New FMXs (Added to Final Plan) **12/15/2022**

Action Number	Type	Action Name	Sponsor	County	Cost	Notes	TC Rec (Y/N)	TC Date	RFPG Rec (Y/N)	RFPG Date
101000214	FME	West Brazoria County Drainage District 11 - Master Drainage Plan	WBCDD #11	Brazoria	$ 990,000	New FME from Sponsor	Y	12/1/2022		
101000209	FME	Jackson County Phase 2 DMP	Jackson County	Jackson	$ 4,000,000	New FME from Sponsor	Y	12/1/2022		
101000208	FME	Glen Flora Drainage Master Plan and Levee Project	Wharton County	Wharton	$ 300,000	New FME from Sponsor	Y	12/1/2022		
101000210	FME	City of El Campo Drainage Master Plan Update	El Campo	Wharton	$ 612,500	New FME from Sponsor	Y	12/1/2022		
101000211	FME	Jarvis Creek Channel Widening and Regional Detention Project	Wharton County	Wharton	$ 150,000	New FME from Sponsor	Y	12/1/2022		
101000212	FME	Louise Internal Drainage Master Plan	Wharton County	Wharton	$ 400,000	New FME from Sponsor	Y	12/1/2022		
101000213	FME	Wharton County Drainage Master Plan Update	Wharton County	Wharton	$ 4,000,000	New FME from Sponsor	Y	12/1/2022		
					$ 10,452,500					

Flood Management Evaluation (FME) STUDY

Lower Colorado-Lavaca REGIONAL FLOOD PLANNING GROUP
REGION 10

Title: West Brazoria County Drainage District 11 - Master Drainage | ID#: 101000214

Sponsor (name of entity): West Brazoria County Drainage District | Commitment: [x] Yes [ ] No

Technical committee recommend: [x] Yes [ ] No | RFPG recommend: [ ] Yes [x] No

Study Type

[ ] Emergency preparedness [ ] Floodplain modeling, mapping and risk assessment [x] Feasibility study [ ] Preliminary project engineering

[ ] Other

Problem Area

City: N/A | County: Brazoria

Watershed name(s): San Bernard River

Tributary(ies): Dance, Linnville, Little Linnville and Redfish; Bear, Bell,

HUC#: 12090401,12090402 | Stream miles (est.): 292.00

Drainage area: square miles, est: 506.66 | or acreage, est.: 324,260

Social vulnerability index: 0.6

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

Other:

Flood Risk Description

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.

Population at risk: 12,686 | Structures at risk: 7,737 | Critical facilities at risk: 0

Farm/Ranch land impacted (acres): 37,018 | Roadway(s) impacted (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

Cost: $990,000 | Potential funding source(s): TBD

Flood Management Evaluation (FME) STUDY

Lower Colorado-Lavaca REGIONAL FLOOD PLANNING GROUP
REGION 10

Title Jackson County Phase 2 DMP ID# 101000209

Sponsor (name of entity) Jackson (County) Commitment [x] Yes [ ] No

Technical committee recommend [x] Yes [ ] No RFPG recommend [ ] Yes [x] No

Study Type

[ ] Emergency preparedness [ ] Floodplain modeling, mapping and risk assessment [x] Feasibility study [ ] Preliminary project engineering

[ ] Other

Problem Area

City N/A County Jackson

Watershed name(s) Navidad, Central Matagorda Bay, West Matagorda Bay

Tributary(ies) Brushy Creek, Cox Creek, Devers Creek, Dry Creek East

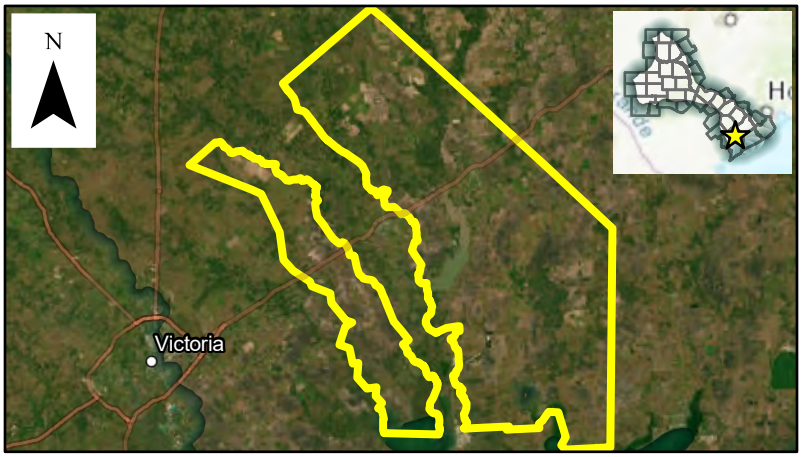
HUC# 12100402,12100101 Stream miles (est.) 318.00

