

# Flood Management Evaluation (FME) STUDY

## Lower Colorado-Lavaca REGIONAL FLOOD PLANNING GROUP

Title  ID#   
Sponsor (name of entity)  Commitment  Yes  No  
Technical committee recommend  Yes  No RFPG recommend  Yes  No

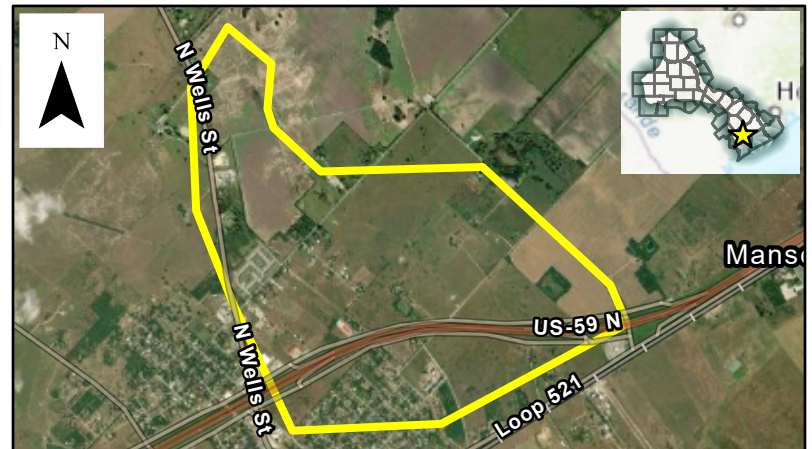
REGION 10

### Study Type

Emergency preparedness  Floodplain modeling, mapping and risk assessment  Feasibility study  Preliminary project engineering  
 Other

### Problem Area

City  County   
Watershed   
name(s)   
Tributary(ies)   
HUC#  Stream miles (est.)   
Drainage area: square miles, est.  or acreage, est.   
Social vulnerability index   
(SVI score 0.0 indicates least vulnerable; 1.0 indicates most vulnerable.)  
Other



### Flood Risk Description

The existing crossing is undersized and overtops. The existing crossing/bridge class structure is a multi-box (2) culvert-bridge. The proposed improvements include upgrades to the subject crossing. The existing road is a 2-lane road with an average daily traffic count of 152.

Population at risk  Structures at risk  Critical facilities at risk   
Farm/Ranch land impacted (acres)  Roadway(s) impacted (miles)

### Scope of Study

Conduct a study to evaluate upsizing the existing culvert-bridge. 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  Potential funding source(s)

# Flood Management Evaluation (FME) STUDY

## Lower Colorado-Lavaca REGIONAL FLOOD PLANNING GROUP

Title **Stormwater Diversion Project** ID# **101000063**  
Sponsor (name of entity) **Edna (Municipality)** Commitment  Yes  No  
Technical committee recommend  Yes  No RFPG recommend  Yes  No

REGION 10

### Study Type

Emergency preparedness  Floodplain modeling, mapping and risk assessment  Feasibility study  Preliminary project engineering  
 Other

### Problem Area

City **Edna** County **Jackson**  
Watershed **Post Oak Branch - Dry Creek**  
name(s)  
Tributary(ies) **Dry Creek**  
HUC# **12100101,12100102** Stream miles (est.) **TBD**  
Drainage area: square miles, est. **4.06** or acreage, est. **2,601**  
Social vulnerability index **0.51**  
(SVI score 0.0 indicates least vulnerable; 1.0 indicates most vulnerable.)  
Other **Drainage System Improvements**



### Flood Risk Description

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. Sponsor has indicated targeted buyouts area also a potential outcome.

Population at risk **2,503** Structures at risk **1,223** Critical facilities at risk **0**  
Farm/Ranch land impacted (acres) **137** Roadway(s) impacted (miles) **26.26**

### 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)

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 **\$200,000** Potential funding source(s) **TBD**

# Flood Management Evaluation (FME) STUDY

## Lower Colorado-Lavaca REGIONAL FLOOD PLANNING GROUP

Title  ID#   
Sponsor (name of entity)  Commitment  Yes  No  
Technical committee recommend  Yes  No RFPG recommend  Yes  No

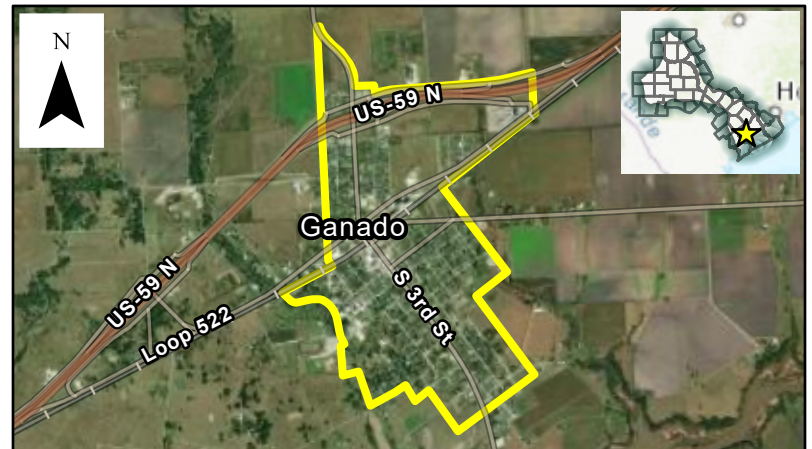
REGION 10

### Study Type

Emergency preparedness  Floodplain modeling, mapping and risk assessment  Feasibility study  Preliminary project engineering  
 Other

### Problem Area

City  County   
Watershed  name(s)   
Tributary(ies)   
HUC#  Stream miles (est.)   
Drainage area: square miles, est.  or acreage, est.   
Social vulnerability index   
*(SVI score 0.0 indicates least vulnerable; 1.0 indicates most vulnerable.)*  
Other



### Flood Risk Description

The current facility is located within the 100-year floodplain. The study will investigate possible sites and cost for relocation and may include the need to extend floodplain models upstream to verify the new location is outside the floodplain.

Population at risk  Structures at risk  Critical facilities at risk   
Farm/Ranch land impacted (acres)  Roadway(s) impacted (miles)

### Scope of Study

The study will include hydrologic and hydraulic modeling (with Atlas 14) to identify/verify the most appropriate location for this development.

### 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

Cost  Potential funding source(s)

# Flood Management Evaluation (FME) STUDY

## Lower Colorado-Lavaca REGIONAL FLOOD PLANNING GROUP

Title  ID#   
Sponsor (name of entity)  Commitment  Yes  No  
Technical committee recommend  Yes  No RFPG recommend  Yes  No

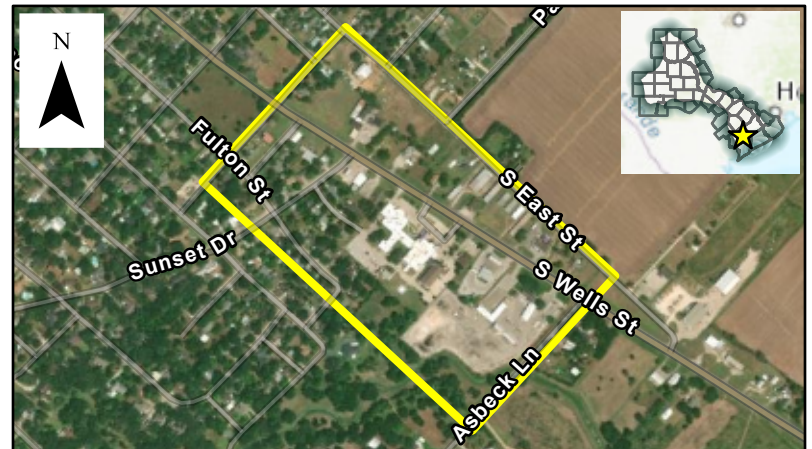
REGION 10

### Study Type

Emergency preparedness  Floodplain modeling, mapping and risk assessment  Feasibility study  Preliminary project engineering  
 Other

### Problem Area

City  County   
Watershed   
name(s)   
Tributary(ies)   
HUC#  Stream miles (est.)   
Drainage area: square miles, est.  or acreage, est.   
Social vulnerability index   
(SVI score 0.0 indicates least vulnerable; 1.0 indicates most vulnerable.)  
Other



### Flood Risk Description

The southern portion of the study area is located in the 100-year floodplain of Dry Creek and multiple structures are at risk. 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  Structures at risk  Critical facilities at risk   
Farm/Ranch land impacted (acres)  Roadway(s) impacted (miles)

### Scope of Study

Study will include hydrologic and hydraulic modeling (with Atlas 14 rainfall), and may include 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). 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  Potential funding source(s)

# Flood Management Evaluation (FME) STUDY

## Lower Colorado-Lavaca REGIONAL FLOOD PLANNING GROUP

Title  ID#   
Sponsor (name of entity)  Commitment  Yes  No  
Technical committee recommend  Yes  No RFPG recommend  Yes  No

REGION 10

### Study Type

Emergency preparedness  Floodplain modeling, mapping and risk assessment  Feasibility study  Preliminary project engineering  
 Other

### Problem Area

City  County   
Watershed   
Tributary(ies)   
HUC#  Stream miles (est.)   
Drainage area: square miles, est.  or acreage, est.   
Social vulnerability index   
*(SVI score 0.0 indicates least vulnerable; 1.0 indicates most vulnerable.)*  
Other



### Flood Risk Description

CR480 runs parallel to Matagorda Bay and is threatened by erosion. The road serves as one of the primary means of ingress/egress to several residential areas in southern Jackson County. The proposed improvements include construction of a wall to protect and strengthen the roadway. The existing road is a 2-lane road with an average daily traffic count of 36. 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  Structures at risk  Critical facilities at risk   
Farm/Ranch land impacted (acres)  Roadway(s) impacted (miles)

### 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

Cost  Potential funding source(s)

# Flood Management Evaluation (FME) STUDY

## Lower Colorado-Lavaca REGIONAL FLOOD PLANNING GROUP

Title  ID#

Sponsor (name of entity)  Commitment  Yes  No

Technical committee recommend  Yes  No RFPG recommend  Yes  No

REGION 10

### Study Type

Emergency preparedness  Floodplain modeling, mapping and risk assessment  Feasibility study  Preliminary project engineering  
 Other

### Problem Area

City  County

Watershed  name(s)

Tributary(ies)

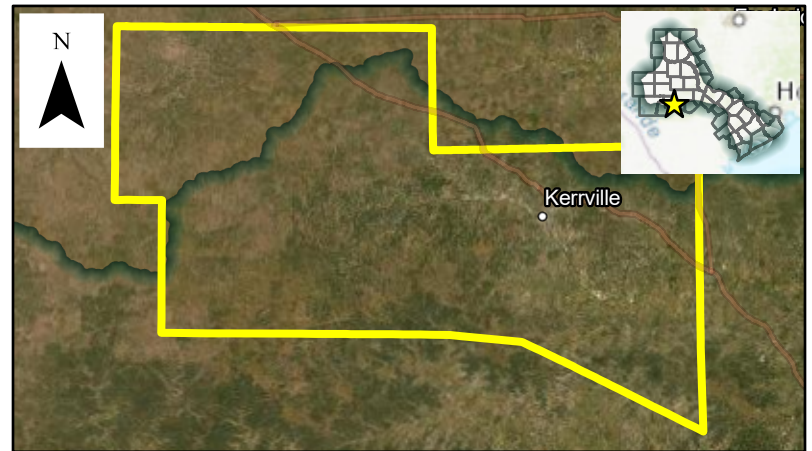
HUC#  Stream miles (est.)

