# FLOOD MANAGEMENT EVALUATIONS (FMEs) FACT SHEETS

#### **FME** Description Develop Flood risk maps for the county of Brooks and develop CIP Study Type ✓ Flood risk modeling/mapping ✓ Alternative Analysis □ Flood preparedness studies ✓ Flood mitigation study □ Feasibility Assessments

#### Study Area

#### City/ Cities Insert snip of Location Map here County/ Counties Brooks HUC 8 **HUC 12** Study Area (sq. mi.) 685.70

**Emergency Need** 

Yes 🗸 No 🗆

#### **Known Flood Risk**

History of Flooding?	Yes 🗸	No 🗆	Frequency:		
Population at Risk			# of structures inundated		
Roadways flooded	Yes 🗆	No 🗆	Miles inundated?		
Critical Facilities Impacted	Yes 🗆	No 🗆	Agricultural Land impacted	Yes 🗆	No 🗆
Notes:					

#### **Study Costs**

Total Cost:	\$250,000	Study Sponsor:		
Estimated year to start:		Entity with Oversight		
Time to complete?		Included in a CIP or other plan?	Yes 🗆	No ✓
Funding Dedicated?	Yes 🗆 No 🗸	(Potential) Source of Funding		

#### Study identified as a gap by Region 15 Regional Flood Planning Group (RFPG)

Yes 🖌 No 🗆



**FME** 

FME ID: 15100001

**Brooks County Master Drainage Study** 

Flood Management Evaluations Fact Sheet

Study identified because project could not be included as an Flood Mitigation Project (FMP) in the Region 15 Regional Flood Plan because it did meet the minimum requirements, per TWDB guidance for Regional Flood Planning or the provisions of Title 31 of TAQC Chapters 361 and 362.

Yes 🖌 No 🗆

Was the project missing sufficient data to assess whether the proposed project has a negative effect, per TWDB  $Y_{es} \checkmark N_0 \square$  guidelines?

Was the project recommended by the RFPG to be studied in order for it to provide more project details, such as  $Yes \checkmark No \square$  a benefit cost ratio or the number of structures the project removes from the 100-year floodplain?

#### Related Goals

- □ Increase community access routes to critical facilities, evacuation routes, during and after a flooding event
- □ Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain
- Increase the # of communities participating in the National Flood Insurance Program
- Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs
- Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards
- □ Increase participation in the regional flood planning process
- Provide regional detention that could be used for water reuse applications or as part of a floodplain management program
- Increase acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use
- Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website
- Increase the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations
- Reduce the # of structures that have been subject to repeated flooding events through property buyouts

#### **RFPG Recommended**

- Increase the # of entities that adopt higher than NFIPminimum standards
- Develop and maintain an operational stormwater asset management plan
- Increase the # of flood gauges (rainfall/stream) in the region
- Increase the # of entities that have multi-year drainage CIP list
- Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
- □ Increase use of nature-based flood risk reduction projects
- Develop a regionally coordinated warning and emergency response program that can detect the flood threat and provide timely warning of impending flood danger
- Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
- Increase the proficiency of floodplain managers by increasing the # of them that are certified as Certified Floodplain Managers (CFM) with the Texas Floodplain Management Association
- Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

#### Flood Mitigation Evaluations Fact Sheet

FME ID: 15100002

#### **Bayiew Action #6**

#### **FME** Description

Upgrade three roadway bridges and one footbridge including structural improvements and stabilization to reduce damages caused by flooding and high winds.

#### Study Type

- ✓ Flood risk modeling/mapping
- $\checkmark$  Flood mitigation study

- Alternative AnalysisFeasibility Assessments
- □ Flood preparedness studies



History of Flooding?	Yes 🗸	No 🗆	Frequency of flooding:		
Population at Risk			# of structures inundated		
Roadways flooded	Yes 🗸	No 🗆	Miles inundated?		
Critical Facilities Impacted	Yes 🗆	No 🗆	Agricultural Land impacted	Yes 🗆	No
Notes:					

#### Study Costs

\$369,600	Study Sponsor:	Bayview
2018	Entity with Oversight	Bayview
2020	Included in a Hazard Mitigation	Yes 🗸 No 🗆
	Action Plan or other plan?	
Yes 🗆 No 🗸	(Potential) Source of Funding	HMGP; USDA; Other Grants
a gap by Region	15 Regional Flood Pla	anning Group (RFPG)
	\$369,600 2018 2020 Yes □ No ✓ a gap by Region	<ul> <li>\$369,600 Study Sponsor:</li> <li>2018 Entity with Oversight</li> <li>2020 Included in a Hazard Mitigation</li> <li>Action Plan or other plan?</li> <li>Yes □ No ✓ (Potential) Source of Funding</li> <li>a gap by Region 15 Regional Flood Plan</li> </ul>

Yes 🗆 No 🗸

Flood Mitigation Evaluations Fact Sheet

Study identified because project could not be included as an Flood Mitigation Project (FMP) in the Region 15 Regional Flood Plan because it did meet the minimum requirements, per TWDB guidance for Regional Flood Planning or the provisions of Title 31 of TAQC Chapters 361 and 362.

Yes 🖌 No 🗆

Was the project missing sufficient data to assess whether the proposed project has a negative effect, per TWDB  $Y_{es} \checkmark N_0 \square$  guidelines?

Was the project recommended by the RFPG to be studied in order for it to provide more project details, such as  $Yes \checkmark No \square$  a benefit cost ratio or the number of structures the project removes from the 100-year floodplain?

#### Related Goals

- ✓ Increase community access routes to critical facilities, evacuation routes, during and after a flooding event
- Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain
- Increase the # of communities participating in the National Flood Insurance Program
- Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs
- Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards
- □ Increase participation in the regional flood planning process
- Provide regional detention that could be used for water reuse applications or as part of a floodplain management program
- Increase acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use
- Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website
- Increase the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations
- Reduce the # of structures that have been subject to repeated flooding events through property buyouts

#### **RFPG Recommended**

- Increase the # of entities that adopt higher than NFIPminimum standards
- Develop and maintain an operational stormwater asset management plan
- Increase the # of flood gauges (rainfall/stream) in the region
- Increase the # of entities that have multi-year drainage CIP list
- Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
- □ Increase use of nature-based flood risk reduction projects
- Develop a regionally coordinated warning and emergency response program that can detect the flood threat and provide timely warning of impending flood danger
- Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
- Increase the proficiency of floodplain managers by increasing the # of them that are certified as Certified Floodplain Managers (CFM) with the Texas Floodplain Management Association
- Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

#### City of Brownsville Action #24



#### **FME** Description

Improve drainage and replace or upgrade gutters at City Plaza buildings.

#### Study Type

- □ Flood risk modeling/mapping
- ✓ Flood mitigation study

#### **Study Area**

City/ Cities	Brownsville
County/ Counties	Cameron
HUC 8	12110208
HUC 12	121102080800,
	121102080900
Study Area (sq. mi.)	0.1

#### **Emergency Need**

Yes 🗸 No 🗆

#### **Known Flood Risk**

History of Flooding? Population at Risk Roadways flooded **Critical Facilities Impacted** Notes:

#### Study Costs

Total Cost: Estimated year to start: Time to complete?

Funding Dedicated?

✓ Alternative Analysis

- □ Feasibility Assessments
- □ Flood preparedness studies

**FME** 

Fact Sheet

Flood Mitigation Project



Yes 🗸	No 🗆	Frequency of flooding:		
		# of structures inundated		
Yes 🗸	No 🗆	Miles inundated?		
Yes 🗆	No 🗆	Agricultural Land impacted	Yes 🗆	No

\$19,800	Study Sponsor:	Brownsville
Upon Funding	Entity with Oversight	Brownsville
	Included in a Hazard Mitigation	Yes 🖌 No 🗆
	Action Plan or other plan?	
Yes 🗆 No 🗸	(Potential) Source of Funding	Capital Improvement Funds

#### Study identified as a gap by Region 15 Regional Flood Planning Group (RFPG) Yes 🗆 No 🗸

Flood Mitigation Project Fact Sheet

Study identified because project could not be included as an Flood Mitigation Project (FMP) in the Region 15 Regional Flood Plan because it did meet the minimum requirements, per TWDB guidance for Regional Flood Planning or the provisions of Title 31 of TAQC Chapters 361 and 362.

Yes 🖌 No 🗆

Was the project missing sufficient data to assess whether the proposed project has a negative effect, per TWDB Yes 
Yes

Was the project recommended by the RFPG to be studied in order for it to provide more project details, such as  $Yes \checkmark No \square$  a benefit cost ratio or the number of structures the project removes from the 100-year floodplain?

#### Related Goals

- □ Increase community access routes to critical facilities, evacuation routes, during and after a flooding event
- Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain
- Increase the # of communities participating in the National Flood Insurance Program
- Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs
- Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards
- □ Increase participation in the regional flood planning process
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- Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website
- Increase the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations
- Reduce the # of structures that have been subject to repeated flooding events through property buyouts

#### **RFPG Recommended**

- Increase the # of entities that adopt higher than NFIPminimum standards
- Develop and maintain an operational stormwater asset management plan
- Increase the # of flood gauges (rainfall/stream) in the region
- Increase the # of entities that have multi-year drainage CIP list
- Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
- □ Increase use of nature-based flood risk reduction projects
- Develop a regionally coordinated warning and emergency response program that can detect the flood threat and provide timely warning of impending flood danger
- Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
- Increase the proficiency of floodplain managers by increasing the # of them that are certified as Certified Floodplain Managers (CFM) with the Texas Floodplain Management Association
- Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

### **FME** Flood Mitigation Evaluations Fact Sheet

FME ID: 15100007

#### Indian Lake Action #1

#### **FME** Description

Elevate and harden S Resaca Shore Drive bridge to reduce risk of damages and maintaining critical access route.

#### Study Type

- □ Flood risk modeling/mapping
- ✓ Flood mitigation study

#### **Study Area**

City/ Cities	Indian Lake
County/ Counties	Cameron
HUC 8	12110208
HUC 12	121102080900
Study Area (sq. mi.)	0.21

#### **Emergency Need**

Yes 🗸 No 🗆

#### **Known Flood Risk**

History of Flooding?	Yes 🗸
Population at Risk	
Roadways flooded	Yes 🗸
Critical Facilities Impacted	Yes 🗆
Notes:	

#### **Study Costs**

✓ Alternative Analysis □ Feasibility Assessments □ Flood preparedness studies



es 🗸	No 🗆	Frequency of flooding:		
		# of structures inundated		
es 🗸	No 🗆	Miles inundated?		
′es □	No 🗆	Agricultural Land impacted	Yes 🗆	No 🗆

Total Cost:	\$92,400	Study Sponsor:	Indian Lakes
Estimated year to start:	2018	Entity with Oversight	Indian Lakes
Time to complete?	2020	Included in a Hazard Mitigation	Yes 🖌 No 🗆
		Action Plan or other plan?	
Funding Dedicated?	Yes 🗆 No 🗸	(Potential) Source of Funding	General Fund; HMGP

#### Study identified as a gap by Region 15 Regional Flood Planning Group (RFPG)

Yes 🗆 No 🗸

Flood Mitigation Evaluations Fact Sheet

Study identified because project could not be included as an Flood Mitigation Project (FMP) in the Region 15 Regional Flood Plan because it did meet the minimum requirements, per TWDB guidance for Regional Flood Planning or the provisions of Title 31 of TAQC Chapters 361 and 362.

Yes 🖌 No 🗆

Was the project missing sufficient data to assess whether the proposed project has a negative effect, per TWDB  $Y_{es} \checkmark N_0 \square$  guidelines?

Was the project recommended by the RFPG to be studied in order for it to provide more project details, such as Yes  $\checkmark$  No  $\Box$  a benefit cost ratio or the number of structures the project removes from the 100-year floodplain?

#### Related Goals

- ✓ Increase community access routes to critical facilities, evacuation routes, during and after a flooding event
- Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain
- Increase the # of communities participating in the National Flood Insurance Program
- Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs
- Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards
- □ Increase participation in the regional flood planning process
- Provide regional detention that could be used for water reuse applications or as part of a floodplain management program
- Increase acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use
- Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website
- Increase the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations
- Reduce the # of structures that have been subject to repeated flooding events through property buyouts

#### **RFPG Recommended**

Yes v No

- Increase the # of entities that adopt higher than NFIPminimum standards
- Develop and maintain an operational stormwater asset management plan
- Increase the # of flood gauges (rainfall/stream) in the region
- Increase the # of entities that have multi-year drainage CIP list
- Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
- □ Increase use of nature-based flood risk reduction projects
- Develop a regionally coordinated warning and emergency response program that can detect the flood threat and provide timely warning of impending flood danger
- Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
- Increase the proficiency of floodplain managers by increasing the # of them that are certified as Certified Floodplain Managers (CFM) with the Texas Floodplain Management Association
- Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

# **Flood** Mitigation Evaluations

Fact Sheet

#### Indian Lake Action #12

FME ID: 15100008

#### FME Description

Upgrade/Elevate Henderson Road bridge over Resaca to remove from potential floodway, reduce the risk of damages, and maintain critical access route.

#### Study Type

- □ Flood risk modeling/mapping
- ✓ Flood mitigation study

#### Study Area

City/ Cities	Indian Lake
County/ Counties	Cameron
HUC 8	12110208
HUC 12	121102080900
Study Area (sq. mi.)	0.16

#### **Emergency Need**

Yes 🖌 No 🗆

#### Known Flood Risk

History of Flooding?	Yes 🗸	No
Population at Risk		
Roadways flooded	Yes 🗸	No
Critical Facilities Impacted	Yes 🗆	No
Notes:		

#### Study Costs

Total Cost:	\$184,800	Study Sponsor:	Indian Lakes
Estimated year to start:	2019	Entity with Oversight	Indian Lakes
Time to complete?	2021	Included in a Hazard Mitigation	Yes 🖌 No 🗆
		Action Plan or other plan?	
Funding Dedicated?	Yes 🗆 No 🗸	(Potential) Source of Funding	General Fund; HMGP

Study identified as a gap by Region 15 Regional Flood Planning Group (RFPG) Yes D No ✓

- ✓ Alternative Analysis□ Feasibility Assessments
- □ Flood preparedness studies



Frequency of flooding: # of structures inundated Miles inundated? Agricultural Land impacted Yes D No D

Flood Mitigation Evaluations Fact Sheet

Study identified because project could not be included as an Flood Mitigation Project (FMP) in the Region 15 Regional Flood Plan because it did meet the minimum requirements, per TWDB guidance for Regional Flood Planning or the provisions of Title 31 of TAQC Chapters 361 and 362.

Yes 🖌 No 🗆

Was the project missing sufficient data to assess whether the proposed project has a negative effect, per TWDB  $Y_{es} \checkmark N_0 \square$  guidelines?

Was the project recommended by the RFPG to be studied in order for it to provide more project details, such as  $Yes \checkmark No \square$  a benefit cost ratio or the number of structures the project removes from the 100-year floodplain?

#### Related Goals

- ✓ Increase community access routes to critical facilities, evacuation routes, during and after a flooding event
- Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain
- Increase the # of communities participating in the National Flood Insurance Program
- Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs
- Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards
- □ Increase participation in the regional flood planning process
- Provide regional detention that could be used for water reuse applications or as part of a floodplain management program
- Increase acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use
- Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website
- Increase the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations
- Reduce the # of structures that have been subject to repeated flooding events through property buyouts

#### **RFPG Recommended**

Yes v No

- Increase the # of entities that adopt higher than NFIPminimum standards
- Develop and maintain an operational stormwater asset management plan
- Increase the # of flood gauges (rainfall/stream) in the region
- Increase the # of entities that have multi-year drainage CIP list
- Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
- □ Increase use of nature-based flood risk reduction projects
- Develop a regionally coordinated warning and emergency response program that can detect the flood threat and provide timely warning of impending flood danger
- Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
- Increase the proficiency of floodplain managers by increasing the # of them that are certified as Certified Floodplain Managers (CFM) with the Texas Floodplain Management Association
- Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

#### Indian Lake Action #17

FME ID: 151000009

□ Flood preparedness studies

FME Description

Upgrade shoulders and provide turnouts along Henderson Road to support evacuation route.

✓ Alternative Analysis

□ Feasibility Assessments

#### Study Type

- □ Flood risk modeling/mapping
- $\checkmark \ {\sf Flood\ mitigation\ study}$
- Study Area
  - City/ Cities Indian Lake County/ Counties Cameron HUC 8 12110208 HUC 12 121102080900
  - Study Area (sq. mi.) 0.78

#### **Emergency Need**

Yes 🖌 No 🗆

#### Known Flood Risk

History of Flooding?	Yes 🗸	No 🗆	Frequency of flooding:		
Population at Risk			# of structures inundated		
Roadways flooded	Yes 🗸	No 🗆	Miles inundated?		
Critical Facilities Impacted	Yes 🗆	No 🗆	Agricultural Land impacted	Yes 🗆	No
Notes:			<b>.</b> .		

#### **Study Costs**

Total Cost:	\$9,240	Study Sponsor:	Indian Lakes
Estimated year to start:	2019	Entity with Oversight	Indian Lakes
Time to complete?	2021	Included in a Hazard Mitigation	Yes 🖌 No 🗆
		Action Plan or other plan?	
Funding Dedicated?	Yes 🗆 No 🗸	(Potential) Source of Funding	General Fund; HMGP

#### Study identified as a gap by Region 15 Regional Flood Planning Group (RFPG)

Yes 🗆 No 🗸



**FME** 

Fact Sheet

Flood Mitigation Evaluations

Flood Mitigation Evaluations Fact Sheet

Study identified because project could not be included as an Flood Mitigation Project (FMP) in the Region 15 Regional Flood Plan because it did meet the minimum requirements, per TWDB guidance for Regional Flood Planning or the provisions of Title 31 of TAQC Chapters 361 and 362.

Yes 🖌 No 🗆

Was the project missing sufficient data to assess whether the proposed project has a negative effect, per TWDB  $Y_{es} \checkmark N_0 \square$  guidelines?

Was the project recommended by the RFPG to be studied in order for it to provide more project details, such as  $Yes \checkmark No \square$  a benefit cost ratio or the number of structures the project removes from the 100-year floodplain?

#### Related Goals

- ✓ Increase community access routes to critical facilities, evacuation routes, during and after a flooding event
- Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain
- Increase the # of communities participating in the National Flood Insurance Program
- Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs
- Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards
- □ Increase participation in the regional flood planning process
- Provide regional detention that could be used for water reuse applications or as part of a floodplain management program
- Increase acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use
- Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website
- Increase the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations
- Reduce the # of structures that have been subject to repeated flooding events through property buyouts

#### **RFPG Recommended**

Yes v No

- Increase the # of entities that adopt higher than NFIPminimum standards
- Develop and maintain an operational stormwater asset management plan
- Increase the # of flood gauges (rainfall/stream) in the region
- Increase the # of entities that have multi-year drainage CIP list
- Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
- □ Increase use of nature-based flood risk reduction projects
- Develop a regionally coordinated warning and emergency response program that can detect the flood threat and provide timely warning of impending flood danger
- Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
- Increase the proficiency of floodplain managers by increasing the # of them that are certified as Certified Floodplain Managers (CFM) with the Texas Floodplain Management Association
- Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

#### Flood Mitigation Evaluations Fact Sheet

FME ID: 151000010

#### Indian Lake Action #18

#### **FME Description**

Harden critical facilities, to include the Town Hall/Police Station, to reduce or eliminate wind, hail, and flood damage and ensure continuity of emergency services.

#### Study Type

- □ Flood risk modeling/mapping
- ✓ Flood mitigation study

#### Study Area

City/ Cities	Indian Lake
County/ Counties	Cameron
HUC 8	12110208
HUC 12	121102080900
Study Area (sq. mi.)	0.50

#### **Emergency Need**

Yes 🖌 No 🗆

#### **Known Flood Risk**

History of Flooding?	Ye
Population at Risk	
Roadways flooded	Ye
Critical Facilities Impacted	Ye
Notes:	

#### Study Costs

$\checkmark$	Alte	rna	ative	e Analys	sis
_	-				

- Feasibility Assessments
- □ Flood preparedness studies



	Yes 🖌 No 🗆	Frequency of flooding:	
		<pre># of structures inundated</pre>	
	Yes 🖌 No 🗆	Miles inundated?	
ted	Yes 🗆 No 🗆	Agricultural Land impacted	Yes 🗆 No 🗆

Total Cost:	\$27,720	Study Sponsor:	Indian Lakes
Estimated year to start:	2018	Entity with Oversight	Indian Lakes
Time to complete?	2020	Included in a Hazard Mitigation	Yes 🖌 No 🗆
		Action Plan or other plan?	
Funding Dedicated?	Yes 🗆 No 🗸	(Potential) Source of Funding	General Fund; HMGP

Study identified as a gap by Region 15 Regional Flood Planning Group (RFPG) Yes  $\square$  No  $\checkmark$ 

Flood Mitigation Evaluations Fact Sheet

Study identified because project could not be included as an Flood Mitigation Project (FMP) in the Region 15 Regional Flood Plan because it did meet the minimum requirements, per TWDB guidance for Regional Flood Planning or the provisions of Title 31 of TAQC Chapters 361 and 362.

Yes 🖌 No 🗆

Was the project missing sufficient data to assess whether the proposed project has a negative effect, per TWDB  $Y_{es} \checkmark N_0 \square$  guidelines?

Was the project recommended by the RFPG to be studied in order for it to provide more project details, such as  $Yes \checkmark No \square$  a benefit cost ratio or the number of structures the project removes from the 100-year floodplain?

#### Related Goals

- Increase community access routes to critical facilities, evacuation routes, during and after a flooding event
- Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain
- Increase the # of communities participating in the National Flood Insurance Program
- Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs
- Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards
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- Increase the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations
- Reduce the # of structures that have been subject to repeated flooding events through property buyouts

#### **RFPG Recommended**

 $Yes \ v \Box \quad No$ 

- Increase the # of entities that adopt higher than NFIPminimum standards
- Develop and maintain an operational stormwater asset management plan
- Increase the # of flood gauges (rainfall/stream) in the region
- Increase the # of entities that have multi-year drainage CIP list
- Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
- □ Increase use of nature-based flood risk reduction projects
- ✓ Develop a regionally coordinated warning and emergency response program that can detect the flood threat and provide timely warning of impending flood danger
- Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
- Increase the proficiency of floodplain managers by increasing the # of them that are certified as Certified Floodplain Managers (CFM) with the Texas Floodplain Management Association
- Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

## Flood Mitigation Evaluations Fact Sheet

FME ID: 151000012

#### Laguna Vista Action #10

#### **FME** Description

Drainage Improvements: Harden and reinforce head wall along the Laguna Madre bay off Beach Boulevard.

#### Study Type

- □ Flood risk modeling/mapping
- $\checkmark \ {\sf Flood\ mitigation\ study}$

#### Study Area

City/ Cities	Laguna Vista
County/ Counties	Cameron
HUC 8	12110208
HUC 12	121102080800
	121102080900
Study Area (sq. mi.)	0.41

#### **Emergency Need**

Yes 🖌 No 🗆

#### Known Flood Risk

History of Flooding?	Yes 🗸	No
Population at Risk		
Roadways flooded	Yes 🗸	No
Critical Facilities Impacted	Yes 🗆	No
Notes:		

#### Study Costs

Total Cost:	\$924,000	Study Sponsor:	Laguna Vista
Estimated year to start:	2018	Entity with Oversight	Laguna Vista
Time to complete?	2020	Included in a Hazard Mitigation	Yes 🖌 No 🗆
		Action Plan or other plan?	
Funding Dedicated?	Yes 🗆 No 🗸	(Potential) Source of Funding	HMGP; Local Funds; Other Grants;
			Drainage Fee

#### Study identified as a gap by Region 15 Regional Flood Planning Group (RFPG)

Yes 🗆 No 🗸

- ✓ Alternative Analysis
- □ Feasibility Assessments
- □ Flood preparedness studies



Yes 🗆	No
	Yes 🗆

Flood Mitigation Evaluations Fact Sheet

Study identified because project could not be included as an Flood Mitigation Project (FMP) in the Region 15 Regional Flood Plan because it did meet the minimum requirements, per TWDB guidance for Regional Flood Planning or the provisions of Title 31 of TAQC Chapters 361 and 362.

Yes 🖌 No 🗆

Was the project missing sufficient data to assess whether the proposed project has a negative effect, per TWDB  $Y_{es} \checkmark N_0 \square$  guidelines?

Was the project recommended by the RFPG to be studied in order for it to provide more project details, such as  $Yes \checkmark No \square$  a benefit cost ratio or the number of structures the project removes from the 100-year floodplain?

#### Related Goals

- ✓ Increase community access routes to critical facilities, evacuation routes, during and after a flooding event
- Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain
- Increase the # of communities participating in the National Flood Insurance Program
- Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs
- Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards
- □ Increase participation in the regional flood planning process
- Provide regional detention that could be used for water reuse applications or as part of a floodplain management program
- Increase acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use
- Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website
- Increase the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations
- Reduce the # of structures that have been subject to repeated flooding events through property buyouts

#### **RFPG Recommended**

Yes v No

- Increase the # of entities that adopt higher than NFIPminimum standards
- Develop and maintain an operational stormwater asset management plan
- Increase the # of flood gauges (rainfall/stream) in the region
- Increase the # of entities that have multi-year drainage CIP list
- Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
- Increase use of nature-based flood risk reduction projects
- Develop a regionally coordinated warning and emergency response program that can detect the flood threat and provide timely warning of impending flood danger
- Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
- Increase the proficiency of floodplain managers by increasing the # of them that are certified as Certified Floodplain Managers (CFM) with the Texas Floodplain Management Association
- Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

### **FME** Flood Mitigation Evaluations

Fact Sheet

FME ID: 151000013

#### Laguna Vista Action #11

#### **FME** Description

Drainage Improvements: Upgrade 48" drainage pipe located at 1004 Beach Blvd to increase capacity and reduce risk of flood damages.

#### Study Type

- □ Flood risk modeling/mapping
- ✓ Flood mitigation study

#### Study Area

City/Cities Laguna Vista County/ Counties Cameron HUC 8 12110208 **HUC 12** 121102080800, 121102080900 Study Area (sq. mi.) 0.01

#### **Emergency Need**

Yes 🗸 No 🗆

#### **Known Flood Risk**

History of Flooding? Yes 🗸 N Population at Risk Roadways flooded Yes 🗸 N Yes 🗆 N **Critical Facilities Impacted** Notes:

#### **Study Costs**

Total Cost:
Estimated year to start:
Time to complete?
Funding Dedicated?

- ✓ Alternative Analysis
- □ Feasibility Assessments
- □ Flood preparedness studies



0 🗌	Frequency of flooding:		
	# of structures inundated		
0 🗌	Miles inundated?		
0 🗆	Agricultural Land impacted	Yes 🗆	No 🗆

\$92,400 Study Sponsor: Laguna Vista 2018 Entity with Oversight Laguna Vista 2020 Included in a Hazard Mitigation Action Plan or other plan? Yes 🗆 No 🗸 (Potential) Source of Funding Drainage Fee

Yes 🗸 No 🗆 HMGP; Local Funds; Other Grants;

### Study identified as a gap by Region 15 Regional Flood Planning Group (RFPG)

Yes 🗆 No 🗸

Flood Mitigation Evaluations Fact Sheet

Study identified because project could not be included as an Flood Mitigation Project (FMP) in the Region 15 Regional Flood Plan because it did meet the minimum requirements, per TWDB guidance for Regional Flood Planning or the provisions of Title 31 of TAQC Chapters 361 and 362.

Yes 🖌 No 🗆

Was the project missing sufficient data to assess whether the proposed project has a negative effect, per TWDB  $Y_{es} \checkmark N_0 \square$  guidelines?

Was the project recommended by the RFPG to be studied in order for it to provide more project details, such as  $Yes \checkmark No \square$  a benefit cost ratio or the number of structures the project removes from the 100-year floodplain?

#### Related Goals

- ✓ Increase community access routes to critical facilities, evacuation routes, during and after a flooding event
- Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain
- Increase the # of communities participating in the National Flood Insurance Program
- Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs
- Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards
- □ Increase participation in the regional flood planning process
- Provide regional detention that could be used for water reuse applications or as part of a floodplain management program
- Increase acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use
- Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website
- Increase the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations
- Reduce the # of structures that have been subject to repeated flooding events through property buyouts

#### **RFPG Recommended**

Yes v No

- Increase the # of entities that adopt higher than NFIPminimum standards
- Develop and maintain an operational stormwater asset management plan
- Increase the # of flood gauges (rainfall/stream) in the region
- Increase the # of entities that have multi-year drainage CIP list
- Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
- □ Increase use of nature-based flood risk reduction projects
- Develop a regionally coordinated warning and emergency response program that can detect the flood threat and provide timely warning of impending flood danger
- Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
- Increase the proficiency of floodplain managers by increasing the # of them that are certified as Certified Floodplain Managers (CFM) with the Texas Floodplain Management Association
- Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

### **FME** Flood Mitigation Evaluations

FME ID: 151000014

#### Laguna Vista Action #12

#### **FME** Description

Drainage Improvements: Relocate and upgrade existing 36" drainage pipe located at 1026 Beach Blvd to increase capacity and reduce risk of flood damages.

#### Study Type

- □ Flood risk modeling/mapping
- ✓ Flood mitigation study

#### Study Area

City/Cities Laguna Vista County/ Counties Cameron HUC 8 12110208 **HUC 12** 121102080800, 121102080900 Study Area (sq. mi.) 0.01

#### **Emergency Need**

Yes 🗸 No 🗆

#### **Known Flood Risk**

History of Flooding? Yes ✓ No 🗆 Population at Risk Roadways flooded Yes 🗸 No 🗆 Yes 🗆 No 🗆 **Critical Facilities Impacted** Notes:

#### **Study Costs**

Total Cost:	
Estimated year to start:	
Time to complete?	
Funding Dedicated?	Yes

- ✓ Alternative Analysis
- □ Feasibility Assessments
- □ Flood preparedness studies



Frequency of flooding:		
# of structures inundated		
Miles inundated?		
Agricultural Land impacted	Yes 🗆	No 🗆

\$92,400 Study Sponsor: 2018 Entity with Oversight 2020 Included in a Hazard Mitigation Action Plan or other plan? (Potential) Source of Funding Yes 🗆 No 🗸

Laguna Vista Laguna Vista Yes 🗸 No 🗆

HMGP; Local Funds; Other Grants; Drainage Fee

Study identified as a gap by Region 15 Regional Flood Planning Group (RFPG) Yes 🗆 No 🗸

Flood Mitigation Evaluations Fact Sheet

Study identified because project could not be included as an Flood Mitigation Project (FMP) in the Region 15 Regional Flood Plan because it did meet the minimum requirements, per TWDB guidance for Regional Flood Planning or the provisions of Title 31 of TAQC Chapters 361 and 362.

Yes 🖌 No 🗆

Was the project missing sufficient data to assess whether the proposed project has a negative effect, per TWDB  $Y_{es} \checkmark N_0 \square$  guidelines?

Was the project recommended by the RFPG to be studied in order for it to provide more project details, such as  $Yes \checkmark No \square$  a benefit cost ratio or the number of structures the project removes from the 100-year floodplain?

#### Related Goals

- ✓ Increase community access routes to critical facilities, evacuation routes, during and after a flooding event
- Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain
- Increase the # of communities participating in the National Flood Insurance Program
- Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs
- Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards
- □ Increase participation in the regional flood planning process
- Provide regional detention that could be used for water reuse applications or as part of a floodplain management program
- Increase acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use
- Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website
- Increase the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations
- Reduce the # of structures that have been subject to repeated flooding events through property buyouts

#### **RFPG Recommended**

Yes v No

- Increase the # of entities that adopt higher than NFIPminimum standards
- Develop and maintain an operational stormwater asset management plan
- Increase the # of flood gauges (rainfall/stream) in the region
- Increase the # of entities that have multi-year drainage CIP list
- Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
- Increase use of nature-based flood risk reduction projects
- Develop a regionally coordinated warning and emergency response program that can detect the flood threat and provide timely warning of impending flood danger
- Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
- Increase the proficiency of floodplain managers by increasing the # of them that are certified as Certified Floodplain Managers (CFM) with the Texas Floodplain Management Association
- Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

## Flood Mitigation Evaluations Fact Sheet

FME ID: 151000015

#### Laguna Vista Action #19

#### **FME Description**

Harden Town Hall with wind, hail, and flood mitigation measures to reduce damages and ensure continuity of services

#### Study Type

- □ Flood risk modeling/mapping
- $\checkmark \ {\sf Flood\ mitigation\ study}$

#### Study Area

City/ Cities	Laguna Vista
County/ Counties	Cameron
HUC 8	12110208
HUC 12	121102080800
	121102080900
Study Area (sq. mi.)	0.01

#### **Emergency Need**

Yes 🖌 No 🗆

#### Known Flood Risk

History of Flooding?	Yes 🗸	No
Population at Risk		
Roadways flooded	Yes 🗸	No
Critical Facilities Impacted	Yes 🗆	No
Notes:		

#### Study Costs

Total Cost:	\$18,480	Study Sponsor:	Laguna Vista
Estimated year to start:	2018	Entity with Oversight	Laguna Vista
Time to complete?	2020	Included in a Hazard Mitigation	Yes 🖌 No 🗆
		Action Plan or other plan?	
Funding Dedicated?	Yes 🗆 No 🗸	(Potential) Source of Funding	HMGP; Local Funds; Other Grants;
			Drainage Fee

#### Study identified as a gap by Region 15 Regional Flood Planning Group (RFPG)

Yes 🗆 No 🗸

- ✓ Alternative Analysis
- □ Feasibility Assessments
- □ Flood preparedness studies



Frequency of flooding: # of structures inundated

Miles inundated? Agricultural Land impacted Yes 
No

Flood Mitigation Evaluations Fact Sheet

Study identified because project could not be included as an Flood Mitigation Project (FMP) in the Region 15 Regional Flood Plan because it did meet the minimum requirements, per TWDB guidance for Regional Flood Planning or the provisions of Title 31 of TAQC Chapters 361 and 362.

Yes 🖌 No 🗆

Was the project missing sufficient data to assess whether the proposed project has a negative effect, per TWDB  $Y_{es} \checkmark N_0 \square$  guidelines?

Was the project recommended by the RFPG to be studied in order for it to provide more project details, such as  $Yes \checkmark No \square$  a benefit cost ratio or the number of structures the project removes from the 100-year floodplain?

#### Related Goals

- ✓ Increase community access routes to critical facilities, evacuation routes, during and after a flooding event
- Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain
- Increase the # of communities participating in the National Flood Insurance Program
- Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs
- Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards
- □ Increase participation in the regional flood planning process
- Provide regional detention that could be used for water reuse applications or as part of a floodplain management program
- Increase acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use
- Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website
- Increase the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations
- Reduce the # of structures that have been subject to repeated flooding events through property buyouts

#### **RFPG Recommended**

- Increase the # of entities that adopt higher than NFIPminimum standards
- Develop and maintain an operational stormwater asset management plan
- Increase the # of flood gauges (rainfall/stream) in the region
- Increase the # of entities that have multi-year drainage CIP list
- Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
- □ Increase use of nature-based flood risk reduction projects
- Develop a regionally coordinated warning and emergency response program that can detect the flood threat and provide timely warning of impending flood danger
- Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
- Increase the proficiency of floodplain managers by increasing the # of them that are certified as Certified Floodplain Managers (CFM) with the Texas Floodplain Management Association
- Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

#### Flood Mitigation Evaluations Fact Sheet

FME ID: 151000017

#### Laguna Vista Action #3

#### **FME Description**

Drainage improvements Basin "D": Install upgraded drainage system west side of State Highway 510 for 80 acre residential area. Current system is inadequate to carry storm water runoff.

#### Study Type

- □ Flood risk modeling/mapping
- ✓ Flood mitigation study

#### Study Area

City/ Cities	Laguna Vista
County/ Counties	Cameron
HUC 8	12110208
HUC 12	121102080800,
	121102080900
Study Area (sq. mi.)	1.87

#### **Emergency Need**

Yes 🖌 No 🗆

#### Known Flood Risk

History of Flooding? Population at Risk Roadways flooded Critical Facilities Impacted Notes:

#### Study Costs

Total Cost: Estimated year to start: Time to complete?	\$9	24,0 20 20
Funding Dedicated?	Yes 🗆	No

- ✓ Alternative Analysis
- □ Feasibility Assessments
- $\hfill\square$  Flood preparedness studies



Yes 🗸	No 🗆	Frequency of flooding:		
		# of structures inundated		
Yes 🗸	No 🗆	Miles inundated?		
Yes $\square$	$No$ $\Box$	Agricultural Land impacted	Yes 🗆	No $\square$

Lag	Study Sponsor:	\$924,000
Lag	Entity with Oversight	2018
Yes	Included in a Hazard Mitigation	2020
	Action Plan or other plan?	
ΗM	(Potential) Source of Funding	🗆 No 🗸
Dro		

Laguna Vista Laguna Vista Yes ✔ No □

HMGP; Local Funds; Other Grants; Drainage Fee

Study identified as a gap by Region 15 Regional Flood Planning Group (RFPG) Yes D No ✓

Flood Mitigation Evaluations Fact Sheet

Study identified because project could not be included as an Flood Mitigation Project (FMP) in the Region 15 Regional Flood Plan because it did meet the minimum requirements, per TWDB guidance for Regional Flood Planning or the provisions of Title 31 of TAQC Chapters 361 and 362.

Yes 🖌 No 🗆

Was the project missing sufficient data to assess whether the proposed project has a negative effect, per TWDB  $Y_{es} \checkmark N_0 \square$  guidelines?

Was the project recommended by the RFPG to be studied in order for it to provide more project details, such as  $Yes \checkmark No \square$  a benefit cost ratio or the number of structures the project removes from the 100-year floodplain?

#### Related Goals

- ✓ Increase community access routes to critical facilities, evacuation routes, during and after a flooding event
- Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain
- Increase the # of communities participating in the National Flood Insurance Program
- Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs
- Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards
- □ Increase participation in the regional flood planning process
- Provide regional detention that could be used for water reuse applications or as part of a floodplain management program
- Increase acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use
- Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website
- Increase the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations
- Reduce the # of structures that have been subject to repeated flooding events through property buyouts

#### **RFPG Recommended**

- Increase the # of entities that adopt higher than NFIPminimum standards
- Develop and maintain an operational stormwater asset management plan
- Increase the # of flood gauges (rainfall/stream) in the region
- Increase the # of entities that have multi-year drainage CIP list
- Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
- □ Increase use of nature-based flood risk reduction projects
- Develop a regionally coordinated warning and emergency response program that can detect the flood threat and provide timely warning of impending flood danger
- Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
- Increase the proficiency of floodplain managers by increasing the # of them that are certified as Certified Floodplain Managers (CFM) with the Texas Floodplain Management Association
- Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

#### Flood Mitigation Evaluations

FME ID: 151000018

Fact Sheet

#### FME Description

Laguna Vista Action #4

Drainage improvements Basin "E": Install upgraded drainage system off Saunders Street and State Highway 510 that drains acreage south of Fernandez Street and north of Morris Street.