Drainage area: square miles, est 700.13 or acreage, est. 448,085

Social vulnerability index 0.599

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

Other



Flood Risk Description

The county has suffered extreme flooding from recent events such as the floods of 1998, 2004, and 2021 floods. 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 966 Structures at risk 717 Critical facilities at risk 0

Farm/Ranch land impacted (acres) 58,759 Roadway(s) impacted (miles) 68.25

Scope of Study

This study would include all FEMA streams east and west of the Lavaca watershed. Study scope will include hydrologic and hydraulic modeling (with Atlas14 rainfall). If potential projects are identified the study may include 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 $4,000,000 Potential funding source(s) TBD

Flood Management Evaluation (FME) STUDY

Lower Colorado-Lavaca REGIONAL FLOOD PLANNING GROUP
REGION 10

Title: Glen Flora Drainage Master Plan and Levee Project | ID#: 101000208

Sponsor (name of entity): Wharton (County) | Commitment: [x] Yes [ ] No

Technical committee recommend: [x] Yes [ ] No | RFPG recommend: [ ] Yes [x] No

Study Type

[ ] Emergency preparedness [ ] Floodplain modeling, mapping and risk assessment [x] Feasibility study [ ] Preliminary project engineering

[ ] Other

Problem Area

City: Glen Flora | County: Wharton

Watershed name(s): San Bernard, Lower Colorado

Tributary(ies): TBD

HUC#: 12090302,12090401 | Stream miles (est.): 0.00

Drainage area: square miles, est: 0.60 | or acreage, est.: 381

Social vulnerability index: 0.77

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

Other:

Flood Risk Description

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: 36 | Structures at risk: 48 | Critical facilities at risk: 0

Farm/Ranch land impacted (acres): 112 | Roadway(s) impacted (miles): 1.41

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 | Potential funding source(s): TBD

Flood Management Evaluation (FME) STUDY

Lower Colorado-Lavaca REGIONAL FLOOD PLANNING GROUP
REGION 10

Title: City of El Campo Drainage Master Plan Update | ID#: 101000210

Sponsor (name of entity): El Campo (Municipality) | Commitment: [x] Yes [ ] No

Technical committee recommend: [x] Yes [ ] No | RFPG recommend: [ ] Yes [x] No

Study Type

[ ] Emergency preparedness [ ] Floodplain modeling, mapping and risk assessment [x] Feasibility study [ ] Preliminary project engineering

[ ] Other

Problem Area

City: El Campo | County: Wharton

Watershed name(s): Lower Colorado, Central Matagorda Bay, Navidad

Tributary(ies): Blue Creek, Tres Palacios, East Mustang Creek

HUC#: 12100102,12090302 | Stream miles (est.): 102.50

Drainage area: square miles, est: 33.45 | or acreage, est.: 21,408

Social vulnerability index: 0.64

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

Other:

Flood Risk Description

El Campo was flooded severely in 2004 and the city of El Campo has been working to resolve issues. US 59 By-Pass acts like a dam holding flood waters back into town. 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: 6,309 | Structures at risk: 1,820 | Critical facilities at risk: 0

Farm/Ranch land impacted (acres): 5,707 | Roadway(s) impacted (miles): 45.23

Scope of Study

The master plan completed for the City of El Campo in 2004 and needs to be updated. Study will include a drainage master plan for the urban center of El Campo using InfoWorks ICM and a restudy of upper Blue Creek using HEC RAS 1D/2D. This also includes Tres Palacios Tributary 6 Channel improvements and Regional Detention. 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: $612,500 | Potential funding source(s): TBD

Flood Management Evaluation (FME) STUDY

Lower Colorado-Lavaca REGIONAL FLOOD PLANNING GROUP
REGION 10

Title: Jarvis Creek Channel Widening and Regional Detention Project | ID#: 101000211

Sponsor (name of entity): Wharton (County) | Commitment: [x] Yes [ ] No

Technical committee recommend: [x] Yes [ ] No | RFPG recommend: [ ] Yes [x] No

Study Type

[ ] Emergency preparedness [ ] Floodplain modeling, mapping and risk assessment [ ] Feasibility study [x] Preliminary project engineering

