APPENDIX C

Fact Sheets

Flood Management

Evaluations



Flood Manager	nent Evaluat	ion (FME) _{STUDY}	Lower Colorado-Lavaca REGIONAL FLOOD
Title Drainage System Improvements		ID# 101000001	PLANNING GROUP
Sponsor (name of entity) Smithville (M	1unicipality)	Commitment x Yes No	
Technical committee recommend x	Yes No RFPG	recommend × Yes No	REGION 10
Study Type			
Emergency preparedness	Floodplain modeling, mappi	ng and risk assessment	easibility study x Preliminary project engineering
Other			
Problem Area		N	71
City Smithville	County Bastrop		
Watershed Willow Creek - Colorado name(s)	River	2571	
Tributary(ies) Unnamed Tributary			Smithville
HUC# 12090301 Stre	am miles (est.) TBD		
Drainage area: square miles, est 0.67	or acreage, est. 429		Shine Lake
Social vulnerability index 0.61 (SVI score 0.0 indicates least vulnerable; 1	.0 indicates most vulnerable.)		Shipp Lake
Other Drainage system improvemen SE 2nd, SE 4th	ts - NE 7th, NE 8th, NE 5th, NE	2nd,	

The sponsor has indicated the existing stormwater infrastructure in the study area is undersized (less than 25-year capacity) and the area is at risk of street flooding, property flooding, and potential structural flooding. The existing flood risk is not well defined, and the risk indicators are based on the study area. Study results will provide a more detailed assessment of existing flood and potential flood risk reduction that will be used to evaluate projects for future planning cycles.

Population at risk 0

Structures at risk 0

Critical facilities at risk 0

Farm/Ranch land impacted (acres) 0

Roadway(s) impacted (miles) 0.00

Scope of Study

Study will include hydrologic and hydraulic modeling (with Atlas 14 rainfall), preliminary design of improvements, risk reduction analysis, verification of no adverse impacts, preparation of cost estimates and a benefit-cost-analysis, and an evaluation of potential constraints (environmental, utility conflicts, rightof-way needs, and constructability).

Related Goal(s)

6.1 Reduce the number of structures and critical facilities that are at high risk of repetitive loss through the implementation of structural flood mitigation projects. 6.2 Increase the number of entities that mitigate flood risk at vulnerable roadways or waterways (e.g., low-water crossings, irrigation canals).

Estimated Study Cost

Cost \$250,000

Flood Manag	gement Evalua	tion (FME) STUDY	Lower Colorado-Lavaca REGIONAL FLOOD
Title Smithville Recreation Cen	ter Expansion	ID# 101000026	PLANNING GROUP
Sponsor (name of entity) Smith	hville (Municipality)	Commitment x Yes No	
Technical committee recomme	end x Yes No RFF	PG recommend X Yes No	REGION 10
Study Type Emergency preparedness Other	Floodplain modeling, map	oping and risk assessment x F	easibility study Preliminary project engineering
Problem Area			
City Smithville	County Bastrop	N	
Watershed Willow Creek - Col name(s)	lorado River	2571	
Tributary(ies) Unnamed Tribut	tary		Smithville
HUC# 12090301	Stream miles (est.) TBD	and the second second	
Drainage area: square miles, e	est 0.00 or acreage, est. 2		
Social vulnerability index 0.61 (SVI score 0.0 indicates least vulner Other Structure/Infrastructure	erable; 1.0 indicates most vulnerable.)		Ship

Sponsor has indicated the desire to expand and improve the shelter-in-place capability of the Center.

Population at risk 0

Structures at risk 0

Critical facilities at risk 0

Farm/Ranch land impacted (acres) 0

Roadway(s) impacted (miles) 0.00

Scope of Study

Evaluate the existing building and determine feasibility and costs associated with providing expanded capacity.

Related Goal(s)

2.1 Increase the number of communities with warning and emergency response capabilities, or which participate in regional flood warning systems (e.g., City of Austin Flood Early Warning System) that can detect flood threats in real time and provide timely warning of impending flood danger.

Estimated Study Cost

Flood Manag	ement Evaluat	tion (FME) STUDY	Lower Colorado-Lavaca REGIONAL FLOOD
Title Citywide Drainage System In	mprovements	ID# 101000104	PLANNING GROUP
Sponsor (name of entity) Smithv	ille (Municipality)	Commitment x Yes No	
Technical committee recommen	nd x Yes No RFPG	recommend X Yes No	REGION 10
Study Type			
Emergency preparedness	Floodplain modeling, mappi	ng and risk assessment x Fe	asibility study Preliminary project engineering
Other			
Problem Area		N	
City Smithville	County Bastrop		
Watershed Willow Creek - Colo name(s)	rado River		11. Hi
Tributary(ies) Gazley Creek, Wil	low Creek		
HUC# 12090301	Stream miles (est.) TBD	2571	Smithville
Drainage area: square miles, est	4.02 or acreage, est. 2,57	0	
Social vulnerability index 0.61 (SVI score 0.0 indicates least vulnera	able; 1.0 indicates most vulnerable.)		A A A A A A A A A A A A A A A A A A A
Other Drainage System Improve	ements		

The sponsor has indicated the existing stormwater infrastructure in the study area is undersized and the area is at risk of street flooding, property flooding, and potential structural flooding. The existing flood risk is not well defined, and the risk indicators are based on the study area. Study results will provide a more detailed assessment of existing flood and potential flood risk reduction that will be used to evaluate projects for future planning cycles.

Population at risk 663

Structures at risk 83

Critical facilities at risk 0

Farm/Ranch land impacted (acres) 335

Roadway(s) impacted (miles) 3.79

Scope of Study

Study will include hydrologic and hydraulic modeling (with Atlas 14 rainfall), preliminary design of improvements, risk reduction analysis, verification of no adverse impacts, preparation of cost estimates and a benefit-cost-analysis, and an evaluation of potential constraints (environmental, utility conflicts, rightof-way needs, and constructability).

Related Goal(s)

5.1 Reduce the number of structures and critical infrastructure that are at high risk of repetitive loss through property/easement acquisitions, relocations, floodproofing and/or elevation. 6.1 Reduce the number of structures and critical facilities that are at high risk of repetitive loss through the implementation of structural flood mitigation projects. 6.2 Increase the number of entities that mitigate flood risk at vulnerable roadways or waterways (e.g., low-water crossings, irrigation canals).

Estimated Study Cost

Cost \$500,000

Flood Manag	gement Evalu	lation (FME) _{stul}	PY Lower Colorado-Lavaca REGIONAL FLOOD
Title Drainage Ditch Maintenan	ce/Improvements	ID# 101000071	PLANNING GROUP
Sponsor (name of entity) Sunris	se Beach Village (Municipality)	Commitment x Yes	lo
Technical committee recomme	nd 🗙 Yes 📃 No 🛛 F	RFPG recommend X Yes No	REGION 10
Study Type			
Emergency preparedness	Floodplain modeling, m	napping and risk assessment	x Feasibility study Preliminary project engineering
Other			
Problem Area		N	2900
City Sunrise Beach Village	County Llano		Highland
Watershed Sandy Creek - Lake name(s)	Lyndon B Johnson		Haven Granite Shoa
Tributary(ies) Unnamed Tribut	aries	71	A LA CAR CAR CAR
HUC# 12090201	Stream miles (est.) TBD		
Drainage area: square miles, es	or acreage, est.	1,688	
Social vulnerability index 0.19 (SVI score 0.0 indicates least vulner	rable; 1.0 indicates most vulnerable	e.)	
Other Channel Improvements			Horseshoe Bay

The City has identified a number of drainage channels that need to be maintained as well as improved to provide additional conveyance to prevent erosion and mitigate local flooding. The proposed improvements will include channel modifications and develop a more detailed assessment of existing flood and potential flood risk reduction (where appropriate) that will used to evaluate projects for future planning cycles.

Population at risk 583

Structures at risk 330

Critical facilities at risk 0

Farm/Ranch land impacted (acres) 101

Roadway(s) impacted (miles) 0.82

Scope of Study

Study will include hydrologic and hydraulic modeling (with Atlas 14 rainfall), preliminary design of improvements, risk reduction analysis, verification of no adverse impacts, preparation of cost estimates and a benefit-cost-analysis, and an evaluation of potential constraints (environmental, utility conflicts, right-of-way needs, and constructability).

Related Goal(s)

6.1 Reduce the number of structures and critical facilities that are at high risk of repetitive loss through the implementation of structural flood mitigation projects.

Estimated Study Cost

Flood Manag	gement Evalı	uation (FME)	STUDY Lower Colorado-Lavaca REGIONAL FLOOD
Title 102 Beach Dr Low Water C	rossing	ID# 101000175	
Sponsor (name of entity) Sunris	se Beach Village (Municipality)	Commitment x Yes	s No
Technical committee recomme	nd x Yes No	RFPG recommend X Yes	REGION 10
Study Type			
Emergency preparedness	Floodplain modeling,	mapping and risk assessment	x Feasibility study Preliminary project engineering
Other			
Problem Area		N	
City Sunrise Beach Village	County Llano		
Watershed Sandy Creek - Lake name(s)	Lyndon B Johnson		Sunrise Beach
Tributary(ies) Unnamed Tribut	ary		Village
HUC# 12090201	Stream miles (est.) TBD	the state	
Drainage area: square miles, es	or acreage, est.	320	
Social vulnerability index 0.19 (SVI score 0.0 indicates least vulner	rable; 1.0 indicates most vulnerab		2233 Lake Lynd
Other Roadway/Crossing Impr	ovements & Channel Improve	ements	Johnso

The existing crossing is undersized and overtops. The existing crossing consists of two (2) corrugated metal pipes. The proposed improvements include upsizing the pipes. The average daily traffic count is unknown. The existing risk indicators are based on available data and will be better defined as part of the study. Study results will include detailed assessments of existing flood risk and potential flood risk reduction to be used in evaluating projects for future funding cycles.

Population at risk 0

Structures at risk 0

Critical facilities at risk 0

0.00

Farm/Ranch land impacted (acres) 0

Scope of Study

Conduct a study to evaluate upsizing the existing low water crossing. Study will include hydrologic and hydraulic modeling (with Atlas 14 rainfall), preliminary design of improvements, risk reduction analysis, verification of no adverse impacts, preparation of cost estimates and a benefit-cost-analysis, and an evaluation of potential constraints (environmental, utility conflicts, right-of-way needs, and constructability).

Roadway(s) impacted (miles)

Related Goal(s)

6.2 Increase the number of entities that mitigate flood risk at vulnerable roadways or waterways (e.g., low-water crossings, irrigation canals).

Estimated Study Cost

Flood Management Evalu	ation (FME) STUDY	Lower Colorado-Lavaca REGIONAL FLOOD
Title 124 Sunrise Drive Low Water Crossing	ID# 101000176	PLANNING GROUP
Sponsor (name of entity) Sunrise Beach Village (Municipality)	Commitment x Yes No	
Technical committee recommend 🗴 Yes 📃 No 🛛 🦷	RFPG recommend X Yes No	REGION 10
Study Type		
Emergency preparedness Floodplain modeling, m	napping and risk assessment 🛛 🗙 F	easibility study 🛛 📄 Preliminary project engineering
Other		
Problem Area	N	
City Sunrise Beach Village County Llano		
Watershed Sandy Creek - Lake Lyndon B Johnson name(s)		Sunrise Beach
Tributary(ies) Unnamed Tributary		Village
HUC# 12090201 Stream miles (est.) TBD		
Drainage area: square miles, est 0.44 or acreage, est.	279	
Social vulnerability index 0.19 (SVI score 0.0 indicates least vulnerable; 1.0 indicates most vulnerable	2233	Lake Lyno
Other Roadway/Crossing Improvements & Channel Improvem	nents	Johnsc

The existing crossing is undersized and overtops. The existing crossing consists of two (2) corrugated metal pipes. The proposed improvements include upsizing the pipes. The average daily traffic count is unknown. The existing risk indicators are based on available data and will be better defined as part of the study. Study results will include detailed assessments of existing flood risk and potential flood risk reduction to be used in evaluating projects for future funding cycles.

Population at risk 0

Structures at risk 0

Critical facilities at risk 0

Farm/Ranch land impacted (acres) 0

Roadway(s) impacted (miles) 0.00

Scope of Study

Conduct a study to evaluate upsizing the existing low water crossing. Study will include hydrologic and hydraulic modeling (with Atlas 14 rainfall), preliminary design of improvements, risk reduction analysis, verification of no adverse impacts, preparation of cost estimates and a benefit-cost-analysis, and an evaluation of potential constraints (environmental, utility conflicts, right-of-way needs, and constructability).

Related Goal(s)

6.2 Increase the number of entities that mitigate flood risk at vulnerable roadways or waterways (e.g., low-water crossings, irrigation canals).

Estimated Study Cost

Floo	d Manage	ement Evalua	itio	n (FME) _{study}	Lower Colorado-Lavaca REGIONAL FLOOD	
Title CR 3	332 Drainage Improvement	ts		ID# 101000109	PLANNING GROUP	
Sponsor (n	ame of entity) Sweeny (I	Municipality)	Cc	ommitment x Yes No		
Technical c	committee recommend	x Yes No RFF	PG recom	nmend X Yes No	REGION 10	
Study Typ	ре					
Emerge	ency preparedness	Floodplain modeling, map	oping and	d risk assessment 🛛 🗙 F	easibility study Preliminary project engine	eering
Other						
Problem	Area			N		olo lo la
City Swee	ny	County Brazoria			diocean	
Watershed name(s)		3ell Creek - San Bernard River				H
Tributary(ie	es) Cedar Lake Creek				Sweeny	R.
HUC# 12	2090402,12090401 S	tream miles (est.) TBD			321	
Drainage a	rea: square miles, est 0	0.21 or acreage, est. 13	37			and the
	erability index 0.21 .0 indicates least vulnerable	le; 1.0 indicates most vulnerable.)				
Other Drai	inage System Improvem	nents		16-2		

The Sponsor has indicated the existing stormwater infrastructure on CR322 is undersized. The existing flood risk is not well defined, and the risk indicators are based on the study area. Study results will provide a more detailed assessment of existing flood and potential flood risk reduction that will be used to evaluate projects for future planning cycles.

 Population at risk
 16
 Structures at risk
 9
 Critical facilities at risk
 0

 Farm/Ranch land impacted (acres)
 15
 Roadway(s) impacted (miles)
 2.89

Scope of Study

Study will include hydrologic and hydraulic modeling (with Atlas 14 rainfall), preliminary design of improvements, risk reduction analysis, verification of no adverse impacts, preparation of cost estimates and a benefit-cost-analysis, and an evaluation of potential constraints (environmental, utility conflicts, right-of-way needs, and constructability).

Related Goal(s)

6.1 Reduce the number of structures and critical facilities that are at high risk of repetitive loss through the implementation of structural flood mitigation projects.

Estimated Study Cost

Flood Management Evaluation (FME) STUDY Lower Colorado-Lavaca REGIONAL FLOOD					
Title Various Culverts Along Stevenson Slough	ID# 101000110	PLANNING GROUP			
Sponsor (name of entity) Sweeny (Municipality)	Commitment x Yes No				
Technical committee recommend 🗴 Yes 📃 No 🛛 RFPG I	recommend X Yes No	REGION 10			
Study Type					
Emergency preparedness Floodplain modeling, mappir Other	ng and risk assessment x Feas	ibility study Preliminary project engineering			
Problem Area	N				
City Sweeny County Brazoria					
Watershed East Matagorda Bay, Bell Creek - San Bernard River name(s)	O blo	cean H			
Tributary(ies) Unnamed Tributary					
HUC# 12090402,12090401 Stream miles (est.) TBD					
Drainage area: square miles, est 3.08 or acreage, est. 1,973	3				
Social vulnerability index 0.61 (SVI score 0.0 indicates least vulnerable; 1.0 indicates most vulnerable.)					
Other Roadway/Crossing Improvements					

The Sponsor has indicated there are multiple low water crossings in Stevenson Slough that are undersized and overtop. Proposed improvements include upsizing the culverts. The existing risk indicators are based on available data and will be better defined as part of the study. Study results will include detailed assessments of existing flood risk and potential flood risk reduction to be used in evaluating projects for future funding cycles.