#### Study Type

- □ Flood risk modeling/mapping
- ✓ Flood mitigation study

#### Study Area

City/ Cities	Laguna Vista
County/ Counties	Cameron
HUC 8	12110208
HUC 12	121102080800,
	121102080900
Study Area (sq. mi.)	N/A

#### **Emergency Need**

Yes 🖌 No 🗆

#### Known Flood Risk

History of Flooding? Yes ✓ No □ Population at Risk Roadways flooded Yes ✓ No □ Critical Facilities Impacted Yes □ No □ Notes:

#### Study Costs

Total Cost:	\$924,000
Estimated year to start:	2018
Time to complete?	2020
Funding Dedicated?	Yes 🗆 No 🗸

- ✓ Alternative Analysis
- □ Feasibility Assessments
- □ Flood preparedness studies



Frequency of flooding:		
# of structures inundated		
Miles inundated?		
Agricultural Land impacted	Yes 🗆	No 🗆

Study Sponsor: Entity with Oversight	Lagun Lagun

Included in a Hazard Mitigation

Action Plan or other plan? (Potential) Source of Funding Laguna Vista Laguna Vista Yes ✓ No □

HMGP; Local Funds; Other Grants; Drainage Fee

Study identified as a gap by Region 15 Regional Flood Planning Group (RFPG) Yes  $\square$  No  $\checkmark$ 

Flood Mitigation Evaluations Fact Sheet

Study identified because project could not be included as an Flood Mitigation Project (FMP) in the Region 15 Regional Flood Plan because it did meet the minimum requirements, per TWDB guidance for Regional Flood Planning or the provisions of Title 31 of TAQC Chapters 361 and 362.

Yes 🖌 No 🗆

Was the project missing sufficient data to assess whether the proposed project has a negative effect, per TWDB  $Y_{es} \checkmark N_0 \square$  guidelines?

Was the project recommended by the RFPG to be studied in order for it to provide more project details, such as  $Yes \checkmark No \square$  a benefit cost ratio or the number of structures the project removes from the 100-year floodplain?

#### Related Goals

- ✓ Increase community access routes to critical facilities, evacuation routes, during and after a flooding event
- Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain
- Increase the # of communities participating in the National Flood Insurance Program
- Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs
- Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards
- □ Increase participation in the regional flood planning process
- Provide regional detention that could be used for water reuse applications or as part of a floodplain management program
- Increase acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use
- Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website
- Increase the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations
- Reduce the # of structures that have been subject to repeated flooding events through property buyouts

#### **RFPG Recommended**

Yes v No

- Increase the # of entities that adopt higher than NFIPminimum standards
- Develop and maintain an operational stormwater asset management plan
- Increase the # of flood gauges (rainfall/stream) in the region
- Increase the # of entities that have multi-year drainage CIP list
- Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
- □ Increase use of nature-based flood risk reduction projects
- Develop a regionally coordinated warning and emergency response program that can detect the flood threat and provide timely warning of impending flood danger
- Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
- Increase the proficiency of floodplain managers by increasing the # of them that are certified as Certified Floodplain Managers (CFM) with the Texas Floodplain Management Association
- Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

#### Flood Mitigation Evaluations Fact Sheet

FME ID: 151000019

#### Laguna Vista Action #5

#### **FME** Description

Drainage improvements Basin "F": Install drainage system at the most southwestern part of the Town limits, bounded by State Highway 100 and State Highway 510.

#### Study Type

- □ Flood risk modeling/mapping
- ✓ Flood mitigation study

#### Study Area

City/ Cities	Laguna Vista
County/ Counties	Cameron
HUC 8	12110208
HUC 12	121102080800,
	121102080900
Study Area (sq. mi.)	0.18

#### **Emergency Need**

Yes 🖌 No 🗆

#### Known Flood Risk

History of Flooding?	Yes 🗸	No 🗆
Population at Risk		
Roadways flooded	Yes 🗸	No 🗆
Critical Facilities Impacted	Yes 🗆	No 🗆
Notes:		

#### Study Costs

Total Cost:	\$924,000
Estimated year to start:	2018
Time to complete?	2020
Funding Dedicated?	Yes 🗆 No 🗸

- ✓ Alternative Analysis
- □ Feasibility Assessments
- $\hfill\square$  Flood preparedness studies



Frequency of flooding: # of structures inundated Miles inundated? Agricultural Land impacted Yes O No O

Study Sponsor: La Entity with Oversight La Included in a Hazard Mitigation Ye Action Plan or other plan? (Potential) Source of Funding Hi

Laguna Vista Laguna Vista Yes ✔ No □

HMGP; Local Funds; Other Grants; Drainage Fee

Study identified as a gap by Region 15 Regional Flood Planning Group (RFPG) Yes D No ✓

Flood Mitigation Evaluations Fact Sheet

Study identified because project could not be included as an Flood Mitigation Project (FMP) in the Region 15 Regional Flood Plan because it did meet the minimum requirements, per TWDB guidance for Regional Flood Planning or the provisions of Title 31 of TAQC Chapters 361 and 362.

Yes 🖌 No 🗆

Was the project missing sufficient data to assess whether the proposed project has a negative effect, per TWDB  $Y_{es} \checkmark N_0 \square$  guidelines?

Was the project recommended by the RFPG to be studied in order for it to provide more project details, such as Yes  $\checkmark$  No  $\Box$  a benefit cost ratio or the number of structures the project removes from the 100-year floodplain?

#### Related Goals

- ✓ Increase community access routes to critical facilities, evacuation routes, during and after a flooding event
- Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain
- Increase the # of communities participating in the National Flood Insurance Program
- Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs
- Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards
- □ Increase participation in the regional flood planning process
- Provide regional detention that could be used for water reuse applications or as part of a floodplain management program
- Increase acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use
- Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website
- Increase the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations
- Reduce the # of structures that have been subject to repeated flooding events through property buyouts

#### **RFPG Recommended**

- Increase the # of entities that adopt higher than NFIPminimum standards
- Develop and maintain an operational stormwater asset management plan
- Increase the # of flood gauges (rainfall/stream) in the region
- Increase the # of entities that have multi-year drainage CIP list
- Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
- □ Increase use of nature-based flood risk reduction projects
- Develop a regionally coordinated warning and emergency response program that can detect the flood threat and provide timely warning of impending flood danger
- Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
- Increase the proficiency of floodplain managers by increasing the # of them that are certified as Certified Floodplain Managers (CFM) with the Texas Floodplain Management Association
- Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

# Flood Mitigation Evaluations

Fact Sheet

FME ID: 15100020

#### Laguna Vista Action #6

#### **FME** Description

Drainage improvements SH 100: Regrade the existing drainage ditch that parallels State Highway 100 to increase capacity and reduce risk of flooding.

#### Study Type

- □ Flood risk modeling/mapping
- ✓ Flood mitigation study

#### Study Area

City/ Cities Laguna Vista County/ Counties Cameron HUC 8 12110208 HUC 12 121102080800, 121102080900 Study Area (sq. mi.) 13.5

#### **Emergency Need**

Yes 🖌 No 🗆

#### Known Flood Risk

History of Flooding? Yes ✓ Population at Risk Roadways flooded Yes ✓ Critical Facilities Impacted Yes □ Notes:

#### Study Costs

Total Cost:	\$369,600
Estimated year to start:	2018
Time to complete?	2020
Funding Dedicated?	Yes 🗆 No 🗸

- ✓ Alternative Analysis
- □ Feasibility Assessments
- □ Flood preparedness studies



Frequency of flooding:		
# of structures inundated		
Miles inundated?		
Agricultural Land impacted	Yes 🗆	No 🗆
	Frequency of flooding: # of structures inundated Miles inundated? Agricultural Land impacted	Frequency of flooding: # of structures inundated Miles inundated? Agricultural Land impacted Yes 🗆

Laguna	Study Sponsor:	\$369,600
Lagun	Entity with Oversight	2018
Yes 🗸	Included in a Hazard Mitigation	2020
	Action Plan or other plan?	
HMGP	(Potential) Source of Funding	🗆 No 🗸
Droimo		

Laguna Vista Laguna Vista Yes ✓ No □

HMGP; Local Funds; Other Grants; Drainage Fee

Study identified as a gap by Region 15 Regional Flood Planning Group (RFPG) Yes □ No ✓

Flood Mitigation Evaluations Fact Sheet

Study identified because project could not be included as an Flood Mitigation Project (FMP) in the Region 15 Regional Flood Plan because it did meet the minimum requirements, per TWDB guidance for Regional Flood Planning or the provisions of Title 31 of TAQC Chapters 361 and 362.

Yes 🖌 No 🗆

Was the project missing sufficient data to assess whether the proposed project has a negative effect, per TWDB  $Y_{es} \checkmark N_0 \square$  guidelines?

Was the project recommended by the RFPG to be studied in order for it to provide more project details, such as  $Yes \checkmark No \square$  a benefit cost ratio or the number of structures the project removes from the 100-year floodplain?

#### Related Goals

- ✓ Increase community access routes to critical facilities, evacuation routes, during and after a flooding event
- Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain
- Increase the # of communities participating in the National Flood Insurance Program
- Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs
- Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards
- □ Increase participation in the regional flood planning process
- Provide regional detention that could be used for water reuse applications or as part of a floodplain management program
- Increase acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use
- Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website
- Increase the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations
- Reduce the # of structures that have been subject to repeated flooding events through property buyouts

#### **RFPG Recommended**

- Increase the # of entities that adopt higher than NFIPminimum standards
- Develop and maintain an operational stormwater asset management plan
- Increase the # of flood gauges (rainfall/stream) in the region
- Increase the # of entities that have multi-year drainage CIP list
- Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
- □ Increase use of nature-based flood risk reduction projects
- Develop a regionally coordinated warning and emergency response program that can detect the flood threat and provide timely warning of impending flood danger
- Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
- Increase the proficiency of floodplain managers by increasing the # of them that are certified as Certified Floodplain Managers (CFM) with the Texas Floodplain Management Association
- Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

#### Flood Mitigation Evaluations Fact Sheet

FME ID: 15100021

#### Laguna Vista Action #7

#### **FME** Description

Drainage improvements SH 100: Regrade the existing drainage ditch that parallels State Highway 100 to increase capacity and reduce risk of flooding.

#### Study Type

- □ Flood risk modeling/mapping
- ✓ Flood mitigation study

#### Study Area

City/ Cities	Laguna Vista
County/ Counties	Cameron
HUC 8	12110208
HUC 12	121102080800
	121102080900
Study Area (sq. mi.)	0.01

#### **Emergency Need**

Yes 🖌 No 🗆

#### Known Flood Risk

History of Flooding? Population at Risk Roadways flooded Critical Facilities Impacted Notes: Yes ✓

Yes ✓ Yes □

\$369,60

Yes 🗆 No 🗸

201

202

#### Study Costs

Total Cost:
Estimated year to start:
Time to complete?
Funding Dedicated?

- ✓ Alternative Analysis
- Feasibility Assessments
- $\hfill\square$  Flood preparedness studies



Frequency of flooding:		
# of structures inundated		
Miles inundated?		
Agricultural Land impacted	Yes 🗆	No 🗆
	Frequency of flooding: # of structures inundated Miles inundated? Agricultural Land impacted	Frequency of flooding: # of structures inundated Miles inundated? Agricultural Land impacted Yes 🗆

0	Study Sponsor:	Lá
8	Entity with Oversight	La
0	Included in a Hazard Mitigation	Ye
	Action Plan or other plan?	
/	(Potential) Source of Funding	Н

Laguna Vista Laguna Vista Yes ✔ No □

HMGP; Local Funds; Other Grants; Drainage Fee

Study identified as a gap by Region 15 Regional Flood Planning Group (RFPG) Yes D No ✓

Flood Mitigation Evaluations Fact Sheet

Study identified because project could not be included as an Flood Mitigation Project (FMP) in the Region 15 Regional Flood Plan because it did meet the minimum requirements, per TWDB guidance for Regional Flood Planning or the provisions of Title 31 of TAQC Chapters 361 and 362.

Yes 🖌 No 🗆

Was the project missing sufficient data to assess whether the proposed project has a negative effect, per TWDB  $Y_{es} \checkmark N_0 \square$  guidelines?

Was the project recommended by the RFPG to be studied in order for it to provide more project details, such as  $Yes \checkmark No \square$  a benefit cost ratio or the number of structures the project removes from the 100-year floodplain?

#### Related Goals

- ✓ Increase community access routes to critical facilities, evacuation routes, during and after a flooding event
- Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain
- Increase the # of communities participating in the National Flood Insurance Program
- Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs
- Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards
- □ Increase participation in the regional flood planning process
- Provide regional detention that could be used for water reuse applications or as part of a floodplain management program
- Increase acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use
- Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website
- Increase the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations
- Reduce the # of structures that have been subject to repeated flooding events through property buyouts

#### **RFPG Recommended**

- Increase the # of entities that adopt higher than NFIPminimum standards
- Develop and maintain an operational stormwater asset management plan
- Increase the # of flood gauges (rainfall/stream) in the region
- Increase the # of entities that have multi-year drainage CIP list
- Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
- □ Increase use of nature-based flood risk reduction projects
- Develop a regionally coordinated warning and emergency response program that can detect the flood threat and provide timely warning of impending flood danger
- Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
- Increase the proficiency of floodplain managers by increasing the # of them that are certified as Certified Floodplain Managers (CFM) with the Texas Floodplain Management Association
- Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

## Flood Mitigation Evaluations Fact Sheet

FME ID: 151000022

#### Laguna Vista Action #8

#### **FME Description**

Drainage Improvements: Upgrade the drainage system on Holley Beach to increase capacity and reduce risk of flooding.

#### Study Type

- □ Flood risk modeling/mapping
- $\checkmark \ {\sf Flood mitigation study}$

#### Study Area

City/ Cities	Laguna Vista
County/ Counties	Cameron
HUC 8	12110208
HUC 12	121102080800,
	121102080900
Study Area (sg. mi.)	3.99

#### **Emergency Need**

Yes 🖌 No 🗆

#### **Known Flood Risk**

History of Flooding?	Yes 🗸	No 🗆
Population at Risk		
Roadways flooded	Yes 🗸	No 🗆
Critical Facilities Impacted	Yes 🗆	No 🗆
Notes:		

#### Study Costs

Total Cost:	\$369,600	Study Sponsor:	Laguna Vista
Estimated year to start:	2018	Entity with Oversight	Laguna Vista
Time to complete?	2020	Included in a Hazard Mitigation	Yes 🗸 No 🗆
		Action Plan or other plan?	
Funding Dedicated?	Yes 🗆 No 🗸	(Potential) Source of Funding	HMGP; Local Funds; Other Grants;
			Drainage Fee

### Study identified as a gap by Region 15 Regional Flood Planning Group (RFPG)

✓ Alternative Analysis

- □ Feasibility Assessments
- $\hfill\square$  Flood preparedness studies



Frequency of flooding:		
# of structures inundated		
Miles inundated?		
Agricultural Land impacted	Yes 🗆	No

Flood Mitigation Evaluations Fact Sheet

Study identified because project could not be included as an Flood Mitigation Project (FMP) in the Region 15 Regional Flood Plan because it did meet the minimum requirements, per TWDB guidance for Regional Flood Planning or the provisions of Title 31 of TAQC Chapters 361 and 362.

Yes 🖌 No 🗆

Was the project missing sufficient data to assess whether the proposed project has a negative effect, per TWDB  $Y_{es} \checkmark N_0 \square$  guidelines?

Was the project recommended by the RFPG to be studied in order for it to provide more project details, such as  $Yes \checkmark No \square$  a benefit cost ratio or the number of structures the project removes from the 100-year floodplain?

#### Related Goals

- ✓ Increase community access routes to critical facilities, evacuation routes, during and after a flooding event
- Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain
- Increase the # of communities participating in the National Flood Insurance Program
- Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs
- Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards
- □ Increase participation in the regional flood planning process
- Provide regional detention that could be used for water reuse applications or as part of a floodplain management program
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- Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website
- Increase the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations
- Reduce the # of structures that have been subject to repeated flooding events through property buyouts

#### **RFPG Recommended**

- Increase the # of entities that adopt higher than NFIPminimum standards
- Develop and maintain an operational stormwater asset management plan
- Increase the # of flood gauges (rainfall/stream) in the region
- Increase the # of entities that have multi-year drainage CIP list
- Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
- □ Increase use of nature-based flood risk reduction projects
- Develop a regionally coordinated warning and emergency response program that can detect the flood threat and provide timely warning of impending flood danger
- Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
- Increase the proficiency of floodplain managers by increasing the # of them that are certified as Certified Floodplain Managers (CFM) with the Texas Floodplain Management Association
- Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

### Flood Mitigation Evaluations

**FME** 

Fact Sheet

FME ID: 151000023

#### Laguna Vista Action #9

#### **FME** Description

Drainage Improvements: Upgrade and harden drainage structure on Town-owed marina to increase capacity and reduce risk of damages.

#### Study Type

- □ Flood risk modeling/mapping
- ✓ Flood mitigation study

#### Study Area

City/ Cities	Laguna Vista
County/ Counties	Cameron
HUC 8	12110208
HUC 12	121102080800,
	121102080900
Study Area (sq. mi.)	0.51

#### **Emergency Need**

Yes 🖌 No 🗆

#### **Known Flood Risk**

History of Flooding?	Yes 🗸	No 🗆
Population at Risk		
Roadways flooded	Yes 🗸	No 🗆
Critical Facilities Impacted	Yes 🗆	No
Notes:		

#### Study Costs

Total Cost:	\$554,400
Estimated year to start:	2018
Time to complete?	2020
Funding Dedicated?	Yes 🗆 No 🗸

- ✓ Alternative Analysis
- □ Feasibility Assessments
- □ Flood preparedness studies



Frequency of flooding: # of structures inundated Miles inundated? Agricultural Land impacted Yes D No D

Study Sponsor: L Entity with Oversight L Included in a Hazard Mitigation Y Action Plan or other plan? (Potential) Source of Funding F

Laguna Vista Laguna Vista Yes ✓ No □

HMGP; Local Funds; Other Grants; Drainage Fee

Study identified as a gap by Region 15 Regional Flood Planning Group (RFPG) Yes D No ✓
Flood Mitigation Evaluations Fact Sheet

Study identified because project could not be included as an Flood Mitigation Project (FMP) in the Region 15 Regional Flood Plan because it did meet the minimum requirements, per TWDB guidance for Regional Flood Planning or the provisions of Title 31 of TAQC Chapters 361 and 362.

Yes 🖌 No 🗆

Was the project missing sufficient data to assess whether the proposed project has a negative effect, per TWDB  $Y_{es} \checkmark N_0 \square$  guidelines?

Was the project recommended by the RFPG to be studied in order for it to provide more project details, such as  $Yes \checkmark No \square$  a benefit cost ratio or the number of structures the project removes from the 100-year floodplain?

# Related Goals

- ✓ Increase community access routes to critical facilities, evacuation routes, during and after a flooding event
- Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain
- Increase the # of communities participating in the National Flood Insurance Program
- Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs
- Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards
- □ Increase participation in the regional flood planning process
- Provide regional detention that could be used for water reuse applications or as part of a floodplain management program
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- Increase the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations
- Reduce the # of structures that have been subject to repeated flooding events through property buyouts

# **RFPG Recommended**

- Increase the # of entities that adopt higher than NFIPminimum standards
- Develop and maintain an operational stormwater asset management plan
- Increase the # of flood gauges (rainfall/stream) in the region
- Increase the # of entities that have multi-year drainage CIP list
- Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
- Increase use of nature-based flood risk reduction projects
- Develop a regionally coordinated warning and emergency response program that can detect the flood threat and provide timely warning of impending flood danger
- Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
- Increase the proficiency of floodplain managers by increasing the # of them that are certified as Certified Floodplain Managers (CFM) with the Texas Floodplain Management Association
- Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

#### Flood Mitigation Evaluations Fact Sheet

FME ID: 151000024

□ Flood preparedness studies

# Los Fresnos Action #13

# **FME** Description

Upgrade culverts and install drainage improvements at various locations to increase capacity and reduce risk of flood damages. Purchase trailer mounted water trash pump to reduce or eliminate flooding. Drainage Improvement locations: Drainage Ditch South of Highway 100 causes flooding on East Fifth Street, East Sixth Street, East Seventh Street, East Eighth Street, East Ninth Street and East Tenth Street. South Nogal Street Causes Flooding on West First Street, West Second Street, West Third Street, Valle Alto Street & Bougainvillea Street, Jacqueline Street & North Canal Street Drain Pipe Collapse, Olmo Street from West Eighth Street to West Tenth Street, Holly Lane Drain Under Canal, Pasto Drive at California Road Drain Under Canal, and Resaca Escondido Drain Pipe Collapse. The following Resaca Crossings are Too Low: Henderson Road East Side, Henderson Road West Side, and Whipple Road West Side.

### Study Type

- □ Flood risk modeling/mapping
- ✓ Flood mitigation study

### **Study Area**

City/ Cities	Los Fresnos
County/ Counties	Cameron
HUC 8	12110208
HUC 12	121102080800,
	121102080900
Study Area (sq. mi.)	1.40

# **Emergency Need**

Yes 🗸 No 🗆

### **Known Flood Risk**

History of Flooding?	Yes 🗸	No
Population at Risk		
Roadways flooded	Yes 🗸	No
Critical Facilities Impacted	Yes 🗆	No
Notes:		

### Study Costs

Total Cost:	\$1,848,000
Estimated year to start:	2018
Time to complete?	2020
Funding Dedicated?	Yes 🗆 No 🗸

- ✓ Alternative Analysis
- □ Feasibility Assessments



and the second se			
		Frequency of flooding:	
		# of structures inundated	
		Miles inundated?	
No	Yes 🗆	Agricultural Land impacted	

Juy 00313			
otal Cost:	\$1,848,000	Study Sponsor:	Los Fresnos
timated year to start:	2018	Entity with Oversight	Los Fresnos
me to complete?	2020	Included in a Hazard Mitigation	Yes 🖌 No 🗆
		Action Plan or other plan?	
Inding Dedicated?	Yes 🗆 No 🗸	(Potential) Source of Funding	HMGP; General Funds, Drainage Fee

Page 1 of 2

Flood Mitigation Evaluations

Study identified as a gap by Region 15 Regional Flood Planning Group (RFPG) Yes □ No ✓

Study identified because project could not be included as an Flood Mitigation Project (FMP) in the Region 15 Regional Flood Plan because it did meet the minimum requirements, per TWDB guidance for Regional Flood Planning or the provisions of Title 31 of TAQC Chapters 361 and 362.

Yes 🖌 No 🗆

Was the project missing sufficient data to assess whether the proposed project has a negative effect, per TWDB  $\vee$  No  $\square$  guidelines?

Was the project recommended by the RFPG to be studied in order for it to provide more project details, such as  $Yes \checkmark No \square$  a benefit cost ratio or the number of structures the project removes from the 100-year floodplain?

### Related Goals

- ✓ Increase community access routes to critical facilities, evacuation routes, during and after a flooding event
- Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain
- Increase the # of communities participating in the National Flood Insurance Program
- Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs
- Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards
- □ Increase participation in the regional flood planning process
- Provide regional detention that could be used for water reuse applications or as part of a floodplain management program
- Increase acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use
- Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website
- Increase the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations
- Reduce the # of structures that have been subject to repeated flooding events through property buyouts

#### Increase the # of entities that adopt higher than NFIPminimum standards

- Develop and maintain an operational stormwater asset management plan
- Increase the # of flood gauges (rainfall/stream) in the region
- Increase the # of entities that have multi-year drainage CIP list
- Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
- □ Increase use of nature-based flood risk reduction projects
- Develop a regionally coordinated warning and emergency response program that can detect the flood threat and provide timely warning of impending flood danger
- Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
- Increase the proficiency of floodplain managers by increasing the # of them that are certified as Certified Floodplain Managers (CFM) with the Texas Floodplain Management Association
- Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

### **RFPG Recommended**

# Flood Mitigation Evaluations

Fact Sheet

FME ID: 151000027

# Port Isabel Action #19

# **FME Description**

Elevate and widen coastal roads as well as evacuation routes to reduce risk of flood damages and maintain emergency access.

# Study Type

- □ Flood risk modeling/mapping
- ✓ Flood mitigation study

# Study Area

City/ Cities	Port Isabel
County/ Counties	Cameron
HUC 8	12110208
HUC 12	121102081000,
	121102081000
Study Area (sq. mi.)	2.72

# **Emergency Need**

Yes 🖌 No 🗆

# Known Flood Risk

History of Flooding?	Yes 🗸
Population at Risk	
Roadways flooded	Yes 🗸
Critical Facilities Impacted	Yes 🗆
Notes:	

# Study Costs

Total Cost:	\$554,400	Study Sponsor:	Los Fresnos
Estimated year to start:	2018	Entity with Oversight	Los Fresnos
Time to complete?	2020	Included in a Hazard Mitigation	Yes 🖌 No 🗆
		Action Plan or other plan?	
Funding Dedicated?	Yes 🗆 No 🗸	(Potential) Source of Funding	HMGP; General Funds

No 🗆

No 🗆

No 🗆

### Study identified as a gap by Region 15 Regional Flood Planning Group (RFPG) Yes D No ✓

- ✓ Alternative Analysis
- Feasibility Assessments
- $\hfill\square$  Flood preparedness studies



Frequency of flooding:

Miles inundated?

Agricultural Land impacted Yes 🗆 No 🗆

# of structures inundated

Flood Mitigation Evaluations Fact Sheet

Study identified because project could not be included as an Flood Mitigation Project (FMP) in the Region 15 Regional Flood Plan because it did meet the minimum requirements, per TWDB guidance for Regional Flood Planning or the provisions of Title 31 of TAQC Chapters 361 and 362.

Yes 🖌 No 🗆

Was the project missing sufficient data to assess whether the proposed project has a negative effect, per TWDB  $Y_{es} \checkmark N_0 \square$  guidelines?

Was the project recommended by the RFPG to be studied in order for it to provide more project details, such as  $Yes \checkmark No \square$  a benefit cost ratio or the number of structures the project removes from the 100-year floodplain?

# Related Goals

- ✓ Increase community access routes to critical facilities, evacuation routes, during and after a flooding event
- Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain
- Increase the # of communities participating in the National Flood Insurance Program
- Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs
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- Provide regional detention that could be used for water reuse applications or as part of a floodplain management program
- Increase acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use
- Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website
- Increase the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations
- Reduce the # of structures that have been subject to repeated flooding events through property buyouts

# **RFPG Recommended**

- Increase the # of entities that adopt higher than NFIPminimum standards
- Develop and maintain an operational stormwater asset management plan
- Increase the # of flood gauges (rainfall/stream) in the region
- Increase the # of entities that have multi-year drainage CIP list
- Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
- □ Increase use of nature-based flood risk reduction projects
- Develop a regionally coordinated warning and emergency response program that can detect the flood threat and provide timely warning of impending flood danger
- Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
- Increase the proficiency of floodplain managers by increasing the # of them that are certified as Certified Floodplain Managers (CFM) with the Texas Floodplain Management Association
- Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

# **FME** Flood Mitigation Evaluations

Fact Sheet

FME ID: 15100028

□ Flood preparedness studies

Funds

# **FME** Description

Port Isabel Action #22

Build breakwater or similar shoreline protection for harbor.

# Study Type

- □ Flood risk modeling/mapping
- ✓ Flood mitigation study

# **Study Area**

City/ Cities	Port Isabel
County/ Counties	Cameron
HUC 8	12110208
HUC 12	121102081000,
	121102081000
Study Area (sg. mi.)	0.47

# **Emergency Need**

Yes 🗸 No 🗆

### **Known Flood Risk**

History of Flooding? Population at Risk Roadways flooded **Critical Facilities Impacted** Notes:

# **Study Costs**

Total Cost:	\$1,108,800	Study Sponsor:	Los Fresnos
Estimated year to start:	2018	Entity with Oversight	Los Fresnos
Time to complete?	2020	Included in a Hazard Mitigation	Yes 🖌 No 🗆
		Action Plan or other plan?	
Funding Dedicated?	Yes 🗆 No 🗸	(Potential) Source of Funding	HMGP; General

### Study identified as a gap by Region 15 Regional Flood Planning Group (RFPG) Yes 🗆 No 🗸

✓ Alternative Analysis

□ Feasibility Assessments

Port Isabe

Yes 🗸	No 🗆	Frequency of flooding:		
		# of structures inundated		
Yes 🗸	No 🗆	Miles inundated?		
Yes 🗆	No 🗆	Agricultural Land impacted	Yes 🗆	No 🗆

Flood Mitigation Evaluations Fact Sheet

Study identified because project could not be included as an Flood Mitigation Project (FMP) in the Region 15 Regional Flood Plan because it did meet the minimum requirements, per TWDB guidance for Regional Flood Planning or the provisions of Title 31 of TAQC Chapters 361 and 362.

Yes 🖌 No 🗆

Was the project missing sufficient data to assess whether the proposed project has a negative effect, per TWDB  $Y_{es} \checkmark N_0 \square$  guidelines?

Was the project recommended by the RFPG to be studied in order for it to provide more project details, such as  $Yes \checkmark No \square$  a benefit cost ratio or the number of structures the project removes from the 100-year floodplain?

# Related Goals

- Increase community access routes to critical facilities, evacuation routes, during and after a flooding event
- Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain
- Increase the # of communities participating in the National Flood Insurance Program
- Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs
- Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards
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- Reduce the # of structures that have been subject to repeated flooding events through property buyouts

## **RFPG Recommended**

- Increase the # of entities that adopt higher than NFIPminimum standards
- Develop and maintain an operational stormwater asset management plan
- Increase the # of flood gauges (rainfall/stream) in the region
- Increase the # of entities that have multi-year drainage CIP list
- Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
- ✓ Increase use of nature-based flood risk reduction projects
- Develop a regionally coordinated warning and emergency response program that can detect the flood threat and provide timely warning of impending flood danger
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- Increase the proficiency of floodplain managers by increasing the # of them that are certified as Certified Floodplain Managers (CFM) with the Texas Floodplain Management Association
- Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

# **FME** Flood Mitigation Evaluations Fact Sheet

# Primera Action #2

### FME ID: 151000029

# **FME** Description

Construct a large retention/detention pond in the northwest part of town to hold water during heavy rain events.

# Study Type

- □ Flood risk modeling/mapping
- ✓ Flood mitigation study

# Study Area

City/ Cities	Primera
County/ Counties	Cameron
HUC 8	12110208
HUC 12	121102080700
Study Area (sg. mi.)	0.1

# **Emergency Need**

Yes 🗸 No 🗆

# **Known Flood Risk**

History of Flooding?	Yes 🗸	No 🗆
Population at Risk		
Roadways flooded	Yes 🗸	No 🗆
Critical Facilities Impacted	Yes 🗆	No
Notes:		

# **Study Costs**

Total Cost:	\$92,400
Estimated year to start:	2018
Time to complete?	2020
Funding Dedicated?	Yes 🗆 No 🗸

- □ Alternative Analysis □ Feasibility Assessments
- □ Flood preparedness studies



Frequency of flooding: # of structures inundated Miles inundated? Agricultural Land impacted Yes 🗆 No 🗆

Study Sponsor: Primera Entity with Oversight Primera Included in a Hazard Mitigation Yes 🗸 No 🗆 Action Plan or other plan?

Local Funds; HMGP; Cameron County **Drainage District** 

## Study identified as a gap by Region 15 Regional Flood Planning Group (RFPG) Yes 🗆 No 🗸

(Potential) Source of Funding

\$92,400

2020

Flood Mitigation Evaluations Fact Sheet

Study identified because project could not be included as an Flood Mitigation Project (FMP) in the Region 15 Regional Flood Plan because it did meet the minimum requirements, per TWDB guidance for Regional Flood Planning or the provisions of Title 31 of TAQC Chapters 361 and 362.

Yes 🖌 No 🗆

Was the project missing sufficient data to assess whether the proposed project has a negative effect, per TWDB  $Y_{es} \checkmark N_0 \square$  guidelines?

Was the project recommended by the RFPG to be studied in order for it to provide more project details, such as  $Yes \checkmark No \square$  a benefit cost ratio or the number of structures the project removes from the 100-year floodplain?

# Related Goals

- ✓ Increase community access routes to critical facilities, evacuation routes, during and after a flooding event
- Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain
- Increase the # of communities participating in the National Flood Insurance Program
- Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs
- Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards
- □ Increase participation in the regional flood planning process
- Provide regional detention that could be used for water reuse applications or as part of a floodplain management program
- Increase acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use
- Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website
- Increase the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations
- Reduce the # of structures that have been subject to repeated flooding events through property buyouts

# **RFPG Recommended**

- Increase the # of entities that adopt higher than NFIPminimum standards
- Develop and maintain an operational stormwater asset management plan
- Increase the # of flood gauges (rainfall/stream) in the region
- Increase the # of entities that have multi-year drainage CIP list
- Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
- Increase use of nature-based flood risk reduction projects
- Develop a regionally coordinated warning and emergency response program that can detect the flood threat and provide timely warning of impending flood danger
- Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
- Increase the proficiency of floodplain managers by increasing the # of them that are certified as Certified Floodplain Managers (CFM) with the Texas Floodplain Management Association
- Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

# Flood Mitigation Evaluations Fact Sheet

FME ID: 151000030

# South Padre Island #6

# **FME** Description

Upgrade undersized culverts throughout the Island to increase capacity and reduce flood risk.

# Study Type

- □ Flood risk modeling/mapping
- $\checkmark \ {\sf Flood mitigation study}$

# Study Area

City/ Cities South Padre County/ Counties Cameron HUC 8 12110208 HUC 12 121102081000 Study Area (sq. mi.) 4.62

# **Emergency Need**

Yes 🖌 No 🗆

# Known Flood Risk

History of Flooding?	Yes 🗸	No 🗆
Population at Risk		
Roadways flooded	Yes 🗸	No 🗆
Critical Facilities Impacted	Yes 🗆	No 🗆
Notes:		

# Study Costs

Total Cost:	\$1,848,000
Estimated year to start:	2018
Time to complete?	2020
Funding Dedicated?	Yes 🗆 No 🗸

✓ Alternative Analysis□ Feasibility Assessments



Frequency of flooding: # of structures inundated Miles inundated? Agricultural Land impacted Yes D No D

48,000 Study Sponsor: South Padre Island
2018 Entity with Oversight
2020 Included in a Hazard Mitigation Action Plan or other plan?
No ✓ (Potential) Source of Funding HMGP; CDBG

# Study identified as a gap by Region 15 Regional Flood Planning Group (RFPG)

Flood preparedness studies

Flood Mitigation Evaluations Fact Sheet

Study identified because project could not be included as an Flood Mitigation Project (FMP) in the Region 15 Regional Flood Plan because it did meet the minimum requirements, per TWDB guidance for Regional Flood Planning or the provisions of Title 31 of TAQC Chapters 361 and 362.

Yes 🖌 No 🗆

Was the project missing sufficient data to assess whether the proposed project has a negative effect, per TWDB  $Y_{es} \checkmark N_0 \square$  guidelines?

Was the project recommended by the RFPG to be studied in order for it to provide more project details, such as  $Yes \checkmark No \square$  a benefit cost ratio or the number of structures the project removes from the 100-year floodplain?

# Related Goals

- ✓ Increase community access routes to critical facilities, evacuation routes, during and after a flooding event
- Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain
- Increase the # of communities participating in the National Flood Insurance Program
- Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs
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- Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website
- Increase the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations
- Reduce the # of structures that have been subject to repeated flooding events through property buyouts

# **RFPG Recommended**

- Increase the # of entities that adopt higher than NFIPminimum standards
- Develop and maintain an operational stormwater asset management plan
- Increase the # of flood gauges (rainfall/stream) in the region
- Increase the # of entities that have multi-year drainage CIP list
- Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
- □ Increase use of nature-based flood risk reduction projects
- Develop a regionally coordinated warning and emergency response program that can detect the flood threat and provide timely warning of impending flood danger
- Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
- Increase the proficiency of floodplain managers by increasing the # of them that are certified as Certified Floodplain Managers (CFM) with the Texas Floodplain Management Association
- Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

# Study Type ✓ Alternative Analysis ✓ Flood risk modeling/mapping ✓ Flood mitigation study □ Feasibility Assessments City/ Cities Insert snip of Location Map here County/ Counties Dimmit HUC 8 **HUC 12** Study Area (sq. mi.) 172.15

**Emergency Need** 

Yes 🗸 No 🗆

# **Known Flood Risk**

History of Flooding?	Yes 🗸	No 🗆	Frequency:		
Population at Risk			# of structures inundated		
Roadways flooded	Yes 🗆	No 🗆	Miles inundated?		
Critical Facilities Impacted	Yes $\square$	No 🗆	Agricultural Land impacted	Yes 🗆	No 🗆
Notes:					

# Study Costs

Total Cost:	\$250,000	Study Sponsor:	
Estimated year to start:		Entity with Oversight	
Time to complete?		Included in a CIP or other plan?	Yes 🗆 No 🗸
Funding Dedicated?	Yes 🗆 No 🗸	(Potential) Source of Funding	

Study identified as a gap by Region 15 Regional Flood Planning Group (RFPG)

Yes 🖌 No 🗆

# Study Area

**FME** Description Develop Flood risk maps for the county of Dimmit and develop CIP

# **Dimmit County Master Drainage Study**

FME ID: 151000031



# **FME**

Fact Sheet

Flood Management Evaluations

Flood Management Evaluations Fact Sheet

Study identified because project could not be included as an Flood Mitigation Project (FMP) in the Region 15 Regional Flood Plan because it did meet the minimum requirements, per TWDB guidance for Regional Flood Planning or the provisions of Title 31 of TAQC Chapters 361 and 362.

Yes 🖌 No 🗆

Was the project missing sufficient data to assess whether the proposed project has a negative effect, per TWDB  $Y_{es} \checkmark N_0 \square$  guidelines?

Was the project recommended by the RFPG to be studied in order for it to provide more project details, such as  $Yes \checkmark No \square$  a benefit cost ratio or the number of structures the project removes from the 100-year floodplain?

# Related Goals

- □ Increase community access routes to critical facilities, evacuation routes, during and after a flooding event
- □ Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain
- Increase the # of communities participating in the National Flood Insurance Program
- Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs
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- Increase the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations
- Reduce the # of structures that have been subject to repeated flooding events through property buyouts

# **RFPG Recommended**

- Increase the # of entities that adopt higher than NFIPminimum standards
- Develop and maintain an operational stormwater asset management plan
- Increase the # of flood gauges (rainfall/stream) in the region
- Increase the # of entities that have multi-year drainage CIP list
- Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
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- Develop a regionally coordinated warning and emergency response program that can detect the flood threat and provide timely warning of impending flood danger
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- Increase the proficiency of floodplain managers by increasing the # of them that are certified as Certified Floodplain Managers (CFM) with the Texas Floodplain Management Association
- Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain



Edwards County Master Drainage Study

FME ID: 151000032

Study Costs

Notes:

**Known Flood Risk** 

**Critical Facilities Impacted** 

History of Flooding?

Population at Risk

Roadways flooded

Total Cost:	\$250,000	Study Sponsor:		
Estimated year to start:		Entity with Oversight		
Time to complete?		Included in a CIP or other plan?	Yes 🗆	No 🗸
Funding Dedicated?	Yes 🗆 No 🗸	(Potential) Source of Funding		

Yes 🖌 No 🗆

Yes 🗆 No 🗆

Yes 🗆 No 🗆

Study identified as a gap by Region 15 Regional Flood Planning Group (RFPG)

Yes 🗸 No 🗆

Flood Management Evaluations Fact Sheet

# of structures inundated

Miles inundated?

