u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u>	Annual Chance
PNI HAZARO AREAS Pagintar Productive Structure Areas Ob- Casada Industed Image: Control of the control o	e (BFE)

No Digital Da

Flood Risk Description



Related Goal(s)

Estimated Project Cost

Ongoing O&M costs

Cost/benefit analysis

Lower Colorado-Lavaca

REGIONAL FLOOD

Title		ID#	PLANN	ING GROUP
Sponsor (note if City or County)		Commitment Yes	No	EGION 10
Technical committee recommend Ye	es No RFPG recomme	nd Yes No		
Project Type				
STRUCTURAL				
Detention Channel modification	n Bridge/culvert Stor	m drain Levee/floodwall		
Other				
NON-STRUCTURAL				
Property buyouts Floodproofing	g Flood readiness/resilience	Flood warning system/gaug	ges	
Other		National Flood Hazard Layer	FIRMette 🛞 FEMA	Legend
Problem Area		Burnet/County Unincorporated/Areas 481209	I STATE DOOWNANT THE REAL	SEC PS REPORT FOR EXAMPLES USED AND RECY MAN FOR THEM PARAL LANCE SPECIAL FLOOD HAZARD AREAS SPECIAL FLOOD HAZARD AREAS
City	County		- MOFET STALL STALL	0.2% Annail Chance Flood Mazard, Areas de 3% Annail Chance Flood Mazard, Areas de ph less than one fost or with dramage means of less than one square mile <i>tour</i> it Future Conditions 2% Annail
Watershed name(s)			The second	CENERS Floot Hazind Door I CENER AREAS OF FLOOD HAZARD Area with Flood Risk due to Levee Jane J
			Zõng AE BUD TREEL	VO SCHERN Alves of Minimal Flood Hager 8 June 1 Effective LONRs OTHER AREAS Avea of Undetermined Flood Magard June 2
Tributary(ies)			834 6 FEET	GENERAL STRUCTURES ITTITT Leven Disk or Floched
HUC#(s)	Stream miles (est.)	AREA OF MINIMAL FLOOD HAZARD	ble Falls	CMAX Cross Sections with 1th Annual Chance TAS water Surface Elevation i Costal Drawent ·
Drainage area: square miles, est	or acreage, est	480093	- C	OTHER - Profile Baseline FEATURES - Profile Baseline
Social Vulnerability Index (SVI) (SVI score 0.0 indicates least vulnerable; 1.0 in	dicates most vulnerable.)			Digital Deta Available v No Digital Deta Available v No Digital Deta Available v Unwapped
Other		A DA MAN		The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.
oue			Mr. m. M	This map complex with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complex with FEMA's basemap accuracy standards. The flood based information is described format from the
			SMG 17019	The Road hazard information is derived (investig) from the architectures first, well-services provided by FDMA. This map was exported on 3/13/2023 at 12/27 FM and does not reflect todages or amendments undersequent to this date and time. The MFMs, and effective information may change or become upsended by resultate our time.

Flood Risk Description



Status

Atlas 14 rainfall used

Project Description

Related Goal(s)

Estimated Project Cost

Capital cost Potential funding source(s) Ongoing O&M costs

Cost/benefit analysis

Lower Colorado-Lavaca

REGIONAL FLOOD PLANNING GROUP