Population at risk 403

Structures at risk 205

Critical facilities at risk 0

Farm/Ranch land impacted (acres) 335

Roadway(s) impacted (miles) 3.80

Scope of Study

Conduct a study to evaluate upsizing the existing culverts. Study will include hydrologic and hydraulic modeling (with Atlas 14 rainfall), preliminary design of improvements, risk reduction analysis, verification of no adverse impacts, preparation of cost estimates and a benefit-cost-analysis, and an evaluation of potential constraints (environmental, utility conflicts, right-of-way needs, and constructability).

Related Goal(s)

6.2 Increase the number of entities that mitigate flood risk at vulnerable roadways or waterways (e.g., low-water crossings, irrigation canals).

Estimated Study Cost

Cost \$125,000

Flood Management Evaluation (FME) STUDY Lower Colorado- REGIONAL F						
Title Spicewood Springs Road Low Wa	ater Crossing #1 Project	ID# 101000195	PLANNING GROUP			
Sponsor (name of entity) Travis (Coun	ıty)	Commitment x Yes No				
Technical committee recommend x	Yes No RFPG rec	ommend X Yes No	REGION 10			
Study Type						
Emergency preparedness	Floodplain modeling, mapping a	and risk assessment F	easibility study x Preliminary project engineering			
Other						
Problem Area		N				
City N/A	County Travis					
Watershed Bull Creek name(s)			Anderson Mill Jollyville			
Tributary(ies) Bull Creek						
HUC# 12090205,12070205 Stre	eam miles (est.) 0.10	n Bend	1			
Drainage area: square miles, est 14.	86 or acreage, est. 9,512					
Social vulnerability index 0.15 (SVI score 0.0 indicates least vulnerable; . Other	1.0 indicates most vulnerable.)					

The existing crossing consists of small pipe culverts and the roadway is overtopped in small, frequent, storm events (less than 5-yr). Road closures limit ingress/egress to several surrounding neighborhoods. The existing road is a 2-lane road with an average daily traffic count of 1,979.

Population at risk 16

Structures at risk 10

Farm/Ranch land impacted (acres) 283

Critical facilities at risk 0

Scope of Study

Conduct (or enhance existing study) to evaluate the replacement of the low water crossing with a 200 foot bridge. Study will update existing hydrologic and hydraulic models (with Atlas 14 rainfall) as needed to refine preliminary design and provide additional information needed to meet TWDB requirements for a flood mitigation project including verifying no adverse impacts, updating the cost estimate and providing a benefit-cost-analysis, and updating/verifying there are no potential constraints (environmental, utility conflicts, right-of-way needs, and constructability) that will prevent implementation.

Roadway(s) impacted (miles) 1.64

Related Goal(s)

6.2 Increase the number of entities that mitigate flood risk at vulnerable roadways or waterways (e.g., low-water crossings, irrigation canals).

Estimated Study Cost

Cost \$682,500

Flo	od Manag	<u>g</u> eme	nt Evalı	Jation	(FME) STUDY	Lower Colorado-Lavaca REGIONAL FLOOD
Title	Highland Hills Crossing Imp	provements P	roject		ID# 101000203	PLANNING GROUP
Sponso	r (name of entity) Austir	n (Municipalit	τγ)	Con	nmitment x Yes No	
Technic	al committee recomme	nd x Yes	No	RFPG recomn	nend X Yes No	REGION 10
Study	Туре					
Em	ergency preparedness	Floc	odplain modeling,	mapping and	risk assessment 🛛 🛛 Fe	asibility study X Preliminary project engineering
Otł	ner					
Proble	em Area				N	
City N	/A	Coun	nty Travis			
Waters nam	hed Lake Austin e(s)				2222	
Tributa	ry(ies) Dry Creek					
HUC#	12090205	Stream m	iles (est.) 0.25			
Draina	ge area: square miles, es	st 0.47	or acreage, est.	299		Abercrombie
	vulnerability index 0.47 re 0.0 indicates least vulner	rable; 1.0 indi	icates most vulnerab	le.)	\bigwedge	
Other						

The Highland Hills crossing is inundated by small, frequent, storm events (less than 2-year event) leading to unsafe conditions for motorists who need to use this roadway for neighborhood ingress/egress. Existing risk factors are based on available data and will be better defined as part of the study. Study results will include detailed assessments of the potential risk and potential flood risk reduction to be used in evaluating the project.

Population at risk 8	Structures at risk	3	Critical	facilities at risk 0	
Farm/Ranch land impacted (acres) 1		Roadway(s) impacted	(miles)	0.02	

Scope of Study

Update existing study to evaluate upgrading the hydraulic capacity of the crossing to reduce the frequency and depth of inundation and improve public safety. Study will update existing hydrologic and hydraulic models (with Atlas 14 rainfall) as needed to refine preliminary design and provide additional information needed to meet TWDB requirements for a flood mitigation project including verifying no adverse impacts, updating the cost estimate and providing a benefit-cost-analysis, and updating/verifying there are no potential constraints (environmental, utility conflicts, right-of-way needs, and constructability) that will prevent implementation.

Related Goal(s)

6.2 Increase the number of entities that mitigate flood risk at vulnerable roadways or waterways (e.g., low-water crossings, irrigation canals).

Estimated Study Cost

Cost \$150,000

Flood Management Evaluat	tion (FME) STUDY Lower Colorado-Lavaca REGIONAL FLOOD
Title Various Streets - Upgrade Existing Roadway Crossings	ID# 101000090 PLANNING GROUP
Sponsor (name of entity) Victoria (Municipality)	Commitment x Yes No
Technical committee recommend x Yes No RFPG	recommend X Yes No
Study Type	
Emergency preparedness Floodplain modeling, mapping	ing and risk assessment 🛛 🗴 Feasibility study 📄 Preliminary project engineering
Other	
Problem Area	N SAMA SAMA SAMA SAMA SAMA SAMA SAMA SAM
City Victoria County Victoria	
Watershed Unnamed Watershed name(s)	
Tributary(ies) Unnamed Tributary	
HUC# 12100204,12100402 Stream miles (est.) TBD	
Drainage area: square miles, est 44.61 or acreage, est. 28,5	48
Social vulnerability index 0.62 (SVI score 0.0 indicates least vulnerable; 1.0 indicates most vulnerable.)	Victoria
Other Roadway/Crossing Improvements	

The Sponsor has indicated there are multiple low water crossings that are undersized and overtop. Proposed improvements include upsizing the culverts. The existing risk indicators are based on available data and will be better defined as part of the study. Study results will include detailed assessments of existing flood risk and potential flood risk reduction to be used in evaluating projects for future funding cycles.

Population at risk 0

Structures at risk 0

Farm/Ranch land impacted (acres) 0

Roadway(s) impacted (miles)

Critical facilities at risk 0 0.00

Scope of Study

Conduct a study to evaluate upsizing the existing low water crossing. Study will include hydrologic and hydraulic modeling (with Atlas 14 rainfall), preliminary design of improvements, risk reduction analysis, verification of no adverse impacts, preparation of cost estimates and a benefit-cost-analysis, and an evaluation of potential constraints (environmental, utility conflicts, right-of-way needs, and constructability).

Related Goal(s)

6.2 Increase the number of entities that mitigate flood risk at vulnerable roadways or waterways (e.g., low-water crossings, irrigation canals).

Estimated Study Cost

Flood Manage	Lower Colorado-Lavaca REGIONAL FLOOD				
Title Harden City Buildings, Critical I	nfrastructure	ID# 101000091	PLANNING GROUP		
Sponsor (name of entity) Victoria (N	Лunicipality)	Commitment x Yes No			
Technical committee recommend	x Yes No RFPG	recommend X Yes No	REGION 10		
Study Type					
Emergency preparedness	Floodplain modeling, mappi	ng and risk assessment x F	easibility study Preliminary project engineering		
Other					
Problem Area		N			
City Victoria	County Victoria				
Watershed Placedo Creek, Marcac name(s)	lo Creek - Gracitas Creek				
Tributary(ies) Unnamed Tributary					
HUC# 12100204,12100402 St					
Drainage area: square miles, est 3	6.71 or acreage, est. 23,49	93	Victoria		
Social vulnerability index 0.62 (SVI score 0.0 indicates least vulnerable; 1.0 indicates most vulnerable.)					
Other Local Plans & Regulations			All and Date of the		

Numerous city buildings and other critical infrastructure are at risk due to flood damage. The purpose of the study will be to evaluate the existing infrastructure and determine feasibility and costs for increasing resiliency. The existing risk indicators are based on available data and will be better defined as part of the study. Study results will include detailed assessments of existing flood risk and potential flood risk reduction to be used in evaluating projects for future funding cycles.

Population at risk 2,502

Structures at risk 368

Critical facilities at risk 1

Farm/Ranch land impacted (acres) 849

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Roadway(s) impacted (miles) 0.00

Scope of Study

Perform a feasibility study to determine if some or all of the city infrastructure should be hardened or flood proofed, establish costs, and prioritize improvements.

Related Goal(s)

5.1 Reduce the number of structures and critical infrastructure that are at high risk of repetitive loss through property/easement acquisitions, relocations, floodproofing and/or elevation. 6.1 Reduce the number of structures and critical facilities that are at high risk of repetitive loss through the implementation of structural flood mitigation projects.

Estimated Study Cost

Floo	od Manage	eme	nt Evalı	uati	on (FME) _{STUDY}	Lower Colorado-Lavaca REGIONAL FLOOD
Title Ci	itywide Drainage Study				ID# 101000092	PLANNING GROUP
Sponsor	(name of entity) Victoria	Municipal	ity)		Commitment x Yes No	
Technica	l committee recommend	x Yes	No	RFPG ree	commend X Yes No	REGION 10
Study T	уре					
Emer	rgency preparedness	x Floo	dplain modeling,	mapping	and risk assessment	Feasibility study Preliminary project engineering
Othe	r					
Probler	n Area				N	
City Vict	toria	Coun	ty Victoria			
Watershed name(s) Multiple Watersheds						
Tributary	(ies) Unnamed Tributary	,				Victoria
HUC#	12100204,12100402	tream m	iles (est.) TBD			
Drainage	e area: square miles, est	385.81	or acreage, est.	566,92	0	
	Inerability index 0.62 0.0 indicates least vulnerab	le; 1.0 indi	cates most vulnerab	le.)		
Other W	/atershed Study					

The sponsor has indicated the existing stormwater infrastructure in the study area is undersized and the area is at risk of street flooding, property flooding, and potential structural flooding. The existing flood risk is not well defined, and the risk indicators are based on the study area. Study results will provide a more detailed assessment of existing flood and potential flood risk reduction that will be used to evaluate projects for future planning cycles.

Population at risk 3,478

Structures at risk 776

Critical facilities at risk 3

Farm/Ranch land impacted (acres) 37,406

Roadway(s) impacted (miles)

pacted (miles) 0.10

Scope of Study

Study will include hydrologic and hydraulic modeling (with Atlas 14 rainfall), preliminary design of improvements, risk reduction analysis, verification of no adverse impacts, preparation of cost estimates and a benefit-cost-analysis, and an evaluation of potential constraints (environmental, utility conflicts, right-of-way needs, and constructability).

Related Goal(s)

3.2 Increase the number of entities that have evaluated priority flood risk areas and flood risk reduction measures (e.g., alternatives analysis and preliminary engineering). 5.1 Reduce the number of structures and critical infrastructure that are at high risk of repetitive loss through property/easement acquisitions, relocations, floodproofing and/or elevation. 6.1 Reduce the number of structures and critical facilities that are at high risk of repetitive loss through the implementation of structural flood mitigation projects.

Estimated Study Cost

Cost \$250,000

Flo	od Manage	me	ent Evalu	uatio	n (FME) _{STUDY}	Lower Colorado-Lavaca REGIONAL FLOOD
Title	Various Streets - Upgrade Exist	ing Road	way Crossings and B	ridges	ID# 101000093	PLANNING GROUP
Sponso	r (name of entity) Victoria (C	ounty)		C	Commitment x Yes No	
Technic	cal committee recommend	x Yes	No	RFPG reco	mmend X Yes No	REGION 10
Study	Туре					
Em	ergency preparedness	Floc	odplain modeling,	mapping ar	nd risk assessment x	Feasibility study Preliminary project engineering
Oth	ner					
Proble	em Area				N	
City N	/A	Cour	nty Victoria			
Waters nam	hed Multiple Watersheds e(s)					
Tributa	ry(ies) Unnamed Tributary					Victoria
HUC#	12100204,12100402 St	ream m	iles (est.) TBD			
Draina	ge area: square miles, est 8	35.81	or acreage, est.	566,920		
	vulnerability index 0.62 re 0.0 indicates least vulnerable	; 1.0 ind	icates most vulnerat	le.)		
Other	Roadway/Crossing Improve	ments				

The Sponsor has indicated there are multiple low water crossings that are undersized and overtop. They have also identified that a number of bridges do not have sufficient hydraulic capacity and should be raised above the base flood elevation. Proposed improvements include upsizing the culverts and elevating bridges. The existing risk indicators are based on available data and will be better defined as part of the study. Study results will provide a more detailed assessment of existing flood and potential flood risk reduction that will be used to evaluate projects for future planning cycles.

Population at risk 3,478

Structures at risk 776

Critical facilities at risk 3

0.10

Farm/Ranch land impacted (acres) 37,406

Roadway(s) impacted (miles)

Scope of Study

Conduct a study to evaluate upsizing the existing low water crossings and bridges. Study will include hydrologic and hydraulic modeling (with Atlas 14 rainfall), preliminary design of improvements, risk reduction analysis, verification of no adverse impacts, preparation of cost estimates and a benefit-costanalysis, and an evaluation of potential constraints (environmental, utility conflicts, right-of-way needs, and constructability).

Related Goal(s)

6.2 Increase the number of entities that mitigate flood risk at vulnerable roadways or waterways (e.g., low-water crossings, irrigation canals).

Estimated Study Cost

Floc	od Managei	ment Evalu	iatio	n (FME) _{STUDY}	Lower Colorado-Lavaca REGIONAL FLOOD
Title Ide	entify and Buyout Repetitive L	oss Properties		ID# 101000095	PLANNING GROUP
Sponsor (name of entity) Victoria (Co	ounty)	C	ommitment x Yes No	
Technical	committee recommend	Yes No F	RFPG recor	nmend X Yes No	REGION 10
Study Ty	ype				
Emer	gency preparedness	Floodplain modeling, m	napping an	d risk assessment x F	easibility study Preliminary project engineering
Other					
Problem	n Area			N	
City N/A		County Victoria			
Watershed Multiple Watersheds name(s)					
Tributary((ies) Unnamed Tributary				Victoria
HUC# 1	2100204,12100402 Stre	eam miles (est.) TBD			
Drainage	area: square miles, est 885	5.81 or acreage, est.	566,920		
	nerability index 0.62 0.0 indicates least vulnerable;	1.0 indicates most vulnerable	2.)		
Other Vo	luntary buyout				

There are multiple flood prone properties that are within the County that are within the 100-year floodplain and subject to repetitive loss. Study results will provide a more detailed assessment of existing flood and potential flood risk reduction that will be used to evaluate voluntary buyouts for future planning cycles.

Population at risk 3,478

Structures at risk 776

Critical facilities at risk 3

Farm/Ranch land impacted (acres) 37,406

Roadway(s) impacted (miles) 0.10

Scope of Study

Perform a feasibility study to determine if some or all of the houses should be elevated or removed.

Related Goal(s)

5.1 Reduce the number of structures and critical infrastructure that are at high risk of repetitive loss through property/easement acquisitions, relocations, floodproofing and/or elevation.