Frequency:

Agricultural Land impacted Yes 🗆 No 🗆

# **FME**

Flood Management Evaluations Fact Sheet

Study identified because project could not be included as an Flood Mitigation Project (FMP) in the Region 15 Regional Flood Plan because it did meet the minimum requirements, per TWDB guidance for Regional Flood Planning or the provisions of Title 31 of TAQC Chapters 361 and 362.

Yes 🖌 No 🗆

Was the project missing sufficient data to assess whether the proposed project has a negative effect, per TWDB  $Y_{es} \checkmark N_0 \square$  guidelines?

Was the project recommended by the RFPG to be studied in order for it to provide more project details, such as  $Yes \checkmark No \square$  a benefit cost ratio or the number of structures the project removes from the 100-year floodplain?

# Related Goals

- □ Increase community access routes to critical facilities, evacuation routes, during and after a flooding event
- □ Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain
- Increase the # of communities participating in the National Flood Insurance Program
- Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs
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- Increase the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations
- Reduce the # of structures that have been subject to repeated flooding events through property buyouts

# **RFPG Recommended**

- Increase the # of entities that adopt higher than NFIPminimum standards
- Develop and maintain an operational stormwater asset management plan
- Increase the # of flood gauges (rainfall/stream) in the region
- Increase the # of entities that have multi-year drainage CIP list
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### Flood Management Evaluations

FME ID: 151000033



### **FME** Description

Local Drainage Improvements- County Road 1771

# Study Type

- □ Flood risk modeling/mapping
- ✓ Flood mitigation study

# **Study Area**

City/ Cities Mercedes County/ Counties Hidalgo HUC 8 12110207 **HUC 12** Study Area (sq. mi.) 0.81

# **Emergency Need**

Yes 🗸 No 🗆

# **Known Flood Risk**

History of Flooding?	Yes 🗸	No 🗆
Population at Risk		
Roadways flooded	Yes 🗸	No 🗆
Critical Facilities Impacted	Yes 🗆	No 🗆
Notes:		

# **Study Costs**

Total Cost:	
Estimated year to start:	
Time to complete?	
Funding Dedicated?	Yes

✓ Alternative Analysis □ Feasibility Assessments □ Flood preparedness studies



Miles inundated? Agricultural Land impacted Yes 🗸 No 🗆

ost:	\$60,000	Study Sponsor:	HCDD1	
ed year to start:	2023	Entity with Oversight	HCDD1	
complete?	2025	Included in a CIP or other plan?	Yes 🗸	No 🗆
Dedicated?	Yes 🗆 No 🗸	(Potential) Source of Funding		

Study identified as a gap by Region 15 Regional Flood Planning Group (RFPG) Yes 🗆 No 🗸



Lower Rio Grande Regional Flood Planning Group

# **FME**

Fact Sheet

Flood Management Evaluations Fact Sheet

Study identified because project could not be included as an Flood Mitigation Project (FMP) in the Region 15 Regional Flood Plan because it did meet the minimum requirements, per TWDB guidance for Regional Flood Planning or the provisions of Title 31 of TAQC Chapters 361 and 362.

Yes 🖌 No 🗆

Was the project missing sufficient data to assess whether the proposed project has a negative effect, per TWDB  $Y_{es} \checkmark N_0 \square$  guidelines?

Was the project recommended by the RFPG to be studied in order for it to provide more project details, such as  $Yes \checkmark No \square$  a benefit cost ratio or the number of structures the project removes from the 100-year floodplain?

# Related Goals

- □ Increase community access routes to critical facilities, evacuation routes, during and after a flooding event
- □ Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain
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- Reduce the # of structures that have been subject to repeated flooding events through property buyouts

# **RFPG Recommended**

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### Flood Management Evaluations Fact Sheet

FME ID: 151000034

# Pumps and Sumps Study

# **FME** Description

Pump Station H & Sump

# Study Type

- □ Flood risk modeling/mapping
- ✓ Flood mitigation study

# Study Area

City/ Cities County/ Counties Hidalgo 12110207 HUC 8 **HUC 12** Study Area (sq. mi.) 0.31

# **Emergency Need**

Yes 🗸 No 🗆

# **Known Flood Risk**

History of Flooding? Yes Population at Risk Roadways flooded Yes **Critical Facilities Impacted** Yes Notes:

# Study Costs

Total Cost: Estimated yea Time to compl **Funding Dedic** 

- ✓ Alternative Analysis
- □ Feasibility Assessments
- □ Flood preparedness studies



✓	No 🗆	Frequency:		
		# of structures inundated		
$\checkmark$	No 🗆	Miles inundated?		
	No 🗆	Agricultural Land impacted	Yes 🗆	No $\square$

	\$217,500	Study Sponsor:	HCDD1	
ar to start:	2023	Entity with Oversight	HCDD1	
lete?	2025	Included in a CIP or other plan?	Yes 🗸	No 🗆
cated?	Yes 🗆 No 🗸	(Potential) Source of Funding		

Study identified as a gap by Region 15 Regional Flood Planning Group (RFPG) Yes 🗆 No 🗸

Flood Management Evaluations Fact Sheet

Study identified because project could not be included as an Flood Mitigation Project (FMP) in the Region 15 Regional Flood Plan because it did meet the minimum requirements, per TWDB guidance for Regional Flood Planning or the provisions of Title 31 of TAQC Chapters 361 and 362.

Yes 🖌 No 🗆

Was the project missing sufficient data to assess whether the proposed project has a negative effect, per TWDB  $Y_{es} \checkmark N_0 \square$  guidelines?

Was the project recommended by the RFPG to be studied in order for it to provide more project details, such as  $Yes \checkmark No \square$  a benefit cost ratio or the number of structures the project removes from the 100-year floodplain?

# Related Goals

- □ Increase community access routes to critical facilities, evacuation routes, during and after a flooding event
- Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain
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- Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs
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- Reduce the # of structures that have been subject to repeated flooding events through property buyouts

## **RFPG Recommended**

- Increase the # of entities that adopt higher than NFIPminimum standards
- Develop and maintain an operational stormwater asset management plan
- Increase the # of flood gauges (rainfall/stream) in the region
- Increase the # of entities that have multi-year drainage CIP list
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# **Pumps and Sumps Study**

# **FME** Description

Pump Station I & Sump

# Study Type

- □ Flood risk modeling/mapping
- ✓ Flood mitigation study

# **Study Area**

City/ Cities County/ Counties Hidalgo HUC 8 12110207 **HUC 12** Study Area (sq. mi.) 3.73

# **Emergency Need**

Yes 🗸 No 🗆

#### **Known Flood Risk** . . . . . ...

History of Flooding?	Yes 🗸
Population at Risk	
Roadways flooded	Yes 🗸
Critical Facilities Impacted	Yes 🗆
Notes:	

# **Study Costs**

Total Cost:	\$388,500	Study Sponsor:	HCDD1	
Estimated year to start:	2023	Entity with Oversight	HCDD1	
Time to complete?	2025	Included in a CIP or other plan?	Yes 🗸	No
Funding Dedicated?	Yes 🗆 No 🗸	(Potential) Source of Funding		

Study identified as a gap by Region 15 Regional Flood Planning Group (RFPG) Yes ✓ No

# ✓ Alternative Analysis

- □ Feasibility Assessments
- □ Flood preparedness studies
- Laguna Sec

Yes 🗸	No 🗆	Frequency:		
		# of structures inundated		
Yes 🗸	No 🗆	Miles inundated?		
Yes 🗆	No 🗆	Agricultural Land impacted	Yes 🗆	$No$ $\Box$

5 Lower Rio Gran	ide
Regional Flood Planning	Group



**FME** 

### Flood Management Evaluations Fact Sheet

FME ID: 151000035

Flood Management Evaluations Fact Sheet

Study identified because project could not be included as an Flood Mitigation Project (FMP) in the Region 15 Regional Flood Plan because it did meet the minimum requirements, per TWDB guidance for Regional Flood Planning or the provisions of Title 31 of TAQC Chapters 361 and 362.

Yes 🖌 No 🗆

Was the project missing sufficient data to assess whether the proposed project has a negative effect, per TWDB  $Y_{es} \checkmark N_0 \square$  guidelines?

Was the project recommended by the RFPG to be studied in order for it to provide more project details, such as  $Yes \checkmark No \square$  a benefit cost ratio or the number of structures the project removes from the 100-year floodplain?

# Related Goals

- □ Increase community access routes to critical facilities, evacuation routes, during and after a flooding event
- Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain
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- Reduce the # of structures that have been subject to repeated flooding events through property buyouts

## **RFPG Recommended**

- Increase the # of entities that adopt higher than NFIPminimum standards
- Develop and maintain an operational stormwater asset management plan
- Increase the # of flood gauges (rainfall/stream) in the region
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# Pumps and Sumps Study

# **FME** Description

Pump Station J & Sump

# Study Type

- □ Flood risk modeling/mapping
- ✓ Flood mitigation study

# Study Area

City/ Cities County/ Counties Hidalgo 12110207 HUC 8 **HUC 12** Study Area (sq. mi.) 6.23

# **Emergency Need**

Yes 🗸 No 🗆

# **Known Flood Risk**

History of Flooding? Yes ✓ Population at Risk Roadways flooded Yes 🗸 No 🗆 **Critical Facilities Impacted** Yes 🗆 No 🗆 Notes:

# Study Costs

\$310,500	Study Sponsor:	HCDD1
2023	Entity with Oversight	HCDD1
2025	Included in a CIP or other plan?	Yes 🗸
Yes 🗆 No 🗸	(Potential) Source of Funding	
	\$310,500 2023 2025 Yes □ No ✓	\$310,500Study Sponsor:2023Entity with Oversight2025Included in a CIP or other plan?Yes □No ✓(Potential) Source of Funding

No 🗆

Study identified as a gap by Region 15 Regional Flood Planning Group (RFPG) Yes 🗆 No 🗸

- ✓ Alternative Analysis □ Feasibility Assessments
- □ Flood preparedness studies

No 🗆



Frequency:

Agricultural Land impacted Yes 🗆 No 🗆

Miles inundated?

# of structures inundated

# **FME** Flood Management Evaluations

Fact Sheet

Lower Rio Grande Regional Flood Planning Group

FME ID: 151000036

Flood Management Evaluations Fact Sheet

Study identified because project could not be included as an Flood Mitigation Project (FMP) in the Region 15 Regional Flood Plan because it did meet the minimum requirements, per TWDB guidance for Regional Flood Planning or the provisions of Title 31 of TAQC Chapters 361 and 362.

Yes 🖌 No 🗆

Was the project missing sufficient data to assess whether the proposed project has a negative effect, per TWDB  $Y_{es} \checkmark N_0 \square$  guidelines?

Was the project recommended by the RFPG to be studied in order for it to provide more project details, such as  $Yes \checkmark No \square$  a benefit cost ratio or the number of structures the project removes from the 100-year floodplain?

# Related Goals

- □ Increase community access routes to critical facilities, evacuation routes, during and after a flooding event
- Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain
- Increase the # of communities participating in the National Flood Insurance Program
- Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs
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## **RFPG Recommended**

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# Pumps and Sumps Study

FME Description

Pump Station K

# Study Type

- □ Flood risk modeling/mapping
- $\checkmark \ {\sf Flood\ mitigation\ study}$

# Study Area

City/ Cities County/ Counties Hidalgo HUC 8 12110207 HUC 12 Study Area (sq. mi.) 0.1

# **Emergency Need**

Yes 🖌 No 🗆

# Known Flood Risk

History of Flooding?Yes ✓No □Population at RiskRoadways floodedYes ✓No □Critical Facilities ImpactedYes □No □Notes:No □No □

# Study Costs

Total Cost: Estimated year to start: Time to complete? Funding Dedicated?

# ✓ Alternative Analysis □ Eassibility Assessment

- □ Feasibility Assessments
- Flood preparedness studies

Study identified as a gap by Region 15 Regional Flood Planning Group (RFPG) Yes □ No ✓



Frequency:		
# of structures inundated		
Miles inundated?		
Agricultural Land impacted	Yes 🗆	No 🗆

	HCDD1	Study Sponsor:	\$165,000
	HCDD1	Entity with Oversight	2023
No 🗆	Yes 🗸	Included in a CIP or other plan?	2025
		(Potential) Source of Funding	Yes 🗆 No 🗸



# FME

### Flood Management Evaluations Fact Sheet

FME ID: 151000037

Flood Management Evaluations Fact Sheet

Study identified because project could not be included as an Flood Mitigation Project (FMP) in the Region 15 Regional Flood Plan because it did meet the minimum requirements, per TWDB guidance for Regional Flood Planning or the provisions of Title 31 of TAQC Chapters 361 and 362.

Yes 🖌 No 🗆

Was the project missing sufficient data to assess whether the proposed project has a negative effect, per TWDB  $Y_{es} \checkmark N_0 \square$  guidelines?

Was the project recommended by the RFPG to be studied in order for it to provide more project details, such as  $Yes \checkmark No \square$  a benefit cost ratio or the number of structures the project removes from the 100-year floodplain?

# Related Goals

- □ Increase community access routes to critical facilities, evacuation routes, during and after a flooding event
- Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain
- Increase the # of communities participating in the National Flood Insurance Program
- Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs
- Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards
- □ Increase participation in the regional flood planning process
- Provide regional detention that could be used for water reuse applications or as part of a floodplain management program
- Increase acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use
- Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website
- Increase the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations
- Reduce the # of structures that have been subject to repeated flooding events through property buyouts

## **RFPG Recommended**

- Increase the # of entities that adopt higher than NFIPminimum standards
- Develop and maintain an operational stormwater asset management plan
- Increase the # of flood gauges (rainfall/stream) in the region
- Increase the # of entities that have multi-year drainage CIP list
- Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
- □ Increase use of nature-based flood risk reduction projects
- Develop a regionally coordinated warning and emergency response program that can detect the flood threat and provide timely warning of impending flood danger
- Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
- Increase the proficiency of floodplain managers by increasing the # of them that are certified as Certified Floodplain Managers (CFM) with the Texas Floodplain Management Association
- Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

# Pumps and Sumps Study

# FME Description

Pump Station L

# Study Type

□ Flood risk modeling/mapping

 $\checkmark\,$  Flood mitigation study

# Study Area

City/ Cities County/ Counties Hidalgo HUC 8 12110207 HUC 12 Study Area (sq. mi.) 1.30

# **Emergency Need**

Yes 🖌 No 🗆

# Known Flood Risk

History of Flooding? Population at Risk Roadways flooded Critical Facilities Impacted Notes:

# Study Costs

Total Cost: Estimated year to start: Time to complete? Funding Dedicated?

### ✓ Alternative Analysis

- Feasibility Assessments
- □ Flood preparedness studies



Yes 🗸	No 🗆	Frequency:		
		# of structures inundated		
Yes 🗸	No 🗆	Miles inundated?		
Yes $\square$	No 🗆	Agricultural Land impacted	Yes 🗆	No $\square$

	\$165,000	\$Study Sponsor:	HCDD1	
ear to start:	2023	Entity with Oversight	HCDD1	
plete?	2025	Included in a CIP or other plan?	Yes 🗸	No 🗆
icated?	Yes 🗆 No 🗸	(Potential) Source of Funding		

Study identified as a gap by Region 15 Regional Flood Planning Group (RFPG) Yes D No ✓

#### 5 Lower Rio Grande Regional Flood Planning Group

### Flood Management Evaluations Fact Sheet

**FME** 

FME ID: 151000038

Flood Management Evaluations Fact Sheet

Study identified because project could not be included as an Flood Mitigation Project (FMP) in the Region 15 Regional Flood Plan because it did meet the minimum requirements, per TWDB guidance for Regional Flood Planning or the provisions of Title 31 of TAQC Chapters 361 and 362.

Yes 🖌 No 🗆

Was the project missing sufficient data to assess whether the proposed project has a negative effect, per TWDB  $Y_{es} \checkmark N_0 \square$  guidelines?

Was the project recommended by the RFPG to be studied in order for it to provide more project details, such as  $Yes \checkmark No \square$  a benefit cost ratio or the number of structures the project removes from the 100-year floodplain?

# Related Goals

- □ Increase community access routes to critical facilities, evacuation routes, during and after a flooding event
- Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain
- Increase the # of communities participating in the National Flood Insurance Program
- Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs
- Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards
- □ Increase participation in the regional flood planning process
- Provide regional detention that could be used for water reuse applications or as part of a floodplain management program
- Increase acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use
- Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website
- Increase the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations
- Reduce the # of structures that have been subject to repeated flooding events through property buyouts

## **RFPG Recommended**

- Increase the # of entities that adopt higher than NFIPminimum standards
- Develop and maintain an operational stormwater asset management plan
- Increase the # of flood gauges (rainfall/stream) in the region
- Increase the # of entities that have multi-year drainage CIP list
- Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
- □ Increase use of nature-based flood risk reduction projects
- Develop a regionally coordinated warning and emergency response program that can detect the flood threat and provide timely warning of impending flood danger
- Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
- Increase the proficiency of floodplain managers by increasing the # of them that are certified as Certified Floodplain Managers (CFM) with the Texas Floodplain Management Association
- Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

# Lott Rd & Soderquist Study

**FME** Description

Local Drainage Improvements- North of Lott Road and East of Soderquist Rd.

# Study Type

- □ Flood risk modeling/mapping
- ✓ Flood mitigation study

# **Study Area**

City/ Cities Donna County/ Counties Hidalgo 12110207 HUC 8 **HUC 12** Study Area (sq. mi.) 0.27

# **Emergency Need**

Yes 🗸 No 🗆

# **Known Flood Risk**

History of Flooding? Population at Risk Roadways flooded **Critical Facilities Impacted** Notes:

# Study Costs

Total Cost: Estimated year to start: Time to complete? Funding Dedicated?



- ✓ Alternative Analysis □ Feasibility Assessments
- □ Flood preparedness studies

**FME** 

Fact Sheet

Flood Management Evaluations



Yes 🗸	No 🗆	Frequency:		
		# of structures inundated		
Yes 🗸	No 🗆	Miles inundated?		
Yes $\square$	No 🗆	Agricultural Land impacted	Yes 🗆	No

\$19	90,500		Study Sponsor:	HCDD1	
	2023	Entity	with Oversight	HCDD1	
	2025	Included in a CIF	or other plan?	Yes 🗸	No 🗆
es 🗆	No 🗸	(Potential) So	urce of Funding		

Study identified as a gap by Region 15 Regional Flood Planning Group (RFPG) Yes 🗆 No 🗸

Flood Management Evaluations Fact Sheet

Study identified because project could not be included as an Flood Mitigation Project (FMP) in the Region 15 Regional Flood Plan because it did meet the minimum requirements, per TWDB guidance for Regional Flood Planning or the provisions of Title 31 of TAQC Chapters 361 and 362.

Yes 🖌 No 🗆

Was the project missing sufficient data to assess whether the proposed project has a negative effect, per TWDB  $Y_{es} \checkmark N_0 \square$  guidelines?

Was the project recommended by the RFPG to be studied in order for it to provide more project details, such as  $Yes \checkmark No \square$  a benefit cost ratio or the number of structures the project removes from the 100-year floodplain?

# Related Goals

- Increase community access routes to critical facilities, evacuation routes, during and after a flooding event
- Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain
- Increase the # of communities participating in the National Flood Insurance Program
- Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs
- Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards
- □ Increase participation in the regional flood planning process
- Provide regional detention that could be used for water reuse applications or as part of a floodplain management program
- Increase acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use
- Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website
- Increase the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations
- Reduce the # of structures that have been subject to repeated flooding events through property buyouts

# **RFPG Recommended**

- Increase the # of entities that adopt higher than NFIPminimum standards
- Develop and maintain an operational stormwater asset management plan
- Increase the # of flood gauges (rainfall/stream) in the region
- Increase the # of entities that have multi-year drainage CIP list
- Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
- □ Increase use of nature-based flood risk reduction projects
- Develop a regionally coordinated warning and emergency response program that can detect the flood threat and provide timely warning of impending flood danger
- Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
- Increase the proficiency of floodplain managers by increasing the # of them that are certified as Certified Floodplain Managers (CFM) with the Texas Floodplain Management Association
- Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

### Flood Management Evaluations Fact Sheet

FME ID: 151000040

# Mile 2 E & Expy 83 Study

# **FME** Description

Local Drainage Improvements- North of Interstate 2 and West of Mile 2 1/2

# Study Type

- □ Flood risk modeling/mapping
- ✓ Flood mitigation study

# **Study Area**

City/ Cities Mercedes County/ Counties Hidalgo 12110207 HUC 8 **HUC 12** Study Area (sq. mi.) 0.43

# **Emergency Need**

Yes 🗸 No 🗆

# **Known Flood Risk**

History of Flooding? Population at Risk Roadways flooded **Critical Facilities Impacted** Notes:

# **Study Costs**

Tot Est Tim Fur

- ✓ Alternative Analysis
- □ Feasibility Assessments
- □ Flood preparedness studies



No 🗆	Frequency:		
	# of structures inundated		
No 🗆	Miles inundated?		
No 🗆	Agricultural Land impacted	Yes 🗆	$No$ $\Box$
	No 🗆 No 🗆 No 🗆	NoFrequency:# of structures inundatedNoMiles inundated?NoAgricultural Land impacted	NoFrequency: # of structures inundatedNoMiles inundated?NoAgricultural Land impactedYes

al Cost:	\$215,250	Study Sponsor:	HCDD1	
imated year to start:	2023	Entity with Oversight	HCDD1	
ne to complete?	2025	Included in a CIP or other plan?	Yes 🗸	No 🗆
nding Dedicated?	Yes 🗆 No 🗸	(Potential) Source of Funding		

Study identified as a gap by Region 15 Regional Flood Planning Group (RFPG) Yes 🗆 No 🗸

Flood Management Evaluations Fact Sheet

Study identified because project could not be included as an Flood Mitigation Project (FMP) in the Region 15 Regional Flood Plan because it did meet the minimum requirements, per TWDB guidance for Regional Flood Planning or the provisions of Title 31 of TAQC Chapters 361 and 362.

Yes 🖌 No 🗆

Was the project missing sufficient data to assess whether the proposed project has a negative effect, per TWDB  $Y_{es} \checkmark N_0 \square$  guidelines?

Was the project recommended by the RFPG to be studied in order for it to provide more project details, such as  $Yes \checkmark No \square$  a benefit cost ratio or the number of structures the project removes from the 100-year floodplain?

# Related Goals

- Increase community access routes to critical facilities, evacuation routes, during and after a flooding event
- Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain
- Increase the # of communities participating in the National Flood Insurance Program
- Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs
- Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards
- □ Increase participation in the regional flood planning process
- Provide regional detention that could be used for water reuse applications or as part of a floodplain management program
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- Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website
- Increase the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations
- Reduce the # of structures that have been subject to repeated flooding events through property buyouts

# **RFPG Recommended**

- Increase the # of entities that adopt higher than NFIPminimum standards
- Develop and maintain an operational stormwater asset management plan
- Increase the # of flood gauges (rainfall/stream) in the region
- Increase the # of entities that have multi-year drainage CIP list
- Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
- □ Increase use of nature-based flood risk reduction projects
- Develop a regionally coordinated warning and emergency response program that can detect the flood threat and provide timely warning of impending flood danger
- Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
- Increase the proficiency of floodplain managers by increasing the # of them that are certified as Certified Floodplain Managers (CFM) with the Texas Floodplain Management Association
- Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

# TX 88 & W Sugar Cane Dr Study

# **FME** Description

Channel Improvements- Ditch 17B2A1, Ditch 17B2A1 Detention West, Local Drainage Improvements (North of W Sugar Cane West of Ditch17B2A1), Ditch 17B2A1 Detention East, and Local Drainage Improvements (North of W Sugar Cane East of Ditch17B2A1)

# Study Type

□ Flood risk modeling/mapping ✓ Flood mitigation study

# **Study Area**

City/ Cities Weslaco County/ Counties Hidalgo HUC 8 12110207 **HUC 12** 

Study Area (sq. mi.)

# **Emergency Need**

Yes 🖌 No 🗆

# **Known Flood Risk**

History of Flooding? Population at Risk Roadways flooded **Critical Facilities Impacted** Notes:

# Study Costs

Total Cost:	\$375,900	Study Sponsor:	HCDD1	
Estimated year to start:	2023	Entity with Oversight	HCDD1	
Time to complete?	2025	Included in a CIP or other plan?	Yes 🗸	No 🗆
Funding Dedicated?	Yes 🗆 No 🗸	(Potential) Source of Funding		

# Study identified as a gap by Region 15 Regional Flood Planning Group (RFPG)

Yes 🗆 No 🗸

Yes 🗸	No 🗆	Frequency:	
		# of structures inundated	
Yes 🗸	No 🗆	Miles inundated?	
Yes 🗆	$No$ $\Box$	Agricultural Land impacted Yes 🗆 No	)

✓ Alternative Analysis □ Feasibility Assessments





□ Flood preparedness studies

Flood Management Evaluations

Fact Sheet

**FME** 

FME ID: 151000041



Flood Management Evaluations Fact Sheet

Study identified because project could not be included as an Flood Mitigation Project (FMP) in the Region 15 Regional Flood Plan because it did meet the minimum requirements, per TWDB guidance for Regional Flood Planning or the provisions of Title 31 of TAQC Chapters 361 and 362.

Yes 🖌 No 🗆

Was the project missing sufficient data to assess whether the proposed project has a negative effect, per TWDB  $Y_{es} \checkmark N_0 \square$  guidelines?

Was the project recommended by the RFPG to be studied in order for it to provide more project details, such as  $Yes \checkmark No \square$  a benefit cost ratio or the number of structures the project removes from the 100-year floodplain?

# Related Goals

- □ Increase community access routes to critical facilities, evacuation routes, during and after a flooding event
- Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain
- Increase the # of communities participating in the National Flood Insurance Program
- Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs
- Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards
- □ Increase participation in the regional flood planning process
- Provide regional detention that could be used for water reuse applications or as part of a floodplain management program
- Increase acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use
- Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website
- Increase the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations
- Reduce the # of structures that have been subject to repeated flooding events through property buyouts

# **RFPG Recommended**

- Increase the # of entities that adopt higher than NFIPminimum standards
- Develop and maintain an operational stormwater asset management plan
- Increase the # of flood gauges (rainfall/stream) in the region
- Increase the # of entities that have multi-year drainage CIP list
- Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
- □ Increase use of nature-based flood risk reduction projects
- Develop a regionally coordinated warning and emergency response program that can detect the flood threat and provide timely warning of impending flood danger
- Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
- Increase the proficiency of floodplain managers by increasing the # of them that are certified as Certified Floodplain Managers (CFM) with the Texas Floodplain Management Association
- Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

### Flood Management Evaluations Fact Sheet

**FME** 

FME ID: 151000042

# Mile 11 N & Mile 6 W Study

# **FME** Description

Channel Improvements- Ditch 17B2A1A, Channel Improvements- Ditch 7T,7T1, Local Drainage Improvements- West of Ditch17B2A1A, and Ditch 17B2A1 Detention West

# Study Type

- □ Flood risk modeling/mapping
- ✓ Flood mitigation study

# **Study Area**

City/Cities Weslaco County/ Counties Hidalgo HUC 8 12110207 **HUC 12** 

Study Area (sq. mi.)

# **Emergency Need**

Yes 🗸 No 🗆

# **Known Flood Risk**

History of Flooding?	Yes 🗸	No 🗆
Population at Risk		
Roadways flooded	Yes 🗸	No 🗆
Critical Facilities Impacted	Yes 🗆	No 🗆
Notes:		

# **Study Costs**

Total Cost:	\$570,300
Estimated year to start:	2023
Time to complete?	2025
Funding Dedicated?	Yes 🗆 No 🗸

- ✓ Alternative Analysis
- □ Feasibility Assessments
- □ Flood preparedness studies



Frequency: # of structures inundated Miles inundated? Agricultural Land impacted Yes 🗆 No 🗆

Study Sponsor: HCDD1 Entity with Oversight HCDD1 Included in a CIP or other plan? Yes 🗸 No 🗆 (Potential) Source of Funding

Study identified as a gap by Region 15 Regional Flood Planning Group (RFPG) Yes 🗆 No 🗸

Flood Management Evaluations Fact Sheet

Study identified because project could not be included as an Flood Mitigation Project (FMP) in the Region 15 Regional Flood Plan because it did meet the minimum requirements, per TWDB guidance for Regional Flood Planning or the provisions of Title 31 of TAQC Chapters 361 and 362.

Yes 🖌 No 🗆

Was the project missing sufficient data to assess whether the proposed project has a negative effect, per TWDB Yes  $\checkmark$  No  $\Box$  guidelines?

Was the project recommended by the RFPG to be studied in order for it to provide more project details, such as  $Yes \checkmark No \square$  a benefit cost ratio or the number of structures the project removes from the 100-year floodplain?

# Related Goals

- □ Increase community access routes to critical facilities, evacuation routes, during and after a flooding event
- Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain
- Increase the # of communities participating in the National Flood Insurance Program
- Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs
- Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards
- □ Increase participation in the regional flood planning process
- Provide regional detention that could be used for water reuse applications or as part of a floodplain management program
- Increase acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use
- Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website
- Increase the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations
- Reduce the # of structures that have been subject to repeated flooding events through property buyouts

# **RFPG Recommended**

- Increase the # of entities that adopt higher than NFIPminimum standards
- Develop and maintain an operational stormwater asset management plan
- Increase the # of flood gauges (rainfall/stream) in the region
- Increase the # of entities that have multi-year drainage CIP list
- Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
- □ Increase use of nature-based flood risk reduction projects
- Develop a regionally coordinated warning and emergency response program that can detect the flood threat and provide timely warning of impending flood danger
- Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
- Increase the proficiency of floodplain managers by increasing the # of them that are certified as Certified Floodplain Managers (CFM) with the Texas Floodplain Management Association
- Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

### Flood Management Evaluations Fact Sheet

□ Flood preparedness studies

FME ID: 151000043

# Clark Rd & Mile 1 E Study

# **FME** Description

Channel Improvements- Ditch 19,19B,19H,23; Local Drainage Improvements-Los Laureles; Local Detention-Los Laureles; Local Drainage Improvements-Clark road and Mile 1 Road; and Bypass Channel and Sump Area for Pump Station

# Study Type

- □ Flood risk modeling/mapping
- ✓ Flood mitigation study

# Study Area

City/ Cities	Mercedes
County/ Counties	Hidalgo
HUC 8	12110207
HUC 12	
Study Area (sq. mi.)	12.3

# **Emergency Need**

Yes 🗸 No 🗆

# **Known Flood Risk**

History of Flooding?	Yes 🗸	No 🗆
Population at Risk		
Roadways flooded	Yes 🗸	No 🗆
Critical Facilities Impacted	Yes 🗆	No
Notes:		

# **Study Costs**

-	
Total Cost:	\$1,526,550
Estimated year to start:	2023
Time to complete?	2025
Funding Dedicated?	Yes 🗆 No 🗸

- ✓ Alternative Analysis
- □ Feasibility Assessments



Frequency: # of structures inundated Miles inundated? Agricultural Land impacted Yes 🗆 No 🗆

Study Sponsor: HCDD1 Entity with Oversight HCDD1 Included in a CIP or other plan? Yes 🗸 No 🗆 (Potential) Source of Funding

Study identified as a gap by Region 15 Regional Flood Planning Group (RFPG) Yes 🗆 No 🗸
Flood Management Evaluations Fact Sheet

Study identified because project could not be included as an Flood Mitigation Project (FMP) in the Region 15 Regional Flood Plan because it did meet the minimum requirements, per TWDB guidance for Regional Flood Planning or the provisions of Title 31 of TAQC Chapters 361 and 362.

Yes 🖌 No 🗆

Was the project missing sufficient data to assess whether the proposed project has a negative effect, per TWDB  $Y_{es} \checkmark N_0 \square$  guidelines?

Was the project recommended by the RFPG to be studied in order for it to provide more project details, such as  $Yes \checkmark No \square$  a benefit cost ratio or the number of structures the project removes from the 100-year floodplain?

#### Related Goals

- □ Increase community access routes to critical facilities, evacuation routes, during and after a flooding event
- Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain
- Increase the # of communities participating in the National Flood Insurance Program
- Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs
- Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards
- □ Increase participation in the regional flood planning process
- Provide regional detention that could be used for water reuse applications or as part of a floodplain management program
- Increase acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use
- Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website
- Increase the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations
- Reduce the # of structures that have been subject to repeated flooding events through property buyouts

#### **RFPG Recommended**

- Increase the # of entities that adopt higher than NFIPminimum standards
- Develop and maintain an operational stormwater asset management plan
- Increase the # of flood gauges (rainfall/stream) in the region
- Increase the # of entities that have multi-year drainage CIP list
- Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
- □ Increase use of nature-based flood risk reduction projects
- Develop a regionally coordinated warning and emergency response program that can detect the flood threat and provide timely warning of impending flood danger
- Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
- Increase the proficiency of floodplain managers by increasing the # of them that are certified as Certified Floodplain Managers (CFM) with the Texas Floodplain Management Association
- Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

FME Description

International & E Mile 5 N Study

Channel Improvements just upstream of Ditch 35B; Culvert Improvements; Detention North of Llano Grande Lake Just West of 3 Mile Rd; 2- 130,000 GPM Pumps; Channel Improvements Ditch 34, 34B, 34BExt; Regional Detention; Bypass channel from Ditch 34; and Culvert Improvements-Ditch 34 Passing International Blvd.

✓ Alternative Analysis

□ Feasibility Assessments

#### Study Type

- □ Flood risk modeling/mapping
- ✓ Flood mitigation study

#### Study Area

City/Cities Weslaco County/Counties Hidalgo HUC 8 12110207

HUC 12

Study Area (sq. mi.) 1.71

#### **Emergency Need**

Yes 🖌 No 🗆

#### Known Flood Risk

History of Flooding?	Yes 🗸	No 🛛
Population at Risk		
Roadways flooded	Yes 🗸	No
Critical Facilities Impacted	Yes 🗆	No
Notes:		

#### Study Costs

Total Cost:	\$1,093,500	Study Sponsor:	HCDD1	
Estimated year to start:	2023	Entity with Oversight	HCDD1	
Time to complete?	2025	Included in a CIP or other plan?	Yes 🗸	No 🗆
Funding Dedicated?	Yes 🗆 No 🗸	(Potential) Source of Funding		

Study identified as a gap by Region 15 Regional Flood Planning Group (RFPG)



Agricultural Land impacted Yes 🗆 No 🗆

Flood preparedness studies

Flood Management Evaluations

Fact Sheet

**FME** 

FME ID: 151000044

Flood Management Evaluations Fact Sheet

Study identified because project could not be included as an Flood Mitigation Project (FMP) in the Region 15 Regional Flood Plan because it did meet the minimum requirements, per TWDB guidance for Regional Flood Planning or the provisions of Title 31 of TAQC Chapters 361 and 362.

Yes 🖌 No 🗆

Was the project missing sufficient data to assess whether the proposed project has a negative effect, per TWDB  $Y_{es} \checkmark N_0 \square$  guidelines?

Was the project recommended by the RFPG to be studied in order for it to provide more project details, such as  $Yes \checkmark No \square$  a benefit cost ratio or the number of structures the project removes from the 100-year floodplain?

#### Related Goals

- Increase community access routes to critical facilities, evacuation routes, during and after a flooding event
- Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain
- Increase the # of communities participating in the National Flood Insurance Program
- Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs
- Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards
- □ Increase participation in the regional flood planning process
- Provide regional detention that could be used for water reuse applications or as part of a floodplain management program
- Increase acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use
- Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website
- Increase the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations
- Reduce the # of structures that have been subject to repeated flooding events through property buyouts

#### **RFPG Recommended**

- Increase the # of entities that adopt higher than NFIPminimum standards
- Develop and maintain an operational stormwater asset management plan
- Increase the # of flood gauges (rainfall/stream) in the region
- Increase the # of entities that have multi-year drainage CIP list
- Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
- □ Increase use of nature-based flood risk reduction projects
- Develop a regionally coordinated warning and emergency response program that can detect the flood threat and provide timely warning of impending flood danger
- Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
- Increase the proficiency of floodplain managers by increasing the # of them that are certified as Certified Floodplain Managers (CFM) with the Texas Floodplain Management Association
- Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

### **FME** Flood Management Evaluations

Fact Sheet

FME ID: 151000045

#### **FME** Description

Local Drainage Improvements-Storm Drain and Detention North of Rancho Blanco and east of S. Alamo Road

#### Study Type

- □ Flood risk modeling/mapping
- ✓ Flood mitigation study

#### **Study Area**

City/ Cities	Alamo
County/ Counties	Hidalgo
HUC 8	12110207
HUC 12	
Study Area (sq. mi.)	0.03

#### **Emergency Need**

Yes 🗸 No 🗆

#### **Known Flood Risk**

History of Flooding? Population at Risk Roadways flooded **Critical Facilities Impacted** Notes:

#### **Study Costs**

Tot Esti Tim Fur

- ✓ Alternative Analysis Feasibility Assessments
- □ Flood preparedness studies



No 🗆	Frequency:		
	# of structures inundated		
No 🗆	Miles inundated?		
No 🗆	Agricultural Land impacted	Yes 🗆	No 🗆
	No 🗆 No 🗆 No 🗆	NoFrequency:# of structures inundatedNoMiles inundated?NoAgricultural Land impacted	NoFrequency:# of structures inundatedNoMoAgricultural Land impactedYes

-				
al Cost:	\$525,750	Study Sponsor:	HCDD1	
imated year to start:	2023	Entity with Oversight	HCDD1	
ne to complete?	2025	Included in a CIP or other plan?	Yes 🗸	No 🗆
nding Dedicated?	Yes 🗆 No 🗸	(Potential) Source of Funding		

Study identified as a gap by Region 15 Regional Flood Planning Group (RFPG) Yes 🗆 No 🗸



S Alamo and Rancho Blanco Study

Flood Management Evaluations Fact Sheet

Study identified because project could not be included as an Flood Mitigation Project (FMP) in the Region 15 Regional Flood Plan because it did meet the minimum requirements, per TWDB guidance for Regional Flood Planning or the provisions of Title 31 of TAQC Chapters 361 and 362.

Yes 🖌 No 🗆

Was the project missing sufficient data to assess whether the proposed project has a negative effect, per TWDB  $Y_{es} \checkmark N_0 \square$  guidelines?

Was the project recommended by the RFPG to be studied in order for it to provide more project details, such as  $Yes \checkmark No \square$  a benefit cost ratio or the number of structures the project removes from the 100-year floodplain?