[ ] Other

Problem Area

City: N/A | County: Wharton

Watershed name(s): Lower Colorado

Tributary(ies): Jarvis Creek

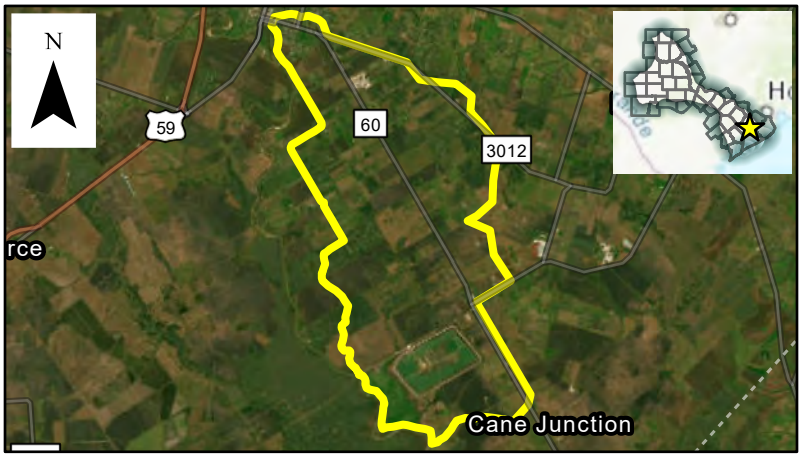
HUC#: 12090302,12090402 | Stream miles (est.): 44.30

Drainage area: square miles, est: 31.41 | or acreage, est.: 20,105

Social vulnerability index: 0.76

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

Other:



Flood Risk Description

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: 1,534 | Structures at risk: 755 | Critical facilities at risk: 0

Farm/Ranch land impacted (acres): 5,475 | Roadway(s) impacted (miles): 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 25-yr 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).

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 | Potential funding source(s): TBD

Flood Management Evaluation (FME) STUDY

Lower Colorado-Lavaca REGIONAL FLOOD PLANNING GROUP
REGION 10

Title: Louise Internal Drainage Master Plan | ID#: 101000212

Sponsor (name of entity): Wharton (County) | Commitment: [x] Yes [ ] No

Technical committee recommend: [x] Yes [ ] No | RFPG recommend: [ ] Yes [x] No

Study Type

[ ] Emergency preparedness [ ] Floodplain modeling, mapping and risk assessment [x] Feasibility study [ ] Preliminary project engineering

[ ] Other

Problem Area

City: N/A | County: Wharton

Watershed name(s): Navidad

Tributary(ies): East Mustang Creek and Middle Mustand Creek

HUC#: 12100102 | Stream miles (est.): 0.60

Drainage area: square miles, est: 0.82 | or acreage, est.: 526

Social vulnerability index: 0.38

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

Other:

Flood Risk Description

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: 26 | 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 | Potential funding source(s): TBD

Flood Management Evaluation (FME) STUDY

Lower Colorado-Lavaca REGIONAL FLOOD PLANNING GROUP
REGION 10

Title: Wharton County Drainage Master Plan Update | ID#: 101000213

Sponsor (name of entity): Wharton (County) | Commitment: [x] Yes [ ] No

Technical committee recommend: [x] Yes [ ] No | RFPG recommend: [ ] Yes [x] No

Study Type

[ ] Emergency preparedness [ ] Floodplain modeling, mapping and risk assessment [x] Feasibility study [ ] Preliminary project engineering

[ ] Other

Problem Area

City: N/A | County: Wharton

Watershed name(s): Navidad, Central Matagorda Bay, Lower Colorado, East Matagorda Bay, San Bernard

Tributary(ies): Blue Creek, Bosque Creek, Clarks Branch, Coon Branch,

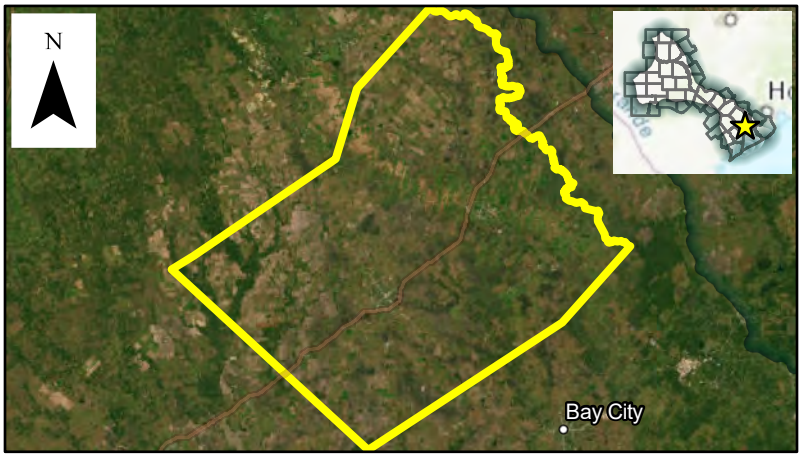
HUC#: 12090302,12090401 | Stream miles (est.): 385.00

Drainage area: square miles, est: 1,090.72 | or acreage, est.: 698,058

Social vulnerability index: 0.71

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

Other:



Flood Risk Description

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: 19,240 | Structures at risk: 7,119 | Critical facilities at risk: 0

Farm/Ranch land impacted (acres): 177,474 | Roadway(s) impacted (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).

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 | Potential funding source(s): TBD