Estimated Study Cost

Flo	od Managei	ment	Evalua	atio	n (FME) _{STUDY}	Lower Colorado-Lavaca REGIONAL FLOOD
Title H	Harden county buildings, critical	infrastructure	, and governmer	nt	ID# 101000096	PLANNING GROUP
Sponsor	(name of entity) Victoria (Co	ounty)		Co	ommitment x Yes No	
Technica	al committee recommend	Yes No	P RF	PG recon	nmend X Yes No	REGION 10
Study ⁻	Туре					
Eme	ergency preparedness	Floodplair	modeling, ma	pping and	d risk assessment x	Feasibility study Preliminary project engineering
Othe	er					
Proble	m Area				N	
City N/	A	County Vic	toria			
Watersh name	ned Multiple Watersheds e(s)					
Tributar	y(ies) Unnamed Tributary					Victoria
HUC#	12100204,12100402 Stre	eam miles (e	st.) TBD			
Drainage	e area: square miles, est 88	5.81 or ac	reage, est. 5	66,920		
	ulnerability index 0.62 e 0.0 indicates least vulnerable;	1.0 indicates n	nost vulnerable.)			
Other L	ocal Plans & Regulations				1	

Numerous County buildings and other critical infrastructure are at risk due to flood damage. The purpose of the study will be to evaluate the existing infrastructure and determine the feasibility and costs for increasing resiliency. The existing risk indicators are based on available data and will be better defined as part of the study. Study results will include detailed assessments of existing flood risk and potential flood risk reduction to be used in evaluating projects for future funding cycles.

Population at risk 3,478

Scope of Study

Structures at risk 776

Critical facilities at risk 3 0.10

Farm/Ranch land impacted (acres) 37,406

Roadway(s) impacted (miles)

Study will include hydrologic and hydraulic modeling (with Atlas 14 rainfall), preliminary design of improvements, risk reduction analysis, verification of no adverse impacts, preparation of cost estimates and a benefit-cost-analysis, and an evaluation of potential constraints (environmental, utility conflicts, rightof-way needs, and constructability).

Related Goal(s)

5.1 Reduce the number of structures and critical infrastructure that are at high risk of repetitive loss through property/easement acquisitions, relocations, floodproofing and/or elevation.

Estimated Study Cost

Flood Manag	gement Evalua	Lower Colorado-Lavaca REGIONAL FLOOD			
Title Review and Update Flood	olain Management Plan	ID# 101000088	PLANNING GROUP		
Sponsor (name of entity) Volen	te (Municipality)	Commitment x Yes No			
Technical committee recomme	nd x Yes No RFPG	G recommend 🗙 Yes 📃 No	REGION 10		
Study Type					
x Emergency preparedness	Floodplain modeling, mapp	oing and risk assessment	easibility study Preliminary project engineering		
Other					
Problem Area		N			
City Volente	County Travis				
Watershed Hurst Creek - Lake Travis, Cypress Creek - Lake Travis name(s)					
Tributary(ies) Unnamed Tribut	ary	o Vista			
HUC# 12090205	Stream miles (est.) TBD				
Drainage area: square miles, est 2.04 or acreage, est. 1,308					
Social vulnerability index 0.15 (SVI score 0.0 indicates least vulnerable; 1.0 indicates most vulnerable.)					
Other Local Plans & Regulation	Other Local Plans & Regulations Hudson Bend				

The city is located on the banks of Lake Travis and has numerous houses located in, or adjacent to, the 100-year floodplain. The purpose of this study is to review the city's floodplain management plan.

Population at risk 391

Structures at risk 150

Critical facilities at risk 0

0.20

Farm/Ranch land impacted (acres) 136

Roadway(s) impacted (miles)

Scope of Study

The study would review the existing floodplain management plan and regulations, and make recommendations for improvements such as adopting higher standards and establish an annual review cycle.

Related Goal(s)

3.1 Increase the number of entities that have updated watershed models and floodplain maps to reflect current conditions, including as applicable Atlas 14 (Volume 11) revised rainfall data. 3.3 Increase the number of entities that have digital flood insurance rate maps (DFIRMs) that reflect current conditions.

Estimated Study Cost

Cost \$25,000

Flood Mar	lagement Evalua	tion (FME) STUDY	Lower Colorado-Lavaca REGIONAL FLOOD
Title Develop an Emerger	cy Operations and Evacuation Plan	ID# 101000089	PLANNING GROUP
Sponsor (name of entity)	Volente (Municipality)	Commitment x Yes No	
Technical committee reco	mmend x Yes No RFP	G recommend 🛛 X Yes 📃 No	REGION 10
Study Type			
x Emergency preparedr	ness Floodplain modeling, map	ping and risk assessment	Feasibility study Preliminary project engineering
Other			
Problem Area		N	
City Volente	County Travis		
Watershed Hurst Creek - Lake Travis, Cypress Creek - Lake Travis name(s)			
Tributary(ies) Unnamed 1	Fributary	o Vista	
HUC# 12090205	Stream miles (est.) TBD		
Drainage area: square mil	es, est 2.04 or acreage, est. 1,3	308	2769
Social vulnerability index (SVI score 0.0 indicates least	0.15 vulnerable; 1.0 indicates most vulnerable.)		
Other Local Plans & Regu	lations		Hudson Bend

The Sponsor's evacuation plan(s) are out of date and need to be updated to assist with emergency coordination during a flood event.

Population at risk 391

Structures at risk 150

Critical facilities at risk 0

Farm/Ranch land impacted (acres) 136

Roadway(s) impacted (miles) 0.20

Scope of Study

Coordinate with agencies and local governments as necessary to develop/update the evacuation plan.

Related Goal(s)

2.1 Increase the number of communities with warning and emergency response capabilities, or which participate in regional flood warning systems (e.g., City of Austin Flood Early Warning System) that can detect flood threats in real time and provide timely warning of impending flood danger.

Estimated Study Cost

Flood Management Evaluation (FME) STUDY Lower Colorado-Lavaca REGIONAL FLOOD					
Title West Brazoria County Draina	ge District 11 - Master Drainage F	Plan ID# 1010	000214	PLANNING GROUP	
Sponsor (name of entity) West Br	azoria County Drainage District #	Commitment	x Yes No		
Technical committee recommend	t x Yes No R	RFPG recommend X	Yes No	REGION 10	
Study Type					
Emergency preparedness Other	Floodplain modeling, m	apping and risk assess	ment x Feasil	bility study Preliminary project engineering	
Problem Area		N			
City N/A	County Brazoria				
Watershed San Bernard River name(s)				Angletor	
Tributary(ies) Dance, Linnville, Li	ttle Linnville and Redfish; Bea	ar, Bell,			
HUC# 12090401,12090402	Stream miles (est.) 292.00	1000		Lake Jackson	
Drainage area: square miles, est	506.66 or acreage, est.	324,261	Bay City		
Social vulnerability index 0.6 (SVI score 0.0 indicates least vulneral	ole; 1.0 indicates most vulnerable	<u>e.</u>)		San Bernard	
Other				Nat'l Wildlife	

The Region 10 Flood Planning Group draft plan notes the WBDD#11 area as SEVERE for current and future risk as well as the location of CRITICAL infrastructure. The location of the WBDD#11 has direct connection to Wharton and Fort Bend Counties, resulting in the need for improvements within the WBDD#11 to assist these neighboring counties. The purpose and goal of the MDP is to conduct a comprehensive evaluation of the existing drainage conditions throughout the district, develop an accurate and current understanding of the drainage infrastructure, and make recommendations on future projects and infrastructure. The assessment will include an inventory of the existing data, hydrologic and hydraulics watershed model, flooding problem area identification, and flood mitigation solutions. A drainage Capital Improvement Plan (CIP), including costs, will be developed to address flooding issues. As part of the MDP scope a web based project management tool will be developed to assist the District with monitoring maintenance activities and construction improvements.

opulation at risk 16,203	Structures at	risk 7,737	Critical	facilities at risk 10	
Farm/Ranch land impacted	l (acres) 37,018	Roadway(s) in	npacted (miles)	219.73	

Scope of Study

Collect and review existing reports, studies, gage data, etc, verify watershed boundaries, examine flooded structures and NFIP claims data. Develop base conditions models for different storm conditions using Atlas 14 rainfall events, determine level of service for the main stem and tributaries and create HEC-RAS 2D models to determine sheet flow issues. Identify problem areas, areas for future development, and constraints affecting the watershed. Perform desktop environmental studies and document baseline conditions, identify alternatives and perform hydraulic analysis to solve future flooding issues. Develop Watershed Strategy via hierarchy of alternatives considering opportunities to team with other agencies, damage reduction, costs, priority areas to be worked and score each of the alternatives, issue a technical note providing documentation on the process of developing the strategy. Create a comprehensive Watershed Plan including a summary of projects and timeline for implementation, and exhibits.

Related Goal(s)

5.1 Reduce the number of structures and critical infrastructure that are at high risk of repetitive loss through property/easement acquisitions, relocations, floodproofing and/or elevation. 6.1 Reduce the number of structures and critical facilities that are at high risk of repetitive loss through the implementation of structural flood mitigation projects.

Estimated Study Cost

Flood Management	Lower Colorado-Lavaca REGIONAL FLOOD		
Title Bee Creek Drainage Improvements		ID# 101000084	PLANNING GROUP
Sponsor (name of entity) West Lake Hills (Municip	ality) Co	ommitment x Yes No	
Technical committee recommend 🗴 Yes 📃 N	lo RFPG recom	nmend × Yes No	REGION 10
Study Type Emergency preparedness Other	in modeling, mapping and	d risk assessment x F	easibility study Preliminary project engineering
Problem Area			
City West Lake Hills County Tr	avis		
Watershed Lake Austin - Town Lake name(s)			
Tributary(ies) Little Bee Creek			
HUC# 12090205 Stream miles (est.) 1.25		West Lake Hills
Drainage area: square miles, est 1.06 or a	acreage, est. 677		
Social vulnerability index 0.15 (SVI score 0.0 indicates least vulnerable; 1.0 indicates	most vulnerable.)	Lost Creek	2244
Other Channel Improvements			

The existing channel and road crossings are undersized resulting in localized erosion as well as flood risk to houses along Yaupon Valley Road and Laurel Valley Road. The area has experienced excessive flow depth and velocity, has structures at risk, historical flood damages, and channel erosion. Study results will provide a more detailed assessment of existing flood and potential flood risk reduction that will be used to evaluate projects for future planning cycles.

Population at risk 43

Structures at risk 14

Critical facilities at risk 0

Farm/Ranch land impacted (acres) 18

Roadway(s) impacted (miles)

0.47

Scope of Study

Study will include hydrologic and hydraulic modeling (with Atlas 14 rainfall), preliminary design of improvements, risk reduction analysis, verification of no adverse impacts, preparation of cost estimates and a benefit-cost-analysis, and an evaluation of potential constraints (environmental, utility conflicts, right-of-way needs, and constructability).

Related Goal(s)

6.1 Reduce the number of structures and critical facilities that are at high risk of repetitive loss through the implementation of structural flood mitigation projects. 6.2 Increase the number of entities that mitigate flood risk at vulnerable roadways or waterways (e.g., low-water crossings, irrigation canals).

Estimated Study Cost

Flood Management Evaluation (FME) STUDY Lower Colorado-Lavaca REGIONAL FLOOD				
Title City-wide Flood Warning Systems	ID# 101000184	PLANNING GROUP		
Sponsor (name of entity) Wharton (Municipality)	Commitment x Yes No			
Technical committee recommend X Yes No RFPG	recommend X Yes No	REGION 10		
Study Type				
Emergency preparedness Floodplain modeling, mappi	ng and risk assessment x Feas	ibility study Preliminary project engineering		
Other				
Problem Area	N			
City Wharton County Wharton				
Watershed Multiple Watersheds name(s)		Wharton		
Tributary(ies) Unnamed Tributary		DATE OF ALL OF		
HUC# 12090402,12090302 Stream miles (est.) TBD				
Drainage area: square miles, est 7.50 or acreage, est. 4,79	9			
Social vulnerability index 0.81 (SVI score 0.0 indicates least vulnerable; 1.0 indicates most vulnerable.)				
Other Install Flood Early Warning System		The second second		

The county has identified multiple roadway/crossings that overtop and where structural improvements are not feasible. Proposed study will identify priority crossings to receive flood warning systems or other safety improvements.

Population at risk 8,920

Structures at risk 1,901

Critical facilities at risk 6

Farm/Ranch land impacted (acres) 1,118

Roadway(s) impacted (miles) 57.10

Scope of Study

Evaluate the type of flood early warnings system (flashers, barricades, signage) and communication systems requirements for the installation and long-term maintenance of the system. Include hydrologic and hydraulic modeling (if needed) including depth, duration and frequency of flooding, daily traffic counts, and length of detour (minutes),

Related Goal(s)

2.1 Increase the number of communities with warning and emergency response capabilities, or which participate in regional flood warning systems (e.g., City of Austin Flood Early Warning System) that can detect flood threats in real time and provide timely warning of impending flood danger. 6.2 Increase the number of entities that mitigate flood risk at vulnerable roadways or waterways (e.g., low-water crossings, irrigation canals).

Estimated Study Cost

Cost \$250,000

Flood Management Evalua	tion (FME) STUDY Lower Colorado-Lavaca REGIONAL FLOOD
Title City-wide Drainage Master Plan	ID# 101000185 PLANNING GROUP
Sponsor (name of entity) Wharton (Municipality)	Commitment x Yes No
Technical committee recommend 🗴 Yes 📃 No RFF	PG recommend × Yes No
Study Type	
Emergency preparedness Floodplain modeling, map	pping and risk assessment x Feasibility study Preliminary project engineering
Other	
Problem Area	N N
City Wharton County Wharton	
Watershed Multiple Watersheds name(s)	Minister Contraction
Tributary(ies) Unnamed Tributary	Carl and all and a Development of the second s
HUC# 12090402,12090302 Stream miles (est.) TBD	
Drainage area: square miles, est 7.50 or acreage, est. 4,	799
Social vulnerability index 0.81 (SVI score 0.0 indicates least vulnerable; 1.0 indicates most vulnerable.)	
Other Watershed Study	

The area has multiple local drainage problems and portions of the region are at risk of flooding. The area has experienced excessive flow depth and velocity, has structures at risk, historical flood damages, and channel erosion. The existing flood risk is not well defined, and the risk indicators are based on the study area. Study results will provide a more detailed assessment of existing flood and potential flood risk reduction that will be used to evaluate projects for future planning cycles.

Population at risk 8,920

Structures at risk 1,901

Critical facilities at risk 6

Farm/Ranch land impacted (acres) 1,118

Roadway(s) impacted (miles) 57.10

Scope of Study

The flood study will include hydrologic and hydraulic modeling (with Atlas 14 rainfall) to identify priority flood risk areas, preliminary design of improvements, risk reduction analysis, verification of no adverse impacts, preparation of cost estimates and a benefit-cost-analysis, and an evaluation of potential constraints (environmental, utility conflicts, right-of-way needs, and constructability).

Related Goal(s)

5.1 Reduce the number of structures and critical infrastructure that are at high risk of repetitive loss through property/easement acquisitions, relocations, floodproofing and/or elevation. 6.1 Reduce the number of structures and critical facilities that are at high risk of repetitive loss through the implementation of structural flood mitigation projects.

Estimated Study Cost

Cost \$250,000

Flood Management Eva	uation (FME) STUDY	Lower Colorado-Lavaca REGIONAL FLOOD
Title Glen Flora Drainage Master Plan and Levee Project	ID#	101000208	PLANNING GROUP
Sponsor (name of entity) Wharton (County)	Commit	ment x Yes No	
Technical committee recommend 🗙 Yes 📃 No	RFPG recommend	d X Yes No	REGION 10
Study Type			
Emergency preparedness Floodplain modeling	g, mapping and risk a	assessment x Fe	easibility study Preliminary project engineering
Other			
Problem Area	Г	N	
City Glen Flora County Wharton		1 States	
Watershed San Bernard, Lower Colorado name(s)			
Tributary(ies) TBD			
HUC# 12090302,12090401 Stream miles (est.) 0.00			Glen Flora
Drainage area: square miles, est 0.60 or acreage, est	. 381	200	
Social vulnerability index 0.77 (SVI score 0.0 indicates least vulnerable; 1.0 indicates most vulner	able.)		KIP
Other		AL A	

There is a need to evaluate flood risk within the Glen Flora area. Glen Flora flooded severely during Harvey and a levee could benefit both Glen Flora and Wharton County. Local flooding is also an issue and roadside ditches, culverts, and stormsewer should be upgraded to contain the 10-yr Atlas 14 flow.