#### Related Goals

- □ Increase community access routes to critical facilities, evacuation routes, during and after a flooding event
- □ Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain
- Increase the # of communities participating in the National Flood Insurance Program
- Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs
- Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards
- □ Increase participation in the regional flood planning process
- Provide regional detention that could be used for water reuse applications or as part of a floodplain management program
- Increase acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use
- Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website
- Increase the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations
- Reduce the # of structures that have been subject to repeated flooding events through property buyouts

#### **RFPG Recommended**

- Increase the # of entities that adopt higher than NFIPminimum standards
- Develop and maintain an operational stormwater asset management plan
- Increase the # of flood gauges (rainfall/stream) in the region
- Increase the # of entities that have multi-year drainage CIP list
- Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
- □ Increase use of nature-based flood risk reduction projects
- Develop a regionally coordinated warning and emergency response program that can detect the flood threat and provide timely warning of impending flood danger
- Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
- Increase the proficiency of floodplain managers by increasing the # of them that are certified as Certified Floodplain Managers (CFM) with the Texas Floodplain Management Association
- Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

#### FM 1423 and Main Grove Study

#### FME Description

Local Drainage Improvements- Main Street, North Street

#### Study Type

- □ Flood risk modeling/mapping
- $\checkmark \ {\sf Flood mitigation study}$

#### Study Area

City/ Cities Donna County/ Counties Hidalgo HUC 8 12110207 HUC 12 Study Area (sq. mi.) 0.12

#### **Emergency Need**

Yes 🖌 No 🗆

#### Known Flood Risk

History of Flooding?	Yes 🗸	No 🗆
Population at Risk		
Roadways flooded	Yes 🗸	No 🗆
Critical Facilities Impacted	Yes 🗆	No 🗆
Notes:		

#### Study Costs

\$107,100	Study Sponsor:	HCDD1	
2023	Entity with Oversight	HCDD1	
2025	Included in a CIP or other plan?	Yes 🗸	No 🗆
Yes 🗆 No 🗸	(Potential) Source of Funding		
	\$107,100 2023 2025 Yes □ No ✓	\$107,100Study Sponsor:2023Entity with Oversight2025Included in a CIP or other plan?Yes □No ✓(Potential) Source of Funding	\$107,100Study Sponsor:HCDD12023Entity with OversightHCDD12025Included in a CIP or other plan?Yes ✓Yes □No ✓(Potential) Source of Funding

Study identified as a gap by Region 15 Regional Flood Planning Group (RFPG) Yes D No ✓

#### ✓ Alternative Analysis

- □ Feasibility Assessments
- □ Flood preparedness studies

**FME** 

### Frequency: # of structures inundated



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ALCONTRACTOR DOCUMENTS
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Flood Management Evaluations Fact Sheet

Study identified because project could not be included as an Flood Mitigation Project (FMP) in the Region 15 Regional Flood Plan because it did meet the minimum requirements, per TWDB guidance for Regional Flood Planning or the provisions of Title 31 of TAQC Chapters 361 and 362.

Yes 🖌 No 🗆

Was the project missing sufficient data to assess whether the proposed project has a negative effect, per TWDB  $Y_{es} \checkmark N_0 \square$  guidelines?

Was the project recommended by the RFPG to be studied in order for it to provide more project details, such as  $Yes \checkmark No \square$  a benefit cost ratio or the number of structures the project removes from the 100-year floodplain?

#### Related Goals

- □ Increase community access routes to critical facilities, evacuation routes, during and after a flooding event
- Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain
- Increase the # of communities participating in the National Flood Insurance Program
- Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs
- Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards
- □ Increase participation in the regional flood planning process
- Provide regional detention that could be used for water reuse applications or as part of a floodplain management program
- Increase acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use
- Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website
- Increase the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations
- Reduce the # of structures that have been subject to repeated flooding events through property buyouts

#### **RFPG Recommended**

- Increase the # of entities that adopt higher than NFIPminimum standards
- Develop and maintain an operational stormwater asset management plan
- Increase the # of flood gauges (rainfall/stream) in the region
- Increase the # of entities that have multi-year drainage CIP list
- Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
- □ Increase use of nature-based flood risk reduction projects
- Develop a regionally coordinated warning and emergency response program that can detect the flood threat and provide timely warning of impending flood danger
- Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
- Increase the proficiency of floodplain managers by increasing the # of them that are certified as Certified Floodplain Managers (CFM) with the Texas Floodplain Management Association
- Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

#### FM 1423 and Nolana Study

# **FME**

Fact Sheet

#### Flood Management Evaluations

FME ID: 151000047

#### **FME** Description

Local Drainage Improvements--Storm Drain and Detention South of Earling Road West of Val Verde Street

#### Study Type

- □ Flood risk modeling/mapping
- ✓ Flood mitigation study

#### **Study Area**

City/ Cities	Donna
County/ Counties	Hidalgo
HUC 8	12110207
HUC 12	
Study Area (sq. mi.)	0.38

**Emergency Need** 

Yes 🗸 No 🗆

#### **Known Flood Risk**

History of Flooding? Y Population at Risk Roadways flooded γ **Critical Facilities Impacted** Notes:

#### Study Costs

Total Cost: Estimated year Time to comple **Funding Dedica** 

- ✓ Alternative Analysis □ Feasibility Assessments
- □ Flood preparedness studies



'es ✓	No 🗆	Frequency:		
		# of structures inundated		
'es ✓	No 🗆	Miles inundated?		
res 🗆	No 🗆	Agricultural Land impacted	Yes 🗆	No $\square$

	\$321,000	Study Sponsor:	HCDD1	
to start:	2023	Entity with Oversight	HCDD1	
ete?	2025	Included in a CIP or other plan?	Yes 🗸	No 🗆
ted?	Yes 🗆 No 🗸	(Potential) Source of Funding		

Study identified as a gap by Region 15 Regional Flood Planning Group (RFPG) Yes 🗆 No 🗸

Flood Management Evaluations Fact Sheet

Study identified because project could not be included as an Flood Mitigation Project (FMP) in the Region 15 Regional Flood Plan because it did meet the minimum requirements, per TWDB guidance for Regional Flood Planning or the provisions of Title 31 of TAQC Chapters 361 and 362.

Yes 🖌 No 🗆

Was the project missing sufficient data to assess whether the proposed project has a negative effect, per TWDB  $Y_{es} \checkmark N_0 \square$  guidelines?

Was the project recommended by the RFPG to be studied in order for it to provide more project details, such as  $Yes \checkmark No \square$  a benefit cost ratio or the number of structures the project removes from the 100-year floodplain?

#### Related Goals

- Increase community access routes to critical facilities, evacuation routes, during and after a flooding event
- Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain
- Increase the # of communities participating in the National Flood Insurance Program
- Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs
- Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards
- □ Increase participation in the regional flood planning process
- Provide regional detention that could be used for water reuse applications or as part of a floodplain management program
- Increase acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use
- Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website
- Increase the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations
- Reduce the # of structures that have been subject to repeated flooding events through property buyouts

#### **RFPG Recommended**

- Increase the # of entities that adopt higher than NFIPminimum standards
- Develop and maintain an operational stormwater asset management plan
- Increase the # of flood gauges (rainfall/stream) in the region
- Increase the # of entities that have multi-year drainage CIP list
- Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
- □ Increase use of nature-based flood risk reduction projects
- Develop a regionally coordinated warning and emergency response program that can detect the flood threat and provide timely warning of impending flood danger
- Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
- Increase the proficiency of floodplain managers by increasing the # of them that are certified as Certified Floodplain Managers (CFM) with the Texas Floodplain Management Association
- Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

**N** Tower Study

#### **FME** Description

Local Drainage Improvements-Storm Drain North of Minnesota Road

#### Study Type

- □ Flood risk modeling/mapping
- ✓ Flood mitigation study

#### **Study Area**

City/ Cities Alamo Hidalgo County/ Counties HUC 8 12110207 **HUC 12** Study Area (sq. mi.)

#### **Emergency Need**

Yes 🗸 No 🗆

#### **Known Flood Risk**

History of Flooding? Population at Risk Roadways flooded **Critical Facilities Impacted** Notes:

#### **Study Costs**

Τ Ε Т F

#### ✓ Alternative Analysis □ Feasibility Assessments

□ Flood preparedness studies

Yes 🗸	No 🗆	Frequency:		
		# of structures inundated		
Yes 🗸	No 🗆	Miles inundated?		
Yes 🗆	No 🗆	Agricultural Land impacted	Yes 🗆	No 🗆

otal Cost:	\$201,000	Study Sponsor:	HCDD1	
stimated year to start:	2023	Entity with Oversight	HCDD1	
ime to complete?	2025	Included in a CIP or other plan?	Yes 🗸	No 🗆
unding Dedicated?	Yes 🗆 No 🗸	(Potential) Source of Funding		
unding Dedicated?	2025 Yes □ No ✓	(Potential) Source of Funding	Yes 🗸	N

Study identified as a gap by Region 15 Regional Flood Planning Group (RFPG) Yes 🗆 No 🗸







# **FME**

Fact Sheet

Flood Management Evaluations Fact Sheet

Study identified because project could not be included as an Flood Mitigation Project (FMP) in the Region 15 Regional Flood Plan because it did meet the minimum requirements, per TWDB guidance for Regional Flood Planning or the provisions of Title 31 of TAQC Chapters 361 and 362.

Yes 🖌 No 🗆

Was the project missing sufficient data to assess whether the proposed project has a negative effect, per TWDB Yes  $\checkmark$  No  $\Box$  guidelines?

Was the project recommended by the RFPG to be studied in order for it to provide more project details, such as  $Yes \checkmark No \square$  a benefit cost ratio or the number of structures the project removes from the 100-year floodplain?

#### Related Goals

- □ Increase community access routes to critical facilities, evacuation routes, during and after a flooding event
- □ Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain
- Increase the # of communities participating in the National Flood Insurance Program
- Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs
- Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards
- □ Increase participation in the regional flood planning process
- Provide regional detention that could be used for water reuse applications or as part of a floodplain management program
- Increase acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use
- Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website
- Increase the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations
- Reduce the # of structures that have been subject to repeated flooding events through property buyouts

#### **RFPG Recommended**

- Increase the # of entities that adopt higher than NFIPminimum standards
- Develop and maintain an operational stormwater asset management plan
- Increase the # of flood gauges (rainfall/stream) in the region
- Increase the # of entities that have multi-year drainage CIP list
- Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
- □ Increase use of nature-based flood risk reduction projects
- Develop a regionally coordinated warning and emergency response program that can detect the flood threat and provide timely warning of impending flood danger
- Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
- Increase the proficiency of floodplain managers by increasing the # of them that are certified as Certified Floodplain Managers (CFM) with the Texas Floodplain Management Association
- Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

#### **Dillon and Roosevelt Study**

#### **FME** Description

Local Drainage Improvements-Just North of E Roosevelt Rd

#### Study Type

- □ Flood risk modeling/mapping
- ✓ Flood mitigation study

#### **Study Area**

City/ Cities Donna Hidalgo County/ Counties HUC 8 12110207 **HUC 12** Study Area (sq. mi.) 0.68

#### **Emergency Need**

Yes 🗸 No 🗆

#### **Known Flood Risk**

History of Flooding? Population at Risk Roadways flooded **Critical Facilities Impacted** Notes:

#### Study Costs

Total Cost:	\$216,600	Study Sponsor:	HCDD1
Estimated year to start:	2023	Entity with Oversight	HCDD1
Time to complete?	2025	Included in a CIP or other plan?	Yes 🗸
Funding Dedicated?	Yes 🗆 No 🗸	(Potential) Source of Funding	

Study identified as a gap by Region 15 Regional Flood Planning Group (RFPG) Yes 🗆 No 🗸

FME ID:	151000049	



Yes 🗸 No 🗆

Yes ✓	No 🗆	Frequency:		
		# of structures inundated		
Yes ✓	No 🗆	Miles inundated?		
Yes 🗆	No 🗆	Agricultural Land impacted	Yes $\square$	No



# **FME**

Fact Sheet

Flood Management Evaluations

Flood Management Evaluations Fact Sheet

Study identified because project could not be included as an Flood Mitigation Project (FMP) in the Region 15 Regional Flood Plan because it did meet the minimum requirements, per TWDB guidance for Regional Flood Planning or the provisions of Title 31 of TAQC Chapters 361 and 362.

Yes 🖌 No 🗆

Was the project missing sufficient data to assess whether the proposed project has a negative effect, per TWDB  $Y_{es} \checkmark N_0 \square$  guidelines?

Was the project recommended by the RFPG to be studied in order for it to provide more project details, such as  $Yes \checkmark No \square$  a benefit cost ratio or the number of structures the project removes from the 100-year floodplain?

#### Related Goals

- □ Increase community access routes to critical facilities, evacuation routes, during and after a flooding event
- □ Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain
- Increase the # of communities participating in the National Flood Insurance Program
- Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs
- Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards
- □ Increase participation in the regional flood planning process
- Provide regional detention that could be used for water reuse applications or as part of a floodplain management program
- Increase acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use
- Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website
- Increase the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations
- Reduce the # of structures that have been subject to repeated flooding events through property buyouts

#### **RFPG Recommended**

- Increase the # of entities that adopt higher than NFIPminimum standards
- Develop and maintain an operational stormwater asset management plan
- Increase the # of flood gauges (rainfall/stream) in the region
- Increase the # of entities that have multi-year drainage CIP list
- Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
- □ Increase use of nature-based flood risk reduction projects
- Develop a regionally coordinated warning and emergency response program that can detect the flood threat and provide timely warning of impending flood danger
- Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
- Increase the proficiency of floodplain managers by increasing the # of them that are certified as Certified Floodplain Managers (CFM) with the Texas Floodplain Management Association
- Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

#### **Canton and Dillon Study**

#### **FME** Description

Local Drainage Improvements-Along Canton Road and adjacent neighborhoods

#### Study Type

- □ Flood risk modeling/mapping
- ✓ Flood mitigation study

#### **Study Area**

City/ Cities Donna Hidalgo County/ Counties HUC 8 12110207 **HUC 12** Study Area (sq. mi.) 1.1

#### **Emergency Need**

Yes 🗸 No 🗆

#### Known Flood Risk History of Flooding?

HISTOLY OF FIODULING?
Population at Risk
Roadways flooded
Critical Facilities Impacted
Notes:

#### **Study Costs**

Total Cost:	\$454,050	Study Sponsor:	HCDD1	
Estimated year to start:	2023	Entity with Oversight	HCDD1	
Time to complete?	2025	Included in a CIP or other plan?	Yes 🗸	No
Funding Dedicated?	Yes 🗆 No 🗸	(Potential) Source of Funding		

Study identified as a gap by Region 15 Regional Flood Planning Group (RFPG) Yes 🗆 No 🗸

✓ Alternative Analysis

□ Feasibility Assessments

#### Flood Management Evaluations Fact Sheet

FME ID: 151000050

□ Flood preparedness studies

No 🗆



Frequency:

Lower Rio Grande Regional Flood Planning Group

**FME** 

#### Yes ✓ No 🗆

	<pre># of structures inundated</pre>	
]	Miles inundated?	
]	Agricultural Land impacted	Yes 🗆

Yes 🗸 No 🗆 Yes 🗆 No 🗆

Flood Management Evaluations Fact Sheet

Study identified because project could not be included as an Flood Mitigation Project (FMP) in the Region 15 Regional Flood Plan because it did meet the minimum requirements, per TWDB guidance for Regional Flood Planning or the provisions of Title 31 of TAQC Chapters 361 and 362.

Yes 🖌 No 🗆

Was the project missing sufficient data to assess whether the proposed project has a negative effect, per TWDB  $Y_{es} \checkmark N_0 \square$  guidelines?

Was the project recommended by the RFPG to be studied in order for it to provide more project details, such as  $Yes \checkmark No \square$  a benefit cost ratio or the number of structures the project removes from the 100-year floodplain?

#### Related Goals

- Increase community access routes to critical facilities, evacuation routes, during and after a flooding event
- Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain
- Increase the # of communities participating in the National Flood Insurance Program
- Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs
- Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards
- □ Increase participation in the regional flood planning process
- Provide regional detention that could be used for water reuse applications or as part of a floodplain management program
- Increase acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use
- Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website
- Increase the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations
- Reduce the # of structures that have been subject to repeated flooding events through property buyouts

#### **RFPG Recommended**

- Increase the # of entities that adopt higher than NFIPminimum standards
- Develop and maintain an operational stormwater asset management plan
- Increase the # of flood gauges (rainfall/stream) in the region
- Increase the # of entities that have multi-year drainage CIP list
- Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
- □ Increase use of nature-based flood risk reduction projects
- Develop a regionally coordinated warning and emergency response program that can detect the flood threat and provide timely warning of impending flood danger
- Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
- Increase the proficiency of floodplain managers by increasing the # of them that are certified as Certified Floodplain Managers (CFM) with the Texas Floodplain Management Association
- Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

FM 1925 and Mile 4 Study

#### FME Description

Local Drainage Improvements-Along Bernal Court

#### Study Type

- □ Flood risk modeling/mapping
- $\checkmark \ {\sf Flood\ mitigation\ study}$

#### Study Area

City/ Cities Donna County/ Counties Hidalgo HUC 8 12110207 HUC 12 Study Area (sq. mi.) 0.16

#### **Emergency Need**

Yes 🖌 No 🗆

#### Known Flood Risk

History of Flooding? Population at Risk Roadways flooded Critical Facilities Impacted Notes:

#### Study Costs

Total Cost: Estimated year to start: Time to complete? Funding Dedicated?

### ✓ Alternative Analysis □ Feasibility Assessments

□ Flood preparedness studies

FME ID: 151000051

Study identified as a gap by Region 15 Regional Flood Planning Group (RFPG)

\$143,550

Yes 🗆 No 🗸

2023

2025

Yes 🗆 No 🗸





Yes 🗸	No 🗆	Frequency:		
		# of structures inundated		
Yes 🗸	No 🗆	Miles inundated?		
Yes 🗆	No 🗆	Agricultural Land impacted	Yes 🗆	No 🗆

Study Sponsor:	HCDD1	
Entity with Oversight	HCDD1	
Included in a CIP or other plan?	Yes 🗸	No
(Potential) Source of Funding		



Fact Sheet

Flood Management Evaluations Fact Sheet

Study identified because project could not be included as an Flood Mitigation Project (FMP) in the Region 15 Regional Flood Plan because it did meet the minimum requirements, per TWDB guidance for Regional Flood Planning or the provisions of Title 31 of TAQC Chapters 361 and 362.

Yes 🖌 No 🗆

Was the project missing sufficient data to assess whether the proposed project has a negative effect, per TWDB  $Y_{es} \checkmark N_0 \square$  guidelines?

Was the project recommended by the RFPG to be studied in order for it to provide more project details, such as  $Yes \checkmark No \square$  a benefit cost ratio or the number of structures the project removes from the 100-year floodplain?

#### Related Goals

- □ Increase community access routes to critical facilities, evacuation routes, during and after a flooding event
- □ Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain
- Increase the # of communities participating in the National Flood Insurance Program
- Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs
- Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards
- □ Increase participation in the regional flood planning process
- Provide regional detention that could be used for water reuse applications or as part of a floodplain management program
- Increase acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use
- Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website
- Increase the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations
- Reduce the # of structures that have been subject to repeated flooding events through property buyouts

#### **RFPG Recommended**

- Increase the # of entities that adopt higher than NFIPminimum standards
- Develop and maintain an operational stormwater asset management plan
- Increase the # of flood gauges (rainfall/stream) in the region
- Increase the # of entities that have multi-year drainage CIP list
- Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
- □ Increase use of nature-based flood risk reduction projects
- Develop a regionally coordinated warning and emergency response program that can detect the flood threat and provide timely warning of impending flood danger
- Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
- Increase the proficiency of floodplain managers by increasing the # of them that are certified as Certified Floodplain Managers (CFM) with the Texas Floodplain Management Association
- Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

#### Pumps and Sumps Study

#### **FME** Description

Pump Station A & Sump

#### Study Type

□ Flood risk modeling/mapping
✓ Flood mitigation study

#### Study Area

City/ Cities County/ Counties Hidalgo HUC 8 12110207 HUC 12 Study Area (sq. mi.) 0.1

#### **Emergency Need**

Yes 🖌 No 🗆

#### Known Flood Risk

History of Flooding?Yes ✓No □Population at RiskRoadways floodedYes ✓No □Critical Facilities ImpactedYes □No □Notes:No □No □

#### Study Costs

Total Cost:	\$213,000	Study Sponsor:	HCDD1	
Estimated year to start:	2023	Entity with Oversight	HCDD1	
Time to complete?	2025	Included in a CIP or other plan?	Yes 🗸	No 🗆
Funding Dedicated?	Yes 🗆 No 🗸	(Potential) Source of Funding		

Study identified as a gap by Region 15 Regional Flood Planning Group (RFPG) Yes D No ✓

#### Flood Management Evaluations Fact Sheet FME ID: 151000052

**FME** 

✓	Alternative Analysis	

□ Feasibility Assessments

□ Flood preparedness studies



Frequency:

Agricultural Land impacted Yes 🗆 No 🗆

Miles inundated?

# of structures inundated



Flood Management Evaluations Fact Sheet

Study identified because project could not be included as an Flood Mitigation Project (FMP) in the Region 15 Regional Flood Plan because it did meet the minimum requirements, per TWDB guidance for Regional Flood Planning or the provisions of Title 31 of TAQC Chapters 361 and 362.

Yes 🖌 No 🗆

Was the project missing sufficient data to assess whether the proposed project has a negative effect, per TWDB Yes  $\checkmark$  No  $\Box$  guidelines?

Was the project recommended by the RFPG to be studied in order for it to provide more project details, such as  $Yes \checkmark No \square$  a benefit cost ratio or the number of structures the project removes from the 100-year floodplain?

#### Related Goals

- □ Increase community access routes to critical facilities, evacuation routes, during and after a flooding event
- Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain
- Increase the # of communities participating in the National Flood Insurance Program
- Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs
- Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards
- □ Increase participation in the regional flood planning process
- Provide regional detention that could be used for water reuse applications or as part of a floodplain management program
- Increase acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use
- Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website
- Increase the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations
- Reduce the # of structures that have been subject to repeated flooding events through property buyouts

#### **RFPG Recommended**

- Increase the # of entities that adopt higher than NFIPminimum standards
- Develop and maintain an operational stormwater asset management plan
- Increase the # of flood gauges (rainfall/stream) in the region
- Increase the # of entities that have multi-year drainage CIP list
- Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
- □ Increase use of nature-based flood risk reduction projects
- Develop a regionally coordinated warning and emergency response program that can detect the flood threat and provide timely warning of impending flood danger
- Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
- Increase the proficiency of floodplain managers by increasing the # of them that are certified as Certified Floodplain Managers (CFM) with the Texas Floodplain Management Association
- Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

#### Study Type ✓ Flood risk modeling/mapping ✓ Alternative Analysis □ Flood preparedness studies ✓ Flood mitigation study □ Feasibility Assessments Study Area City/ Cities Insert snip of Location Map here County/ Counties Hidalgo 12110207 HUC 8 **HUC 12** Study Area (sq. mi.) **Emergency Need** Yes 🗸 No 🗆 **Known Flood Risk** History of Flooding? Yes ✓No 🗆 Frequency: Population at Risk # of structures inundated Roadways flooded Miles inundated? Yes 🗸 No 🗆 **Critical Facilities Impacted** Agricultural Land impacted Yes 🗆 No 🗆 Yes 🗆 No 🗆 Notes: Study Costs

Total Cost:	\$244,500	Study Sponsor:	HCDD1	
Estimated year to start:	2023	Entity with Oversight	HCDD1	
Time to complete?	2025	Included in a CIP or other plan?	Yes 🗸	No 🗆
Funding Dedicated?	Yes 🗆 No 🗸	(Potential) Source of Funding		

Study identified as a gap by Region 15 Regional Flood Planning Group (RFPG) Yes 🗆 No 🗸

Fact Sheet

#### Flood Management Evaluations

FME ID: 151000053

Lower Rio Grande Regional Flood Planning Group

**FME** Description

Pump Station B & Sump

Flood Management Evaluations Fact Sheet

Study identified because project could not be included as an Flood Mitigation Project (FMP) in the Region 15 Regional Flood Plan because it did meet the minimum requirements, per TWDB guidance for Regional Flood Planning or the provisions of Title 31 of TAQC Chapters 361 and 362.

Yes 🖌 No 🗆

Was the project missing sufficient data to assess whether the proposed project has a negative effect, per TWDB Yes  $\checkmark$  No  $\Box$  guidelines?

Was the project recommended by the RFPG to be studied in order for it to provide more project details, such as  $Yes \checkmark No \square$  a benefit cost ratio or the number of structures the project removes from the 100-year floodplain?

#### Related Goals

- □ Increase community access routes to critical facilities, evacuation routes, during and after a flooding event
- □ Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain
- Increase the # of communities participating in the National Flood Insurance Program
- Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs
- Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards
- □ Increase participation in the regional flood planning process
- Provide regional detention that could be used for water reuse applications or as part of a floodplain management program
- Increase acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use
- Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website
- Increase the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations
- Reduce the # of structures that have been subject to repeated flooding events through property buyouts

#### **RFPG Recommended**

- Increase the # of entities that adopt higher than NFIPminimum standards
- Develop and maintain an operational stormwater asset management plan
- Increase the # of flood gauges (rainfall/stream) in the region
- Increase the # of entities that have multi-year drainage CIP list
- Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
- □ Increase use of nature-based flood risk reduction projects
- Develop a regionally coordinated warning and emergency response program that can detect the flood threat and provide timely warning of impending flood danger
- Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
- Increase the proficiency of floodplain managers by increasing the # of them that are certified as Certified Floodplain Managers (CFM) with the Texas Floodplain Management Association
- Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

#### **Pumps and Sumps Study**

#### FME Description

Pump Station D

#### Study Type

- □ Flood risk modeling/mapping
- ✓ Flood mitigation study

#### Study Area

City/ Cities County/ Counties Hidalgo HUC 8 12110207 HUC 12 Study Area (sq. mi.) 4.67

#### **Emergency Need**

Yes 🖌 No 🗆

#### Known Flood Risk

History of Flooding?	Yes 🗸	No 🗆
Population at Risk		
Roadways flooded	Yes 🗸	No 🗆
Critical Facilities Impacted	Yes 🗆	No 🗆
Notes:		

#### Study Costs

Total Cost:	
Estimated year to start:	
Time to complete?	
Funding Dedicated?	Yes
Time to complete? Funding Dedicated?	Ye

✓ Alternative Analysis

### Feasibility Assessments



Miles inundated? Agricultural Land impacted Yes D No D

	HCDD1	Study Sponsor:	\$165,000
	HCDD1	Entity with Oversight	2023
No 🗆	Yes 🗸	Included in a CIP or other plan?	2025
		(Potential) Source of Funding	Yes 🗆 No 🗸

#### Study identified as a gap by Region 15 Regional Flood Planning Group (RFPG) Yes D No ✓

□ Flood preparedness studies

# Management Evaluations

Flood Management Evaluations Fact Sheet

FME ID: 151000055



Flood Management Evaluations Fact Sheet

Study identified because project could not be included as an Flood Mitigation Project (FMP) in the Region 15 Regional Flood Plan because it did meet the minimum requirements, per TWDB guidance for Regional Flood Planning or the provisions of Title 31 of TAQC Chapters 361 and 362.

Yes 🖌 No 🗆

Was the project missing sufficient data to assess whether the proposed project has a negative effect, per TWDB  $Y_{es} \checkmark N_0 \square$  guidelines?

Was the project recommended by the RFPG to be studied in order for it to provide more project details, such as  $Yes \checkmark No \square$  a benefit cost ratio or the number of structures the project removes from the 100-year floodplain?

#### Related Goals

- □ Increase community access routes to critical facilities, evacuation routes, during and after a flooding event
- Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain
- Increase the # of communities participating in the National Flood Insurance Program
- Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs
- Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards
- □ Increase participation in the regional flood planning process
- Provide regional detention that could be used for water reuse applications or as part of a floodplain management program
- Increase acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use
- Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website
- Increase the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations
- Reduce the # of structures that have been subject to repeated flooding events through property buyouts

#### **RFPG Recommended**

- Increase the # of entities that adopt higher than NFIPminimum standards
- Develop and maintain an operational stormwater asset management plan
- Increase the # of flood gauges (rainfall/stream) in the region
- Increase the # of entities that have multi-year drainage CIP list
- Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
- □ Increase use of nature-based flood risk reduction projects
- Develop a regionally coordinated warning and emergency response program that can detect the flood threat and provide timely warning of impending flood danger
- Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
- Increase the proficiency of floodplain managers by increasing the # of them that are certified as Certified Floodplain Managers (CFM) with the Texas Floodplain Management Association
- Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

### Pumps and Sumps Study

### **FME** Description

Pump Station E & Sump

#### Study Type

- □ Flood risk modeling/mapping
- ✓ Flood mitigation study

#### Study Area

City/ Cities County/ Counties Hidalgo 12110207 HUC 8 **HUC 12** Study Area (sq. mi.) 3.45

#### **Emergency Need**

Yes 🗸 No 🗆

#### **Known Flood Risk**

History of Flooding? Population at Risk Roadways flooded **Critical Facilities Impacted** Notes:

#### Study Costs

Total Cost:
Estimated year to start:
Time to complete?
Funding Dedicated?

### Feasibility Assessments

✓ Alternative Analysis

□ Flood preparedness studies

complete?	2025	Included in a CIP or other plan?	Yes 🗸	No 🗆	
J Dedicated?	Yes 🗆 No 🗸	(Potential) Source of Funding			
				•	

No 🗆

Yes ✓

Yes 🗸 No 🗆

Yes 🗆 No 🗆

\$124,500

2023

Study identified as a gap by Region 15 Regional Flood Planning Group (RFPG) Yes 🗆 No 🗸





Frequency:

Yes 🗆 No 🗆

HCDD1

HCDD1

# of structures inundated

Agricultural Land impacted

Miles inundated?

Study Sponsor:

Entity with Oversight

**FME** 

#### Flood Management Evaluations Fact Sheet

FME ID: 151000056

Flood Management Evaluations Fact Sheet

Study identified because project could not be included as an Flood Mitigation Project (FMP) in the Region 15 Regional Flood Plan because it did meet the minimum requirements, per TWDB guidance for Regional Flood Planning or the provisions of Title 31 of TAQC Chapters 361 and 362.

Yes 🖌 No 🗆

Was the project missing sufficient data to assess whether the proposed project has a negative effect, per TWDB  $Y_{es} \checkmark N_0 \square$  guidelines?

Was the project recommended by the RFPG to be studied in order for it to provide more project details, such as  $Yes \checkmark No \square$  a benefit cost ratio or the number of structures the project removes from the 100-year floodplain?

#### Related Goals

- □ Increase community access routes to critical facilities, evacuation routes, during and after a flooding event
- Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain
- Increase the # of communities participating in the National Flood Insurance Program
- Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs
- Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards
- □ Increase participation in the regional flood planning process
- Provide regional detention that could be used for water reuse applications or as part of a floodplain management program
- Increase acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use
- Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website
- Increase the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations
- Reduce the # of structures that have been subject to repeated flooding events through property buyouts

#### **RFPG Recommended**

- Increase the # of entities that adopt higher than NFIPminimum standards
- Develop and maintain an operational stormwater asset management plan
- Increase the # of flood gauges (rainfall/stream) in the region
- Increase the # of entities that have multi-year drainage CIP list
- Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
- □ Increase use of nature-based flood risk reduction projects
- Develop a regionally coordinated warning and emergency response program that can detect the flood threat and provide timely warning of impending flood danger
- Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
- Increase the proficiency of floodplain managers by increasing the # of them that are certified as Certified Floodplain Managers (CFM) with the Texas Floodplain Management Association
- Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

#### Pumps and Sumps Study

#### **FME** Description

Pump Station F & Sump

#### Study Type

□ Flood risk modeling/mapping

✓ Flood mitigation study

#### **Study Area**

City/ Cities County/ Counties Hidalgo 12110207 HUC 8 **HUC 12** Study Area (sq. mi.) 12.4

**Emergency Need** 

Yes 🗸 No 🗆

#### **Known Flood Risk**

History of Flooding? Population at Risk Roadways flooded **Critical Facilities Impacted** Notes:

#### Study Costs

Total Cost: Estimated year to st Time to complete? Funding Dedicated

#### ✓ Alternative Analysis □ Feasibility Assessments

- □ Flood preparedness studies

Study identified as a gap by Region 15 Regional Flood Planning Group (RFPG) Yes 🗆 No 🗸



			115	
Yes 🗸	No 🗆	Frequency:		
		# of structures inundated		
Yes 🗸	No 🗆	Miles inundated?		
Yes 🗆	No 🗆	Agricultural Land impacted	Yes 🗆	No 🗆

	\$480,000	Study Sponsor:	HCDD1	
tart:	2023	Entity with Oversight	HCDD1	
	2025	Included in a CIP or other plan?	Yes 🗸	No 🗆
?	Yes 🗆 No 🗸	(Potential) Source of Funding		

### Lower Rio Grande Regional Flood Planning Group

### **FME** Flood Management Evaluations

Fact Sheet

FME ID: 151000057

Flood Management Evaluations Fact Sheet

Study identified because project could not be included as an Flood Mitigation Project (FMP) in the Region 15 Regional Flood Plan because it did meet the minimum requirements, per TWDB guidance for Regional Flood Planning or the provisions of Title 31 of TAQC Chapters 361 and 362.

Yes 🖌 No 🗆

Was the project missing sufficient data to assess whether the proposed project has a negative effect, per TWDB  $Y_{es} \checkmark N_0 \square$  guidelines?

Was the project recommended by the RFPG to be studied in order for it to provide more project details, such as  $Yes \checkmark No \square$  a benefit cost ratio or the number of structures the project removes from the 100-year floodplain?

#### Related Goals

- □ Increase community access routes to critical facilities, evacuation routes, during and after a flooding event
- Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain
- Increase the # of communities participating in the National Flood Insurance Program
- Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs
- Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards
- □ Increase participation in the regional flood planning process
- Provide regional detention that could be used for water reuse applications or as part of a floodplain management program
- Increase acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use
- Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website
- Increase the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations
- Reduce the # of structures that have been subject to repeated flooding events through property buyouts

#### **RFPG Recommended**

- Increase the # of entities that adopt higher than NFIPminimum standards
- Develop and maintain an operational stormwater asset management plan
- Increase the # of flood gauges (rainfall/stream) in the region
- Increase the # of entities that have multi-year drainage CIP list
- Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
- □ Increase use of nature-based flood risk reduction projects
- Develop a regionally coordinated warning and emergency response program that can detect the flood threat and provide timely warning of impending flood danger
- Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
- Increase the proficiency of floodplain managers by increasing the # of them that are certified as Certified Floodplain Managers (CFM) with the Texas Floodplain Management Association
- Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

#### Pumps and Sumps Study

Lower Rio Grande Regional Flood Planning Group

#### FME Description

Pump Station G & Sump

#### Study Type

□ Flood risk modeling/mapping

✓ Flood mitigation study

#### Study Area

City/ Cities County/ Counties Hidalgo HUC 8 12110207 HUC 12 Study Area (sq. mi.) 2.71

#### **Emergency Need**

Yes 🖌 No 🗆

#### Known Flood Risk

History of Flooding? Population at Risk Roadways flooded Critical Facilities Impacted Notes:

#### Study Costs

Total Cost: Estimated year to start: Time to complete? Funding Dedicated?

### ✓ Alternative Analysis □ Feasibility Assessments

Flood preparedness studies

#### Study identified as a gap by Region 15 Regional Flood Planning Group (RFPG) Yes □ No ✓



No 🗆	Frequency:		
	# of structures inundated		
No 🗆	Miles inundated?		
No 🗆	Agricultural Land impacted	Yes 🗆	No 🗆
	No 🗆 No 🗆 No 🗆	NoFrequency:# of structures inundatedNoMiles inundated?NoAgricultural Land impacted	NoFrequency:# of structures inundatedNoMoAgricultural Land impactedYes

\$271,500	Study Sponsor:	HCDD1	
2023	Entity with Oversight	HCDD1	
2025	Included in a CIP or other plan?	Yes 🗸	No
Yes 🗆 No 🗸	(Potential) Source of Funding		

### FME

#### Flood Management Evaluations

Fact Sheet

FME ID: 151000058

Flood Management Evaluations Fact Sheet

Study identified because project could not be included as an Flood Mitigation Project (FMP) in the Region 15 Regional Flood Plan because it did meet the minimum requirements, per TWDB guidance for Regional Flood Planning or the provisions of Title 31 of TAQC Chapters 361 and 362.

Yes 🖌 No 🗆

Was the project missing sufficient data to assess whether the proposed project has a negative effect, per TWDB  $Y_{es} \checkmark N_0 \square$  guidelines?

Was the project recommended by the RFPG to be studied in order for it to provide more project details, such as  $Yes \checkmark No \square$  a benefit cost ratio or the number of structures the project removes from the 100-year floodplain?

#### Related Goals

- □ Increase community access routes to critical facilities, evacuation routes, during and after a flooding event
- Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain
- Increase the # of communities participating in the National Flood Insurance Program
- Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs
- Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards
- □ Increase participation in the regional flood planning process
- Provide regional detention that could be used for water reuse applications or as part of a floodplain management program
- Increase acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use
- Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website
- Increase the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations
- Reduce the # of structures that have been subject to repeated flooding events through property buyouts

#### **RFPG Recommended**

- Increase the # of entities that adopt higher than NFIPminimum standards
- Develop and maintain an operational stormwater asset management plan
- Increase the # of flood gauges (rainfall/stream) in the region
- Increase the # of entities that have multi-year drainage CIP list
- Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
- □ Increase use of nature-based flood risk reduction projects
- Develop a regionally coordinated warning and emergency response program that can detect the flood threat and provide timely warning of impending flood danger
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- Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

#### **FME** Description Study Type ✓ Alternative Analysis ✓ Flood risk modeling/mapping □ Flood preparedness studies ✓ Flood mitigation study □ Feasibility Assessments Study Area City/ Cities Sullivan City Insert snip of Location Map here County/ Counties Hidalgo HUC 8 12110208 **HUC 12** Study Area (sq. mi.) 3.60

**Emergency Need** 

Yes 🗸 No 🗆

#### **Known Flood Risk**

History of Flooding?	Yes 🗸 N	lo 🗆	Frequency:		
Population at Risk			# of structures inundated		
Roadways flooded	Yes 🗆 N	lo 🗆	Miles inundated?		
Critical Facilities Impacted	Yes 🗆 N	lo 🗆	Agricultural Land impacted	Yes 🗆	No 🗆
Notes:					

#### **Study Costs**

Total Cost:	\$250,000	Study Sponsor:		
Estimated year to start:		Entity with Oversight		
Time to complete?		Included in a CIP or other plan?	Yes 🗆	No √
Funding Dedicated?	Yes 🗆 No 🗸	(Potential) Source of Funding		

Study identified as a gap by Region 15 Regional Flood Planning Group (RFPG)

Yes 🗸 No 🗆

### Sullivan City Master Drainage Study

FME ID: 151000059

Develop Flood risk maps for the city of Sullivan City and develop CIP



Flood Management Evaluations Fact Sheet

Study identified because project could not be included as an Flood Mitigation Project (FMP) in the Region 15 Regional Flood Plan because it did meet the minimum requirements, per TWDB guidance for Regional Flood Planning or the provisions of Title 31 of TAQC Chapters 361 and 362.

Yes 🖌 No 🗆

Was the project missing sufficient data to assess whether the proposed project has a negative effect, per TWDB  $Y_{es} \checkmark N_0 \square$  guidelines?

Was the project recommended by the RFPG to be studied in order for it to provide more project details, such as  $Yes \checkmark No \square$  a benefit cost ratio or the number of structures the project removes from the 100-year floodplain?