Drainage area: square miles, est.  or acreage, est.

Social vulnerability index

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

Other



### Flood Risk Description

The County has identified multiple roadway/crossing 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  Structures at risk  Critical facilities at risk

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

### 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  Potential funding source(s)

# Flood Management Evaluation (FME) STUDY

## Lower Colorado-Lavaca REGIONAL FLOOD PLANNING GROUP

Title  ID#   
Sponsor (name of entity)  Commitment  Yes  No  
Technical committee recommend  Yes  No RFPG recommend  Yes  No

REGION 10

### Study Type

Emergency preparedness  Floodplain modeling, mapping and risk assessment  Feasibility study  Preliminary project engineering  
 Other

### Problem Area

City  County   
Watershed   
name(s)   
Tributary(ies)   
HUC#  Stream miles (est.)   
Drainage area: square miles, est.  or acreage, est.   
Social vulnerability index   
(SVI score 0.0 indicates least vulnerable; 1.0 indicates most vulnerable.)  
Other



### Flood Risk Description

The City has identified the need to dredge Lake Jackson to improve hydraulics and increase storage capacity. 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  Structures at risk  Critical facilities at risk   
Farm/Ranch land impacted (acres)  Roadway(s) impacted (miles)

### 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

Cost  Potential funding source(s)

# Flood Management Evaluation (FME) STUDY

## Lower Colorado-Lavaca REGIONAL FLOOD PLANNING GROUP

Title **Llano River Erosion** ID# **101000069**  
Sponsor (name of entity) **Junction (Municipality)** Commitment  Yes  No  
Technical committee recommend  Yes  No RFPG recommend  Yes  No

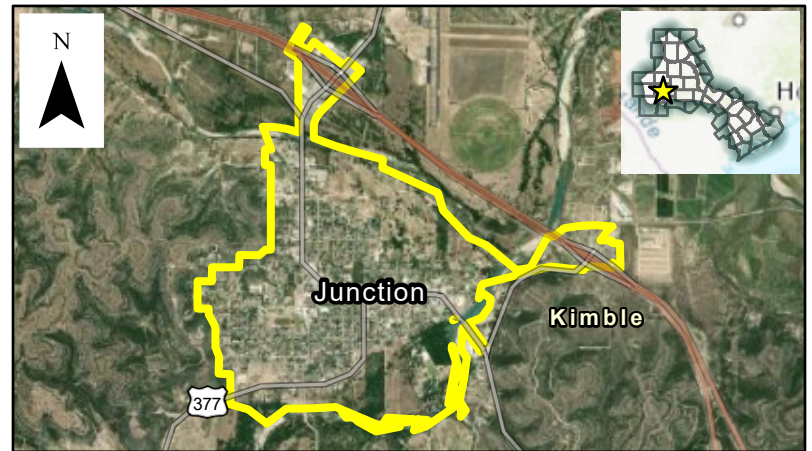
REGION 10

### Study Type

Emergency preparedness  Floodplain modeling, mapping and risk assessment  Feasibility study  Preliminary project engineering  
 Other

### Problem Area

City **Junction** County **Kimble**  
Watershed **Elm Slough - North Llano River, Joy Creek - South Llano River**  
name(s)  
Tributary(ies) **Llano River**  
HUC# **12090202,12090204** Stream miles (est.) **1.60**  
Drainage area: square miles, est. **2.39** or acreage, est. **1,527**  
Social vulnerability index **0.33**  
(SVI score 0.0 indicates least vulnerable; 1.0 indicates most vulnerable.)  
Other **Channel Improvements/erosion protection**



### Flood Risk Description

The City has identified numerous erosion locations along the Llano River impacting Lake Junction and will undertake a study to develop and implement projects to prevent erosion. 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 **252** Structures at risk **130** Critical facilities at risk **0**  
Farm/Ranch land impacted (acres) **427** Roadway(s) impacted (miles) **6.63**

### Scope of Study

Study will include hydrologic and hydraulic modeling, 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

Cost **\$200,000** Potential funding source(s) **TBD**



# Flood Management Evaluation (FME) STUDY

## Lower Colorado-Lavaca REGIONAL FLOOD PLANNING GROUP

REGION 10

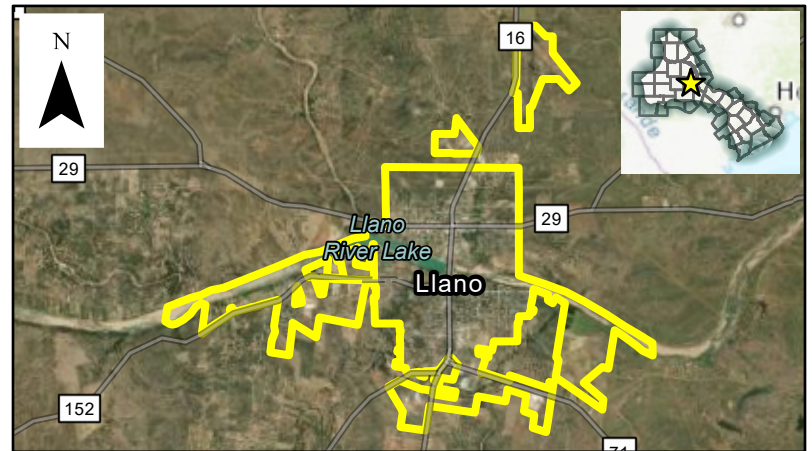
Title **Llano River Channel Maintenance/Improvements** ID# **101000070**  
Sponsor (name of entity) **Llano (Municipality)** Commitment  Yes  No  
Technical committee recommend  Yes  No RFPG recommend  Yes  No

### Study Type

Emergency preparedness  Floodplain modeling, mapping and risk assessment  Feasibility study  Preliminary project engineering  
 Other

### Problem Area

City **Llano** County **Llano**  
Watershed **Johnson Creek - Llano River, Pecan Creek - Llano River,  
name(s) Oatman Creek - Llano River, Wrights Creek - Llano River**  
Tributary(ies) **Llano River**  
HUC# **12090204** Stream miles (est.) **TBD**  
Drainage area: square miles, est. **5.76** or acreage, est. **3,685**  
Social vulnerability index **0.19**  
*(SVI score 0.0 indicates least vulnerable; 1.0 indicates most vulnerable.)*  
Other **Channel Improvements**



### Flood Risk Description

The City has identified numerous maintenance issues in the Johnson Creek, Pecan Creek, Oatman Creek, and Wrights Creek watersheds as well as potential channel modifications/stabilization needs to prevent erosion and mitigate local flooding. The proposed study will evaluate the need for structural infrastructure improvements and develop a more detailed assessment of existing flood and potential flood risk reduction (if appropriate) that will be used to evaluate projects for future planning cycles.

Population at risk **549** Structures at risk **181** Critical facilities at risk **0**  
Farm/Ranch land impacted (acres) **464** Roadway(s) impacted (miles) **4.11**

### Scope of Study

Study will include hydrologic and hydraulic modeling of preliminary design of improvements (if needed) 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

Cost **\$100,000** Potential funding source(s) **TBD**

# Flood Management Evaluation (FME) STUDY

## Lower Colorado-Lavaca REGIONAL FLOOD PLANNING GROUP

REGION 10

Title  ID#   
Sponsor (name of entity)  Commitment  Yes  No  
Technical committee recommend  Yes  No RFPG recommend  Yes  No

### Study Type

Emergency preparedness  Floodplain modeling, mapping and risk assessment  Feasibility study  Preliminary project engineering  
 Other

### Problem Area

City  County   
Watershed   
name(s)   
Tributary(ies)   
HUC#  Stream miles (est.)   
Drainage area: square miles, est.  or acreage, est.   
Social vulnerability index   
*(SVI score 0.0 indicates least vulnerable; 1.0 indicates most vulnerable.)*  
Other



### Flood Risk Description

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  Structures at risk  Critical facilities at risk   
Farm/Ranch land impacted (acres)  Roadway(s) impacted (miles)

### 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

Cost  Potential funding source(s)

# Flood Management Evaluation (FME) STUDY

## Lower Colorado-Lavaca REGIONAL FLOOD PLANNING GROUP

REGION 10

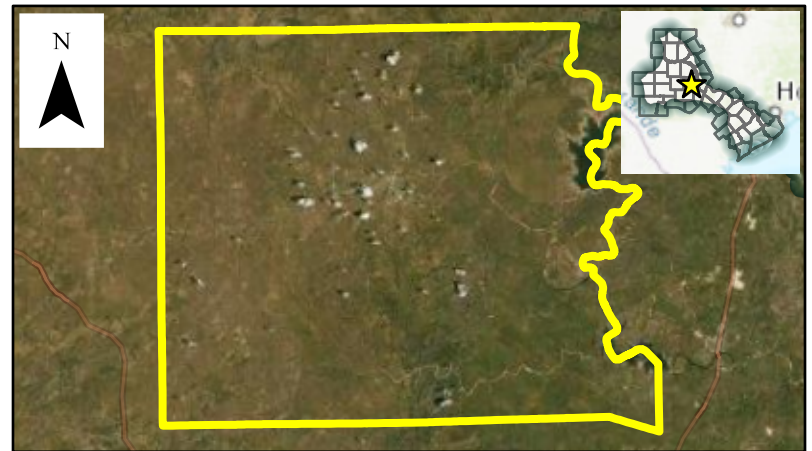
Title  ID#   
Sponsor (name of entity)  Commitment  Yes  No  
Technical committee recommend  Yes  No RFPG recommend  Yes  No

### Study Type

Emergency preparedness  Floodplain modeling, mapping and risk assessment  Feasibility study  Preliminary project engineering  
 Other

### Problem Area

City  County   
Watershed  name(s)   
Tributary(ies)   
HUC#  Stream miles (est.)   
Drainage area: square miles, est.  or acreage, est.   
Social vulnerability index   
*(SVI score 0.0 indicates least vulnerable; 1.0 indicates most vulnerable.)*  
Other



### Flood Risk Description

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  Structures at risk  Critical facilities at risk   
Farm/Ranch land impacted (acres)  Roadway(s) impacted (miles)

### 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

Cost  Potential funding source(s)

# Flood Management Evaluation (FME) STUDY

## Lower Colorado-Lavaca REGIONAL FLOOD PLANNING GROUP

REGION 10

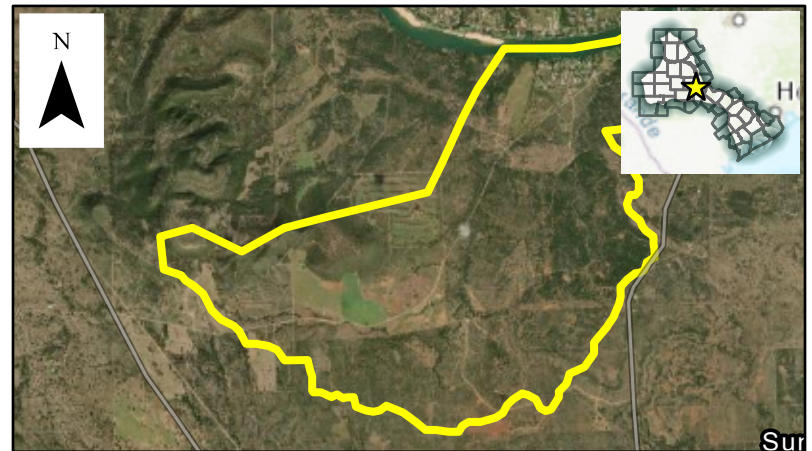
Title  ID#   
Sponsor (name of entity)  Commitment  Yes  No  
Technical committee recommend  Yes  No RFPG recommend  Yes  No

### Study Type

Emergency preparedness  Floodplain modeling, mapping and risk assessment  Feasibility study  Preliminary project engineering  
 Other

### Problem Area

City  County   
Watershed   
name(s)   
Tributary(ies)   
HUC#  Stream miles (est.)   
Drainage area: square miles, est.  or acreage, est.   
Social vulnerability index   
*(SVI score 0.0 indicates least vulnerable; 1.0 indicates most vulnerable.)*  
Other



### Flood Risk Description

The subdivision has multiple local drainage problems and portions of the subdivision are at risk of flooding including a 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  Structures at risk  Critical facilities at risk   
Farm/Ranch land impacted (acres)  Roadway(s) impacted (miles)

### 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  Potential funding source(s)

# Flood Management Evaluation (FME) STUDY

## Lower Colorado-Lavaca REGIONAL FLOOD PLANNING GROUP

Title  ID#   
Sponsor (name of entity)  Commitment  Yes  No  
Technical committee recommend  Yes  No RFPG recommend  Yes  No

REGION 10

### Study Type

Emergency preparedness  Floodplain modeling, mapping and risk assessment  Feasibility study  Preliminary project engineering  
 Other

### Problem Area

City  County   
Watershed  name(s)  
Tributary(ies)   
HUC#  Stream miles (est.)   
Drainage area: square miles, est.  or acreage, est.   
Social vulnerability index   
*(SVI score 0.0 indicates least vulnerable; 1.0 indicates most vulnerable.)*  
Other



### Flood Risk Description

The city has identified the need to construct an emergency operation center for the safety of the community. The study will investigate possible sites and cost for the location and may include the need to extend floodplain models upstream to verify the location is outside the floodplain.

Population at risk  Structures at risk  Critical facilities at risk   
Farm/Ranch land impacted (acres)  Roadway(s) impacted (miles)

### Scope of Study

The study will include hydrologic and hydraulic modeling (with Atlas 14) to identify/verify the most appropriate location for this development.

### 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

Cost  Potential funding source(s)

# Flood Management Evaluation (FME) STUDY

## Lower Colorado-Lavaca REGIONAL FLOOD PLANNING GROUP

Title  ID#

Sponsor (name of entity)  Commitment  Yes  No

Technical committee recommend  Yes  No RFPG recommend  Yes  No

REGION 10

### Study Type

Emergency preparedness  Floodplain modeling, mapping and risk assessment  Feasibility study  Preliminary project engineering  
 Other

### Problem Area

City  County

Watershed  name(s)

Tributary(ies)

HUC#  Stream miles (est.)

Drainage area: square miles, est.  or acreage, est.

Social vulnerability index   
*(SVI score 0.0 indicates least vulnerable; 1.0 indicates most vulnerable.)*

Other



### Flood Risk Description

The airport is located within the 100-year floodplain of Tres Palacios Bay and has local drainage problems with portions of the area at risk of flooding. 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  Structures at risk  Critical facilities at risk

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

### 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)

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  Potential funding source(s)

# Flood Management Evaluation (FME) STUDY

## Lower Colorado-Lavaca REGIONAL FLOOD PLANNING GROUP

Title  ID#   
Sponsor (name of entity)  Commitment  Yes  No  
Technical committee recommend  Yes  No RFPG recommend  Yes  No

REGION 10

### Study Type

Emergency preparedness  Floodplain modeling, mapping and risk assessment  Feasibility study  Preliminary project engineering  
 Other

### Problem Area

City  County   
Watershed   
name(s)   
Tributary(ies)   
HUC#  Stream miles (est.)   
Drainage area: square miles, est.  or acreage, est.   
Social vulnerability index   
*(SVI score 0.0 indicates least vulnerable; 1.0 indicates most vulnerable.)*  
Other



### Flood Risk Description

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

Population at risk  Structures at risk  Critical facilities at risk   
Farm/Ranch land impacted (acres)  Roadway(s) impacted (miles)

### 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  Potential funding source(s)

# Flood Management Evaluation (FME) STUDY

## Lower Colorado-Lavaca REGIONAL FLOOD PLANNING GROUP

Title  ID#

Sponsor (name of entity)  Commitment  Yes  No

Technical committee recommend  Yes  No RFPG recommend  Yes  No

REGION 10

### Study Type

Emergency preparedness  Floodplain modeling, mapping and risk assessment  Feasibility study  Preliminary project engineering  
 Other

### Problem Area

City  County

Watershed  name(s)

Tributary(ies)

HUC#  Stream miles (est.)

Drainage area: square miles, est.  or acreage, est.

Social vulnerability index

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

Other



### Flood Risk Description

The existing floodplain maps are outdated and do not reflect current flood risk.

Population at risk  Structures at risk  Critical facilities at risk

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

### Scope of Study

The flood study will include hydrologic and hydraulic modeling (with Atlas 14 rainfall) and will develop new floodplain maps that reflect current flood risk.

### 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  Potential funding source(s)



# Flood Management Evaluation (FME) STUDY

## Lower Colorado-Lavaca REGIONAL FLOOD PLANNING GROUP

Title  ID#   
Sponsor (name of entity)  Commitment  Yes  No  
Technical committee recommend  Yes  No RFPG recommend  Yes  No

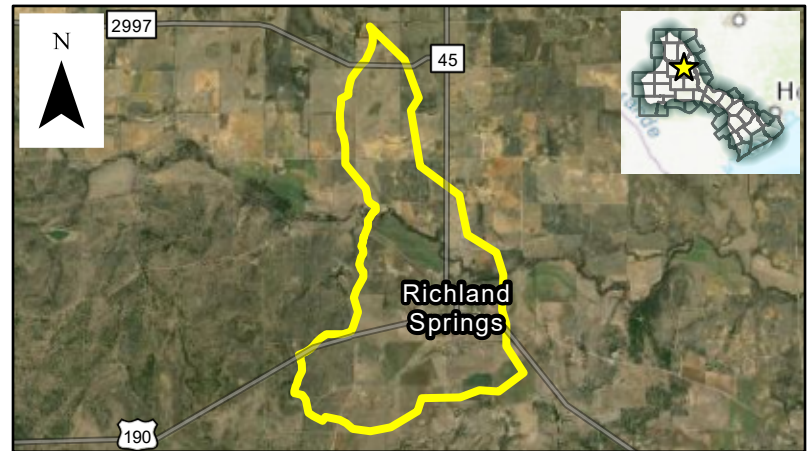
REGION 10

### Study Type

Emergency preparedness  Floodplain modeling, mapping and risk assessment  Feasibility study  Preliminary project engineering  
 Other

### Problem Area

City  County   
Watershed   
name(s)   
Tributary(ies)   
HUC#  Stream miles (est.)   
Drainage area: square miles, est.  or acreage, est.   
Social vulnerability index   
*(SVI score 0.0 indicates least vulnerable; 1.0 indicates most vulnerable.)*  
Other



### Flood Risk Description

The Sponsor has indicated the existing stormwater infrastructure in the study area and numerous houses are located in the 100-year floodplain. 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  Structures at risk  Critical facilities at risk   
Farm/Ranch land impacted (acres)  Roadway(s) impacted (miles)

### 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)

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  Potential funding source(s)

# Flood Management Evaluation (FME) STUDY

## Lower Colorado-Lavaca REGIONAL FLOOD PLANNING GROUP

REGION 10

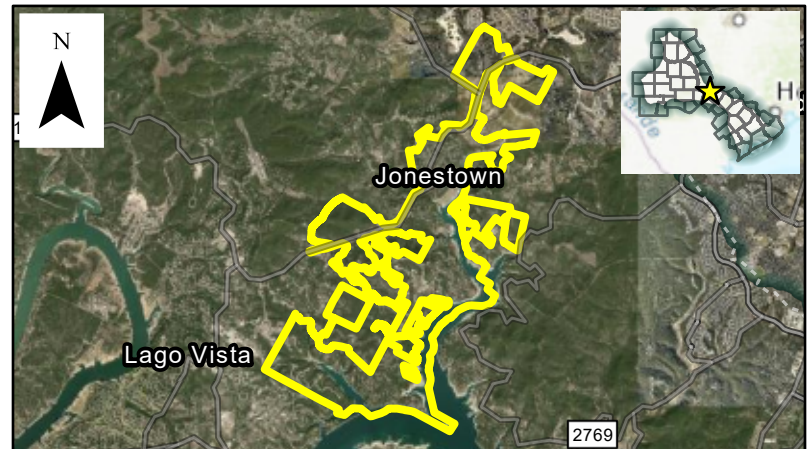
Title  ID#   
Sponsor (name of entity)  Commitment  Yes  No  
Technical committee recommend  Yes  No RFPG recommend  Yes  No

### Study Type

Emergency preparedness  Floodplain modeling, mapping and risk assessment  Feasibility study  Preliminary project engineering  
 Other

### Problem Area

City  County   
Watershed  name(s)  
Tributary(ies)   
HUC#  Stream miles (est.)   
Drainage area: square miles, est.  or acreage, est.   
Social vulnerability index   
*(SVI score 0.0 indicates least vulnerable; 1.0 indicates most vulnerable.)*  
Other



### Flood Risk Description

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  Structures at risk  Critical facilities at risk   
Farm/Ranch land impacted (acres)  Roadway(s) impacted (miles)

### 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

Cost  Potential funding source(s)

# Flood Management Evaluation (FME) STUDY

## Lower Colorado-Lavaca REGIONAL FLOOD PLANNING GROUP

Title  ID#   
Sponsor (name of entity)  Commitment  Yes  No  
Technical committee recommend  Yes  No RFPG recommend  Yes  No

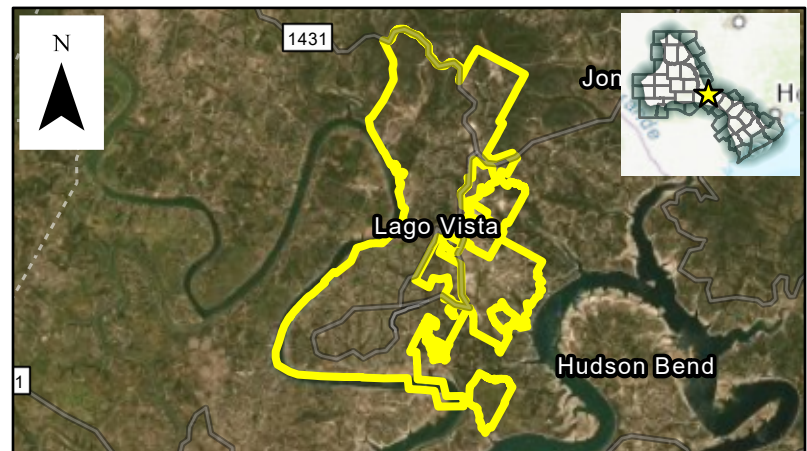
REGION 10

### Study Type

Emergency preparedness  Floodplain modeling, mapping and risk assessment  Feasibility study  Preliminary project engineering  
 Other

### Problem Area

City  County   
Watershed  name(s)  
Tributary(ies)   
HUC#  Stream miles (est.)   
Drainage area: square miles, est.  or acreage, est.   
Social vulnerability index   
*(SVI score 0.0 indicates least vulnerable; 1.0 indicates most vulnerable.)*  
Other



### Flood Risk Description

The City has multiple local drainage problems and portions of the City are at risk of flooding. 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  Structures at risk  Critical facilities at risk   
Farm/Ranch land impacted (acres)  Roadway(s) impacted (miles)

### Scope of Study

The Citywide 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)

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  Potential funding source(s)

# Flood Management Evaluation (FME) STUDY

## Lower Colorado-Lavaca REGIONAL FLOOD PLANNING GROUP

Title  ID#

Sponsor (name of entity)  Commitment  Yes  No

Technical committee recommend  Yes  No RFPG recommend  Yes  No

REGION 10

### Study Type

Emergency preparedness  Floodplain modeling, mapping and risk assessment  Feasibility study  Preliminary project engineering  
 Other

### Problem Area

City  County

Watershed name(s)

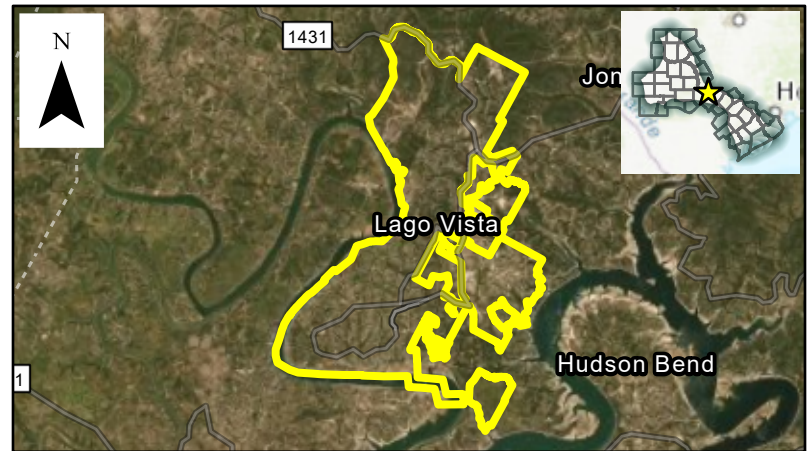
Tributary(ies)

HUC#  Stream miles (est.)

Drainage area: square miles, est.  or acreage, est.

Social vulnerability index   
*(SVI score 0.0 indicates least vulnerable; 1.0 indicates most vulnerable.)*

Other



### Flood Risk Description

The City has identified the need to develop/update an evacuation plan for the safety of the community.

Population at risk  Structures at risk  Critical facilities at risk

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

### 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

Cost  Potential funding source(s)

# Flood Management Evaluation (FME) STUDY

## Lower Colorado-Lavaca REGIONAL FLOOD PLANNING GROUP

REGION 10

Title  ID#   
Sponsor (name of entity)  Commitment  Yes  No  
Technical committee recommend  Yes  No RFPG recommend  Yes  No

### Study Type

Emergency preparedness  Floodplain modeling, mapping and risk assessment  Feasibility study  Preliminary project engineering  
 Other

### Problem Area

City  County   
Watershed   
name(s)   
Tributary(ies)   
HUC#  Stream miles (est.)   
Drainage area: square miles, est.  or acreage, est.   
Social vulnerability index   
*(SVI score 0.0 indicates least vulnerable; 1.0 indicates most vulnerable.)*  
Other



### Flood Risk Description

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  Structures at risk  Critical facilities at risk   
Farm/Ranch land impacted (acres)  Roadway(s) impacted (miles)

### 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

Cost  Potential funding source(s)

# Flood Management Evaluation (FME) STUDY

## Lower Colorado-Lavaca REGIONAL FLOOD PLANNING GROUP

REGION 10

Title  ID#   
Sponsor (name of entity)  Commitment  Yes  No  
Technical committee recommend  Yes  No RFPG recommend  Yes  No

### Study Type

Emergency preparedness  Floodplain modeling, mapping and risk assessment  Feasibility study  Preliminary project engineering  
 Other

### Problem Area

City  County   
Watershed  name(s)  
Tributary(ies)   
HUC#  Stream miles (est.)   
Drainage area: square miles, est.  or acreage, est.   
Social vulnerability index   
*(SVI score 0.0 indicates least vulnerable; 1.0 indicates most vulnerable.)*  
Other



### Flood Risk Description

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  Structures at risk  Critical facilities at risk   
Farm/Ranch land impacted (acres)  Roadway(s) impacted (miles)

### 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

Cost  Potential funding source(s)

# Flood Management Evaluation (FME) STUDY

## Lower Colorado-Lavaca REGIONAL FLOOD PLANNING GROUP

Title  ID#   
Sponsor (name of entity)  Commitment  Yes  No  
Technical committee recommend  Yes  No RFPG recommend  Yes  No

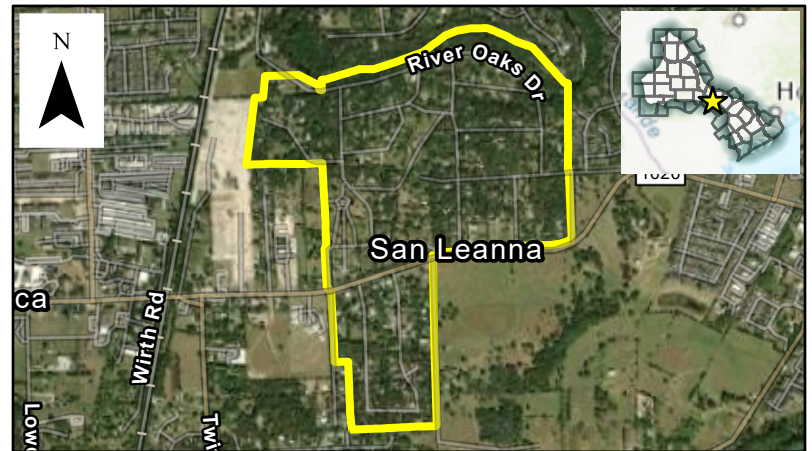
REGION 10

### Study Type

Emergency preparedness  Floodplain modeling, mapping and risk assessment  Feasibility study  Preliminary project engineering  
 Other

### Problem Area

City  County   
Watershed   
name(s)   
Tributary(ies)   
HUC#  Stream miles (est.)   
Drainage area: square miles, est.  or acreage, est.   
Social vulnerability index   
(SVI score 0.0 indicates least vulnerable; 1.0 indicates most vulnerable.)  
Other



### Flood Risk Description

The City has multiple local drainage problems and portions of the City are at risk of flooding. The existing risk indicators are based on available data and will be better defined as part of the study. Study 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  Structures at risk  Critical facilities at risk   
Farm/Ranch land impacted (acres)  Roadway(s) impacted (miles)

### Scope of Study

The Citywide 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)

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  Potential funding source(s)

# Flood Management Evaluation (FME) STUDY

## Lower Colorado-Lavaca REGIONAL FLOOD PLANNING GROUP

Title  ID#   
Sponsor (name of entity)  Commitment  Yes  No  
Technical committee recommend  Yes  No RFPG recommend  Yes  No

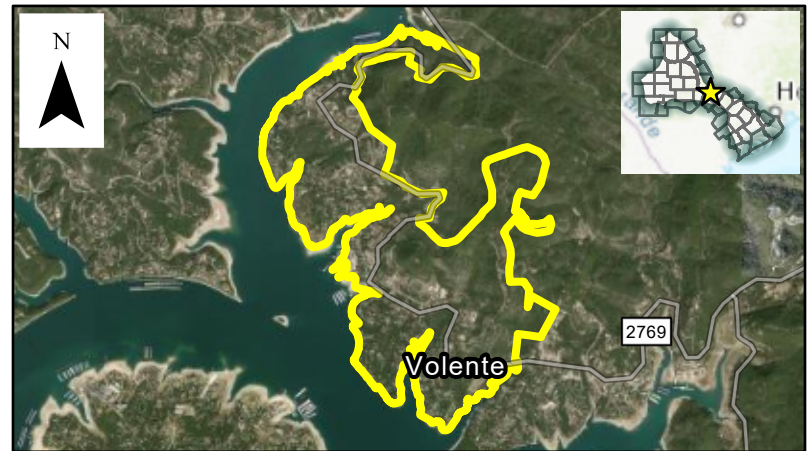
REGION 10

### Study Type

Emergency preparedness  Floodplain modeling, mapping and risk assessment  Feasibility study  Preliminary project engineering  
 Other

### Problem Area

City  County   
Watershed  name(s)  
Tributary(ies)   
HUC#  Stream miles (est.)   
Drainage area: square miles, est.  or acreage, est.   
Social vulnerability index   
*(SVI score 0.0 indicates least vulnerable; 1.0 indicates most vulnerable.)*  
Other



### Flood Risk Description

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  Structures at risk  Critical facilities at risk   
Farm/Ranch land impacted (acres)  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  Potential funding source(s)



# Flood Management Evaluation (FME) STUDY

## Lower Colorado-Lavaca REGIONAL FLOOD PLANNING GROUP

Title  ID#

Sponsor (name of entity)  Commitment  Yes  No

Technical committee recommend  Yes  No RFPG recommend  Yes  No

REGION 10

### Study Type

Emergency preparedness  Floodplain modeling, mapping and risk assessment  Feasibility study  Preliminary project engineering  
 Other

### Problem Area

City  County

Watershed name(s)

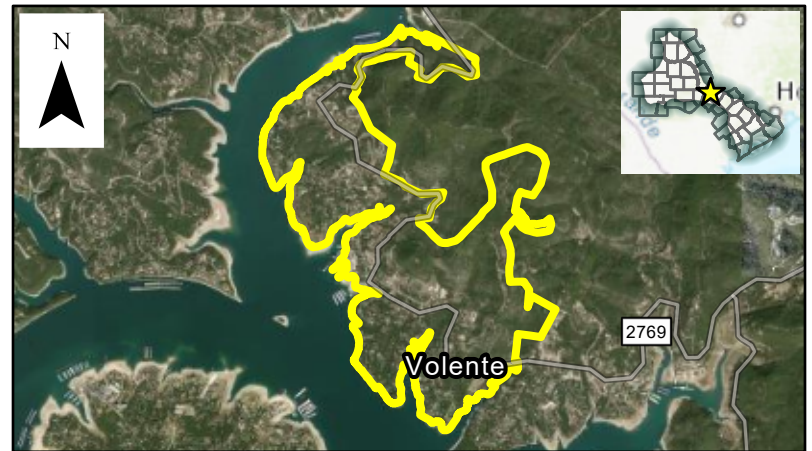
Tributary(ies)

HUC#  Stream miles (est.)

Drainage area: square miles, est.  or acreage, est.

Social vulnerability index   
*(SVI score 0.0 indicates least vulnerable; 1.0 indicates most vulnerable.)*

Other



### Flood Risk Description

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  Structures at risk  Critical facilities at risk

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

### 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

Cost  Potential funding source(s)

# Flood Management Evaluation (FME) STUDY

## Lower Colorado-Lavaca REGIONAL FLOOD PLANNING GROUP

Title  ID#   
Sponsor (name of entity)  Commitment  Yes  No  
Technical committee recommend  Yes  No RFPG recommend  Yes  No

REGION 10

### Study Type

Emergency preparedness  Floodplain modeling, mapping and risk assessment  Feasibility study  Preliminary project engineering  
 Other

### Problem Area

City  County   
Watershed   
name(s)   
Tributary(ies)   
HUC#  Stream miles (est.)   
Drainage area: square miles, est.  or acreage, est.   
Social vulnerability index   
*(SVI score 0.0 indicates least vulnerable; 1.0 indicates most vulnerable.)*  
Other



### Flood Risk Description

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  Structures at risk  Critical facilities at risk   
Farm/Ranch land impacted (acres)  Roadway(s) impacted (miles)

### 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

Cost  Potential funding source(s)

# Flood Management Evaluation (FME) STUDY

## Lower Colorado-Lavaca REGIONAL FLOOD PLANNING GROUP

Title  ID#   
Sponsor (name of entity)  Commitment  Yes  No  
Technical committee recommend  Yes  No RFPG recommend  Yes  No

REGION 10

### Study Type

Emergency preparedness  Floodplain modeling, mapping and risk assessment  Feasibility study  Preliminary project engineering  
 Other

### Problem Area

City  County   
Watershed  name(s)  
Tributary(ies)   
HUC#  Stream miles (est.)   
Drainage area: square miles, est.  or acreage, est.   
Social vulnerability index   
*(SVI score 0.0 indicates least vulnerable; 1.0 indicates most vulnerable.)*  
Other



### Flood Risk Description

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  Structures at risk  Critical facilities at risk   
Farm/Ranch land impacted (acres)  Roadway(s) impacted (miles)

### 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

Cost  Potential funding source(s)

# Flood Management Evaluation (FME) STUDY

## Lower Colorado-Lavaca REGIONAL FLOOD PLANNING GROUP

Title  ID#   
Sponsor (name of entity)  Commitment  Yes  No  
Technical committee recommend  Yes  No RFPG recommend  Yes  No

REGION 10

### Study Type

Emergency preparedness  Floodplain modeling, mapping and risk assessment  Feasibility study  Preliminary project engineering  
 Other

### Problem Area

City  County   
Watershed  name(s)   
Tributary(ies)   
HUC#  Stream miles (est.)   
Drainage area: square miles, est.  or acreage, est.   
Social vulnerability index   
*(SVI score 0.0 indicates least vulnerable; 1.0 indicates most vulnerable.)*  
Other



### Flood Risk Description

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  Structures at risk  Critical facilities at risk   
Farm/Ranch land impacted (acres)  Roadway(s) impacted (miles)

### 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  Potential funding source(s)

# Flood Management Evaluation (FME) STUDY

## Lower Colorado-Lavaca REGIONAL FLOOD PLANNING GROUP

Title  ID#

Sponsor (name of entity)  Commitment  Yes  No

Technical committee recommend  Yes  No RFPG recommend  Yes  No

REGION 10

### Study Type

Emergency preparedness  Floodplain modeling, mapping and risk assessment  Feasibility study  Preliminary project engineering  
 Other

### Problem Area

City  County

Watershed  name(s)

Tributary(ies)

HUC#  Stream miles (est.)

Drainage area: square miles, est.  or acreage, est.

Social vulnerability index   
*(SVI score 0.0 indicates least vulnerable; 1.0 indicates most vulnerable.)*

Other



### Flood Risk Description

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  Structures at risk  Critical facilities at risk

Farm/Ranch land impacted (acres)  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-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  Potential funding source(s)

# Flood Management Evaluation (FME) STUDY

## Lower Colorado-Lavaca REGIONAL FLOOD PLANNING GROUP

Title  ID#   
Sponsor (name of entity)  Commitment  Yes  No  
Technical committee recommend  Yes  No RFPG recommend  Yes  No

REGION 10

### Study Type

Emergency preparedness  Floodplain modeling, mapping and risk assessment  Feasibility study  Preliminary project engineering  
 Other

### Problem Area

City  County   
Watershed   
name(s)   
Tributary(ies)   
HUC#  Stream miles (est.)   
Drainage area: square miles, est.  or acreage, est.   
Social vulnerability index   
*(SVI score 0.0 indicates least vulnerable; 1.0 indicates most vulnerable.)*  
Other



### Flood Risk Description

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  Structures at risk  Critical facilities at risk   
Farm/Ranch land impacted (acres)  Roadway(s) impacted (miles)

### 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

Cost  Potential funding source(s)

# Flood Management Evaluation (FME) STUDY

## Lower Colorado-Lavaca REGIONAL FLOOD PLANNING GROUP

Title Harden county buildings, critical infrastructure, and government ID# 101000096

Sponsor (name of entity) Victoria (County) Commitment  Yes  No

Technical committee recommend  Yes  No RFPG recommend  Yes  No

REGION 10

### Study Type

Emergency preparedness  Floodplain modeling, mapping and risk assessment  Feasibility study  Preliminary project engineering  
 Other

### Problem Area

City N/A County Victoria

Watershed Multiple Watersheds  
name(s)

Tributary(ies) Unnamed Tributary

HUC# 12100204,12100402 Stream miles (est.) TBD

Drainage area: square miles, est 885.81 or acreage, est. 566,920

Social vulnerability index 0.62

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

Other Local Plans & Regulations



### Flood Risk Description

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 3,238 Structures at risk 776 Critical facilities at risk 0

Farm/Ranch land impacted (acres) 37,406 Roadway(s) impacted (miles) 51.50

### 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)

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

Cost \$100,000 Potential funding source(s) TBD

# Flood Management Evaluation (FME) STUDY

## Lower Colorado-Lavaca REGIONAL FLOOD PLANNING GROUP

Title **Tres Palacios, Blue Creek, East Mustang Creek** ID# **101000098**  
Sponsor (name of entity) **El Campo (Municipality)** Commitment  Yes  No  
Technical committee recommend  Yes  No RFPG recommend  Yes  No

REGION 10

### Study Type

Emergency preparedness  Floodplain modeling, mapping and risk assessment  Feasibility study  Preliminary project engineering  
 Other

### Problem Area

City **El Campo** County **Wharton**  
Watershed **Tres Palacios River - Frontal Tres Palacios Bay, Mud Creek - Blue Creek, East Mustang Creek**  
Tributary(ies) **Tres Palacios River, Blue Creek, Mud Creek**  
HUC# **12090302,12100401** Stream miles (est.) **TBD**  
Drainage area: square miles, est. **9.69** or acreage, est. **6,199**  
Social vulnerability index **0.81**  
*(SVI score 0.0 indicates least vulnerable; 1.0 indicates most vulnerable.)*  
Other **Regional Detention**



### Flood Risk Description

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. There are numerous structures in the 100-year floodplain, particularly in the northeast and southwest sections of the city. 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 **5,635** Structures at risk **1,589** Critical facilities at risk **0**  
Farm/Ranch land impacted (acres) **874** Roadway(s) impacted (miles) **34.72**

### Scope of Study

Conduct a study to evaluate potential detention alternatives. 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)

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 **\$150,000** Potential funding source(s) **TBD**



# Flood Management Evaluation (FME) STUDY

## Lower Colorado-Lavaca REGIONAL FLOOD PLANNING GROUP

Title Use Digital Maps of All Hazards and Educate Residents ID# 101000099

Sponsor (name of entity) El Campo (Municipality) Commitment  Yes  No

Technical committee recommend  Yes  No RFPG recommend  Yes  No

REGION 10

### Study Type

Emergency preparedness  Floodplain modeling, mapping and risk assessment  Feasibility study  Preliminary project engineering  
 Other

### Problem Area

City El Campo County Wharton

Watershed Tres Palacios River - Frontal Tres Palacios Bay, Mud Creek -  
name(s) Blue Creek, East Mustang Creek

Tributary(ies) Tres Palacios River, Blue Creek, Mud Creek

HUC# 12090302,12100401 Stream miles (est.) TBD

Drainage area: square miles, est 9.69 or acreage, est. 6,199

Social vulnerability index 0.81  
(SVI score 0.0 indicates least vulnerable; 1.0 indicates most vulnerable.)

Other Local Plans & Regulations



### Flood Risk Description

The City has identified the need to generate digital maps to overlay and display all known hazards for the purpose of notifying and informing residents.

Population at risk 5,635 Structures at risk 1,589 Critical facilities at risk 0

Farm/Ranch land impacted (acres) 874 Roadway(s) impacted (miles) 34.72

### Scope of Study

Collect known hazard maps and create a digital map (geographic information system map) for the purpose of education. The study will include evaluating options for sharing the maps publicly and developing an ongoing maintenance/update cycle.

### Related Goal(s)

1.1 Increase the number of public outreach and educational communications and activities conducted by the RFPG to improve awareness of flood hazards and benefits of flood planning in the flood planning region.

### Estimated Study Cost

Cost \$100,000 Potential funding source(s) TBD

# Flood Management Evaluation (FME) STUDY

## Lower Colorado-Lavaca REGIONAL FLOOD PLANNING GROUP

REGION 10

Title Pecan Street ID# 101000100  
Sponsor (name of entity) El Campo (Municipality) Commitment  Yes  No  
Technical committee recommend  Yes  No RFPG recommend  Yes  No

### Study Type

Emergency preparedness  Floodplain modeling, mapping and risk assessment  Feasibility study  Preliminary project engineering  
 Other

### Problem Area

City El Campo County Wharton  
Watershed Tres Palacios River - Frontal Tres Palacios Bay  
name(s)  
Tributary(ies) Unnamed Tributary  
HUC# 12100401 Stream miles (est.) TBD  
Drainage area: square miles, est. 0.00 or acreage, est. 3  
Social vulnerability index 0.81  
(SVI score 0.0 indicates least vulnerable; 1.0 indicates most vulnerable.)  
Other Drainage System Improvements



### Flood Risk Description

The Sponsor has indicated the existing stormwater infrastructure in the study area is undersized and the area is at risk of street and local flooding. 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 7 Structures at risk 5 Critical facilities at risk 0  
Farm/Ranch land impacted (acres) 0 Roadway(s) impacted (miles) 1.10

### 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)

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 \$100,000 Potential funding source(s) TBD

# Flood Management Evaluation (FME) STUDY

## Lower Colorado-Lavaca REGIONAL FLOOD PLANNING GROUP

REGION 10

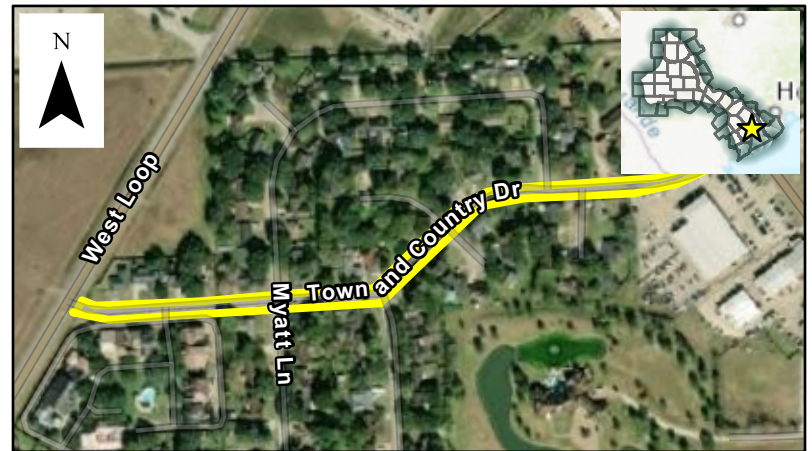
Title  ID#   
Sponsor (name of entity)  Commitment  Yes  No  
Technical committee recommend  Yes  No RFPG recommend  Yes  No

### Study Type

Emergency preparedness  Floodplain modeling, mapping and risk assessment  Feasibility study  Preliminary project engineering  
 Other

### Problem Area

City  County   
Watershed   
name(s)   
Tributary(ies)   
HUC#  Stream miles (est.)   
Drainage area: square miles, est.  or acreage, est.   
Social vulnerability index   
(SVI score 0.0 indicates least vulnerable; 1.0 indicates most vulnerable.)  
Other



### Flood Risk Description

The Sponsor has indicated the existing stormwater infrastructure in the study area is undersized and the area is at risk of street and local flooding. 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  Structures at risk  Critical facilities at risk   
Farm/Ranch land impacted (acres)  Roadway(s) impacted (miles)

### 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

Cost  Potential funding source(s)

# Flood Management Evaluation (FME) STUDY

## Lower Colorado-Lavaca REGIONAL FLOOD PLANNING GROUP

Title  ID#   
Sponsor (name of entity)  Commitment  Yes  No  
Technical committee recommend  Yes  No RFPG recommend  Yes  No

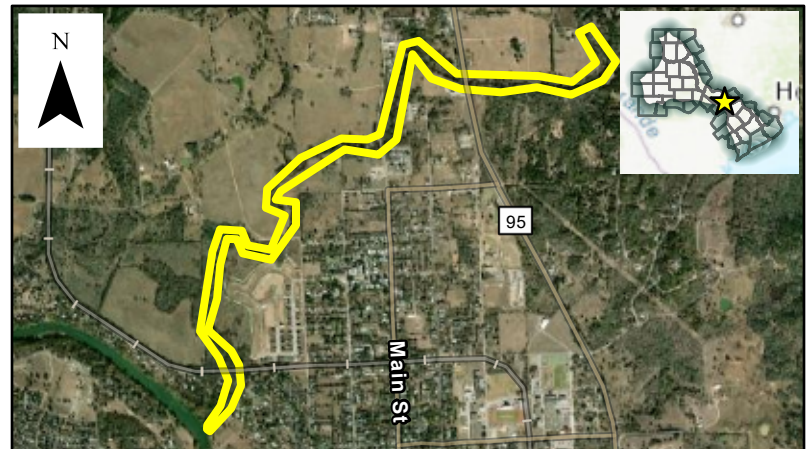
REGION 10

### Study Type

Emergency preparedness  Floodplain modeling, mapping and risk assessment  Feasibility study  Preliminary project engineering  
 Other

### Problem Area

City  County   
Watershed   
name(s)   
Tributary(ies)   
HUC#  Stream miles (est.)   
Drainage area: square miles, est.  or acreage, est.   
Social vulnerability index   
(SVI score 0.0 indicates least vulnerable; 1.0 indicates most vulnerable.)  
Other



### Flood Risk Description

The existing channel from upstream of HWY 95 to the Colorado River is undersized threatening multiple road crossings as well as houses on Magnolia Street, Mesquite street, and in the Bastrop Estates Mobile Home Park. The city has identified channel benching (approx. 4,430 feet) to increase conveyance as a potential solution. 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  Structures at risk  Critical facilities at risk   
Farm/Ranch land impacted (acres)  Roadway(s) impacted (miles)

### 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)

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  Potential funding source(s)

# Flood Management Evaluation (FME) STUDY

## Lower Colorado-Lavaca REGIONAL FLOOD PLANNING GROUP

Title  ID#   
Sponsor (name of entity)  Commitment  Yes  No  
Technical committee recommend  Yes  No RFPG recommend  Yes  No

REGION 10

### Study Type

Emergency preparedness  Floodplain modeling, mapping and risk assessment  Feasibility study  Preliminary project engineering  
 Other

### Problem Area

City  County   
Watershed   
Tributary(ies)   
HUC#  Stream miles (est.)   
Drainage area: square miles, est.  or acreage, est.   
Social vulnerability index   
*(SVI score 0.0 indicates least vulnerable; 1.0 indicates most vulnerable.)*  
Other



### Flood Risk Description

Additions to the watershed would require improvements to the existing undersized drainage system in the JC Madison Addition. 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  Structures at risk  Critical facilities at risk   
Farm/Ranch land impacted (acres)  Roadway(s) impacted (miles)

### 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

Cost  Potential funding source(s)

# Flood Management Evaluation (FME) STUDY

## Lower Colorado-Lavaca REGIONAL FLOOD PLANNING GROUP

Title  ID#   
Sponsor (name of entity)  Commitment  Yes  No  
Technical committee recommend  Yes  No RFPG recommend  Yes  No

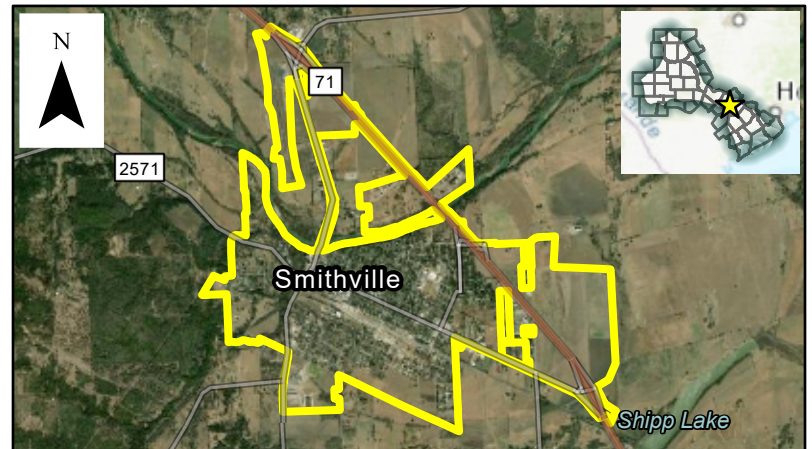
REGION 10

### Study Type

Emergency preparedness  Floodplain modeling, mapping and risk assessment  Feasibility study  Preliminary project engineering  
 Other

### Problem Area

City  County   
Watershed   
name(s)   
Tributary(ies)   
HUC#  Stream miles (est.)   
Drainage area: square miles, est.  or acreage, est.   
Social vulnerability index   
*(SVI score 0.0 indicates least vulnerable; 1.0 indicates most vulnerable.)*  
Other



### Flood Risk Description

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  Structures at risk  Critical facilities at risk   
Farm/Ranch land impacted (acres)  Roadway(s) impacted (miles)

### 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)

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  Potential funding source(s)

# Flood Management Evaluation (FME) STUDY

## Lower Colorado-Lavaca REGIONAL FLOOD PLANNING GROUP

Title  ID#   
Sponsor (name of entity)  Commitment  Yes  No  
Technical committee recommend  Yes  No RFPG recommend  Yes  No

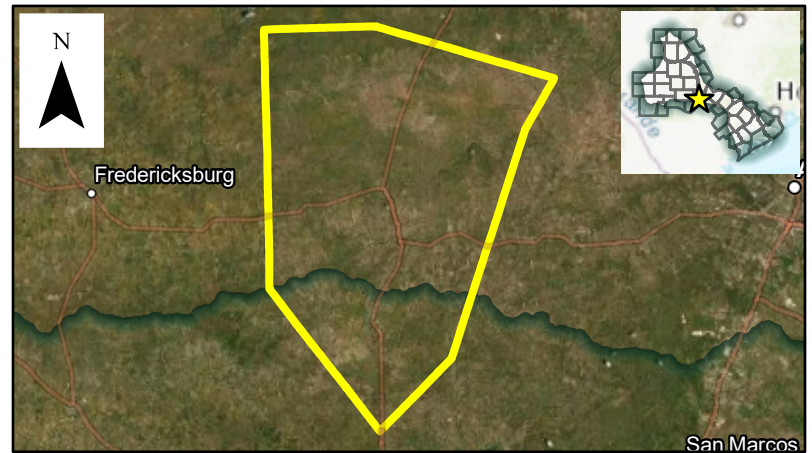
REGION 10

### Study Type

Emergency preparedness  Floodplain modeling, mapping and risk assessment  Feasibility study  Preliminary project engineering  
 Other

### Problem Area

City  County   
Watershed  name(s)   
Tributary(ies)   
HUC#  Stream miles (est.)   
Drainage area: square miles, est.  or acreage, est.   
Social vulnerability index   
*(SVI score 0.0 indicates least vulnerable; 1.0 indicates most vulnerable.)*  
Other



### Flood Risk Description

The City has identified the need to develop/update an evacuation plan for the safety of the community.

Population at risk  Structures at risk  Critical facilities at risk   
Farm/Ranch land impacted (acres)  Roadway(s) impacted (miles)

### 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.

### Estimated Study Cost

Cost  Potential funding source(s)

# Flood Management Evaluation (FME) STUDY

## Lower Colorado-Lavaca REGIONAL FLOOD PLANNING GROUP

Title  ID#

Sponsor (name of entity)  Commitment  Yes  No

Technical committee recommend  Yes  No RFPG recommend  Yes  No

REGION 10

### Study Type

Emergency preparedness  Floodplain modeling, mapping and risk assessment  Feasibility study  Preliminary project engineering  
 Other

### Problem Area

City  County

Watershed   
name(s)

Tributary(ies)

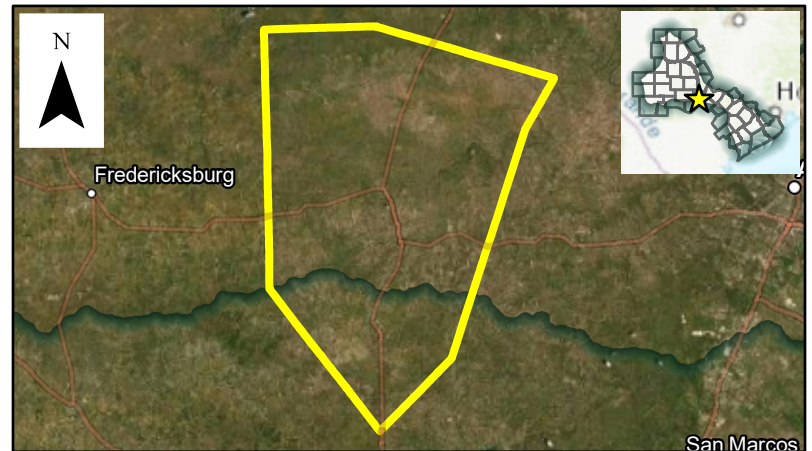
HUC#  Stream miles (est.)

Drainage area: square miles, est.  or acreage, est.

Social vulnerability index

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

Other



### Flood Risk Description

The Sponsor has indicated there are multiple low water crossings throughout the County 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  Structures at risk  Critical facilities at risk

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

### Scope of Study

Conduct a study to evaluate upsizing the existing low water crossings. 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  Potential funding source(s)



# Flood Management Evaluation (FME) STUDY

## Lower Colorado-Lavaca REGIONAL FLOOD PLANNING GROUP

Title  ID#   
Sponsor (name of entity)  Commitment  Yes  No  
Technical committee recommend  Yes  No RFPG recommend  Yes  No

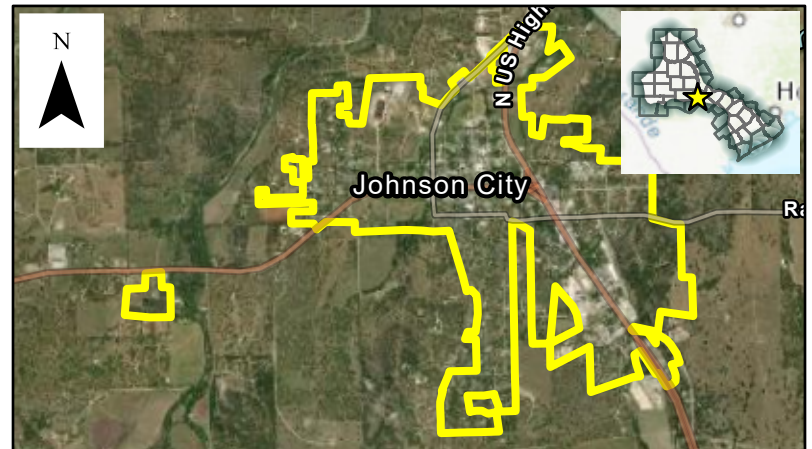
REGION 10

### Study Type

Emergency preparedness  Floodplain modeling, mapping and risk assessment  Feasibility study  Preliminary project engineering  
 Other

### Problem Area

City  County   
Watershed   
name(s)   
Tributary(ies)   
HUC#  Stream miles (est.)   
Drainage area: square miles, est.  or acreage, est.   
Social vulnerability index   
(SVI score 0.0 indicates least vulnerable; 1.0 indicates most vulnerable.)  
Other



### Flood Risk Description

The City has multiple local drainage problems and portions of the City are at risk of flooding from the Pedernales River, Flat Creek, Town Creek, and Deer Creek. 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  Structures at risk  Critical facilities at risk   
Farm/Ranch land impacted (acres)  Roadway(s) impacted (miles)

### Scope of Study

The Citywide 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. 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  Potential funding source(s)

# Flood Management Evaluation (FME) STUDY

## Lower Colorado-Lavaca REGIONAL FLOOD PLANNING GROUP

Title  ID#   
Sponsor (name of entity)  Commitment  Yes  No  
Technical committee recommend  Yes  No RFPG recommend  Yes  No

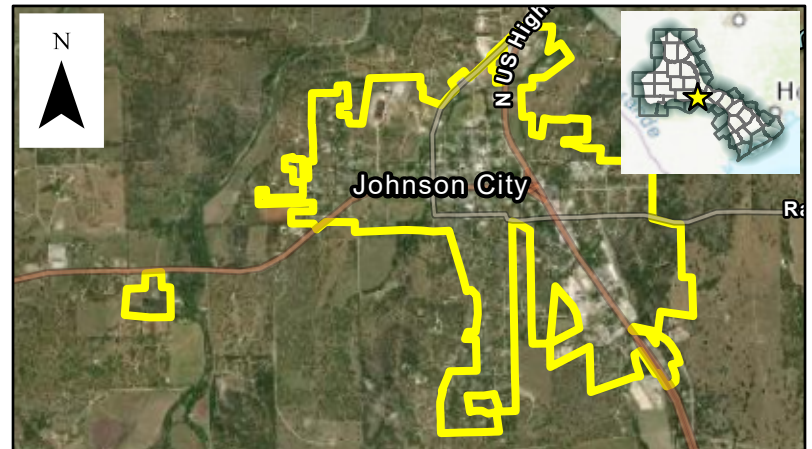
REGION 10

### Study Type

Emergency preparedness  Floodplain modeling, mapping and risk assessment  Feasibility study  Preliminary project engineering  
 Other

### Problem Area

City  County   
Watershed   
Tributary(ies)   
HUC#  Stream miles (est.)   
Drainage area: square miles, est.  or acreage, est.   
Social vulnerability index   
*(SVI score 0.0 indicates least vulnerable; 1.0 indicates most vulnerable.)*  
Other



### Flood Risk Description

The existing floodplain maps are outdated and do not reflect current flood risk.

Population at risk  Structures at risk  Critical facilities at risk   
Farm/Ranch land impacted (acres)  Roadway(s) impacted (miles)

### Scope of Study

The study will include hydrologic and hydraulic modeling (with Atlas 14 rainfall) and will develop new floodplain maps that reflect current flood risk.

### 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  Potential funding source(s)

# Flood Management Evaluation (FME) STUDY

## Lower Colorado-Lavaca REGIONAL FLOOD PLANNING GROUP

Title **CR 332 Drainage Improvements** ID# **101000109**

Sponsor (name of entity) **Sweeny (Municipality)** Commitment  Yes  No

Technical committee recommend  Yes  No RFPG recommend  Yes  No

REGION 10

### Study Type

Emergency preparedness  Floodplain modeling, mapping and risk assessment  Feasibility study  Preliminary project engineering  
 Other

### Problem Area

City **Sweeny** County **Brazoria**

Watershed **East Matagorda Bay, Bell Creek - San Bernard River**  
name(s)

Tributary(ies) **Cedar Lake Creek**

HUC# **12090402,12090401** Stream miles (est.) **TBD**

Drainage area: square miles, est. **0.21** or acreage, est. **137**

Social vulnerability index **0.21**

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

Other **Drainage System Improvements**



### Flood Risk Description

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 **27** Structures at risk **9** Critical facilities at risk **0**

Farm/Ranch land impacted (acres) **0** 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

Cost **\$50,000** Potential funding source(s) **TBD**

# Flood Management Evaluation (FME) STUDY

## Lower Colorado-Lavaca REGIONAL FLOOD PLANNING GROUP

Title  ID#

Sponsor (name of entity)  Commitment  Yes  No

Technical committee recommend  Yes  No RFPG recommend  Yes  No

REGION 10

### Study Type

Emergency preparedness  Floodplain modeling, mapping and risk assessment  Feasibility study  Preliminary project engineering  
 Other

### Problem Area

City  County

Watershed  name(s)

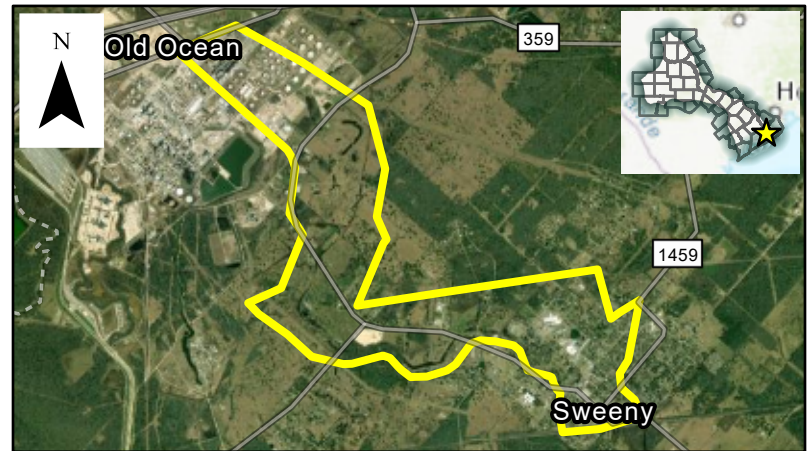
Tributary(ies)

HUC#  Stream miles (est.)

Drainage area: square miles, est.  or acreage, est.

Social vulnerability index   
*(SVI score 0.0 indicates least vulnerable; 1.0 indicates most vulnerable.)*

Other



### Flood Risk Description

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  Structures at risk  Critical facilities at risk

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

### 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  Potential funding source(s)

# Flood Management Evaluation (FME) STUDY

## Lower Colorado-Lavaca REGIONAL FLOOD PLANNING GROUP

Title  ID#   
Sponsor (name of entity)  Commitment  Yes  No  
Technical committee recommend  Yes  No RFPG recommend  Yes  No

REGION 10

### Study Type

Emergency preparedness  Floodplain modeling, mapping and risk assessment  Feasibility study  Preliminary project engineering  
 Other

### Problem Area

City  County   
Watershed   
Tributary(ies)   
HUC#  Stream miles (est.)   
Drainage area: square miles, est.  or acreage, est.   
Social vulnerability index   
*(SVI score 0.0 indicates least vulnerable; 1.0 indicates most vulnerable.)*  
Other



### Flood Risk Description

The existing floodplain maps are outdated and do not reflect current flood risk.

Population at risk  Structures at risk  Critical facilities at risk   
Farm/Ranch land impacted (acres)  Roadway(s) impacted (miles)

### Scope of Study

The study will include hydrologic and hydraulic modeling (with Atlas 14 rainfall) and will develop new floodplain maps that reflect current flood risk.

### 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  Potential funding source(s)

# Flood Management Evaluation (FME) STUDY

## Lower Colorado-Lavaca REGIONAL FLOOD PLANNING GROUP

Title Willis Creek Detention ID# 101000112

Sponsor (name of entity) Brownwood (Municipality) Commitment  Yes  No

Technical committee recommend  Yes  No RFPG recommend  Yes  No

REGION 10

### Study Type

Emergency preparedness  Floodplain modeling, mapping and risk assessment  Feasibility study  Preliminary project engineering  
 Other

### Problem Area

City Brownwood County Brown

Watershed Pecan Bayou  
name(s)

Tributary(ies) Willis Creek

HUC# 12090106,12090107 Stream miles (est.) 13.00

Drainage area: square miles, est 26.81 or acreage, est. 17,161

Social vulnerability index 0.28  
(SVI score 0.0 indicates least vulnerable; 1.0 indicates most vulnerable.)

Other Regional Detention



### Flood Risk Description

The area of concern along Willis Creek has insufficient channel capacity and undersized bridge/culvert crossings. 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 3,853 Structures at risk 758 Critical facilities at risk 0

Farm/Ranch land impacted (acres) 1,350 Roadway(s) impacted (miles) 14.13

### Scope of Study

The study will build upon and update previously conducted flood risk reduction studies. Study will include hydrologic and hydraulic modeling, 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

Cost \$250,000 Potential funding source(s) TBD

# Flood Management Evaluation (FME) STUDY

## Lower Colorado-Lavaca REGIONAL FLOOD PLANNING GROUP

Title **Burnet County Flood Early Warning Systems** ID# **101000113**  
Sponsor (name of entity) **Burnet (County)** Commitment  Yes  No  
Technical committee recommend  Yes  No RFPG recommend  Yes  No

REGION 10

### Study Type

Emergency preparedness  Floodplain modeling, mapping and risk assessment  Feasibility study  Preliminary project engineering  
 Other

### Problem Area

City **N/A** County **Burnet**  
Watershed **Multiple Watersheds**  
name(s)  
Tributary(ies) **Unnamed Tributary**  
HUC# **12090201,12090205** Stream miles (est.) **TBD**  
Drainage area: square miles, est. **1,016.05** or acreage, est. **650,272**  
Social vulnerability index **0.19**  
(SVI score 0.0 indicates least vulnerable; 1.0 indicates most vulnerable.)  
Other **Install Flood Early Warning System**



### Flood Risk Description

The county has identified multiple roadway crossings that may be overtopped during LCRA Floodgate operations and where roadway crossing improvements are not feasible. Proposed study will identify priority crossings to receive flood warning systems or other safety improvements. 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 **8,505** Structures at risk **2,835** Critical facilities at risk **0**  
Farm/Ranch land impacted (acres) **0** Roadway(s) impacted (miles) **43.31**

### 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 **\$100,000** Potential funding source(s) **TBD**

# Flood Management Evaluation (FME) STUDY

## Lower Colorado-Lavaca REGIONAL FLOOD PLANNING GROUP

Title  ID#   
Sponsor (name of entity)  Commitment  Yes  No  
Technical committee recommend  Yes  No RFPG recommend  Yes  No

REGION 10

### Study Type

Emergency preparedness  Floodplain modeling, mapping and risk assessment  Feasibility study  Preliminary project engineering  
 Other

### Problem Area

City  County   
Watershed   
name(s)   
Tributary(ies)   
HUC#  Stream miles (est.)   
Drainage area: square miles, est.  or acreage, est.   
Social vulnerability index   
*(SVI score 0.0 indicates least vulnerable; 1.0 indicates most vulnerable.)*  
Other



### Flood Risk Description

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  Structures at risk  Critical facilities at risk   
Farm/Ranch land impacted (acres)  Roadway(s) impacted (miles)

### Scope of Study

The 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. 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  Potential funding source(s)



# Flood Management Evaluation (FME) STUDY

## Lower Colorado-Lavaca REGIONAL FLOOD PLANNING GROUP

Title  ID#   
Sponsor (name of entity)  Commitment  Yes  No  
Technical committee recommend  Yes  No RFPG recommend  Yes  No

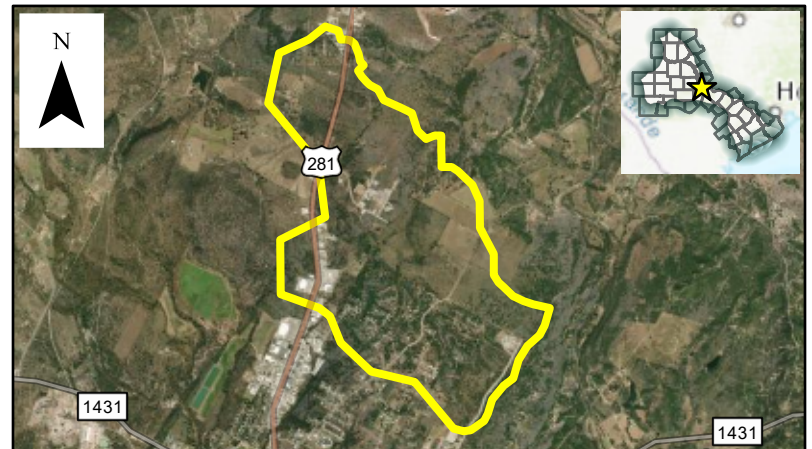
REGION 10

### Study Type

Emergency preparedness  Floodplain modeling, mapping and risk assessment  Feasibility study  Preliminary project engineering  
 Other

### Problem Area

City  County   
Watershed   
name(s)   
Tributary(ies)   
HUC#  Stream miles (est.)   
Drainage area: square miles, est.  or acreage, est.   
Social vulnerability index   
*(SVI score 0.0 indicates least vulnerable; 1.0 indicates most vulnerable.)*  
Other



### Flood Risk Description

The existing crossing is undersized and overtops, potentially impacting surrounding structures. The proposed improvements include installing a 50 foot wide bypass channel. The existing road is a 2-lane road with an average daily traffic count of 265. 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  Structures at risk  Critical facilities at risk   
Farm/Ranch land impacted (acres)  Roadway(s) impacted (miles)

### Scope of Study

Conduct a study to evaluate the area. 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

Cost  Potential funding source(s)

# Flood Management Evaluation (FME) STUDY

## Lower Colorado-Lavaca REGIONAL FLOOD PLANNING GROUP

Title  ID#   
Sponsor (name of entity)  Commitment  Yes  No  
Technical committee recommend  Yes  No RFPG recommend  Yes  No

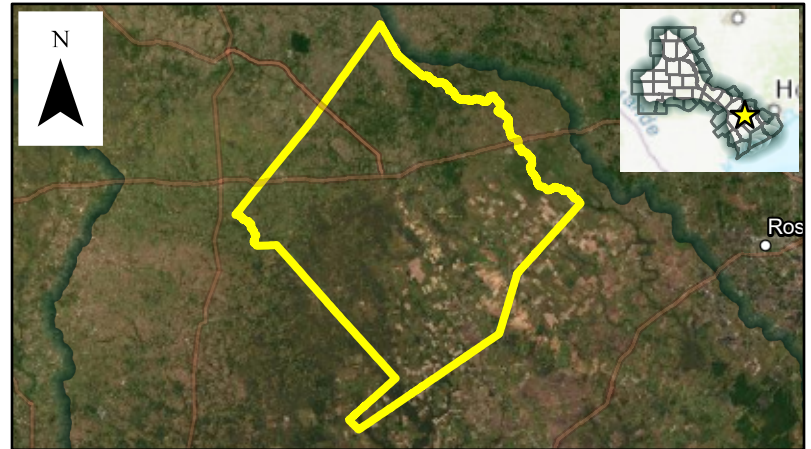
REGION 10

### Study Type

Emergency preparedness  Floodplain modeling, mapping and risk assessment  Feasibility study  Preliminary project engineering  
 Other

### Problem Area

City  County   
Watershed   
name(s)   
Tributary(ies)   
HUC#  Stream miles (est.)   
Drainage area: square miles, est.  or acreage, est.   
Social vulnerability index   
*(SVI score 0.0 indicates least vulnerable; 1.0 indicates most vulnerable.)*  
Other



### Flood Risk Description

The subdivision has multiple local drainage problems and portions of the subdivision are at risk of 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  Structures at risk  Critical facilities at risk   
Farm/Ranch land impacted (acres)  Roadway(s) impacted (miles)

### Scope of Study

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)

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  Potential funding source(s)