Population at risk 87

Structures at risk 48

Roadway(s) impacted (miles) 1.41

Farm/Ranch land impacted (acres) 112

Critical facilities at risk 0

Scope of Study

Study will include InfoWorks ICM and HEC RAS 2D analysis of the urban center of Glen Flora. It will also include a regional evaluation of expanding the USACE levee along FM 102. Study scope will include hydrologic and hydraulic modeling (with Atlas14 rainfall), preliminary design of improvements, risk reduction analysis, verification of no adverse impacts, preparation of cost estimate and benefit-cost-analysis, and an evaluation of potential constraints (environmental, utility conflicts, right-of-way needs, and constructability).

Related Goal(s)

5.1 Reduce the number of structures and critical infrastructure that are at high risk of repetitive loss through property/easement acquisitions, relocations, floodproofing and/or elevation. 6.1 Reduce the number of structures and critical facilities that are at high risk of repetitive loss through the implementation of structural flood mitigation projects.

Estimated Study Cost

Cost \$300,000

Flo	od Managei	ment Evalu	atio	n (FME) _{STUDY}	Lower Colorado-Lavaca REGIONAL FLOOD
Title	Jarvis Creek Channel Widening a	and Regional Detention Projec	ct	ID# 101000211	PLANNING GROUP
Sponsc	or (name of entity) Wharton (C	County)	Cr	Commitment x Yes No	
Technie	cal committee recommend 🗴	x Yes No R	RFPG recor	mmend X Yes No	REGION 10
Study	/ Туре				
Em	nergency preparedness	Floodplain modeling, m	napping an	id risk assessment	Feasibility study X Preliminary project engineering
Oth	her				
Proble	em Area			N	Wharton
City N	I/A	County Wharton			
	shed Lower Colorado ne(s)				
Tributa	ary(ies) Jarvis Creek			and the second	
HUC#	12090302,12090402 Stre	ream miles (est.) 44.30			
Draina	ge area: square miles, est 31.	41 or acreage, est.	20,105		
	vulnerability index 0.76 bre 0.0 indicates least vulnerable;	: 1.0 indicates most vulnerable	2.)		
Other					

In recent years, there have been flooding problems along Jarvis Creek, heavy vegetation issues, and the need for improvements to bridges, culverts, and a wider overall channel configuration. Jarvis Creek is a major flood relief channel for the City of Wharton and should be designed based on a future conditions scenario for the City of Wharton.

Population at risk 2,119

Structures at risk 755

Critical facilities at risk 0

Farm/Ranch land impacted (acres) 5,475

22.30

Scope of Study

This study includes a 1D/2D HEC RAS model for Jarvis Creek and development of channel improvements and regional detention solutions to mitigate the 25yr flood risk areas. Study scope will include hydrologic and hydraulic modeling (with Atlas14 rainfall), preliminary design of improvements, risk reduction analysis, verification of no adverse impacts, preparation of cost estimate and benefit-cost-analysis, and an evaluation of potential constraints (environmental, utility conflicts, right-of-way needs, and constructability).

Roadway(s) impacted (miles)

Related Goal(s)

5.1 Reduce the number of structures and critical infrastructure that are at high risk of repetitive loss through property/easement acquisitions, relocations, floodproofing and/or elevation. 6.1 Reduce the number of structures and critical facilities that are at high risk of repetitive loss through the implementation of structural flood mitigation projects. 6.2 Increase the number of entities that mitigate flood risk at vulnerable roadways or waterways (e.g. low-water crossings, irrigation canals)

Estimated Study Cost

Cost \$150,000

Flood Manag	ement Evalua	Lower Colorado-Lavaca REGIONAL FLOOD	
Title Louise Internal Drainage Ma	aster Plan	ID# 101000212	PLANNING GROUP
Sponsor (name of entity) Wharton	on (County)	Commitment x Yes No	
Technical committee recommen	nd 🗙 Yes 📃 No 🛛 RFP	G recommend X Yes No	REGION 10
Study Type			
Emergency preparedness	Floodplain modeling, map	ping and risk assessment x Fe	easibility study Preliminary project engineering
Other			
Problem Area		N	
City N/A	County Wharton		
Watershed Navidad name(s)			
Tributary(ies) East Mustang Cre	ek and Middle Mustand Creek		
HUC# 12100102	Stream miles (est.) 0.60		
Drainage area: square miles, est	0.82 or acreage, est. 52	6	Louise
Social vulnerability index 0.38 (SVI score 0.0 indicates least vulnero	able; 1.0 indicates most vulnerable.)		
Other			

Rain events in November 2004 caused severe flooding and flood damage. In addition, the 2010 Wharton County drainage master plan revealed a significant flood risk, including structures and roadway crossings, as East Mustang Creek overflows into Middle Mustang Creek.

Population at risk 35

Structures at risk 20

Critical facilities at risk 0

Farm/Ranch land impacted (acres) 16

Roadway(s) impacted (miles) 0.09

Scope of Study

Conduct a study that will include an InfoWorks ICM 1D/2D surface and subsurface drainage analysis and flood reduction recommendations. Study scope will include hydrologic and hydraulic modeling (with Atlas14 rainfall), preliminary design of improvements, risk reduction analysis, verification of no adverse impacts, preparation of cost estimate and benefit-cost-analysis, and an evaluation of potential constraints (environmental, utility conflicts, right-of-way needs, and constructability).

Related Goal(s)

5.1 Reduce the number of structures and critical infrastructure that are at high risk of repetitive loss through property/easement acquisitions, relocations, floodproofing and/or elevation. 6.1 Reduce the number of structures and critical facilities that are at high risk of repetitive loss through the implementation of structural flood mitigation projects.

Estimated Study Cost

Cost \$400,000

Flood Manager	nent Evaluat	tion (FME) _{STUDY}	Lower Colorado-Lavaca REGIONAL FLOOD
Title Wharton County Drainage Maste	r Plan Update	ID# 101000213	PLANNING GROUP
Sponsor (name of entity) Wharton (Co	ounty)	Commitment x Yes No	
Technical committee recommend x	Yes No RFPG	recommend X Yes No	REGION 10
Study Type			
Emergency preparedness	Floodplain modeling, mappi	ng and risk assessment x	Feasibility study Preliminary project engineering
Other			
Problem Area		N	
City N/A	County Wharton		
Watershed Navidad, Central Matago name(s) Matagorda Bay, San Beri			
Tributary(ies) Blue Creek, Bosque Cr	eek, Clarks Branch, Coon Bran	ch,	
HUC# 12090302,12090401 Stre	eam miles (est.) 385.00	Total State	
Drainage area: square miles, est 1,0	90.72 or acreage, est. 698,	060	
Social vulnerability index 0.71	1.0 indicatos most un la orstila	and the second second	
(SVI score 0.0 indicates least vulnerable; . Other	LO maicates most vuinerable.)		Bay City

The county has suffered extreme flooding from recent events such as the floods of 1998, 2004, 2016, 2019 and Hurricane Harvey. The area has multiple local drainage problems including local street floods with excessive flow depth and velocity, has structures at risk, historical flood damages, and channel erosion. The existing flood risk is not well defined, and the risk indicators are based on the study area. Study results will provide a more detailed assessment of existing flood and potential flood risk reduction that will be used to evaluate projects for future planning cycles.

Population at risk 24,391

Structures at risk 7,119

.,___

Farm/Ranch land impacted (acres) 177,474

es at risk 7,119

Critical facilities at risk 8 d (miles) 367.95

Scope of Study

An update to the Wharton County Drainage Master Plan (circa 2008) is needed to include new Atlas 14 1D/2D HEC RAS models for the entire county. This study would include all FEMA Streams except Colorado River, San Bernard River, West Bernard River, Lower Caney Creek, and Jarvis Creek. Study scope will include hydrologic and hydraulic modeling, preliminary design of improvements, risk reduction analysis, verification of no adverse impacts, preparation of cost estimate and benefit-cost-analysis, and an evaluation of potential constraints (environmental, utility conflicts, right-of-way needs, and constructability).

Roadway(s) impacted (miles)

Related Goal(s)

5.1 Reduce the number of structures and critical infrastructure that are at high risk of repetitive loss through property/easement acquisitions, relocations, floodproofing and/or elevation. 6.1 Reduce the number of structures and critical facilities that are at high risk of repetitive loss through the implementation of structural flood mitigation projects.

Estimated Study Cost

Cost \$4,000,000

Flood Management Ev	valuation (FME) STUDY	Lower Colorado-Lavaca REGIONAL FLOOD
Title Burnet County Lower Water Crossing Assessment	ID# 101000221	PLANNING GROUP
Sponsor (name of entity) Burnet (County)	Commitment x Yes No	
Technical committee recommend x Yes No	RFPG recommend 🛛 🗙 Yes 📃 No	REGION 10
Study Type		
Emergency preparedness Floodplain mo	deling, mapping and risk assessment	Feasibility study Preliminary project engineering
Other		
Problem Area	N	
City Bastrop County Burnet		
Watershed Austin-Travis Lakes, Buchanan-Lyndon B. name(s) Pedernales	Johnson Lakes	
Tributary(ies) Multiple	and the second sec	
HUC# 12090205,12090201 Stream miles (est.)	1.45	
Drainage area: square miles, est 533.64 or acreag	ge, est. 341,530	
Social vulnerability index 0.32 (SVI score 0.0 indicates least vulnerable; 1.0 indicates most v	vulnerable.)	
Other		

Burnet County is located in flash flood alley and is fairly rural in nature. In the Lower Colorado-Lavaca planning region, there are 59 low water crossings in Burnet County, however evaluation of all stream crossings likely results in a higher number of designated lower water crossings. This assessment should be conducted after the updated modeling and mapping utilizing Atlas 14 rainfall data is conducted in this portion of the County.

Population at risk 6,359

Structures at risk 3,799

Critical facilities at risk 4

Farm/Ranch land impacted (acres) 16,335

Roadway(s) impacted (miles) 34.19

Scope of Study

The assessment of low water crossings includes the evaluation of existing condition level of service, average daily traffic, and emergency access routes to understand risk of each crossing. Following the assessment, low water crossings can be prioritized to support future implementation of improvements.

Related Goal(s)

3.2 Increase the number of entities that have evaluated priority flood risk areas. 6.2 Increase the number of entities that mitigate flood risk at vulnerable roadways or waterways.

Estimated Study Cost

Cost \$150,000

Flood Management Eva	aluation (FME) st	Lower Colorado-Lavaca REGIONAL FLOOD
Title Burnet County Modeling and Mapping Update	ID# 101000222	PLANNING GROUP
Sponsor (name of entity) Burnet (County)	Commitment x Yes	No
Technical committee recommend x Yes No	RFPG recommend X Yes No	REGION 10
Study Type		
Emergency preparedness Floodplain modeli	ing, mapping and risk assessment	Feasibility study Preliminary project engineering
Other		
Problem Area	N	
City Bastrop County Burnet		
Watershed Piney Creek-Colorado River name(s)		
Tributary(ies) Multiple		
HUC# 12090205,12090201 Stream miles (est.) 1.45	5	
Drainage area: square miles, est 533.64 or acreage, e	est. 341,530	
Social vulnerability index 0.32 (SVI score 0.0 indicates least vulnerable; 1.0 indicates most vulne	erable.)	Rour
Other	Same of	

Burnet County is located in flash flood alley and is fairly rural innature. In the Lower Colorado-Lavaca planning region, there are approximately 1,450 riverine stream miles that need updated analysis utilizing the best available science (software, Atlas14 rainfall) and data (topography) to identify flood exposure.

Population at risk 6,359

Structures at risk 3,799

Critical facilities at risk 4

Farm/Ranch land impacted (acres) 16,335

Roadway(s) impacted (miles) 34.19

Scope of Study

The study should include the development of updated hydrologic and hydraulic models utilizing the best available science and data. Updated floodplain maps can then be used for regulation and update of outdated FEMA maps in this portion of Burnet County.

Related Goal(s)

3.2 Increase the number of entities that have evaluated priority flood risk areas. 6.2 Increase the number of entities that mitigate flood risk at vulnerable roadways or waterways.

Estimated Study Cost

Cost \$4,000,000

Flood Man	agement Evalua	ation (FME) STUDY	Lower Colorado-Lavaca REGIONAL FLOOD
Title Caldwell County Floor	d Early Warning System	ID# 101000223	PLANNING GROUP
Sponsor (name of entity)	Caldwell (County)	Commitment x Yes No	
Technical committee recor	nmend x Yes No RF	PG recommend x Yes No	REGION 10
Study Type		_	
x Emergency prepared ne	ess Floodplain modeling, ma	oping and risk assessment 🛛 🛛 🛛	easibility study 🛛 📄 Preliminary project engineering
Other			
Problem Area		N	
City N/A	County Caldwell		
Watershed Walnut Creek- name(s) River, and Low	Cedar Creek, Plum Creek, Upper San l er San Marcos River	Marcos San Marco	
Tributary(ies) TBD			
HUC# 12090301	Stream miles (est.) TBD		
Drainage area: square mile	es, est 544.69 or acreage, est. 34	48,604	
Social vulnerability index ((SVI score 0.0 indicates least v).83 ulnerable; 1.0 indicates most vulnerable.)	ew Braunfels	
Other			

Caldwell County and other local participating entities should review existing flood early warning system equipment, procedures, and training to ensure that emergency responders can meet residents' needs in an efficient, safe, and timely manner during a flood event.

Population at risk 113

Structures at risk 99

Critical facilities at risk 0

Farm/Ranch land impacted (acres) 4,279

Roadway(s) impacted (miles) 3.62

Scope of Study

Review of existing gages and flood early warning system equipment. Evaluate software and hardware required to develop and/or improve flood early warning system effectiveness. Coordinate with local participating communities to develop a set of flood early warning system development/improvement goals. Develop a budget to develop/upgrade the flood early warning system. Develop a budget and strategy to ensure long term future funding of the flood early warning system.

Related Goal(s)

2.1 Increase the number of communities with warning and emergency response capabilities, or which participate in regional flood warning systems (e.g., City of Austin Flood Early Warning System) that can detect flood threats in real time and provide timely warning of impending flood danger. 6.2 Increase the number of entities that mitigate flood risk at vulnerable roadways or waterways (e.g., low-water crossings, irrigation canals).

Estimated Study Cost

Cost \$50,000

Flood Mana	gement Eva	luation	(FME) STUDY	Lower Colorado-Lavaca REGIONAL FLOOD
Title Lytton Springs Creek Near	- CR 174	ID	# 101000224	PLANNING GROUP
Sponsor (name of entity) Caldy	well (County)	Comm	nitment x Yes No	
Technical committee recomme	end x Yes No	RFPG recomme	nd x Yes No	REGION 10
Study Type				
Emergency preparedness	Floodplain modeli	ng, mapping and ris	k assessment Fe	asibility study Preliminary project engineering
Other				
Problem Area			N C.	
City Dale	County Caldwell			
Watershed Lytton Springs Cre name(s)	ek			
Tributary(ies) TBD				
HUC# 12090301	Stream miles (est.) 1.10	l		
Drainage area: square miles, e	est 0.11 or acreage, e	est. 70		A AN TEAR AND AND AND
Social vulnerability index 0.83 (SVI score 0.0 indicates least vulne		erable.)		TO PALATER AND
Other				

Based on hydraulic modeling of existing conditions, approximately 14 residential and agricultural structures lie within the 1% AEP floodplain on the south side of CR 174 at the downstream end of Lytton Springs Creek.