#### Related Goals

- □ Increase community access routes to critical facilities, evacuation routes, during and after a flooding event
- Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain
- Increase the # of communities participating in the National Flood Insurance Program
- Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs
- Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards
- □ Increase participation in the regional flood planning process
- Provide regional detention that could be used for water reuse applications or as part of a floodplain management program
- Increase acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use
- Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website
- Increase the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations
- Reduce the # of structures that have been subject to repeated flooding events through property buyouts

#### **RFPG Recommended**

- Increase the # of entities that adopt higher than NFIPminimum standards
- Develop and maintain an operational stormwater asset management plan
- Increase the # of flood gauges (rainfall/stream) in the region
- Increase the # of entities that have multi-year drainage CIP list
- Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
- □ Increase use of nature-based flood risk reduction projects
- Develop a regionally coordinated warning and emergency response program that can detect the flood threat and provide timely warning of impending flood danger
- Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
- Increase the proficiency of floodplain managers by increasing the # of them that are certified as Certified Floodplain Managers (CFM) with the Texas Floodplain Management Association
- Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

#### Flood Mitigation Evaluations Fact Sheet

**FME** 

FME ID: 151000060

#### Alton MDP - West Mile 5 Road and Louisiana **Street Alternative 2**

#### **FME** Description

Alternative 2 is designed to remove structures from the 10-year floodplain. Approximately 35 acre-feet of volume is proposed to be excavated. construction consists of 1,940 LF of 36-inch diameter pipe sloped at 0.2% along Louisiana, Kentucky, and Trosper Road out falling directly into the retention pond, 3 headwalls and approximately 9 inlets. Additional inlets and smaller pipe may be needed to catch low lying areas that pond between the houses or regrading with swales to take runoff to the street.

✓ Alternative Analysis

#### Study Type

- □ Flood risk modeling/mapping
- ✓ Flood mitigation study

#### **Study Area**

City/ Cities	Alton
County/ Counties	Hidalgo
HUC 8	12110207,
	12110208
HUC 12	121102080200,
	121102080300
Study Area (sg. mi.)	0.1

#### **Emergency Need**

Yes 🖌 No 🗆

#### Known Flood Risk

History of Flooding?	Yes
Population at Risk	
Roadways flooded	Yes
Critical Facilities Impacted	Yes
Notes:	

#### 'es ✓ No 🗆 res 🗆 No 🗆

No 🗆

Frequency of flooding: # of structures inundated Miles inundated? Agricultural Land impacted Yes 🗆 No 🗆

#### **Study Costs**

Total Cost:	\$322,898	
Estimated year to start:	2023	
Time to complete?	2025	lı
Funding Dedicated?	Yes 🗆 No 🗸	

Study Sponsor:	City of Alton
Entity with Oversight	City of Alton
Included in a Hazard Mitigation	Yes 🗸 No 🗆
Action Plan or other plan?	
(Potential) Source of Funding	FIF, local

□ Flood preparedness studies



Flood Mitigation Evaluations

Study identified as a gap by Region 15 Regional Flood Planning Group (RFPG) Yes □ No ✓

Study identified because project could not be included as an Flood Mitigation Project (FMP) in the Region 15 Regional Flood Plan because it did meet the minimum requirements, per TWDB guidance for Regional Flood Planning or the provisions of Title 31 of TAQC Chapters 361 and 362.

Yes 🖌 No 🗆

Was the project missing sufficient data to assess whether the proposed project has a negative effect, per TWDB  $\vee$  No  $\square$  guidelines?

Was the project recommended by the RFPG to be studied in order for it to provide more project details, such as  $Yes \checkmark No \square$  a benefit cost ratio or the number of structures the project removes from the 100-year floodplain?

#### Related Goals

- ✓ Increase community access routes to critical facilities, evacuation routes, during and after a flooding event
- Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain
- Increase the # of communities participating in the National Flood Insurance Program
- Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs
- Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards
- □ Increase participation in the regional flood planning process
- Provide regional detention that could be used for water reuse applications or as part of a floodplain management program
- Increase acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use
- Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website
- Increase the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations
- Reduce the # of structures that have been subject to repeated flooding events through property buyouts

#### Increase the # of entities that adopt higher than NFIPminimum standards

- Develop and maintain an operational stormwater asset management plan
- Increase the # of flood gauges (rainfall/stream) in the region
- Increase the # of entities that have multi-year drainage CIP list
- Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
- □ Increase use of nature-based flood risk reduction projects
- Develop a regionally coordinated warning and emergency response program that can detect the flood threat and provide timely warning of impending flood danger
- Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
- Increase the proficiency of floodplain managers by increasing the # of them that are certified as Certified Floodplain Managers (CFM) with the Texas Floodplain Management Association
- Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

#### **RFPG Recommended**

#### Flood Mitigation Evaluations Fact Sheet

**FME** 

#### FME ID: 151000062

#### Alton MDP - North Inspiration Road and West St. Jude Avenue Alternative 2

□ Flood preparedness studies

#### **FME** Description

Alternative 2, is designed to remove structures from the 25-year floodplain and more frequent storms. This alternative consists of upsizing the storm drain under West St Jude Avenue. The trunk line will consist of 1,900 LF of a single 7' X 5' reinforced concrete box sloped at 0.5% from the area just west of the neighborhood on W. St. Jude Avenue to the West Main Drain Channel, downstream (north) of the existing 10' X 7' box culvert.

#### Study Type

- □ Flood risk modeling/mapping
- ✓ Flood mitigation study

#### **Study Area**

City/ Cities	Alton
County/ Counties	Hidalgo
HUC 8	12110207,
	12110210
HUC 12	121102080200,
	121102080300
Study Area (sg. mi.)	0.16

#### **Emergency Need**

Yes 🗸 No 🗆

#### Known Flood Risk

History of Flooding? Population at Risk Roadways flooded **Critical Facilities Impacted** Notes:

#### **Study Costs**

Total Cost:	\$422,690	Study Sponsor:
Estimated year to start:	2023	Entity with Oversight
Time to complete?	2025	Included in a Hazard Mitigation
		Action Plan or other plan?
Funding Dedicated?	Yes 🗆 No 🗸	(Potential) Source of Funding

Yes

Yes



Feasibility Assessments

PROPOSED DETENTION POND EASEMEN RQD. ISTING PROPOSED BERM STORM DRAIN: 1 - 7' X 5' BOX ,900 LF) EASEMEN XISTING 10'X7' BOX ULVERT ON WEST IAIN CHANNEL

		<pre># of structures inundated</pre>		
Yes 🗸	No 🗆	Miles inundated?		
Yes 🗆	No 🗆	Agricultural Land impacted	Yes 🗆	No 🗆

City of Alton

City of Alton

Yes 🗸 No 🗆

FIF, local

Flood Mitigation Evaluations

Study identified as a gap by Region 15 Regional Flood Planning Group (RFPG) Yes □ No ✓

Study identified because project could not be included as an Flood Mitigation Project (FMP) in the Region 15 Regional Flood Plan because it did meet the minimum requirements, per TWDB guidance for Regional Flood Planning or the provisions of Title 31 of TAQC Chapters 361 and 362.

Yes 🖌 No 🗆

Was the project missing sufficient data to assess whether the proposed project has a negative effect, per TWDB  $\vee$  No  $\square$  guidelines?

Was the project recommended by the RFPG to be studied in order for it to provide more project details, such as  $Yes \checkmark No \square$  a benefit cost ratio or the number of structures the project removes from the 100-year floodplain?

#### Related Goals

- ✓ Increase community access routes to critical facilities, evacuation routes, during and after a flooding event
- Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain
- Increase the # of communities participating in the National Flood Insurance Program
- Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs
- Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards
- □ Increase participation in the regional flood planning process
- Provide regional detention that could be used for water reuse applications or as part of a floodplain management program
- Increase acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use
- Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website
- Increase the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations
- Reduce the # of structures that have been subject to repeated flooding events through property buyouts

#### Increase the # of entities that adopt higher than NFIPminimum standards

- Develop and maintain an operational stormwater asset management plan
- Increase the # of flood gauges (rainfall/stream) in the region
- Increase the # of entities that have multi-year drainage CIP list
- Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
- □ Increase use of nature-based flood risk reduction projects
- Develop a regionally coordinated warning and emergency response program that can detect the flood threat and provide timely warning of impending flood danger
- Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
- Increase the proficiency of floodplain managers by increasing the # of them that are certified as Certified Floodplain Managers (CFM) with the Texas Floodplain Management Association
- Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

#### **RFPG Recommended**

#### Alton MDP - West Mile 5 and South Glasscock **Road Alternative 3**

FME ID: 151000063

□ Flood preparedness studies

#### **FME** Description

Alternative 3 is simply the buyout and removal of 23 properties on the north side of Buchanan from the 10-year floodplain. Once structures are removed, the vacant land can be excavated and used as a park/regional retention pond.

✓ Alternative Analysis

□ Feasibility Assessments

#### Study Type

- □ Flood risk modeling/mapping
- ✓ Flood mitigation study

#### Study Area

City/ Cities Alton County/ Counties Hidalgo HUC 8 12110207, 12110213 HUC 12 121102080200, 121102080300 Study Area (sq. mi.) 0.23

#### **Emergency Need**

Yes 🗸 No 🗆

#### Known Flood Risk

History of Flooding? Population at Risk Roadways flooded **Critical Facilities Impacted** Notes:

#### **Study Costs**

Total Cost:	\$249,480	Study Sponsor:	City of Alton
Estimated year to start:	2023	Entity with Oversight	City of Alton
Time to complete?	2025	Included in a Hazard Mitigation	Yes 🗸 No 🗆
		Action Plan or other plan?	
Funding Dedicated?	Yes 🗆 No 🗸	(Potential) Source of Funding	FIF, local

Yes 🗸 No 🗆

Yes 🗸 No 🗆

Yes 🗆 No 🗆

#### Study identified as a gap by Region 15 Regional Flood Planning Group (RFPG)

Yes 🗆 No 🗸



Frequency of flooding:

Miles inundated?

# of structures inundated

Agricultural Land impacted

by Clark	
tige and the second sec	
	Ban
	n in
G Auto Repair	-
Bomingo Trevino Middle School	3
	50

Yes 🗆 No 🗆



Fact Sheet

**FME**
Flood Mitigation Evaluations

Study identified because project could not be included as an Flood Mitigation Project (FMP) in the Region 15 Regional Flood Plan because it did meet the minimum requirements, per TWDB guidance for Regional Flood Planning or the provisions of Title 31 of TAQC Chapters 361 and 362.

Yes 🖌 No 🗆

Was the project missing sufficient data to assess whether the proposed project has a negative effect, per TWDB  $Yes \checkmark No \square$  guidelines?

Was the project recommended by the RFPG to be studied in order for it to provide more project details, such as  $Yes \checkmark No \square$  a benefit cost ratio or the number of structures the project removes from the 100-year floodplain?

#### Related Goals

- Increase community access routes to critical facilities, evacuation routes, during and after a flooding event
- Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain
- Increase the # of communities participating in the National Flood Insurance Program
- Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs
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- Increase the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations
- Reduce the # of structures that have been subject to repeated flooding events through property buyouts

#### RFPG Recommended

- Increase the # of entities that adopt higher than NFIPminimum standards
- Develop and maintain an operational stormwater asset management plan
- Increase the # of flood gauges (rainfall/stream) in the region
- Increase the # of entities that have multi-year drainage CIP list
- Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
- □ Increase use of nature-based flood risk reduction projects
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- Increase the proficiency of floodplain managers by increasing the # of them that are certified as Certified Floodplain Managers (CFM) with the Texas Floodplain Management Association
- Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

#### Weslaco Stormwater Improvement Plan -Pleasantview Drive and 11th Street

#### **FME** Description

Installation of 3,220 LF of new storm drain system consisting of two – 8' x 4' RCBs along Mile 3 ½.

✓ Alternative Analysis

#### Study Type

- □ Flood risk modeling/mapping
- City/ Cities Weslaco County/ Counties Hidalgo HUC 8 12110207, 12110228 HUC 12 121102080100, 121102080300 Study Area (sq. mi.) 0.22

#### **Emergency Need**

Yes 🖌 No 🗆

#### Known Flood Risk

History of Flooding?	
Population at Risk	
Roadways flooded	
Critical Facilities Impacted	
Notes:	

#### Study Costs

Total Cost:	\$819,390	Study Sponsor:	City of Weslaco
Estimated year to start:		Entity with Oversight	City of Weslaco
Time to complete?		Included in a Hazard Mitigation	Yes 🖌 No 🗆
		Action Plan or other plan?	
Funding Dedicated?	Yes 🗆 No 🗸	(Potential) Source of Funding	FIF, local

#### Study identified as a gap by Region 15 Regional Flood Planning Group (RFPG) Yes No ✓

#### Frequency of flooding: # of structures inundated Miles inundated? Agricultural Land impacted Yes D No D





<ul> <li>✓ Flood mitigation study</li> </ul>	Feasibility Assessments
Study Area City/Cities Weslaco	Prof
County/ Counties Hidalgo	

Yes ✓ No 🗆

Yes 🖌 No 🗆

Yes 🗆 No 🗆

Flood Mitigation Evaluations Fact Sheet

**FME** 

FME ID: 151000064

Flood Mitigation Evaluations Fact Sheet

**FME** 

Study identified because project could not be included as an Flood Mitigation Project (FMP) in the Region 15 Regional Flood Plan because it did meet the minimum requirements, per TWDB guidance for Regional Flood Planning or the provisions of Title 31 of TAQC Chapters 361 and 362.

Yes 🖌 No 🗆

Was the project missing sufficient data to assess whether the proposed project has a negative effect, per TWDB Yes 🗸 No 🗆 guidelines?

Was the project recommended by the RFPG to be studied in order for it to provide more project details, such as  $Yes \checkmark No \square$  a benefit cost ratio or the number of structures the project removes from the 100-year floodplain?

#### Related Goals

- ✓ Increase community access routes to critical facilities, evacuation routes, during and after a flooding event
- Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain
- Increase the # of communities participating in the National Flood Insurance Program
- Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs
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- Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website
- Increase the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations
- Reduce the # of structures that have been subject to repeated flooding events through property buyouts

#### **RFPG Recommended**

- Increase the # of entities that adopt higher than NFIPminimum standards
- Develop and maintain an operational stormwater asset management plan
- Increase the # of flood gauges (rainfall/stream) in the region
- Increase the # of entities that have multi-year drainage CIP list
- Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
- □ Increase use of nature-based flood risk reduction projects
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- Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
- Increase the proficiency of floodplain managers by increasing the # of them that are certified as Certified Floodplain Managers (CFM) with the Texas Floodplain Management Association
- Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

#### Flood Mitigation Evaluations Fact Sheet

**FME** 

#### Weslaco Stormwater Improvement Plan - Mile 10 N and Mile 5 ½ W

FME ID: 151000065

□ Flood preparedness studies

#### **FME** Description

Construction of an 8 acre detention pond, with approximately 4,000 LF of channel widening along the back of the neighborhoods and between the Justice Raul A. Gonzalez Elementary School and Joe Calvillo Jr Career & Technology Education Complex; replacement of existing undersized channel culvert with two  $-8' \times 5'$  reinforced concrete boxes (RCBs), and adding two  $-8' \times 5'$  RCBs to connect the existing drainage ditches to the drain channel system on the east.

✓ Alternative Analysis

□ Feasibility Assessments

#### Study Type

- □ Flood risk modeling/mapping
- $\checkmark\,$  Flood mitigation study

#### Study Area

City/ Cities Weslaco County/ Counties Hidalgo HUC 8 12110207, 12110230 HUC 12 121102080100, 121102080300 Study Area (sq. mi.) 0.40

#### **Emergency Need**

Yes 🖌 No 🗆

#### Known Flood Risk

History of Flooding? Population at Risk Roadways flooded Critical Facilities Impacted Notes:

#### Study Costs

Total Cost: Estimated year to start: Time to complete?

Funding Dedicated?



Yes 🗸	No 🗆	Frequency of flooding:		
		# of structures inundated		
Yes 🗸	No 🗆	Miles inundated?		
Yes 🗆	No 🗆	Agricultural Land impacted	Yes 🗆	No

	A / / / A E A		<u></u>
	\$666,151	Study Sponsor:	City of Weslaco
r to start:		Entity with Oversight	City of Weslaco
ete?		Included in a Hazard Mitigation	Yes 🖌 No 🗆
		Action Plan or other plan?	
ated?	Yes 🗆 No 🗸	(Potential) Source of Funding	FIF, local

Flood Mitigation Evaluations

Study identified as a gap by Region 15 Regional Flood Planning Group (RFPG) Yes □ No ✓

Study identified because project could not be included as an Flood Mitigation Project (FMP) in the Region 15 Regional Flood Plan because it did meet the minimum requirements, per TWDB guidance for Regional Flood Planning or the provisions of Title 31 of TAQC Chapters 361 and 362.

Yes 🖌 No 🗆

Was the project missing sufficient data to assess whether the proposed project has a negative effect, per TWDB  $\vee$  No  $\square$  guidelines?

Was the project recommended by the RFPG to be studied in order for it to provide more project details, such as  $Yes \checkmark No \square$  a benefit cost ratio or the number of structures the project removes from the 100-year floodplain?

#### Related Goals

- Increase community access routes to critical facilities, evacuation routes, during and after a flooding event
- Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain
- Increase the # of communities participating in the National Flood Insurance Program
- Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs
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- Increase the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations
- Reduce the # of structures that have been subject to repeated flooding events through property buyouts

#### Increase the # of entities that adopt higher than NFIPminimum standards

- Develop and maintain an operational stormwater asset management plan
- Increase the # of flood gauges (rainfall/stream) in the region
- Increase the # of entities that have multi-year drainage CIP list
- Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
- □ Increase use of nature-based flood risk reduction projects
- Develop a regionally coordinated warning and emergency response program that can detect the flood threat and provide timely warning of impending flood danger
- Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
- Increase the proficiency of floodplain managers by increasing the # of them that are certified as Certified Floodplain Managers (CFM) with the Texas Floodplain Management Association
- Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

#### **RFPG Recommended**

#### Weslaco Stormwater Improvement Plan - South International Boulevard and Business 83

#### FME ID: 151000066

#### **FME** Description

Replacement of 48 – inch culverts at two roadway crossings with 6' x 4' RCBs.

#### Study Type

□ Flood risk modeling/mapping

✓ Flood mitigation study

#### Study Area

City/ Cities	Weslaco
County/ Counties	Hidalgo
HUC 8	12110207,
	12110231
HUC 12	12110208010
	12110208030
tudy Area (sq. mi.)	0.39

#### **Emergency Need**

Yes 🗸 No 🗆

#### **Known Flood Risk**

History of Flooding?	Yes 🗸	No 🗆
Population at Risk		
Roadways flooded	Yes 🗸	No 🗆
Critical Facilities Impacted	Yes 🗆	No 🗆
Notes:		

#### **Study Costs**

Total Cost:	\$14,071	Study Sponsor:	City of Weslaco
Estimated year to start:		Entity with Oversight	City of Weslaco
Time to complete?		Included in a Hazard Mitigation	Yes 🗸 No 🗆
		Action Plan or other plan?	
Funding Dedicated?	Yes 🗆 No 🗸	(Potential) Source of Funding	FIF, local

#### Study identified as a gap by Region 15 Regional Flood Planning Group (RFPG) Yes 🗆 No 🗸





**FME** Flood Mitigation Evaluations

Fact Sheet

### Lower Rio Grande Regional Flood Planning Group

Fur

Miles inundated?

Agricultural Land impacted Yes □ No □

Frequency of flooding:

# of structures inundated

- ✓ Alternative Analysis
- □ Feasibility Assessments

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S

Flood Mitigation Evaluations Fact Sheet

**FME** 

Study identified because project could not be included as an Flood Mitigation Project (FMP) in the Region 15 Regional Flood Plan because it did meet the minimum requirements, per TWDB guidance for Regional Flood Planning or the provisions of Title 31 of TAQC Chapters 361 and 362.

Yes 🖌 No 🗆

Was the project missing sufficient data to assess whether the proposed project has a negative effect, per TWDB Yes 🗸 No 🗆 guidelines?

Was the project recommended by the RFPG to be studied in order for it to provide more project details, such as  $Yes \checkmark No \square$  a benefit cost ratio or the number of structures the project removes from the 100-year floodplain?

#### Related Goals

- ✓ Increase community access routes to critical facilities, evacuation routes, during and after a flooding event
- Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain
- Increase the # of communities participating in the National Flood Insurance Program
- Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs
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- Reduce the # of structures that have been subject to repeated flooding events through property buyouts

#### **RFPG Recommended**

- Increase the # of entities that adopt higher than NFIPminimum standards
- Develop and maintain an operational stormwater asset management plan
- Increase the # of flood gauges (rainfall/stream) in the region
- Increase the # of entities that have multi-year drainage CIP list
- Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
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- Develop a regionally coordinated warning and emergency response program that can detect the flood threat and provide timely warning of impending flood danger
- Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
- Increase the proficiency of floodplain managers by increasing the # of them that are certified as Certified Floodplain Managers (CFM) with the Texas Floodplain Management Association
- Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

### Flood Mitigation Evaluations Fact Sheet

FME ID: 151000067

#### Weslaco Stormwater Improvement Plan - Texas Boulevard to Airport Drive, South of Business 83

#### **FME** Description

Construction of two detention ponds, 10 acres near Texas Boulevard and 18th Street and 3 acres south of Dawson Street, a berm, approximately 5,400 LF of channel widening and extension, and installation of an 8' x 4' RCB storm drain system near Border

#### Study Type

- □ Flood risk modeling/mapping
- $\checkmark\,$  Flood mitigation study

#### Study Area

City/ Cities Weslaco County/ Counties Hidalgo HUC 8 12110207, 12110232 HUC 12 121102080100, 121102080300 Study Area (sq. mi.) 1.34

#### **Emergency Need**

Yes 🖌 No 🗆

#### Known Flood Risk

History of Flooding? Population at Risk Roadways flooded Critical Facilities Impacted Notes:

Yes ✓ No □ Yes □ No □

No 🗆

Yes ✓

Frequency of flooding: # of structures inundated Miles inundated? Agricultural Land impacted Yes D No D

#### Study Costs

 Total Cost:
 \$6,597,680

 Estimated year to start:
 Time to complete?

 Funding Dedicated?
 Yes □ No ✓

Study Spansor	City of Moslaco
Study Sponsor.	City of Wesiaco
Entity with Oversight	City of Weslaco
Included in a Hazard Mitigation	Yes 🖌 No 🗆
Action Plan or other plan?	
(Potential) Source of Funding	FIF, local



Flood Mitigation Evaluations

Study identified as a gap by Region 15 Regional Flood Planning Group (RFPG) Yes □ No ✓

Study identified because project could not be included as an Flood Mitigation Project (FMP) in the Region 15 Regional Flood Plan because it did meet the minimum requirements, per TWDB guidance for Regional Flood Planning or the provisions of Title 31 of TAQC Chapters 361 and 362.

Yes 🖌 No 🗆

Was the project missing sufficient data to assess whether the proposed project has a negative effect, per TWDB  $\vee$  No  $\square$  guidelines?

Was the project recommended by the RFPG to be studied in order for it to provide more project details, such as  $Yes \checkmark No \square$  a benefit cost ratio or the number of structures the project removes from the 100-year floodplain?

#### Related Goals

- ✓ Increase community access routes to critical facilities, evacuation routes, during and after a flooding event
- Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain
- Increase the # of communities participating in the National Flood Insurance Program
- Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs
- Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards
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- Reduce the # of structures that have been subject to repeated flooding events through property buyouts

#### Increase the # of entities that adopt higher than NFIPminimum standards

- Develop and maintain an operational stormwater asset management plan
- Increase the # of flood gauges (rainfall/stream) in the region
- Increase the # of entities that have multi-year drainage CIP list
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- Develop a regionally coordinated warning and emergency response program that can detect the flood threat and provide timely warning of impending flood danger
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- Increase the proficiency of floodplain managers by increasing the # of them that are certified as Certified Floodplain Managers (CFM) with the Texas Floodplain Management Association
- Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

#### **RFPG Recommended**

### **FME** Flood Mitigation Evaluations Fact Sheet

#### Weslaco Stormwater Improvement Plan - West Weslaco

FME ID: 151000068

#### **FME** Description

The Study is located just west of Border Avenue, between US 83 and Zelma Street. Construction of three detention ponds, 18 acres east of Vaughn Road and Midway Road, 26 acres near West 6th Street and Milano Road and 60 acres at Harlon Block Sports Complex, approximately 17,000 LF of channel widening connecting the ponds, and installation of approximately 4500 LF of large (8' x 4', 8' x 5', 8' x 6') RCB storm drain system to improve conveyance along the channels to the ponds.

✓ Alternative Analysis

#### Study Type

- □ Flood risk modeling/mapping
- ✓ Flood mitigation study

#### **Study Area**

City/ Cities	Weslaco
County/ Counties	Hidalgo
HUC 8	12110207,
	12110233
HUC 12	121102080100,
	121102080300
Study Area (sq. mi.)	2.00

#### **Emergency Need**

Yes 🖌 No 🗆

#### **Known Flood Risk**

History of Flooding?
Population at Risk
Roadways flooded
Critical Facilities Impacted
Notes:

#### **Study Costs**

Total Cost: Estimated year to start: Time to complete?	
Funding Dedicated?	



□ Flood preparedness studies



Yes 🗸	No 🗆	Frequency of flooding:		
		# of structures inundated		
Yes 🗸	No 🗆	Miles inundated?		
Yes 🗆	No 🗆	Agricultural Land impacted	Yes 🗆	No $\square$

\$5,595,880	Study Sponsor:	City of Weslaco
	Entity with Oversight	City of Weslaco
	Included in a Hazard Mitigation	Yes 🗸 No 🗆
	Action Plan or other plan?	
Yes 🗆 No 🗸	(Potential) Source of Funding	FIF, local

Flood Mitigation Evaluations

Study identified as a gap by Region 15 Regional Flood Planning Group (RFPG) Yes □ No ✓

Study identified because project could not be included as an Flood Mitigation Project (FMP) in the Region 15 Regional Flood Plan because it did meet the minimum requirements, per TWDB guidance for Regional Flood Planning or the provisions of Title 31 of TAQC Chapters 361 and 362.

Yes 🖌 No 🗆

Was the project missing sufficient data to assess whether the proposed project has a negative effect, per TWDB  $\vee$  No  $\square$  guidelines?

Was the project recommended by the RFPG to be studied in order for it to provide more project details, such as  $Yes \checkmark No \square$  a benefit cost ratio or the number of structures the project removes from the 100-year floodplain?

#### Related Goals

- ✓ Increase community access routes to critical facilities, evacuation routes, during and after a flooding event
- Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain
- Increase the # of communities participating in the National Flood Insurance Program
- Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs
- Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards
- □ Increase participation in the regional flood planning process
- Provide regional detention that could be used for water reuse applications or as part of a floodplain management program
- Increase acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use
- Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website
- Increase the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations
- Reduce the # of structures that have been subject to repeated flooding events through property buyouts

#### Increase the # of entities that adopt higher than NFIPminimum standards

- Develop and maintain an operational stormwater asset management plan
- Increase the # of flood gauges (rainfall/stream) in the region
- Increase the # of entities that have multi-year drainage CIP list
- Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
- □ Increase use of nature-based flood risk reduction projects
- Develop a regionally coordinated warning and emergency response program that can detect the flood threat and provide timely warning of impending flood danger
- Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
- Increase the proficiency of floodplain managers by increasing the # of them that are certified as Certified Floodplain Managers (CFM) with the Texas Floodplain Management Association
- Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

#### **RFPG Recommended**

### Fact Sheet

**FME** 

FME ID: 151000069

#### Weslaco Stormwater Improvement Plan -Westgate Drive and Sugar Cane Drive

Lower Rio Grande Regional Flood Planning Group

#### **FME** Description

Construction of two detention ponds, 11 acres near Clecker-Heald Elementary School and 8 acres behind the commercial properties north of Interstate 2, approximately 4,500 LF of channel widening connecting the two ponds, addition of a new 42-inch reinforced concrete pipe (RCP) culvert east of Border Avenue, and installation of approximately 5,600 LF of an 8' x 4' RCB storm drain system along West Paisano Lane and East Ballard Street.

✓ Alternative Analysis

□ Feasibility Assessments

#### Study Type

- □ Flood risk modeling/mapping
- ✓ Flood mitigation study

#### **Study Area**

City/ Cities Weslaco County/ Counties Hidalgo HUC 8 12110207, 12110234 HUC 12 121102080100, 121102080300 Study Area (sq. mi.) 1.58

#### **Emergency Need**

Yes 🖌 No 🗆

#### **Known Flood Risk**

History of Flooding?
Population at Risk
Roadways flooded
Critical Facilities Impacted
Notes:

#### **Study Costs**

\$1,664,860	Study Sponsor:	City of Weslaco
	Entity with Oversight	City of Weslaco
	Included in a Hazard Mitigation	Yes 🗸 No 🗆
	Action Plan or other plan?	
Yes 🗆 No 🗸	(Potential) Source of Funding	FIF, local
	\$1,664,860 Yes □ No ✓	<ul> <li>\$1,664,860</li> <li>Study Sponsor: Entity with Oversight Included in a Hazard Mitigation Action Plan or other plan?</li> <li>Yes □ No ✓ (Potential) Source of Funding</li> </ul>

### □ Flood preparedness studies

No 🗆	Frequency of flooding:		
	# of structures inundated		
No 🗆	Miles inundated?		
No 🗆	Agricultural Land impacted	Yes 🗆	No $\square$
	No 🗆 No 🗆 No 🗆	NoFrequency of flooding:# of structures inundatedNoMiles inundated?NoAgricultural Land impacted	No     Frequency of flooding:       # of structures inundated       No     Miles inundated?       No     Agricultural Land impacted     Yes

Flood Mitigation Evaluations

Study identified as a gap by Region 15 Regional Flood Planning Group (RFPG) Yes □ No ✓

Study identified because project could not be included as an Flood Mitigation Project (FMP) in the Region 15 Regional Flood Plan because it did meet the minimum requirements, per TWDB guidance for Regional Flood Planning or the provisions of Title 31 of TAQC Chapters 361 and 362.

Yes 🖌 No 🗆

Was the project missing sufficient data to assess whether the proposed project has a negative effect, per TWDB  $\vee$  No  $\square$  guidelines?

Was the project recommended by the RFPG to be studied in order for it to provide more project details, such as  $Yes \checkmark No \square$  a benefit cost ratio or the number of structures the project removes from the 100-year floodplain?

#### Related Goals

- ✓ Increase community access routes to critical facilities, evacuation routes, during and after a flooding event
- Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain
- Increase the # of communities participating in the National Flood Insurance Program
- Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs
- Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards
- □ Increase participation in the regional flood planning process
- Provide regional detention that could be used for water reuse applications or as part of a floodplain management program
- Increase acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use
- Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website
- Increase the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations
- Reduce the # of structures that have been subject to repeated flooding events through property buyouts

#### Increase the # of entities that adopt higher than NFIPminimum standards

- Develop and maintain an operational stormwater asset management plan
- Increase the # of flood gauges (rainfall/stream) in the region
- Increase the # of entities that have multi-year drainage CIP list
- Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
- □ Increase use of nature-based flood risk reduction projects
- Develop a regionally coordinated warning and emergency response program that can detect the flood threat and provide timely warning of impending flood danger
- Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
- Increase the proficiency of floodplain managers by increasing the # of them that are certified as Certified Floodplain Managers (CFM) with the Texas Floodplain Management Association
- Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

#### **RFPG Recommended**

### Precinct 4 MDP - Risk Area A at Mile 8.5 Rd. &

FME ID: 151000071

## Approximately 1 mile of proposed channel improvements. Proposed culverts. Proposed Detention Ponds with pond north of Mile 8.5 Rd. to collect runoff from the west and has an approximate footprint of 12 acres and storage capacity of 60 acre-ft and will outfall south towards the pond south of Mile 8.5 Rd.

#### Study Type

- □ Flood risk modeling/mapping
- ✓ Flood mitigation study

#### Study Area

City/ Cities County/ Counties Hidalgo HUC 8 12110207, 12110279 HUC 12 121102080400, 121102070100, 121102080200 Study Area (sq. mi.) 0.79

#### **Emergency Need**

Yes 🖌 No 🗆

#### Known Flood Risk

History of Flooding?
Population at Risk
Roadways flooded
Critical Facilities Impacted
Notes:

#### Study Costs

Total Cost:	\$2,984,850	Study Sponsor:	Hidalgo County Precinct 4
Estimated year to start:	2023	Entity with Oversight	Hidalgo County Precinct 4
Time to complete?	2025	Included in a Hazard Mitigation	Yes 🖌 No 🗆
		Action Plan or other plan?	
Funding Dedicated?	Yes 🗆 No 🗸	(Potential) Source of Funding	FIF, local

Yes ✓

Yes 🖌 No 🗆

Yes 🗆 No 🗆

No 🗆

### Ware Rd. FME Description

### h of Mile 8.5 Rd.

- ✓ Alternative Analysis□ Feasibility Assessments
- □ Flood preparedness studies



Frequency of flooding:

Miles inundated?

Agricultural Land impacted Yes 🗆 No 🗆

# of structures inundated

5 LOWER R10 Grande Regional Flood Planning Group

Flood Mitigation Evaluations

Fact Sheet

**FME** 

Flood Mitigation Evaluations

Study identified as a gap by Region 15 Regional Flood Planning Group (RFPG) Yes □ No ✓

Study identified because project could not be included as an Flood Mitigation Project (FMP) in the Region 15 Regional Flood Plan because it did meet the minimum requirements, per TWDB guidance for Regional Flood Planning or the provisions of Title 31 of TAQC Chapters 361 and 362.

Yes 🖌 No 🗆

Was the project missing sufficient data to assess whether the proposed project has a negative effect, per TWDB  $\vee$  No  $\square$  guidelines?

Was the project recommended by the RFPG to be studied in order for it to provide more project details, such as  $Yes \checkmark No \square$  a benefit cost ratio or the number of structures the project removes from the 100-year floodplain?

#### Related Goals

- ✓ Increase community access routes to critical facilities, evacuation routes, during and after a flooding event
- Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain
- Increase the # of communities participating in the National Flood Insurance Program
- Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs
- Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards
- □ Increase participation in the regional flood planning process
- Provide regional detention that could be used for water reuse applications or as part of a floodplain management program
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- Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website
- Increase the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations
- Reduce the # of structures that have been subject to repeated flooding events through property buyouts

#### Increase the # of entities that adopt higher than NFIPminimum standards

- Develop and maintain an operational stormwater asset management plan
- Increase the # of flood gauges (rainfall/stream) in the region
- Increase the # of entities that have multi-year drainage CIP list
- Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
- □ Increase use of nature-based flood risk reduction projects
- Develop a regionally coordinated warning and emergency response program that can detect the flood threat and provide timely warning of impending flood danger
- Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
- Increase the proficiency of floodplain managers by increasing the # of them that are certified as Certified Floodplain Managers (CFM) with the Texas Floodplain Management Association
- Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

#### **RFPG Recommended**

#### Flood Mitigation Evaluations Fact Sheet

#### FME ID: 151000072

#### Precinct 4 MDP - Risk Area B at Mile 6 & North Ware Rd.

#### **FME** Description

Regional Detention Facilities with a pond footprint of 25 acres along the Existing HCDD1 West Main Drain. Storm Drain and Local Drainage Improvements. Channel maintenance.

#### Study Type

- □ Flood risk modeling/mapping
- ✓ Flood mitigation study

#### **Study Area**

City/ Cities County/ Counties Hidalgo HUC 8 12110207, 12110280 HUC 12 121102080400, 121102070100, 121102080200, 121102080200 Study Area (sq. mi.) 0.15

#### **Emergency Need**

Yes 🖌 No 🗆

#### **Known Flood Risk**

History of Flooding?	Yes
Population at Risk	
Roadways flooded	Yes
Critical Facilities Impacted	Ye
Notes:	

#### Study Costs

<b>J</b>		
Total Cost:	\$4,076,320	
Estimated year to start:	2023	
Time to complete?	2025	In
Funding Dedicated?	Yes 🗆 No 🗸	

- ✓ Alternative Analysis □ Feasibility Assessments
- □ Flood preparedness studies



Yes 🗸	No 🗆	Frequency of flooding:		
		# of structures inundated		
Yes 🗸	No 🗆	Miles inundated?		
Yes 🗆	No 🗆	Agricultural Land impacted	Yes 🗆	No 🗆

Hidalgo County Precinct 4	Study Sponsor:	\$4,076,320
Hidalgo County Precinct 4	Entity with Oversight	2023
Yes 🖌 No 🗆	Included in a Hazard Mitigation	2025
	Action Plan or other plan?	
FIF, local	(Potential) Source of Funding	Yes 🗆 No 🗸

Flood Mitigation Evaluations

Study identified as a gap by Region 15 Regional Flood Planning Group (RFPG) Yes □ No ✓

Study identified because project could not be included as an Flood Mitigation Project (FMP) in the Region 15 Regional Flood Plan because it did meet the minimum requirements, per TWDB guidance for Regional Flood Planning or the provisions of Title 31 of TAQC Chapters 361 and 362.

Yes 🖌 No 🗆

Was the project missing sufficient data to assess whether the proposed project has a negative effect, per TWDB  $\vee$  No  $\square$  guidelines?

Was the project recommended by the RFPG to be studied in order for it to provide more project details, such as  $Yes \checkmark No \square$  a benefit cost ratio or the number of structures the project removes from the 100-year floodplain?

#### Related Goals

- ✓ Increase community access routes to critical facilities, evacuation routes, during and after a flooding event
- Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain
- Increase the # of communities participating in the National Flood Insurance Program
- Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs
- Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards
- □ Increase participation in the regional flood planning process
- Provide regional detention that could be used for water reuse applications or as part of a floodplain management program
- Increase acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use
- Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website
- Increase the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations
- Reduce the # of structures that have been subject to repeated flooding events through property buyouts

#### Increase the # of entities that adopt higher than NFIPminimum standards

- Develop and maintain an operational stormwater asset management plan
- Increase the # of flood gauges (rainfall/stream) in the region
- Increase the # of entities that have multi-year drainage CIP list
- Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
- □ Increase use of nature-based flood risk reduction projects
- Develop a regionally coordinated warning and emergency response program that can detect the flood threat and provide timely warning of impending flood danger
- Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
- Increase the proficiency of floodplain managers by increasing the # of them that are certified as Certified Floodplain Managers (CFM) with the Texas Floodplain Management Association
- Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

#### **RFPG Recommended**

### Precinct 4 MDP - Risk Area C at FM 2812 & FM 493

#### **FME** Description

Channel Improvements (Widening & Regrading) to Existing J-01 Drain with approximately 1.5 miles of proposed improvements. Channel Improvements (Channel Maintenance & Flowline Regrading) to Existing DA-1 Ext. Drain with approximately 0.4 miles of proposed improvements. Proposed detention pond will have an approximate footprint of 9 acres and storage capacity of 90 acre-ft. Grate inlets & proposed storm drain channel maintenance & debris removal.

#### Study Type

- □ Flood risk modeling/mapping
- ✓ Flood mitigation study

#### Study Area

City/ Cities County/ Counties Hidalgo HUC 8 12110207, 12110281 HUC 12 121102080400, 121102080200, 121102080200 Study Area (sq. mi.) 3.23

#### **Emergency Need**

Yes 🗸 No 🗆

#### Known Flood Risk

History of Flooding?	Yes 🗸
Population at Risk	
Roadways flooded	Yes 🗸
Critical Facilities Impacted	Yes 🗆
Notes:	

#### Study Costs

Total Cost:	\$1,183,050
Estimated year to start:	2023
Time to complete?	2025
Funding Dedicated?	Yes 🗆 No 🗸

- ✓ Alternative Analysis
- □ Feasibility Assessments



No 🗆	Frequency of flooding:		
	# of structures inundated		
No 🗆	Miles inundated?		
No 🗆	Agricultural Land impacted	Yes 🗆	No

Study Sponsor:	Hidalgo County
Entity with Oversight	Hidaigo County
Included in a Hazard Mitigation	Yes 🖌 No 🗆
Action Plan or other plan?	
(Potential) Source of Funding	FIF, local

FME ID: 151000073

Flood Mitigation Evaluations Fact Sheet

**FME** 

□ Flood preparedness studies

Precinct 4

Precinct 4

#### Study identified as a gap by Region 15 Regional Flood Planning Group (RFPG) Yes D No 🗸

Was the project missing sufficient data to access whether the proposed project has a possible offect, per TWDD guidelines?