Population at risk 13

Structures at risk 12

Critical facilities at risk 0

0.02

Farm/Ranch land impacted (acres) 51

Scope of Study

Conduct a study to evaluate upsizing the existing culvert crossing. Study will include hydrologic and hydraulic modeling (with Atlas 14 rainfall), preliminary design of improvements, risk reduction analysis, verification of no adverse impacts, preparation of cost estimates and a benefit-cost-analysis, and an evaluation of potential constraints (environmental, utility conflicts, right-of-way needs, and constructability).

Roadway(s) impacted (miles)

Related Goal(s)

6.2 Increase the number of entities that mitigate flood risk at vulnerable roadways or waterways.

Estimated Study Cost

Cost \$40,000

Flood Manag	gement Ev	valuatio	on (FME) _{stud}	V	Colorado-Lavaca
Title CR175 @ Cedar Creek Trib	1		ID# 101000225		NING GROUP
Sponsor (name of entity) Caldy	vell (County)		Commitment x Yes No		
Technical committee recomme	nd x Yes No	RFPG rec	commend x Yes No		REGION 10
Study Type			_		
Emergency preparedness	Floodplain mod	leling, mapping	and risk assessment	Feasibility study	Preliminary project engineering
Other					
Problem Area					
City Dale	County Caldwel				
Watershed Cedar Creek name(s)			idge		
Tributary(ies) TBD				2/32.7	1/ Partin Astron
HUC# 12090301	Stream miles (est.) 0	.81	X		and the states of
Drainage area: square miles, e	st 0.14 or acreage	e, est. 88			C 20Bran College stre
Social vulnerability index 0.83 (SVI score 0.0 indicates least vulne	rable; 1.0 indicates most v	ulnerable.)	OFFS	1 AND	
Other					A AND A AND A

CR 175 (Tomahawk Trail) has been identified by Caldwell County as a priority crossing in need of upgrade. The crossing remained closed for 2 days during Hurricane Harvey and is inundated by the 1% AEP storm event. Existing risk factors are based on available data and will be better defined as part of the study. Study results will include detailed assessments of the potential risk and potential flood risk reduction to be used in evaluating the project.

Population at risk 0

Scope of Study

Structures at risk 0

Roadway(s) impacted (miles)

Farm/Ranch land impacted (acres) 59

Critical facilities at risk 0

0.21

Conduct a study to evaluate upsizing the existing culvert crossing. Study will include hydrologic and hydraulic modeling (with Atlas 14 rainfall), preliminary design of improvements, risk reduction analysis, verification of no adverse impacts, preparation of cost estimates and a benefit-cost-analysis, and an evaluation of potential constraints (environmental, utility conflicts, right-of-way needs, and constructability).

Related Goal(s)

6.2 Increase the number of entities that mitigate flood risk at vulnerable roadways or waterways.

Estimated Study Cost

Cost \$40,000

Flood Manag	geme	nt Evalı	Jatio	on (FME) _{STUDY}		Colorado-Lavaca
Title Cummins Creek WS SCS Si	te 1 Dam Floc	od Management Eval	uation	ID# 101000228		NING GROUP
Sponsor (name of entity) Lee (0	County)		(Commitment x Yes No	r LAN	
Technical committee recomme	end x Yes	No	RFPG reco	ommend X Yes No		REGION 10
Study Type						
Emergency preparedness	Floc	odplain modeling,	mapping a	nd risk assessment	Feasibility study	Preliminary project engineering
Other						
Problem Area				N	7	ER O
City N/A	Coun	nty Lee		290		
Watershed Onion Creek-Color name(s)	ado River					H
Tributary(ies) TBD				matter All		Son Andreas
HUC# 12090301	Stream m	iles (est.) 4.26		and marked	market and	
Drainage area: square miles, es	st 1.16	or acreage, est.	742	Satis X1	A. L. Ball	
Social vulnerability index 0.25 (SVI score 0.0 indicates least vulner			ıle.)	1 Contraction	1 2 7/4	a so- a la ca
Other				to the second	6.08 30	Back Street

During major flood events on Cummins Creek the backwater created by the subject dam floods approximately 25 to 50 homes. The backwater flooding also cuts access to the area due to inundation of County Roads 233 and 226. Backwater flooding in this area is also likely aggravated by sedimentation behind the dam. The most extreme of these recent flood events was Hurricane Harvey in 2017, but the area also flooded in 2015 and 2016. Príor flooding has led to implementation of two separate buyout programs, one for the 2016 floods and a separate one for Hurricane Harvey. The flood risk area is currently the focus of several ongoing grants and other efforts to improve the situation, including an effort to raise the elevation of CR 226 and construct a new bridge to allow evacuation of residents. One potential flood risk reduction effort that has not previously been evaluated is to reduce the backwater area by lowering the elevation of the dam spillway or other modifications.

Population at risk 44	Structures at risk	47	Critical	facilities at risk	0
Farm/Ranch land impacted (acres)	579	Roadway(s) impacted	d (miles)	1.19	

Scope of Study

The scope of the study would include: 1) hydrology and hydraulic modeling to confirm and further assess and quantify flood risk and exposure; 2) a preliminary assessment of the technical feasibility of modifying the dam; 3) development of preliminary construction and O&M costs to modify the dam; 4) conduct of a cost/benefit analysis; 5) evaluation of potential constraints to implementation of alternatives (e.g., environmental, water rights, regulatory, dam safety, constructability; and 6) comparative analysis of other flood reduction measures (e.g., additional property buyouts, raise elevation of affected roadways). The results of the study will be documented in a report with recommendations.

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 Study Cost

Flood Manag	gement Ev	valuation (FME)	SILIDY	Colorado-Lavaca
Title Town of Boling Drainage N	laster Plan	ID# 101000240		NING GROUP
Sponsor (name of entity) Whar	ton (County)	Commitment x Yes		NING ONOOP
Technical committee recomme	nd x Yes No	RFPG recommend x Yes	No	REGION 10
Study Type		_		
Emergency preparedness	Floodplain mod	leling, mapping and risk assessment	x Feasibility study	Preliminary project engineering
Other				
Problem Area		N		
City Boling	County Wharton			
Watershed Caney Creek name(s)			lago	442
Tributary(ies) TBD		2817	Boling	
HUC# 12090402	Stream miles (est.) T	BD		
Drainage area: square miles, es	t 0.94 or acreage	e, est. 602		Newgulf
Social vulnerability index 0.76 (SVI score 0.0 indicates least vulner	able: 1 0 indicates most y	ulnerable.)		1301
Other	a, 10 maleates most v			

Town of Boling floods frequently due to poor existing drainage infrastructure. Known concerns include undersized roadside ditch sizes, and an undersized storm drain system. The existing risk indicators are based on available data and will be better defined as part of the study. Study results will include detailed assessments of existing flood risk and potential flood risk reduction to be used in evaluating projects for future funding cycles.

Population at risk 42

Structures at risk 14

Critical facilities at risk 0 0.09

Farm/Ranch land impacted (acres) 37

Scope of Study

The flood study will include hydrologic and hydraulic modeling (with Atlas 14 rainfall) to identify priority flood risk areas, preliminary design of improvements, risk reduction analysis, adverse impacts, preparation of cost estimates and a benefit-cost-analysis, and an evaluation of potential constraints (environmental, utility conflicts, right-of-way needs, and constructibility), and will include InfoWorks ICM and RAS 2D analysis of the urban center of Boling. It will also include a regional evaluation of flooding from Caney Creek.

Roadway(s) impacted (miles)

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 Study Cost

Cost \$150,000

Flood Managem	Lower Colorado-Lavaca REGIONAL FLOOD									
Title Louise Drainage Master Plan		ID# 101000241	PLANNING GROUP							
Sponsor (name of entity) Wharton (County)		Commitment x Yes No								
Technical committee recommend X Yes	NO RFPG	recommend x Yes No	REGION 10							
Study Type										
Emergency preparedness Floodplain modeling, mapping and risk assessment x Feasibility study Preliminary project en										
Other										
Problem Area										
City Louise Co	unty Wharton									
Watershed East Mustang Creek and Mic name(s)	dle Mustang Creek									
Tributary(ies) TBD										
HUC# 12100102 Stream	miles (est.) TBD	. Parte IL	Louise							
Drainage area: square miles, est 8.27	or acreage, est. 5,29	15								
Social vulnerability index 0.49 (SVI score 0.0 indicates least vulnerable; 1.0 i										
Other										

Flood Risk from Middle Mustang Creek and East Mustang Creek, Local drainage flood risk.

Population at risk 63

Structures at risk 50

Critical facilities at risk 0

Farm/Ranch land impacted (acres) 1,123

Roadway(s) impacted (miles) 5.15

Scope of Study

The flood study will include hydrologic and hydraulic modeling (with Atlas 14 rainfall) to identify priority flood risk areas, preliminary design of improvements, risk reduction analysis, adverse impacts, preparation of cost estimates and a benefit-cost-analysis, and an evaluation of potential constraints (environmental, utility conflicts, right-of-way needs, and constructibility).

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 Study Cost

Cost \$150,000

Floo	d Manage	me	Lower Colorado-Lavaca REGIONAL FLOOD					
Title Colorado River Levee Gate Structure Improvements				ID# 101000243		PLANNING GROUP		
Sponsor (name of entity)				Commitment x Yes No				
Technical co	ommittee recommend	< Yes	No	RFPG rec	ommend x Yes No		REGION 10	
Study Typ)e				_			
Emerge Other	ency preparedness	Floo	dplain modeling, i	mapping a	and risk assessment x F	easibility study	Preliminary project engineering	
Problem /	Area				N			
City Bay Ci	ty	Count	ty Wharton					
Watershed name(s)	Caney Crek					John Market	HI CONTRACTOR	
Tributary(ie	s) TBD					R. C. P. C.	Bay City	
HUC# 120	090302 Str	eam mi	iles (est.) TBD			A starter		
Drainage ar	rea: square miles, est 36	1.18	or acreage, est.	231,153	ctoria	ALC: SAL		
	erability index 0.82 0 indicates least vulnerable;	1.0 indi	cates most vulnerab	le.)		the state		
Other						S-A		

City of Bay City is protected by the Colorado River East Levee. Many of the culverts under this levee have need of a gate structure or improved gate structure to protect the City from an extreme flood along the Colorado River.

Population at risk 6,869

Structures at risk 3,531

Critical facilities at risk 4

Farm/Ranch land impacted (acres) 83,083

Roadway(s) impacted (miles) 152.56

Scope of Study

Conduct a study to evaluate benefit-costs and define construction cost for new gate structures along the Eastern Colorado River Levee near Bay City, TX. The flood study will include hydrologic and hydraulic modeling (with Atlas 14 rainfall) to identify priority flood risk areas, preliminary design of improvements, risk reduction analysis, adverse impacts, preparation of cost estimates and a benefit-cost-analysis, and an evaluation of potential constraints (environmental, utility conflicts, right-of-way needs, and constructibility).

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 Study Cost

Floo	d Manag	geme	nt Evalı	uatio	n (FME) _{st}			Colorado-Lavad	
Title El Lo	obo Neighborhood Drai	nage Improv	ements		ID# 101000244			NING GROU	
Sponsor (na	ame of entity) Whart	on (County)		С	commitment x Yes	No			
Technical co	ommittee recomme	nd x Yes	No	RFPG recor	mmend x Yes No	D		REGION 10	
Study Typ	be				_				
Emerge	ency preparedness	Floo	dplain modeling,	mapping ar	nd risk assessment	x Feasibi	ility study	Preliminary project eng	ineering
Other									
Problem	Area				N	and a second			0
City N/A		Coun	ty Wharton			1 9 3 9			
Watershed name(s)	San Bernard River								H
Tributary(ie	es) TBD				1.25-20				Alm.
HUC# 12	090401	Stream mi	iles (est.) TBD			the second	A AL	1 1 3 11	
Drainage ar	rea: square miles, es	t 1.97	or acreage, est.	1,262		110			ar y
(SVI score 0.0	erability index 0.81 0 indicates least vulner	able; 1.0 indi	cates most vulnerab	le.)	1-1-5		The		A.
Other					Section of the sectio	ser	H		· str

Flood risk from the San Bernard River exceeds local drainage capacity resulting in localized flooding in the El Lobo subdivision. Unsafe conditions limit neighborhood ingress/egress. The existing risk factors are based on available data and will be better defined as part of the study. Study results will include detailed assessments of existing flood risk and potential flood risk reduction to be used in evaluating projects for future funding cycles.

Population at risk 223

Structures at risk 136

Critical facilities at risk 0

Farm/Ranch land impacted (acres) 562

Roadway(s) impacted (miles) 5.68

Scope of Study

Conduct a study to evaluate benefit-costs and define construction cost for levee improvements, channel improvements, and drainage improvements. Study will include hydro modeling (with Atlas 14 rainfall), preliminary design of improvements, risk reduction analysis, verification of no adverse impacts, preparation of cost estimates and a benefit-cos! evaluation of potential constraints (environmental, utility conflicts, right-of-way needs, and constructibility),

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 Study Cost

Cost \$50,000

Flood Manag	ement Evalu	ation (FME) STUDY	Lower Colorado-Lavaca REGIONAL FLOOD
Title Pecan Valley Phase 2 Prelim	inary Engineering Report	ID# 101000245	PLANNING GROUP
Sponsor (name of entity) Wharto	on (County)	Commitment x Yes No	
Technical committee recommen	id x Yes No Rf	FPG recommend x Yes No	REGION 10
Study Type			
Emergency preparedness	Floodplain modeling, ma	apping and risk assessment x	Feasibility study Preliminary project engineering
Other			
Problem Area		N	
City N/A	County Wharton		60
Watershed Colorado River name(s)			H
Tributary(ies) TBD		and the second	
HUC# 12090302	Stream miles (est.) TBD		
Drainage area: square miles, est	2.29 or acreage, est.	1,466	
Social vulnerability index 0.79 (SVI score 0.0 indicates least vulnera	able; 1.0 indicates most vulnerable.,	.)	
Other		A R A	

Flood Risk from local drainage as well as overflows from the Colorado River inundate county roads causing unsafe conditions for motorists using the roads for neighborhood ingress/egress. The existing risk factors are based on available data and will be better defined as part of the study. Study results will include detailed assessments of existing flood risk and potential flood risk reduction to be used in evaluating projects for future funding cycles.

Population at risk 141

Structures at risk 86

Critical facilities at risk 0

Farm/Ranch land impacted (acres) 1,320

(ac) 1 220

Roadway(s) impacted (miles) 4.67

Scope of Study

Conduct a study to evaluate benefit-costs and define construction cost for levee improvements, channel improvements, and drainage improvements. Study will include hydro modeling (with Atlas 14 rainfall), preliminary design of improvements, risk reduction analysis, verification of no adverse impacts, preparation of cost estimates and a benefit-cos! evaluation of potential constraints (environmental, utility conflicts, right-of-way needs, and constructibility),

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.

Estimated Study Cost

Flood Mana	igement Evalua	ation (FME) STUDY	Lower Colorado-Lavaca REGIONAL FLOOD
Title Highland Hills Crossing	Improvements Project	ID# 101000203	PLANNING GROUP
Sponsor (name of entity) Au	stin (Municipality)	Commitment x Yes No	
Technical committee recomm	mend x Yes No RF	PG recommend X Yes No	REGION 10
Study Type			
Emergency preparednes	s Floodplain modeling, ma	pping and risk assessment	easibility study X Preliminary project engineering
Other			
Problem Area			
City N/A	County Travis		
Watershed Lake Austin name(s)			
Tributary(ies) Dry Creek			
HUC# 12090205	Stream miles (est.) 0.25		
Drainage area: square miles,	est 0.47 or acreage, est.	99	Abercrombie
Social vulnerability index 0.2 (SVI score 0.0 indicates least vul	17 nerable; 1.0 indicates most vulnerable.,		
Other			2222

The Highland Hills crossing is inundated by small, frequent, storm events (less than 2-year event) leading to unsafe conditions for motorists who need to use this roadway for neighborhood ingress/egress. Existing risk factors are based on available data and will be better defined as part of the study. Study results will include detailed assessments of the potential risk and potential flood risk reduction to be used in evaluating the project.

Population at risk 8

Structures at risk 3

Critical facilities at risk 0 0.02

Farm/Ranch land impacted (acres) 1

Roadway(s) impacted (miles)

Scope of Study

Update existing study to evaluate upgrading the hydraulic capacity of the crossing to reduce the frequency and depth of inundation and improve public safety. Study will update existing hydrologic and hydraulic models (with Atlas 14 rainfall) as needed to refine preliminary design and provide additional information needed to meet TWDB requirements for a flood mitigation project including verifying no adverse impacts, updating the cost estimate and providing a benefit-cost-analysis, and updating/verifying there are no potential constraints (environmental, utility conflicts, right-of-way needs, and constructability) that will prevent implementation.

Related Goal(s)

6.2 Increase the number of entities that mitigate flood risk at vulnerable roadways or waterways (e.g., low-water crossings, irrigation canals).

Estimated Study Cost

Cost \$150,000

Flo	od Mana	geme	nt Evalı	Jatio	n (FME) _{STUD}	Lower Colorado-Lavaca REGIONAL FLOOD
Title	Hill, Pecan, & Pine Street I	Drainage Impr	ovements (DMP GB-	-04)	ID# 101000215	PLANNING GROUP
Sponso	r (name of entity) Bastr	op (Municipal	ity)	С	Commitment x Yes No	
Technic	al committee recomme	end x Yes	No	RFPG reco	mmend X Yes No	REGION 10
Study Em Oth	ergency preparedness	Floo	dplain modeling,	mapping ar	nd risk assessment	Feasibility study Preliminary project engineering
Proble	em Area				N	
City Ba	astrop	Coun	ty Bastrop			95
Waters nam	hed Piney Creek-Colora e(s)	ido River				
Tributa	ry(ies) Gills Branch				21	Bastrop
HUC#	12090301	Stream mi	iles (est.) 0.00			Bastrop
Drainag	ge area: square miles, e	st 0.07	or acreage, est.	48		
	ulnerability index 0.59 Te 0.0 indicates least vulne	rable; 1.0 indi	cates most vulnerab	ıle.)		
Other						

Hill, Pecan, Emile, Pine, Jefferson, and other streets in the surrounding residential area experience significant flooding due to the low-lying nature of the downtown Bastrop terrain. To reduce ponding and flooding during rain events, an upgraded drainage system is proposed to convey runoff into Gills Branch. Approximately 160 properties will benefit from the upgraded stormwater system, reducing private property flooding concerns. These improvements should consider improvements in other portions of the Gills Branch watershed. The existing risk indicators are based on available data and will be better defined as part of the study. Study results will include detailed assessments of existing flood risk and potential flood risk reduction to be used in evaluating projects for future funding cycles.

Population at risk285Structures at risk73Critical facilities at risk0Farm/Ranch land impacted (acres)0Roadway(s) impacted (miles)1.17

Scope of Study

Conduct a study to evaluate proposed improvements. Study will include hydrologic and hydraulic modeling (with Atlas 14 rainfall), limited field survey and geotechnical investigations, preliminary design of improvements, risk reduction analysis, verification of no adverse impacts, preparation of cost estimates and a benefit-cost-analysis, and an evaluation of potential constraints (environmental, utility conflicts, right-of-way needs, and constructability). Potential improvements include approximately 5,940 feet of storm drain to replace the existing undersized storm drain system. The parallel pipes along Jefferson and Pine Strees will be cut, plugged, and abandoned and existing flow will be directed through the new, larger storm drain system. The new system will connect to the existing Hill Street channel and then drain into Gills Branch. The 2023 City of Bastrop Drainage Master Plan estimated potential costs of improvements totaling approximately \$8.7 million.

Related Goal(s)

3.2 Increase the number of entities that have evaluated priority flood risk areas. 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 Study Cost

Cost \$600,000

Floo	d Manager	ment Evaluat	tion (FME) STUD	Lower Colorado-Lavaca REGIONAL FLOOD
Title Loca	l Storm Drain Improvements	Near Piney Creek (DMP PC-04)	ID# 101000216	PLANNING GROUP
Sponsor (na	ame of entity) Bastrop (Mu	unicipality)	Commitment x Yes No	
Technical co	ommittee recommend x	Yes No RFPG	recommend X Yes No	REGION 10
Study Typ	De			
Emerge	ency preparedness	Floodplain modeling, mappi	ing and risk assessment	Feasibility study Preliminary project engineering
Other				
Problem	Area		N	
City Bastro	р	County Bastrop		
Watershed name(s)	Piney Creek-Colorado Riv	ver		
Tributary(ie	es) Piney Creek		969	95
HUC# 12	090301 Stre	eam miles (est.) 0.06		
Drainage ar	rea: square miles, est 0.0	7 or acreage, est. 47		
	erability index <mark>0.59</mark> D indicates least vulnerable; .	1.0 indicates most vulnerable.)	21	Bastrop-Bas
Other				Bastrop

Streets and residential area experience significant flooding due to the low-lying nature of the downtown Bastrop terrain. To reduce ponding and flooding during rain events, a new stormwater system is proposed to redirect runoff into the Piney Creek. Approximately 115 properties will benefit from the upgraded stormwater system, reducing private property flooding concerns. These improvements should consider improvements in other portions of the Piney Creek watershed. The existing risk indicators are based on available data and will be better defined as part of the study. Study results will include detailed assessments of existing flood risk and potential flood risk reduction to be used in evaluating projects for future funding cycles.

Population at risk 119

Structures at risk 83

Critical facilities at risk 0 1.33

Farm/Ranch land impacted (acres) 1

Scope of Study

Conduct a study to evaluate proposed improvements. Study will include hydrologic and hydraulic modeling (with Atlas 14 rainfall), limited field survey and geotechnical investigations, preliminary design of improvements, risk reduction analysis, verification of no adverse impacts, preparation of cost estimates and a benefit-cost-analysis, and an evaluation of potential constraints (environmental, utility conflicts, right-of-way needs, and constructability). Potential improvements include approximately 2,930 ft of storm drain to follow the Main Street right-of-way and convey water directly into the creek, bypassing the existing storm drain system to the east, a 36-in pipe extending approximately 1,580-ft, from Linden Street to Mesquite Street, and two storm drain inlets every 300-ft to capture runoff. Existing pipes following Mesquite and Linden Steets will be cut, plugged, and abandoned to reduce flow through the existing storm drain system. Drainage at Mesquite and Linden Street will be captured and conveyed through the Main Street system. These improvements are tied to

Roadway(s) impacted (miles)

Related Goal(s)

3.2 Increase the number of entities that have evaluated priority flood risk areas. 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 Study Cost

Cost \$360,000

Flo	od Manag	geme	ent Evalı	uatio	on (FME) _s	TUDY	Lower Colorado-Lavaca REGIONAL FLOOD
Title	Pecan Street Bypass & Por	nd Diversion	(DMP PC-05)		ID# 101000217		PLANNING GROUP
Sponsor (name of entity) Bastrop (Municipality)				(Commitment x Yes	No	
Technic	cal committee recomme	end x Yes	No	RFPG reco	ommend X Yes N	10	REGION 10
Study	Туре						
Em	ergency preparedness	Flo	odplain modeling,	mapping a	nd risk assessment	Feas	sibility study Preliminary project engineering
Otł	ner						
Proble	em Area				N	Ser.	
City B	astrop	Cou	nty Bastrop				
Waters nam	hed Piney Creek-Colora le(s)	ado River				1	HI CONTRACTOR OF THE REAL PROPERTY OF THE REAL PROP
Tributa	ry(ies) Piney Creek				969	A THE	95
HUC#	12090301	Stream n	niles (est.) 0.00			X	
Draina	ge area: square miles, e	st 0.11	or acreage, est.	69	Conne State	- AL	
	vulnerability index 0.59 re 0.0 indicates least vulne	rable; 1.0 inc	licates most vulnerab	le.)		21	Bastrop Bastrop

Streets and residential area experience significant flooding due to the low-lying nature of the downtown Bastrop terrain. To reduce ponding and flooding during rain events, a Pecan Street bypass is proposed to redirect runoff into the Piney Creek. Approximately 135 properties will benefit from the new stormwater system, reducing private property flooding concerns. These improvements should consider improvements in other portions of the Piney Creek watershed. The existing risk indicators are based on available data and will be better defined as part of the study. Study results will include detailed assessments of existing flood risk and potential flood risk reduction to be used in evaluating projects for future funding cycles.

Population at risk 103

Scope of Study

Structures at risk 67

Critical facilities at risk 0

0.66

Farm/Ranch land impacted (acres) 4

Critical facilities

Conduct a study to evaluate proposed improvements. Study will include hydrologic and hydraulic modeling (with Atlas 14 rainfall), limited field survey and geotechnical investigations, preliminary design of improvements, risk reduction analysis, verification of no adverse impacts, preparation of cost estimates and a benefit-cost-analysis, and an evaluation of potential constraints (environmental, utility conflicts, right-of-way needs, and constructability). Potential improvements include a 1,600 ft diversion from the Hill/Linden pond, approximately 8,900 ft of storm drain along the Pecan Street right-of-way, and a 250 ft pipe to collect runoff between Hawthorne and Linden Street. Existing pipes on Linden and Laurel Streets will be cut, plugged, and abandoned to reduce flow through the existing storm drain system. These improvements are tied to the FMEs for Pecan Street Bypass & Pond Diversion as well as Local Storm Drain Improvements near Piney Creek. The 2023 City of Bastrop Drainage Master Plan estimated potential costs of improvements totaling approximately \$23.7

Roadway(s) impacted (miles)

Related Goal(s)

3.2 Increase the number of entities that have evaluated priority flood risk areas. 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 Study Cost

Cost \$1,700,000

Flo	od Manag	geme	nt Eval	uatio	n (FME) _{STUDY}	Lower Colorado-Lavaca REGIONAL FLOOD
Title	Pecan, Beech, & Haysel Im	provements t	to Gills Branch (DMF	9 GB-05)	ID# 101000218	PLANNING GROUP
Sponso	or (name of entity) Bastro	op (Municipal	ity)	C	Commitment x Yes No	
Technic	al committee recomme	end x Yes	No	RFPG reco	mmend X Yes No	REGION 10
Study	Туре					
Em	ergency preparedness	Floc	odplain modeling,	mapping ar	nd risk assessment	easibility study Preliminary project engineering
Oth	ner					
Proble	em Area				N	
City B	astrop	Coun	ty Bastrop			
Waters nam	hed Piney Creek-Colora e(s)	ado River				
Tributa	ry(ies) Gills Branch					Bastrop
HUC#	12090301	Stream m	iles (est.) 0.00		21	Bastrop
Draina	ge area: square miles, e	st 0.05	or acreage, est.	31		Bastrop
	vulnerability index 0.59 re 0.0 indicates least vulne	rable; 1.0 indi	icates most vulneral	ole.)		
Other					A Stand	

Haysel, Farm, Beech, Pecan, and other streets in the surrounding residential area experience significant flooding due to the low-lying nature of the downtown Bastrop terrain. To reduce ponding and flooding during rain events, an upgraded system is proposed to redirect runoff into Gills Branch. Approximately 180 properties will benefit from the upgraded stormwater system, reducing private property flooding concerns. These improvements should consider improvements in other portions of the Gills Branch watershed. The existing risk indicators are based on available data and will be better defined as part of the study. Study results will include detailed assessments of existing flood risk and potential flood risk reduction to be used in evaluating projects for future funding cycles.

Population at risk 964

Scope of Study

Structures at risk 57

Critical facilities at risk 0

Farm/Ranch land impacted (acres) 0

1.02

Conduct a study to evaluate proposed improvements. Study will include hydrologic and hydraulic modeling (with Atlas 14 rainfall), limited field survey and geotechnical investigations, preliminary design of improvements, risk reduction analysis, verification of no adverse impacts, preparation of cost estimates and a benefit-cost-analysis, and an evaluation of potential constraints (environmental, utility conflicts, right-of-way needs, and constructability). Potential improvements include 5,520 feet of storm drain to replace the existing undersized system. The existing pipe conveying flow through the Mina Elementary campus will be cut, plugged, and aban- doned, and flow will be redirected from Pecan Street through the Hill and Farm Street rights-of-way, eventually rejoining the Haysel Street trunkline. The 2023 City of Bastrop Drainage Master Plan estimated potential costs of improvements totaling approximately \$20.6 million.

Roadway(s) impacted (miles)

Related Goal(s)

3.2 Increase the number of entities that have evaluated priority flood risk areas. 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 Study Cost

Cost \$1,400,000

Flood Man	agement Evalua	ation (FME) STUDY	Lower Colorado-Lavaca REGIONAL FLOOD
Title Bastrop CCTV Storm D	Drain Evaluation (DMP COB-02)	ID# 101000219	PLANNING GROUP
Sponsor (name of entity) B	astrop (Municipality)	Commitment x Yes No	
Technical committee recom	nmend X Yes No RF	PG recommend X Yes No	REGION 10
Study Type			
Emergency preparedne	ess Floodplain modeling, ma	pping and risk assessment	Feasibility study Preliminary project engineering
Other			
Problem Area		N	Lake Bast
City Bastrop	County Bastrop		
Watershed Piney Creek-Co name(s)	olorado River		
Tributary(ies) Piney Creek,	, Gills Branch		
HUC# 12090301	Stream miles (est.) 1.90		Bastrop
Drainage area: square mile	es, est 1.77 or acreage, est. 1,	,134	21 Bastrop
Social vulnerability index 0 (SVI score 0.0 indicates least v).59 vulnerable; 1.0 indicates most vulnerable.)	20	Bastrop
Other		Shiloh	A A A A A A A A A A A A A A A A A A A

The existing storm drain system was surveyed, to the extent possible, within the city limits and right of way, during Spring of 2022. Survey points included storm drain inlets, manhole elevations, pipe flowlines and dimensions, and outfall flow lines and dimensions. The survey team captured approximately 360 storm drain inlets, 80 manholes, and 35 outfalls. A storm drain database was developed for the City of Bastrop to map and detail existing storm drain infrastructure within city limits. There is a need to assess the condition and functionality of the storm drainage system to develop a maintenance and improvement plan.

Population at risk 2,890

Structures at risk 659

Critical facilities at risk 2

Farm/Ranch land impacted (acres) 108

Roadway(s) impacted (miles) 7.77

Scope of Study

Conduct a study to assess the condition of the existing storm drain infrastructure within the urban core of the City of Bastrop. The study should utilize closedcircuit television (CCTV) inspection. Inspection will analyze approximately 17,000 feet of storm drain infrastructure. Evaluation will allow the design consultant to develop a storm drain maintenance and improvement plan.

Related Goal(s)

3.2 Increase the number of entities that have evaluated priority flood risk areas. 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 Study Cost

Cost \$350,000

Flo	od Mana	geme	ent Eval	uatio	n (FME) STUDY	Lower Colorado-Lavaca REGIONAL FLOOD
Title	Water, Spring, & Cedar Str	reet Drainage	Improvements (DM	P GB-03)	ID# 101000220	PLANNING GROUP
Sponso	r (name of entity) Bastr	op (Municipa	lity)	C	ommitment x Yes No	
Technic	al committee recomme	end x Yes	No	RFPG recor	mmend X Yes No	REGION 10
Study	Туре					
Em	ergency preparedness	Floo	odplain modeling,	mapping ar	nd risk assessment	Feasibility study Preliminary project engineering
Oth	er					
Proble	em Area				N	
City Ba	strop	Cour	nty Bastrop			
Waters nam	hed Piney Creek-Colora e(s)	ado River				95
Tributa	ry(ies) Gills Branch					
HUC#	12090301	Stream m	iles (est.) 0.00		21	Bastrop Bastro
Drainag	e area: square miles, e	st 0.22	or acreage, est.	141		Bastrop
	ulnerability index 0.59 The 0.0 indicates least vulne		icates most vulneral	ble.)		
Other						

Water, Spring, Cedar, and other streets in the surrounding residential area experience significant flooding due to the low-lying nature of the downtown Bastrop terrain. To reduce ponding and flooding during rain events, an upgraded system is proposed to redirect runoff into the Colorado River. Approximately 260 properties will benefit from the upgraded stormwater system, reducing private property flooding concerns. These improvements should consider improvements in other portions of the Gills Branch watershed. The existing risk indicators are based on available data and will be better defined as part of the study. Study results will include detailed assessments of existing flood risk and potential flood risk reduction to be used in evaluating projects for future funding cycles.

Population at risk 1,188

Structures at risk 132

Critical facilities at risk 1 1.71

Farm/Ranch land impacted (acres) 1

Scope of Study

Conduct a study to evaluate proposed improvements. Study will include hydrologic and hydraulic modeling (with Atlas 14 rainfall), limited field survey and geotechnical investigations, preliminary design of improvements, risk reduction analysis, verification of no adverse impacts, preparation of cost estimates and a benefit-cost-analysis, and an evaluation of potential constraints (environmental, utilityconflicts, right-of-way needs, and constructability). Potential improvements include 17,100 feet of storm drain to replace the existing undersized system. Pipes at Beech and Jefferson will be cut, plugged, and abandoned and flow will be directed through the new storm drain system. Existing laterals extending down Beech, Buttonwood, & Elm St will remain unchanged. The 2023 City of Bastrop Drainage Master Plan estimated potential costs of improvements totaling approximately \$25.7 million.

Roadway(s) impacted (miles)

Related Goal(s)

3.2 Increase the number of entities that have evaluated priority flood risk areas. 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 Study Cost

Cost \$1,800,000

Flood Mana	gement Evalu	ation (FME) STUDY	Lower Colorado-Lavaca REGIONAL FLOOD
Title City of Hays Drainage Ma	ster Plan Update	ID# 101000226	PLANNING GROUP
Sponsor (name of entity) Hays	(Municipality)	Commitment x Yes No	
Technical committee recomm	end x Yes No Ri	PG recommend X Yes No	REGION 10
Study Type			
Emergency preparedness	Floodplain modeling, ma	pping and risk assessment Fe	easibility study Preliminary project engineering
Other			
Problem Area		N	Shady Hollow
City Hays	County Hays		
Watershed Onion Creek-Colo name(s)	rado River		Manc
Tributary(ies) Little Bear Cree	k, Little Bear Creek Tributary 1A		
HUC# 12090205	Stream miles (est.) 10.33	Markey Star	
Drainage area: square miles, e	est 4.92 or acreage, est.	5,151	
Social vulnerability index 6.69 (SVI score 0.0 indicates least vulne Other	9999979436398E-03 erable; 1.0 indicates most vulnerable.,	967	Buda
			Duua

The City of Hays is located between two tributaries of Little Bear Creek. Historically, this area has been subject to major flooding events resulting in a threat to human and animal life and extensive property/infrastructure damage. Compounding area flooding problems relative to the City of Hays is the recent widening of FM 1626 from a two lane country road to a five lane transportation corridor; completion of SH 45 Southwest; increased upstream impervious cover due to major single family/multi-housing residential development and commercial/retail development. Additionally, several proposed/planned major residential and commercial development will significantly increase population density and impervious cover in the watersheds located upstream from the City of Hays. Potential increases in flood risk threaten the City of Hays and thousands of people sole source drinking water supply derived from the Barton Springs Segment of the Edwards Aquifer, Water quality is a concern as a large portion of the Little Bear Creek Watershed is either located over the Barton Springs-Edwards Aquifer recharge, transition or contributing zones. The City of Hays in 2017 conducted a watershed study to assess flood risk and to prepare a drainage master plan for areas within the City's jurisdiction. This master plan needs to be updated to reflect changed conditions as described above, as well as to incorporate updated Atlas 14 rainfall values.

opulation at risk 14	48	Structures at risk	83	Critical	facilities at risk 0
Farm/Ranch land imp	pacted (acres) 2	11	Roadway(s) impacted	(miles)	0.93

Scope of Study

Update information and data used to develop the 2017 drainage master plan. Leverage the Atlas 14 hydrologic/hydraulic models for Little Bear Creek and Little Bear Creek Tributary 1A to assess riverine flood risk and exposure for the 10-, 25-, 100-, and 500-year flood events. Assess local drainage patterns using Atlas 14 rainfall data to identify potential local flood exposure in the City and ETJ areas. Identify priority flood risk areas and for such areas identify, evaluate, and recommend structural and non-structural flood risk reduction measures. Alternatives analysis to include potential negative upstream and/or downstream impacts, environmental impacts, cost and benefit analysis for risk reduction measures, and potential adverse impacts and/or benefits associated with groundwater recharge and drinking water supply.

Related Goal(s)

3.1 Increase the number of entities that have updated watershed models and floodplain maps to reflect current conditions, including as applicable Atlas 14 (Volume 11) revised rainfall data. 5.1/6.1 Reduce the number of structures and critical infrastructure that are at high risk of repetitive loss.

Estimated Study Cost

Cost \$200,000

Flood	Manage	men	t Evalı	latio	n (FME) _{STUDY}		Colorado-Lavaca
Title Needvill	e Wastewater Treatme	nt Plant Floc	odproofing		ID# 101000229		NING GROUP
Sponsor (name	e of entity) Needville (Municipality	y)	C	Commitment x Yes No		
Technical comr	nittee recommend	X Yes	No	RFPG recor	mmend x Yes No	_	REGION 10
Study Type							
Emergency	preparedness	Floodp	lain modeling, i	mapping ar	nd risk assessment	Feasibility study	Preliminary project engineering
Other							
Problem Are	a				N	1897 N	
City Needville		County	Fort Bend			Ne	edville
Watershed Cenname(s)	dar Creek, San Berna	rd Watersl	hed			5	
Tributary(ies)	Buffalo Creek				1442		
HUC# 12090	401 St	eam miles	(est.) 1.84		rton		
Drainage area:	square miles, est 45	.66 01	r acreage, est.	29,225	A CARLES AND		
	ility index 0.678726 licates least vulnerable			le.)	a salar	Sec.	
Other						1	

The plant is located adjacent to Buffalo creek that runs through the City of Needville. This area hasn't been studied in detail, but as a critical facility further study is recommended to assess risk of flood from Buffalo Creek. There were no reported loss of service events in initial data gathering. The results of the study will provide additional insight into existing flood risk, indicators to evaluate projects for future flood planning cycles.

Population at risk 82

Structures at risk 76

Critical facilities at risk 0

2.98

Farm/Ranch land impacted (acres) 3,222

Scope of Study

The flood risk study of the wastewater treatment plant area will include hydrologic and hydraulic modeling (with Atlas 14 rainfall) to identify priority flood risk areas, preliminary design of improvements, risk reduction analysis, verification of no adverse impacts, preparation of cost estimates and a benefit-costanalysis, and an evaluation of potential constraints (environmental, utility conflicts, right-of-way needs, and constructability). This information will allow for a better understanding of high risk areas and future potential projects.

Roadway(s) impacted (miles)

Related Goal(s)

3.2 Increase the number of entities that have evaluated priority flood risk areas. 6.1 Reduce the number of structures and critical facilities that are at high risk through the implementation of structural flood mitigation projects.

Estimated Study Cost

Cost \$100,000

Flood Manage	ement Evaluat	ion (FME) _{STUDY}	Lower Colorado-Lavaca REGIONAL FLOOD
Title Fairchild Creek Drainage Miti	gation Study	ID# 101000230	PLANNING GROUP
Sponsor (name of entity) Needvill	e (Municipality)	Commitment x Yes No	
Technical committee recommend	1 x Yes No RFPG r	recommend x Yes No	REGION 10
Study Type		_	
Emergency preparedness	Floodplain modeling, mappin	ng and risk assessment F	easibility study Preliminary project engineering
Other			
Problem Area		N	
City Needville	County Fort Bend		
Watershed San Bernard, Lower E name(s)	3razos Watersheds		Needville
Tributary(ies) Fairchild Creek, Ce	dar Creek, Buffalo Creek		S CV
HUC# 12090401	Stream miles (est.) 0.00	Maartan	
Drainage area: square miles, est	92.55 or acreage, est. 59,23	Nharton	
Social vulnerability index 0.6787 (SVI score 0.0 indicates least vulnerab			
Other		and the second	

The southwest portion of the City of Needville and its extraterritorial jurisdiction has been defined as a major flooding area for the City. Portions of the Buffalo Creek watershed have been interconnected with an extension of Fairchilds Creek. Based on preliminary drainage investigations, it appears that this interconnection may contribute to flooding in Needville. Further study is required to understand existing flood risk indicators is required to develop solutions for this problematic flood prone area of the City.

Population at risk 82

Structures at risk 76

Critical facilities at risk 0

Farm/Ranch land impacted (acres) 3,222

Roadway(s) impacted (miles)

2.98

Scope of Study

This study will include hydrologic and hydraulic analysis (with Atlas 14 rainfall) to assess the existing conditions flooding patterns created by the two creeks across the City problem areas. Additionally, preliminary design of improvements, risk reduction analysis, verification of no adverse impacts, preparation of cost estimates and a benefit-cost-analysis, and an evaluation of potential constraints (environmental, utility conflicts, right-of-way needs, and constructability) will also be considered. This information will allow for a better understanding of high risk areas and future potential projects.

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 Study Cost

Cost \$100,000

Flo	od Manag	<u>g</u> eme	ent Evalı	uatio	n (FME) _{STUDY}	Lower Colorado-Lavaca REGIONAL FLOOD
Title	Caldwell Elementary Impro	ovements at	Upper Gilleland Cree	ek (DMP	ID# 101000231	PLANNING GROUP
Sponso	or (name of entity) Pfluge	erville (Muni	cipality)	С	commitment x Yes No	
Technic	cal committee recomme	nd x Yes	No	RFPG reco	mmend X Yes No	REGION 10
Study	Туре					
Em	ergency preparedness	Flo	odplain modeling,	mapping ar	nd risk assessment	Feasibility study Preliminary project engineering
Oth	ner					
Proble	em Area				N	
City Pf	flugerville	Cour	nty Travis			45
Waters nam	hed Willbarger Creek-C le(s)	olorado Riv	/er		45	
Tributa	ry(ies) Gilleland Creek					35
HUC#	12090301	Stream m	niles (est.) 1.51			
Draina	ge area: square miles, es	st 0.39	or acreage, est.	248		
	vulnerability index 0.356 re 0.0 indicates least vulner			ole.)	Wells B	ranch
Other						Pflugerville

Caldwell Elementary, multiple streets and residential areas experience significant flooding from Gilleland Creek. The proposed design removes Caldwell Elementary from the 100 year floodplain, prevents Fitzgerald Lane from overtopping during the 100-year storm event, and reduces flood risk for 205 homes. The existing risk indicators are based on available data and will be better defined as part of the study. Study results will include detailed assessments of existing flood risk and potential flood risk reduction to be used in evaluating projects for future funding cycles.

Population at risk 18

Structures at risk 5

Critical facilities at risk 0

Farm/Ranch land impacted (acres) 23

0.14

Scope of Study

Conduct a study to evaluate proposed improvements. Study will include hydrologic and hydraulic modeling (with Atlas 14 rainfall), limited field survey and geotechnical investigations, preliminary design of improvements, risk reduction analysis, verification of no adverse impacts, preparation of cost estimates and a benefit-cost-analysis, and an evaluation of potential constraints (environmental, utility conflicts, right-of-way needs, and constructability). Potential improvements include raising the Fitzgerald Lane profile to an elevation of 777 feet, 1,270 linear feet of channel improvements, and a 2,280-foot berm on the eastern border of Gilleland Creek. The 2022 City of Pflugerville Drainage Master Plan estimated potential costs of improvements totaling approximately \$9.7 million.

Roadway(s) impacted (miles)

Related Goal(s)

3.2 Increase the number of entities that have evaluated priority flood risk areas. 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 Study Cost

Cost \$680,000

Flood Ma	anageme	ent Evalı	uatio	n (FME) _{stu})Y	r Colorado-Lavaca	
Title Pflugerville Stor	m Drain CCTV Evaluation	on (DMP Pf-03)		ID# 101000232		NNING GROUP	
Sponsor (name of ent	tity) Pflugerville (Muni	cipality)	C	ommitment x Yes	No		
Technical committee	recommend X Yes	No	RFPG recon	mmend X Yes No		REGION 10	
Study Type							
Emergency prepa	redness Flo	odplain modeling,	mapping an	d risk assessment	Feasibility study	Preliminary project engineeri	ng
Other							
Problem Area				N	$\prec N$		
City Pflugerville	Cou	nty Travis					
Watershed Willbarge name(s)	er Creek-Colorado Riv	/er					10
Tributary(ies) Gillelar	nd Creek, Wilbarger (Creek		ranch			
HUC# 12090301	Stream n	niles (est.) 0.57			Pflu	gerville	
Drainage area: square	e miles, est 0.21	or acreage, est.	137				1
Social vulnerability in (SVI score 0.0 indicates I			le.)				
Other							

The City of Pflugerville maintains a storm drain system database to map, size and identify existing storm drain infrastructure within city limits. The geospatial data includes detention ponds, drainge structures, stormwater inlets, lines, manholes, and outfalls. There is a need to assess the condition and functionality of the storm drainage system to develop a maintenance and improvement plan.

Population at risk 10

Structures at risk 10

Critical facilities at risk 0

Farm/Ranch land impacted (acres) 7

Roadway(s) impacted (miles) 0.00

Scope of Study

Conduct a study to assess the condition of the existing storm drain infrastructure within the downtown business district of the City of Pflugerville. The study should utilize closed-circuit television (CCTV) inspection. Inspection will analyze approximately 11,000 feet of storm drain infrastructure. Evaluation will allow the design consultant to develop a storm drain maintenance and improvement plan.

Related Goal(s)

3.2 Increase the number of entities that have evaluated priority flood risk areas. 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 Study Cost

Cost \$250,000

Flood Manag	gement Evalua	tion (FME) STUDY	Lower Colorado-Lavaca REGIONAL FLOOD
Title Hidden Lake Drive Improv	vements at Wilbarger Creek Tributary 20	DO ID# 101000233	PLANNING GROUP
Sponsor (name of entity) Pflug	gerville (Municipality)	Commitment x Yes No	
Technical committee recomme	end x Yes No RFP	G recommend X Yes No	REGION 10
Study Type			
Emergency preparedness	Floodplain modeling, map	ping and risk assessment	Feasibility study Preliminary project engineering
Other			
Problem Area		N	
City Pflugerville	County Travis	130	
Watershed Willbarger Creek-C name(s)	Colorado River		
Tributary(ies) Wilbarger Creek	< Tributary 200		
HUC# 12090301	Stream miles (est.) 0.15		
Drainage area: square miles, e	est 0.02 or acreage, est. 14		
•	erable; 1.0 indicates most vulnerable.)	rville	
Other			

Hidden Lake Drive over Wilbarger Creek Tributary 200 currently floods during the 10-year storm event. The proposed improvement allows Hidden Lake Drive to pass the 100-year event. The existing risk indicators are based on available data and will be better defined as part of the study. Study results will include detailed assessments of existing flood risk and potential flood risk reduction to be used in evaluating projects for future funding cycles.

Population at risk 0

Structures at risk 0

Farm/Ranch land impacted (acres) 6

Critical facilities at risk 0 0.07

Scope of Study

Conduct a study to evaluate proposed improvements. Study will include hydrologic and hydraulic modeling (with Atlas 14 rainfall), limited field survey and geotechnical investigations, preliminary design of improvements, risk reduction analysis, verification of no adverse impacts, preparation of cost estimates and a benefit-cost-analysis, and an evaluation of potential constraints (environmental, utility conflicts, right-of-way needs, and constructability). Potential improvements include replacing the fourteen 10' x 5' existing culverts with a 200-foot bridge span. Proposed improvements also include raising Hidden Lake Drive to an elevation of 644 feet, 3 feet higher than the current elevation. The 2022 City of Pflugerville Drainage Master Plan estimated potential costs of improvements totaling approximately \$4 million.

Roadway(s) impacted (miles)

Related Goal(s)

3.2 Increase the number of entities that have evaluated priority flood risk areas. 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 Study Cost

Cost \$280,000

Flood	Manager	nent l	Evaluat	tion (FN	<mark>∕IE)</mark> stud)Y	Colorado-L	
Title Kenneme	r Drive Improvements a	t Wilbarger Cree	ek Tributary 200 (I	OMP ID# 101	.000234		NNING GR	
Sponsor (name	of entity) Pflugerville (Municipality)		Commitment	t x Yes No			
Technical comm	ittee recommend x	Yes No	RFPG	recommend x	Yes No).	REGION 10	
Study Type								
Emergency Other	preparedness	Floodplain n	nodeling, mappi	ng and risk asses	sment	Feasibility study	Preliminary pro	oject engineering
Problem Area	a			N				ITR O
City Pflugervill	e	County Travis	S					
Watershed Wil name(s)	barger Creek-Colorad	lo River			45			H
Tributary(ies) V	/ilbarger Creek Tribut	ary 200			F/ S	130		
HUC# 120903	S01 Stre	am miles (est.) 0.31				《 》 [2] [2] [3] [4]	A Company
Drainage area:	square miles, est 0.03	s or acre	eage, est. 20	\sim	A			
Social vulnerabi (SVI score 0.0 indi	lity index 0.96 cates least vulnerable; 1	0 indicates mo	st vulnerable.)					
Other								So the

Kennemer Drive over Wilbarger Creek Tributary 200 currently floods during the 5-year storm event. The proposed improvement allows Kennemer Drive to pass the 10-year event and significantly reduces the flooding depth and flood extents of the 100-year storm event. The existing risk indicators are based on available data and will be better defined as part of the study. Study results will include detailed assessments of existing flood risk and potential flood risk reduction to be used in evaluating projects for future funding cycles.

Population at risk 8

Structures at risk 2

Critical facilities at risk 0 0.08

Farm/Ranch land impacted (acres) 2

Scope of Study

Conduct a study to evaluate proposed improvements. Study will include hydrologic and hydraulic modeling (with Atlas 14 rainfall), limited field survey and geotechnical investigations, preliminary design of improvements, risk reduction analysis, verification of no adverse impacts, preparation of cost estimates and a benefit-cost-analysis, and an evaluation of potential constraints (environmental, utility conflicts, right-of-way needs, and constructability). Potential improvements include replacing the existing culverts with a 150 foot 3-span bridge and raising the roadway profile by 0.8 feet. Improvements also include widening and stabilizing the channel underneath the bridge. The 2022 City of Pflugerville Drainage Master Plan estimated potential costs of improvements totaling approximately \$3.1 million.

Roadway(s) impacted (miles)

Related Goal(s)

3.2 Increase the number of entities that have evaluated priority flood risk areas. 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 Study Cost

Cost \$220,000

Flood Manag	gement Evalua ⁻	tion (FME) STUDY	Lower Colorado-Lavaca REGIONAL FLOOD
Title North Heatherwilde Impro	ovements at Upper Gilleland Creek (DMI	ID# 101000235	PLANNING GROUP
Sponsor (name of entity) Pfluge	erville (Municipality)	Commitment x Yes No	
Technical committee recomme	end x Yes No RFPG	G recommend X Yes No	REGION 10
Study Type			
Emergency preparedness	Floodplain modeling, mapp	ping and risk assessment F	easibility study Preliminary project engineering
Other			
Problem Area		N	
City Pflugerville	County Travis		
Watershed Willbarger Creek-C name(s)	Colorado River		
Tributary(ies) Gilleland Creek			
HUC# 12090301	Stream miles (est.) 0.24		
Drainage area: square miles, es	or acreage, est. 19		
	6099997758865 prable; 1.0 indicates most vulnerable.)	alls Branch	Pflugerville
Other			

Multiple streets and residential areas experience flooding from Gilleland Creek. North Heatherwilde Boulevard over Gilleland Creek currently floods during the 50-year storm event. The proposed design design allows North Heatherwilde Boulevard to pass the 100-year storm event, reduces flood risk for 8 homes, and relieves flooding on Cactus Blossom Drive. The existing risk indicators are based on available data and will be better defined as part of the study. Study results will include detailed assessments of existing flood risk and potential flood risk reduction to be used in evaluating projects for future funding cycles.

Population at risk 0

Structures at risk 0

Critical facilities at risk 0

0.03

Farm/Ranch land impacted (acres) 6

Liures di LISK U

Circical facilities at r

Scope of Study

Conduct a study to evaluate proposed improvements. Study will include hydrologic and hydraulic modeling (with Atlas 14 rainfall), limited field survey and geotechnical investigations, preliminary design of improvements, risk reduction analysis, verification of no adverse impacts, preparation of cost estimates and a benefit-cost-analysis, and an evaluation of potential constraints (environmental, utility conflicts, right-of-way needs, and constructability). Potential improvements include include extending the North Heatherwilde bridge opening by 80 feet in the southern direction and 500 feet of channel improvements, including channel benching upstream and downstream of the North Heatherwilde Boulevard bridge. The 2022 City of Pflugerville Drainage Master Plan estimated potential costs of improvements totaling approximately \$8.5 million.

Roadway(s) impacted (miles)

Related Goal(s)

3.2 Increase the number of entities that have evaluated priority flood risk areas. 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 Study Cost

Cost \$1,200,000

Flo	od Mana	geme	nt Eval	uatio	on (FME) _{stul}	DY	Colorado-Lava	
Title	Railroad Avenue Improver	ments at Uppe	er Gilleland Creek (DMP GC-04)	ID# 101000237		NING GROU	
Sponso	or (name of entity) Pflug	erville (Munic	ipality)	(Commitment x Yes	No		
Technie	cal committee recomme	end x Yes	No	RFPG reco	mmend X Yes No		REGION 10	
Study	Туре							
Em	ergency preparedness	Floc	dplain modeling	, mapping a	nd risk assessment	Feasibility study	Preliminary project en	gineering
Oth	ner							
Proble	em Area				N			0
City P	flugerville	Coun	ty Travis					
Waters nam	hed Willbarger Creek-C he(s)	Colorado Riv	er					H
Tributa	ry(ies) Gilleland Creek				nch			
HUC#	12090301	Stream m	iles (est.) 0.70			Pflugervi		
Draina	ge area: square miles, e	st 0.11	or acreage, est.	69				
	vulnerability index 0.22 re 0.0 indicates least vulne			ıble.)				
Other								30

Multiple streets and residential areas experience flooding from Gilleland Creek. Railroad Avenue over Gilleland Creek currently floods during the 2-year storm event. The proposed design allows Railroad to pass the 10-year storm event and reduces flood risk for 16 homes. The existing risk indicators are based on available data and will be better defined as part of the study. Study results will include detailed assessments of existing flood risk and potential flood risk reduction to be used in evaluating projects for future funding cycles.

Population at risk 90

Structures at risk 22

Critical facilities at risk 0

0.20

Farm/Ranch land impacted (acres) 11

clures at risk 22

critical facilities

Scope of Study

Conduct a study to evaluate proposed improvements. Study will include hydrologic and hydraulic modeling (with Atlas 14 rainfall), limited field survey and geotechnical investigations, preliminary design of improvements, risk reduction analysis, verification of no adverse impacts, preparation of cost estimates and a benefit-cost-analysis, and an evaluation of potential constraints (environmental, utility conflicts, right-of-way needs, and constructability). Potential improvements include raising Railroad Avenue 5 feet and widening the bridge opening by 220 feet. Proposed improvements also include 1,760 feet of channel improvements including channel benching downstream of Railroad Avenue. The 2022 City of Pflugerville Drainage Master Plan estimated potential costs of improvements totaling approximately \$16.8 million.

Roadway(s) impacted (miles)

Related Goal(s)

3.2 Increase the number of entities that have evaluated priority flood risk areas. 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 Study Cost

Cost \$1,200,000

Flood Manag	gement Eva	aluatic	on (FME) STUDY	Lower Colorado-Lavad REGIONAL FLOO	
Title Swenson Farms Improven	nents at Upper Gilleland Creel	(DMP GC-03)	ID# 101000238	PLANNING GROU	
Sponsor (name of entity) Pflug	erville (Municipality)	(Commitment x Yes No		
Technical committee recomme	end x Yes No	RFPG reco	mmend X Yes No	REGION 10	
Study Type					
Emergency preparedness	Floodplain model	ng, mapping a	nd risk assessment	easibility study Preliminary project eng	ineering
Other					
Problem Area			N		0
City Pflugerville	County Travis				
Watershed Willbarger Creek-C name(s)	Colorado River				H
Tributary(ies) Gilleland Creek					
HUC# 12090301	Stream miles (est.) 0.67	,			
Drainage area: square miles, e	st 0.09 or acreage, e	est. 54	Branch		5
Social vulnerability index 0.48 (SVI score 0.0 indicates least vulne		erable.)		Pflugerville	E
Other					Pak,

Multiple streets and residential areas experience flooding from Gilleland Creek. Swenson Farms Boulevard over Gilleland Creek currently floods during the 100-year storm event. The proposed design allows Swenson Farms Boulevard to pass the 100-year storm event, reduces flood risk for 10 homes, and relieves flooding on Pfenning Lane. The existing risk indicators are based on available data and will be better defined as part of the study. Study results will include detailed assessments of existing flood risk and potential flood risk reduction to be used in evaluating projects for future funding cycles.

Population at risk 0

Structures at risk 0

Critical facilities at risk 0

Farm/Ranch land impacted (acres) 18

Roadway(s) impacted (miles)

0.09

Scope of Study

Conduct a study to evaluate proposed improvements. Study will include hydrologic and hydraulic modeling (with Atlas 14 rainfall), limited field survey and geotechnical investigations, preliminary design of improvements, risk reduction analysis, verification of no adverse impacts, preparation of cost estimates and a benefit-cost-analysis, and an evaluation of potential constraints (environmental, utility conflicts, right-of-way needs, and constructability). Potential improvements include extending the bridge opening by 50 feet to the north, 200 linear feet of channel improvements, including channel benching upstream and downstream of Swenson Farms Boulevard, and a 2,000 foot embankment adjacent to Pfennig Lane to contain the floodplain. The 2022 City of Pflugerville Drainage Master Plan estimated potential costs of improvements totaling approximately \$5.2 million.

Related Goal(s)

3.2 Increase the number of entities that have evaluated priority flood risk areas. 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 Study Cost

Cost \$370,000

Flood Managem	ent Evaluatio	n (FME) _{STUDY}	Lower Colorado-Lavaca REGIONAL FLOOD
Title Weiss Lane Improvements at Wilbarg	ger Creek (DMP WC-01)	ID# 101000239	PLANNING GROUP
Sponsor (name of entity) Pflugerville (Mu	unicipality) C	Commitment x Yes No	
Technical committee recommend x Yes	s No RFPG recor	mmend X Yes No	REGION 10
Study Type			
Emergency preparedness F	loodplain modeling, mapping an	nd risk assessment	easibility study Preliminary project engineering
Other			
Problem Area		N	
City Pflugerville Co	ounty Travis		
Watershed Willbarger Creek-Colorado F name(s)	River		HI CONTRACTOR OF THE CONTRACTOR OF TO CO
Tributary(ies) Wilbarger Creek			
HUC# 12090301 Stream	n miles (est.) 0.30		
Drainage area: square miles, est 0.02	or acreage, est. 16		CAN TO DATE OF
Social vulnerability index 0 (SVI score 0.0 indicates least vulnerable; 1.0 i	indicates most vulnerable.)		
Other		Star St	

Weiss Lane over Wilbarger Creek currently floods during the 50-year storm event. The proposed improvement allows Weiss Lane to pass the 100-year storm event. The existing risk indicators are based on available data and will be better defined as part of the study. Study results will include detailed assessments of existing flood risk and potential flood risk reduction to be used in evaluating projects for future funding cycles.

Population at risk 0

Structures at risk 0

Critical facilities at risk 0

Farm/Ranch land impacted (acres) 7

Roadway(s) impacted (miles) 0.13

Scope of Study

Conduct a study to evaluate proposed improvements. Study will include hydrologic and hydraulic modeling (with Atlas 14 rainfall), limited field survey and geotechnical investigations, preliminary design of improvements, risk reduction analysis, verification of no adverse impacts, preparation of cost estimates and a benefit-cost-analysis, and an evaluation of potential constraints (environmental, utility conflicts, right-of-way needs, and constructability). Potential improvements include raising the roadway profile 4 feet to the south of the Weiss Lane bridge, adding six 10'x5' drainage relief culverts under the newly raised profile, and adding a 100' wide bypass channel to allow flow through the culverts. The 2022 City of Pflugerville Drainage Master Plan estimated potential costs of improvements totaling approximately \$1.6 million.

Related Goal(s)

3.2 Increase the number of entities that have evaluated priority flood risk areas. 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 Study Cost

Cost \$110,000

Flo	od Manag	geme	nt Evalı	uatio	n (FME) _{stui})Y	olorado-Lavaca
Title	Riverwood Drive Improver	ments at Pine	y Creek (DMP PC-02)	ID# 101000246		NING GROUP
Sponso	or (name of entity) Bastro	op (Municipa	lity)	С	Commitment x Yes		
Technic	cal committee recomme	nd x Yes	No	RFPG reco	mmend X Yes No		REGION 10
Study	Туре						
Em	ergency preparedness	Floo	odplain modeling,	mapping ar	nd risk assessment	Feasibility study	Preliminary project engineering
Oth	ner						
Proble	em Area				N	1 Proven	
City B	astrop	Cour	ity Bastrop			1 2/ 80	
Waters nam	hed Piney Creek-Colora ne(s)	ido River					H
Tributa	ry(ies) Piney Creek				969	and the set	95
HUC#	12090301	Stream m	iles (est.) 1.79		AT THE REAL		
Draina	ge area: square miles, e	st 0.26	or acreage, est.	166			Bas
	vulnerability index 0.6 re 0.0 indicates least vulne	rable; 1.0 ind	icates most vulnerab	le.)			trop_
Other					20		Bastrop

Riverwood Drive becomes flooded by Piney Creek during the 50% ACE storm event. The proposed design prevents Riverwood Drive from overtopping during the 10% ACE storm event and reduces, but does not eliminate, overtopping during the 4% ACE storm event. The existing risk indicators are based on available data and will be better defined as part of the study. Study results will include detailed assessments of existing flood risk and potential flood risk reduction to be used in evaluating projects for future funding cycles.

Population at risk 8

Structures at risk 10

Critical facilities at risk 1

0.54

Farm/Ranch land impacted (acres) 85

Roadway(s) impacted (miles)

Scope of Study

Conduct a study to evaluate proposed improvements. Study will include hydrologic and hydraulic modeling (with Atlas 14 rainfall), limited field survey and geotechnical investigations, preliminary design of improvements, risk reduction analysis, verification of no adverse impacts, preparation of cost estimates and a benefit-cost-analysis, and an evaluation of potential constraints (environmental, utility conflicts, right-of-way needs, and constructability). Potential improvements include raising Riverwood Drive by approximately 17.25 feet, 375 feet of roadway improvements, replacing the existing culverts with a 210foot bridge, 8,125 linear feet of channel clearing, and approximately 280 linear feet of channel improvements. The 2023 City of Bastrop Drainage Master Plan estimated potential costs of improvements totaling approximately \$2.3 million.

Related Goal(s)

3.2 Increase the number of entities that have evaluated priority flood risk areas. 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 Study Cost

Cost \$160,000