Study identified because project could not be included as an Flood Mitigation Project (FMP) in the Region 15 Regional Flood Plan because it did meet the minimum requirements, per TWDB guidance for Regional Flood Planning or the provisions of Title 31 of TAQC Chapters 361 and 362.

Yes 🖌 No 🗆

was the project missing sufficient data to assess whether the proposed project has a negative effect, per twod guidelines?	res •	NO L
Was the project recommended by the REPG to be studied in order for it to provide more project details, such as a benefit	Yes 🗸	No 🗆

cost ratio or the number of structures the project removes from the 100-year floodplain?

#### **Related Goals**

- ✓ Increase community access routes to critical facilities, evacuation routes, during and after a flooding event
- Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain
- Increase the # of communities participating in the National Flood Insurance Program
- Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs
- Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards
- □ Increase participation in the regional flood planning process
- ✓ Provide regional detention that could be used for water reuse applications or as part of a floodplain management program
- Increase acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use
- Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website
- Increase the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations
- Reduce the # of structures that have been subject to repeated flooding events through property buyouts

#### RFPG Recommended

Yes 🗸 No

Increase the # of entities that adopt higher than NFIP-minimum standards

FME

Fact Sheet

Flood Mitigation Evaluations

- Develop and maintain an operational stormwater asset management plan
- □ Increase the # of flood gauges (rainfall/stream) in the region
- □ Increase the # of entities that have multi-year drainage CIP list
- Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
- □ Increase use of nature-based flood risk reduction projects
- Develop a regionally coordinated warning and emergency response program that can detect the flood threat and provide timely warning of impending flood danger
- □ Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
- Increase the proficiency of floodplain managers by increasing the # of them that are certified as Certified Floodplain Managers (CFM) with the Texas Floodplain Management Association
- Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

### Precinct 4 MDP - Risk Area D at S. McColl &

**FME** Description Channel Improvements (Widening & Regrading) to Existing McAllen Lateral & North Main Drain with approximately 2.25 miles of proposed improvements from S McColl St. to State Highway 107. Crossings at W Canton Rd., W Freddy Gonzalez Dr., and W Sprague St. were all evaluated up to the 25-year design storm criteria for upsizing evaluation.

✓ Alternative Analysis

□ Feasibility Assessments

#### Study Type

Canton Rd.

- □ Flood risk modeling/mapping
- ✓ Flood mitigation study

#### Study Area

City/Cities County/ Counties Hidalgo 12110207, HUC 8 12110282 HUC 12 121102080400, 121102070100, 121102080200, 121102080200 Study Area (sq. mi.) 1.40

#### **Emergency Need**

Yes 🗸 No 🗆

#### Known Flood Risk

History of Flooding?	Yes 🔹
Population at Risk	
Roadways flooded	Yes 🗸
Critical Facilities Impacted	Yes
Notes:	

#### **Study Costs**

Total Cost: Estimated year to start:	\$953,700 2023
Time to complete?	2025
Funding Dedicated?	Yes 🗆 No 🗸

Study Sponsor: Entity with Oversight Included in a Hazard Mitigation Action Plan or other plan? (Potential) Source of Funding

2023

2025

Hidalgo County Precinct 4 Hidalgo County Precinct 4 Yes 🗸 No 🗆

FIF, local



#### □ Flood preparedness studies



Fact Sheet

Lower Rio Grande Regional Flood Planning Group

FME ID: 151000074

Flood Mitigation Evaluations

Study identified as a gap by Region 15 Regional Flood Planning Group (RFPG) Yes □ No ✓

Study identified because project could not be included as an Flood Mitigation Project (FMP) in the Region 15 Regional Flood Plan because it did meet the minimum requirements, per TWDB guidance for Regional Flood Planning or the provisions of Title 31 of TAQC Chapters 361 and 362.

Yes 🖌 No 🗆

Was the project missing sufficient data to assess whether the proposed project has a negative effect, per TWDB  $\vee$  No  $\square$  guidelines?

Was the project recommended by the RFPG to be studied in order for it to provide more project details, such as  $Yes \checkmark No \square$  a benefit cost ratio or the number of structures the project removes from the 100-year floodplain?

#### Related Goals

- ✓ Increase community access routes to critical facilities, evacuation routes, during and after a flooding event
- Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain
- Increase the # of communities participating in the National Flood Insurance Program
- Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs
- Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards
- □ Increase participation in the regional flood planning process
- Provide regional detention that could be used for water reuse applications or as part of a floodplain management program
- Increase acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use
- Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website
- Increase the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations
- Reduce the # of structures that have been subject to repeated flooding events through property buyouts

#### Increase the # of entities that adopt higher than NFIPminimum standards

- Develop and maintain an operational stormwater asset management plan
- Increase the # of flood gauges (rainfall/stream) in the region
- Increase the # of entities that have multi-year drainage CIP list
- Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
- □ Increase use of nature-based flood risk reduction projects
- Develop a regionally coordinated warning and emergency response program that can detect the flood threat and provide timely warning of impending flood danger
- Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
- Increase the proficiency of floodplain managers by increasing the # of them that are certified as Certified Floodplain Managers (CFM) with the Texas Floodplain Management Association
- Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

#### **RFPG Recommended**

#### Flood Management Evaluations Fact Sheet

**FME** 

#### Precinct 4 MDP - Risk Area E at Hwy 107 & Val Verde Rd.

FME ID: 151000075

#### **FME** Description

Channel Improvements with approximately 0.3 miles of proposed improvements. Proposed detention pond north of Tex-Mex Rd. and east of \$ 87th St. has an approximate footprint of 4.25 acres and capacity of 20 acre-ft. Grate Inlets and Proposed Storm Drain 5'x5' grate inlets spaced along every 500' of storm drain with a 4'x2' RCB along S 85th St.

#### Study Type

- □ Flood risk modeling/mapping
- ✓ Flood mitigation study

#### **Study Area**

City/ Cities	
County/ Counties	Hidalgo
HUC 8	12110207,
	12110283
HUC 12	121102070100
	121102080200
	121102080400
Study Area (sq. mi.)	0.1

#### **Emergency Need**

Yes 🗸 No 🗆

#### Known Flood Risk

History of Flooding? Population at Risk Roadways flooded **Critical Facilities Impacted** Notes:

#### **Study Costs**

Total Cost: Estimated year to start: Time to complete? Funding Dedicated? Yes 🗆 🛛

- ✓ Alternative Analysis □ Feasibility Assessments
- □ Flood preparedness studies



No 🗆

Yes 🗸	No 🗌	Frequency:	
		<pre># of structures inundated</pre>	
Yes 🗸	No 🗆	Miles inundated?	
Yes 🗆	No 🗆	Agricultural Land impacted	Yes 🗆

\$747,450	Study Sponsor:	Hidalgo County
2023	Entity with Oversight	Hidalgo County
2025	Included in a CIP or other plan?	Yes 🖌 No 🗆
🗆 No 🗸	(Potential) Source of Funding	FIF, Local



Flood Management Evaluations Fact Sheet

Study identified as a gap by Region 15 Regional Flood Planning Group (RFPG) Yes □ No ✓

Study identified because project could not be included as an Flood Mitigation Project (FMP) in the Region 15 Regional Flood Plan because it did meet the minimum requirements, per TWDB guidance for Regional Flood Planning or the provisions of Title 31 of TAQC Chapters 361 and 362.

Yes 🖌 No 🗆

Was the project missing sufficient data to assess whether the proposed project has a negative effect, per TWDB  $\vee$  No  $\square$  guidelines?

Was the project recommended by the RFPG to be studied in order for it to provide more project details, such as  $Yes \checkmark No \square$  a benefit cost ratio or the number of structures the project removes from the 100-year floodplain?

#### Related Goals

- ✓ Increase community access routes to critical facilities, evacuation routes, during and after a flooding event
- Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain
- Increase the # of communities participating in the National Flood Insurance Program
- Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs
- Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards
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- Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website
- Increase the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations
- Reduce the # of structures that have been subject to repeated flooding events through property buyouts

#### Increase the # of entities that adopt higher than NFIPminimum standards

- Develop and maintain an operational stormwater asset management plan
- Increase the # of flood gauges (rainfall/stream) in the region
- Increase the # of entities that have multi-year drainage CIP list
- Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
- □ Increase use of nature-based flood risk reduction projects
- Develop a regionally coordinated warning and emergency response program that can detect the flood threat and provide timely warning of impending flood danger
- Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
- Increase the proficiency of floodplain managers by increasing the # of them that are certified as Certified Floodplain Managers (CFM) with the Texas Floodplain Management Association
- Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

#### **RFPG Recommended**

Fact Sheet

FME ID: 151000076

□ Flood preparedness studies

#### Precinct 4 MDP - Risk Area F at Texas Rd. & Cesar Chavez Rd.

#### **FME** Description

Channel Improvements with approximately 0.6 miles of proposed improvements. Grate Inlets and Proposed Storm Drain with grate inlets in sag spaced along every 500' tying into a 42'' RCP along Cesar Chavez Road starting at just south of Texas Rd to the Curry Drain. Culvert Improvements with connections between the proposed open channels and existing HCDD1 Edinburg Stub will require the installation of 4'x3' RCBs.

✓ Alternative Analysis

□ Feasibility Assessments

#### Study Type

- □ Flood risk modeling/mapping
- ✓ Flood mitigation study

#### **Study Area**

City/ Cities County/ Counties Hidalgo HUC 8 12110207, 12110284 HUC 12 121102070100, 121102080200, 121102080400, Study Area (sq. mi.) 0.56

#### **Emergency Need**

Yes 🖌 No 🗆

#### **Known Flood Risk**

History of Flooding?
Population at Risk
Roadways flooded
Critical Facilities Impacted
Notes:

#### **Study Costs**

Total Cost:	\$1,188,000
Estimated year to start:	2023
Time to complete?	2025
Funding Dedicated?	Yes 🗆 No 🗸

Study Sponsor: Hidalgo County Entity with Oversight Hidalgo County Included in a CIP or other plan? Yes 🗸 No 🗆 (Potential) Source of Funding FIF, Local

Frequency:

Yes 🗆 No 🗆

# of structures inundated

Miles inundated? Agricultural Land impacted

#### Study identified as a gap by Region 15 Regional Flood Planning Group (RFPG)

No 🗆

Yes ✓

Yes 🗸 No 🗆

Yes 🗆 No 🗆

Yes 🗆 No 🗸





Flood Management Evaluations Fact Sheet

Study identified because project could not be included as an Flood Mitigation Project (FMP) in the Region 15 Regional Flood Plan because it did meet the minimum requirements, per TWDB guidance for Regional Flood Planning or the provisions of Title 31 of TAQC Chapters 361 and 362.

Yes 🖌 No 🗆

Was the project missing sufficient data to assess whether the proposed project has a negative effect, per TWDB guidelines? Yes 🗸 No 🗆

Was the project recommended by the RFPG to be studied in order for it to provide more project details, such as a benefit  $Yes \checkmark No \square$  cost ratio or the number of structures the project removes from the 100-year floodplain?

#### **Related Goals**

- ✓ Increase community access routes to critical facilities, evacuation routes, during and after a flooding event
- □ Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain
- Increase the # of communities participating in the National Flood Insurance Program
- Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs
- Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards
- □ Increase participation in the regional flood planning process
- Provide regional detention that could be used for water reuse applications or as part of a floodplain management program
- □ Increase acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use
- Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website
- Increase the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations
- □ Reduce the # of structures that have been subject to repeated flooding events through property buyouts

#### **RFPG Recommended**

- Increase the # of entities that adopt higher than NFIP-minimum standards
- Develop and maintain an operational stormwater asset management plan
- □ Increase the # of flood gauges (rainfall/stream) in the region
- □ Increase the # of entities that have multi-year drainage CIP list
- Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
- □ Increase use of nature-based flood risk reduction projects
- Develop a regionally coordinated warning and emergency response program that can detect the flood threat and provide timely warning of impending flood danger
- Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
- Increase the proficiency of floodplain managers by increasing the # of them that are certified as Certified Floodplain Managers (CFM) with the Texas Floodplain Management Association
- Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain



#### Precinct 4 MDP - Risk Area G at Hoehn Rd. & Mile 11 Rd.

Lower Rio Grande Regional Flood Planning Group

FME ID: 151000077

#### **FME** Description

Channel Improvements with approximately 0.75 miles of proposed improvements. Proposed Pond north of County Road 3424 and west of County Road 3421 has an approximate footprint of 5 acres and capacity of 35 acre-ft. Grate Inlets and Proposed Storm Drain 5'x5' grate inlets will be located at the southwest corner of Eubanks and County Road 3424 with a connection to a 42" DIA RCP storm drain. Proposed culverts.

#### Study Type

- □ Flood risk modeling/mapping
- ✓ Flood mitigation study

#### **Study Area**

City/ Cities

County/ Counties	Hidalgo
HUC 8	12110207,
	12110285
HUC 12	121102070100
	121102080200
	121102080400

Study Area (sq. mi.) 0.79

#### **Emergency Need**

Yes 🗸 No 🗆

#### **Known Flood Risk**

History of Flooding?	Yes 🗸	No
Population at Risk		
Roadways flooded	Yes 🗸	No
Critical Facilities Impacted	Yes 🗆	No
Notes:		

#### **Study Costs**

Total Cost:	\$909,150
Estimated year to start:	2023
Time to complete?	2025
Funding Dedicated?	Yes 🗆 No 🗸

- ✓ Alternative Analysis
- □ Feasibility Assessments
- □ Flood preparedness studies



Frequency: # of structures inundated Miles inundated? Agricultural Land impacted Yes 🗆 No 🗆

Hidalgo County
Hidalgo County
Yes 🖌 No 🗆
FIF, Local

Page 1 of 2

Flood Management Evaluations Fact Sheet

Study identified as a gap by Region 15 Regional Flood Planning Group (RFPG) Yes □ No ✓

Study identified because project could not be included as an Flood Mitigation Project (FMP) in the Region 15 Regional Flood Plan because it did meet the minimum requirements, per TWDB guidance for Regional Flood Planning or the provisions of Title 31 of TAQC Chapters 361 and 362.

Yes 🖌 No 🗆

Was the project missing sufficient data to assess whether the proposed project has a negative effect, per TWDB  $\vee$  No  $\square$  guidelines?

Was the project recommended by the RFPG to be studied in order for it to provide more project details, such as  $Yes \checkmark No \square$  a benefit cost ratio or the number of structures the project removes from the 100-year floodplain?

#### Related Goals

- ✓ Increase community access routes to critical facilities, evacuation routes, during and after a flooding event
- Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain
- Increase the # of communities participating in the National Flood Insurance Program
- Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs
- Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards
- □ Increase participation in the regional flood planning process
- Provide regional detention that could be used for water reuse applications or as part of a floodplain management program
- Increase acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use
- Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website
- Increase the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations
- Reduce the # of structures that have been subject to repeated flooding events through property buyouts

#### Increase the # of entities that adopt higher than NFIPminimum standards

- Develop and maintain an operational stormwater asset management plan
- Increase the # of flood gauges (rainfall/stream) in the region
- Increase the # of entities that have multi-year drainage CIP list
- Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
- □ Increase use of nature-based flood risk reduction projects
- Develop a regionally coordinated warning and emergency response program that can detect the flood threat and provide timely warning of impending flood danger
- Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
- Increase the proficiency of floodplain managers by increasing the # of them that are certified as Certified Floodplain Managers (CFM) with the Texas Floodplain Management Association
- Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

#### **RFPG Recommended**

### Flood Mitigation Evaluations

**FME** 

Fact Sheet

#### Precinct 4 MDP - Risk Area I at Sharp Rd. & E Monte Cristo Rd

FME ID: 151000078

#### **FME** Description

Inlets and proposed storm drain with Approximately 1,100' of 4'x4' RCB storm drain with curb inlets to be installed along Hendrix Dr. and Gaston Cr. with approximately 1,200' of 6'x4' RCB storm with grate and sag inlets along Uresti Rd. with connection to the HCDD1 J-02 Drain. Proposed installation of grate and sag inlets along Mile 19 Rd. (Phase Two) and proposed installation of grate and sag inlets along Sharp Rd. (Phase Two). Proposed Culverts Improvements (Phase One). Proposed detention pond with 9 acre footprint. Channel maintenance.

#### Study Type

- □ Flood risk modeling/mapping
- ✓ Flood mitigation study

#### Study Area

City/ Cities County/ Counties Hidalgo HUC 8 12110207, 12110286 HUC 12 121102080400, 121102070100. 121102080200, 121102080200 Study Area (sq. mi.) 0.73

#### **Emergency Need**

Yes 🗸 No 🗆

#### Known Flood Risk

History of Flooding? Population at Risk Roadways flooded Critical Facilities Impacted Notes:

#### **Study Costs**

Total Cost:	\$899,250
Estimated year to start:	2023
Time to complete?	2025
Funding Dedicated?	Yes 🗆 No 🗸

Yes ✓

Yes ✓

Yes 🗆



Frequency of flooding:		
# of structures inundated		
Miles inundated?		
Agricultural Land impacted	Yes $\square$	No
	Frequency of flooding: # of structures inundated Miles inundated? Agricultural Land impacted	Frequency of flooding: # of structures inundated Miles inundated? Agricultural Land impacted Yes 🗆

(Potential) Source of Funding

Hidalgo County Precinct 4 Study Sponsor: Entity with Oversight Hidalgo County Precinct 4 Included in a Hazard Mitigation Yes 🗸 No 🗆 Action Plan or other plan?

FIF, local

### Flood Mitigation Evaluations

FME

Study identified as a gap by Region 15 Regional Flood Planning Group (RFPG) Yes D No ✓

Study identified because project could not be included as an Flood Mitigation Project (FMP) in the Region 15 Regional Flood Plan because it did meet the minimum requirements, per TWDB guidance for Regional Flood Planning or the provisions of Title 31 of TAQC Chapters 361 and 362.

Yes 🖌 No 🗆

Was the project missing sufficient data to assess whether the proposed project has a negative effect, per TWDB guidelines? Yes 🗸 No 🗆

Was the project recommended by the RFPG to be studied in order for it to provide more project details, such as a benefit  $Yes \checkmark No \square$  cost ratio or the number of structures the project removes from the 100-year floodplain?

#### **Related Goals**

- Increase community access routes to critical facilities, evacuation routes, during and after a flooding event
- Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain
- Increase the # of communities participating in the National Flood Insurance Program
- Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs
- Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards
- □ Increase participation in the regional flood planning process
- Provide regional detention that could be used for water reuse applications or as part of a floodplain management program
- Increase acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use
- Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website
- Increase the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations
- Reduce the # of structures that have been subject to repeated flooding events through property buyouts

#### RFPG Recommended

- Increase the # of entities that adopt higher than NFIP-minimum standards
- Develop and maintain an operational stormwater asset management plan
- □ Increase the # of flood gauges (rainfall/stream) in the region
- □ Increase the # of entities that have multi-year drainage CIP list
- Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
- □ Increase use of nature-based flood risk reduction projects
- Develop a regionally coordinated warning and emergency response program that can detect the flood threat and provide timely warning of impending flood danger
- □ Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
- Increase the proficiency of floodplain managers by increasing the # of them that are certified as Certified Floodplain Managers (CFM) with the Texas Floodplain Management Association
- Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

#### Flood Management Evaluations Fact Sheet

**FME** 

#### Precinct 4 MDP - Risk Area J at SH107 & FM

FME ID: 151000079

□ Flood preparedness studies

#### **FME** Description

Channel Improvements (Widening & Regrading) to Existing HCDD1 "Y" drain with approximately 0.75 miles of proposed channel improvements beginning at Fresno Dr. and ending at E Curry Rd. Proposed Drainage Grate Inlets approximately 3,800' of storm drain to provide local drainage improvements north and west of existing HCDD1 "Y" Drain in two separate systems. Proposed culverts improvements. Proposed detention pond with a 2.7 acre footprint.

#### Study Type

□ Flood risk modeling/mapping

... . ....

✓ Flood mitigation study

#### **Study Area**

City/ Cities	
County/ Counties	Hidalgo
HUC 8	12110207,
	12110287
HUC 12	121102070100,
	121102080200,
	121102080400,
Study Area (sq. mi.)	0.15

#### **Emergency Need**

Yes 🖌 No 🗆

#### Known Flood Risk

History of Flooding?
Population at Risk
Roadways flooded
Critical Facilities Impacted
Notes:

#### **Study Costs**

Total Cost:	
Estimated year to start:	
Time to complete?	
Funding Dedicated?	

- ✓ Alternative Analysis
- □ Feasibility Assessments

Yes ✓	No 🗆	Frequency:		
		# of structures inundated		
Yes 🗸	No 🗆	Miles inundated?		
Yes 🗆	No 🗆	Agricultural Land impacted	Yes 🗆	No 🗆

\$541,200 2023	Study Sponsor: Entity with Oversight	Hidalgo County Hidalgo County
2025	Included in a CIP or other plan?	Yes 🖌 No 🗆
Yes 🗆 No 🗸	(Potential) Source of Funding	FIF, Local

Flood Management Evaluations Fact Sheet

Study identified as a gap by Region 15 Regional Flood Planning Group (RFPG) Yes D No ✓

Study identified because project could not be included as an Flood Mitigation Project (FMP) in the Region 15 Regional Flood Plan because it did meet the minimum requirements, per TWDB guidance for Regional Flood Planning or the provisions of Title 31 of TAQC Chapters 361 and 362.

Yes 🖌 No 🗆

Was the project missing sufficient data to assess whether the proposed project has a negative effect, per TWDB guidelines? Yes 🗸 No 🗆

Was the project recommended by the RFPG to be studied in order for it to provide more project details, such as a benefit  $Yes \checkmark No \square$  cost ratio or the number of structures the project removes from the 100-year floodplain?

#### Related Goals

- Increase community access routes to critical facilities, evacuation routes, during and after a flooding event
- Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain
- Increase the # of communities participating in the National Flood Insurance Program
- Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs
- Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards
- Increase participation in the regional flood planning process
- Provide regional detention that could be used for water reuse applications or as part of a floodplain management program
- Increase acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use
- Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website
- Increase the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations
- Reduce the # of structures that have been subject to repeated flooding events through property buyouts

#### RFPG Recommended

- Increase the # of entities that adopt higher than NFIP-minimum standards
- Develop and maintain an operational stormwater asset management plan
- □ Increase the # of flood gauges (rainfall/stream) in the region
- □ Increase the # of entities that have multi-year drainage CIP list
- Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
- Increase use of nature-based flood risk reduction projects
- Develop a regionally coordinated warning and emergency response program that can detect the flood threat and provide timely warning of impending flood danger
- □ Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
- Increase the proficiency of floodplain managers by increasing the # of them that are certified as Certified Floodplain Managers (CFM) with the Texas Floodplain Management Association
- Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

## Jim Hogg County Master Drainage Study

**FME** Description

Develop Flood risk maps for the county of Jim Hogg and develop CIP

#### Study Type

- ✓ Flood risk modeling/mapping
- ✓ Flood mitigation study

#### Study Area

City/ Cities Insert snip of Location Map here County/ Counties Jim Hogg HUC 8 **HUC 12** Study Area (sq. mi.) 870.56

✓ Alternative Analysis

□ Feasibility Assessments

#### **Emergency Need**

Yes 🗸 No 🗆

#### **Known Flood Risk**

History of Flooding?	Yes 🗸	No 🗆	Frequency:		
Population at Risk			# of structures inundated		
Roadways flooded	Yes 🗆	No 🗆	Miles inundated?		
Critical Facilities Impacted	Yes 🗆	No 🗆	Agricultural Land impacted	Yes 🗆	No 🗆
Notes:			-		

#### Study Costs

Total Cost:	\$250,000	Study Sponsor:	
Estimated year to start:		Entity with Oversight	
Time to complete?		Included in a CIP or other plan?	Yes 🗆 No 🗸
Funding Dedicated?	Yes 🗆 No 🗸	(Potential) Source of Funding	

Study identified as a gap by Region 15 Regional Flood Planning Group (RFPG)

Yes 🖌 No 🗆

### Lower Rio Grande Regional Flood Planning Group

Flood Management Evaluations Fact Sheet

151000082

□ Flood preparedness studies

FME ID:

## **FME**

Flood Management Evaluations Fact Sheet

Study identified because project could not be included as an Flood Mitigation Project (FMP) in the Region 15 Regional Flood Plan because it did meet the minimum requirements, per TWDB guidance for Regional Flood Planning or the provisions of Title 31 of TAQC Chapters 361 and 362.

Yes 🖌 No 🗆

Was the project missing sufficient data to assess whether the proposed project has a negative effect, per TWDB  $Y_{es} \checkmark N_0 \square$  guidelines?

Was the project recommended by the RFPG to be studied in order for it to provide more project details, such as  $Yes \checkmark No \square$  a benefit cost ratio or the number of structures the project removes from the 100-year floodplain?

#### Related Goals

- □ Increase community access routes to critical facilities, evacuation routes, during and after a flooding event
- □ Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain
- Increase the # of communities participating in the National Flood Insurance Program
- Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs
- Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards
- □ Increase participation in the regional flood planning process
- Provide regional detention that could be used for water reuse applications or as part of a floodplain management program
- Increase acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use
- Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website
- Increase the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations
- Reduce the # of structures that have been subject to repeated flooding events through property buyouts

#### **RFPG Recommended**

- Increase the # of entities that adopt higher than NFIPminimum standards
- Develop and maintain an operational stormwater asset management plan
- Increase the # of flood gauges (rainfall/stream) in the region
- Increase the # of entities that have multi-year drainage CIP list
- Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
- □ Increase use of nature-based flood risk reduction projects
- Develop a regionally coordinated warning and emergency response program that can detect the flood threat and provide timely warning of impending flood danger
- Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
- Increase the proficiency of floodplain managers by increasing the # of them that are certified as Certified Floodplain Managers (CFM) with the Texas Floodplain Management Association
- Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

#### **FME** Description Develop Flood risk maps for the county of Kenedy and develop CIP Study Type ✓ Flood risk modeling/mapping ✓ Alternative Analysis □ Flood preparedness studies ✓ Flood mitigation study □ Feasibility Assessments Study Area City/ Cities Insert snip of Location Map here County/ Counties Kenedy HUC 8

**HUC 12** 

Study Area (sq. mi.) 1478.25

#### **Emergency Need**

Yes 🗸 No 🗆

#### **Known Flood Risk**

History of Flooding?	Yes 🖌 No 🗆	Frequency:	
Population at Risk		# of structures inundated	
Roadways flooded	Yes 🗆 No 🗆	Miles inundated?	
Critical Facilities Impacted	Yes 🗆 No 🗆	Agricultural Land impacted	Yes 🗆 No 🗆
Notes:			

#### **Study Costs**

Total Cost:	\$250,000	Study Sponsor:		
Estimated year to start:		Entity with Oversight		
Time to complete?		Included in a CIP or other plan?	Yes 🗆	No ✓
Funding Dedicated?	Yes 🗆 No 🗸	(Potential) Source of Funding		

### Study identified as a gap by Region 15 Regional Flood Planning Group (RFPG)

Yes 🖌 No 🗆

Kenedy County Master Drainage Study

### Flood Management Evaluations Fact Sheet

FME ID: 15100083

**FME** 

Flood Management Evaluations Fact Sheet

Study identified because project could not be included as an Flood Mitigation Project (FMP) in the Region 15 Regional Flood Plan because it did meet the minimum requirements, per TWDB guidance for Regional Flood Planning or the provisions of Title 31 of TAQC Chapters 361 and 362.

Yes 🖌 No 🗆

Was the project missing sufficient data to assess whether the proposed project has a negative effect, per TWDB  $Y_{es} \checkmark N_0 \square$  guidelines?

Was the project recommended by the RFPG to be studied in order for it to provide more project details, such as  $Yes \checkmark No \square$  a benefit cost ratio or the number of structures the project removes from the 100-year floodplain?

#### Related Goals

- □ Increase community access routes to critical facilities, evacuation routes, during and after a flooding event
- □ Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain
- Increase the # of communities participating in the National Flood Insurance Program
- Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs
- Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards
- □ Increase participation in the regional flood planning process
- Provide regional detention that could be used for water reuse applications or as part of a floodplain management program
- Increase acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use
- Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website
- Increase the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations
- Reduce the # of structures that have been subject to repeated flooding events through property buyouts

#### **RFPG Recommended**

- Increase the # of entities that adopt higher than NFIPminimum standards
- Develop and maintain an operational stormwater asset management plan
- Increase the # of flood gauges (rainfall/stream) in the region
- Increase the # of entities that have multi-year drainage CIP list
- Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
- □ Increase use of nature-based flood risk reduction projects
- Develop a regionally coordinated warning and emergency response program that can detect the flood threat and provide timely warning of impending flood danger
- Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
- Increase the proficiency of floodplain managers by increasing the # of them that are certified as Certified Floodplain Managers (CFM) with the Texas Floodplain Management Association
- Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

#### Fort Clark MUD Master Drainage Study

#### **FME** Description

Develop Flood risk maps for Fort Clark MUD and develop CIP

#### Study Type

- ✓ Flood risk modeling/mapping
- ✓ Flood mitigation study

#### Study Area

City/ Cities County/ Counties Kinney HUC 8 **HUC 12** Study Area (sq. mi.) 4.21

✓ Alternative Analysis

□ Feasibility Assessments

#### **Emergency Need**

Yes 🗸 No 🗆

#### **Known Flood Risk**

History of Flooding?	Yes 🖌 No 🗆	Frequency:	
Population at Risk		# of structures inundated	
Roadways flooded	Yes 🗆 No 🗆	Miles inundated?	
Critical Facilities Impacted	Yes 🗆 No 🗆	Agricultural Land impacted	Yes 🗆 No 🗆
Notes:			

#### **Study Costs**

Total Cost:	\$250,000	Study Sponsor:		
Estimated year to start:		Entity with Oversight		
Time to complete?		Included in a CIP or other plan?	Yes 🗆 No	√
Funding Dedicated?	Yes 🗆 No 🗸	(Potential) Source of Funding		

### Study identified as a gap by Region 15 Regional Flood Planning Group (RFPG)

Yes 🖌 No 🗆





FME ID: 151000084

□ Flood preparedness studies

Lower Rio Grande Regional Flood Planning Group

**FME** 

Fact Sheet

Flood Management Evaluations
Flood Management Evaluations Fact Sheet

Study identified because project could not be included as an Flood Mitigation Project (FMP) in the Region 15 Regional Flood Plan because it did meet the minimum requirements, per TWDB guidance for Regional Flood Planning or the provisions of Title 31 of TAQC Chapters 361 and 362.

Yes 🖌 No 🗆

Was the project missing sufficient data to assess whether the proposed project has a negative effect, per TWDB  $Y_{es} \checkmark N_0 \square$  guidelines?

Was the project recommended by the RFPG to be studied in order for it to provide more project details, such as  $Yes \checkmark No \square$  a benefit cost ratio or the number of structures the project removes from the 100-year floodplain?

#### Related Goals

- □ Increase community access routes to critical facilities, evacuation routes, during and after a flooding event
- □ Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain
- Increase the # of communities participating in the National Flood Insurance Program
- Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs
- Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards
- □ Increase participation in the regional flood planning process
- Provide regional detention that could be used for water reuse applications or as part of a floodplain management program
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- Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website
- Increase the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations
- Reduce the # of structures that have been subject to repeated flooding events through property buyouts

#### **RFPG Recommended**

- Increase the # of entities that adopt higher than NFIPminimum standards
- Develop and maintain an operational stormwater asset management plan
- Increase the # of flood gauges (rainfall/stream) in the region
- Increase the # of entities that have multi-year drainage CIP list
- Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
- □ Increase use of nature-based flood risk reduction projects
- Develop a regionally coordinated warning and emergency response program that can detect the flood threat and provide timely warning of impending flood danger
- Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
- Increase the proficiency of floodplain managers by increasing the # of them that are certified as Certified Floodplain Managers (CFM) with the Texas Floodplain Management Association
- Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

### Kinney County Master Drainage Study

#### **FME** Description

Develop Flood risk maps for the county of Kinney and develop CIP

#### Study Type

- ✓ Flood risk modeling/mapping
- ✓ Flood mitigation study

#### Study Area

City/ Cities County/ Counties Kinney HUC 8 **HUC 12** Study Area (sq. mi.) 751.29

#### **Emergency Need**

Yes 🗸 No 🗆

#### **Known Flood Risk**

History of Flooding?	Yes 🗸	No 🗆	Frequency:		
Population at Risk			# of structures inundated		
Roadways flooded	Yes 🗆	No 🗆	Miles inundated?		
Critical Facilities Impacted	Yes 🗆	No 🗆	Agricultural Land impacted	Yes 🗆 No	) 🗌
Notes:					

#### **Study Costs**

Total Cost:	\$250,000	Study Sponsor:		
Estimated year to start:		Entity with Oversight		
Time to complete?		Included in a CIP or other plan?	Yes 🗆	No √
Funding Dedicated?	Yes 🗆 No 🗸	(Potential) Source of Funding		

### Study identified as a gap by Region 15 Regional Flood Planning Group (RFPG)

Yes 🗸 No 🗆



**FME** 

FME ID: 15100085







#### Flood Management Evaluations Fact Sheet

**FME** 

Study identified because project could not be included as an Flood Mitigation Project (FMP) in the Region 15 Regional Flood Plan because it did meet the minimum requirements, per TWDB guidance for Regional Flood Planning or the provisions of Title 31 of TAQC Chapters 361 and 362.

Yes 🖌 No 🗆

Was the project missing sufficient data to assess whether the proposed project has a negative effect, per TWDB Yes 🗸 No 🗆 guidelines?

Was the project recommended by the RFPG to be studied in order for it to provide more project details, such as Yes  $\checkmark$  No  $\Box$  a benefit cost ratio or the number of structures the project removes from the 100-year floodplain?

#### **Related Goals**

- Increase community access routes to critical facilities, evacuation routes, during and after a flooding event
- Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain
- Increase the # of communities participating in the National Flood Insurance Program
- Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs
- Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards
- □ Increase participation in the regional flood planning process
- Provide regional detention that could be used for water reuse applications or as part of a floodplain management program
- Increase acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use
- Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website
- Increase the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations
- Reduce the # of structures that have been subject to repeated flooding events through property buyouts

#### **RFPG Recommended**

- Increase the # of entities that adopt higher than NFIPminimum standards
- Develop and maintain an operational stormwater asset management plan
- Increase the # of flood gauges (rainfall/stream) in the region
- Increase the # of entities that have multi-year drainage CIP list
- Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
- □ Increase use of nature-based flood risk reduction projects
- Develop a regionally coordinated warning and emergency response program that can detect the flood threat and provide timely warning of impending flood danger
- Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
- Increase the proficiency of floodplain managers by increasing the # of them that are certified as Certified Floodplain Managers (CFM) with the Texas Floodplain Management Association
- Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

#### Risk Area 11 Rancho Escondido

FME ID: 151000086

**FME** 

Fact Sheet

Flood Mitigation Evaluations

#### **FME** Description

Study includes constructing 10'x2' U-shaped channel from Flores Drive to just south of Microtel Inn Suites, replacing existing culvert under Maza Drive with 1-8'x4 RCB, and installing curb inlet at cul-de-sac on Nancy Drive.

✓ Alternative Analysis

□ Feasibility Assessments

#### Study Type

- □ Flood risk modeling/mapping
- ✓ Flood mitigation study

#### Study Area

City/ Cities	Eagle Pass
County/ Counties	Maverick
HUC 8	13080001,
	13080002
HUC 12	130800020703,
	130800020702
Study Area (sq. mi.)	0.03

#### **Emergency Need**

Yes 🖌 No 🗆

#### **Known Flood Risk**

History of Flooding?	Yes 🗸	No
Population at Risk		
Roadways flooded	Yes 🗸	No
Critical Facilities Impacted	Yes 🗆	No
Notes:		

#### Study Costs

Total Cost:	\$136,785	Study Sponsor:	City of Eagle Pass
Estimated year to start:		Entity with Oversight	City of Eagle Pass
Time to complete?		Included in a Hazard Mitigation	Yes 🖌 No 🗆
		Action Plan or other plan?	
Funding Dedicated?	Yes 🗆 No 🗸	(Potential) Source of Funding	FIF, local

## Study identified as a gap by Region 15 Regional Flood Planning Group (RFPG)

Yes 🗆 No 🗸

- FLORES DR
  - Replace Existing Culvert with Proposed 8'x4' RCB Proposed 8'x4' RCB Proposed 8'x4' RCB

Frequency of flooding: # of structures inundated

Miles inundated? Agricultural Land impacted Yes 
No

□ Flood preparedness studies

Flood Mitigation Evaluations Fact Sheet

Study identified because project could not be included as an Flood Mitigation Project (FMP) in the Region 15 Regional Flood Plan because it did meet the minimum requirements, per TWDB guidance for Regional Flood Planning or the provisions of Title 31 of TAQC Chapters 361 and 362.

Yes 🖌 No 🗆

Was the project missing sufficient data to assess whether the proposed project has a negative effect, per TWDB  $Y_{es} \checkmark N_0 \square$  guidelines?

Was the project recommended by the RFPG to be studied in order for it to provide more project details, such as  $Yes \checkmark No \square$  a benefit cost ratio or the number of structures the project removes from the 100-year floodplain?

#### Related Goals

- ✓ Increase community access routes to critical facilities, evacuation routes, during and after a flooding event
- Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain
- Increase the # of communities participating in the National Flood Insurance Program
- Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs
- Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards
- □ Increase participation in the regional flood planning process
- Provide regional detention that could be used for water reuse applications or as part of a floodplain management program
- Increase acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use
- Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website
- Increase the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations
- Reduce the # of structures that have been subject to repeated flooding events through property buyouts

#### **RFPG Recommended**

- Increase the # of entities that adopt higher than NFIPminimum standards
- Develop and maintain an operational stormwater asset management plan
- Increase the # of flood gauges (rainfall/stream) in the region
- Increase the # of entities that have multi-year drainage CIP list
- Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
- □ Increase use of nature-based flood risk reduction projects
- Develop a regionally coordinated warning and emergency response program that can detect the flood threat and provide timely warning of impending flood danger
- Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
- Increase the proficiency of floodplain managers by increasing the # of them that are certified as Certified Floodplain Managers (CFM) with the Texas Floodplain Management Association
- Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

## Lower Rio Grande Regional Flood Planning Group

#### Flood Mitigation Evaluations Fact Sheet

**FME** 

FME ID: 151000087

#### **Risk Area 12 Fox Borough Drive**

#### **FME** Description

Study includes bypassing flow from inlet at PointLoma Drive and North Point Drive to the detention pond with 1 - 8'x4' RCB and Installing additional curb inlets on N. Point Drive and Silver Oak Circle.

#### Study Type

- □ Flood risk modeling/mapping
- ✓ Flood mitigation study

#### **Study Area**

City/ Cities	Eagle Pass
County/ Counties	Maverick
HUC 8	13080001,
	13080002
HUC 12	130800020703,
	130800020702
Study Area (sq. mi.)	0.05

#### **Emergency Need**

Yes 🖌 No 🗆

#### **Known Flood Risk**

History of Flooding?	Yes 🗸	Ν
Population at Risk		
Roadways flooded	Yes 🗸	Ν
Critical Facilities Impacted	Yes 🗆	Ν
Notes:		

#### **Study Costs**

Total Cost:	\$177,870	Study Sponsor:	City of Eagle Pass
Estimated year to start:		Entity with Oversight	City of Eagle Pass
Time to complete?		Included in a Hazard Mitigation	Yes 🗸 No 🗆
-		Action Plan or other plan?	
Funding Dedicated?	Yes 🗆 No 🗸	(Potential) Source of Funding	FIF, local

## Study identified as a gap by Region 15 Regional Flood Planning Group (RFPG)

Yes 🗆 No 🗸

- ✓ Alternative Analysis □ Feasibility Assessments
- □ Flood preparedness studies



No 🗆	Frequency of flooding:		
	# of structures inundated		
No 🗆	Miles inundated?		
No 🗆	Agricultural Land impacted	Yes 🗆	No 🗆

Flood Mitigation Evaluations Fact Sheet

Study identified because project could not be included as an Flood Mitigation Project (FMP) in the Region 15 Regional Flood Plan because it did meet the minimum requirements, per TWDB guidance for Regional Flood Planning or the provisions of Title 31 of TAQC Chapters 361 and 362.

Yes 🖌 No 🗆

Was the project missing sufficient data to assess whether the proposed project has a negative effect, per TWDB  $Y_{es} \checkmark N_0 \square$  guidelines?

Was the project recommended by the RFPG to be studied in order for it to provide more project details, such as  $Yes \checkmark No \square$  a benefit cost ratio or the number of structures the project removes from the 100-year floodplain?

#### Related Goals

- ✓ Increase community access routes to critical facilities, evacuation routes, during and after a flooding event
- Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain
- Increase the # of communities participating in the National Flood Insurance Program
- Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs
- Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards
- □ Increase participation in the regional flood planning process
- Provide regional detention that could be used for water reuse applications or as part of a floodplain management program
- Increase acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use
- Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website
- Increase the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations
- Reduce the # of structures that have been subject to repeated flooding events through property buyouts

#### **RFPG Recommended**

- Increase the # of entities that adopt higher than NFIPminimum standards
- Develop and maintain an operational stormwater asset management plan
- Increase the # of flood gauges (rainfall/stream) in the region
- Increase the # of entities that have multi-year drainage CIP list
- Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
- □ Increase use of nature-based flood risk reduction projects
- Develop a regionally coordinated warning and emergency response program that can detect the flood threat and provide timely warning of impending flood danger
- Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
- Increase the proficiency of floodplain managers by increasing the # of them that are certified as Certified Floodplain Managers (CFM) with the Texas Floodplain Management Association
- Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

#### Risk Area 13 Celle De Los Santos neighborhood. Additional culvert under irrigation canal.

#### **FME Description**

Study includes upgrading existing culvert crossing irrigation canal from 2-6'x4' RCB to 4-6'x4' RCB.

✓ Alternative Analysis

□ Feasibility Assessments

#### Study Type

□ Flood risk modeling/mapping

✓ Flood mitigation study

#### **Study Area**

City/ Cities Eagle Pass County/ Counties Maverick HUC 8 13080001, 130800020703, 130800020702 Study Area (sq. mi.) 0.03

#### **Emergency Need**

Yes 🖌 No 🗆

#### Known Flood Risk

History of Flooding? Population at Risk Roadways flooded Critical Facilities Impacted Notes:

#### Study Costs

Total Cost:
Estimated year to start:
Time to complete?

Funding Dedicated?

Yes 🗆 No 🗸

Yes 🗸 No 🗆

Yes 🗆 No 🗆

No 🗆

\$27,225

Yes 🗸

Study Sponsor:City of Eagle PassEntity with OversightCity of Eagle PassIncluded in a Hazard MitigationYes ✓ No □Action Plan or other plan?FIF, local

### Study identified as a gap by Region 15 Regional Flood Planning Group (RFPG)

Yes 🗆 No 🗸



Agricultural Land impacted Yes

d Yes 🗆 No 🗆



## Risk Area 13 Celle De Los Santos neighborhoc

FME ID: 151000088

□ Flood preparedness studies

Flood Mitigation Evaluations Fact Sheet

#### 5 Lower Rio Grande Regional Flood Planning Group

Flood Mitigation Evaluations Fact Sheet

**FME** 

#### Study identified because project could not be included as an Flood Mitigation Project (FMP) in the Region 15 Regional Flood Plan because it did meet the minimum requirements, per TWDB guidance for Regional Flood Planning or the provisions of Title 31 of TAQC Chapters 361 and 362.

Yes 🖌 No 🗆

Was the project missing sufficient data to assess whether the proposed project has a negative effect, per TWDB Yes 🗸 No 🗆 guidelines?

Was the project recommended by the RFPG to be studied in order for it to provide more project details, such as  $Yes \checkmark No \square$  a benefit cost ratio or the number of structures the project removes from the 100-year floodplain?

#### Related Goals

- ✓ Increase community access routes to critical facilities, evacuation routes, during and after a flooding event
- Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain
- Increase the # of communities participating in the National Flood Insurance Program
- Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs
- Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards
- □ Increase participation in the regional flood planning process
- Provide regional detention that could be used for water reuse applications or as part of a floodplain management program
- Increase acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use
- Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website
- Increase the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations
- Reduce the # of structures that have been subject to repeated flooding events through property buyouts

#### **RFPG Recommended**

- Increase the # of entities that adopt higher than NFIPminimum standards
- Develop and maintain an operational stormwater asset management plan
- Increase the # of flood gauges (rainfall/stream) in the region
- Increase the # of entities that have multi-year drainage CIP list
- Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
- □ Increase use of nature-based flood risk reduction projects
- Develop a regionally coordinated warning and emergency response program that can detect the flood threat and provide timely warning of impending flood danger
- Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
- Increase the proficiency of floodplain managers by increasing the # of them that are certified as Certified Floodplain Managers (CFM) with the Texas Floodplain Management Association
- Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

#### Risk Area 15 Trib 3 Detention at Main Street

#### **FME** Description

Study includes constructing 10 acre detention pond (29 ac-ft volume) along East Channel north of Highway 277 and installing flapgates at flume outfalls on Omar Drive and Jana Drive, to prevent more frequent stormwater from backing up into the neighborhood on the west side of the channel.

#### Study Type

- □ Flood risk modeling/mapping
- ✓ Flood mitigation study
- ✓ Alternative Analysis □ Feasibility Assessments
- □ Flood preparedness studies



City/ Cities	Eagle Pass
County/ Counties	Maverick
HUC 8	13080001,
	13080002
HUC 12	130800020703,
	130800020702
Study Area (sq. mi.)	0.05

#### **Emergency Need**

Yes 🗸 No 🗆

#### **Known Flood Risk**

History of Flooding?	Yes 🗸	No 🗆
Population at Risk		
Roadways flooded	Yes 🗸	No 🗆
Critical Facilities Impacted	Yes 🗆	No 🗆
Notes:		

### Study Costs

Total Cost:	\$124,245
Estimated year to start:	
Time to complete?	

Study Sponsor: Entity with Oversight Included in a Hazard Mitigation Action Plan or other plan? (Potential) Source of Funding FIF, local

Agricultural Land impacted

City of Eagle Pass City of Eagle Pass Yes 🗸 No 🗆

Yes 🗆 No 🗆

**Funding Dedicated?** 

Yes □ No ✓

Study identified as a gap by Region 15 Regional Flood Planning Group (RFPG) Yes 🗆 No 🗸





## **FME** Flood Mitigation Evaluations

Fact Sheet

FME ID: 151000089

Flood Mitigation Evaluations Fact Sheet

**FME** 

#### Study identified because project could not be included as an Flood Mitigation Project (FMP) in the Region 15 Regional Flood Plan because it did meet the minimum requirements, per TWDB guidance for Regional Flood Planning or the provisions of Title 31 of TAQC Chapters 361 and 362.

Yes 🖌 No 🗆

Was the project missing sufficient data to assess whether the proposed project has a negative effect, per TWDB Yes 🗸 No 🗆 guidelines?

Was the project recommended by the RFPG to be studied in order for it to provide more project details, such as  $Yes \checkmark No \square$  a benefit cost ratio or the number of structures the project removes from the 100-year floodplain?

#### Related Goals

- ✓ Increase community access routes to critical facilities, evacuation routes, during and after a flooding event
- Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain
- Increase the # of communities participating in the National Flood Insurance Program
- Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs
- Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards
- □ Increase participation in the regional flood planning process
- Provide regional detention that could be used for water reuse applications or as part of a floodplain management program
- Increase acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use
- Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website
- Increase the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations
- Reduce the # of structures that have been subject to repeated flooding events through property buyouts

#### **RFPG Recommended**

- Increase the # of entities that adopt higher than NFIPminimum standards
- Develop and maintain an operational stormwater asset management plan
- Increase the # of flood gauges (rainfall/stream) in the region
- Increase the # of entities that have multi-year drainage CIP list
- Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
- □ Increase use of nature-based flood risk reduction projects
- Develop a regionally coordinated warning and emergency response program that can detect the flood threat and provide timely warning of impending flood danger
- Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
- Increase the proficiency of floodplain managers by increasing the # of them that are certified as Certified Floodplain Managers (CFM) with the Texas Floodplain Management Association
- Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

### **Risk Area 2 Treasure Hills**

FME ID: 151000090

□ Flood preparedness studies

#### **FME** Description

Study includes constructing a 4' deep trapezoidal concrete channel with 8' bottom width and 2:1 side slopes, from detention pond outfall to existing culverts.

✓ Alternative Analysis

□ Feasibility Assessments

#### Study Type

- □ Flood risk modeling/mapping
- ✓ Flood mitigation study

#### Study Area

City/ Cities	Eagle Pass
County/ Counties	Maverick
HUC 8	13080001,
	13080002
HUC 12	13080002070
	13080002070
Study Area (sq. mi.)	0.06

#### **Emergency Need**

Yes 🗸 No 🗆

#### **Known Flood Risk**

History of Flooding? Population at Risk Roadways flooded **Critical Facilities Impacted** Notes:

#### **Study Costs**

Total Cost:	\$89,595	Study Sponsor:	City of Eagle Pass
Estimated year to start:		Entity with Oversight	City of Eagle Pass
Time to complete?		Included in a Hazard Mitigation	Yes 🗸 No 🗆
		Action Plan or other plan?	
Funding Dedicated?	Yes 🗆 No 🗸	(Potential) Source of Funding	FIF, local

Yes 🗸 No 🗆

Yes 🗸 No 🗆

Yes 🗆 No 🗆

## Study identified as a gap by Region 15 Regional Flood Planning Group (RFPG)

Yes 🗆 No 🗸



Frequency of flooding:

Miles inundated?

Agricultural Land impacted Yes □ No □

# of structures inundated

**FME** Flood Mitigation Evaluations

Fact Sheet

Flood Mitigation Evaluations Fact Sheet

Study identified because project could not be included as an Flood Mitigation Project (FMP) in the Region 15 Regional Flood Plan because it did meet the minimum requirements, per TWDB guidance for Regional Flood Planning or the provisions of Title 31 of TAQC Chapters 361 and 362.

Yes 🖌 No 🗆

Was the project missing sufficient data to assess whether the proposed project has a negative effect, per TWDB  $Y_{es} \checkmark N_0 \square$  guidelines?

Was the project recommended by the RFPG to be studied in order for it to provide more project details, such as  $Yes \checkmark No \square$  a benefit cost ratio or the number of structures the project removes from the 100-year floodplain?

#### Related Goals

- ✓ Increase community access routes to critical facilities, evacuation routes, during and after a flooding event
- Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain
- Increase the # of communities participating in the National Flood Insurance Program
- Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs
- Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards
- □ Increase participation in the regional flood planning process
- Provide regional detention that could be used for water reuse applications or as part of a floodplain management program
- Increase acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use
- Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website
- Increase the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations
- Reduce the # of structures that have been subject to repeated flooding events through property buyouts

#### **RFPG Recommended**

- Increase the # of entities that adopt higher than NFIPminimum standards
- Develop and maintain an operational stormwater asset management plan
- Increase the # of flood gauges (rainfall/stream) in the region
- Increase the # of entities that have multi-year drainage CIP list
- Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
- □ Increase use of nature-based flood risk reduction projects
- Develop a regionally coordinated warning and emergency response program that can detect the flood threat and provide timely warning of impending flood danger
- Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
- Increase the proficiency of floodplain managers by increasing the # of them that are certified as Certified Floodplain Managers (CFM) with the Texas Floodplain Management Association
- Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

#### Flood Mitigation Evaluations Fact Sheet

**FME** 

FME ID: 151000091

□ Flood preparedness studies

**Risk Area 3 Arrow Point Boulevard** 

#### **FME Description**

Study includes constructing small retaining wall at downstream of flume outfall to force flow towards Stone Way and constructing a 2' wide and 6" deep concrete flume from existing flume outfall to Stone Way.

✓ Alternative Analysis

□ Feasibility Assessments

#### Study Type

- □ Flood risk modeling/mapping
- ✓ Flood mitigation study

#### Study Are

City/ Cities	Eagle Pass
County/ Counties	Maverick
HUC 8	13080001,
	13080002
HUC 12	130800020703,
	130800020702
Study Area (sq. mi.)	0.02

#### **Emergency Need**

Yes 🖌 No 🗆

#### **Known Flood Risk**

History of Flooding?	Yes 🗸	Ν
Population at Risk		
Roadways flooded	Yes 🗸	Ν
Critical Facilities Impacted	Yes 🗆	Ν
Notes:		

#### Study Costs

Total Cost:	\$7,920	Study Sponsor:	City of Eagle Pass
Estimated year to start:		Entity with Oversight	City of Eagle Pass
Time to complete?		Included in a Hazard Mitigation	Yes 🗸 No 🗆
-		Action Plan or other plan?	
Funding Dedicated?	Yes 🗆 No 🗸	(Potential) Source of Funding	FIF, local

Study identified as a gap by Region 15 Regional Flood Planning Group (RFPG)

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✓	No 🗆	Frequency of flooding:		
		# of structures inundated		
✓	No 🗆	Miles inundated?		
	No 🗆	Agricultural Land impacted	Yes 🗆	No

Flood Mitigation Evaluations Fact Sheet

Study identified because project could not be included as an Flood Mitigation Project (FMP) in the Region 15 Regional Flood Plan because it did meet the minimum requirements, per TWDB guidance for Regional Flood Planning or the provisions of Title 31 of TAQC Chapters 361 and 362.

Yes 🖌 No 🗆

Was the project missing sufficient data to assess whether the proposed project has a negative effect, per TWDB  $Y_{es} \checkmark N_0 \square$  guidelines?

Was the project recommended by the RFPG to be studied in order for it to provide more project details, such as  $Yes \checkmark No \square$  a benefit cost ratio or the number of structures the project removes from the 100-year floodplain?

#### Related Goals

- ✓ Increase community access routes to critical facilities, evacuation routes, during and after a flooding event
- Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain
- Increase the # of communities participating in the National Flood Insurance Program
- Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs
- Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards
- □ Increase participation in the regional flood planning process
- Provide regional detention that could be used for water reuse applications or as part of a floodplain management program
- Increase acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use
- Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website
- Increase the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations
- Reduce the # of structures that have been subject to repeated flooding events through property buyouts

#### **RFPG Recommended**

- Increase the # of entities that adopt higher than NFIPminimum standards
- Develop and maintain an operational stormwater asset management plan
- Increase the # of flood gauges (rainfall/stream) in the region
- Increase the # of entities that have multi-year drainage CIP list
- Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
- □ Increase use of nature-based flood risk reduction projects
- Develop a regionally coordinated warning and emergency response program that can detect the flood threat and provide timely warning of impending flood danger
- Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
- Increase the proficiency of floodplain managers by increasing the # of them that are certified as Certified Floodplain Managers (CFM) with the Texas Floodplain Management Association
- Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

### Risk Area 4 Bibb & Misty Willow storm drain

#### **FME** Description

Study includes installing 6'x4' RCB along Misty Willow Drive from N Bibb Avenue to existing channel between N Bibb Avenue and Timber Valley and installing curb inlets on N Bibb Avenue and Misty Willow Drive.

✓ Alternative Analysis

□ Feasibility Assessments

#### Study Type

- □ Flood risk modeling/mapping
- ✓ Flood mitigation study

#### Study Area

City/ Cities	Eagle Pass
County/ Counties	Maverick
HUC 8	13080001,
	13080002
HUC 12	130800020703,
	130800020702
Study Area (sq. mi.)	0.02

#### **Emergency Need**

Yes 🗸 No 🗆

#### **Known Flood Risk**

History of Flooding?	Yes 🗸
Population at Risk	
Roadways flooded	Yes 🗸
Critical Facilities Impacted	Yes 🗆
Notes:	

#### **Study Costs**

Total Cost:	\$47,520	Study Sponsor:	City of Eagle Pass
Estimated year to start:		Entity with Oversight	City of Eagle Pass
Time to complete?		Included in a Hazard Mitigation	Yes 🖌 No 🗆
		Action Plan or other plan?	
Funding Dedicated?	Yes 🗆 No 🗸	(Potential) Source of Funding	FIF, local

### Study identified as a gap by Region 15 Regional Flood Planning Group (RFPG)

#### Yes 🗆 No 🗸



□ Flood preparedness studies

## Flood Mitigation Evaluations

Lower Rio Grande Regional Flood Planning Group

No 🗆 No 🗆

No 🗆

Frequency of flooding: # of structures inundated Miles inundated? Agricultural Land impacted Yes □ No □

FME ID: 151000092

**FME** 

Fact Sheet

Flood Mitigation Evaluations Fact Sheet

Study identified because project could not be included as an Flood Mitigation Project (FMP) in the Region 15 Regional Flood Plan because it did meet the minimum requirements, per TWDB guidance for Regional Flood Planning or the provisions of Title 31 of TAQC Chapters 361 and 362.

Yes 🖌 No 🗆

Was the project missing sufficient data to assess whether the proposed project has a negative effect, per TWDB  $Y_{es} \checkmark N_0 \square$  guidelines?

Was the project recommended by the RFPG to be studied in order for it to provide more project details, such as  $Yes \checkmark No \square$  a benefit cost ratio or the number of structures the project removes from the 100-year floodplain?

#### Related Goals

- ✓ Increase community access routes to critical facilities, evacuation routes, during and after a flooding event
- Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain
- Increase the # of communities participating in the National Flood Insurance Program
- Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs
- Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards
- □ Increase participation in the regional flood planning process
- Provide regional detention that could be used for water reuse applications or as part of a floodplain management program
- Increase acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use
- Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website
- Increase the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations
- Reduce the # of structures that have been subject to repeated flooding events through property buyouts

#### **RFPG Recommended**

- Increase the # of entities that adopt higher than NFIPminimum standards
- Develop and maintain an operational stormwater asset management plan
- Increase the # of flood gauges (rainfall/stream) in the region
- Increase the # of entities that have multi-year drainage CIP list
- Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
- Increase use of nature-based flood risk reduction projects
- Develop a regionally coordinated warning and emergency response program that can detect the flood threat and provide timely warning of impending flood danger
- Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
- Increase the proficiency of floodplain managers by increasing the # of them that are certified as Certified Floodplain Managers (CFM) with the Texas Floodplain Management Association
- Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

Flood Mitigation Evaluations Fact Sheet

FME ID: 151000093

#### **Risk Area 5 Debona Drive**

**FME** Description

Study includes constructing a 5' deep trapezoidal channel approximately 30 feet wide with 3:1 side slopes and a 5' concrete pilot channel, replacing Juarez Street culvert with 8'x4' box culvert, and realigning existing channel to provide additional distance from homes.

✓ Alternative Analysis

□ Feasibility Assessments

#### Study Type

- □ Flood risk modeling/mapping
- ✓ Flood mitigation study
- Study Area
  - City/ Cities **Eagle Pass** County/ Counties Maverick HUC 8 13080001, 13080002 HUC 12 130800020703, 130800020702 Study Area (sq. mi.) 0.02

#### **Emergency Need**

Yes 🗸 No 🗆

#### **Known Flood Risk**

History of Flooding?	Yes 🗸	No 🗆
Population at Risk		
Roadways flooded	Yes 🗸	No 🗆
Critical Facilities Impacted	Yes 🗆	No 🗆
Notes:		

### Study Costs

Total Cost:	\$53,955	Study Sponsor:
Estimated year to start:		Entity with Oversight
Time to complete?		Included in a Hazard Mitigation
		Action Plan or other plan?
		· · · · · · · · · · · · · · · · · · ·

City of Eagle Pass City of Eagle Pass Yes 🗸 No 🗆

Yes 🗆 No 🗆

Funding Dedicated?

Yes □ No ✓

on ?ו (Potential) Source of Funding FIF, local

Miles inundated?

Agricultural Land impacted

## Study identified as a gap by Region 15 Regional Flood Planning Group (RFPG)

3'x4' RCE

Yes 🗆 No 🗸



□ Flood preparedness studies

Flood Mitigation Evaluations Fact Sheet

**FME** 

Study identified because project could not be included as an Flood Mitigation Project (FMP) in the Region 15 Regional Flood Plan because it did meet the minimum requirements, per TWDB guidance for Regional Flood Planning or the provisions of Title 31 of TAQC Chapters 361 and 362.

Yes 🖌 No 🗆

Was the project missing sufficient data to assess whether the proposed project has a negative effect, per TWDB Yes 🗸 No 🗆 guidelines?

Was the project recommended by the RFPG to be studied in order for it to provide more project details, such as  $Yes \checkmark No \square$  a benefit cost ratio or the number of structures the project removes from the 100-year floodplain?

#### Related Goals

- ✓ Increase community access routes to critical facilities, evacuation routes, during and after a flooding event
- Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain
- Increase the # of communities participating in the National Flood Insurance Program
- Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs
- Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards
- □ Increase participation in the regional flood planning process
- Provide regional detention that could be used for water reuse applications or as part of a floodplain management program
- Increase acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use
- Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website
- Increase the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations
- Reduce the # of structures that have been subject to repeated flooding events through property buyouts

#### **RFPG Recommended**

- Increase the # of entities that adopt higher than NFIPminimum standards
- Develop and maintain an operational stormwater asset management plan
- Increase the # of flood gauges (rainfall/stream) in the region
- Increase the # of entities that have multi-year drainage CIP list
- Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
- □ Increase use of nature-based flood risk reduction projects
- Develop a regionally coordinated warning and emergency response program that can detect the flood threat and provide timely warning of impending flood danger
- Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
- Increase the proficiency of floodplain managers by increasing the # of them that are certified as Certified Floodplain Managers (CFM) with the Texas Floodplain Management Association
- Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

## **FME** Flood Mitigation Evaluations Fact Sheet

FME ID: 151000094

#### Risk Area 6 Trib 2 bypass & detention at Eagle Pass High School fields

#### **FME** Description

Study includes bypassing flow from Golfcrest Drive to the detention pond with 1-6'x4', RCB Modifying outfall structure from 2-5'x3' RCB to 1-5'x3' RCB, and Lowering existing baseball field by 3 ft to provide an additional 30 ac-ft of storage.

#### Study Type

- □ Flood risk modeling/mapping
- ✓ Flood mitigation study

#### **Study Area**

City/ Cities	Eagle Pass
County/ Counties	Maverick
HUC 8	13080001,
	13080002
HUC 12	130800020703,
	130800020702
Study Area (sq. mi.)	0.10

#### **Emergency Need**

Yes 🗸 No 🗆

#### Known Flood Risk

History of Flooding? Population at Risk Roadways flooded **Critical Facilities Impacted** Notes:

#### **Study Costs**

Total Cost:	
Estimated year to start:	
Time to complete?	

Funding Dedicated?

Yes

Yes

Yes

Yes

✓ Alternative Analysis □ Feasibility Assessments □ Flood preparedness studies



∕es □	No
ſ	′es □

\$143,550	Study Sponsor:	City of Eagle Pass
	Entity with Oversight	City of Eagle Pass
	Included in a Hazard Mitigation	Yes 🗸 No 🗆
	Action Plan or other plan?	
🗆 No 🗸	(Potential) Source of Funding	FIF, local

Study identified as a gap by Region 15 Regional Flood Planning Group (RFPG)

Yes 🗆 No 🗸

Flood Mitigation Evaluations

Study identified because project could not be included as an Flood Mitigation Project (FMP) in the Region 15 Regional Flood Plan because it did meet the minimum requirements, per TWDB guidance for Regional Flood Planning or the provisions of Title 31 of TAQC Chapters 361 and 362.

Yes 🖌 No 🗆

Was the project missing sufficient data to assess whether the proposed project has a negative effect, per TWDB  $Yes \checkmark No \Box$  guidelines?

Was the project recommended by the RFPG to be studied in order for it to provide more project details, such as  $Yes \checkmark No \square$  a benefit cost ratio or the number of structures the project removes from the 100-year floodplain?

#### Related Goals

- Increase community access routes to critical facilities, evacuation routes, during and after a flooding event
- Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain
- Increase the # of communities participating in the National Flood Insurance Program
- Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs
- Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards
- □ Increase participation in the regional flood planning process
- Provide regional detention that could be used for water reuse applications or as part of a floodplain management program
- Increase acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use
- Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website
- Increase the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations
- Reduce the # of structures that have been subject to repeated flooding events through property buyouts

#### **RFPG Recommended**

- Increase the # of entities that adopt higher than NFIPminimum standards
- Develop and maintain an operational stormwater asset management plan
- Increase the # of flood gauges (rainfall/stream) in the region
- Increase the # of entities that have multi-year drainage CIP list
- Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
- □ Increase use of nature-based flood risk reduction projects
- Develop a regionally coordinated warning and emergency response program that can detect the flood threat and provide timely warning of impending flood danger
- Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
- Increase the proficiency of floodplain managers by increasing the # of them that are certified as Certified Floodplain Managers (CFM) with the Texas Floodplain Management Association
- Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

### Risk Area 8 Tributary 2 channel widening near **Alexander Drive**

FME ID: 151000095

#### **FME** Description

Study includes constructing a 3' deep trapezoidal channel with a 76' bottom width with 4:1 side slopes from Graves Elementary School to the confluence of existing channels and constructing a 4' deep trapezoidal channel with a 11' bottom width with 4:1 side slopes from confluence of existing channels to existing culvert at Kelso Drive.

✓ Alternative Analysis

#### Study Type

- □ Flood risk modeling/mapping
- ✓ Flood mitigation study

#### **Study Area**

City/ Cities	Eagle Pass
County/ Counties	Maverick
HUC 8	13080001,
	13080002
HUC 12	130800020703,
	130800020702
Study Area (sq. mi.)	0.04

#### **Emergency Need**

Yes 🖌 No 🗆

#### **Known Flood Risk**

History of Flooding?	Yes 🗸
Population at Risk	
Roadways flooded	Yes 🗸
Critical Facilities Impacted	Yes [
Notes:	

#### **Study Costs**

Total Cost:	12,045	Study Sponsor:	City of Eagle Pass
Estimated year to start:		Entity with Oversight	City of Eagle Pass
Time to complete?		Included in a Hazard Mitigation	Yes 🗸 No 🗆
-		Action Plan or other plan?	
Funding Dedicated?	Yes 🗆 No 🗸	(Potential) Source of Funding	FIF, local

No 🗆

No 🗆 No 🗆

### Study identified as a gap by Region 15 Regional Flood Planning Group (RFPG)

Yes 🗆 No 🗸



HIN'S ST		(Del)	Mrs. Chi	
Freque	ncy of floodi	ing:		
# of struct	ures inunda	ted		
Μ	iles inundate	ed?		
A	The second second second	ii	V _	

roposed Channel Nidening

Agricultural Land impacted Yes □ No □

□ Flood preparedness studies

□ Feasibility Assessments Eagle Pass Creek



Fact Sheet

Flood Mitigation Evaluations Fact Sheet

**FME** 

Study identified because project could not be included as an Flood Mitigation Project (FMP) in the Region 15 Regional Flood Plan because it did meet the minimum requirements, per TWDB guidance for Regional Flood Planning or the provisions of Title 31 of TAQC Chapters 361 and 362.

Yes 🖌 No 🗆

Was the project missing sufficient data to assess whether the proposed project has a negative effect, per TWDB  $\vee$  No  $\square$  guidelines?

Was the project recommended by the RFPG to be studied in order for it to provide more project details, such as Yes  $\checkmark$  No  $\Box$  a benefit cost ratio or the number of structures the project removes from the 100-year floodplain?

#### **Related Goals**

- ✓ Increase community access routes to critical facilities, evacuation routes, during and after a flooding event
- Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain
- Increase the # of communities participating in the National Flood Insurance Program
- Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs
- Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards
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- Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website
- Increase the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations
- Reduce the # of structures that have been subject to repeated flooding events through property buyouts

#### **RFPG Recommended**

- Increase the # of entities that adopt higher than NFIPminimum standards
- Develop and maintain an operational stormwater asset management plan
- Increase the # of flood gauges (rainfall/stream) in the region
- Increase the # of entities that have multi-year drainage CIP list
- Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
- □ Increase use of nature-based flood risk reduction projects
- Develop a regionally coordinated warning and emergency response program that can detect the flood threat and provide timely warning of impending flood danger
- Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
- Increase the proficiency of floodplain managers by increasing the # of them that are certified as Certified Floodplain Managers (CFM) with the Texas Floodplain Management Association
- Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

#### Maverick County Master Drainage Study

#### **FME** Description

Develop Flood risk maps for the county of Maverick and develop CIP

#### Study Type

- ✓ Flood risk modeling/mapping
- ✓ Flood mitigation study

#### Study Area

City/ Cities County/ Counties Maverick HUC 8 13080001, 13080002 **HUC 12** 

✓ Alternative Analysis

Study Area (sq. mi.) 768.49

#### **Emergency Need**

Yes 🗸 No 🗆

#### **Known Flood Risk**

History of Flooding?	Yes 🗸	No 🗆	Frequency:		
Population at Risk			# of structures inundated		
Roadways flooded	Yes 🗆	No 🗆	Miles inundated?		
Critical Facilities Impacted	Yes 🗆	No 🗆	Agricultural Land impacted	Yes 🗆	No 🗆
Notes:					

#### **Study Costs**

Total Cost:	\$250,000	Study Sponsor:		
Estimated year to start:		Entity with Oversight		
Time to complete?		Included in a CIP or other plan?	Yes 🗆	No √
Funding Dedicated?	Yes 🗆 No 🗸	(Potential) Source of Funding		

#### Study identified as a gap by Region 15 Regional Flood Planning Group (RFPG)

Yes 🗸 No 🗆

### Flood Management Evaluations

FME ID: 151000096

Lower Rio Grande Regional Flood Planning Group

## □ Feasibility Assessments

Insert snip of Location Map here

□ Flood preparedness studies

**FME** 

Fact Sheet

Flood Management Evaluations Fact Sheet

Study identified because project could not be included as an Flood Mitigation Project (FMP) in the Region 15 Regional Flood Plan because it did meet the minimum requirements, per TWDB guidance for Regional Flood Planning or the provisions of Title 31 of TAQC Chapters 361 and 362.

Yes 🖌 No 🗆

Was the project missing sufficient data to assess whether the proposed project has a negative effect, per TWDB  $Y_{es} \checkmark N_0 \square$  guidelines?

Was the project recommended by the RFPG to be studied in order for it to provide more project details, such as  $Yes \checkmark No \square$  a benefit cost ratio or the number of structures the project removes from the 100-year floodplain?

#### Related Goals

- □ Increase community access routes to critical facilities, evacuation routes, during and after a flooding event
- Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain
- Increase the # of communities participating in the National Flood Insurance Program
- Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs
- Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards
- □ Increase participation in the regional flood planning process
- Provide regional detention that could be used for water reuse applications or as part of a floodplain management program
- Increase acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use
- Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website
- Increase the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations
- Reduce the # of structures that have been subject to repeated flooding events through property buyouts

#### **RFPG Recommended**

- Increase the # of entities that adopt higher than NFIPminimum standards
- Develop and maintain an operational stormwater asset management plan
- Increase the # of flood gauges (rainfall/stream) in the region
- Increase the # of entities that have multi-year drainage CIP list
- Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
- □ Increase use of nature-based flood risk reduction projects
- Develop a regionally coordinated warning and emergency response program that can detect the flood threat and provide timely warning of impending flood danger
- Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
- Increase the proficiency of floodplain managers by increasing the # of them that are certified as Certified Floodplain Managers (CFM) with the Texas Floodplain Management Association
- Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

#### Starr County Master Drainage Study

#### **FME** Description

Develop Flood risk maps for the county of Starr and develop CIP

#### Study Type

- ✓ Flood risk modeling/mapping
- ✓ Flood mitigation study

City/ Cities

Starr

County/ Counties

#### Study Area

HUC 8 12110207, 12110208 **HUC 12** Study Area (sq. mi.) 1232.38

#### **Emergency Need**

Yes 🗸 No 🗆

#### **Known Flood Risk**

History of Flooding?	Yes 🗸	No 🗆	Frequency:		
Population at Risk			# of structures inundated		
Roadways flooded	Yes 🗆	No 🗆	Miles inundated?		
Critical Facilities Impacted	Yes 🗆	No 🗆	Agricultural Land impacted	Yes 🗆	No $\square$
Notes:					

#### **Study Costs**

Total Cost:	\$250,000	Study Sponsor:		
Estimated year to start:		Entity with Oversight		
Time to complete?		Included in a CIP or other plan?	Yes 🗆	No ✓
Funding Dedicated?	Yes 🗆 No 🗸	(Potential) Source of Funding		

### Study identified as a gap by Region 15 Regional Flood Planning Group (RFPG)

Yes 🗸 No 🗆

### Lower Rio Grande Regional Flood Planning Group

Flood Management Evaluations Fact Sheet

**FME** 

FME ID: 151000097



Insert snip of Location Map here

Flood Management Evaluations Fact Sheet

Study identified because project could not be included as an Flood Mitigation Project (FMP) in the Region 15 Regional Flood Plan because it did meet the minimum requirements, per TWDB guidance for Regional Flood Planning or the provisions of Title 31 of TAQC Chapters 361 and 362.

Yes 🖌 No 🗆

Was the project missing sufficient data to assess whether the proposed project has a negative effect, per TWDB  $Y_{es} \checkmark N_0 \square$  guidelines?

Was the project recommended by the RFPG to be studied in order for it to provide more project details, such as  $Yes \checkmark No \square$  a benefit cost ratio or the number of structures the project removes from the 100-year floodplain?

#### Related Goals

- Increase community access routes to critical facilities, evacuation routes, during and after a flooding event
- Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain
- Increase the # of communities participating in the National Flood Insurance Program
- Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs
- Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards
- □ Increase participation in the regional flood planning process
- Provide regional detention that could be used for water reuse applications or as part of a floodplain management program
- Increase acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use
- Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website
- Increase the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations
- Reduce the # of structures that have been subject to repeated flooding events through property buyouts

#### **RFPG Recommended**

- Increase the # of entities that adopt higher than NFIPminimum standards
- Develop and maintain an operational stormwater asset management plan
- Increase the # of flood gauges (rainfall/stream) in the region
- Increase the # of entities that have multi-year drainage CIP list
- Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
- □ Increase use of nature-based flood risk reduction projects
- Develop a regionally coordinated warning and emergency response program that can detect the flood threat and provide timely warning of impending flood danger
- Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
- Increase the proficiency of floodplain managers by increasing the # of them that are certified as Certified Floodplain Managers (CFM) with the Texas Floodplain Management Association
- Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

#### Starr County Drainage District Master Drainage Study

#### **FME** Description

Develop Flood risk maps for the Starr County Drainage District and develop CIP

#### Study Type

- ✓ Flood risk modeling/mapping
- ✓ Flood mitigation study

#### **Study Area**

City/ Cities County/ Counties Starr HUC 8 12110207, 12110208 **HUC 12** Study Area (sq. mi.) 1232.34

✓ Alternative Analysis

□ Feasibility Assessments

#### **Emergency Need**

Yes 🗸 No 🗆

#### **Known Flood Risk**

History of Flooding?	Yes 🖌 No 🗆	Frequency:	
Population at Risk		# of structures inundated	
Roadways flooded	Yes 🗆 No 🗆	Miles inundated?	
Critical Facilities Impacted	Yes 🗆 No 🗆	Agricultural Land impacted	Yes 🗆 No 🗆
Notes:			

#### **Study Costs**

\$250,000	Study Sponsor:		
	Entity with Oversight		
	Included in a CIP or other plan?	Yes 🗆	No √
Yes 🗆 No 🗸	(Potential) Source of Funding		
	\$250,000 Yes □ No ✓	<ul> <li>\$250,000 Study Sponsor: Entity with Oversight Included in a CIP or other plan?</li> <li>Yes □ No ✓ (Potential) Source of Funding</li> </ul>	<ul> <li>\$250,000 Study Sponsor: Entity with Oversight</li> <li>Included in a CIP or other plan? Yes □</li> <li>Yes □ No ✓ (Potential) Source of Funding</li> </ul>

#### G)

Yes 🗸 No 🗆

Study	identified	as a gap	by Region	15 Regional	Flood Planning	Group (RFF	эG
Vac /	NI- I						

#### Flood Management Evaluations Fact Sheet

**FME** 

FME ID: 151000098

□ Flood preparedness studies





Flood Management Evaluations

Fact Sheet

Study identified because project could not be included as an Flood Mitigation Project (FMP) in the Region 15 Regional Flood Plan because it did meet the minimum requirements, per TWDB guidance for Regional Flood Planning or the provisions of Title 31 of TAQC Chapters 361 and 362.

Yes 🖌 No 🗆

Was the project missing sufficient data to assess whether the proposed project has a negative effect, per TWDB  $Yes \checkmark No \Box$  guidelines?

Was the project recommended by the RFPG to be studied in order for it to provide more project details, such as  $Yes \checkmark No \square$  a benefit cost ratio or the number of structures the project removes from the 100-year floodplain?

#### Related Goals

- Increase community access routes to critical facilities, evacuation routes, during and after a flooding event
- Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain
- Increase the # of communities participating in the National Flood Insurance Program
- Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs
- Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards
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- Increase the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations
- Reduce the # of structures that have been subject to repeated flooding events through property buyouts

#### **RFPG Recommended**

- Increase the # of entities that adopt higher than NFIPminimum standards
- Develop and maintain an operational stormwater asset management plan
- Increase the # of flood gauges (rainfall/stream) in the region
- Increase the # of entities that have multi-year drainage CIP list
- Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
- □ Increase use of nature-based flood risk reduction projects
- Develop a regionally coordinated warning and emergency response program that can detect the flood threat and provide timely warning of impending flood danger
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- Increase the proficiency of floodplain managers by increasing the # of them that are certified as Certified Floodplain Managers (CFM) with the Texas Floodplain Management Association
- Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

#### La Grulla Master Drainage Study

#### **FME** Description

Develop Flood risk maps for the city of La Grulla and develop CIP

#### Study Type

- ✓ Flood risk modeling/mapping
- ✓ Flood mitigation study
- Study Area
  - City/ Cities La Grulla
  - County/ Counties Starr
    - HUC 8

**HUC 12** 

Study Area (sq. mi.) 0.94

#### **Emergency Need**

Yes 🗸 No 🗆

#### **Known Flood Risk**

History of Flooding?	Yes 🗸	No 🗆	Frequency:		
Population at Risk			# of structures inundated		
Roadways flooded	Yes 🗆	No 🗆	Miles inundated?		
Critical Facilities Impacted	Yes 🗆	No 🗆	Agricultural Land impacted	Yes 🗆	No 🗆
Notes:					

#### **Study Costs**

Total Cost:	\$250,000	Study Sponsor:		
Estimated year to start:		Entity with Oversight		
Time to complete?		Included in a CIP or other plan?	Yes 🗆	No 🗸
Funding Dedicated?	Yes 🗆 No 🗸	(Potential) Source of Funding		

#### Study identified as a gap by Region 15 Regional Flood Planning Group (RFPG)

Yes 🗸 No 🗆

## FME ID: 151000099

✓ Alternative Analysis

□ Flood preparedness studies



## **FME**

Fact Sheet

Flood Management Evaluations

Flood Management Evaluations Fact Sheet

Study identified because project could not be included as an Flood Mitigation Project (FMP) in the Region 15 Regional Flood Plan because it did meet the minimum requirements, per TWDB guidance for Regional Flood Planning or the provisions of Title 31 of TAQC Chapters 361 and 362.

Yes 🖌 No 🗆

Was the project missing sufficient data to assess whether the proposed project has a negative effect, per TWDB  $Y_{es} \checkmark N_0 \square$  guidelines?

Was the project recommended by the RFPG to be studied in order for it to provide more project details, such as  $Yes \checkmark No \square$  a benefit cost ratio or the number of structures the project removes from the 100-year floodplain?

#### Related Goals

- □ Increase community access routes to critical facilities, evacuation routes, during and after a flooding event
- Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain
- Increase the # of communities participating in the National Flood Insurance Program
- Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs
- Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards
- □ Increase participation in the regional flood planning process
- Provide regional detention that could be used for water reuse applications or as part of a floodplain management program
- Increase acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use
- Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website
- Increase the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations
- Reduce the # of structures that have been subject to repeated flooding events through property buyouts

#### **RFPG Recommended**

- Increase the # of entities that adopt higher than NFIPminimum standards
- Develop and maintain an operational stormwater asset management plan
- Increase the # of flood gauges (rainfall/stream) in the region
- Increase the # of entities that have multi-year drainage CIP list
- Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
- □ Increase use of nature-based flood risk reduction projects
- Develop a regionally coordinated warning and emergency response program that can detect the flood threat and provide timely warning of impending flood danger
- Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
- Increase the proficiency of floodplain managers by increasing the # of them that are certified as Certified Floodplain Managers (CFM) with the Texas Floodplain Management Association
- Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

#### Page 1 of 2

### Flood Management Evaluations

FME ID: 151000100

#### **FME** Description

Develop Flood risk maps for the city of Roma and develop CIP

#### Study Type

- ✓ Flood risk modeling/mapping
- ✓ Flood mitigation study

#### Study Area

City/ Cities Roma County/ Counties Starr HUC 8 12110207,

12110208

**HUC 12** 

Study Area (sq. mi.) 5.98

#### **Emergency Need**

Yes 🗸 No 🗆

#### **Known Flood Risk**

History of Flooding?	Yes 🗸	No 🗆	Frequency:		
Population at Risk			# of structures inundated		
Roadways flooded	Yes 🗆	No 🗆	Miles inundated?		
Critical Facilities Impacted	Yes 🗆	No 🗆	Agricultural Land impacted	Yes 🗆	No 🗆
Notes:					

#### **Study Costs**

Total Cost:	\$250,000	Study Sponsor:		
Estimated year to start:		Entity with Oversight		
Time to complete?		Included in a CIP or other plan?	Yes 🗆	No √
Funding Dedicated?	Yes 🗆 No 🗸	(Potential) Source of Funding		

#### Study identified as a gap by Region 15 Regional Flood Planning Group (RFPG)

Yes 🗸 No 🗆



Lower Rio Grande Regional Flood Planning Group

Insert snip of Location Map here

**Roma Master Drainage Study** 

✓ Alternative Analysis

Fact Sheet

□ Flood preparedness studies

# **FME**

□ Feasibility Assessments

Flood Management Evaluations Fact Sheet

Study identified because project could not be included as an Flood Mitigation Project (FMP) in the Region 15 Regional Flood Plan because it did meet the minimum requirements, per TWDB guidance for Regional Flood Planning or the provisions of Title 31 of TAQC Chapters 361 and 362.

Yes 🖌 No 🗆

Was the project missing sufficient data to assess whether the proposed project has a negative effect, per TWDB  $Y_{es} \checkmark N_0 \square$  guidelines?

Was the project recommended by the RFPG to be studied in order for it to provide more project details, such as  $Yes \checkmark No \square$  a benefit cost ratio or the number of structures the project removes from the 100-year floodplain?

#### Related Goals

- □ Increase community access routes to critical facilities, evacuation routes, during and after a flooding event
- □ Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain
- Increase the # of communities participating in the National Flood Insurance Program
- Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs
- Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards
- □ Increase participation in the regional flood planning process
- Provide regional detention that could be used for water reuse applications or as part of a floodplain management program
- Increase acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use
- Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website
- Increase the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations
- Reduce the # of structures that have been subject to repeated flooding events through property buyouts

#### **RFPG Recommended**

- Increase the # of entities that adopt higher than NFIPminimum standards
- Develop and maintain an operational stormwater asset management plan
- Increase the # of flood gauges (rainfall/stream) in the region
- Increase the # of entities that have multi-year drainage CIP list
- Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
- □ Increase use of nature-based flood risk reduction projects
- Develop a regionally coordinated warning and emergency response program that can detect the flood threat and provide timely warning of impending flood danger
- Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
- Increase the proficiency of floodplain managers by increasing the # of them that are certified as Certified Floodplain Managers (CFM) with the Texas Floodplain Management Association
- Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

## **Escobares Master Drainage Study**

**FME** Description Develop Flood risk maps for the city of Escobares and develop CIP

#### Study Type

- ✓ Flood risk modeling/mapping
- ✓ Flood mitigation study

#### Study Area

- City/Cities Escobares County/ Counties Starr
  - HUC 8 12110207,

12110208

**HUC 12** 

Study Area (sq. mi.) 2.73

#### **Emergency Need**

Yes 🗸 No 🗆

#### **Known Flood Risk**

History of Flooding?	Yes 🗸	No 🗆	Frequency:		
Population at Risk			# of structures inundated		
Roadways flooded	Yes 🗆	No 🗆	Miles inundated?		
Critical Facilities Impacted	Yes 🗆	No 🗆	Agricultural Land impacted	Yes 🗆	No 🗆
Notes:					

#### **Study Costs**

Total Cost:	\$250,000	Study Sponsor:		
Estimated year to start:		Entity with Oversight		
Time to complete?		Included in a CIP or other plan?	Yes 🗆	No √
Funding Dedicated?	Yes 🗆 No 🗸	(Potential) Source of Funding		

#### Study identified as a gap by Region 15 Regional Flood Planning Group (RFPG)

Yes 🗸 No 🗆

## Flood Management Evaluations

FME ID: 151000101

□ Flood preparedness studies

□ Feasibility Assessments

Insert snip of Location Map here

✓ Alternative Analysis



**FME** 

Fact Sheet

Flood Management Evaluations Fact Sheet

Study identified because project could not be included as an Flood Mitigation Project (FMP) in the Region 15 Regional Flood Plan because it did meet the minimum requirements, per TWDB guidance for Regional Flood Planning or the provisions of Title 31 of TAQC Chapters 361 and 362.

Yes 🖌 No 🗆

Was the project missing sufficient data to assess whether the proposed project has a negative effect, per TWDB Yes  $\checkmark$  No  $\Box$  guidelines?

Was the project recommended by the RFPG to be studied in order for it to provide more project details, such as  $Yes \checkmark No \square$  a benefit cost ratio or the number of structures the project removes from the 100-year floodplain?

#### Related Goals

- Increase community access routes to critical facilities, evacuation routes, during and after a flooding event
- Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain
- Increase the # of communities participating in the National Flood Insurance Program
- Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs
- Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards
- □ Increase participation in the regional flood planning process
- Provide regional detention that could be used for water reuse applications or as part of a floodplain management program
- Increase acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use
- Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website
- Increase the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations
- Reduce the # of structures that have been subject to repeated flooding events through property buyouts

#### **RFPG Recommended**

- Increase the # of entities that adopt higher than NFIPminimum standards
- Develop and maintain an operational stormwater asset management plan
- Increase the # of flood gauges (rainfall/stream) in the region
- Increase the # of entities that have multi-year drainage CIP list
- Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
- □ Increase use of nature-based flood risk reduction projects
- Develop a regionally coordinated warning and emergency response program that can detect the flood threat and provide timely warning of impending flood danger
- Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
- Increase the proficiency of floodplain managers by increasing the # of them that are certified as Certified Floodplain Managers (CFM) with the Texas Floodplain Management Association
- Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain





Yes 🗸 No 🗆

#### **Known Flood Risk**

History of Flooding?	Yes 🖌 No 🗆	Frequency:	
Population at Risk		# of structures inundated	
Roadways flooded	Yes 🗆 No 🗆	Miles inundated?	
Critical Facilities Impacted	Yes 🗆 No 🗆	Agricultural Land impacted	Yes 🗆 No 🗆
Notes:			

#### **Study Costs**

Total Cost:	\$250,000	Study Sponsor:		
Estimated year to start:		Entity with Oversight		
Time to complete?		Included in a CIP or other plan?	Yes $\square$	No 🗸
Funding Dedicated?	Yes 🗆 No 🗸	(Potential) Source of Funding		

#### Study identified as a gap by Region 15 Regional Flood Planning Group (RFPG)

Yes 🗸 No 🗆

#### Flood Management Evaluations Fact Sheet

**FME** 

FME ID: 151000102
Flood Management Evaluations Fact Sheet

Study identified because project could not be included as an Flood Mitigation Project (FMP) in the Region 15 Regional Flood Plan because it did meet the minimum requirements, per TWDB guidance for Regional Flood Planning or the provisions of Title 31 of TAQC Chapters 361 and 362.

Yes 🖌 No 🗆

Was the project missing sufficient data to assess whether the proposed project has a negative effect, per TWDB  $Y_{es} \checkmark N_0 \square$  guidelines?

Was the project recommended by the RFPG to be studied in order for it to provide more project details, such as  $Yes \checkmark No \square$  a benefit cost ratio or the number of structures the project removes from the 100-year floodplain?

# Related Goals

- □ Increase community access routes to critical facilities, evacuation routes, during and after a flooding event
- Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain
- Increase the # of communities participating in the National Flood Insurance Program
- Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs
- Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards
- □ Increase participation in the regional flood planning process
- Provide regional detention that could be used for water reuse applications or as part of a floodplain management program
- Increase acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use
- Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website
- Increase the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations
- Reduce the # of structures that have been subject to repeated flooding events through property buyouts

## **RFPG Recommended**

- Increase the # of entities that adopt higher than NFIPminimum standards
- Develop and maintain an operational stormwater asset management plan
- Increase the # of flood gauges (rainfall/stream) in the region
- Increase the # of entities that have multi-year drainage CIP list
- Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
- □ Increase use of nature-based flood risk reduction projects
- Develop a regionally coordinated warning and emergency response program that can detect the flood threat and provide timely warning of impending flood danger
- Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
- Increase the proficiency of floodplain managers by increasing the # of them that are certified as Certified Floodplain Managers (CFM) with the Texas Floodplain Management Association
- Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain



History of Flooding?	Yes 🖌 No 🗆	Frequency:	
Population at Risk		# of structures inundated	
Roadways flooded	Yes 🗆 No 🗆	Miles inundated?	
Critical Facilities Impacted	Yes 🗆 No 🗆	Agricultural Land impacted	Yes 🗆 No
Notes:		<b>.</b> .	

# **Study Costs**

Total Cost:	\$500,000	Study Sponsor:		
Estimated year to start:		Entity with Oversight		
Time to complete?		Included in a CIP or other plan?	Yes 🗆	No √
Funding Dedicated?	Yes 🗆 No 🗸	(Potential) Source of Funding		

Study identified as a gap by Region 15 Regional Flood Planning Group (RFPG)

Yes 🖌 No 🗆

#### Flood Management Evaluations Fact Sheet

**FME** 

FME ID: 151000124

Flood Management Evaluations Fact Sheet

Study identified because project could not be included as an Flood Mitigation Project (FMP) in the Region 15 Regional Flood Plan because it did meet the minimum requirements, per TWDB guidance for Regional Flood Planning or the provisions of Title 31 of TAQC Chapters 361 and 362.

Yes 🖌 No 🗆

Was the project missing sufficient data to assess whether the proposed project has a negative effect, per TWDB  $Y_{es} \checkmark N_0 \square$  guidelines?

Was the project recommended by the RFPG to be studied in order for it to provide more project details, such as  $Yes \checkmark No \square$  a benefit cost ratio or the number of structures the project removes from the 100-year floodplain?

# Related Goals

- Increase community access routes to critical facilities, evacuation routes, during and after a flooding event
- Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain
- Increase the # of communities participating in the National Flood Insurance Program
- Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs
- Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards
- □ Increase participation in the regional flood planning process
- Provide regional detention that could be used for water reuse applications or as part of a floodplain management program
- Increase acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use
- Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website
- Increase the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations
- Reduce the # of structures that have been subject to repeated flooding events through property buyouts

# **RFPG Recommended**

- Increase the # of entities that adopt higher than NFIPminimum standards
- Develop and maintain an operational stormwater asset management plan
- Increase the # of flood gauges (rainfall/stream) in the region
- Increase the # of entities that have multi-year drainage CIP list
- Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
- □ Increase use of nature-based flood risk reduction projects
- Develop a regionally coordinated warning and emergency response program that can detect the flood threat and provide timely warning of impending flood danger
- Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
- Increase the proficiency of floodplain managers by increasing the # of them that are certified as Certified Floodplain Managers (CFM) with the Texas Floodplain Management Association
- Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

# Webb County Drainage District #1 **Master Drainage Study**

FME ID: 151000125

□ Flood preparedness studies

### **FME** Description

Develop Flood risk maps for the Webb County Drainage District #1 and develop CIP

# Study Type

- ✓ Flood risk modeling/mapping
- ✓ Flood mitigation study
- Study Area
  - City/ Cities County/ Counties Webb HUC 8 13080002 **HUC 12** Study Area (sq. mi.) 9.12

✓ Alternative Analysis

# **Emergency Need**

Yes 🗸 No 🗆

# **Known Flood Risk**

History of Flooding?	Yes 🗸	No 🗆	Frequency:		
Population at Risk			# of structures inundated		
Roadways flooded	Yes 🗆	No 🗆	Miles inundated?		
Critical Facilities Impacted	Yes 🗆	No 🗆	Agricultural Land impacted	Yes 🗆	No 🗆
Notes:					

# **Study Costs**

Total Cost:	\$1,000,000	Study Sponsor:		
Estimated year to start:		Entity with Oversight		
Time to complete?		Included in a CIP or other plan?	Yes 🗆	No 🗸
Funding Dedicated?	Yes 🗆 No 🗸	(Potential) Source of Funding		

# Study identified as a gap by Region 15 Regional Flood Planning Group (RFPG)

Yes 🗸 No 🗆





# **FME** Flood Management Evaluations

Fact Sheet

Flood Management Evaluations Fact Sheet

Study identified because project could not be included as an Flood Mitigation Project (FMP) in the Region 15 Regional Flood Plan because it did meet the minimum requirements, per TWDB guidance for Regional Flood Planning or the provisions of Title 31 of TAQC Chapters 361 and 362.

Yes 🖌 No 🗆

Was the project missing sufficient data to assess whether the proposed project has a negative effect, per TWDB Yes  $\checkmark$  No  $\Box$  guidelines?

Was the project recommended by the RFPG to be studied in order for it to provide more project details, such as  $Yes \checkmark No \square$  a benefit cost ratio or the number of structures the project removes from the 100-year floodplain?

# Related Goals

- □ Increase community access routes to critical facilities, evacuation routes, during and after a flooding event
- Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain
- Increase the # of communities participating in the National Flood Insurance Program
- Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs
- Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards
- □ Increase participation in the regional flood planning process
- Provide regional detention that could be used for water reuse applications or as part of a floodplain management program
- Increase acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use
- Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website
- Increase the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations
- Reduce the # of structures that have been subject to repeated flooding events through property buyouts

# **RFPG Recommended**

- Increase the # of entities that adopt higher than NFIPminimum standards
- Develop and maintain an operational stormwater asset management plan
- Increase the # of flood gauges (rainfall/stream) in the region
- Increase the # of entities that have multi-year drainage CIP list
- Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
- □ Increase use of nature-based flood risk reduction projects
- Develop a regionally coordinated warning and emergency response program that can detect the flood threat and provide timely warning of impending flood danger
- Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
- Increase the proficiency of floodplain managers by increasing the # of them that are certified as Certified Floodplain Managers (CFM) with the Texas Floodplain Management Association
- Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

# **Rio Bravo Master Drainage Study FME** Description

Develop Flood risk maps for the city of Rio Bravo and develop CIP

# Study Type

- ✓ Flood risk modeling/mapping
- ✓ Flood mitigation study
- Study Area
  - City/ Cities Rio Bravo County/ Counties Webb 13080002 HUC 8 **HUC 12**

Study Area (sq. mi.) 0.66

# **Emergency Need**

Yes 🗸 No 🗆

# **Known Flood Risk**

History of Flooding?	Yes 🗸	No 🗆	Frequency:	
Population at Risk			# of structures inundated	
Roadways flooded	Yes 🗆	No 🗆	Miles inundated?	
Critical Facilities Impacted	Yes 🗆	No 🗆	Agricultural Land impacted	Yes 🗆 No 🗆
Notes:				

# **Study Costs**

Total Cost:	\$250,000	Study Sponsor:	
Estimated year to start:		Entity with Oversight	
Time to complete?		Included in a CIP or other plan?	Yes 🗆 No 🗸
Funding Dedicated?	Yes 🗆 No 🗸	(Potential) Source of Funding	

Study identified as a gap by Region 15 Regional Flood Planning Group (RFPG)

✓ Alternative Analysis

□ Feasibility Assessments

Yes 🖌 No 🗆

#### Flood Management Evaluations Fact Sheet

□ Flood preparedness studies

**FME** 

FME ID: 151000127



Lower Rio Grande Regional Flood Planning Group

Flood Management Evaluations Fact Sheet

Study identified because project could not be included as an Flood Mitigation Project (FMP) in the Region 15 Regional Flood Plan because it did meet the minimum requirements, per TWDB guidance for Regional Flood Planning or the provisions of Title 31 of TAQC Chapters 361 and 362.

Yes 🖌 No 🗆

Was the project missing sufficient data to assess whether the proposed project has a negative effect, per TWDB  $Y_{es} \checkmark N_0 \square$  guidelines?

Was the project recommended by the RFPG to be studied in order for it to provide more project details, such as  $Yes \checkmark No \square$  a benefit cost ratio or the number of structures the project removes from the 100-year floodplain?

# Related Goals

- □ Increase community access routes to critical facilities, evacuation routes, during and after a flooding event
- Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain
- Increase the # of communities participating in the National Flood Insurance Program
- Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs
- Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards
- □ Increase participation in the regional flood planning process
- Provide regional detention that could be used for water reuse applications or as part of a floodplain management program
- Increase acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use
- Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website
- Increase the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations
- Reduce the # of structures that have been subject to repeated flooding events through property buyouts

# **RFPG Recommended**

Yes v No

- Increase the # of entities that adopt higher than NFIPminimum standards
- Develop and maintain an operational stormwater asset management plan
- Increase the # of flood gauges (rainfall/stream) in the region
- Increase the # of entities that have multi-year drainage CIP list
- Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
- □ Increase use of nature-based flood risk reduction projects
- Develop a regionally coordinated warning and emergency response program that can detect the flood threat and provide timely warning of impending flood danger
- Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
- Increase the proficiency of floodplain managers by increasing the # of them that are certified as Certified Floodplain Managers (CFM) with the Texas Floodplain Management Association
- Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

# El Cenizo Master Drainage Study

## **FME** Description

Develop Flood risk maps for the city of El Cenizo and develop CIP

# Study Type

✓ Flood risk modeling/mapping ✓Flood mitigation study

✓ Alternative Analysis □ Feasibility Assessments

### Study Area

City/ Cities El Cenizo County/ Counties Webb 13080002 HUC 8 **HUC 12** 

Study Area (sq. mi.) 0.53

# **Emergency Need**

Yes 🗸 No 🗆

# **Known Flood Risk**

History of Flooding?	Yes 🗸	No 🗆	Frequency:	
Population at Risk			# of structures inundated	
Roadways flooded	Yes 🗆	No 🗆	Miles inundated?	
Critical Facilities Impacted	Yes 🗆	No 🗆	Agricultural Land impacted	Yes 🗆 No 🗆
Notes:				

# **Study Costs**

Total Cost:	\$250,000	Study Sponsor:	
Estimated year to start:		Entity with Oversight	
Time to complete?		Included in a CIP or other plan?	Yes 🗆 No 🗸
Funding Dedicated?	Yes 🗆 No 🗸	(Potential) Source of Funding	

# Study identified as a gap by Region 15 Regional Flood Planning Group (RFPG)

Yes 🖌 No 🗆



#### Flood Management Evaluations Fact Sheet

**FME** 

FME ID: 151000128

□ Flood preparedness studies

Insert snip of Location Map here



Flood Management Evaluations Fact Sheet

Study identified because project could not be included as an Flood Mitigation Project (FMP) in the Region 15 Regional Flood Plan because it did meet the minimum requirements, per TWDB guidance for Regional Flood Planning or the provisions of Title 31 of TAQC Chapters 361 and 362.

Yes 🖌 No 🗆

Was the project missing sufficient data to assess whether the proposed project has a negative effect, per TWDB  $Y_{es} \checkmark N_0 \square$  guidelines?

Was the project recommended by the RFPG to be studied in order for it to provide more project details, such as  $Yes \checkmark No \square$  a benefit cost ratio or the number of structures the project removes from the 100-year floodplain?

# Related Goals

- Increase community access routes to critical facilities, evacuation routes, during and after a flooding event
- Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain
- Increase the # of communities participating in the National Flood Insurance Program
- Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs
- Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards
- □ Increase participation in the regional flood planning process
- Provide regional detention that could be used for water reuse applications or as part of a floodplain management program
- Increase acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use
- Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website
- Increase the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations
- Reduce the # of structures that have been subject to repeated flooding events through property buyouts

# **RFPG Recommended**

- Increase the # of entities that adopt higher than NFIPminimum standards
- Develop and maintain an operational stormwater asset management plan
- Increase the # of flood gauges (rainfall/stream) in the region
- Increase the # of entities that have multi-year drainage CIP list
- Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
- □ Increase use of nature-based flood risk reduction projects
- Develop a regionally coordinated warning and emergency response program that can detect the flood threat and provide timely warning of impending flood danger
- Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
- Increase the proficiency of floodplain managers by increasing the # of them that are certified as Certified Floodplain Managers (CFM) with the Texas Floodplain Management Association
- Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

# Lower Rio Grande Regional Flood Planning Group

# **FME**

Fact Sheet

### Flood Management Evaluations

# **City of Laredo Project 6**

#### FME ID: 151000130

### **FME Description**

Vidaurri Avenue Roadway Drainage Improvements to prevent future drainage in the area. Street improvements from Scott Street to Jefferson Street.

✓ Alternative Analysis

□ Feasibility Assessments

## Study Type

- □ Flood risk modeling/mapping
- ✓ Flood mitigation study

#### **Study Area**

City/ Cities	Laredo
County/ Counties	Webb
HUC 8	13080002
HUC 12	130800022405,
	130800022610,
	130800022611,
	130800022612,
	130800022801,
	130800022802,
	130800022804, 130800022805,
	130800022809, 130800030208,
	130800022806

Study Area (sq. mi.) 0.70

#### **Emergency Need**

Yes 🗸 No 🗆

### **Known Flood Risk**

History of Flooding?	Yes 🗸	No 🗆
Population at Risk		
Roadways flooded	Yes 🗸	No 🗆
Critical Facilities Impacted	Yes 🗆	No 🗆
Notes:		

## **Study Costs**

Total Cost:

\$330,000

Study Sponsor: Laredo

Frequency:

Agricultural Land impacted  $Yes \square No \square$ 

# of structures inundated Miles inundated? □ Flood preparedness studies





#### Flood Management Evaluations Fact Sheet

Estimated year to start: Time to complete? Funding Dedicated?

Yes 🗆 No 🗸

Entity with Oversight Included in a CIP or other plan? (Potential) Source of Funding Laredo Yes ✓ No □ N/A

Study identified as a gap by Region 15 Regional Flood Planning Group (RFPG) Yes D No ✓

Study identified because project could not be included as an Flood Mitigation Project (FMP) in the Region 15 Regional Flood Plan because it did meet the minimum requirements, per TWDB guidance for Regional Flood Planning or the provisions of Title 31 of TAQC Chapters 361 and 362.

Yes 🖌 No 🗆

Was the project missing sufficient data to assess whether the proposed project has a negative effect, per TWDB guidelines? Yes 🗸 No 🗆

Was the project recommended by the RFPG to be studied in order for it to provide more project details, such as a benefit  $Yes \checkmark No \square$  cost ratio or the number of structures the project removes from the 100-year floodplain?

#### Related Goals

- Increase community access routes to critical facilities, evacuation routes, during and after a flooding event
- Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain
- Increase the # of communities participating in the National Flood Insurance Program
- Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs
- Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards
- □ Increase participation in the regional flood planning process
- Provide regional detention that could be used for water reuse applications or as part of a floodplain management program
- Increase acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use
- Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website
- Increase the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations
- □ Reduce the # of structures that have been subject to repeated flooding events through property buyouts

#### **RFPG Recommended**

- Increase the # of entities that adopt higher than NFIP-minimum standards
- Develop and maintain an operational stormwater asset management plan
- □ Increase the # of flood gauges (rainfall/stream) in the region
- □ Increase the # of entities that have multi-year drainage CIP list
- Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
- □ Increase use of nature-based flood risk reduction projects
- Develop a regionally coordinated warning and emergency response program that can detect the flood threat and provide timely warning of impending flood danger
- Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
- Increase the proficiency of floodplain managers by increasing the # of them that are certified as Certified Floodplain Managers (CFM) with the Texas Floodplain Management Association
- Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

### **FME** Description Develop Flood risk maps for the county of Webb and develop CIP Study Type ✓ Flood risk modeling/mapping ✓ Alternative Analysis □ Flood preparedness studies ✓ Flood mitigation study □ Feasibility Assessments

# Study Area

City/ Cities	
County/ Counties	Webb
HUC 8	13080002
HUC 12	
Study Area (sq. mi.)	1654.59
morgoncy No	od

# Emergency Need

Yes 🗸 No 🗆

# **Known Flood Risk**

History of Flooding?	Yes 🖌 No 🗆	Frequency:	
Population at Risk		# of structures inundated	
Roadways flooded	Yes 🗆 No 🗆	Miles inundated?	
Critical Facilities Impacted	Yes 🗆 No 🗆	Agricultural Land impacted	Yes 🗆 No 🗆
Notes:			

# **Study Costs**

Total Cost:	\$1,000,000	Study Sponsor:	
Estimated year to start:		Entity with Oversight	
Time to complete?		Included in a CIP or other plan?	Yes 🗆 No 🗸
Funding Dedicated?	Yes 🗆 No 🗸	(Potential) Source of Funding	

# Study identified as a gap by Region 15 Regional Flood Planning Group (RFPG)

Yes 🖌 No 🗆

Webb County Master Drainage Study

## Flood Management Evaluations Fact Sheet

**FME** 

Lower Rio Grande Regional Flood Planning Group

FME ID: 151000131



Flood Management Evaluations Fact Sheet

Study identified because project could not be included as an Flood Mitigation Project (FMP) in the Region 15 Regional Flood Plan because it did meet the minimum requirements, per TWDB guidance for Regional Flood Planning or the provisions of Title 31 of TAQC Chapters 361 and 362.

Yes 🖌 No 🗆

Was the project missing sufficient data to assess whether the proposed project has a negative effect, per TWDB  $Y_{es} \checkmark N_0 \square$  guidelines?

Was the project recommended by the RFPG to be studied in order for it to provide more project details, such as  $Yes \checkmark No \square$  a benefit cost ratio or the number of structures the project removes from the 100-year floodplain?

# Related Goals

- □ Increase community access routes to critical facilities, evacuation routes, during and after a flooding event
- Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain
- Increase the # of communities participating in the National Flood Insurance Program
- Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs
- Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards
- □ Increase participation in the regional flood planning process
- Provide regional detention that could be used for water reuse applications or as part of a floodplain management program
- Increase acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use
- Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website
- Increase the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations
- Reduce the # of structures that have been subject to repeated flooding events through property buyouts

# **RFPG Recommended**

- Increase the # of entities that adopt higher than NFIPminimum standards
- Develop and maintain an operational stormwater asset management plan
- Increase the # of flood gauges (rainfall/stream) in the region
- Increase the # of entities that have multi-year drainage CIP list
- Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
- □ Increase use of nature-based flood risk reduction projects
- Develop a regionally coordinated warning and emergency response program that can detect the flood threat and provide timely warning of impending flood danger
- Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
- Increase the proficiency of floodplain managers by increasing the # of them that are certified as Certified Floodplain Managers (CFM) with the Texas Floodplain Management Association
- Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

# Zapata County Master Drainage Study **FME** Description

Develop Flood risk maps for the county of Zapata and develop CIP

# Study Type

- ✓ Flood risk modeling/mapping
- ✓ Flood mitigation study

# Study Area

### City/ Cities Insert snip of Location Map here County/ Counties Zapata HUC 8 **HUC 12** Study Area (sq. mi.) 150.03

✓ Alternative Analysis

□ Feasibility Assessments

## **Emergency Need**

Yes 🗸 No 🗆

# **Known Flood Risk**

History of Flooding?	Yes 🖌 No 🗆	Frequency:	
Population at Risk		# of structures inundated	
Roadways flooded	Yes 🗆 No 🗆	Miles inundated?	
Critical Facilities Impacted	Yes 🗆 No 🗆	Agricultural Land impacted	Yes 🗆 No 🗆
Notes:			

# **Study Costs**

Total Cost:	\$250,000	Study Sponsor:	
Estimated year to start:		Entity with Oversight	
Time to complete?		Included in a CIP or other plan?	Yes 🗆 No 🗸
Funding Dedicated?	Yes 🗆 No 🗸	(Potential) Source of Funding	

# Study identified as a gap by Region 15 Regional Flood Planning Group (RFPG)

Yes 🖌 No 🗆



□ Flood preparedness studies

Lower Rio Grande Regional Flood Planning Group

FME ID: 151000132

**FME** 

Flood Management Evaluations Fact Sheet

Study identified because project could not be included as an Flood Mitigation Project (FMP) in the Region 15 Regional Flood Plan because it did meet the minimum requirements, per TWDB guidance for Regional Flood Planning or the provisions of Title 31 of TAQC Chapters 361 and 362.

Yes 🖌 No 🗆

Was the project missing sufficient data to assess whether the proposed project has a negative effect, per TWDB  $Y_{es} \checkmark N_0 \square$  guidelines?

Was the project recommended by the RFPG to be studied in order for it to provide more project details, such as  $Yes \checkmark No \square$  a benefit cost ratio or the number of structures the project removes from the 100-year floodplain?

# Related Goals

- □ Increase community access routes to critical facilities, evacuation routes, during and after a flooding event
- Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain
- Increase the # of communities participating in the National Flood Insurance Program
- Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs
- Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards
- □ Increase participation in the regional flood planning process
- Provide regional detention that could be used for water reuse applications or as part of a floodplain management program
- Increase acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use
- Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website
- Increase the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations
- Reduce the # of structures that have been subject to repeated flooding events through property buyouts

# **RFPG Recommended**

- Increase the # of entities that adopt higher than NFIPminimum standards
- Develop and maintain an operational stormwater asset management plan
- Increase the # of flood gauges (rainfall/stream) in the region
- Increase the # of entities that have multi-year drainage CIP list
- Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
- □ Increase use of nature-based flood risk reduction projects
- Develop a regionally coordinated warning and emergency response program that can detect the flood threat and provide timely warning of impending flood danger
- Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
- Increase the proficiency of floodplain managers by increasing the # of them that are certified as Certified Floodplain Managers (CFM) with the Texas Floodplain Management Association
- Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

# San Ygnacio MUD Master Drainage Study

# **FME** Description

Develop Flood risk maps for San Ygnacio MUD and develop CIP

# Study Type

- ✓ Flood risk modeling/mapping
- ✓ Flood mitigation study

# Study Area

County/ Counties Zapata HUC 8 **HUC 12** Study Area (sq. mi.)

✓ Alternative Analysis

□ Feasibility Assessments

# **Emergency Need**

Yes 🗸 No 🗆

# **Known Flood Risk**

History of Flooding?	Yes 🖌 No 🗆	Frequency:	
Population at Risk		# of structures inundated	
Roadways flooded	Yes 🗆 No 🗆	Miles inundated?	
Critical Facilities Impacted	Yes 🗆 No 🗆	Agricultural Land impacted	Yes 🗆 No 🛛
Notes:		-	

# Study Costs

Total Cost:	\$250,000	Study Sponsor:		
Estimated year to start:		Entity with Oversight		
Time to complete?		Included in a CIP or other plan?	Yes 🗆	No 🗸
Funding Dedicated?	Yes 🗆 No 🗸	(Potential) Source of Funding		

# Study identified as a gap by Region 15 Regional Flood Planning Group (RFPG)

Yes 🖌 No 🗆



#### Flood Management Evaluations Fact Sheet

□ Flood preparedness studies

FME ID: 151000133

City/ Cities Insert snip of Location Map here



Flood Management Evaluations Fact Sheet

Study identified because project could not be included as an Flood Mitigation Project (FMP) in the Region 15 Regional Flood Plan because it did meet the minimum requirements, per TWDB guidance for Regional Flood Planning or the provisions of Title 31 of TAQC Chapters 361 and 362.

Yes 🖌 No 🗆

Was the project missing sufficient data to assess whether the proposed project has a negative effect, per TWDB  $Y_{es} \checkmark N_0 \square$  guidelines?

Was the project recommended by the RFPG to be studied in order for it to provide more project details, such as  $Yes \checkmark No \square$  a benefit cost ratio or the number of structures the project removes from the 100-year floodplain?

# Related Goals

- □ Increase community access routes to critical facilities, evacuation routes, during and after a flooding event
- Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain
- Increase the # of communities participating in the National Flood Insurance Program
- Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs
- Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards
- □ Increase participation in the regional flood planning process
- Provide regional detention that could be used for water reuse applications or as part of a floodplain management program
- Increase acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use
- Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website
- Increase the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations
- Reduce the # of structures that have been subject to repeated flooding events through property buyouts

# **RFPG Recommended**

- Increase the # of entities that adopt higher than NFIPminimum standards
- Develop and maintain an operational stormwater asset management plan
- Increase the # of flood gauges (rainfall/stream) in the region
- Increase the # of entities that have multi-year drainage CIP list
- Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
- □ Increase use of nature-based flood risk reduction projects
- Develop a regionally coordinated warning and emergency response program that can detect the flood threat and provide timely warning of impending flood danger
- Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
- Increase the proficiency of floodplain managers by increasing the # of them that are certified as Certified Floodplain Managers (CFM) with the Texas Floodplain Management Association
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# Rgc Public Works, Escobares City, And Starr **Public Works Roadway Improvements**

FME ID: 151000103

□ Flood preparedness studies

# **FME Description**

Improve Roadways, By Widening And Raising, And Create Drainage Culverts Or Bridges. (Morenos Creek And Garceno Creek)(Kelsey Creek, Rio Grande City)

✓ Alternative Analysis

# Study Type

- ✓ Flood risk modeling/mapping
- ✓ Flood mitigation study
- □ Feasibility Assessments

## **Study Area**

City/ Cities					
County/ Counties	STARR				
HUC 8	12110207,				
	13090001				
HUC 12	121102070100,				
	130900011301,				
	130900011302,				
	130900011304,				
	130900011202,				
	130900011203, 130900011204, 130900011401,				
	130900011402, 130800031007, 130800031011,				
	130900011102, 130900011103, 130900011110,				
	130900011403, 130900011501, 130900011502,				
	130900011601, 130900011603, 130900011604,				
	130900011605, 13	0900011606, 130900011607,			
	130900011701, 13	0900011702, 130900011703,			
	130900011704, 13	0900011705, 130900011706,			
	130900011107, 13	0900011109, 130900011112			

Study Area (sq. mi.)



Fact Sheet



Flood Management Evaluations Fact Sheet

FME

#### **Emergency Need**

Yes 🖌 No 🗆

## Known Flood Risk

History of Flooding?	Yes 🗸	No 🗆	Frequency:		
Population at Risk			# of structures inundated		
Roadways flooded	Yes 🗸	No 🗆	Miles inundated?		
Critical Facilities Impacted	Yes 🗆	No 🗆	Agricultural Land impacted	Yes 🗆	No 🗆
Notes:					

# **Study Costs**

Total Cost:	\$528,000	Study Sponsor:	Starr County
Estimated year to start:		Entity with Oversight	Starr County
Time to complete?		Included in a CIP or other plan?	Yes 🗆 No 🗆
Funding Dedicated?	Yes 🗆 No 🗸	(Potential) Source of Funding	TDA/Local

Study identified as a gap by Region 15 Regional Flood Planning Group (RFPG) Yes D No ✓

Study identified because project could not be included as an Flood Mitigation Project (FMP) in the Region 15 Regional Flood Plan because it did meet the minimum requirements, per TWDB guidance for Regional Flood Planning or the provisions of Title 31 of TAQC Chapters 361 and 362.

Yes 🖌 No 🗆

Was the project missing sufficient data to assess whether the proposed project has a negative effect, per TWDB  $\vee$  No  $\square$  guidelines?

Was the project recommended by the RFPG to be studied in order for it to provide more project details, such as Yes  $\checkmark$  No  $\Box$  a benefit cost ratio or the number of structures the project removes from the 100-year floodplain?

# Related Goals

- ✓ Increase community access routes to critical facilities, evacuation routes, during and after a flooding event
- Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain
- Increase the # of communities participating in the National Flood Insurance Program
- Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs
- Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards
- □ Increase the # of entities that adopt higher than NFIPminimum standards
- Develop and maintain an operational stormwater asset management plan
- □ Increase the # of flood gauges (rainfall/stream) in the region
- Increase the # of entities that have multi-year drainage CIP list
- Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings

## Flood Management Evaluations

#### Fact Sheet

- □ Increase participation in the regional flood planning process
- Provide regional detention that could be used for water reuse applications or as part of a floodplain management program
- Increase acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use
- Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website
- Increase the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations
- Reduce the # of structures that have been subject to repeated flooding events through property buyouts

# **RFPG Recommended**

Yes 🗆 No 🗸

- Increase use of nature-based flood risk reduction projects
- Develop a regionally coordinated warning and emergency response program that can detect the flood threat and provide timely warning of impending flood danger
- Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
- Increase the proficiency of floodplain managers by increasing the # of them that are certified as Certified Floodplain Managers (CFM) with the Texas Floodplain Management Association
- Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain