FLOOD MANAGEMENT STRATEGIES (FMSs) FACT SHEETS

Region 15 Lower Rio Grande Regional Flood Planning Group

FMS

Flood Management Strategies
Fact Sheet

Bayview Action #19

FMS ID: 152000001

FMS Description

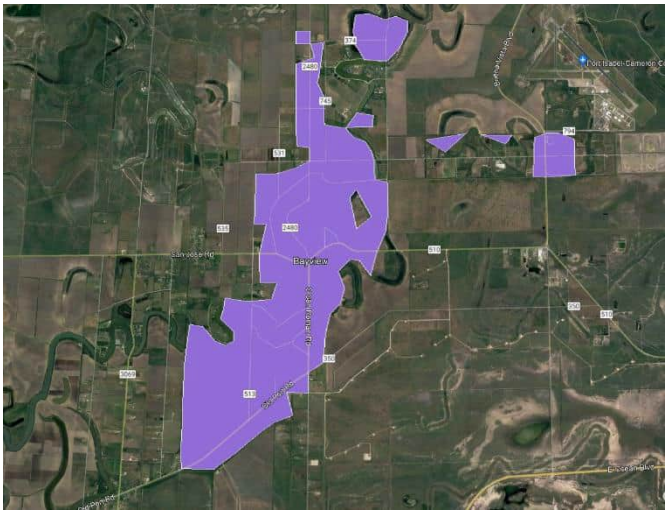
Upgrade the Town's website to include local information on hazards, risks, mitigation, protective actions, and applicable ordinances

Strategy Type

- ☐ Education and Outreach Activities
- ☐ Protected Areas
- ☐ Regulatory and Guidance
- ☐ Development Standards
- ✓ Flood Preparedness Programs
- ☐ Other:

Strategy Area

City/ Cities	Bayview
County/ Counties	Cameron
HUC 8	12110208
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:

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

Strategy Costs

Total Cost:	$10,000	Study Sponsor:	Bayview
Non-reoccurring Non-capital Cost (include in Total above):		*These are one-time costs for program development, education campaign, and non-engineering study costs.*	
Estimated year to start:	2018	Entity with Oversight	Bayview
Time to complete?	2020	Included in a Hazard Mitigation Action Plan or other plan?	Yes ✓ No ☐
Funding Dedicated?	Yes ☐ No ✓	(Potential) Source of Funding	HMGP: Local Funding

Have the flood risk and flood reduction impacts been evaluated?

Yes ☐ No ✓

Was the strategy missing sufficient data to assess whether the proposed strategy has a negative effect, per TWDB guidelines? Yes ☐ No ✓

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 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

RFPG Recommended

Yes ✓ No ☐

Region 15 Lower Rio Grande Regional Flood Planning Group

FMS

Flood Management Strategies
Fact Sheet

Bayview Action #7

FMS ID: 152000002

FMS Description

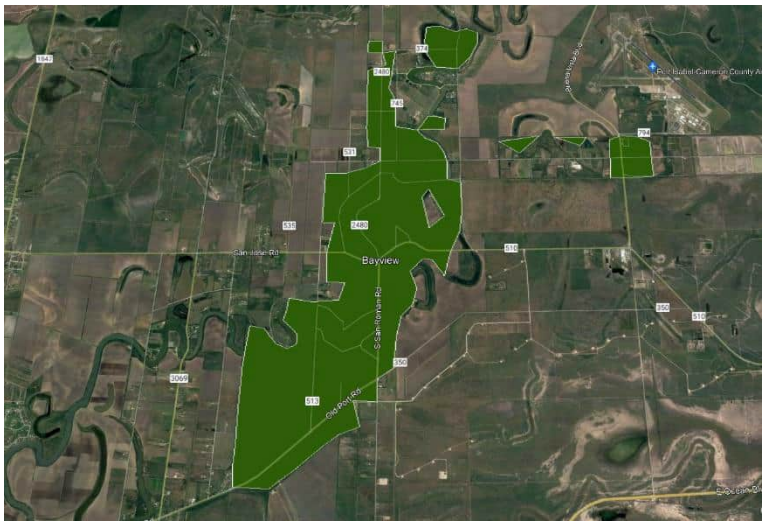
Approve and Adopt FEMA Flood Insurance Rate Maps

Strategy Type

- ☐ Education and Outreach Activities
- ☐ Protected Areas
- ✓ Regulatory and Guidance
- ☐ Development Standards
- ☐ Flood Preparedness Programs
- ☐ Other:

Strategy Area

City/ Cities	Bayview
County/ Counties	Cameron
HUC 8	12110208
HUC 12	
Study Area (sq. mi.)	



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:

Strategy Costs

Total Cost:	$1,000	Study Sponsor:	Bayview
Non-reoccurring Non-capital Cost (include in Total above):		*These are one-time costs for program development, education campaign, and non-engineering study costs.*	
Estimated year to start:	2019	Entity with Oversight	Bayview
Time to complete?	2021	Included in a Hazard Mitigation Action Plan or other plan?	Yes ✓ No ☐
Funding Dedicated?	Yes ☐ No ✓	(Potential) Source of Funding	Local Funding

Have the flood risk and flood reduction impacts been evaluated?

Yes ☐ No ✓

Was the strategy missing sufficient data to assess whether the proposed strategy has a negative effect, per TWDB guidelines? Yes ☐ No ✓

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
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- ☐ Increase the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations
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- ☐ 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

Yes ✓ No ☐

Region 15 Lower Rio Grande Regional Flood Planning Group

FMS

Flood Management Strategies
Fact Sheet

Bayview Action #8

FMS ID: 152000003

FMS Description

Develop cooperative agreement with state and county to address flood risk to roadways leading in and out of town – outside of jurisdictional boundaries

Strategy Type

- ☐ Education and Outreach Activities
- ☐ Protected Areas
- ☐ Regulatory and Guidance
- ☐ Development Standards
- ☐ Flood Preparedness Programs
- ✓ Other:

Strategy Area

City/ Cities	Bayview
County/ Counties	Cameron
HUC 8	12110208
HUC 12	
Study Area (sq. mi.)	

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:

Strategy Costs

Total Cost:	$1,000	Study Sponsor:	Bayview
Non-reoccurring Non-capital Cost (include in Total above):		*These are one-time costs for program development, education campaign, and non-engineering study costs.*	
Estimated year to start:	2018	Entity with Oversight	Bayview
Time to complete?	2020	Included in a Hazard Mitigation Action Plan or other plan?	Yes ✓ No ☐
Funding Dedicated?	Yes ☐ No ✓	(Potential) Source of Funding	Local Funding

Have the flood risk and flood reduction impacts been evaluated?

Yes ☐ No ✓

Was the strategy missing sufficient data to assess whether the proposed strategy has a negative effect, per TWDB guidelines? Yes ☐ No ✓

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 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

RFPG Recommended

Yes ✓ No ☐

Region 15 Lower Rio Grande Regional Flood Planning Group

FMS

Flood Management Strategies
Fact Sheet

Bayview Action #9

FMS ID: 152000004

FMS Description

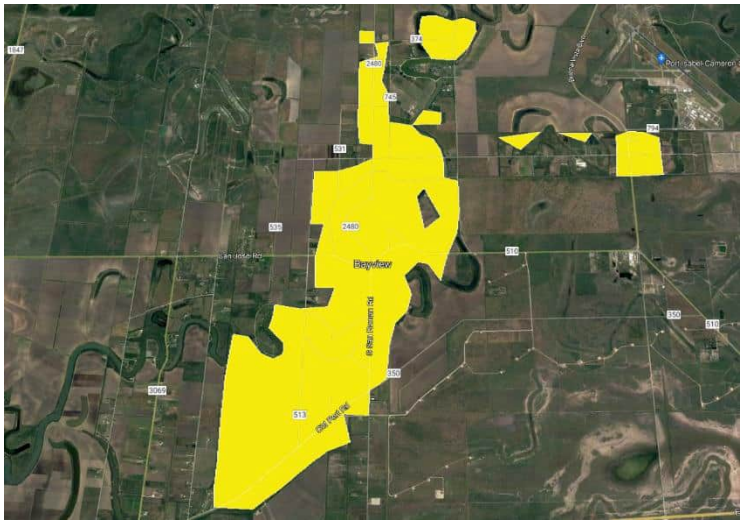
Participate in the National Flood Insurance Program

Strategy Type

- ☐ Education and Outreach Activities
- ☐ Protected Areas
- ✓ Regulatory and Guidance
- ☐ Development Standards
- ☐ Flood Preparedness Programs
- ☐ Other:

Strategy Area

City/ Cities	Bayview
County/ Counties	Cameron
HUC 8	12110208
HUC 12	
Study Area (sq. mi.)	



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:

Strategy Costs

Total Cost:	$1,000	Study Sponsor:	Bayview
Non-reoccurring Non-capital Cost (include in Total above):		*These are one-time costs for program development, education campaign, and non-engineering study costs.*	
Estimated year to start:	2018	Entity with Oversight	Bayview
Time to complete?	2020	Included in a Hazard Mitigation Action Plan or other plan?	Yes ✓ No ☐
Funding Dedicated?	Yes ☐ No ✓	(Potential) Source of Funding	Local Funding

Have the flood risk and flood reduction impacts been evaluated?

Yes ☐ No ✓

Was the strategy missing sufficient data to assess whether the proposed strategy has a negative effect, per TWDB guidelines? Yes ☐ No ✓

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 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
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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

RFPG Recommended

Yes ✓ No ☐

Region 15 Lower Rio Grande Regional Flood Planning Group

FMS

Flood Management Strategies
Fact Sheet

Indian Lake Action #2

FMS ID: 152000005

FMS Description

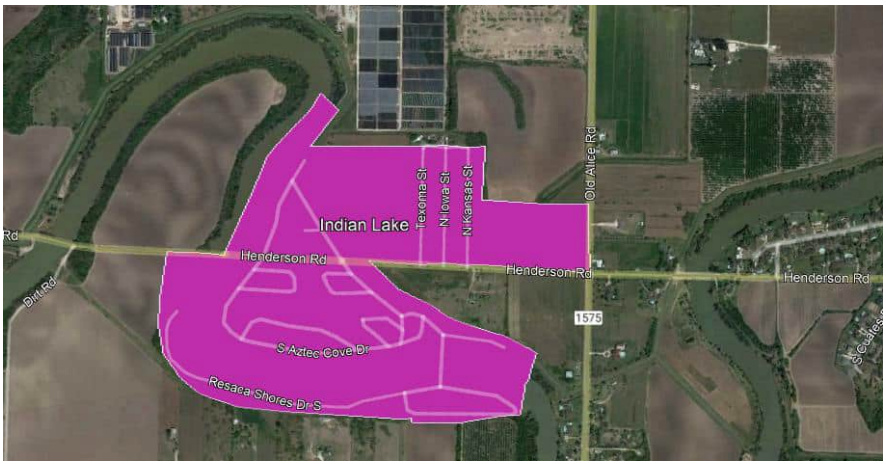
Educate property owners about residential mitigation measures for all natural hazards such as the need to elevate structures, implementing residential mitigation measures, install retaining walls, and avoid building in high hazard areas

Strategy Type

- ✓ Education and Outreach Activities
- ☐ Regulatory and Guidance
- ☐ Flood Preparedness Programs
- ☐ Protected Areas
- ☐ Development Standards
- ☐ Other:

Strategy Area

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



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:

Strategy Costs

Total Cost:	$500	Study Sponsor:	Indian Lake
Non-reoccurring Non-capital Cost (include in Total above):		*These are one-time costs for program development, education campaign, and non-engineering study costs.*	
Estimated year to start:	2020	Entity with Oversight	Indian Lake
Time to complete?	2022	Included in a Hazard Mitigation Action Plan or other plan?	Yes ✓ No ☐
Funding Dedicated?	Yes ☐ No ✓	(Potential) Source of Funding	General Fund; HMGP

Have the flood risk and flood reduction impacts been evaluated?

Yes ☐ No ✓

Was the strategy missing sufficient data to assess whether the proposed strategy has a negative effect, per TWDB guidelines? Yes ☐ No ✓

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 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

Yes ✓ No ☐

Region 15 Lower Rio Grande Regional Flood Planning Group

FMS

Flood Management Strategies
Fact Sheet

Brownsville Public Utilities Board Action #8

FMS ID: 152000006

FMS Description

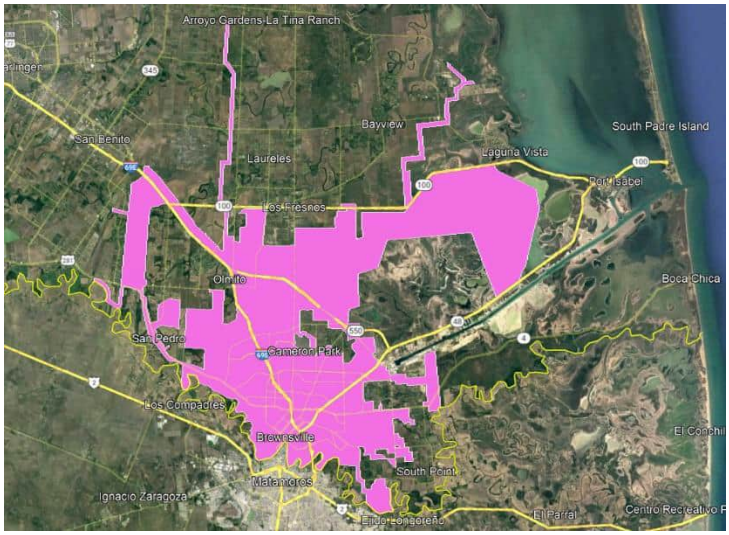
Develop program to annually remove buildup of silt in area Resacas that become cutoff from the river and contribute to flooding during severe flood or hurricane event

Strategy Type

- ☐ Education and Outreach Activities
- ☐ Protected Areas
- ✓ Regulatory and Guidance
- ☐ Development Standards
- ☐ Flood Preparedness Programs
- ☐ Other:

Strategy Area

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



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:

Strategy Costs

Total Cost:	$20,000	Study Sponsor:	Brownsville
Non-reoccurring Non-capital Cost (include in Total above):		*These are one-time costs for program development, education campaign, and non-engineering study costs.*	
Estimated year to start:	2016	Entity with Oversight	Brownsville
Time to complete?	2018	Included in a Hazard Mitigation Action Plan or other plan?	Yes ✓ No ☐
Funding Dedicated?	Yes ☐ No ✓	(Potential) Source of Funding	Grants

Have the flood risk and flood reduction impacts been evaluated?

Yes ☐ No ✓

Was the strategy missing sufficient data to assess whether the proposed strategy has a negative effect, per TWDB guidelines? Yes ☐ No ✓

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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- ☐ 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

Yes ✓ No ☐

Region 15 Lower Rio Grande Regional Flood Planning Group

FMS

Flood Management Strategies
Fact Sheet

City Of Brownsville Action #2

FMS ID: 152000007

FMS Description

Join the Community Rating System program to reduce risk and flood insurance premiums to residents

Strategy Type

- ☐ Education and Outreach Activities
- ☐ Protected Areas
- ✓ Regulatory and Guidance
- ☐ Development Standards
- ☐ Flood Preparedness Programs
- ☐ Other:

Strategy Area

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

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:

Strategy Costs

Total Cost:	$100,000	Study Sponsor:	Brownsville
Non-reoccurring Non-capital Cost (include in Total above):		*These are one-time costs for program development, education campaign, and non-engineering study costs.*	
Estimated year to start:	2015	Entity with Oversight	Brownsville
Time to complete?	2017	Included in a Hazard Mitigation Action Plan or other plan?	Yes ✓ No ☐
Funding Dedicated?	Yes ☐ No ✓	(Potential) Source of Funding	Local Revenue, Storm Water Fee

Have the flood risk and flood reduction impacts been evaluated?

Yes ☐ No ✓

Was the strategy missing sufficient data to assess whether the proposed strategy has a negative effect, per TWDB guidelines? Yes ☐ No ✓

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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- ✓ 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

Yes ✓ No ☐

Region 15 Lower Rio Grande Regional Flood Planning Group

FMS

Flood Management Strategies
Fact Sheet

Indian Lake Action #11

FMS ID: 152000008

FMS Description

Adopt revised floodplain ordinance to include model ordinance language and higher NFIP standards such as freeboard

Strategy Type

- ☐ Education and Outreach Activities
- ☐ Protected Areas
- ✓ Regulatory and Guidance
- ☐ Development Standards
- ☐ Flood Preparedness Programs
- ☐ Other:

Strategy Area

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

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:

Strategy Costs

Total Cost:	$500	Study Sponsor:	Indian Lake
Non-reoccurring Non-capital Cost (include in Total above):		*These are one-time costs for program development, education campaign, and non-engineering study costs.*	
Estimated year to start:	2018	Entity with Oversight	Indian Lake
Time to complete?	2020	Included in a Hazard Mitigation Action Plan or other plan?	Yes ✓ No ☐
Funding Dedicated?	Yes ☐ No ✓	(Potential) Source of Funding	General Fund; HMGP

Have the flood risk and flood reduction impacts been evaluated?

Yes ☐ No ✓

Was the strategy missing sufficient data to assess whether the proposed strategy has a negative effect, per TWDB guidelines? Yes ☐ No ✓

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 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

RFPG Recommended

Yes ✓ No ☐

Region 15 Lower Rio Grande Regional Flood Planning Group

FMS

Flood Management Strategies
Fact Sheet

Indian Lake Action #9

FMS ID: 152000009

FMS Description

Prepare and advertise local evacuation plan and procedures

Strategy Type

- ✓ Education and Outreach Activities
- ☐ Protected Areas
- ☐ Regulatory and Guidance
- ☐ Development Standards
- ✓ Flood Preparedness Programs
- ☐ Other:

Strategy Area

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

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:

Strategy Costs

Total Cost:	$500	Study Sponsor:	Indian Lake
Non-reoccurring Non-capital Cost (include in Total above):		*These are one-time costs for program development, education campaign, and non-engineering study costs.*	
Estimated year to start:	2019	Entity with Oversight	Indian Lake
Time to complete?	2021	Included in a Hazard Mitigation Action Plan or other plan?	Yes ✓ No ☐
Funding Dedicated?	Yes ☐ No ✓	(Potential) Source of Funding	General Fund; HMGP; FEMA AFG

Have the flood risk and flood reduction impacts been evaluated?

Yes ☐ No ✓

Was the strategy missing sufficient data to assess whether the proposed strategy has a negative effect, per TWDB guidelines? Yes ☐ No ✓

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 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

RFPG Recommended

Yes ✓ No ☐

Region 15 Lower Rio Grande Regional Flood Planning Group

FMS

Flood Management Strategies
Fact Sheet

Port Isabel Action #10

FMS ID: 152000010

FMS Description

Prepare and advertise local evacuation plan

Strategy Type

- ✓ Education and Outreach Activities
- ☐ Protected Areas
- ☐ Regulatory and Guidance
- ☐ Development Standards
- ✓ Flood Preparedness Programs
- ☐ Other:

Strategy Area

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

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:

Strategy Costs

Total Cost:	$500	Study Sponsor:	Port Isabel
Non-reoccurring Non-capital Cost (include in Total above):		*These are one-time costs for program development, education campaign, and non-engineering study costs.*	
Estimated year to start:	2019	Entity with Oversight	Port Isabel
Time to complete?	2021	Included in a Hazard Mitigation Action Plan or other plan?	Yes ✓ No ☐
Funding Dedicated?	Yes ☐ No ✓	(Potential) Source of Funding	HMGP; General Funds; AFG

Have the flood risk and flood reduction impacts been evaluated?

Yes ☐ No ✓

Was the strategy missing sufficient data to assess whether the proposed strategy has a negative effect, per TWDB guidelines? Yes ☐ No ✓

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 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

RFPG Recommended

Yes ✓ No ☐

Region 15 Lower Rio Grande Regional Flood Planning Group

FMS

Flood Management Strategies
Fact Sheet

Port Isabel Action #11

FMS ID: 152000011

FMS Description

Update floodplain management ordinances to include higher standards required to join the CRS program; Join the CRS program upon adoption of ordinance

Strategy Type

- ☐ Education and Outreach Activities
- ☐ Protected Areas
- ✓ Regulatory and Guidance
- ☐ Development Standards
- ☐ Flood Preparedness Programs
- ☐ Other:

Strategy Area

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

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:

Strategy Costs

Total Cost:	$500	Study Sponsor:	Port Isabel
Non-reoccurring Non-capital Cost (include in Total above):		*These are one-time costs for program development, education campaign, and non-engineering study costs.*	
Estimated year to start:	2018	Entity with Oversight	Port Isabel
Time to complete?	2020	Included in a Hazard Mitigation Action Plan or other plan?	Yes ✓ No ☐
Funding Dedicated?	Yes ☐ No ✓	(Potential) Source of Funding	HMGP; General Funds

Have the flood risk and flood reduction impacts been evaluated?

Yes ☐ No ✓

Was the strategy missing sufficient data to assess whether the proposed strategy has a negative effect, per TWDB guidelines? Yes ☐ No ✓

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 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

RFPG Recommended

Yes ✓ No ☐

Region 15 Lower Rio Grande Regional Flood Planning Group

FMS

Flood Management Strategies
Fact Sheet

Port Isabel Action #12

FMS ID: 152000012

FMS Description

Adopt NFIP model ordinance with higher floodplain standards

Strategy Type

- ☐ Education and Outreach Activities
- ☐ Protected Areas
- ✓ Regulatory and Guidance
- ☐ Development Standards
- ☐ Flood Preparedness Programs
- ☐ Other:

Strategy Area

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

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:

Strategy Costs

Total Cost:	$500	Study Sponsor:	Port Isabel
Non-reoccurring Non-capital Cost (include in Total above):		*These are one-time costs for program development, education campaign, and non-engineering study costs.*	
Estimated year to start:	2018	Entity with Oversight	Port Isabel
Time to complete?	2020	Included in a Hazard Mitigation Action Plan or other plan?	Yes ✓ No ☐
Funding Dedicated?	Yes ☐ No ✓	(Potential) Source of Funding	HMGP; General Funds

Have the flood risk and flood reduction impacts been evaluated?

Yes ☐ No ✓

Was the strategy missing sufficient data to assess whether the proposed strategy has a negative effect, per TWDB guidelines? Yes ☐ No ✓

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 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

RFPG Recommended

Yes ✓ No ☐

Region 15 Lower Rio Grande Regional Flood Planning Group

FMS

Flood Management Strategies
Fact Sheet

Port Isabel Action #21

FMS ID: 152000013

FMS Description

Use the internet and social media to warn citizens of disasters and extreme weather on a regular basis as well as how to prepare for such events and mitigate damages

Strategy Type

- ☐ Education and Outreach Activities
- ☐ Protected Areas
- ☐ Regulatory and Guidance
- ☐ Development Standards
- ✓ Flood Preparedness Programs
- ☐ Other:

Strategy Area

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

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:

Strategy Costs

Total Cost:	$500	Study Sponsor:	Port Isabel
Non-reoccurring Non-capital Cost (include in Total above):		*These are one-time costs for program development, education campaign, and non-engineering study costs.*	
Estimated year to start:	2018	Entity with Oversight	Port Isabel
Time to complete?	2020	Included in a Hazard Mitigation Action Plan or other plan?	Yes ✓ No ☐
Funding Dedicated?	Yes ☐ No ✓	(Potential) Source of Funding	HMGP; General Funds

Have the flood risk and flood reduction impacts been evaluated?

Yes ☐ No ✓

Was the strategy missing sufficient data to assess whether the proposed strategy has a negative effect, per TWDB guidelines? Yes ☐ No ✓

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 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

RFPG Recommended

Yes ✓ No ☐

Region 15 Lower Rio Grande Regional Flood Planning Group

FMS

Flood Management Strategies
Fact Sheet

Port Isabel Action #25

FMS ID: 152000014

FMS Description

Implement early warning system for residents to notify of natural disasters; three warning sirens would be installed

Strategy Type

- ☐ Education and Outreach Activities
- ☐ Protected Areas
- ☐ Regulatory and Guidance
- ☐ Development Standards
- ✓ Flood Preparedness Programs
- ☐ Other:

Strategy Area

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

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:

Strategy Costs

Total Cost:	$100,000	Study Sponsor:	Port Isabel
Non-reoccurring Non-capital Cost (include in Total above):		*These are one-time costs for program development, education campaign, and non-engineering study costs.*	
Estimated year to start:	2019	Entity with Oversight	Port Isabel
Time to complete?	2021	Included in a Hazard Mitigation Action Plan or other plan?	Yes ✓ No ☐
Funding Dedicated?	Yes ☐ No ✓	(Potential) Source of Funding	HMGP; General Funds

Have the flood risk and flood reduction impacts been evaluated?

Yes ☐ No ✓

Was the strategy missing sufficient data to assess whether the proposed strategy has a negative effect, per TWDB guidelines? Yes ☐ No ✓

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 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

RFPG Recommended

Yes ✓ No ☐

Region 15 Lower Rio Grande Regional Flood Planning Group

FMS

Flood Management Strategies
Fact Sheet

Primera Action #1

FMS ID: 152000015

FMS Description

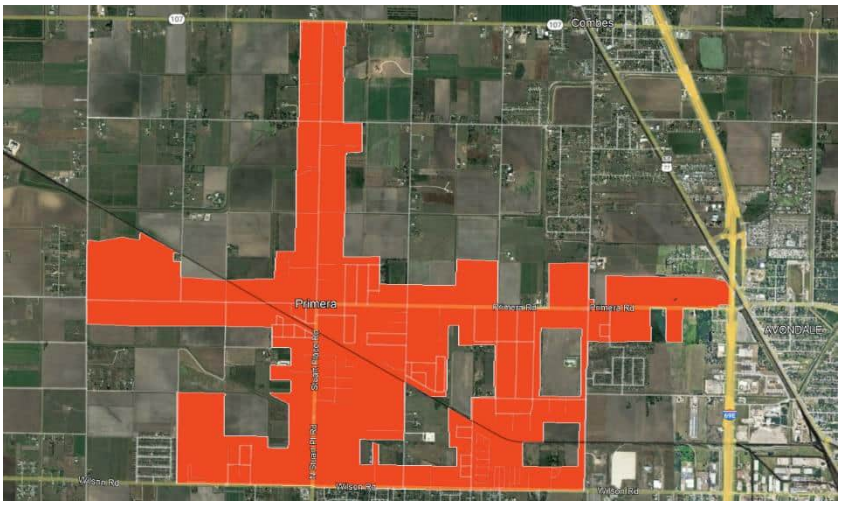
Amend subdivision ordinances to require retention or detention ponds in any new subdivision

Strategy Type

- ☐ Education and Outreach Activities
- ☐ Protected Areas
- ✓ Regulatory and Guidance
- ☐ Development Standards
- ☐ Flood Preparedness Programs
- ☐ Other:

Strategy Area

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



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:

Strategy Costs

Total Cost:	$5,000	Study Sponsor:	Primera
Non-reoccurring Non-capital Cost (include in Total above):		*These are one-time costs for program development, education campaign, and non-engineering study costs.*	
Estimated year to start:	2018	Entity with Oversight	Primera
Time to complete?	2020	Included in a Hazard Mitigation Action Plan or other plan?	Yes ✓ No ☐
Funding Dedicated?	Yes ☐ No ✓	(Potential) Source of Funding	Local Funds

Have the flood risk and flood reduction impacts been evaluated?

Yes ☐ No ✓

Was the strategy missing sufficient data to assess whether the proposed strategy has a negative effect, per TWDB guidelines? Yes ☐ No ✓

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 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

RFPG Recommended

Yes ✓ No ☐

Region 15 Lower Rio Grande Regional Flood Planning Group

FMS

Flood Management Strategies
Fact Sheet

Primera Action #10

FMS ID: 152000016

FMS Description

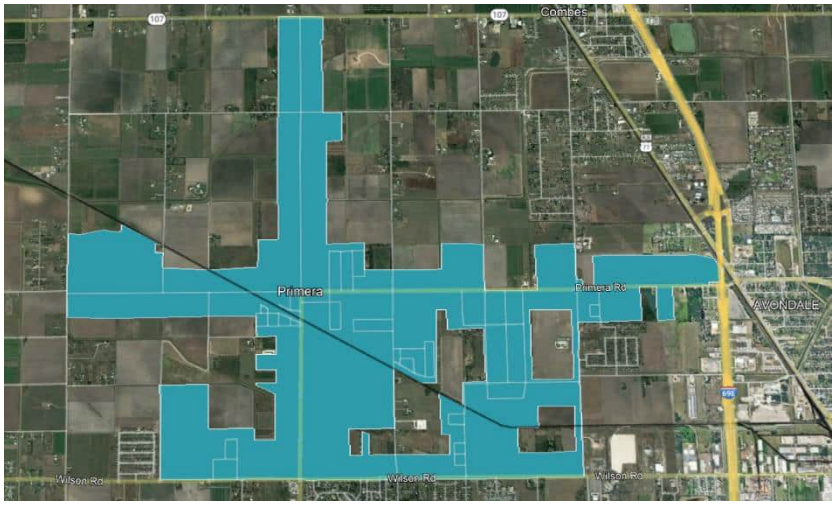
Adopt higher floodplain standards such as freeboard and cumulative substantial damage

Strategy Type

- ☐ Education and Outreach Activities
- ☐ Protected Areas
- ✓ Regulatory and Guidance
- ☐ Development Standards
- ☐ Flood Preparedness Programs
- ☐ Other:

Strategy Area

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



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:

Strategy Costs

Total Cost:	$5,000	Study Sponsor:	Primera
Non-reoccurring Non-capital Cost (include in Total above):		*These are one-time costs for program development, education campaign, and non-engineering study costs.*	
Estimated year to start:	2019	Entity with Oversight	Primera
Time to complete?	2021	Included in a Hazard Mitigation Action Plan or other plan?	Yes ✓ No ☐
Funding Dedicated?	Yes ☐ No ✓	(Potential) Source of Funding	Local Funds; HMGP

Have the flood risk and flood reduction impacts been evaluated?

Yes ☐ No ✓

Was the strategy missing sufficient data to assess whether the proposed strategy has a negative effect, per TWDB guidelines? Yes ☐ No ✓

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 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

RFPG Recommended

Yes ✓ No ☐

Region 15 Lower Rio Grande Regional Flood Planning Group

FMS

Flood Management Strategies
Fact Sheet

Primera Action #8

FMS ID: 152000017

FMS Description

Implement early warning system to new areas of the jurisdiction to alert residents of impending severe weather

Strategy Type

- ☐ Education and Outreach Activities
- ☐ Protected Areas
- ☐ Regulatory and Guidance
- ☐ Development Standards
- ✓ Flood Preparedness Programs
- ☐ Other:

Strategy Area

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

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:

Strategy Costs

Total Cost:	$75,000	Study Sponsor:	Primera
Non-reoccurring Non-capital Cost (include in Total above):		*These are one-time costs for program development, education campaign, and non-engineering study costs.*	
Estimated year to start:	2018	Entity with Oversight	Primera
Time to complete?	2020	Included in a Hazard Mitigation Action Plan or other plan?	Yes ✓ No ☐
Funding Dedicated?	Yes ☐ No ✓	(Potential) Source of Funding	Local Funds; HMGP

Have the flood risk and flood reduction impacts been evaluated?

Yes ☐ No ✓

Was the strategy missing sufficient data to assess whether the proposed strategy has a negative effect, per TWDB guidelines? Yes ✓ No ☐

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 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

RFPG Recommended

Yes ✓ No ☐

Region 15 Lower Rio Grande Regional Flood Planning Group

FMS

Flood Management Strategies
Fact Sheet

Rancho Viejo Action #3

FMS ID: 152000018

FMS Description

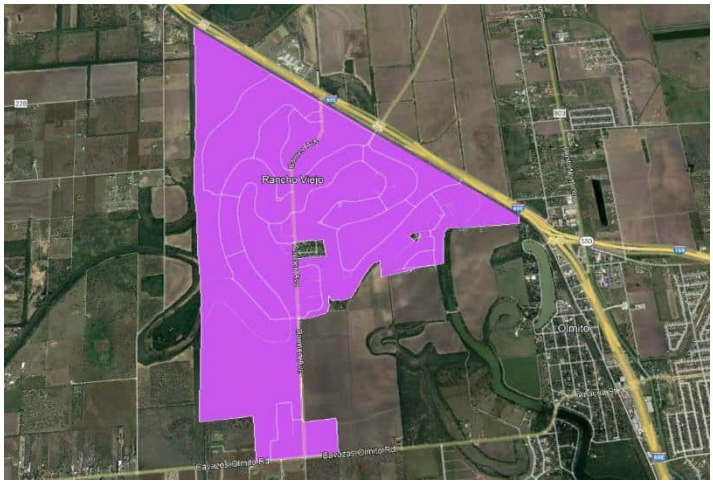
Adopt the International Building Code (IBC) and International Residential Code (IRC); revise and update regulatory floodplain maps; adopt higher standards in floodplain ordinances including freeboard, no-rise in the floodplain, cumulative substantial damage, etc.

Strategy Type

- ☐ Education and Outreach Activities
- ✓ Regulatory and Guidance
- ☐ Flood Preparedness Programs
- ☐ Protected Areas
- ☐ Development Standards
- ☐ Other:

Strategy Area

City/ Cities	Rancho Viejo
County/ Counties	Cameron
HUC 8	12110208
HUC 12	
Study Area (sq. mi.)	



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:

Strategy Costs

Total Cost:	$5,000	Study Sponsor:	Rancho Viejo
Non-reoccurring Non-capital Cost (include in Total above):		*These are one-time costs for program development, education campaign, and non-engineering study costs.*	
Estimated year to start:	2018	Entity with Oversight	Rancho Viejo
Time to complete?	2020	Included in a Hazard Mitigation Action Plan or other plan?	Yes ✓ No ☐
Funding Dedicated?	Yes ☐ No ✓	(Potential) Source of Funding	Local Funds; HMGP

Have the flood risk and flood reduction impacts been evaluated?

Yes ☐ No ✓

Was the strategy missing sufficient data to assess whether the proposed strategy has a negative effect, per TWDB guidelines? Yes ☐ No ✓

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 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

RFPG Recommended

Yes ✓ No ☐

Region 15 Lower Rio Grande Regional Flood Planning Group

FMS

Flood Management Strategies
Fact Sheet

Rancho Viejo Action #11

FMS ID: 152000019

FMS Description

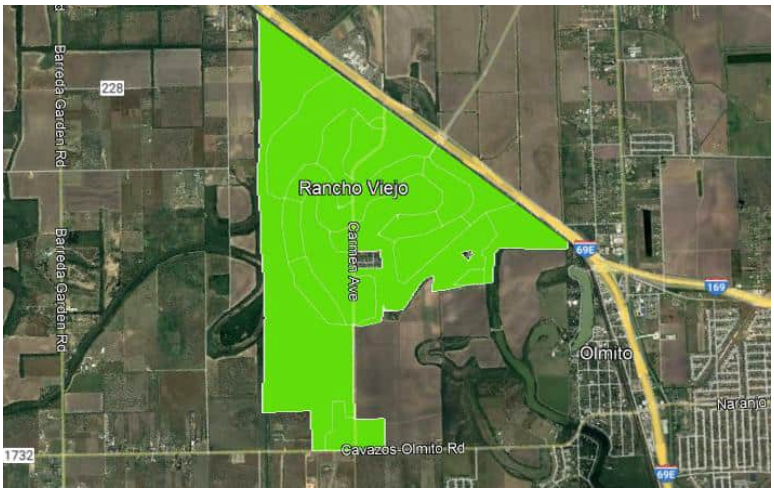
Update website with maps and information including StormReady data and links; Mail educational brochures to residents in hazard-prone areas on mitigation measures to reduce damages

Strategy Type

- ✓ Education and Outreach Activities
- ☐ Regulatory and Guidance
- ☐ Flood Preparedness Programs
- ☐ Protected Areas
- ☐ Development Standards
- ☐ Other:

Strategy Area

City/ Cities	Rancho Viejo
County/ Counties	Cameron
HUC 8	12110208
HUC 12	
Study Area (sq. mi.)	



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:

Strategy Costs

Total Cost:	$5,000	Study Sponsor:	Rancho Viejo
Non-reoccurring Non-capital Cost (include in Total above):		*These are one-time costs for program development, education campaign, and non-engineering study costs.*	
Estimated year to start:	2018	Entity with Oversight	Rancho Viejo
Time to complete?	2020	Included in a Hazard Mitigation Action Plan or other plan?	Yes ✓ No ☐
Funding Dedicated?	Yes ☐ No ✓	(Potential) Source of Funding	Local Funds; HMGP

Have the flood risk and flood reduction impacts been evaluated?

Yes ☐ No ✓

Was the strategy missing sufficient data to assess whether the proposed strategy has a negative effect, per TWDB guidelines? Yes ☐ No ✓

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 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

RFPG Recommended

Yes ✓ No ☐

Region 15 Lower Rio Grande Regional Flood Planning Group

FMS

Flood Management Strategies
Fact Sheet

Rio Hondo Action #4

FMS ID: 152000020

FMS Description

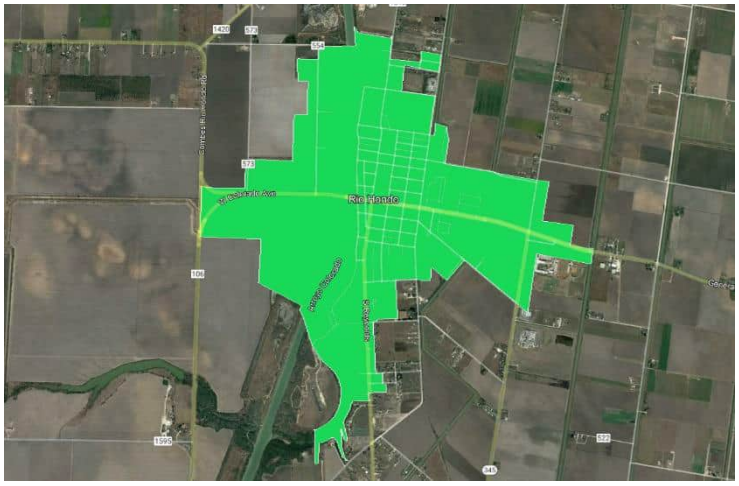
Adopt ASCE24-05 Flood Resistant Design and Construction to reduce flooding caused by Storm Surge

Strategy Type

- ☐ Education and Outreach Activities
- ☐ Protected Areas
- ✓ Regulatory and Guidance
- ☐ Development Standards
- ☐ Flood Preparedness Programs
- ☐ Other:

Strategy Area

City/ Cities	Rio Hondo
County/ Counties	Cameron
HUC 8	12110208
HUC 12	
Study Area (sq. mi.)	



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:

Strategy Costs

Total Cost:	$2,000,000	Study Sponsor:	Rio Hondo
Non-reoccurring Non-capital Cost (include in Total above):		*These are one-time costs for program development, education campaign, and non-engineering study costs.*	
Estimated year to start:	2021	Entity with Oversight	Rio Hondo
Time to complete?	2023	Included in a Hazard Mitigation Action Plan or other plan?	Yes ✓ No ☐
Funding Dedicated?	Yes ☐ No ✓	(Potential) Source of Funding	USDA; City Funds; HMGP

Have the flood risk and flood reduction impacts been evaluated?

Yes ☐ No ✓

Was the strategy missing sufficient data to assess whether the proposed strategy has a negative effect, per TWDB guidelines? Yes ☐ No ✓

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 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

RFPG Recommended

Yes ✓ No ☐

Region 15 Lower Rio Grande Regional Flood Planning Group

FMS

Flood Management Strategies
Fact Sheet

San Benito Action #13

FMS ID: 152000021

FMS Description

Adopt higher standards into the flood damage prevention ordinance to limit floodplain development and provide higher protection to structures in the floodplain

Strategy Type

- ☐ Education and Outreach Activities
- ☐ Protected Areas
- ☐ Regulatory and Guidance
- ✓ Development Standards
- ☐ Flood Preparedness Programs
- ☐ Other:

Strategy Area

City/ Cities	San Benito
County/ Counties	Cameron
HUC 8	12110208
HUC 12	
Study Area (sq. mi.)	

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:

Strategy Costs

Total Cost:	$10,000	Study Sponsor:	San Benito
Non-reoccurring Non-capital Cost (include in Total above):		*These are one-time costs for program development, education campaign, and non-engineering study costs.*	
Estimated year to start:	2020	Entity with Oversight	San Benito
Time to complete?	2022	Included in a Hazard Mitigation Action Plan or other plan?	Yes ✓ No ☐
Funding Dedicated?	Yes ☐ No ✓	(Potential) Source of Funding	CDBG; EDC; Pre-Disaster Mitigation Grant Program

Have the flood risk and flood reduction impacts been evaluated?

Yes ☐ No ✓

Was the strategy missing sufficient data to assess whether the proposed strategy has a negative effect, per TWDB guidelines? Yes ☐ No ✓

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 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

RFPG Recommended

Yes ✓ No ☐

Region 15 Lower Rio Grande Regional Flood Planning Group

FMS

Flood Management Strategies
Fact Sheet

South Padre Island Action #13

FMS ID: 152000022

FMS Description

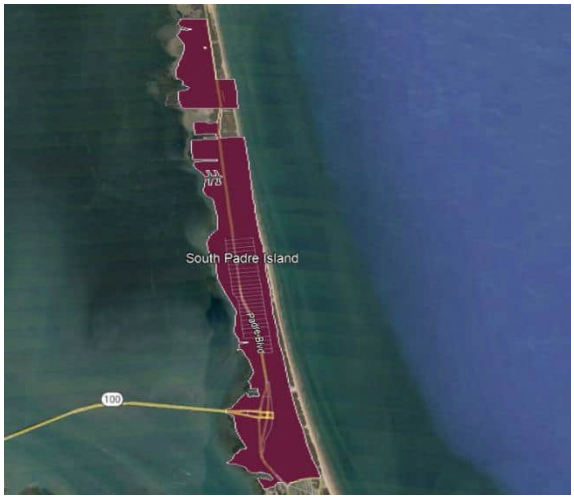
Adopt higher floodplain standards in local floodplain ordinance

Strategy Type

- ☐ Education and Outreach Activities
- ☐ Protected Areas
- ✓ Regulatory and Guidance
- ☐ Development Standards
- ☐ Flood Preparedness Programs
- ☐ Other:

Strategy Area

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



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:

Strategy Costs

Total Cost:	$5,000	Study Sponsor:	South Padre Island
Non-reoccurring Non-capital Cost (include in Total above):		*These are one-time costs for program development, education campaign, and non-engineering study costs.*	
Estimated year to start:	2021	Entity with Oversight	South Padre Island
Time to complete?	2023	Included in a Hazard Mitigation Action Plan or other plan?	Yes ✓ No ☐
Funding Dedicated?	Yes ☐ No ✓	(Potential) Source of Funding	HMGP; Local Funds

Have the flood risk and flood reduction impacts been evaluated?

Yes ☐ No ✓

Was the strategy missing sufficient data to assess whether the proposed strategy has a negative effect, per TWDB guidelines? Yes ☐ No ✓

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
- ✓ 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

RFPG Recommended

Yes ✓ No ☐

Region 15 Lower Rio Grande Regional Flood Planning Group

FMS

Flood Management Strategies
Fact Sheet

South Padre Island Action #3

FMS ID: 152000023

FMS Description

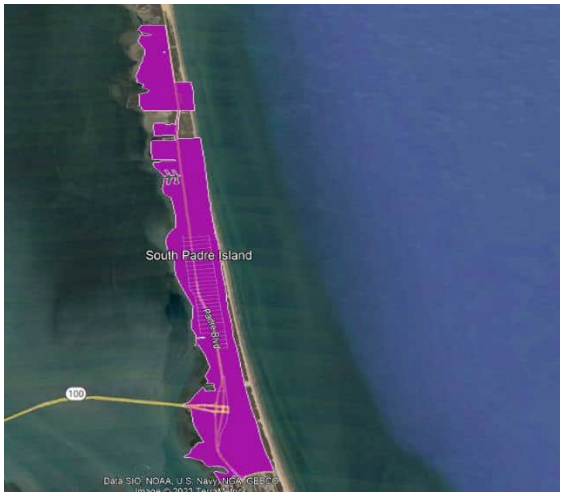
Adoption erosion control ordinance and prohibit development in high-hazard areas

Strategy Type

- ☐ Education and Outreach Activities
- ☐ Protected Areas
- ✓ Regulatory and Guidance
- ☐ Development Standards
- ☐ Flood Preparedness Programs
- ☐ Other:

Strategy Area

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



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:

Strategy Costs

Total Cost:	$5,000	Study Sponsor:	South Padre Island
Non-reoccurring Non-capital Cost (include in Total above):		*These are one-time costs for program development, education campaign, and non-engineering study costs.*	
Estimated year to start:	2018	Entity with Oversight	South Padre Island
Time to complete?	2020	Included in a Hazard Mitigation Action Plan or other plan?	Yes ✓ No ☐
Funding Dedicated?	Yes ☐ No ✓	(Potential) Source of Funding	HMGP; Local Funds

Have the flood risk and flood reduction impacts been evaluated?

Yes ☐ No ✓

Was the strategy missing sufficient data to assess whether the proposed strategy has a negative effect, per TWDB guidelines? Yes ☐ No ✓

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 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

RFPG Recommended

Yes ✓ No ☐

Region 15 Lower Rio Grande Regional Flood Planning Group

FMS

Flood Management Strategies
Fact Sheet

Alamo #4-1.1

FMS ID: 152000024

FMS Description

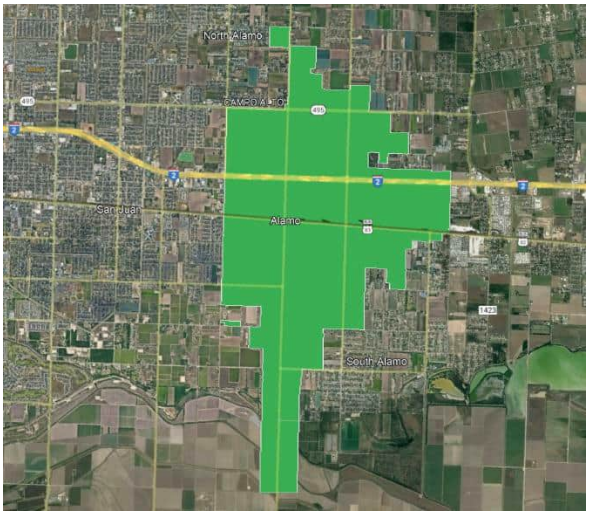
Alamo Pd Will Create A Working Evacuation List For Emergency Situations. Prioritize Flood Prone Areas

Strategy Type

- ☐ Education and Outreach Activities
- ☐ Protected Areas
- ✓ Regulatory and Guidance
- ☐ Development Standards
- ☐ Flood Preparedness Programs
- ☐ Other:

Strategy Area

City/ Cities	Alamo
County/ Counties	Hidalgo
HUC 8	12110208
HUC 12	
Study Area (sq. mi.)	



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:

Strategy Costs

Total Cost:	$1,000	Study Sponsor:	Alamo
Non-reoccurring Non-capital Cost (include in Total above):		*These are one-time costs for program development, education campaign, and non-engineering study costs.*	
Estimated year to start:	2024	Entity with Oversight	Alamo
Time to complete?	2026	Included in a Hazard Mitigation Action Plan or other plan?	Yes ✓ No ☐
Funding Dedicated?	Yes ☐ No ✓	(Potential) Source of Funding	Identify Grants; Police Department Budget

Have the flood risk and flood reduction impacts been evaluated?

Yes ☐ No ✓

Was the strategy missing sufficient data to assess whether the proposed strategy has a negative effect, per TWDB guidelines? Yes ☐ No ✓

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 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

RFPG Recommended

Yes ✓ No ☐

Region 15 Lower Rio Grande Regional Flood Planning Group

FMS

Flood Management Strategies
Fact Sheet

Alamo #5-1.1

FMS ID: 152000025

FMS Description

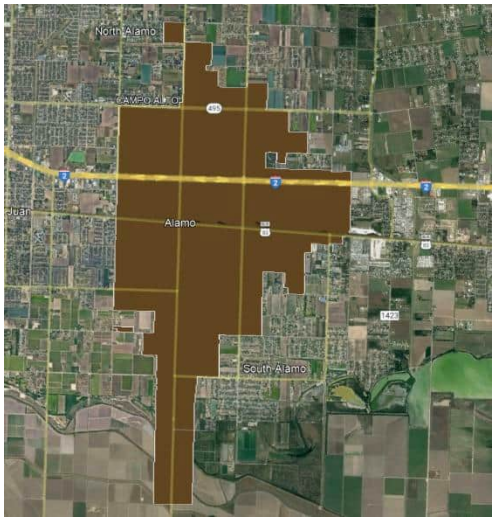
Implement Program To Provide Links To Weather Alerts And Departmental Phone Listings With Contact Personnel For Residents.

Strategy Type

- ☐ Education and Outreach Activities
- ☐ Protected Areas
- ☐ Regulatory and Guidance
- ☐ Development Standards
- ✓ Flood Preparedness Programs
- ☐ Other:

Strategy Area

City/ Cities	Alamo
County/ Counties	Hidalgo
HUC 8	12110208
HUC 12	
Study Area (sq. mi.)	



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:

Strategy Costs

Total Cost:	$2,000	Study Sponsor:	Alamo
Non-reoccurring Non-capital Cost (include in Total above):		*These are one-time costs for program development, education campaign, and non-engineering study costs.*	
Estimated year to start:	2023	Entity with Oversight	Alamo
Time to complete?	2025	Included in a Hazard Mitigation Action Plan or other plan?	Yes ✓ No ☐
Funding Dedicated?	Yes ☐ No ✓	(Potential) Source of Funding	Jurisdiction Budget

Have the flood risk and flood reduction impacts been evaluated?

Yes ☐ No ✓

Was the strategy missing sufficient data to assess whether the proposed strategy has a negative effect, per TWDB guidelines? Yes ☐ No ✓

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 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

RFPG Recommended

Yes ✓ No ☐

Region 15 Lower Rio Grande Regional Flood Planning Group

FMS

Flood Management Strategies
Fact Sheet

Edcouch #3-1.1

FMS ID: 152000026

FMS Description

Complete Activities Required To Be A Nfip Participating Community

Strategy Type

- ☐ Education and Outreach Activities
- ✓ Regulatory and Guidance
- ☐ Flood Preparedness Programs
- ☐ Protected Areas
- ☐ Development Standards
- ☐ Other:

Strategy Area

City/ Cities	Edcouch
County/ Counties	Hidalgo
HUC 8	12110208
HUC 12	
Study Area (sq. mi.)	

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:

Strategy Costs

Total Cost:	$5,000	Study Sponsor:	Edcouch
Non-reoccurring Non-capital Cost (include in Total above):		*These are one-time costs for program development, education campaign, and non-engineering study costs.*	
Estimated year to start:	2021	Entity with Oversight	Edcouch
Time to complete?	2022	Included in a Hazard Mitigation Action Plan or other plan?	Yes ✓ No ☐
Funding Dedicated?	Yes ☐ No ✓	(Potential) Source of Funding	FEMA

Have the flood risk and flood reduction impacts been evaluated?

Yes ☐ No ✓

Was the strategy missing sufficient data to assess whether the proposed strategy has a negative effect, per TWDB guidelines? Yes ☐ No ✓

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 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

RFPG Recommended

Yes ✓ No ☐

Region 15 Lower Rio Grande Regional Flood Planning Group

FMS

Flood Management Strategies
Fact Sheet

Edcouch #5-1.1

FMS ID: 152000027

FMS Description

Implement Program To Provide Links To Weather Alerts And Departmental Phone Listings With Contact Personnel For Residents.

Strategy Type

- ☐ Education and Outreach Activities
- ☐ Protected Areas
- ☐ Regulatory and Guidance
- ☐ Development Standards
- ✓ Flood Preparedness Programs
- ☐ Other:

Strategy Area

City/ Cities	Edcouch
County/ Counties	Hidalgo
HUC 8	12110208
HUC 12	
Study Area (sq. mi.)	

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:

Strategy Costs

Total Cost:	$2,000	Study Sponsor:	Edcouch
Non-reoccurring Non-capital Cost (include in Total above):		*These are one-time costs for program development, education campaign, and non-engineering study costs.*	
Estimated year to start:	2021	Entity with Oversight	Edcouch
Time to complete?	2021	Included in a Hazard Mitigation Action Plan or other plan?	Yes ✓ No ☐
Funding Dedicated?	Yes ☐ No ✓	(Potential) Source of Funding	Jurisdiction Budget

Have the flood risk and flood reduction impacts been evaluated?

Yes ✓ No ☐

Was the strategy missing sufficient data to assess whether the proposed strategy has a negative effect, per TWDB guidelines? Yes ☐ No ✓

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 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

RFPG Recommended

Yes ✓ No ☐

Region 15 Lower Rio Grande Regional Flood Planning Group

FMS

Flood Management Strategies
Fact Sheet

Edcouch #7-1.1

FMS ID: 152000028

FMS Description

Develop Procedures For Mass Notifications To Citizens And Merchants During Natural Hazard Incident. Solicit Bids For System. Purchase Emergency Notification System And Install Distribute Information On New System And Conduct Training

Strategy Type

- ☐ Education and Outreach Activities
- ☐ Protected Areas
- ☐ Regulatory and Guidance
- ☐ Development Standards
- ✓ Flood Preparedness Programs
- ☐ Other:

Strategy Area

City/ Cities	Edcouch
County/ Counties	Hidalgo
HUC 8	12110208
HUC 12	
Study Area (sq. mi.)	

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:

Strategy Costs

Total Cost:	$25,000	Study Sponsor:	Edcouch
Non-reoccurring Non-capital Cost (include in Total above):		*These are one-time costs for program development, education campaign, and non-engineering study costs.*	
Estimated year to start:	2021	Entity with Oversight	Edcouch
Time to complete?	2023	Included in a Hazard Mitigation Action Plan or other plan?	Yes ✓ No ☐
Funding Dedicated?	Yes ☐ No ✓	(Potential) Source of Funding	Jurisdiction Budget

Have the flood risk and flood reduction impacts been evaluated?

Yes ☐ No ✓

Was the strategy missing sufficient data to assess whether the proposed strategy has a negative effect, per TWDB guidelines? Yes ☐ No ✓

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 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
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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

RFPG Recommended

Yes ✓ No ☐

Region 15 Lower Rio Grande Regional Flood Planning Group

FMS

Flood Management Strategies
Fact Sheet

Edinburg #1-1.2

FMS ID: 152000029

FMS Description

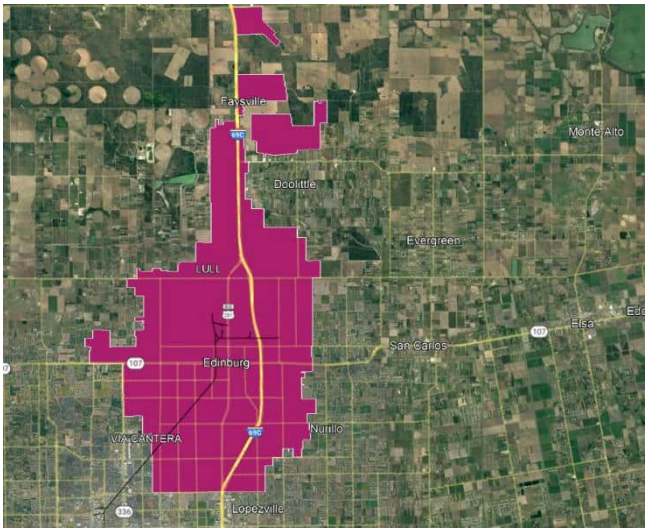
Implement Reverse 9-1-1 System

Strategy Type

- ☐ Education and Outreach Activities
- ☐ Protected Areas
- ☐ Regulatory and Guidance
- ☐ Development Standards
- ✓ Flood Preparedness Programs
- ☐ Other:

Strategy Area

City/ Cities	Edinburg
County/ Counties	Hidalgo
HUC 8	12110208
HUC 12	
Study Area (sq. mi.)	



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:

Strategy Costs

Total Cost:	$250,000	Study Sponsor:	Edinburg
Non-reoccurring Non-capital Cost (include in Total above):		*These are one-time costs for program development, education campaign, and non-engineering study costs.*	
Estimated year to start:	2021	Entity with Oversight	Edinburg
Time to complete?	2022	Included in a Hazard Mitigation Action Plan or other plan?	Yes ✓ No ☐
Funding Dedicated?	Yes ☐ No ✓	(Potential) Source of Funding	Federal, State, & Local

Have the flood risk and flood reduction impacts been evaluated?

Yes ☐ No ✓

Was the strategy missing sufficient data to assess whether the proposed strategy has a negative effect, per TWDB guidelines? Yes ☐ No ✓

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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- ☐ Reduce the # of structures that have been subject to repeated flooding events through property buyouts
- ☐ 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

RFPG Recommended

Yes ✓ No ☐

Region 15 Lower Rio Grande Regional Flood Planning Group

FMS

Flood Management Strategies
Fact Sheet

Edinburg #7-1.1

FMS ID: 152000030

FMS Description

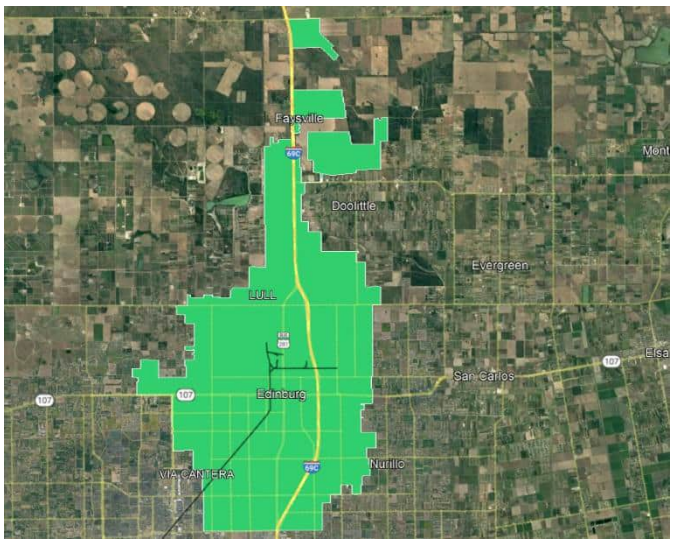
Implement Program To Provide Links To Weather Alerts And Departmental Phone Listings With Contact Personnel For Residents.

Strategy Type

- ☐ Education and Outreach Activities
- ☐ Protected Areas
- ☐ Regulatory and Guidance
- ☐ Development Standards
- ✓ Flood Preparedness Programs
- ☐ Other:

Strategy Area

City/ Cities	Edinburg
County/ Counties	Hidalgo
HUC 8	12110208
HUC 12	
Study Area (sq. mi.)	



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:

Strategy Costs

Total Cost:	$1,000	Study Sponsor:	Edinburg
Non-reoccurring Non-capital Cost (include in Total above):		*These are one-time costs for program development, education campaign, and non-engineering study costs.*	
Estimated year to start:		Entity with Oversight	Edinburg
Time to complete?	Completed	Included in a Hazard Mitigation Action Plan or other plan?	Yes ✓ No ☐
Funding Dedicated?	Yes ☐ No ✓	(Potential) Source of Funding	Jurisdiction Budget

Have the flood risk and flood reduction impacts been evaluated?

Yes ☐ No ✓

Was the strategy missing sufficient data to assess whether the proposed strategy has a negative effect, per TWDB guidelines? Yes ☐ No ✓

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 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

RFPG Recommended

Yes ✓ No ☐

Region 15 Lower Rio Grande Regional Flood Planning Group

FMS

Flood Management Strategies
Fact Sheet

Edinburg #9-1.2

FMS ID: 152000031

FMS Description

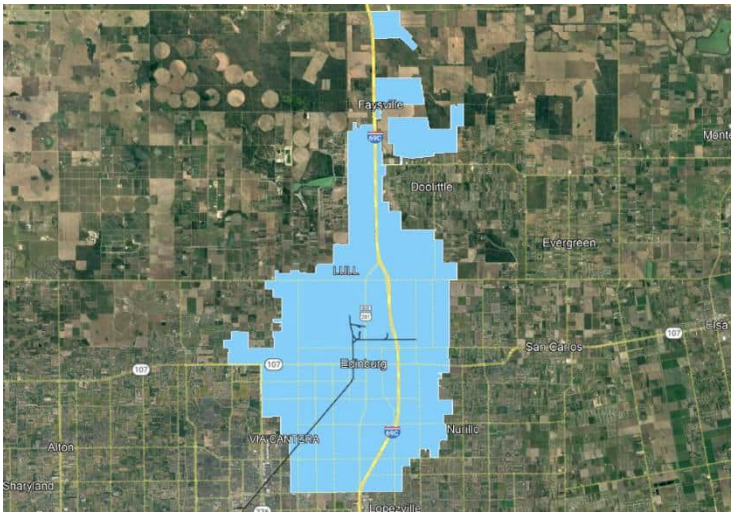
Develop Procedures For Mass Notifications To Citizens And Merchants During Natural Hazard Incident. Solicit Bids For System. Purchase Emergency Notification System And Install Distribute Information On New System And Conduct Training

Strategy Type

- ☐ Education and Outreach Activities
- ☐ Protected Areas
- ☐ Regulatory and Guidance
- ☐ Development Standards
- ✓ Flood Preparedness Programs
- ☐ Other:

Strategy Area

City/ Cities	Edinburg
County/ Counties	Hidalgo
HUC 8	12110208
HUC 12	
Study Area (sq. mi.)	



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:

Strategy Costs

Total Cost:	$31,000	Study Sponsor:	Edinburg
Non-reoccurring Non-capital Cost (include in Total above):		*These are one-time costs for program development, education campaign, and non-engineering study costs.*	
Estimated year to start:		Entity with Oversight	Edinburg
Time to complete?	Completed	Included in a Hazard Mitigation Action Plan or other plan?	Yes ✓ No ☐
Funding Dedicated?	Yes ☐ No ✓	(Potential) Source of Funding	Jurisdiction Budget

Have the flood risk and flood reduction impacts been evaluated?

Yes ☐ No ✓

Was the strategy missing sufficient data to assess whether the proposed strategy has a negative effect, per TWDB guidelines? Yes ☐ No ✓

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 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

RFPG Recommended

Yes ✓ No ☐

Region 15 Lower Rio Grande Regional Flood Planning Group

FMS

Flood Management Strategies
Fact Sheet

Hidalgo #5-1.1

FMS ID: 152000032

FMS Description

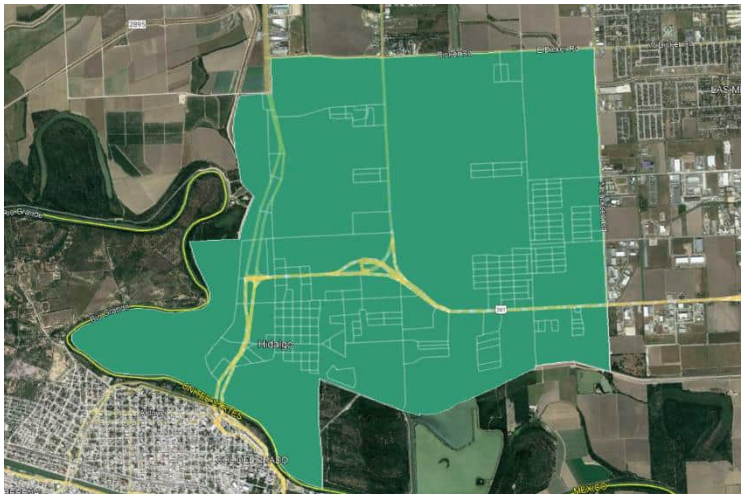
Implement Program To Provide Links To Weather Alerts And Departmental Phone Listings With Contact Personnel For Residents.

Strategy Type

- ✓ Education and Outreach Activities
- ☐ Regulatory and Guidance
- ☐ Flood Preparedness Programs
- ☐ Protected Areas
- ☐ Development Standards
- ☐ Other:

Strategy Area

City/ Cities	Hidalgo
County/ Counties	Hidalgo
HUC 8	12110207
	12110213
HUC 12	
Study Area (sq. mi.)	



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:

Strategy Costs

Total Cost:	$5,000	Study Sponsor:	Hidalgo
Non-reoccurring Non-capital Cost (include in Total above):		*These are one-time costs for program development, education campaign, and non-engineering study costs.*	
Estimated year to start:	2022	Entity with Oversight	Hidalgo
Time to complete?	2023	Included in a Hazard Mitigation Action Plan or other plan?	Yes ✓ No ☐
Funding Dedicated?	Yes ☐ No ✓	(Potential) Source of Funding	N/A

Have the flood risk and flood reduction impacts been evaluated?

Yes ☐ No ✓

Was the strategy missing sufficient data to assess whether the proposed strategy has a negative effect, per TWDB guidelines? Yes ☐ No ✓

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 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

RFPG Recommended

Yes ✓ No ☐

Region 15 Lower Rio Grande Regional Flood Planning Group

FMS

Flood Management Strategies
Fact Sheet

Hidalgo County #11-1.2

FMS ID: 152000033

FMS Description

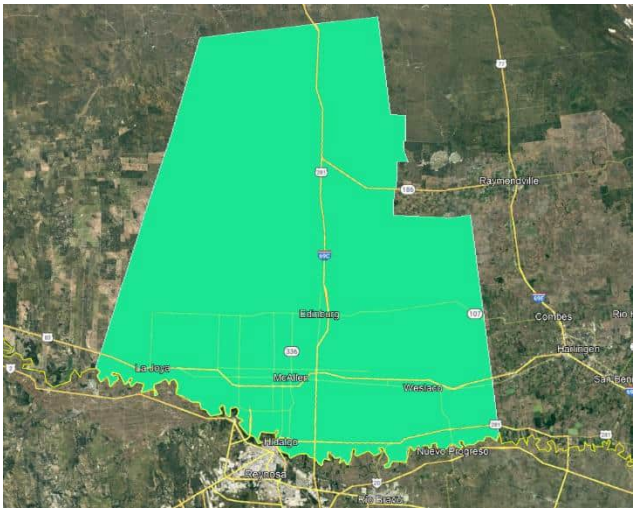
Implement An Inspection, Maintenance, And Enforcement Program To Ensure Continued Structural Integrity of Dams And Levees.

Strategy Type

- ☐ Education and Outreach Activities
- ☐ Protected Areas
- ☐ Regulatory and Guidance
- ☐ Development Standards
- ☐ Flood Preparedness Programs
- ✓ Other:

Strategy Area

City/ Cities	
County/ Counties	Hidalgo
HUC 8	12110207
	12110231
HUC 12	
Study Area (sq. mi.)	



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:

Strategy Costs

Total Cost:	$10,000	Study Sponsor:	Hidalgo County
Non-reoccurring Non-capital Cost (include in Total above):		*These are one-time costs for program development, education campaign, and non-engineering study costs.*	
Estimated year to start:	2023	Entity with Oversight	Hidalgo County
Time to complete?	2025	Included in a Hazard Mitigation Action Plan or other plan?	Yes ✓ No ☐
Funding Dedicated?	Yes ☐ No ✓	(Potential) Source of Funding	Jurisdiction Budget, Grants

Have the flood risk and flood reduction impacts been evaluated?

Yes ☐ No ✓

Was the strategy missing sufficient data to assess whether the proposed strategy has a negative effect, per TWDB guidelines? Yes ☐ No ✓

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
- ☐ 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

RFPG Recommended

Yes ✓ No ☐

Region 15 Lower Rio Grande Regional Flood Planning Group

FMS

Flood Management Strategies
Fact Sheet

Hidalgo County #12-1.1

FMS ID: 152000034

FMS Description

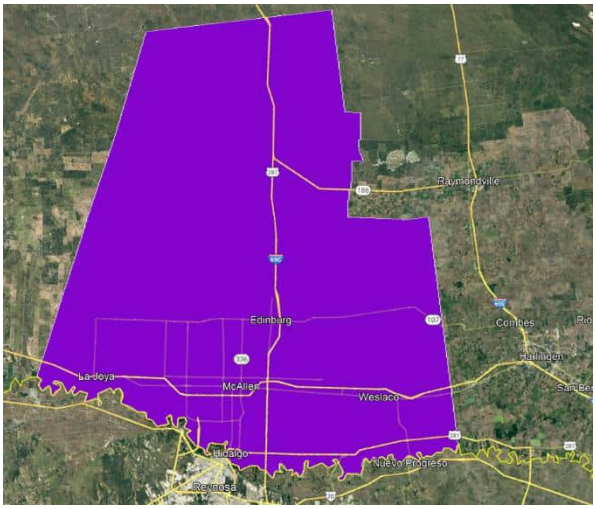
Implement Program To Provide Links To Weather Alerts And Departmental Phone Listings With Contact Personnel For Residents.

Strategy Type

- ☐ Education and Outreach Activities
- ☐ Protected Areas
- ☐ Regulatory and Guidance
- ☐ Development Standards
- ✓ Flood Preparedness Programs
- ☐ Other:

Strategy Area

City/ Cities	
County/ Counties	Hidalgo
HUC 8	12110207
	12110233
HUC 12	
Study Area (sq. mi.)	



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:

Strategy Costs

Total Cost:	$100,000	Study Sponsor:	Hidalgo County
Non-reoccurring Non-capital Cost (include in Total above):		*These are one-time costs for program development, education campaign, and non-engineering study costs.*	
Estimated year to start:	2023	Entity with Oversight	Hidalgo County
Time to complete?	2025	Included in a Hazard Mitigation Action Plan or other plan?	Yes ✓ No ☐
Funding Dedicated?	Yes ☐ No ✓	(Potential) Source of Funding	FEMA, Department Budget

Have the flood risk and flood reduction impacts been evaluated?

Yes ☐ No ✓

Was the strategy missing sufficient data to assess whether the proposed strategy has a negative effect, per TWDB guidelines? Yes ☐ No ✓

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 # 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

RFPG Recommended

Yes ✓ No ☐

Region 15 Lower Rio Grande Regional Flood Planning Group

FMS

Flood Management Strategies
Fact Sheet

Hidalgo County #14-1.1

FMS ID: 152000035

FMS Description

Develop Procedures For Mass Notifications To Citizens And Merchants During Natural Hazard Incident. Solicit Bids For System. Purchase Emergency Notification System And Install Distribute Information On New System And Conduct Training

Strategy Type

- ☐ Education and Outreach Activities
- ☐ Protected Areas
- ☐ Regulatory and Guidance
- ☐ Development Standards
- ✓ Flood Preparedness Programs
- ☐ Other:

Strategy Area

City/ Cities

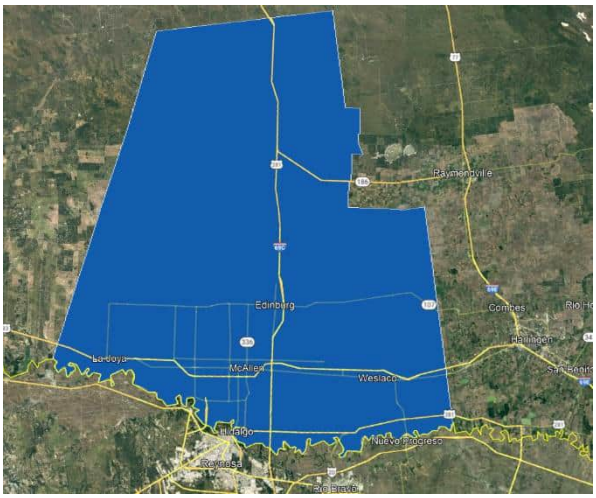
County/ Counties Hidalgo

HUC 8 12110207

12110236

HUC 12

Study Area (sq. mi.)



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:

Strategy Costs

Total Cost:	$100,000	Study Sponsor:	Hidalgo County
Non-reoccurring Non-capital Cost (include in Total above):		*These are one-time costs for program development, education campaign, and non-engineering study costs.*	
Estimated year to start:	2023	Entity with Oversight	Hidalgo County
Time to complete?	2025	Included in a Hazard Mitigation Action Plan or other plan?	Yes ✓ No ☐
Funding Dedicated?	Yes ☐ No ✓	(Potential) Source of Funding	Department Budget

Have the flood risk and flood reduction impacts been evaluated?

Yes ☐ No ✓

Was the strategy missing sufficient data to assess whether the proposed strategy has a negative effect, per TWDB guidelines? Yes ☐ No ✓

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
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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 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
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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

RFPG Recommended

Yes ✓ No ☐

Region 15 Lower Rio Grande Regional Flood Planning Group

FMS

Flood Management Strategies
Fact Sheet

Hidalgo County #2-2.1

FMS ID: 152000036

FMS Description

Incorporate Assessments of Hazards, Including Hurricane, Flood, Wild Land Fires, And Severe Storms, Into Site Selection And Design For New Buildings And When Siting Or Leasing County Facilities

Strategy Type

- ☐ Education and Outreach Activities
- ✓ Regulatory and Guidance
- ☐ Flood Preparedness Programs
- ☐ Protected Areas
- ☐ Development Standards
- ☐ Other:

Strategy Area

City/ Cities

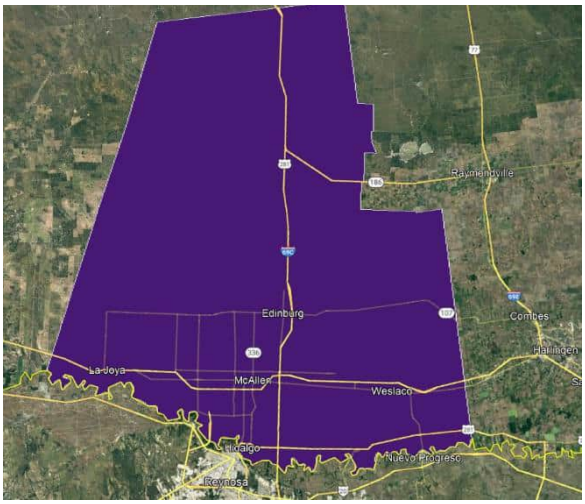
County/ Counties Hidalgo

HUC 8 12110207

12110213

HUC 12

Study Area (sq. mi.)



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:

Strategy Costs

Total Cost:	$25,000	Study Sponsor:	Hidalgo County
Non-reoccurring Non-capital Cost (include in Total above):		*These are one-time costs for program development, education campaign, and non-engineering study costs.*	
Estimated year to start:	2023	Entity with Oversight	Hidalgo County
Time to complete?	2025	Included in a Hazard Mitigation Action Plan or other plan?	Yes ✓ No ☐
Funding Dedicated?	Yes ☐ No ✓	(Potential) Source of Funding	Annual Department Budget

Have the flood risk and flood reduction impacts been evaluated?

Yes ☐ No ✓

Was the strategy missing sufficient data to assess whether the proposed strategy has a negative effect, per TWDB guidelines? Yes ☐ No ✓

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 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

RFPG Recommended

Yes ✓ No ☐

Region 15 Lower Rio Grande Regional Flood Planning Group

FMS

Flood Management Strategies
Fact Sheet

Hidalgo County #3-1.2

FMS ID: 152000037

FMS Description

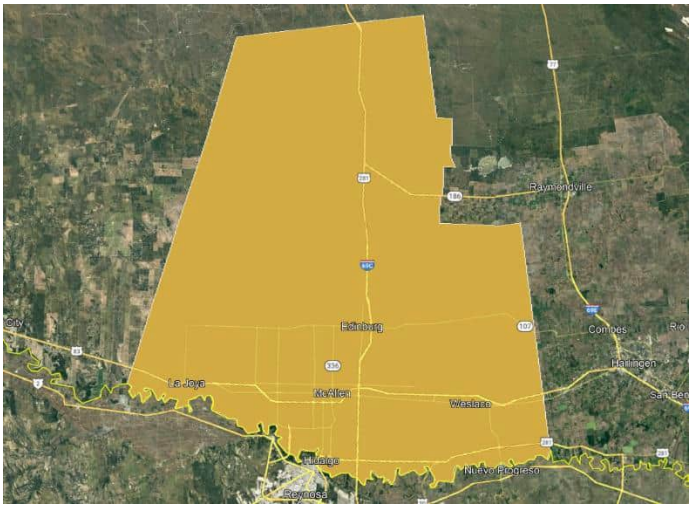
Enhance The Appropriate Websites To Provide Convenient Access To Most Current Hazard Maps.

Strategy Type

- ☐ Education and Outreach Activities
- ☐ Protected Areas
- ☐ Regulatory and Guidance
- ☐ Development Standards
- ✓ Flood Preparedness Programs
- ☐ Other:

Strategy Area

City/ Cities	
County/ Counties	Hidalgo
HUC 8	12110207
	12110217
HUC 12	
Study Area (sq. mi.)	



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:

Strategy Costs

Total Cost:	$50,000	Study Sponsor:	Hidalgo County
Non-reoccurring Non-capital Cost (include in Total above):		*These are one-time costs for program development, education campaign, and non-engineering study costs.*	
Estimated year to start:	2023	Entity with Oversight	Hidalgo County
Time to complete?	2025	Included in a Hazard Mitigation Action Plan or other plan?	Yes ✓ No ☐
Funding Dedicated?	Yes ☐ No ✓	(Potential) Source of Funding	Annual Department Budget and External Funding

Have the flood risk and flood reduction impacts been evaluated?

Yes ☐ No ✓

Was the strategy missing sufficient data to assess whether the proposed strategy has a negative effect, per TWDB guidelines? Yes ☐ No ✓

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 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

RFPG Recommended

Yes ✓ No ☐

Region 15 Lower Rio Grande Regional Flood Planning Group

FMS

Flood Management Strategies
Fact Sheet

La Villa #6-1.1

FMS ID: 152000038

FMS Description

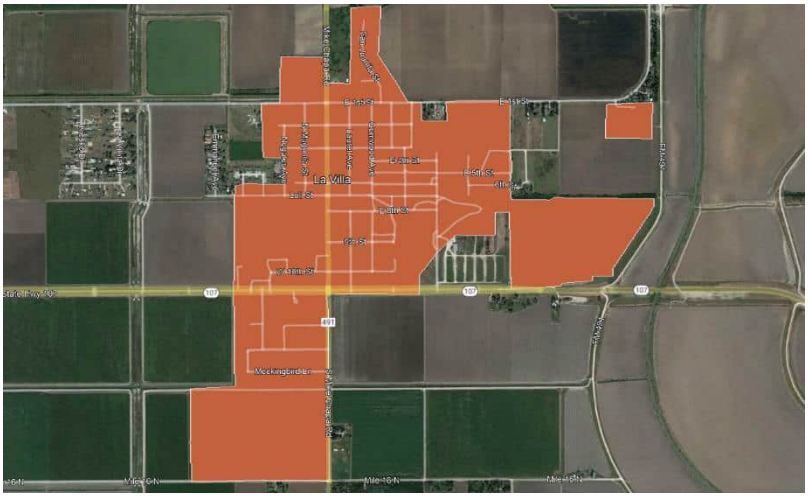
Implement Program To Provide Links To Weather Alerts And Departmental Phone Listings With Contact Personnel For Residents.

Strategy Type

- ☐ Education and Outreach Activities
- ☐ Protected Areas
- ☐ Regulatory and Guidance
- ☐ Development Standards
- ✓ Flood Preparedness Programs
- ☐ Other:

Strategy Area

City/ Cities	La Villa
County/ Counties	Hidalgo
HUC 8	12110208
HUC 12	
Study Area (sq. mi.)	



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:

Strategy Costs

Total Cost:	$1,000	Study Sponsor:	La Villa
Non-reoccurring Non-capital Cost (include in Total above):		*These are one-time costs for program development, education campaign, and non-engineering study costs.*	
Estimated year to start:		Entity with Oversight	La Villa
Time to complete?	Completed	Included in a Hazard Mitigation Action Plan or other plan?	Yes ✓ No ☐
Funding Dedicated?	Yes ☐ No ☐	(Potential) Source of Funding	N/A

Have the flood risk and flood reduction impacts been evaluated?

Yes ☐ No ✓

Was the strategy missing sufficient data to assess whether the proposed strategy has a negative effect, per TWDB guidelines? Yes ☐ No ✓

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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- ☐ 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 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

Yes ✓ No ☐

Region 15 Lower Rio Grande Regional Flood Planning Group

FMS

Flood Management Strategies
Fact Sheet

La Villa #8-1.1

FMS ID: 152000039

FMS Description

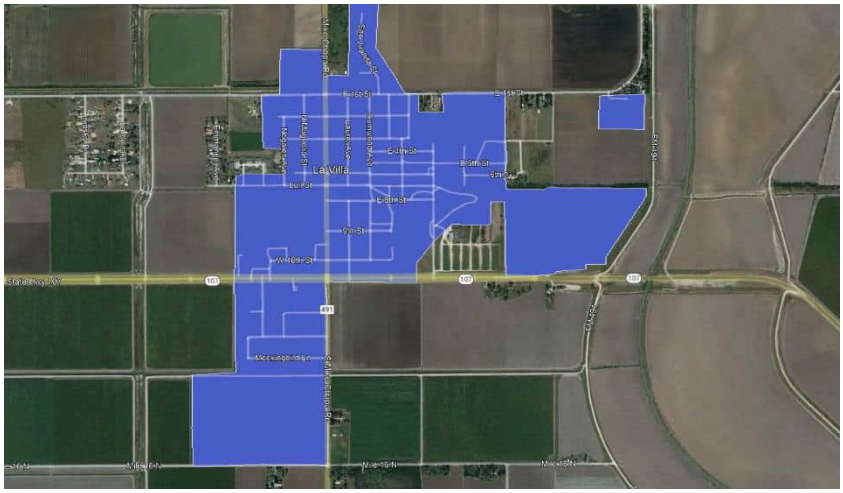
Develop Procedures For Mass Notifications To Citizens And Merchants During Natural Hazard Incident. Solicit Bids For System. Purchase Emergency Notification System And Install Distribute Information On New System And Conduct Training

Strategy Type

- ☐ Education and Outreach Activities
- ☐ Protected Areas
- ☐ Regulatory and Guidance
- ☐ Development Standards
- ✓ Flood Preparedness Programs
- ☐ Other:

Strategy Area

City/ Cities	La Villa
County/ Counties	Hidalgo
HUC 8	12110208
HUC 12	
Study Area (sq. mi.)	



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:

Strategy Costs

Total Cost:	$31,000	Study Sponsor:	La Villa
Non-reoccurring Non-capital Cost (include in Total above):		*These are one-time costs for program development, education campaign, and non-engineering study costs.*	
Estimated year to start:	2021	Entity with Oversight	La Villa
Time to complete?	2023	Included in a Hazard Mitigation Action Plan or other plan?	Yes ✓ No ☐
Funding Dedicated?	Yes ☐ No ✓	(Potential) Source of Funding	Jurisdiction Budget

Have the flood risk and flood reduction impacts been evaluated?

Yes ☐ No ✓

Was the strategy missing sufficient data to assess whether the proposed strategy has a negative effect, per TWDB guidelines? Yes ☐ No ✓

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 # 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

RFPG Recommended

Yes ✓ No ☐

Region 15 Lower Rio Grande Regional Flood Planning Group

FMS

Flood Management Strategies
Fact Sheet

McAllen #11-1.1

FMS ID: 152000040

FMS Description

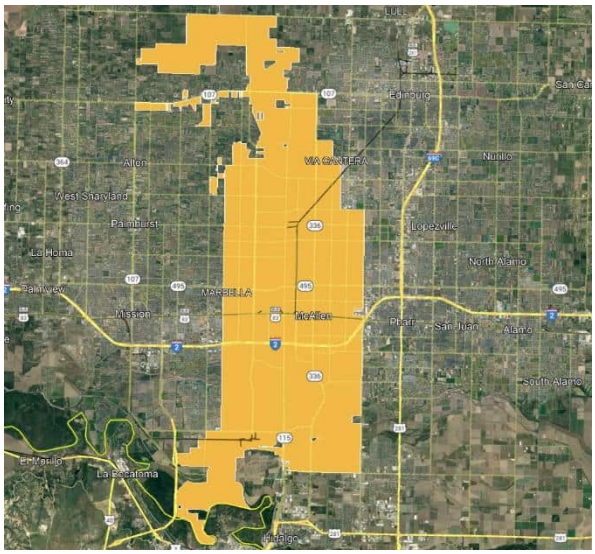
Implement Program To Provide Links To Weather Alerts And Departmental Phone Listings With Contact Personnel For Residents.

Strategy Type

- ☐ Education and Outreach Activities
- ☐ Protected Areas
- ☐ Regulatory and Guidance
- ☐ Development Standards
- ✓ Flood Preparedness Programs
- ☐ Other:

Strategy Area

City/ Cities	McAllen
County/ Counties	Hidalgo
HUC 8	12110208
HUC 12	
Study Area (sq. mi.)	



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:

Strategy Costs

Total Cost:	$1,000	Study Sponsor:	McAllen
Non-reoccurring Non-capital Cost (include in Total above):		*These are one-time costs for program development, education campaign, and non-engineering study costs.*	
Estimated year to start:		Entity with Oversight	McAllen
Time to complete?	Completed	Included in a Hazard Mitigation Action Plan or other plan?	Yes ✓ No ☐
Funding Dedicated?	Yes ☐ No ✓	(Potential) Source of Funding	Jurisdiction Budget

Have the flood risk and flood reduction impacts been evaluated?

Yes ☐ No ✓

Was the strategy missing sufficient data to assess whether the proposed strategy has a negative effect, per TWDB guidelines? Yes ☐ No ✓

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
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- ☐ Develop and maintain an operational stormwater asset management plan
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- ☐ 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

RFPG Recommended

Yes ✓ No ☐

Region 15 Lower Rio Grande Regional Flood Planning Group

FMS

Flood Management Strategies
Fact Sheet

McAllen #1-2.1

FMS ID: 152000041

FMS Description

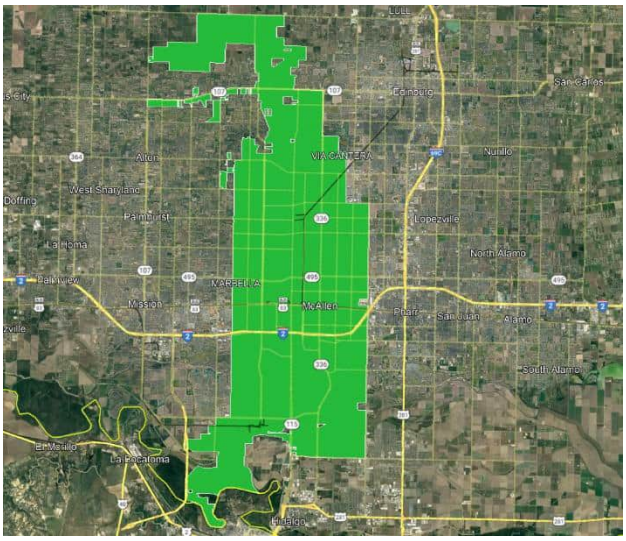
Develop Emergency Notification Awareness System For Traveling Public Via Transportation System In The Event of Severe Weather In McAllen

Strategy Type

- ☐ Education and Outreach Activities
- ☐ Protected Areas
- ☐ Regulatory and Guidance
- ☐ Development Standards
- ✓ Flood Preparedness Programs
- ☐ Other:

Strategy Area

City/ Cities	McAllen
County/ Counties	Hidalgo
HUC 8	12110208
HUC 12	
Study Area (sq. mi.)	



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:

Strategy Costs

Total Cost:	$500,000	Study Sponsor:	McAllen
Non-reoccurring Non-capital Cost (include in Total above):		*These are one-time costs for program development, education campaign, and non-engineering study costs.*	
Estimated year to start:	2021	Entity with Oversight	McAllen
Time to complete?	2024	Included in a Hazard Mitigation Action Plan or other plan?	Yes ✓ No ☐
Funding Dedicated?	Yes ☐ No ✓	(Potential) Source of Funding	Grants, Matching City Funds

Have the flood risk and flood reduction impacts been evaluated?

Yes ☐ No ✓

Was the strategy missing sufficient data to assess whether the proposed strategy has a negative effect, per TWDB guidelines? Yes ☐ No ✓

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
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- ☐ Develop and maintain an operational stormwater asset management plan
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- ☐ 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

Yes ✓ No ☐

Region 15 Lower Rio Grande Regional Flood Planning Group

FMS

Flood Management Strategies
Fact Sheet

McAllen #1-2.1

FMS ID: 152000042

FMS Description

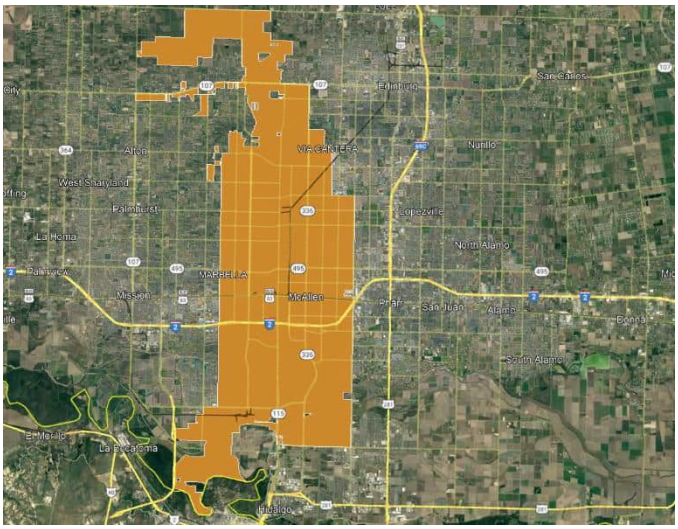
Provide A Means of Disseminating Emergency Information To The Citizens of McAllen

Strategy Type

- ☐ Education and Outreach Activities
- ☐ Protected Areas
- ☐ Regulatory and Guidance
- ☐ Development Standards
- ✓ Flood Preparedness Programs
- ☐ Other:

Strategy Area

City/ Cities	McAllen
County/ Counties	Hidalgo
HUC 8	12110208
HUC 12	
Study Area (sq. mi.)	



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:

Strategy Costs

Total Cost:	$500,000	Study Sponsor:	McAllen
Non-reoccurring Non-capital Cost (include in Total above):		*These are one-time costs for program development, education campaign, and non-engineering study costs.*	
Estimated year to start:	2021	Entity with Oversight	McAllen
Time to complete?	2022	Included in a Hazard Mitigation Action Plan or other plan?	Yes ✓ No ☐
Funding Dedicated?	Yes ☐ No ✓	(Potential) Source of Funding	Grants, Matching City Funds

Have the flood risk and flood reduction impacts been evaluated?

Yes ☐ No ✓

Was the strategy missing sufficient data to assess whether the proposed strategy has a negative effect, per TWDB guidelines? Yes ☐ No ✓

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 # 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
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- ☐ Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
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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

RFPG Recommended

Yes ✓ No ☐

Region 15 Lower Rio Grande Regional Flood Planning Group

FMS

Flood Management Strategies
Fact Sheet

Mercedes #11-1.1

FMS ID: 152000043

FMS Description

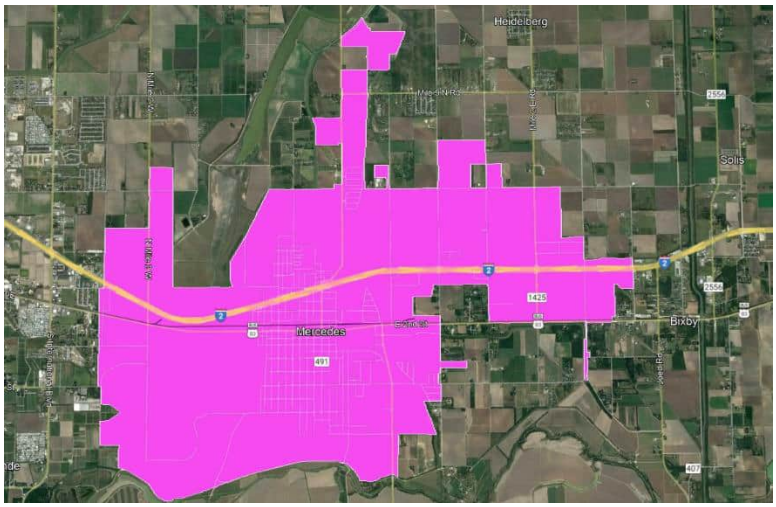
Develop Procedures For Mass Notifications To Citizens And Merchants During Natural Hazard Incident. Solicit Bids For System. Purchase Emergency Notification System And Install Distribute Information On New System And Conduct Training

Strategy Type

- ☐ Education and Outreach Activities
- ☐ Protected Areas
- ☐ Regulatory and Guidance
- ☐ Development Standards
- ✓ Flood Preparedness Programs
- ☐ Other:

Strategy Area

City/ Cities	Mercedes
County/ Counties	Hidalgo
HUC 8	12110208
HUC 12	
Study Area (sq. mi.)	



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:

Strategy Costs

Total Cost:	$25,000	Study Sponsor:	Mercedes
Non-reoccurring Non-capital Cost (include in Total above):		*These are one-time costs for program development, education campaign, and non-engineering study costs.*	
Estimated year to start:	2021	Entity with Oversight	Mercedes
Time to complete?	2023	Included in a Hazard Mitigation Action Plan or other plan?	Yes ✓ No ☐
Funding Dedicated?	Yes ☐ No ✓	(Potential) Source of Funding	Jurisdiction Budget

Have the flood risk and flood reduction impacts been evaluated?

Yes ☐ No ✓

Was the strategy missing sufficient data to assess whether the proposed strategy has a negative effect, per TWDB guidelines? Yes ☐ No ✓

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 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

RFPG Recommended

Yes ✓ No ☐

Region 15 Lower Rio Grande Regional Flood Planning Group

FMS

Flood Management Strategies
Fact Sheet

Mercedes #9-1.1

FMS ID: 152000044

FMS Description

Implement Program To Provide Links To Weather Alerts And Departmental Phone Listings With Contact Personnel For Residents.

Strategy Type

- ☐ Education and Outreach Activities
- ☐ Protected Areas
- ☐ Regulatory and Guidance
- ☐ Development Standards
- ☐ Flood Preparedness Programs
- ✓ Other:

Strategy Area

City/ Cities	Mercedes
County/ Counties	Hidalgo
HUC 8	12110208
HUC 12	
Study Area (sq. mi.)	

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:

Strategy Costs

Total Cost:	$1,000	Study Sponsor:	Mercedes
Non-reoccurring Non-capital Cost (include in Total above):		*These are one-time costs for program development, education campaign, and non-engineering study costs.*	
Estimated year to start:	2022	Entity with Oversight	Mercedes
Time to complete?	2024	Included in a Hazard Mitigation Action Plan or other plan?	Yes ✓ No ☐
Funding Dedicated?	Yes ☐ No ✓	(Potential) Source of Funding	Jurisdiction Budget

Have the flood risk and flood reduction impacts been evaluated?

Yes ☐ No ✓

Was the strategy missing sufficient data to assess whether the proposed strategy has a negative effect, per TWDB guidelines? Yes ☐ No ✓

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 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

RFPG Recommended

Yes ✓ No ☐

Region 15 Lower Rio Grande Regional Flood Planning Group

FMS

Flood Management Strategies
Fact Sheet

Mission #1-1.1

FMS ID: 152000045

FMS Description

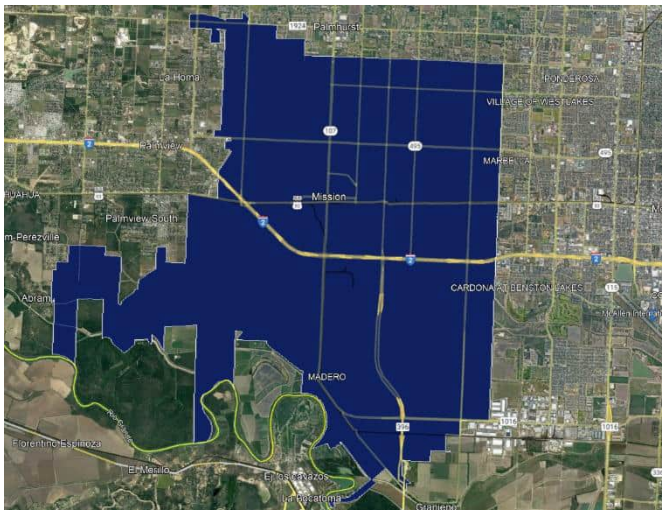
Develop Procedures For Mass Notifications To Citizens And Merchants During Natural Hazard Incident. Solicit Bids For System. Purchase Emergency Notification System And Install Distribute Information On New System And Conduct Training

Strategy Type

- ☐ Education and Outreach Activities
- ☐ Protected Areas
- ☐ Regulatory and Guidance
- ☐ Development Standards
- ✓ Flood Preparedness Programs
- ☐ Other:

Strategy Area

City/ Cities	Mission
County/ Counties	Hidalgo
HUC 8	12110208
HUC 12	
Study Area (sq. mi.)	



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:

Strategy Costs

Total Cost:	$31,000	Study Sponsor:	Mission
Non-reoccurring Non-capital Cost (include in Total above):		*These are one-time costs for program development, education campaign, and non-engineering study costs.*	
Estimated year to start:		Entity with Oversight	Mission
Time to complete?	Completed	Included in a Hazard Mitigation Action Plan or other plan?	Yes ✓ No ☐
Funding Dedicated?	Yes ☐ No ✓	(Potential) Source of Funding	City Of Mission

Have the flood risk and flood reduction impacts been evaluated?

Yes ☐ No ✓

Was the strategy missing sufficient data to assess whether the proposed strategy has a negative effect, per TWDB guidelines? Yes ☐ No ✓

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 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

RFPG Recommended

Yes ✓ No ☐

Region 15 Lower Rio Grande Regional Flood Planning Group

FMS

Flood Management Strategies
Fact Sheet

Mission #7-1.1

FMS ID: 152000046

FMS Description

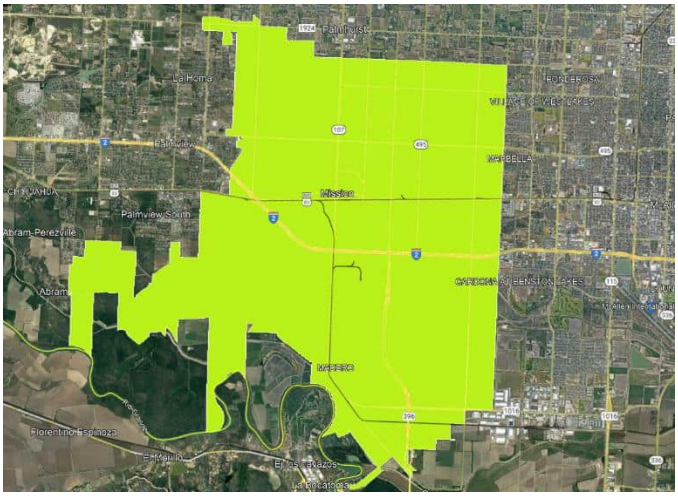
Implement Program To Provide Links To Weather Alerts And Departmental Phone Listings With Contact Personnel For Residents.

Strategy Type

- ☐ Education and Outreach Activities
- ☐ Protected Areas
- ☐ Regulatory and Guidance
- ☐ Development Standards
- ✓ Flood Preparedness Programs
- ☐ Other:

Strategy Area

City/ Cities	Mission
County/ Counties	Hidalgo
HUC 8	12110208
HUC 12	
Study Area (sq. mi.)	



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:

Strategy Costs

Total Cost:	$8,500	Study Sponsor:	Mission
Non-reoccurring Non-capital Cost (include in Total above):		*These are one-time costs for program development, education campaign, and non-engineering study costs.*	
Estimated year to start:		Entity with Oversight	Mission
Time to complete?	Completed	Included in a Hazard Mitigation Action Plan or other plan?	Yes ✓ No ☐
Funding Dedicated?	Yes ☐ No ✓	(Potential) Source of Funding	City Of Mission

Have the flood risk and flood reduction impacts been evaluated?

Yes ☐ No ☐

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

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 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

RFPG Recommended

Yes ✓ No ☐

Region 15 Lower Rio Grande Regional Flood Planning Group

FMS

Flood Management Strategies
Fact Sheet

Palmview #5-1.1

FMS ID: 152000047

FMS Description

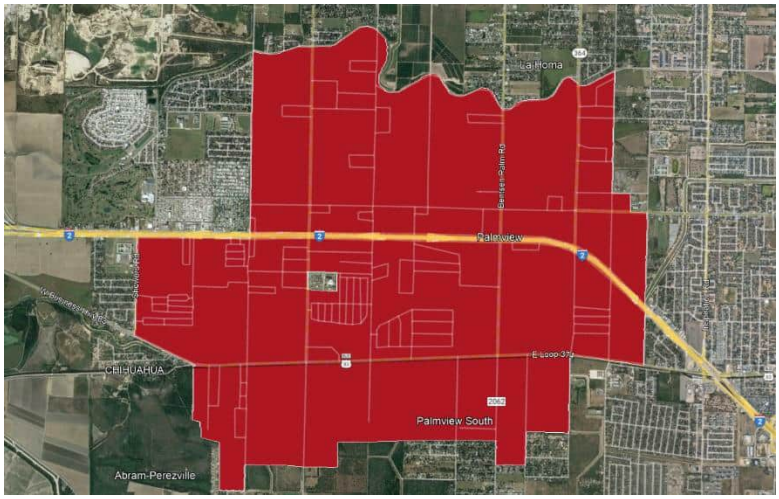
Implement Program To Provide Links To Weather Alerts And Departmental Phone Listings With Contact Personnel For Residents.

Strategy Type

- ☐ Education and Outreach Activities
- ☐ Protected Areas
- ☐ Regulatory and Guidance
- ☐ Development Standards
- ✓ Flood Preparedness Programs
- ☐ Other:

Strategy Area

City/ Cities	Palmview
County/ Counties	Hidalgo
HUC 8	12110208
HUC 12	
Study Area (sq. mi.)	



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:

Strategy Costs

Total Cost:	$1,000	Study Sponsor:	Palmview
Non-reoccurring Non-capital Cost (include in Total above):		*These are one-time costs for program development, education campaign, and non-engineering study costs.*	
Estimated year to start:		Entity with Oversight	Palmview
Time to complete?	Completed	Included in a Hazard Mitigation Action Plan or other plan?	Yes ✓ No ☐
Funding Dedicated?	Yes ☐ No ✓	(Potential) Source of Funding	N/A

Have the flood risk and flood reduction impacts been evaluated?

Yes ☐ No ✓

Was the strategy missing sufficient data to assess whether the proposed strategy has a negative effect, per TWDB guidelines? Yes ☐ No ✓

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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- ☐ Reduce the # of structures that have been subject to repeated flooding events through property buyouts
- ☐ 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

RFPG Recommended

Yes ✓ No ☐

Region 15 Lower Rio Grande Regional Flood Planning Group

FMS

Flood Management Strategies
Fact Sheet

Palmview #7-1.1

FMS ID: 152000048

FMS Description

Develop Procedures For Mass Notifications To Citizens And Merchants During Natural Hazard Incident. Solicit Bids For System. Purchase Emergency Notification System And Install Distribute Information On New System And Conduct Training.

Strategy Type

- ☐ Education and Outreach Activities
- ☐ Protected Areas
- ☐ Regulatory and Guidance
- ☐ Development Standards
- ☐ Flood Preparedness Programs
- ✓ Flood Measurement and Warning

Strategy Area

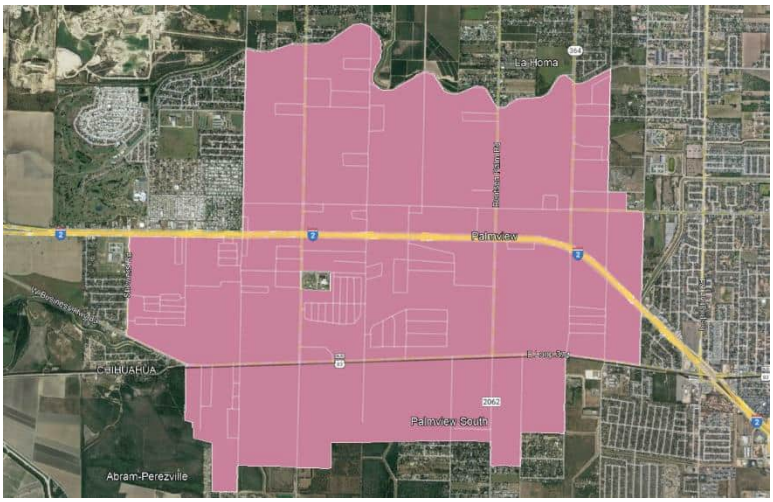
City/ Cities

County/ Counties Hidalgo

HUC 8 12110208

HUC 12

Study Area (sq. mi.)



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:

Strategy Costs

Total Cost:	$31,000	Study Sponsor:	Palmview
Non-reoccurring Non-capital Cost (include in Total above):		*These are one-time costs for program development, education campaign, and non-engineering study costs.*	
Estimated year to start:		Entity with Oversight	Palmview
Time to complete?	Completed	Included in a Hazard Mitigation Action Plan or other plan?	Yes ✓ No ☐
Funding Dedicated?	Yes ☐ No ✓	(Potential) Source of Funding	Jurisdiction Budget

Have the flood risk and flood reduction impacts been evaluated?

Yes ☐ No ✓

Was the strategy missing sufficient data to assess whether the proposed strategy has a negative effect, per TWDB guidelines? Yes ☐ No ✓

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 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

RFPG Recommended

Yes ✓ No ☐

Region 15 Lower Rio Grande Regional Flood Planning Group

FMS

Flood Management Strategies
Fact Sheet

Pharr #10-1.1

FMS ID: 152000049

FMS Description

Develop Procedures For Mass Notifications To Citizens And Merchants During Natural Hazard Incident. Solicit Bids For System. Purchase Emergency Notification System And Install Distribute Information On New System And Conduct Training.

Strategy Type

- ☐ Education and Outreach Activities
- ☐ Protected Areas
- ☐ Regulatory and Guidance
- ☐ Development Standards
- ☐ Flood Preparedness Programs
- ✓ Flood Measurement and Warning

Strategy Area

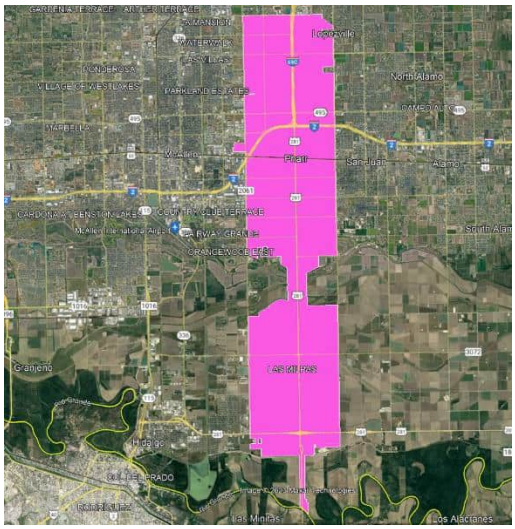
City/ Cities

County/ Counties Hidalgo

HUC 8 12110208

HUC 12

Study Area (sq. mi.)



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:

Strategy Costs

Total Cost:	$5,000	Study Sponsor:	Pharr
Non-reoccurring Non-capital Cost (include in Total above):		*These are one-time costs for program development, education campaign, and non-engineering study costs.*	
Estimated year to start:		Entity with Oversight	Pharr
Time to complete?	Completed	Included in a Hazard Mitigation Action Plan or other plan?	Yes ✓ No ☐
Funding Dedicated?	Yes ☐ No ✓	(Potential) Source of Funding	Jurisdiction Budget

Have the flood risk and flood reduction impacts been evaluated?

Yes ☐ No ✓

Was the strategy missing sufficient data to assess whether the proposed strategy has a negative effect, per TWDB guidelines? Yes ☐ No ✓

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 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

RFPG Recommended

Yes ✓ No ☐

Region 15 Lower Rio Grande Regional Flood Planning Group

FMS

Flood Management Strategies
Fact Sheet

Pharr #8-1.1

FMS ID: 152000050

FMS Description

Implement Program To Provide Links To Weather Alerts And Departmental Phone Listings With Contact Personnel For Residents.

Strategy Type

- ☐ Education and Outreach Activities
- ☐ Protected Areas
- ☐ Regulatory and Guidance
- ☐ Development Standards
- ☐ Flood Preparedness Programs
- ✓ Flood Measurement and Warning

Strategy Area

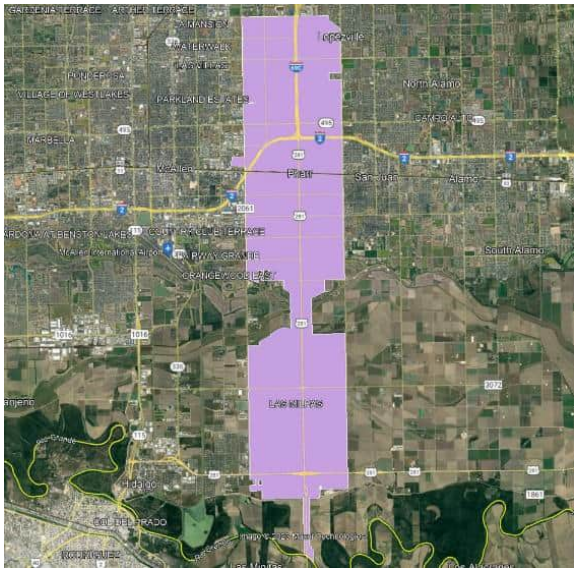
City/ Cities

County/ Counties Hidalgo

HUC 8 12110208

HUC 12

Study Area (sq. mi.)



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:

Strategy Costs

Total Cost:	$1,000	Study Sponsor:	Pharr
Non-reoccurring Non-capital Cost (include in Total above):		*These are one-time costs for program development, education campaign, and non-engineering study costs.*	
Estimated year to start:		Entity with Oversight	Pharr
Time to complete?	Completed	Included in a Hazard Mitigation Action Plan or other plan?	Yes ✓ No ☐
Funding Dedicated?	Yes ☐ No ✓	(Potential) Source of Funding	Jurisdiction Budget

Have the flood risk and flood reduction impacts been evaluated?

Yes ☐ No ✓

Was the strategy missing sufficient data to assess whether the proposed strategy has a negative effect, per TWDB guidelines? Yes ☐ No ✓

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 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

RFPG Recommended

Yes ✓ No ☐

Region 15 Lower Rio Grande Regional Flood Planning Group

FMS

Flood Management Strategies
Fact Sheet

Alamo #4-1.2

FMS ID: 152000051

FMS Description

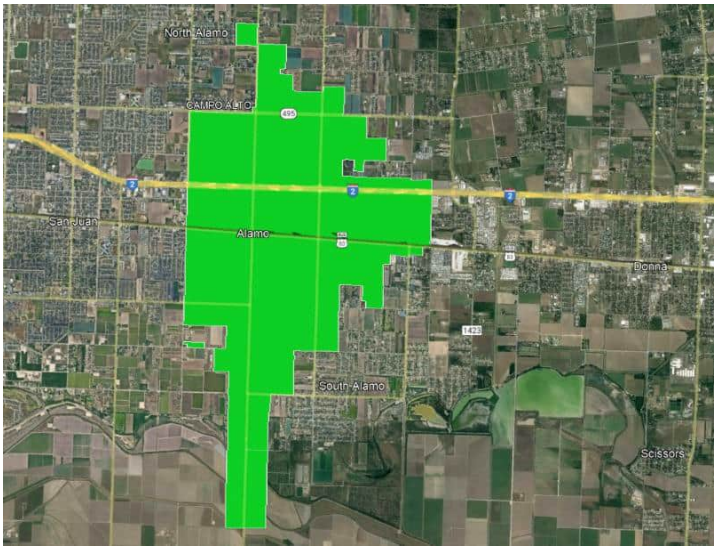
Provide Traffic Control And Evacuation Assistance During Emergency Situations

Strategy Type

- ☐ Education and Outreach Activities
- ☐ Protected Areas
- ✓ Regulatory and Guidance
- ☐ Development Standards
- ☐ Flood Preparedness Programs
- ☐ Other:

Strategy Area

City/ Cities	Alamo
County/ Counties	Hidalgo
HUC 8	12110208
HUC 12	
Study Area (sq. mi.)	



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:

Strategy Costs

Total Cost:	$10,000	Study Sponsor:	Alamo
Non-reoccurring Non-capital Cost (include in Total above):		*These are one-time costs for program development, education campaign, and non-engineering study costs.*	
Estimated year to start:	2024	Entity with Oversight	Alamo
Time to complete?	2026	Included in a Hazard Mitigation Action Plan or other plan?	Yes ✓ No ☐
Funding Dedicated?	Yes ☐ No ✓	(Potential) Source of Funding	Identify Grants; Police Department Budget

Have the flood risk and flood reduction impacts been evaluated?

Yes ☐ No ✓

Was the strategy missing sufficient data to assess whether the proposed strategy has a negative effect, per TWDB guidelines? Yes ☐ No ✓

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 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

RFPG Recommended

Yes ✓ No ☐

Region 15 Lower Rio Grande Regional Flood Planning Group

FMS

Flood Management Strategies
Fact Sheet

Starr County Hazard Mitigation Plan Action #2

FMS ID: 152000052

FMS Description

Develop needs assessment to identify and fund improvements to flood proof critical facilities such as lift stations and treatment plants.

Strategy Type

- ☐ Education and Outreach Activities
- ☐ Protected Areas
- ✓ Regulatory and Guidance
- ☐ Development Standards
- ☐ Flood Preparedness Programs
- ☐ Other:

Strategy Area

City/ Cities	County Wide
County/ Counties	Starr County
HUC 8	
HUC 12	
Study Area (sq. mi.)	

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:

Strategy Costs

Total Cost:	20,000,000	Study Sponsor:	Starr County
Non-reoccurring Non-capital Cost (include in Total above):	$1,000	*These are one-time costs for program development, education campaign, and non-engineering study costs.*	
Estimated year to start:	2024	Entity with Oversight	Starr County
Time to complete?	2026	Included in a Hazard Mitigation Action Plan or other plan?	Yes ✓ No ☐
Funding Dedicated?	Yes ☐ No ✓	(Potential) Source of Funding	Identify Grants; Police Department Budget

Have the flood risk and flood reduction impacts been evaluated?

Yes ☐ No ✓

Was the strategy missing sufficient data to assess whether the proposed strategy has a negative effect, per TWDB guidelines? Yes ☐ No ✓

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 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

RFPG Recommended

Yes ✓ No ☐

Region 15 Lower Rio Grande Regional Flood Planning Group

FMS

Flood Management Strategies
Fact Sheet

Starr County Hazard Mitigation Plan Action #6

FMS ID: 152000053

FMS Description

Building a shelter within a community to serve for flood situations in Rio Grande City.

Strategy Type

- ☐ Education and Outreach Activities
- ☐ Protected Areas
- ✓ Regulatory and Guidance
- ☐ Development Standards
- ☐ Flood Preparedness Programs
- ☐ Other:

Strategy Area

City/ Cities	Rio Grande City
County/ Counties	Starr
HUC 8	
HUC 12	
Study Area (sq. mi.)	

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:

Strategy Costs

Total Cost:	$4,000,000	Study Sponsor:	Starr County
Non-reoccurring Non-capital Cost (include in Total above):	$1,000	*These are one-time costs for program development, education campaign, and non-engineering study costs.*	
Estimated year to start:	2024	Entity with Oversight	Rio Grande City
Time to complete?	2026	Included in a Hazard Mitigation Action Plan or other plan?	Yes ✓ No ☐
Funding Dedicated?	Yes ☐ No ✓	(Potential) Source of Funding	Identify Grants; Police Department Budget

Have the flood risk and flood reduction impacts been evaluated?

Yes ☐ No ✓

Was the strategy missing sufficient data to assess whether the proposed strategy has a negative effect, per TWDB guidelines? Yes ☐ No ✓

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 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

RFPG Recommended

Yes ✓ No ☐

Region 15 Lower Rio Grande Regional Flood Planning Group

FMS

Flood Management Strategies
Fact Sheet

Starr County Hazard Mitigation Plan Action #10

FMS ID: 152000054

FMS Description

Retrofit community center as shelter for flooding events. (Roma)

Strategy Type

- ☐ Education and Outreach Activities
- ☐ Protected Areas
- ✓ Regulatory and Guidance
- ☐ Development Standards
- ☐ Flood Preparedness Programs
- ☐ Other:

Strategy Area

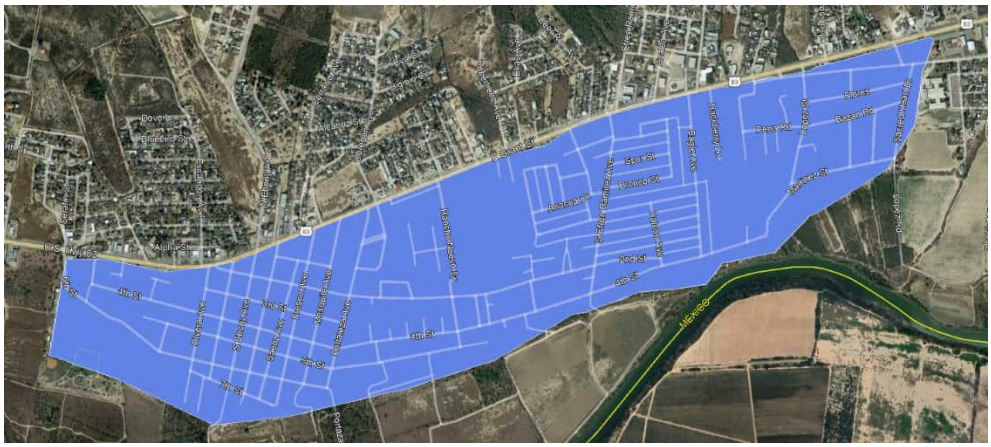
City/ Cities: Roma

County/ Counties: Starr

HUC 8:

HUC 12:

Study Area (sq. mi.):



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:

Strategy Costs

Total Cost:	$1,000,000	Study Sponsor:	Starr County
Non-reoccurring Non-capital Cost (include in Total above):	$1,000	*These are one-time costs for program development, education campaign, and non-engineering study costs.*	
Estimated year to start:	2024	Entity with Oversight	Roma
Time to complete?	2026	Included in a Hazard Mitigation Action Plan or other plan?	Yes ✓ No ☐
Funding Dedicated?	Yes ☐ No ✓	(Potential) Source of Funding	Identify Grants; Police Department Budget

Have the flood risk and flood reduction impacts been evaluated?

Yes ☐ No ✓

Was the strategy missing sufficient data to assess whether the proposed strategy has a negative effect, per TWDB guidelines? Yes ☐ No ✓

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 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

RFPG Recommended

Yes ✓ No ☐

Region 15 Lower Rio Grande Regional Flood Planning Group

FMS

Flood Management Strategies
Fact Sheet

Starr County Hazard Mitigation Plan Action #19

FMS ID: 152000055

FMS Description

Develop maintenance schedule for creeks within jurisdiction

Strategy Type

- ☐ Education and Outreach Activities
- ☐ Protected Areas
- ✓ Regulatory and Guidance
- ☐ Development Standards
- ☐ Flood Preparedness Programs
- ☐ Other:

Strategy Area

City/ Cities	County Wide
County/ Counties	Starr
HUC 8	
HUC 12	
Study Area (sq. mi.)	

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:

Strategy Costs

Total Cost:	$335,000	Study Sponsor:	Starr County
Non-reoccurring Non-capital Cost (include in Total above):	$1,000	*These are one-time costs for program development, education campaign, and non-engineering study costs.*	
Estimated year to start:	2024	Entity with Oversight	Roma
Time to complete?	2026	Included in a Hazard Mitigation Action Plan or other plan?	Yes ✓ No ☐
Funding Dedicated?	Yes ☐ No ✓	(Potential) Source of Funding	Identify Grants; Police Department Budget

Have the flood risk and flood reduction impacts been evaluated?

Yes ☐ No ✓

Was the strategy missing sufficient data to assess whether the proposed strategy has a negative effect, per TWDB guidelines? Yes ☐ No ✓

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 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

RFPG Recommended

Yes ✓ No ☐

Region 15 Lower Rio Grande Regional Flood Planning Group

FMS

Flood Management Strategies
Fact Sheet

City of Laguna Vista - Laguna Vista Establish/Join Drainage District

FMS ID: 152000056

FMS Description

Secure funding to become/join drainage district

Strategy Type

- ☐ Education and Outreach Activities
- ☐ Protected Areas
- ☐ Regulatory and Guidance
- ☐ Development Standards
- ☐ Flood Preparedness Programs
- ✓ Other:

Strategy Area

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

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:

Strategy Costs

Total Cost:	$174,750	Study Sponsor:	City of Laguna Vista
Non-reoccurring Non-capital Cost (include in Total above):	$1,000	*These are one-time costs for program development, education campaign, and non-engineering study costs.*	
Estimated year to start:	2024	Entity with Oversight	City of Laguna Vista
Time to complete?	2026	Included in a Hazard Mitigation Action Plan or other plan?	Yes ✓ No ☐
Funding Dedicated?	Yes ☐ No ✓	(Potential) Source of Funding	Identify Grants; Police Department Budget

Have the flood risk and flood reduction impacts been evaluated?

Yes ☐ No ✓

Was the strategy missing sufficient data to assess whether the proposed strategy has a negative effect, per TWDB guidelines? Yes ☐ No ✓

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 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

RFPG Recommended

Yes ✓ No ☐

Region 15 Lower Rio Grande Regional Flood Planning Group

FMS

Flood Management Strategies
Fact Sheet

Willacy County Drainage District - Re-negotiate El Sauz contractual agreement

FMS ID: 152000057

FMS Description

Re-negotiate agreement with El Sauz Ranch to facilitate more outfall volume

Strategy Type

- ☐ Education and Outreach Activities
- ☐ Protected Areas
- ☐ Regulatory and Guidance
- ☐ Development Standards
- ☐ Flood Preparedness Programs
- ✓ Other:

Strategy Area

City/ Cities	County Wide
County/ Counties	Willacy
HUC 8	
HUC 12	
Study Area (sq. mi.)	

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:

Strategy Costs

Total Cost:	$2,500,000	Study Sponsor:	Willacy County Drainage District
Non-reoccurring Non-capital Cost (include in Total above):	$1,000	*These are one-time costs for program development, education campaign, and non-engineering study costs.*	
Estimated year to start:	2024	Entity with Oversight	Willacy County Drainage District
Time to complete?	2026	Included in a Hazard Mitigation Action Plan or other plan?	Yes ✓ No ☐
Funding Dedicated?	Yes ☐ No ✓	(Potential) Source of Funding	Identify Grants; Police Department Budget

Have the flood risk and flood reduction impacts been evaluated?

Yes ☐ No ✓

Was the strategy missing sufficient data to assess whether the proposed strategy has a negative effect, per TWDB guidelines? Yes ☐ No ✓

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 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

RFPG Recommended

Yes ✓ No ☐

Region 15 Lower Rio Grande Regional Flood Planning Group

FMS

Flood Management Strategies
Fact Sheet

Cameron County Drainage District No. 5 - Cameron County Levee Certification

FMS ID: 152000058

FMS Description

Coordinate with all on-going FIFs in Cameron County, provide a summary analysis for internal drainage and submit Levee Certifiaction to FEMA. Utlize IBWC data for application. Manage review process and coordinate between County, IBWC, and FEMA.

Strategy Type

- ☐ Education and Outreach Activities
- ☐ Protected Areas
- ☐ Regulatory and Guidance
- ☐ Development Standards
- ☐ Flood Preparedness Programs
- ✓ Other:

Strategy Area

City/ Cities	County Wide
County/ Counties	Cameron
HUC 8	
HUC 12	
Study Area (sq. mi.)	

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:

Strategy Costs

Total Cost:	$250,000	Study Sponsor:	Cameron County Drainage District No. 5
Non-reoccurring Non-capital Cost (include in Total above):	$1,000	*These are one-time costs for program development, education campaign, and non-engineering study costs.*	
Estimated year to start:	2024	Entity with Oversight	Cameron County Drainage District No. 5
Time to complete?	2026	Included in a Hazard Mitigation Action Plan or other plan?	Yes ✓ No ☐

Funding Dedicated?	Yes ☐ No ✓	(Potential) Source of Funding	Identify Grants; Police Department Budget

Have the flood risk and flood reduction impacts been evaluated?

Yes ☐ No ✓

Was the strategy missing sufficient data to assess whether the proposed strategy has a negative effect, per TWDB guidelines? Yes ☐ No ✓

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 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

RFPG Recommended

Yes ✓ No ☐

Region 15 Lower Rio Grande Regional Flood Planning Group

FMS

Flood Management Strategies
Fact Sheet

Sewer Manhole Rainguards

FMS ID: 152000059

FMS Description

Installation of rainguards in existing manholes will keep rainwater from entering sewer collection system.

Strategy Type

- ☐ Education and Outreach Activities
- ☐ Protected Areas
- ☐ Regulatory and Guidance
- ☐ Development Standards
- ☐ Flood Preparedness Programs
- ✓ Other:

Strategy Area

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

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:

Strategy Costs

Total Cost:	$200,000	Study Sponsor:	City of Edcouch
Non-reoccurring Non-capital Cost (include in Total above):	$1,000	*These are one-time costs for program development, education campaign, and non-engineering study costs.*	
Estimated year to start:	2024	Entity with Oversight	City of Edcouch
Time to complete?	2026	Included in a Hazard Mitigation Action Plan or other plan?	Yes ✓ No ☐
Funding Dedicated?	Yes ☐ No ✓	(Potential) Source of Funding	Identify Grants; Police Department Budget

Have the flood risk and flood reduction impacts been evaluated?

Yes ☐ No ✓

Was the strategy missing sufficient data to assess whether the proposed strategy has a negative effect, per TWDB guidelines? Yes ☐ No ✓

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 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

RFPG Recommended

Yes ✓ No ☐

Region 15 Lower Rio Grande Regional Flood Planning Group

FMS

Flood Management Strategies
Fact Sheet

City of Progreso - Progreso Storm Ditch improvement Equipment

FMS ID: 152000060

FMS Description

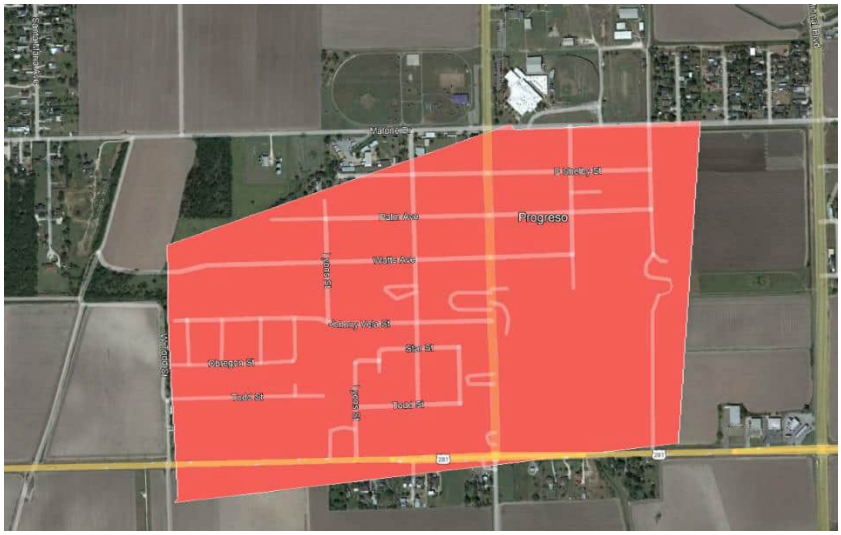
Develop maintenance plan and identify funding strategy to acquire heavy equipment (dozer, long reach excavator) for ditch cleaning operations

Strategy Type

- ☐ Education and Outreach Activities
- ☐ Protected Areas
- ☐ Regulatory and Guidance
- ☐ Development Standards
- ☐ Flood Preparedness Programs
- ✓ Other:

Strategy Area

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



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:

Strategy Costs

Total Cost:	$390,280	Study Sponsor:	City of Progresso
Non-reoccurring Non-capital Cost (include in Total above):	$1,000	*These are one-time costs for program development, education campaign, and non-engineering study costs.*	
Estimated year to start:	2024	Entity with Oversight	City of Progresso
Time to complete?	2026	Included in a Hazard Mitigation Action Plan or other plan?	Yes ✓ No ☐
Funding Dedicated?	Yes ☐ No ✓	(Potential) Source of Funding	Identify Grants; Police Department

			Budget

Have the flood risk and flood reduction impacts been evaluated?

Yes ☐ No ✓

Was the strategy missing sufficient data to assess whether the proposed strategy has a negative effect, per TWDB guidelines? Yes ☐ No ✓

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 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

RFPG Recommended

Yes ✓ No ☐

Region 15 Lower Rio Grande Regional Flood Planning Group

FMS

Flood Management Strategies
Fact Sheet

City of Indian Lake - Indian lake Drainage Infrastructure Funding Study

FMS ID: 152000061

FMS Description

Develop Plan for funding for future drainage infrastructure

Strategy Type

- ☐ Education and Outreach Activities
- ☐ Protected Areas
- ☐ Regulatory and Guidance
- ☐ Development Standards
- ☐ Flood Preparedness Programs
- ✓ Other:

Strategy Area

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

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:

Strategy Costs

Total Cost:	$250,000	Study Sponsor:	City of Indian Lake
Non-reoccurring Non-capital Cost (include in Total above):	$1,000	*These are one-time costs for program development, education campaign, and non-engineering study costs.*	
Estimated year to start:	2024	Entity with Oversight	City of Indian Lake
Time to complete?	2026	Included in a Hazard Mitigation Action Plan or other plan?	Yes ✓ No ☐
Funding Dedicated?	Yes ☐ No ✓	(Potential) Source of Funding	Identify Grants; Police Department Budget

Have the flood risk and flood reduction impacts been evaluated?

Yes ☐ No ✓

Was the strategy missing sufficient data to assess whether the proposed strategy has a negative effect, per TWDB guidelines? Yes ☐ No ✓

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 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

RFPG Recommended

Yes ✓ No ☐

Region 15 Lower Rio Grande Regional Flood Planning Group

FMS

Flood Management Strategies
Fact Sheet

Cameron County Drainage District No.1 - San Martin Lake dredging

FMS ID: 152000062

FMS Description

Develop plan to fund and dredge lake to increase storage capacity

Strategy Type

- ☐ Education and Outreach Activities
- ☐ Protected Areas
- ☐ Regulatory and Guidance
- ☐ Development Standards
- ☐ Flood Preparedness Programs
- ✓ Other:

Strategy Area

City/ Cities	Brownsville
County/ Counties	Cameron
HUC 8	
HUC 12	
Study Area (sq. mi.)	

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:

Strategy Costs

Total Cost:	$1,196,000	Study Sponsor:	Cameron County Drainage District No.1
Non-reoccurring Non-capital Cost (include in Total above):	$1,000	*These are one-time costs for program development, education campaign, and non-engineering study costs.*	
Estimated year to start:	2024	Entity with Oversight	Cameron County Drainage District No.1
Time to complete?	2026	Included in a Hazard Mitigation Action Plan or other plan?	Yes ✓ No ☐
Funding Dedicated?	Yes ☐ No ✓	(Potential) Source of Funding	Identify Grants;

Have the flood risk and flood reduction impacts been evaluated?

Yes ☐ No ✓

Was the strategy missing sufficient data to assess whether the proposed strategy has a negative effect, per TWDB guidelines? Yes ☐ No ✓

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 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

RFPG Recommended

Yes ✓ No ☐

Region 15 Lower Rio Grande Regional Flood Planning Group

FMS

Flood Management Strategies
Fact Sheet

Cameron County Drainage District No.1 - Ditch 1 outfall dredging

FMS ID: 152000063

FMS Description

Develop plan to fund and dredge sediment from outfall in Bahia Grande (in Navigation dist/port of Brownsville)

Strategy Type

- ☐ Education and Outreach Activities
- ☐ Protected Areas
- ☐ Regulatory and Guidance
- ☐ Development Standards
- ☐ Flood Preparedness Programs
- ✓ Other:

Strategy Area

City/ Cities	Brownsville
County/ Counties	Cameron
HUC 8	
HUC 12	
Study Area (sq. mi.)	

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:

Strategy Costs

Total Cost:	$560,625	Study Sponsor:	Cameron County Drainage District No.1
Non-reoccurring Non-capital Cost (include in Total above):	$1,000	*These are one-time costs for program development, education campaign, and non-engineering study costs.*	
Estimated year to start:	2024	Entity with Oversight	Cameron County Drainage District No.1
Time to complete?	2026	Included in a Hazard Mitigation Action Plan or other plan?	Yes ✓ No ☐
Funding Dedicated?	Yes ☐ No ✓	(Potential) Source of Funding	Identify Grants;

Have the flood risk and flood reduction impacts been evaluated?

Yes ☐ No ✓

Was the strategy missing sufficient data to assess whether the proposed strategy has a negative effect, per TWDB guidelines? Yes ☐ No ✓

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 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

RFPG Recommended

Yes ✓ No ☐

Region 15 Lower Rio Grande Regional Flood Planning Group

FMS

Flood Management Strategies
Fact Sheet

City of South Padre Island - SPI Sand Dune restoration/protection program

FMS ID: 152000064

FMS Description

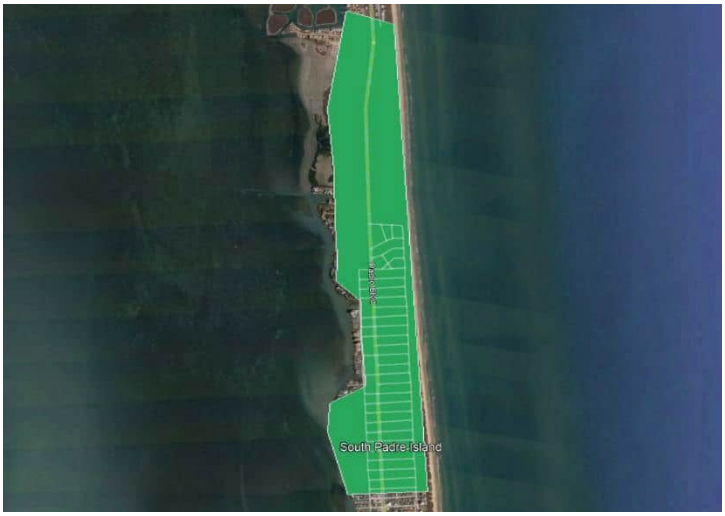
Establish Beach Protection/replenishing program. Build up dunes to protect against tidal surge

Strategy Type

- ☐ Education and Outreach Activities
- ☐ Protected Areas
- ☐ Regulatory and Guidance
- ☐ Development Standards
- ☐ Flood Preparedness Programs
- ✓ Other:

Strategy Area

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



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:

Strategy Costs

Total Cost:	$174,750	Study Sponsor:	Cameron County Drainage District No.1
Non-reoccurring Non-capital Cost (include in Total above):	$1,000	*These are one-time costs for program development, education campaign, and non-engineering study costs.*	
Estimated year to start:	2024	Entity with Oversight	Cameron County Drainage District No.1
Time to complete?	2026	Included in a Hazard Mitigation Action Plan or other plan?	Yes ✓ No ☐
Funding Dedicated?	Yes ☐ No ✓	(Potential) Source of Funding	Identify Grants;

Have the flood risk and flood reduction impacts been evaluated?

Yes ☐ No ✓

Was the strategy missing sufficient data to assess whether the proposed strategy has a negative effect, per TWDB guidelines? Yes ☐ No ✓

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
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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 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

RFPG Recommended

Yes ✓ No ☐

Region 15 Lower Rio Grande Regional Flood Planning Group

FMS

Flood Management Strategies
Fact Sheet

Willacy County Drainage District No.1 - WCDD1 pump station improvements

FMS ID: 152000065

FMS Description

Perform assessment of pump station to make it flood proof and resilient.

Strategy Type

- ☐ Education and Outreach Activities
- ☐ Protected Areas
- ☐ Regulatory and Guidance
- ☐ Development Standards
- ☐ Flood Preparedness Programs
- ✓ Other:

Strategy Area

City/ Cities	County Wide
County/ Counties	Willacy
HUC 8	
HUC 12	
Study Area (sq. mi.)	

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:

Strategy Costs

Total Cost:	$2,100,000.00	Study Sponsor:	Willacy County Drainage District
Non-reoccurring Non-capital Cost (include in Total above):	$1,000	*These are one-time costs for program development, education campaign, and non-engineering study costs.*	
Estimated year to start:	2024	Entity with Oversight	Willacy County Drainage District
Time to complete?	2026	Included in a Hazard Mitigation Action Plan or other plan?	Yes ✓ No ☐
Funding Dedicated?	Yes ☐ No ✓	(Potential) Source of Funding	Identify Grants;

Have the flood risk and flood reduction impacts been evaluated?

Yes ☐ No ✓

Was the strategy missing sufficient data to assess whether the proposed strategy has a negative effect, per TWDB guidelines? Yes ☐ No ✓

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 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

RFPG Recommended

Yes ✓ No ☐

Region 15 Lower Rio Grande Regional Flood Planning Group

FMS

Flood Management Strategies
Fact Sheet

City of Harlingen – Flood Warning System, Planning, Operation & Maintenance

FMS ID: 152000066

FMS Description

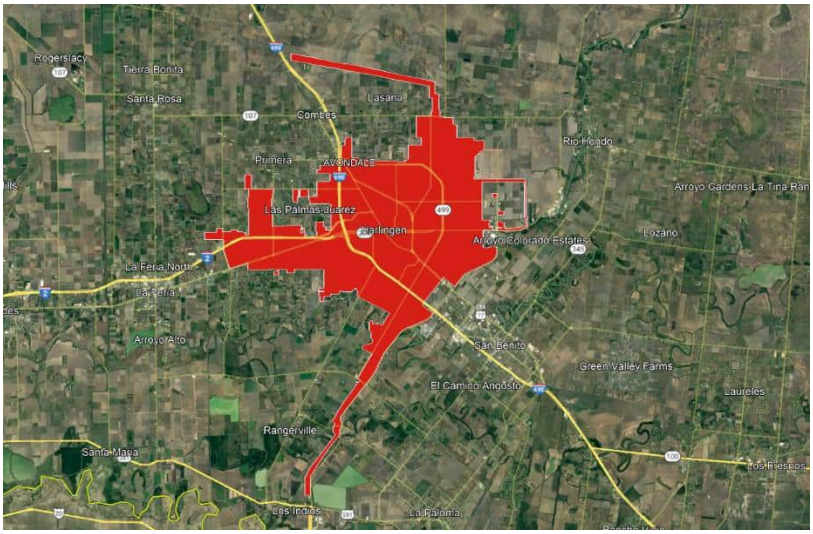
Develop and Implement a Flood warning system, planning, operation & Maintenance plan

Strategy Type

- ☐ Education and Outreach Activities
- ☐ Protected Areas
- ☐ Regulatory and Guidance
- ☐ Development Standards
- ☐ Flood Preparedness Programs
- ✓ Other:

Strategy Area

City/ Cities	Harlingen
County/ Counties	Cameron
HUC 8	12110208
HUC 12	
Study Area (sq. mi.)	40.4



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:

Strategy Costs

Total Cost:	$5,000,000.00	Study Sponsor:	Willacy County Drainage District
Non-reoccurring Non-capital Cost (include in Total above):	$1,000	*These are one-time costs for program development, education campaign, and non-engineering study costs.*	
Estimated year to start:	2024	Entity with Oversight	Willacy County Drainage District
Time to complete?	2026	Included in a Hazard Mitigation Action Plan or other plan?	Yes ✓ No ☐
Funding Dedicated?	Yes ☐ No ✓	(Potential) Source of Funding	Identify Grants;

Have the flood risk and flood reduction impacts been evaluated?

Yes ☐ No ✓

Was the strategy missing sufficient data to assess whether the proposed strategy has a negative effect, per TWDB guidelines? Yes ☐ No ✓

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 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

RFPG Recommended

Yes ✓ No ☐

Region 15 Lower Rio Grande Regional Flood Planning Group

FMS

Flood Management Strategies
Fact Sheet

City of Edinburg - Planning, Operation & Maintenance

FMS ID: 152000067

FMS Description

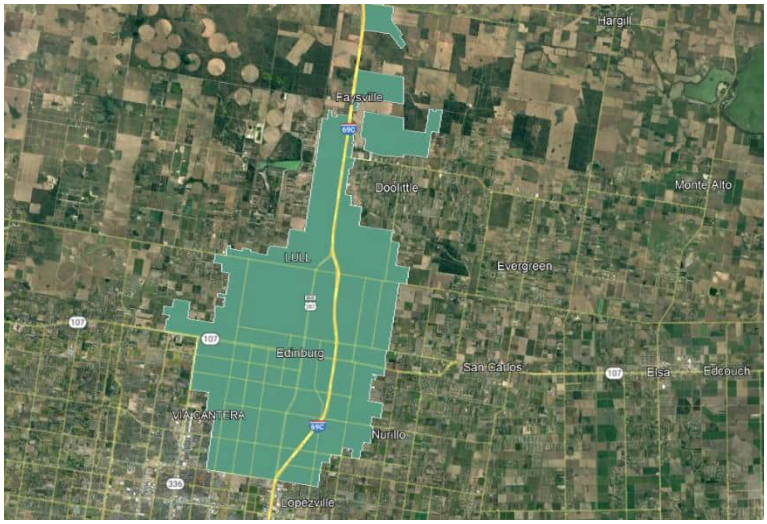
Develop and Implement a planning, operation & Maintenance plan

Strategy Type

- ☐ Education and Outreach Activities
- ☐ Protected Areas
- ☐ Regulatory and Guidance
- ☐ Development Standards
- ☐ Flood Preparedness Programs
- ✓ Other:

Strategy Area

City/ Cities	Edinburg
County/ Counties	Hidalgo
HUC 8	12110208
HUC 12	
Study Area (sq. mi.)	44.7



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:

Strategy Costs

Total Cost:	$5,000,000.00	Study Sponsor:	Willacy County Drainage District
Non-reoccurring Non-capital Cost (include in Total above):	$1,000	*These are one-time costs for program development, education campaign, and non-engineering study costs.*	
Estimated year to start:	2024	Entity with Oversight	Willacy County Drainage District
Time to complete?	2026	Included in a Hazard Mitigation Action Plan or other plan?	Yes ✓ No ☐
Funding Dedicated?	Yes ☐ No ✓	(Potential) Source of Funding	Identify Grants;

Have the flood risk and flood reduction impacts been evaluated?

Yes ☐ No ✓

Was the strategy missing sufficient data to assess whether the proposed strategy has a negative effect, per TWDB guidelines? Yes ☐ No ✓

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 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

RFPG Recommended

Yes ✓ No ☐

Region 15 Lower Rio Grande Regional Flood Planning Group

FMS

Flood Management Strategies
Fact Sheet

City of La Villa - Planning, Operation & Maintenance

FMS ID: 152000068

FMS Description

Develop and Implement a planning, operation & Maintenance plan

Strategy Type

- ☐ Education and Outreach Activities
- ☐ Protected Areas
- ☐ Regulatory and Guidance
- ☐ Development Standards
- ☐ Flood Preparedness Programs
- ✓ Other:

Strategy Area

City/ Cities	La Villa
County/ Counties	Hidalgo
HUC 8	12110208
HUC 12	
Study Area (sq. mi.)	0.72

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:

Strategy Costs

Total Cost:	$5,000,000.00	Study Sponsor:	Willacy County Drainage District
Non-reoccurring Non-capital Cost (include in Total above):	$1,000	*These are one-time costs for program development, education campaign, and non-engineering study costs.*	
Estimated year to start:	2024	Entity with Oversight	Willacy County Drainage District
Time to complete?	2026	Included in a Hazard Mitigation Action Plan or other plan?	Yes ✓ No ☐
Funding Dedicated?	Yes ☐ No ✓	(Potential) Source of Funding	Identify Grants;

Have the flood risk and flood reduction impacts been evaluated?

Yes ☐ No ✓

Was the strategy missing sufficient data to assess whether the proposed strategy has a negative effect, per TWDB guidelines? Yes ☐ No ✓

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 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

RFPG Recommended

Yes ✓ No ☐

Region 15 Lower Rio Grande Regional Flood Planning Group

FMS

Flood Management Strategies
Fact Sheet

City of Mission - Planning, Operation & Maintenance

FMS ID: 152000069

FMS Description

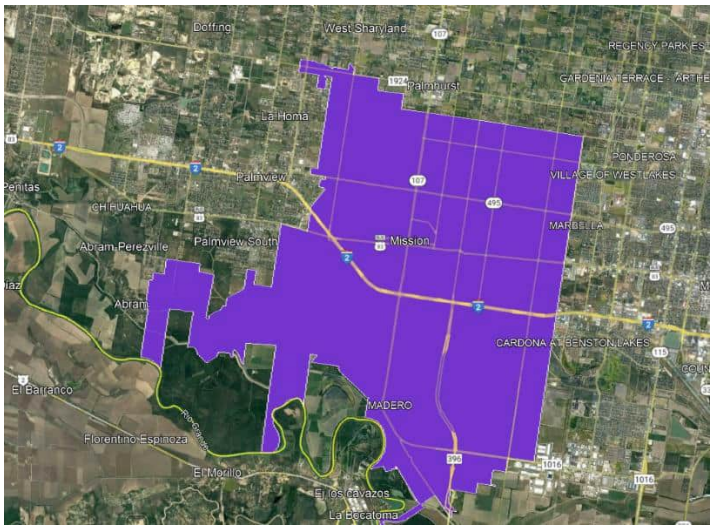
Develop and Implement a planning, operation & Maintenance plan

Strategy Type

- ☐ Education and Outreach Activities
- ☐ Protected Areas
- ☐ Regulatory and Guidance
- ☐ Development Standards
- ☐ Flood Preparedness Programs
- ✓ Other:

Strategy Area

City/ Cities	Mission
County/ Counties	Hidalgo
HUC 8	12110208
HUC 12	
Study Area (sq. mi.)	36.3



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:

Strategy Costs

Total Cost:	$5,000,000.00	Study Sponsor:	Willacy County Drainage District
Non-reoccurring Non-capital Cost (include in Total above):	$1,000	*These are one-time costs for program development, education campaign, and non-engineering study costs.*	
Estimated year to start:	2024	Entity with Oversight	Willacy County Drainage District
Time to complete?	2026	Included in a Hazard Mitigation Action Plan or other plan?	Yes ✓ No ☐
Funding Dedicated?	Yes ☐ No ✓	(Potential) Source of Funding	Identify Grants;

Have the flood risk and flood reduction impacts been evaluated?

Yes ☐ No ✓

Was the strategy missing sufficient data to assess whether the proposed strategy has a negative effect, per TWDB guidelines? Yes ☐ No ✓

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 # 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

RFPG Recommended

Yes ✓ No ☐

Region 15 Lower Rio Grande Regional Flood Planning Group

FMS

Flood Management Strategies
Fact Sheet

City of Primera - Planning, Operation & Maintenance

FMS ID: 152000070

FMS Description

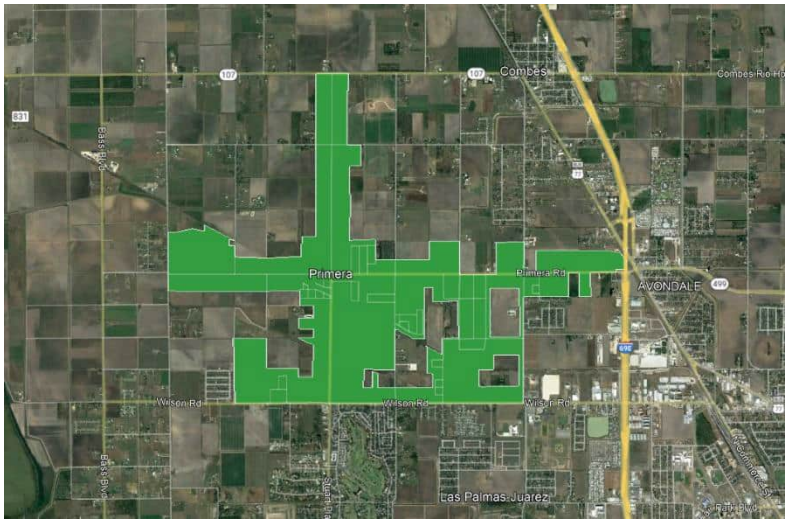
Develop and Implement a planning, operation & Maintenance plan

Strategy Type

- ☐ Education and Outreach Activities
- ☐ Protected Areas
- ☐ Regulatory and Guidance
- ☐ Development Standards
- ☐ Flood Preparedness Programs
- ✓ Other:

Strategy Area

City/ Cities	Primera
County/ Counties	Cameron
HUC 8	12110208
HUC 12	
Study Area (sq. mi.)	2.7



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:

Strategy Costs

Total Cost:	$5,000,000.00	Study Sponsor:	Willacy County Drainage District
Non-reoccurring Non-capital Cost (include in Total above):	$1,000	*These are one-time costs for program development, education campaign, and non-engineering study costs.*	
Estimated year to start:	2024	Entity with Oversight	Willacy County Drainage District
Time to complete?	2026	Included in a Hazard Mitigation Action Plan or other plan?	Yes ✓ No ☐
Funding Dedicated?	Yes ☐ No ✓	(Potential) Source of Funding	Identify Grants;

Have the flood risk and flood reduction impacts been evaluated?

Yes ☐ No ✓

Was the strategy missing sufficient data to assess whether the proposed strategy has a negative effect, per TWDB guidelines? Yes ☐ No ✓

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 # 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

RFPG Recommended

Yes ✓ No ☐

Region 15 Lower Rio Grande Regional Flood Planning Group

FMS

Flood Management Strategies
Fact Sheet

City of La Feria – Flood Warning System, Planning, Operation & Maintenance

FMS ID: 152000071

FMS Description

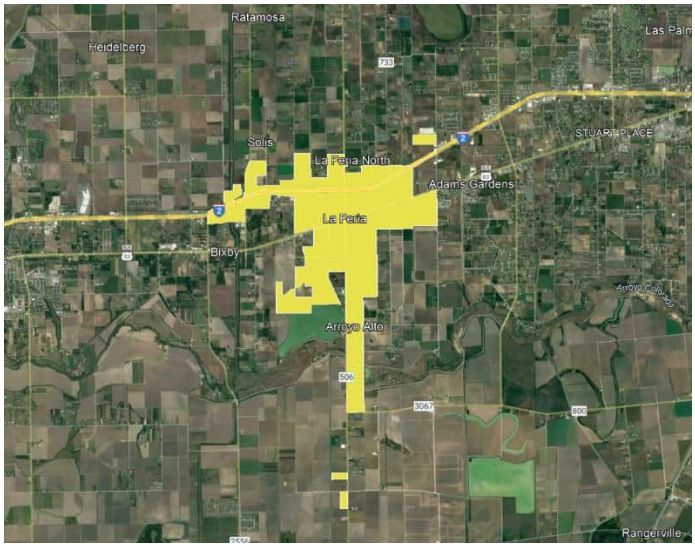
Develop and Implement a Flood warning system, planning, operation & Maintenance plan

Strategy Type

- ☐ Education and Outreach Activities
- ☐ Protected Areas
- ☐ Regulatory and Guidance
- ☐ Development Standards
- ☐ Flood Preparedness Programs
- ✓ Other:

Strategy Area

City/ Cities	La Feria
County/ Counties	Cameron
HUC 8	12110208
HUC 12	
Study Area (sq. mi.)	5.4



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:

Strategy Costs

Total Cost:	$5,000,000.00	Study Sponsor:	Willacy County Drainage District
Non-reoccurring Non-capital Cost (include in Total above):	$1,000	*These are one-time costs for program development, education campaign, and non-engineering study costs.*	
Estimated year to start:	2024	Entity with Oversight	Willacy County Drainage District
Time to complete?	2026	Included in a Hazard Mitigation Action Plan or other plan?	Yes ✓ No ☐
Funding Dedicated?	Yes ☐ No ✓	(Potential) Source of Funding	Identify Grants;

Have the flood risk and flood reduction impacts been evaluated?

Yes ☐ No ✓

Was the strategy missing sufficient data to assess whether the proposed strategy has a negative effect, per TWDB guidelines? Yes ☐ No ✓

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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- ☐ 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

Yes ✓ No ☐

Region 15 Lower Rio Grande Regional Flood Planning Group

FMS

Flood Management Strategies
Fact Sheet

City of La Joya – Flood Warning System, Planning, Operation & Maintenance

FMS ID: 152000072

FMS Description

Develop and Implement a Flood warning system, planning, operation & Maintenance plan

Strategy Type

- ☐ Education and Outreach Activities
- ☐ Protected Areas
- ☐ Regulatory and Guidance
- ☐ Development Standards
- ☐ Flood Preparedness Programs
- ✓ Other:

Strategy Area

City/ Cities	La Joya
County/ Counties	Hidalgo
HUC 8	12110208
HUC 12	
Study Area (sq. mi.)	10.8

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:

Strategy Costs

Total Cost:	$5,000,000.00	Study Sponsor:	Willacy County Drainage District
Non-reoccurring Non-capital Cost (include in Total above):	$1,000	*These are one-time costs for program development, education campaign, and non-engineering study costs.*	
Estimated year to start:	2024	Entity with Oversight	Willacy County Drainage District
Time to complete?	2026	Included in a Hazard Mitigation Action Plan or other plan?	Yes ✓ No ☐
Funding Dedicated?	Yes ☐ No ✓	(Potential) Source of Funding	Identify Grants;

Have the flood risk and flood reduction impacts been evaluated?

Yes ☐ No ✓

Was the strategy missing sufficient data to assess whether the proposed strategy has a negative effect, per TWDB guidelines? Yes ☐ No ✓

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 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

RFPG Recommended

Yes ✓ No ☐

Region 15 Lower Rio Grande Regional Flood Planning Group

FMS

Flood Management Strategies
Fact Sheet

City of Los Fresnos – Flood Warning System, Planning, Operation & Maintenance

FMS ID: 152000073

FMS Description

Develop and Implement a Flood warning system, planning, operation & Maintenance plan

Strategy Type

- ☐ Education and Outreach Activities
- ☐ Protected Areas
- ☐ Regulatory and Guidance
- ☐ Development Standards
- ☐ Flood Preparedness Programs
- ✓ Other:

Strategy Area

City/ Cities	Los Fresnos
County/ Counties	Cameron
HUC 8	12110208
HUC 12	
Study Area (sq. mi.)	4.1

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:

Strategy Costs

Total Cost:	$5,000,000.00	Study Sponsor:	Willacy County Drainage District
Non-reoccurring Non-capital Cost (include in Total above):	$1,000	*These are one-time costs for program development, education campaign, and non-engineering study costs.*	
Estimated year to start:	2024	Entity with Oversight	Willacy County Drainage District
Time to complete?	2026	Included in a Hazard Mitigation Action Plan or other plan?	Yes ✓ No ☐
Funding Dedicated?	Yes ☐ No ✓	(Potential) Source of Funding	Identify Grants;

Have the flood risk and flood reduction impacts been evaluated?

Yes ☐ No ✓

Was the strategy missing sufficient data to assess whether the proposed strategy has a negative effect, per TWDB guidelines? Yes ☐ No ✓

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 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

RFPG Recommended

Yes ✓ No ☐

Region 15 Lower Rio Grande Regional Flood Planning Group

FMS

Flood Management Strategies
Fact Sheet

City of Mercedes - Planning, Operation & Maintenance

FMS ID: 152000074

FMS Description

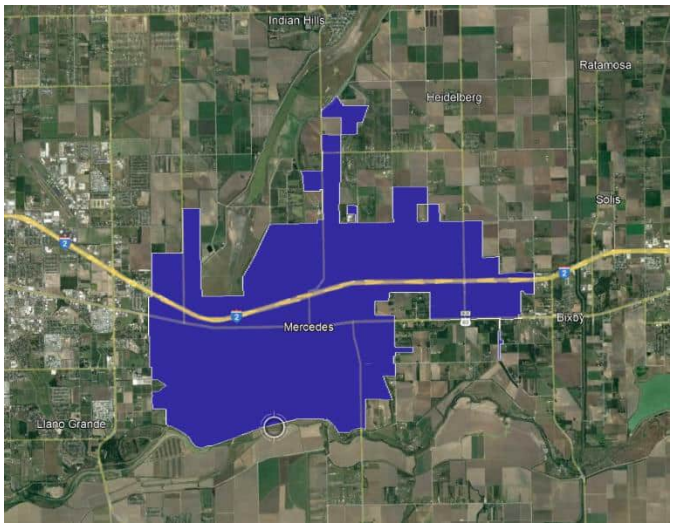
Develop and Implement a planning, operation & Maintenance plan

Strategy Type

- ☐ Education and Outreach Activities
- ☐ Protected Areas
- ☐ Regulatory and Guidance
- ☐ Development Standards
- ☐ Flood Preparedness Programs
- ✓ Other:

Strategy Area

City/ Cities	Mercedes
County/ Counties	Hidalgo
HUC 8	100000000
HUC 12	
Study Area (sq. mi.)	27



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:

Strategy Costs

Total Cost:	$5,000,000.00	Study Sponsor:	Willacy County Drainage District
Non-reoccurring Non-capital Cost (include in Total above):	$1,000	*These are one-time costs for program development, education campaign, and non-engineering study costs.*	
Estimated year to start:	2024	Entity with Oversight	Willacy County Drainage District
Time to complete?	2026	Included in a Hazard Mitigation Action Plan or other plan?	Yes ✓ No ☐
Funding Dedicated?	Yes ☐ No ✓	(Potential) Source of Funding	Identify Grants;

Have the flood risk and flood reduction impacts been evaluated?

Yes ☐ No ✓

Was the strategy missing sufficient data to assess whether the proposed strategy has a negative effect, per TWDB guidelines? Yes ☐ No ✓

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 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

RFPG Recommended

Yes ✓ No ☐

Region 15 Lower Rio Grande Regional Flood Planning Group

FMS

Flood Management Strategies
Fact Sheet

City of Palmhurst – Flood Warning System, Planning, Operation & Maintenance

FMS ID: 152000075

FMS Description

Develop and Implement a Flood warning system, planning, operation & Maintenance plan

Strategy Type

- ☐ Education and Outreach Activities
- ☐ Protected Areas
- ☐ Regulatory and Guidance
- ☐ Development Standards
- ☐ Flood Preparedness Programs
- ✓ Other:

Strategy Area

City/ Cities	Palmhurst
County/ Counties	Hidalgo
HUC 8	12110208
HUC 12	
Study Area (sq. mi.)	4.5

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:

Strategy Costs

Total Cost:	$5,000,000.00	Study Sponsor:	Willacy County Drainage District
Non-reoccurring Non-capital Cost (include in Total above):	$1,000	*These are one-time costs for program development, education campaign, and non-engineering study costs.*	
Estimated year to start:	2024	Entity with Oversight	Willacy County Drainage District
Time to complete?	2026	Included in a Hazard Mitigation Action Plan or other plan?	Yes ✓ No ☐
Funding Dedicated?	Yes ☐ No ✓	(Potential) Source of Funding	Identify Grants;

Have the flood risk and flood reduction impacts been evaluated?

Yes ☐ No ✓

Was the strategy missing sufficient data to assess whether the proposed strategy has a negative effect, per TWDB guidelines? Yes ☐ No ✓

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 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

RFPG Recommended

Yes ✓ No ☐

Region 15 Lower Rio Grande Regional Flood Planning Group

FMS

Flood Management Strategies
Fact Sheet

City of Palmview - Planning, Operation & Maintenance

FMS ID: 152000076

FMS Description

Develop and Implement a planning, operation & Maintenance plan

Strategy Type

- ☐ Education and Outreach Activities
- ☐ Protected Areas
- ☐ Regulatory and Guidance
- ☐ Development Standards
- ☐ Flood Preparedness Programs
- ✓ Other:

Strategy Area

City/ Cities	Palmview
County/ Counties	Hidalgo
HUC 8	12110208
HUC 12	
Study Area (sq. mi.)	0.6

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:

Strategy Costs

Total Cost:	$5,000,000.00	Study Sponsor:	Willacy County Drainage District
Non-reoccurring Non-capital Cost (include in Total above):	$1,000	*These are one-time costs for program development, education campaign, and non-engineering study costs.*	
Estimated year to start:	2024	Entity with Oversight	Willacy County Drainage District
Time to complete?	2026	Included in a Hazard Mitigation Action Plan or other plan?	Yes ✓ No ☐
Funding Dedicated?	Yes ☐ No ✓	(Potential) Source of Funding	Identify Grants;

Have the flood risk and flood reduction impacts been evaluated?

Yes ☐ No ✓

Was the strategy missing sufficient data to assess whether the proposed strategy has a negative effect, per TWDB guidelines? Yes ☐ No ✓

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 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

RFPG Recommended

Yes ✓ No ☐

Region 15 Lower Rio Grande Regional Flood Planning Group

FMS

Flood Management Strategies
Fact Sheet

City of San Benito – Flood Warning System, Planning, Operation & Maintenance

FMS ID: 152000077

FMS Description

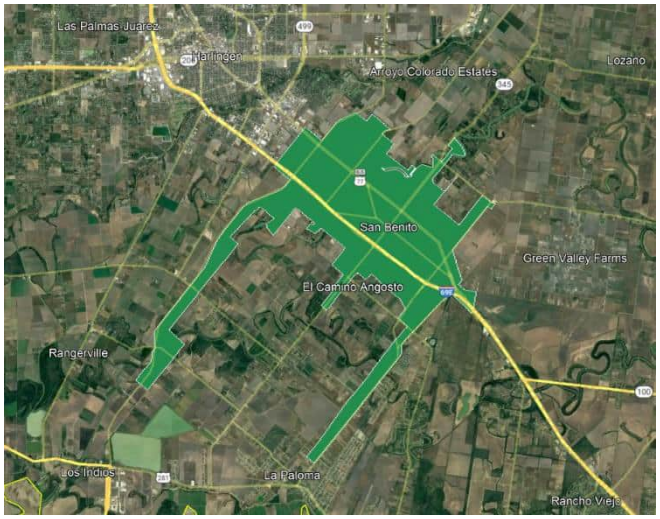
Develop and Implement a Flood warning system, planning, operation & Maintenance plan

Strategy Type

- ☐ Education and Outreach Activities
- ☐ Protected Areas
- ☐ Regulatory and Guidance
- ☐ Development Standards
- ☐ Flood Preparedness Programs
- ✓ Other:

Strategy Area

City/ Cities	San Benito
County/ Counties	Cameron
HUC 8	12110208
HUC 12	
Study Area (sq. mi.)	16.4



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:

Strategy Costs

Total Cost:	$5,000,000.00	Study Sponsor:	Willacy County Drainage District
Non-reoccurring Non-capital Cost (include in Total above):	$1,000	*These are one-time costs for program development, education campaign, and non-engineering study costs.*	
Estimated year to start:	2024	Entity with Oversight	Willacy County Drainage District
Time to complete?	2026	Included in a Hazard Mitigation Action Plan or other plan?	Yes ✓ No ☐
Funding Dedicated?	Yes ☐ No ✓	(Potential) Source of Funding	Identify Grants;

Have the flood risk and flood reduction impacts been evaluated?

Yes ☐ No ✓

Was the strategy missing sufficient data to assess whether the proposed strategy has a negative effect, per TWDB guidelines? Yes ☐ No ✓

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
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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 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

RFPG Recommended

Yes ✓ No ☐

Region 15 Lower Rio Grande Regional Flood Planning Group

FMS

Flood Management Strategies
Fact Sheet

City of San Juan – Flood Warning System, Planning, Operation & Maintenance

FMS ID: 152000078

FMS Description

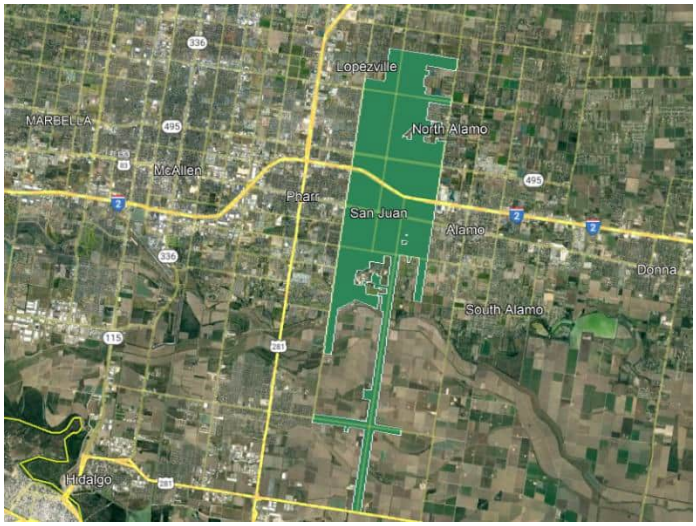
Develop and Implement a Flood warning system, planning, operation & Maintenance plan

Strategy Type

- ☐ Education and Outreach Activities
- ☐ Protected Areas
- ☐ Regulatory and Guidance
- ☐ Development Standards
- ☐ Flood Preparedness Programs
- ✓ Other:

Strategy Area

City/ Cities	San Juan
County/ Counties	Hidalgo
HUC 8	12110208
HUC 12	
Study Area (sq. mi.)	11.9



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:

Strategy Costs

Total Cost:	$5,000,000.00	Study Sponsor:	Willacy County Drainage District
Non-reoccurring Non-capital Cost (include in Total above):	$1,000	*These are one-time costs for program development, education campaign, and non-engineering study costs.*	
Estimated year to start:	2024	Entity with Oversight	Willacy County Drainage District
Time to complete?	2026	Included in a Hazard Mitigation Action Plan or other plan?	Yes ✓ No ☐
Funding Dedicated?	Yes ☐ No ✓	(Potential) Source of Funding	Identify Grants;

Have the flood risk and flood reduction impacts been evaluated?

Yes ☐ No ✓

Was the strategy missing sufficient data to assess whether the proposed strategy has a negative effect, per TWDB guidelines? Yes ☐ No ✓

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 # of entities that adopt higher than NFIP-minimum standards
- ☐ Develop and maintain an operational stormwater asset management plan
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- ☐ 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
- ☐ 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

Yes ✓ No ☐

Region 15 Lower Rio Grande Regional Flood Planning Group

FMS

Flood Management Strategies
Fact Sheet

City of Weslaco – Flood Warning System, Planning, Operation & Maintenance

FMS ID: 152000079

FMS Description

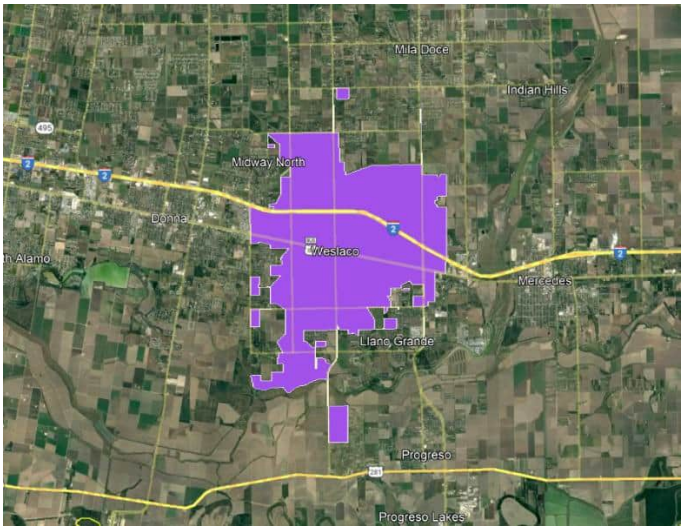
Develop and Implement a Flood warning system, planning, operation & Maintenance plan

Strategy Type

- ☐ Education and Outreach Activities
- ☐ Protected Areas
- ☐ Regulatory and Guidance
- ☐ Development Standards
- ☐ Flood Preparedness Programs
- ✓ Other:

Strategy Area

City/ Cities	Weslaco
County/ Counties	Hidalgo
HUC 8	12110208
HUC 12	
Study Area (sq. mi.)	16.4



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:

Strategy Costs

Total Cost:	$5,000,000.00	Study Sponsor:	Willacy County Drainage District
Non-reoccurring Non-capital Cost (include in Total above):	$1,000	*These are one-time costs for program development, education campaign, and non-engineering study costs.*	
Estimated year to start:	2024	Entity with Oversight	Willacy County Drainage District
Time to complete?	2026	Included in a Hazard Mitigation Action Plan or other plan?	Yes ✓ No ☐
Funding Dedicated?	Yes ☐ No ✓	(Potential) Source of Funding	Identify Grants;

Have the flood risk and flood reduction impacts been evaluated?

Yes ☐ No ✓

Was the strategy missing sufficient data to assess whether the proposed strategy has a negative effect, per TWDB guidelines? Yes ☐ No ✓

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 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

RFPG Recommended

Yes ✓ No ☐

Region 15 Lower Rio Grande Regional Flood Planning Group

FMS

Flood Management Strategies
Fact Sheet

City of Alamo - Planning, Operation & Maintenance

FMS ID: 152000080

FMS Description

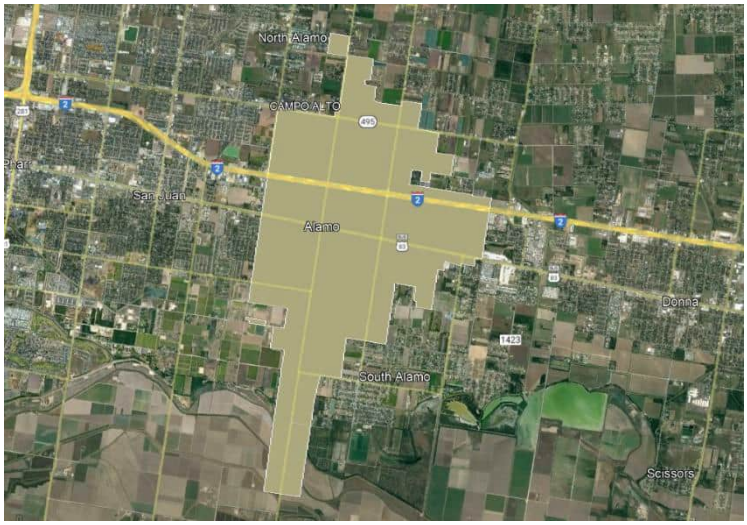
Develop and Implement a planning, operation & Maintenance plan

Strategy Type

- ☐ Education and Outreach Activities
- ☐ Protected Areas
- ☐ Regulatory and Guidance
- ☐ Development Standards
- ☐ Flood Preparedness Programs
- ✓ Other:

Strategy Area

City/ Cities	Alamo
County/ Counties	Hidalgo
HUC 8	12110208
HUC 12	
Study Area (sq. mi.)	7.5



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:

Strategy Costs

Total Cost:	$5,000,000.00	Study Sponsor:	Willacy County Drainage District
Non-reoccurring Non-capital Cost (include in Total above):	$1,000	*These are one-time costs for program development, education campaign, and non-engineering study costs.*	
Estimated year to start:	2024	Entity with Oversight	Willacy County Drainage District
Time to complete?	2026	Included in a Hazard Mitigation Action Plan or other plan?	Yes ✓ No ☐
Funding Dedicated?	Yes ☐ No ✓	(Potential) Source of Funding	Identify Grants;

Have the flood risk and flood reduction impacts been evaluated?

Yes ☐ No ✓

Was the strategy missing sufficient data to assess whether the proposed strategy has a negative effect, per TWDB guidelines? Yes ☐ No ✓

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 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

RFPG Recommended

Yes ✓ No ☐

Region 15 Lower Rio Grande Regional Flood Planning Group

FMS

Flood Management Strategies
Fact Sheet

City of Alton – Flood Warning System, Planning, Operation & Maintenance

FMS ID: 152000081

FMS Description

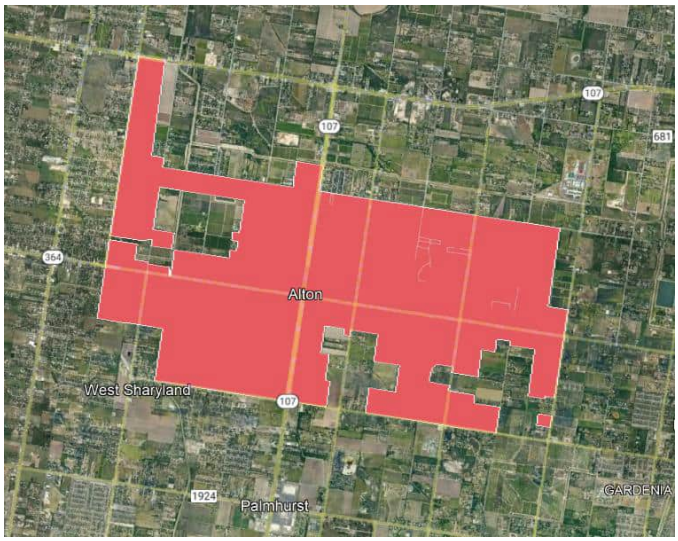
Develop and Implement a Flood warning system, planning, operation & Maintenance plan

Strategy Type

- ☐ Education and Outreach Activities
- ☐ Protected Areas
- ☐ Regulatory and Guidance
- ☐ Development Standards
- ☐ Flood Preparedness Programs
- ✓ Other:

Strategy Area

City/ Cities	Alton
County/ Counties	Hidalgo
HUC 8	12110208
HUC 12	
Study Area (sq. mi.)	7.2



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:

Strategy Costs

Total Cost:	$5,000,000.00	Study Sponsor:	Willacy County Drainage District
Non-reoccurring Non-capital Cost (include in Total above):	$1,000	*These are one-time costs for program development, education campaign, and non-engineering study costs.*	
Estimated year to start:	2024	Entity with Oversight	Willacy County Drainage District
Time to complete?	2026	Included in a Hazard Mitigation Action Plan or other plan?	Yes ✓ No ☐
Funding Dedicated?	Yes ☐ No ✓	(Potential) Source of Funding	Identify Grants;

Have the flood risk and flood reduction impacts been evaluated?

Yes ☐ No ✓

Was the strategy missing sufficient data to assess whether the proposed strategy has a negative effect, per TWDB guidelines? Yes ☐ No ✓

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
- ☐ 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

RFPG Recommended

Yes ✓ No ☐

Region 15 Lower Rio Grande Regional Flood Planning Group

FMS

Flood Management Strategies
Fact Sheet

City of Brownsville – Flood Warning System, Planning, Operation & Maintenance

FMS ID: 152000082

FMS Description

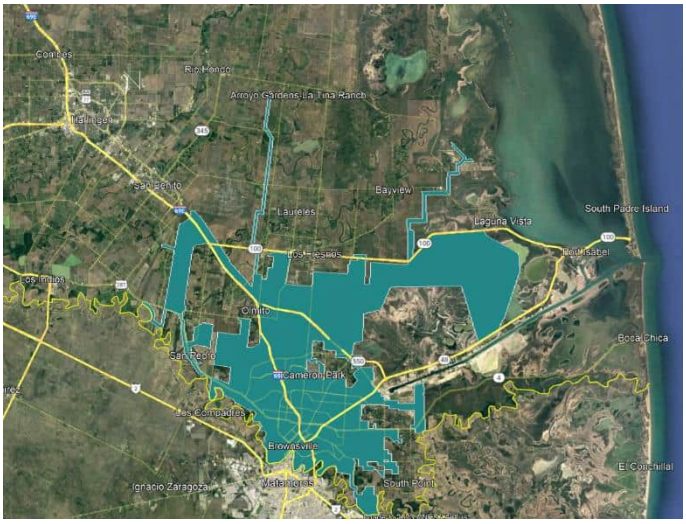
Develop and Implement a Flood warning system, planning, operation & Maintenance plan

Strategy Type

- ☐ Education and Outreach Activities
- ☐ Protected Areas
- ☐ Regulatory and Guidance
- ☐ Development Standards
- ☐ Flood Preparedness Programs
- ✓ Other:

Strategy Area

City/ Cities	Brownsville
County/ Counties	Cameron
HUC 8	12110208
HUC 12	
Study Area (sq. mi.)	145.9



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:

Strategy Costs

Total Cost:	$5,000,000.00	Study Sponsor:	Willacy County Drainage District
Non-reoccurring Non-capital Cost (include in Total above):	$1,000	*These are one-time costs for program development, education campaign, and non-engineering study costs.*	
Estimated year to start:	2024	Entity with Oversight	Willacy County Drainage District
Time to complete?	2026	Included in a Hazard Mitigation Action Plan or other plan?	Yes ✓ No ☐
Funding Dedicated?	Yes ☐ No ✓	(Potential) Source of Funding	Identify Grants;

Have the flood risk and flood reduction impacts been evaluated?

Yes ☐ No ✓

Was the strategy missing sufficient data to assess whether the proposed strategy has a negative effect, per TWDB guidelines? Yes ☐ No ✓

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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- ☐ Reduce the # of structures that have been subject to repeated flooding events through property buyouts
- ☐ 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

RFPG Recommended

Yes ✓ No ☐

Region 15 Lower Rio Grande Regional Flood Planning Group

FMS

Flood Management Strategies
Fact Sheet

Cameron County – Flood Warning System, Planning, Operation & Maintenance

FMS ID: 152000083

FMS Description

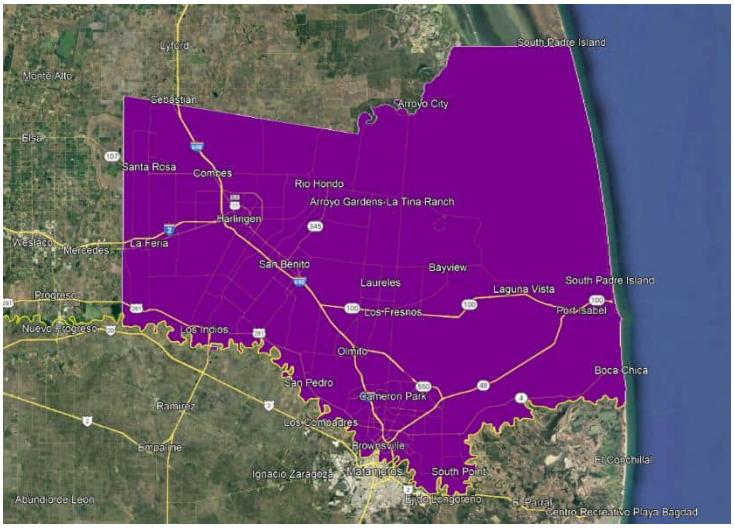
Develop and Implement a Flood warning system, planning, operation & Maintenance plan

Strategy Type

- ☐ Education and Outreach Activities
- ☐ Protected Areas
- ☐ Regulatory and Guidance
- ☐ Development Standards
- ☐ Flood Preparedness Programs
- ✓ Other:

Strategy Area

City/ Cities	
County/ Counties	Cameron
HUC 8	12110208
HUC 12	
Study Area (sq. mi.)	1276



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:

Strategy Costs

Total Cost:	$5,000,000.00	Study Sponsor:	Willacy County Drainage District
Non-reoccurring Non-capital Cost (include in Total above):	$1,000	*These are one-time costs for program development, education campaign, and non-engineering study costs.*	
Estimated year to start:	2024	Entity with Oversight	Willacy County Drainage District
Time to complete?	2026	Included in a Hazard Mitigation Action Plan or other plan?	Yes ✓ No ☐
Funding Dedicated?	Yes ☐ No ✓	(Potential) Source of Funding	Identify Grants;

Have the flood risk and flood reduction impacts been evaluated?

Yes ☐ No ✓

Was the strategy missing sufficient data to assess whether the proposed strategy has a negative effect, per TWDB guidelines? Yes ☐ No ✓

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
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- ☐ 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

RFPG Recommended

Yes ✓ No ☐

Region 15 Lower Rio Grande Regional Flood Planning Group

FMS

Flood Management Strategies
Fact Sheet

City of Combes – Flood Warning System, Planning, Operation & Maintenance

FMS ID: 152000084

FMS Description

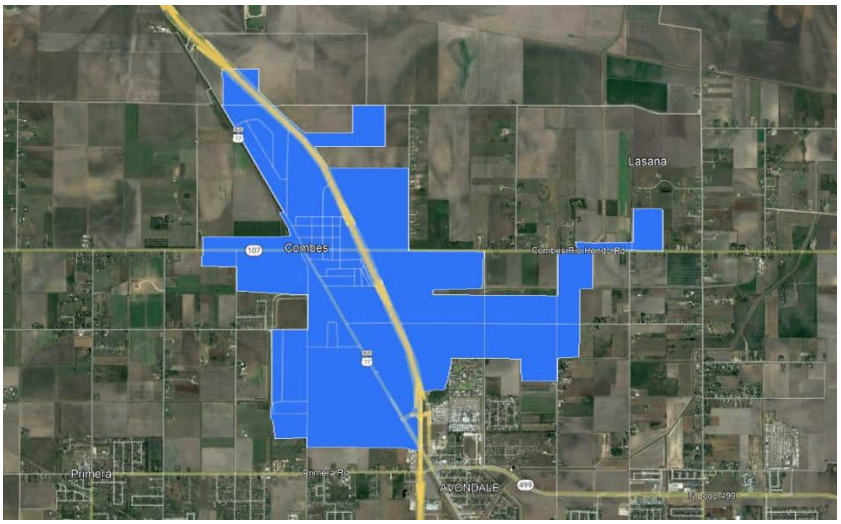
Develop and Implement a Flood warning system, planning, operation & Maintenance plan

Strategy Type

- ☐ Education and Outreach Activities
- ☐ Protected Areas
- ☐ Regulatory and Guidance
- ☐ Development Standards
- ☐ Flood Preparedness Programs
- ✓ Other:

Strategy Area

City/ Cities	Combes
County/ Counties	Cameron
HUC 8	12110208
HUC 12	
Study Area (sq. mi.)	3.6



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:

Strategy Costs

Total Cost:	$5,000,000.00	Study Sponsor:	Willacy County Drainage District
Non-reoccurring Non-capital Cost (include in Total above):	$1,000	*These are one-time costs for program development, education campaign, and non-engineering study costs.*	
Estimated year to start:	2024	Entity with Oversight	Willacy County Drainage District
Time to complete?	2026	Included in a Hazard Mitigation Action Plan or other plan?	Yes ✓ No ☐
Funding Dedicated?	Yes ☐ No ✓	(Potential) Source of Funding	Identify Grants;

Have the flood risk and flood reduction impacts been evaluated?

Yes ☐ No ✓

Was the strategy missing sufficient data to assess whether the proposed strategy has a negative effect, per TWDB guidelines? Yes ☐ No ✓

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 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

RFPG Recommended

Yes ✓ No ☐

Region 15 Lower Rio Grande Regional Flood Planning Group

FMS

Flood Management Strategies
Fact Sheet

City of Donna – Flood Warning System, Planning, Operation & Maintenance

FMS ID: 152000085

FMS Description

Develop and Implement a Flood warning system, planning, operation & Maintenance plan

Strategy Type

- ☐ Education and Outreach Activities
- ☐ Protected Areas
- ☐ Regulatory and Guidance
- ☐ Development Standards
- ☐ Flood Preparedness Programs
- ✓ Other:

Strategy Area

City/ Cities	Donna
County/ Counties	Hidalgo
HUC 8	12110208
HUC 12	
Study Area (sq. mi.)	14.4

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:

Strategy Costs

Total Cost:	$5,000,000.00	Study Sponsor:	Willacy County Drainage District
Non-reoccurring Non-capital Cost (include in Total above):	$1,000	*These are one-time costs for program development, education campaign, and non-engineering study costs.*	
Estimated year to start:	2024	Entity with Oversight	Willacy County Drainage District
Time to complete?	2026	Included in a Hazard Mitigation Action Plan or other plan?	Yes ✓ No ☐
Funding Dedicated?	Yes ☐ No ✓	(Potential) Source of Funding	Identify Grants;

Have the flood risk and flood reduction impacts been evaluated?

Yes ☐ No ✓

Was the strategy missing sufficient data to assess whether the proposed strategy has a negative effect, per TWDB guidelines? Yes ☐ No ✓

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 # 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

RFPG Recommended

Yes ✓ No ☐

Region 15 Lower Rio Grande Regional Flood Planning Group

FMS

Flood Management Strategies
Fact Sheet

City of Elsa – Flood Warning System, Planning, Operation & Maintenance

FMS ID: 152000086

FMS Description

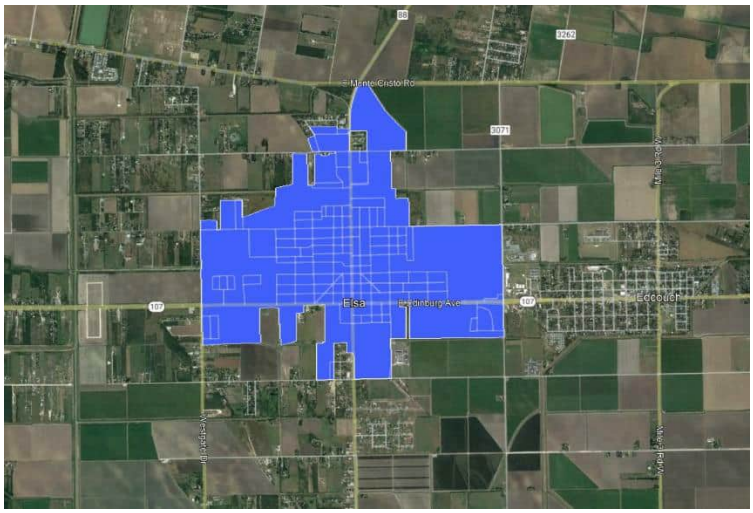
Develop and Implement a Flood warning system, planning, operation & Maintenance plan

Strategy Type

- ☐ Education and Outreach Activities
- ☐ Protected Areas
- ☐ Regulatory and Guidance
- ☐ Development Standards
- ☐ Flood Preparedness Programs
- ✓ Other:

Strategy Area

City/ Cities	Elsa
County/ Counties	Hidalgo
HUC 8	12110208
HUC 12	
Study Area (sq. mi.)	2.0



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:

Strategy Costs

Total Cost:	$5,000,000.00	Study Sponsor:	Willacy County Drainage District
Non-reoccurring Non-capital Cost (include in Total above):	$1,000	*These are one-time costs for program development, education campaign, and non-engineering study costs.*	
Estimated year to start:	2024	Entity with Oversight	Willacy County Drainage District
Time to complete?	2026	Included in a Hazard Mitigation Action Plan or other plan?	Yes ✓ No ☐
Funding Dedicated?	Yes ☐ No ✓	(Potential) Source of Funding	Identify Grants;

Have the flood risk and flood reduction impacts been evaluated?

Yes ☐ No ✓

Was the strategy missing sufficient data to assess whether the proposed strategy has a negative effect, per TWDB guidelines? Yes ☐ No ✓

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 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

RFPG Recommended

Yes ✓ No ☐

Region 15 Lower Rio Grande Regional Flood Planning Group

FMS

Flood Management Strategies
Fact Sheet

Hidalgo County Drainage District #1 - Action #1

FMS ID: 152000087

FMS Description

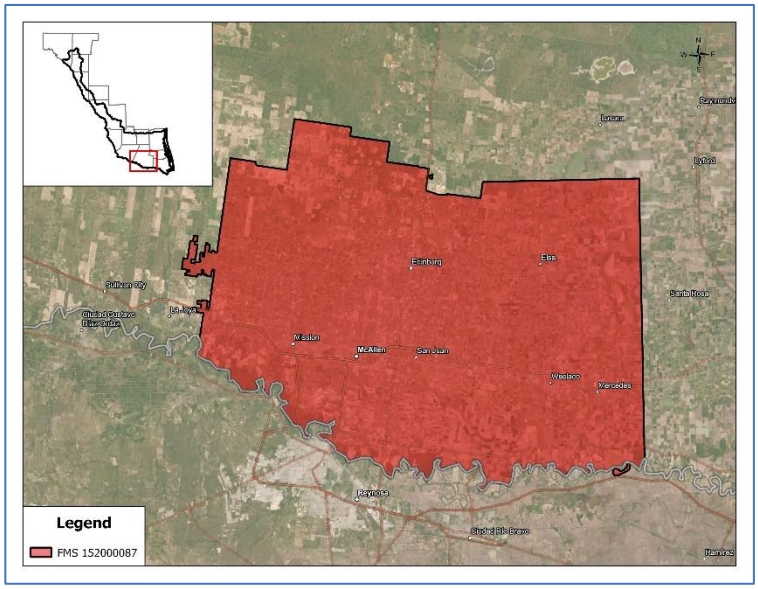
Purchase NOAA All-Hazard Radios

Strategy Type

- ☐ Education and Outreach Activities
- ☐ Infrastructure Projects
- ☐ Regulatory and Guidance
- ☐ Other:
- ✓ Flood Measurement and Warning

Strategy Area

City/ Cities	
County/ Counties	**Hidalgo**
HUC 8	**12110208, 13090002, 13090001**
HUC 12	**130900020305, 130900011705, 121102080100, 121102080600, 121102080300, 121102080400, 130900020301, 130900020401, 130900020311, 121102080200, 121102080500**
Study Area (sq. mi.)	807.24



Emergency Need

Yes ✓ No ☐

Known Flood Risk

History of Flooding?	Yes ✓ No ☐	Frequency of flooding:	
Population at Risk	244,800	# of structures inundated	75,816
Roadways flooded	Yes ✓ No ☐	Miles inundated?	1,840.41
Critical Facilities Impacted	Yes ✓ No ☐	Agricultural Land impacted	Yes ✓ No ☐

Notes:

Strategy Costs

Total Cost:	$50,000	Study Sponsor:	Hidalgo County Drainage District 1
Non-reoccurring Non-capital Cost (include in Total above):		*These are one-time costs for program development, education campaign, and non-engineering study costs.*	

Estimated year to start:	2027	Entity with Oversight	Hidalgo County Drainage District 1
Time to complete?	2028	Included in a Hazard Mitigation Action Plan or other plan?	Yes ☐ No ✓
Funding Dedicated?	Yes ☐ No ✓	(Potential) Source of Funding	

Have the flood risk and flood reduction impacts been evaluated?

Yes ☐ No ✓

Was the strategy missing sufficient data to assess whether the proposed strategy has a negative effect, per TWDB guidelines? Yes ☐ No ✓

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 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

RFPG Recommended

Yes ✓ No ☐

Region 15 Lower Rio Grande Regional Flood Planning Group

FMS

Flood Management Strategies
Fact Sheet

Hidalgo County Drainage District #1 - Action #10

FMS ID: 152000088

FMS Description

Adopt and implement program for cleaning debris from bridges, drains, culverts

Strategy Type

- ☐ Education and Outreach Activities
- ✓ Regulatory and Guidance
- ☐ Flood Measurement and Warning
- ☐ Infrastructure Projects
- ☐ Other:

Strategy Area

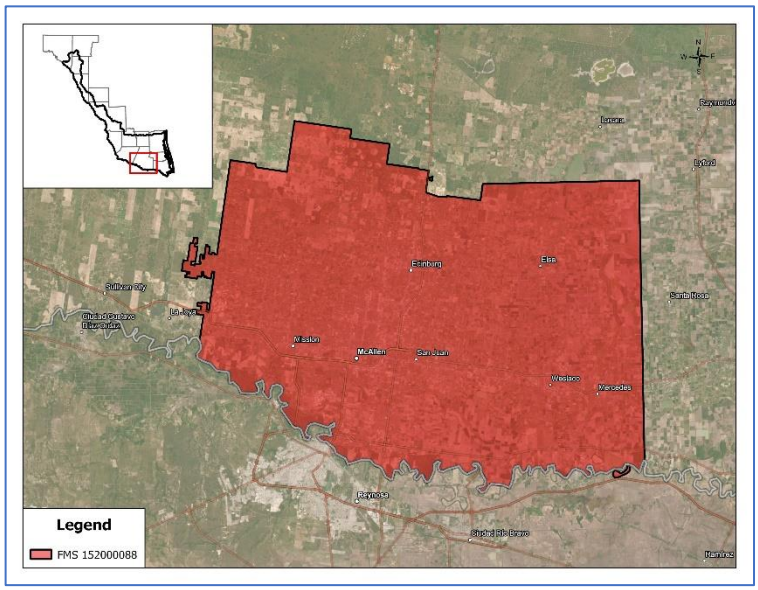
City/ Cities

County/ Counties **Hidalgo**

HUC 8 **12110208, 13090002, 13090001**

HUC 12 **130900020305, 130900011705, 121102080100, 121102080600, 121102080300, 121102080400, 130900020301, 130900020401, 130900020311, 121102080200, 121102080500**

Study Area (sq. mi.) 807.24



Emergency Need

Yes ✓ No ☐

Known Flood Risk

History of Flooding?	Yes ✓ No ☐	Frequency of flooding:	100-year
Population at Risk	244,800	# of structures inundated	75,816
Roadways flooded	Yes ✓ No ☐	Miles inundated?	1,840.41
Critical Facilities Impacted	Yes ✓ No ☐	Agricultural Land impacted	Yes ✓ No ☐

Notes:

Strategy Costs

Total Cost:	$50,000	Study Sponsor:	Hidalgo County Drainage District 1
Non-reoccurring Non-capital Cost (include in Total above):	$50,000	*These are one-time costs for program development, education campaign, and non-engineering study costs.*	

Estimated year to start:	2027	Entity with Oversight	Hidalgo County Drainage District 1
Time to complete?	2028	Included in a Hazard Mitigation Action Plan or other plan?	Yes ☐ No ✓
Funding Dedicated?	Yes ☐ No ✓	(Potential) Source of Funding	

Have the flood risk and flood reduction impacts been evaluated?

Yes ☐ No ✓

Was the strategy missing sufficient data to assess whether the proposed strategy has a negative effect, per TWDB guidelines? Yes ☐ No ✓

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 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

RFPG Recommended

Yes ✓ No ☐

Region 15 Lower Rio Grande Regional Flood Planning Group

FMS

Flood Management Strategies
Fact Sheet

Hidalgo County Drainage District #1 - Action #124

FMS ID: 152000089

FMS Description

Adopt and implement program for cleaning debris from bridges, drains, culverts

Strategy Type

- ✓ Education and Outreach Activities
- ☐ Regulatory and Guidance
- ☐ Flood Measurement and Warning
- ☐ Infrastructure Projects
- ☐ Other:

Strategy Area

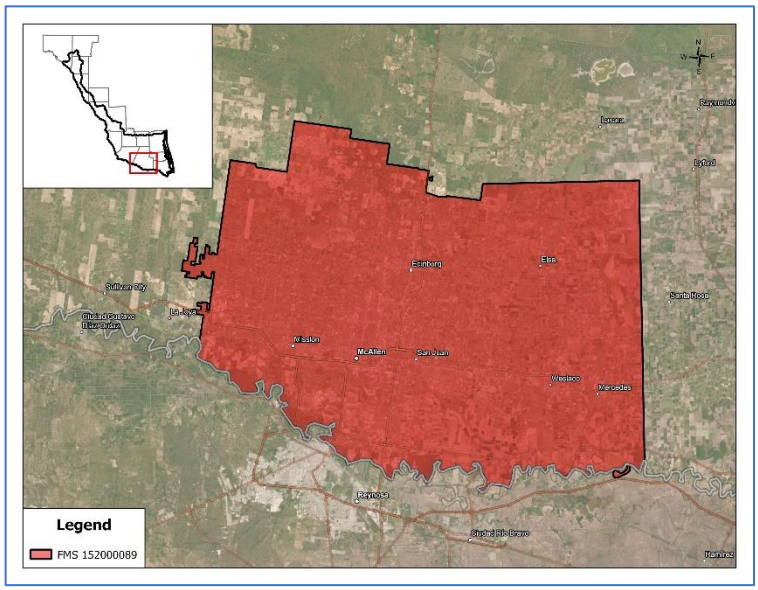
City/ Cities

County/ Counties **Hidalgo**

HUC 8 **12110208, 13090002, 13090001**

HUC 12 **130900020305, 130900011705, 121102080100, 121102080600, 121102080300, 121102080400, 130900020301, 130900020401, 130900020311, 121102080200, 121102080500**

Study Area (sq. mi.) 807.24



Emergency Need

Yes ✓ No ☐

Known Flood Risk

History of Flooding?	Yes ✓ No ☐	Frequency of flooding:	100-year
Population at Risk	244,800	# of structures inundated	75,816
Roadways flooded	Yes ✓ No ☐	Miles inundated?	1,840.41
Critical Facilities Impacted	Yes ✓ No ☐	Agricultural Land impacted	Yes ✓ No ☐

Notes:

Strategy Costs

Total Cost:	$200,000	Study Sponsor:	Hidalgo County Drainage District 1
Non-reoccurring Non-capital Cost (include in Total above):	$200,000	*These are one-time costs for program development, education campaign, and non-engineering study costs.*	
Estimated year to start:	2027	Entity with Oversight	Hidalgo County Drainage District 1

Region 15 Lower Rio Grande Regional Flood Planning Group

FMS

Flood Management Strategies
Fact Sheet

Time to complete?	2028	Included in a Hazard Mitigation Action Plan or other plan?	Yes ☐ No ✓
Funding Dedicated?	Yes ☐ No ✓	(Potential) Source of Funding	

Have the flood risk and flood reduction impacts been evaluated?

Yes ☐ No ✓

Was the strategy missing sufficient data to assess whether the proposed strategy has a negative effect, per TWDB guidelines? Yes ☐ No ✓

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 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

RFPG Recommended

Yes ✓ No ☐

Region 15 Lower Rio Grande Regional Flood Planning Group

FMS

Flood Management Strategies
Fact Sheet

Hidalgo County Drainage District #1 - Action #105

FMS ID: 152000090

FMS Description

Coordinate a debris removal program

Strategy Type

- ☐ Education and Outreach Activities
- ✓ Regulatory and Guidance
- ☐ Flood Measurement and Warning
- ☐ Infrastructure Projects
- ☐ Other:

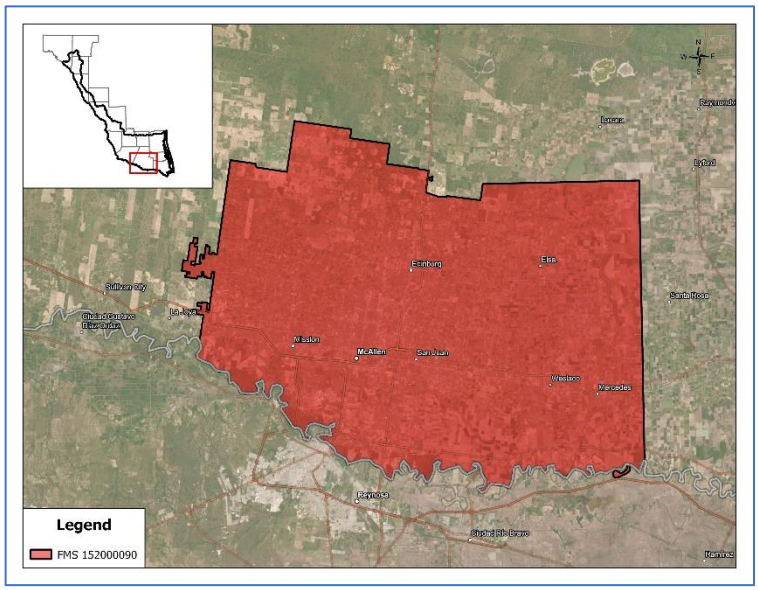
Strategy Area

City/ Cities

County/ Counties **Hidalgo**

HUC 8 **12110208, 13090002, 13090001**
HUC 12 **130900020305, 130900011705, 121102080100, 121102080600, 121102080300, 121102080400, 130900020301, 130900020401, 130900020311, 121102080200, 121102080500**

Study Area (sq. mi.) 807.24



Emergency Need

Yes ✓ No ☐

Known Flood Risk

History of Flooding?	Yes ✓ No ☐	Frequency of flooding:	100-year
Population at Risk	244,800	# of structures inundated	75,816
Roadways flooded	Yes ✓ No ☐	Miles inundated?	1,840.41
Critical Facilities Impacted	Yes ✓ No ☐	Agricultural Land impacted	Yes ✓ No ☐

Notes:

Strategy Costs

Total Cost:	$750,000	Study Sponsor:	Hidalgo County Drainage District 1
Non-reoccurring Non-capital Cost (include in Total above):	$750,000	*These are one-time costs for program development, education campaign, and non-engineering study costs.*	

Estimated year to start:	2027	Entity with Oversight	Hidalgo County Drainage District 1
Time to complete?	2028	Included in a Hazard Mitigation Action Plan or other plan?	Yes ☐ No ✓
Funding Dedicated?	Yes ☐ No ✓	(Potential) Source of Funding	

Have the flood risk and flood reduction impacts been evaluated?

Yes ☐ No ✓

Was the strategy missing sufficient data to assess whether the proposed strategy has a negative effect, per TWDB guidelines? Yes ☐ No ✓

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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- ☐ Reduce the # of structures that have been subject to repeated flooding events through property buyouts
- ☐ 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

RFPG Recommended

Yes ✓ No ☐

Region 15 Lower Rio Grande Regional Flood Planning Group

FMS

Flood Management Strategies
Fact Sheet

Hidalgo County Drainage District #1 - Action #91

FMS ID: 152000091

FMS Description

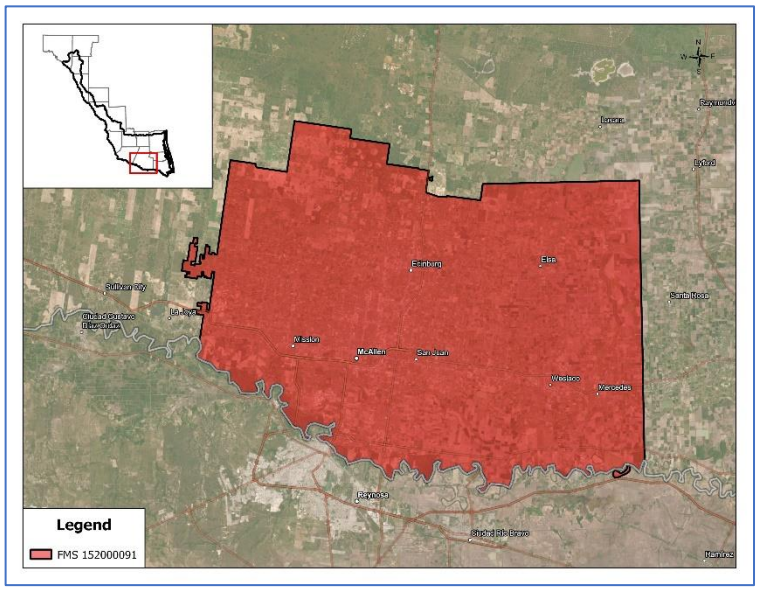
Projects to increase cyber security

Strategy Type

- ☐ Education and Outreach Activities
- ✓ Regulatory and Guidance
- ☐ Flood Measurement and Warning
- ☐ Infrastructure Projects
- ☐ Other:

Strategy Area

City/ Cities	
County/ Counties	**Hidalgo**
HUC 8	**12110208, 13090002, 13090001**
HUC 12	**130900020305, 130900011705, 121102080100, 121102080600, 121102080300, 121102080400, 130900020301, 130900020401, 130900020311, 121102080200, 121102080500**
Study Area (sq. mi.)	807.24



Emergency Need

Yes ✓ No ☐

Known Flood Risk

History of Flooding?	Yes ✓ No ☐	Frequency of flooding:	100-year
Population at Risk	244,800	# of structures inundated	75,816
Roadways flooded	Yes ✓ No ☐	Miles inundated?	1,840.41
Critical Facilities Impacted	Yes ✓ No ☐	Agricultural Land impacted	Yes ✓ No ☐

Notes:

Strategy Costs

Total Cost:	$250,000	Study Sponsor:	Hidalgo County Drainage District 1
Non-reoccurring Non-capital Cost (include in Total above):	$250,000	*These are one-time costs for program development, education campaign, and non-engineering study costs.*	

Estimated year to start:	2027	Entity with Oversight	Hidalgo County Drainage District 1
Time to complete?	2028	Included in a Hazard Mitigation Action Plan or other plan?	Yes ☐ No ✓
Funding Dedicated?	Yes ☐ No ✓	(Potential) Source of Funding	

Have the flood risk and flood reduction impacts been evaluated?

Yes ☐ No ✓

Was the strategy missing sufficient data to assess whether the proposed strategy has a negative effect, per TWDB guidelines? Yes ☐ No ✓

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 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

RFPG Recommended

Yes ✓ No ☐

Region 15 Lower Rio Grande Regional Flood Planning Group

FMS

Flood Management Strategies
Fact Sheet

Hidalgo County Drainage District #1 - Action #106

FMS ID: 152000092

FMS Description

Develop a program to provide hyperlinks to weather data

Strategy Type

- ☐ Education and Outreach Activities
- ☐ Infrastructure Projects
- ☐ Regulatory and Guidance
- ☐ Other:
- ✓ Flood Measurement and Warning

Strategy Area

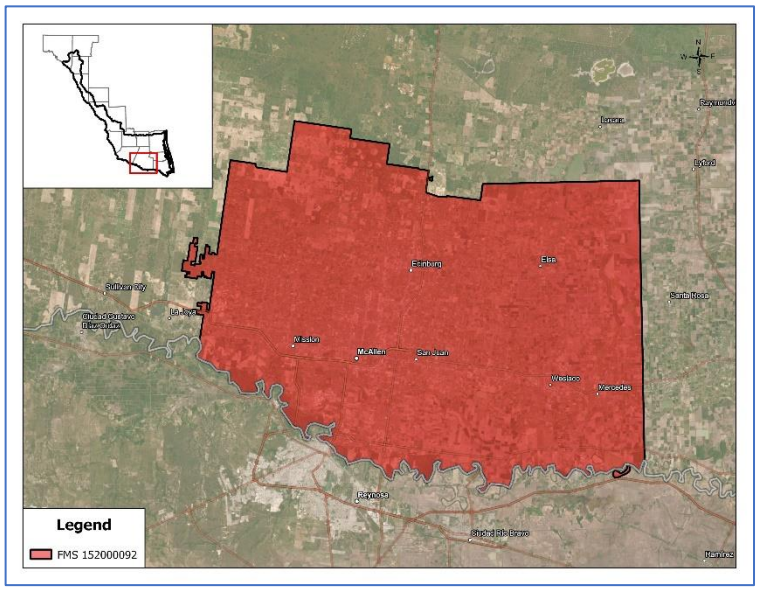
City/ Cities

County/ Counties **Hidalgo**

HUC 8 **12110208, 13090002, 13090001**

HUC 12 **130900020305, 130900011705, 121102080100, 121102080600, 121102080300, 121102080400, 130900020301, 130900020401, 130900020311, 121102080200, 121102080500**

Study Area (sq. mi.) 807.24



Emergency Need

Yes ✓ No ☐

Known Flood Risk

History of Flooding?	Yes ✓ No ☐	Frequency of flooding:	100-year
Population at Risk	244,800	# of structures inundated	75,816
Roadways flooded	Yes ✓ No ☐	Miles inundated?	1,840.41
Critical Facilities Impacted	Yes ✓ No ☐	Agricultural Land impacted	Yes ✓ No ☐

Notes:

Strategy Costs

Total Cost:	$247,250	Study Sponsor:	Hidalgo County Drainage District 1
Non-reoccurring Non-capital Cost (include in Total above):	$247,250	*These are one-time costs for program development, education campaign, and non-engineering study costs.*	

Estimated year to start:	2027	Entity with Oversight	Hidalgo County Drainage District 1
Time to complete?	2028	Included in a Hazard Mitigation Action Plan or other plan?	Yes ☐ No ✓
Funding Dedicated?	Yes ☐ No ✓	(Potential) Source of Funding	

Have the flood risk and flood reduction impacts been evaluated?

Yes ☐ No ✓

Was the strategy missing sufficient data to assess whether the proposed strategy has a negative effect, per TWDB guidelines? Yes ☐ No ✓

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 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

RFPG Recommended

Yes ✓ No ☐

Region 15 Lower Rio Grande Regional Flood Planning Group

FMS

Flood Management Strategies
Fact Sheet

Hidalgo County Drainage District #1 - Action #14

FMS ID: 152000093

FMS Description

Develop Acquisition/ buy-out program

Strategy Type

- ☐ Education and Outreach Activities
- ✓ Infrastructure Projects
- ☐ Regulatory and Guidance
- ☐ Other:
- ☐ Flood Measurement and Warning

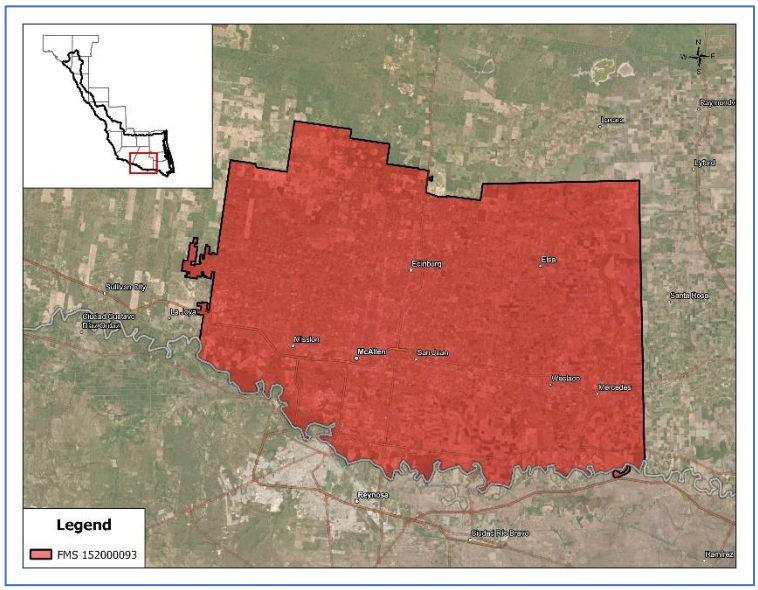
Strategy Area

City/ Cities

County/ Counties **Hidalgo**

HUC 8 **12110208, 13090002, 13090001**
HUC 12 **130900020305, 130900011705, 121102080100, 121102080600, 121102080300, 121102080400, 130900020301, 130900020401, 130900020311, 121102080200, 121102080500**

Study Area (sq. mi.) 807.24



Emergency Need

Yes ✓ No ☐

Known Flood Risk

History of Flooding?	Yes ✓ No ☐	Frequency of flooding:	100-year
Population at Risk	244,800	# of structures inundated	75,816
Roadways flooded	Yes ✓ No ☐	Miles inundated?	1,840.41
Critical Facilities Impacted	Yes ✓ No ☐	Agricultural Land impacted	Yes ✓ No ☐

Notes:

Strategy Costs

Total Cost:	$10,000,000	Study Sponsor:	Hidalgo County Drainage District 1
Non-reoccurring Non-capital Cost (include in Total above):	$500,000	*These are one-time costs for program development, education campaign, and non-engineering study costs.*	

Estimated year to start:	2027	Entity with Oversight	Hidalgo County Drainage District 1
Time to complete?	2030	Included in a Hazard Mitigation Action Plan or other plan?	Yes ☐ No ✓
Funding Dedicated?	Yes ☐ No ✓	(Potential) Source of Funding	

Have the flood risk and flood reduction impacts been evaluated?

Yes ☐ No ✓

Was the strategy missing sufficient data to assess whether the proposed strategy has a negative effect, per TWDB guidelines? Yes ☐ No ✓

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 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

RFPG Recommended

Yes ✓ No ☐

Region 15 Lower Rio Grande Regional Flood Planning Group

FMS

Flood Management Strategies
Fact Sheet

Hidalgo County Drainage District #1 - Action #36

FMS ID: 152000094

FMS Description

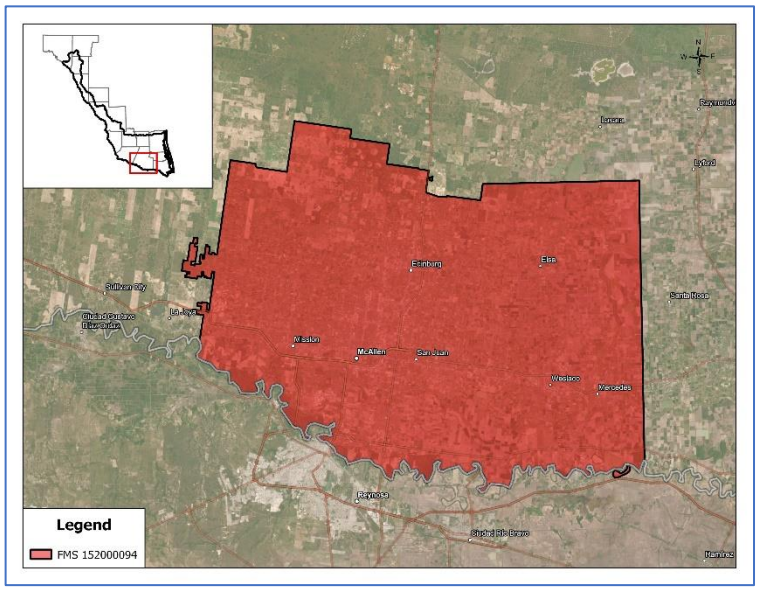
Develop Hazardous Material Spills Prevention and Contingency Plan

Strategy Type

- ☐ Education and Outreach Activities
- ✓ Regulatory and Guidance
- ☐ Flood Measurement and Warning
- ☐ Infrastructure Projects
- ☐ Other:

Strategy Area

City/ Cities	
County/ Counties	**Hidalgo**
HUC 8	**12110208, 13090002, 13090001**
HUC 12	**130900020305, 130900011705, 121102080100, 121102080600, 121102080300, 121102080400, 130900020301, 130900020401, 130900020311, 121102080200, 121102080500**
Study Area (sq. mi.)	807.24



Emergency Need

Yes ✓ No ☐

Known Flood Risk

History of Flooding?	Yes ✓ No ☐	Frequency of flooding:	100-year
Population at Risk	244,800	# of structures inundated	75,816
Roadways flooded	Yes ✓ No ☐	Miles inundated?	1,840.41
Critical Facilities Impacted	Yes ✓ No ☐	Agricultural Land impacted	Yes ✓ No ☐

Notes:

Strategy Costs

Total Cost:	$30,000	Study Sponsor:	Hidalgo County Drainage District 1
Non-reoccurring Non-capital Cost (include in Total above):	$30,000	*These are one-time costs for program development, education campaign, and non-engineering study costs.*	

Estimated year to start:	2027	Entity with Oversight	Hidalgo County Drainage District 1
Time to complete?	2028	Included in a Hazard Mitigation Action Plan or other plan?	Yes ☐ No ✓
Funding Dedicated?	Yes ☐ No ✓	(Potential) Source of Funding	

Have the flood risk and flood reduction impacts been evaluated?

Yes ☐ No ✓

Was the strategy missing sufficient data to assess whether the proposed strategy has a negative effect, per TWDB guidelines? Yes ☐ No ✓

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 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

RFPG Recommended

Yes ✓ No ☐

Region 15 Lower Rio Grande Regional Flood Planning Group

FMS

Flood Management Strategies
Fact Sheet

Hidalgo County Drainage District #1 - Action #107

FMS ID: 152000095

FMS Description

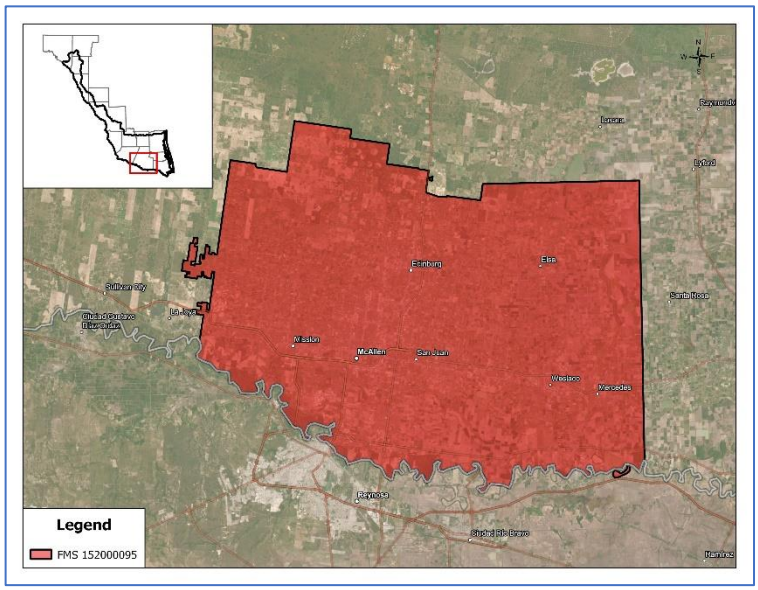
Develop procedures for mass notifications

Strategy Type

- ☐ Education and Outreach Activities
- ☐ Infrastructure Projects
- ☐ Regulatory and Guidance
- ☐ Other:
- ✓ Flood Measurement and Warning

Strategy Area

City/ Cities	
County/ Counties	**Hidalgo**
HUC 8	**12110208, 13090002, 13090001**
HUC 12	**130900020305, 130900011705, 121102080100, 121102080600, 121102080300, 121102080400, 130900020301, 130900020401, 130900020311, 121102080200, 121102080500**
Study Area (sq. mi.)	807.24



Emergency Need

Yes ✓ No ☐

Known Flood Risk

History of Flooding?	Yes ✓ No ☐	Frequency of flooding:	100-year
Population at Risk	244,800	# of structures inundated	75,816
Roadways flooded	Yes ✓ No ☐	Miles inundated?	1,840.41
Critical Facilities Impacted	Yes ✓ No ☐	Agricultural Land impacted	Yes ✓ No ☐

Notes:

Strategy Costs

Total Cost:	$243,800	Study Sponsor:	Hidalgo County Drainage District 1
Non-reoccurring Non-capital Cost (include in Total above):	$243,800	*These are one-time costs for program development, education campaign, and non-engineering study costs.*	

Estimated year to start:	2027	Entity with Oversight	Hidalgo County Drainage District 1
Time to complete?	2028	Included in a Hazard Mitigation Action Plan or other plan?	Yes ☐ No ✓
Funding Dedicated?	Yes ☐ No ✓	(Potential) Source of Funding	

Have the flood risk and flood reduction impacts been evaluated?

Yes ☐ No ✓

Was the strategy missing sufficient data to assess whether the proposed strategy has a negative effect, per TWDB guidelines? Yes ☐ No ✓

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
- ☐ 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

RFPG Recommended

Yes ✓ No ☐

Region 15 Lower Rio Grande Regional Flood Planning Group

FMS

Flood Management Strategies
Fact Sheet

Hidalgo County Drainage District #1 - Action #17

FMS ID: 152000096

FMS Description

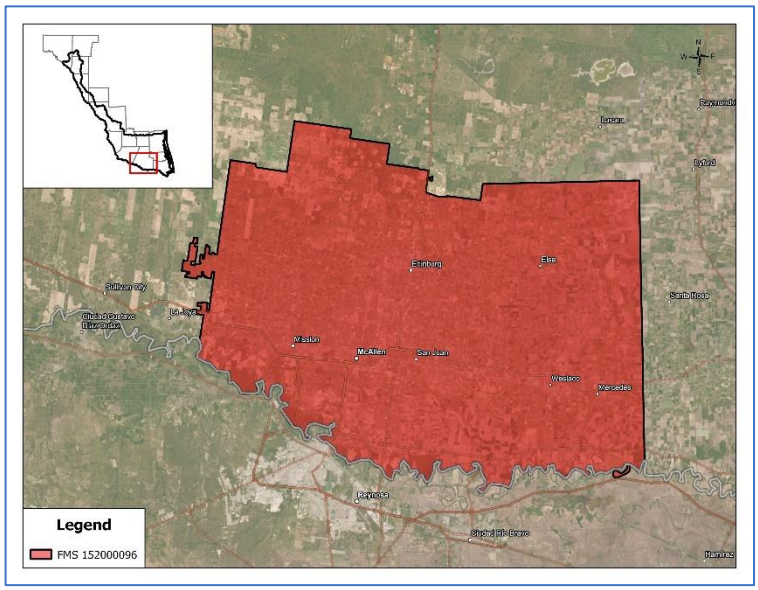
Identify flood-prone and repetitive loss properties

Strategy Type

- ☐ Education and Outreach Activities
- ✓ Infrastructure Projects
- ☐ Regulatory and Guidance
- ☐ Other:
- ☐ Flood Measurement and Warning

Strategy Area

City/ Cities	
County/ Counties	**Hidalgo**
HUC 8	**12110208, 13090002, 13090001**
HUC 12	**130900020305, 130900011705, 121102080100, 121102080600, 121102080300, 121102080400, 130900020301, 130900020401, 130900020311, 121102080200, 121102080500**
Study Area (sq. mi.)	807.24



Emergency Need

Yes ✓ No ☐

Known Flood Risk

History of Flooding?	Yes ✓ No ☐	Frequency of flooding:	100-year
Population at Risk	244,800	# of structures inundated	75,816
Roadways flooded	Yes ✓ No ☐	Miles inundated?	1,840.41
Critical Facilities Impacted	Yes ✓ No ☐	Agricultural Land impacted	Yes ✓ No ☐

Notes:

Strategy Costs

Total Cost:	$1,000,000	Study Sponsor:	Hidalgo County Drainage District 1
Non-reoccurring Non-capital Cost (include in Total above):	$1,000,000	*These are one-time costs for program development, education campaign, and non-engineering study costs.*	

Estimated year to start:	2027	Entity with Oversight	Hidalgo County Drainage District 1
Time to complete?	2028	Included in a Hazard Mitigation Action Plan or other plan?	Yes ☐ No ✓
Funding Dedicated?	Yes ☐ No ✓	(Potential) Source of Funding	

Have the flood risk and flood reduction impacts been evaluated?

Yes ☐ No ✓

Was the strategy missing sufficient data to assess whether the proposed strategy has a negative effect, per TWDB guidelines? Yes ☐ No ✓

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
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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 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

RFPG Recommended

Yes ✓ No ☐

Region 15 Lower Rio Grande Regional Flood Planning Group

FMS

Flood Management Strategies
Fact Sheet

Hidalgo County Drainage District #1 - Action #90

FMS ID: 152000097

FMS Description

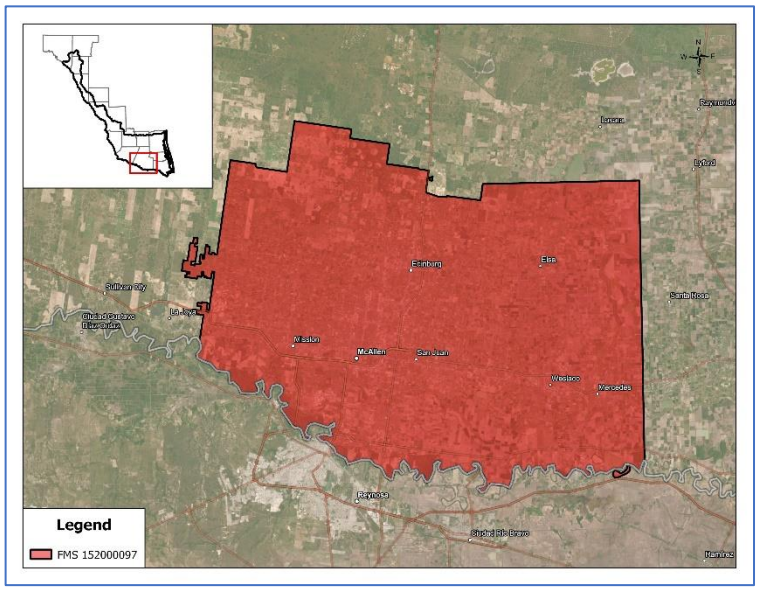
Illegal dumping outreach program

Strategy Type

- ✓ Education and Outreach Activities
- ☐ Regulatory and Guidance
- ☐ Flood Measurement and Warning
- ☐ Infrastructure Projects
- ☐ Other:

Strategy Area

City/ Cities	
County/ Counties	**Hidalgo**
HUC 8	**12110208, 13090002, 13090001**
HUC 12	**130900020305, 130900011705, 121102080100, 121102080600, 121102080300, 121102080400, 130900020301, 130900020401, 130900020311, 121102080200, 121102080500**
Study Area (sq. mi.)	807.24



Emergency Need

Yes ✓ No ☐

Known Flood Risk

History of Flooding?	Yes ✓ No ☐	Frequency of flooding:	100-year
Population at Risk	244,800	# of structures inundated	75,816
Roadways flooded	Yes ✓ No ☐	Miles inundated?	1,840.41
Critical Facilities Impacted	Yes ✓ No ☐	Agricultural Land impacted	Yes ✓ No ☐

Notes:

Strategy Costs

Total Cost:	$500,000	Study Sponsor:	Hidalgo County Drainage District 1
Non-reoccurring Non-capital Cost (include in Total above):	$500,000	*These are one-time costs for program development, education campaign, and non-engineering study costs.*	

Estimated year to start:	2027	Entity with Oversight	Hidalgo County Drainage District 1
Time to complete?	2028	Included in a Hazard Mitigation Action Plan or other plan?	Yes ☐ No ✓
Funding Dedicated?	Yes ☐ No ✓	(Potential) Source of Funding	

Have the flood risk and flood reduction impacts been evaluated?

Yes ☐ No ✓

Was the strategy missing sufficient data to assess whether the proposed strategy has a negative effect, per TWDB guidelines? Yes ☐ No ✓

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 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

RFPG Recommended

Yes ✓ No ☐

Region 15 Lower Rio Grande Regional Flood Planning Group

FMS

Flood Management Strategies
Fact Sheet

Hidalgo County Drainage District #1 - Action #16

FMS ID: 152000098

FMS Description

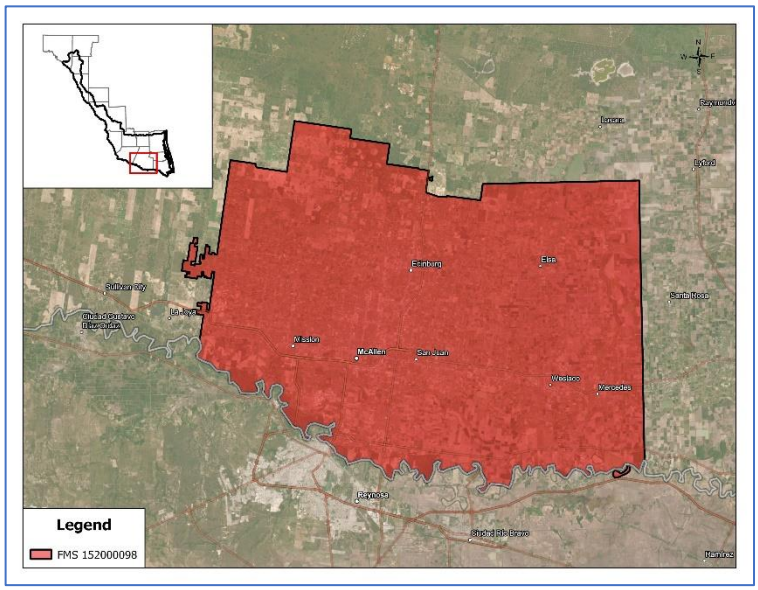
Incorporate Higher standards for hazard resistance

Strategy Type

- ☐ Education and Outreach Activities
- ✓ Regulatory and Guidance
- ☐ Flood Measurement and Warning
- ☐ Infrastructure Projects
- ☐ Other:

Strategy Area

City/ Cities	
County/ Counties	**Hidalgo**
HUC 8	**12110208, 13090002, 13090001**
HUC 12	**130900020305, 130900011705, 121102080100, 121102080600, 121102080300, 121102080400, 130900020301, 130900020401, 130900020311, 121102080200, 121102080500**
Study Area (sq. mi.)	807.24



Emergency Need

Yes ✓ No ☐

Known Flood Risk

History of Flooding?	Yes ✓ No ☐	Frequency of flooding:	100-year
Population at Risk	244,800	# of structures inundated	75,816
Roadways flooded	Yes ✓ No ☐	Miles inundated?	1,840.41
Critical Facilities Impacted	Yes ✓ No ☐	Agricultural Land impacted	Yes ✓ No ☐

Notes:

Strategy Costs

Total Cost:	$15,000	Study Sponsor:	Hidalgo County Drainage District 1
Non-reoccurring Non-capital Cost (include in Total above):	$15,000	*These are one-time costs for program development, education campaign, and non-engineering study costs.*	

Estimated year to start:	2027	Entity with Oversight	Hidalgo County Drainage District 1
Time to complete?	2028	Included in a Hazard Mitigation Action Plan or other plan?	Yes ☐ No ✓
Funding Dedicated?	Yes ☐ No ✓	(Potential) Source of Funding	

Have the flood risk and flood reduction impacts been evaluated?

Yes ☐ No ✓

Was the strategy missing sufficient data to assess whether the proposed strategy has a negative effect, per TWDB guidelines? Yes ☐ No ✓

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 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

RFPG Recommended

Yes ✓ No ☐

Region 15 Lower Rio Grande Regional Flood Planning Group

FMS

Flood Management Strategies
Fact Sheet

Hidalgo County Drainage District #1 - Action #35

FMS ID: 152000099

FMS Description

Install lightning protection systems

Strategy Type

- ☐ Education and Outreach Activities
- ✓ Infrastructure Projects
- ☐ Regulatory and Guidance
- ☐ Other:
- ☐ Flood Measurement and Warning

Strategy Area

City/ Cities

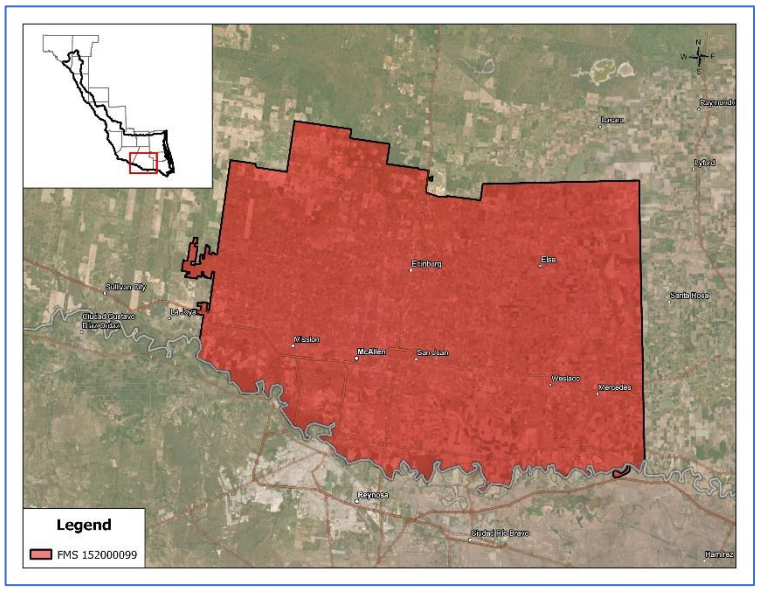
County/ Counties **Hidalgo**

HUC 8 **12110208, 13090002, 13090001**

HUC 12 **130900020305, 130900011705, 121102080100, 121102080600, 121102080300, 121102080400, 130900020301, 130900020401, 130900020311, 121102080200, 121102080500**

Study Area (sq. mi.)

807.24



Emergency Need

Yes ✓ No ☐

Known Flood Risk

History of Flooding?	Yes ✓ No ☐	Frequency of flooding:	100-year
Population at Risk	244,800	# of structures inundated	75,816
Roadways flooded	Yes ✓ No ☐	Miles inundated?	1,840.41
Critical Facilities Impacted	Yes ✓ No ☐	Agricultural Land impacted	Yes ✓ No ☐

Notes:

Strategy Costs

Total Cost:	$200,000	Study Sponsor:	Hidalgo County Drainage District 1
Non-reoccurring Non-capital Cost (include in Total above):		*These are one-time costs for program development, education campaign, and non-engineering study costs.*	
Estimated year to start:	2027	Entity with Oversight	Hidalgo County Drainage District 1

Time to complete?	2028	Included in a Hazard Mitigation Action Plan or other plan?	Yes ☐ No ✓
Funding Dedicated?	Yes ☐ No ✓	(Potential) Source of Funding	

Have the flood risk and flood reduction impacts been evaluated?

Yes ☐ No ✓

Was the strategy missing sufficient data to assess whether the proposed strategy has a negative effect, per TWDB guidelines? Yes ☐ No ✓

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 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

RFPG Recommended

Yes ✓ No ☐

Region 15 Lower Rio Grande Regional Flood Planning Group

FMS

Flood Management Strategies
Fact Sheet

Hidalgo County Drainage District #1 - Action #121

FMS ID: 152000100

FMS Description

Remote Operations/Monitoring of Stormwater Pumps

Strategy Type

- ☐ Education and Outreach Activities
- ✓ Infrastructure Projects
- ☐ Regulatory and Guidance
- ☐ Other:
- ☐ Flood Measurement and Warning

Strategy Area

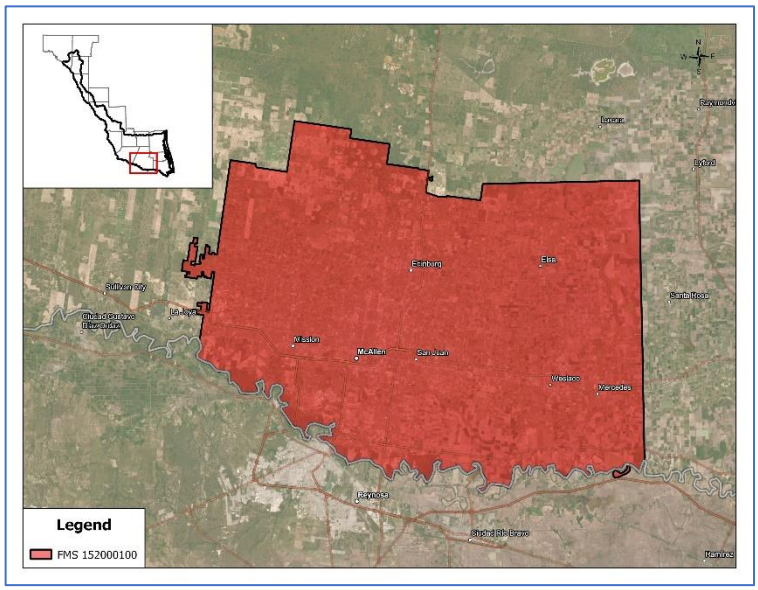
City/ Cities

County/ Counties **Hidalgo**

HUC 8 **12110208, 13090002, 13090001**

HUC 12 **130900020305, 130900011705, 121102080100, 121102080600, 121102080300, 121102080400, 130900020301, 130900020401, 130900020311, 121102080200, 121102080500**

Study Area (sq. mi.) 807.24



Emergency Need

Yes ✓ No ☐

Known Flood Risk

History of Flooding?	Yes ✓ No ☐	Frequency of flooding:	100-year
Population at Risk	244,800	# of structures inundated	75,816
Roadways flooded	Yes ✓ No ☐	Miles inundated?	1,840.41
Critical Facilities Impacted	Yes ✓ No ☐	Agricultural Land impacted	Yes ✓ No ☐

Notes:

Strategy Costs

Total Cost:	$3,000,000	Study Sponsor:	Hidalgo County Drainage District 1
Non-reoccurring Non-capital Cost (include in Total above):		*These are one-time costs for program development, education campaign, and non-engineering study costs.*	

Estimated year to start:	2027	Entity with Oversight	Hidalgo County Drainage District 1
Time to complete?	2028	Included in a Hazard Mitigation Action Plan or other plan?	Yes ☐ No ✓
Funding Dedicated?	Yes ☐ No ✓	(Potential) Source of Funding	

Have the flood risk and flood reduction impacts been evaluated?

Yes ☐ No ✓

Was the strategy missing sufficient data to assess whether the proposed strategy has a negative effect, per TWDB guidelines? Yes ☐ No ✓

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 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

RFPG Recommended

Yes ✓ No ☐

Region 15 Lower Rio Grande Regional Flood Planning Group

FMS

Flood Management Strategies
Fact Sheet

City of La Joya

FMS ID: 152000101

FMS Description

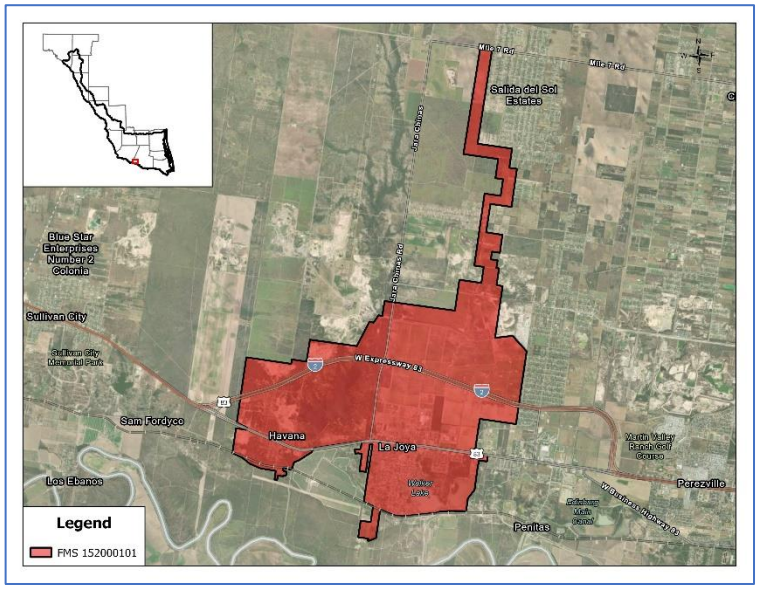
FMS 2 - Assessment, development, and updating of the City's ordinances, orders, policies, engineering specifications, guidance documents and other flood management tools. The objective is to update flood management planning tools to existing local, state, and federal standards, to include innovative methodologies, and to promote universal regional approaches. This study will target the development of new/revised ordinances, orders, policies, engineering guidance designs, operation and maintenance requirements and similar planning tools.

Strategy Type

- ☐ Education and Outreach Activities
- ✓ Regulatory and Guidance
- ☐ Flood Measurement and Warning
- ☐ Infrastructure Projects
- ☐ Other:

Strategy Area

City/ Cities	**La Joya**
County/ Counties	**Hidalgo**
HUC 8	**12110208, 13090002, 13090001**
HUC 12	**130900011705, 130900011706, 121102080100, 130900020301, 121102080200**
Study Area (sq. mi.)	52.36



Emergency Need

Yes ✓ No ☐

Known Flood Risk

History of Flooding?	Yes ✓ No ☐	Frequency of flooding:	100-year
Population at Risk	242	# of structures inundated	104
Roadways flooded	Yes ✓ No ☐	Miles inundated?	5.05
Critical Facilities Impacted	Yes ✓ No ☐	Agricultural Land impacted	Yes ✓ No ☐

Notes:

Strategy Costs

Total Cost:	$500,000	Study Sponsor:	La Joya
Non-reoccurring Non-capital Cost (include in Total above):	$500,000	*These are one-time costs for program development, education campaign, and non-engineering study costs.*	
Estimated year to start:	2027	Entity with Oversight	La Joya

Time to complete?	2028	Included in a Hazard Mitigation Action Plan or other plan?	Yes ☐ No ✓
Funding Dedicated?	Yes ☐ No ✓	(Potential) Source of Funding	

Have the flood risk and flood reduction impacts been evaluated?

Yes ☐ No ✓

Was the strategy missing sufficient data to assess whether the proposed strategy has a negative effect, per TWDB guidelines? Yes ☐ No ✓

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 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

RFPG Recommended

Yes ✓ No ☐

Region 15 Lower Rio Grande Regional Flood Planning Group

FMS

Flood Management Strategies
Fact Sheet

City of Elsa

FMS ID: 152000102

FMS Description

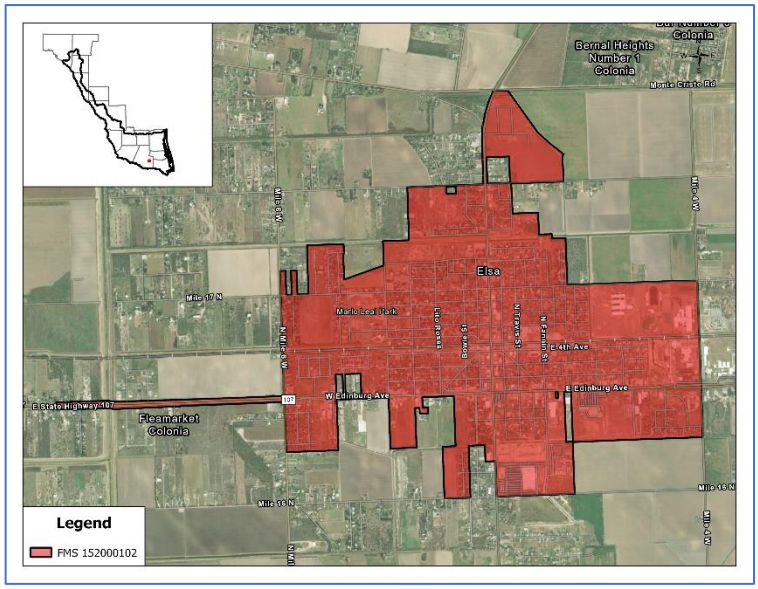
FMS 2 - Assessment, development, and updating of the City's ordinances, orders, policies, engineering specifications, guidance documents and other flood management tools. The objective is to update flood management planning tools to existing local, state, and federal standards, to include innovative methodologies, and to promote universal regional approaches. This study will target the development of new/revised ordinances, orders, policies, engineering guidance designs, operation and maintenance requirements and similar planning tools.

Strategy Type

- ☐ Education and Outreach Activities
- ✓ Regulatory and Guidance
- ☐ Flood Measurement and Warning
- ☐ Infrastructure Projects
- ☐ Other:

Strategy Area

City/ Cities	**Elsa**
County/ Counties	**Hidalgo**
HUC 8	**12110208**
HUC 12	**121102080300**
Study Area (sq. mi.)	5.5



Emergency Need

Yes ✓ No ☐

Known Flood Risk

History of Flooding?	Yes ✓ No ☐	Frequency of flooding:	100-year
Population at Risk	1,769	# of structures inundated	541
Roadways flooded	Yes ✓ No ☐	Miles inundated?	15.37
Critical Facilities Impacted	Yes ✓ No ☐	Agricultural Land impacted	Yes ✓ No ☐

Notes:

Strategy Costs

Total Cost:	$300,000	Study Sponsor:	Elsa
Non-reoccurring Non-capital Cost (include in Total above):	$300,000	*These are one-time costs for program development, education campaign, and non-engineering study costs.*	
Estimated year to start:	2027	Entity with Oversight	Elsa
Time to complete?	2028	Included in a Hazard Mitigation Action Plan or other plan?	Yes ☐ No ✓

Funding Dedicated?	Yes ☐ No ✓	(Potential) Source of Funding	

Have the flood risk and flood reduction impacts been evaluated?

Yes ☐ No ✓

Was the strategy missing sufficient data to assess whether the proposed strategy has a negative effect, per TWDB guidelines? Yes ☐ No ✓

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 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

RFPG Recommended

Yes ✓ No ☐

Region 15 Lower Rio Grande Regional Flood Planning Group

FMS

Flood Management Strategies
Fact Sheet

City of Edcouch

FMS ID: 152000103

FMS Description

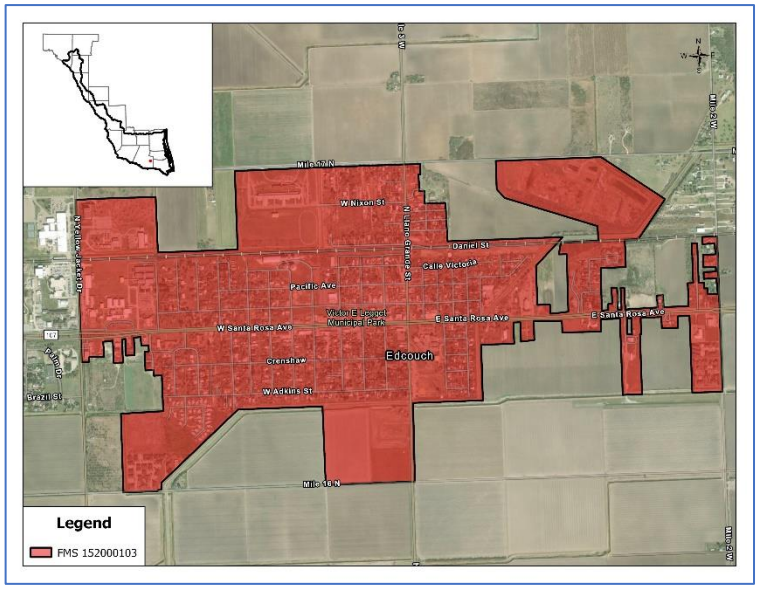
FMS 2 - Assessment, development, and updating of the City's ordinances, orders, policies, engineering specifications, guidance documents and other flood management tools. The objective is to update flood management planning tools to existing local, state, and federal standards, to include innovative methodologies, and to promote universal regional approaches. This study will target the development of new/revised ordinances, orders, policies, engineering guidance designs, operation and maintenance requirements and similar planning tools.

Strategy Type

- ☐ Education and Outreach Activities
- ✓ Regulatory and Guidance
- ☐ Flood Measurement and Warning
- ☐ Infrastructure Projects
- ☐ Other:

Strategy Area

City/ Cities	**Edcouch**
County/ Counties	**Hidalgo**
HUC 8	**12110208**
HUC 12	**121102080300**
Study Area (sq. mi.)	10.88



Emergency Need

Yes ✓ No ☐

Known Flood Risk

History of Flooding?	Yes ✓ No ☐	Frequency of flooding:	100-year
Population at Risk	1,758	# of structures inundated	287
Roadways flooded	Yes ✓ No ☐	Miles inundated?	7.50
Critical Facilities Impacted	Yes ✓ No ☐	Agricultural Land impacted	Yes ✓ No ☐

Notes:

Strategy Costs

Total Cost:	$300,000	Study Sponsor:	Edcouch
Non-reoccurring Non-capital Cost (include in Total above):	$300,000	*These are one-time costs for program development, education campaign, and non-engineering study costs.*	
Estimated year to start:	2027	Entity with Oversight	Edcouch
Time to complete?	2028	Included in a Hazard Mitigation Action Plan or other plan?	Yes ☐ No ✓

Funding Dedicated?	Yes ☐ No ✓	(Potential) Source of Funding	

Have the flood risk and flood reduction impacts been evaluated?

Yes ☐ No ✓

Was the strategy missing sufficient data to assess whether the proposed strategy has a negative effect, per TWDB guidelines? Yes ☐ No ✓

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 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

RFPG Recommended

Yes ✓ No ☐

Region 15 Lower Rio Grande Regional Flood Planning Group

FMS

Flood Management Strategies
Fact Sheet

City of Primera

FMS ID: 152000104

FMS Description

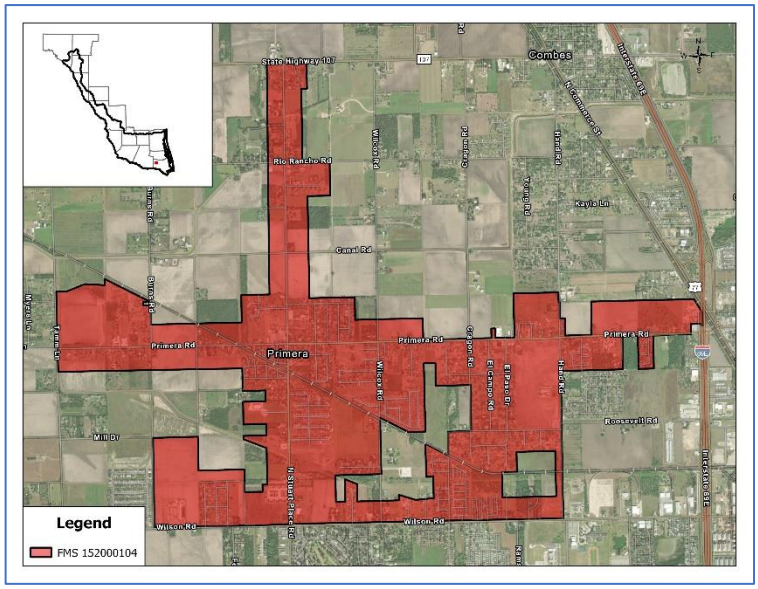
FMS 2 - Assessment, development, and updating of the City's ordinances, orders, policies, engineering specifications, guidance documents and other flood management tools. The objective is to update flood management planning tools to existing local, state, and federal standards, to include innovative methodologies, and to promote universal regional approaches. This study will target the development of new/revised ordinances, orders, policies, engineering guidance designs, operation and maintenance requirements and similar planning tools.

Strategy Type

- ☐ Education and Outreach Activities
- ✓ Regulatory and Guidance
- ☐ Flood Measurement and Warning
- ☐ Infrastructure Projects
- ☐ Other:

Strategy Area

City/ Cities	**Primera**
County/ Counties	**Cameron**
HUC 8	**12110208**
HUC 12	**121102080700**
Study Area (sq. mi.)	44.86



Emergency Need

Yes ✓ No ☐

Known Flood Risk

History of Flooding?	Yes ✓ No ☐	Frequency of flooding:	100-year
Population at Risk	1,107	# of structures inundated	389
Roadways flooded	Yes ✓ No ☐	Miles inundated?	7.25
Critical Facilities Impacted	Yes ✓ No ☐	Agricultural Land impacted	Yes ✓ No ☐

Notes:

Strategy Costs

Total Cost:	$300,000	Study Sponsor:	Primera
Non-reoccurring Non-capital Cost (include in Total above):	$300,000	*These are one-time costs for program development, education campaign, and non-engineering study costs.*	
Estimated year to start:	2027	Entity with Oversight	Primera
Time to complete?	2028	Included in a Hazard Mitigation Action Plan or other plan?	Yes ☐ No ✓

Funding Dedicated?	Yes ☐ No ✓	(Potential) Source of Funding	

Have the flood risk and flood reduction impacts been evaluated?

Yes ☐ No ✓

Was the strategy missing sufficient data to assess whether the proposed strategy has a negative effect, per TWDB guidelines? Yes ☐ No ✓

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
- ☐ 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

RFPG Recommended

Yes ✓ No ☐

Region 15 Lower Rio Grande Regional Flood Planning Group

FMS

Flood Management Strategies
Fact Sheet

City of San Benito

FMS ID: 152000105

FMS Description

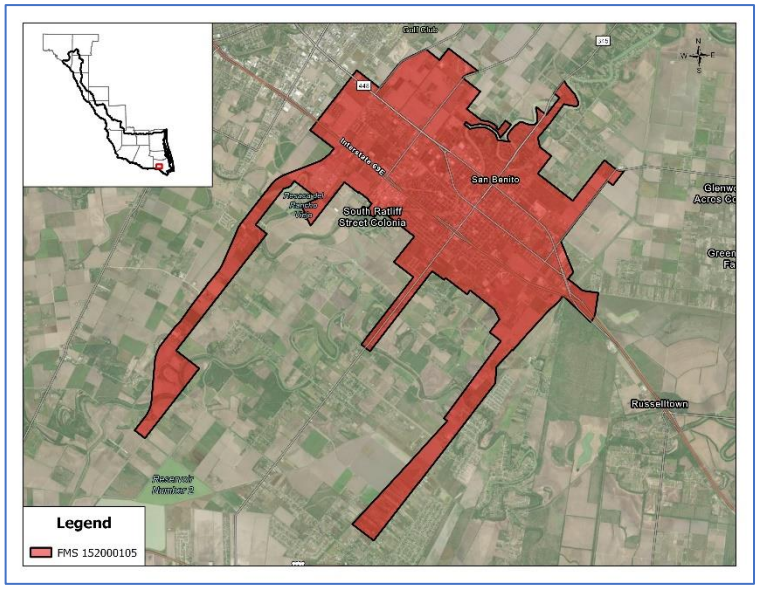
FMS 2 - Assessment, development, and updating of the City's ordinances, orders, policies, engineering specifications, guidance documents and other flood management tools. The objective is to update flood management planning tools to existing local, state, and federal standards, to include innovative methodologies, and to promote universal regional approaches. This study will target the development of new/revised ordinances, orders, policies, engineering guidance designs, operation and maintenance requirements and similar planning tools.

Strategy Type

- ☐ Education and Outreach Activities
- ✓ Regulatory and Guidance
- ☐ Flood Measurement and Warning
- ☐ Infrastructure Projects
- ☐ Other:

Strategy Area

City/ Cities	**San Benito**
County/ Counties	**Cameron**
HUC 8	**12110208**
HUC 12	**121102080800, 121102080600, 121102080700, 121102080900**
Study Area (sq. mi.)	2.78



Emergency Need

Yes ✓ No ☐

Known Flood Risk

History of Flooding?	Yes ✓ No ☐	Frequency of flooding:	100-year
Population at Risk	6,785	# of structures inundated	2,409
Roadways flooded	Yes ✓ No ☐	Miles inundated?	67.38
Critical Facilities Impacted	Yes ✓ No ☐	Agricultural Land impacted	Yes ✓ No ☐

Notes:

Strategy Costs

Total Cost:	$500,000	Study Sponsor:	San Benito
Non-reoccurring Non-capital Cost (include in Total above):	$500,000	*These are one-time costs for program development, education campaign, and non-engineering study costs.*	
Estimated year to start:	2027	Entity with Oversight	San Benito

Time to complete?	2028	Included in a Hazard Mitigation Action Plan or other plan?	Yes ☐ No ✓
Funding Dedicated?	Yes ☐ No ✓	(Potential) Source of Funding	

Have the flood risk and flood reduction impacts been evaluated?

Yes ☐ No ✓

Was the strategy missing sufficient data to assess whether the proposed strategy has a negative effect, per TWDB guidelines? Yes ☐ No ✓

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 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

RFPG Recommended

Yes ✓ No ☐

Region 15 Lower Rio Grande Regional Flood Planning Group

FMS

Flood Management Strategies
Fact Sheet

City of Weslaco

FMS ID: 152000106

FMS Description

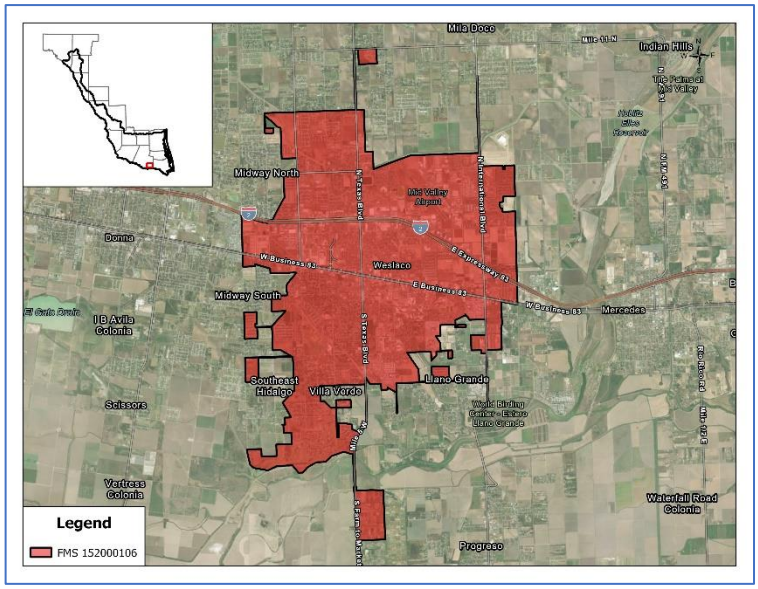
FMS 2 - Assessment, development, and updating of the City's ordinances, orders, policies, engineering specifications, guidance documents and other flood management tools. The objective is to update flood management planning tools to existing local, state, and federal standards, to include innovative methodologies, and to promote universal regional approaches. This study will target the development of new/revised ordinances, orders, policies, engineering guidance designs, operation and maintenance requirements and similar planning tools.

Strategy Type

- ☐ Education and Outreach Activities
- ✓ Regulatory and Guidance
- ☐ Flood Measurement and Warning
- ☐ Infrastructure Projects
- ☐ Other:

Strategy Area

City/ Cities	**Weslaco**
County/ Counties	**Hidalgo**
HUC 8	**12110208**
HUC 12	**121102080100, 121102080300**
Study Area (sq. mi.)	14.45



Emergency Need

Yes ✓ No ☐

Known Flood Risk

History of Flooding?	Yes ✓ No ☐	Frequency of flooding:	100-year
Population at Risk	12,194	# of structures inundated	4,532
Roadways flooded	Yes ✓ No ☐	Miles inundated?	103.54
Critical Facilities Impacted	Yes ✓ No ☐	Agricultural Land impacted	Yes ✓ No ☐

Notes:

Strategy Costs

Total Cost:	$500,000	Study Sponsor:	Weslaco
Non-reoccurring Non-capital Cost (include in Total above):	$500,000	*These are one-time costs for program development, education campaign, and non-engineering study costs.*	
Estimated year to start:	2027	Entity with Oversight	Weslaco
Time to complete?	2028	Included in a Hazard Mitigation Action Plan or other plan?	Yes ☐ No ✓

Funding Dedicated?	Yes ☐ No ✓	(Potential) Source of Funding	

Have the flood risk and flood reduction impacts been evaluated?

Yes ☐ No ✓

Was the strategy missing sufficient data to assess whether the proposed strategy has a negative effect, per TWDB guidelines? Yes ☐ No ✓

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 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

RFPG Recommended

Yes ✓ No ☐

Region 15 Lower Rio Grande Regional Flood Planning Group

FMS

Flood Management Strategies
Fact Sheet

City of Los Fresnos

FMS ID: 152000107

FMS Description

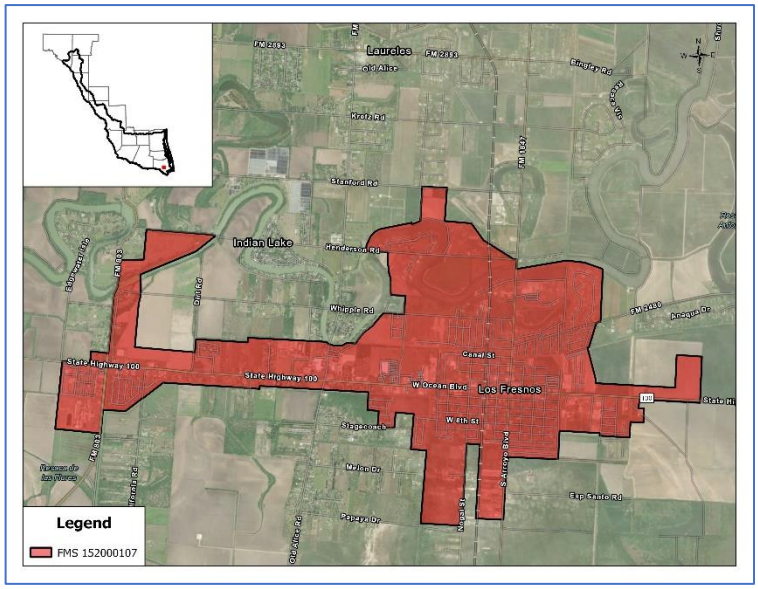
FMS 2 - Assessment, development, and updating of the City's ordinances, orders, policies, engineering specifications, guidance documents and other flood management tools. The objective is to update flood management planning tools to existing local, state, and federal standards, to include innovative methodologies, and to promote universal regional approaches. This study will target the development of new/revised ordinances, orders, policies, engineering guidance designs, operation and maintenance requirements and similar planning tools.

Strategy Type

- ☐ Education and Outreach Activities
- ✓ Regulatory and Guidance
- ☐ Flood Measurement and Warning
- ☐ Infrastructure Projects
- ☐ Other:

Strategy Area

City/ Cities	**Los Fresnos**
County/ Counties	**Cameron**
HUC 8	**12110208**
HUC 12	**121102080800, 121102080900**
Study Area (sq. mi.)	4.16



Emergency Need

Yes ✓ No ☐

Known Flood Risk

History of Flooding?	Yes ✓ No ☐	Frequency of flooding:	100-year
Population at Risk	1,640	# of structures inundated	489
Roadways flooded	Yes ✓ No ☐	Miles inundated?	15.24
Critical Facilities Impacted	Yes ✓ No ☐	Agricultural Land impacted	Yes ✓ No ☐

Notes:

Strategy Costs

Total Cost:	$500,000	Study Sponsor:	Los Fresnos
Non-reoccurring Non-capital Cost (include in Total above):	$500,000	*These are one-time costs for program development, education campaign, and non-engineering study costs.*	
Estimated year to start:	2027	Entity with Oversight	Los Fresnos
Time to complete?	2028	Included in a Hazard Mitigation Action Plan or other plan?	Yes ☐ No ✓

Funding Dedicated?	Yes ☐ No ✓	(Potential) Source of Funding	

Have the flood risk and flood reduction impacts been evaluated?

Yes ☐ No ✓

Was the strategy missing sufficient data to assess whether the proposed strategy has a negative effect, per TWDB guidelines? Yes ☐ No ✓

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 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

RFPG Recommended

Yes ✓ No ☐

Region 15 Lower Rio Grande Regional Flood Planning Group

FMS

Flood Management Strategies
Fact Sheet

Cameron County Drainage District #1

FMS ID: 152000108

FMS Description

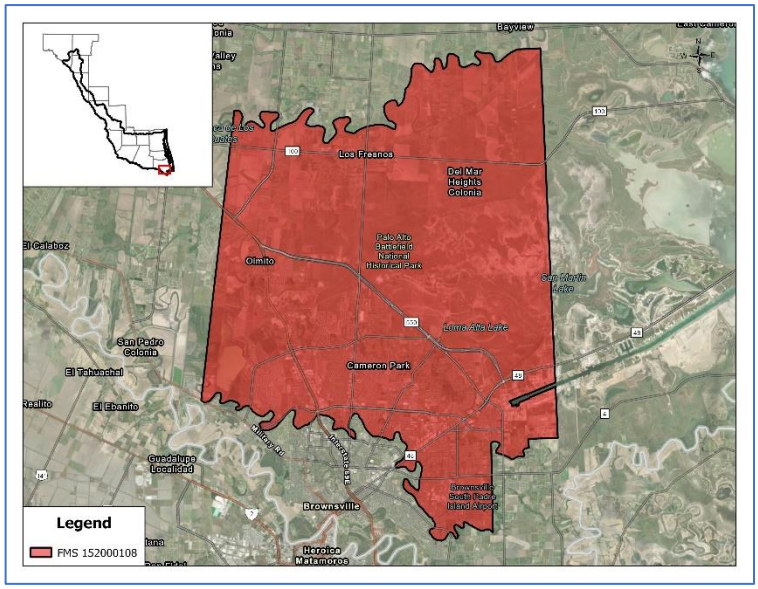
FMS 2 - Assessment, development, and updating of the Drainage District's ordinances, orders, policies, engineering specifications, guidance documents and other flood management tools. The objective is to update flood management planning tools to existing local, state, and federal standards, to include innovative methodologies, and to promote universal regional approaches. This study will target the development of new/revised ordinances, orders, policies, engineering guidance designs, operation and maintenance requirements and similar planning tools.

Strategy Type

- ☐ Education and Outreach Activities
- ✓ Regulatory and Guidance
- ☐ Flood Measurement and Warning
- ☐ Infrastructure Projects
- ☐ Other:

Strategy Area

City/ Cities	
County/ Counties	**Cameron**
HUC 8	**12110208**
HUC 12	**121102080800, 121102080900**
Study Area (sq. mi.)	7.53



Emergency Need

Yes ✓ No ☐

Known Flood Risk

History of Flooding?	Yes ✓ No ☐	Frequency of flooding:	100-year
Population at Risk	17,771	# of structures inundated	5,622
Roadways flooded	Yes ✓ No ☐	Miles inundated?	223.53
Critical Facilities Impacted	Yes ✓ No ☐	Agricultural Land impacted	Yes ✓ No ☐

Notes:

Strategy Costs

Total Cost:	$500,000	Study Sponsor:	Cameron County Drainage District #1
Non-reoccurring Non-capital Cost (include in Total above):	$500,000	*These are one-time costs for program development, education campaign, and non-engineering study costs.*	
Estimated year to start:	2027	Entity with Oversight	Cameron County Drainage District #1
Time to complete?	2028	Included in a Hazard Mitigation Action Plan or other plan?	Yes ☐ No ✓

Funding Dedicated?	Yes ☐ No ✓	(Potential) Source of Funding	

Have the flood risk and flood reduction impacts been evaluated?

Yes ☐ No ✓

Was the strategy missing sufficient data to assess whether the proposed strategy has a negative effect, per TWDB guidelines? Yes ☐ No ✓

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 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

RFPG Recommended

Yes ✓ No ☐

Region 15 Lower Rio Grande Regional Flood Planning Group

FMS

Flood Management Strategies
Fact Sheet

City of La Feria

FMS ID: 152000109

FMS Description

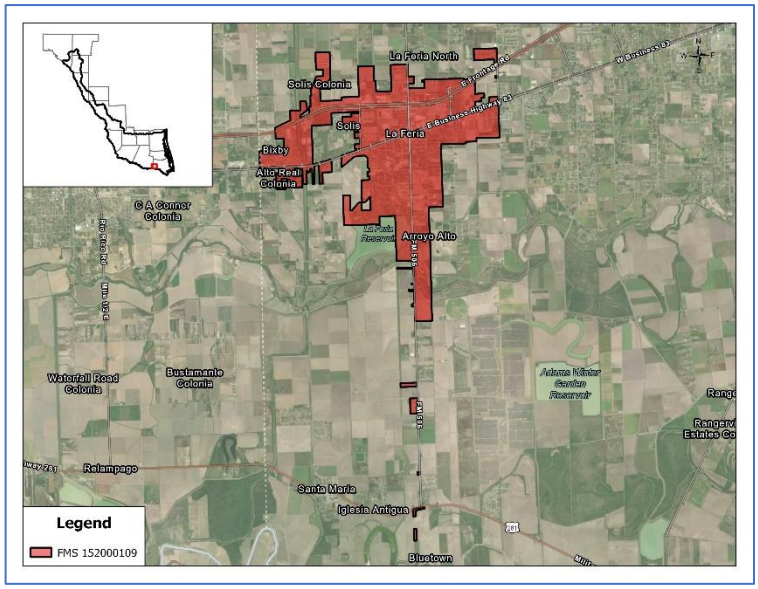
FMS 2 - Assessment, development, and updating of the City's ordinances, orders, policies, engineering specifications, guidance documents and other flood management tools. The objective is to update flood management planning tools to existing local, state, and federal standards, to include innovative methodologies, and to promote universal regional approaches. This study will target the development of new/revised ordinances, orders, policies, engineering guidance designs, operation and maintenance requirements and similar planning tools.

Strategy Type

- ☐ Education and Outreach Activities
- ✓ Regulatory and Guidance
- ☐ Flood Measurement and Warning
- ☐ Infrastructure Projects
- ☐ Other:

Strategy Area

City/ Cities	
County/ Counties	**Cameron**
HUC 8	**12110208**
HUC 12	**121102080600**
Study Area (sq. mi.)	2.20



Emergency Need

Yes ✓ No ☐

Known Flood Risk

History of Flooding?	Yes ✓ No ☐	Frequency of flooding:	100-year
Population at Risk	1,427	# of structures inundated	684
Roadways flooded	Yes ✓ No ☐	Miles inundated?	20.65
Critical Facilities Impacted	Yes ✓ No ☐	Agricultural Land impacted	Yes ✓ No ☐

Notes:

Strategy Costs

Total Cost:	$300,000	Study Sponsor:	La Feria
Non-reoccurring Non-capital Cost (include in Total above):	$300,000	*These are one-time costs for program development, education campaign, and non-engineering study costs.*	
Estimated year to start:	2027	Entity with Oversight	La Feria
Time to complete?	2028	Included in a Hazard Mitigation Action Plan or other plan?	Yes ☐ No ✓

Funding Dedicated?	Yes ☐ No ✓	(Potential) Source of Funding	

Have the flood risk and flood reduction impacts been evaluated?

Yes ☐ No ✓

Was the strategy missing sufficient data to assess whether the proposed strategy has a negative effect, per TWDB guidelines? Yes ☐ No ✓

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
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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 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

RFPG Recommended

Yes ✓ No ☐

Region 15 Lower Rio Grande Regional Flood Planning Group

FMS

Flood Management Strategies
Fact Sheet

City of Escobares

FMS ID: 152000110

FMS Description

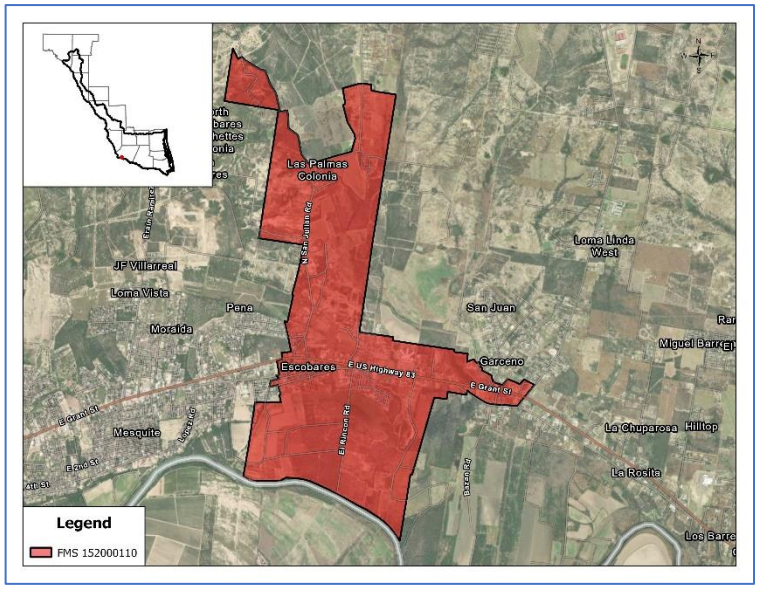
FMS 2 - Assessment, development, and updating of the City's ordinances, orders, policies, engineering specifications, guidance documents and other flood management tools. The objective is to update flood management planning tools to existing local, state, and federal standards, to include innovative methodologies, and to promote universal regional approaches. This study will target the development of new/revised ordinances, orders, policies, engineering guidance designs, operation and maintenance requirements and similar planning tools.

Strategy Type

- ☐ Education and Outreach Activities
- ✓ Regulatory and Guidance
- ☐ Flood Measurement and Warning
- ☐ Infrastructure Projects
- ☐ Other:

Strategy Area

City/ Cities	**Escobares**
County/ Counties	**Starr**
HUC 8	**13090001**
HUC 12	**130900011109, 130900011108**
Study Area (sq. mi.)	7.62



Emergency Need

Yes ✓ No ☐

Known Flood Risk

History of Flooding?	Yes ✓ No ☐	Frequency of flooding:	100-year
Population at Risk	698	# of structures inundated	92
Roadways flooded	Yes ✓ No ☐	Miles inundated?	3.18
Critical Facilities Impacted	Yes ✓ No ☐	Agricultural Land impacted	Yes ✓ No ☐

Notes:

Strategy Costs

Total Cost:	$300,000	Study Sponsor:	Escobares
Non-reoccurring Non-capital Cost (include in Total above):	$300,000	*These are one-time costs for program development, education campaign, and non-engineering study costs.*	
Estimated year to start:	2027	Entity with Oversight	Escobares
Time to complete?	2028	Included in a Hazard Mitigation Action Plan or other plan?	Yes ☐ No ✓

Funding Dedicated?	Yes ☐ No ✓	(Potential) Source of Funding	

Have the flood risk and flood reduction impacts been evaluated?

Yes ☐ No ✓

Was the strategy missing sufficient data to assess whether the proposed strategy has a negative effect, per TWDB guidelines? Yes ☐ No ✓

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 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

RFPG Recommended

Yes ✓ No ☐

Region 15 Lower Rio Grande Regional Flood Planning Group

FMS

Flood Management Strategies
Fact Sheet

City of La Grulla

FMS ID: 152000111

FMS Description

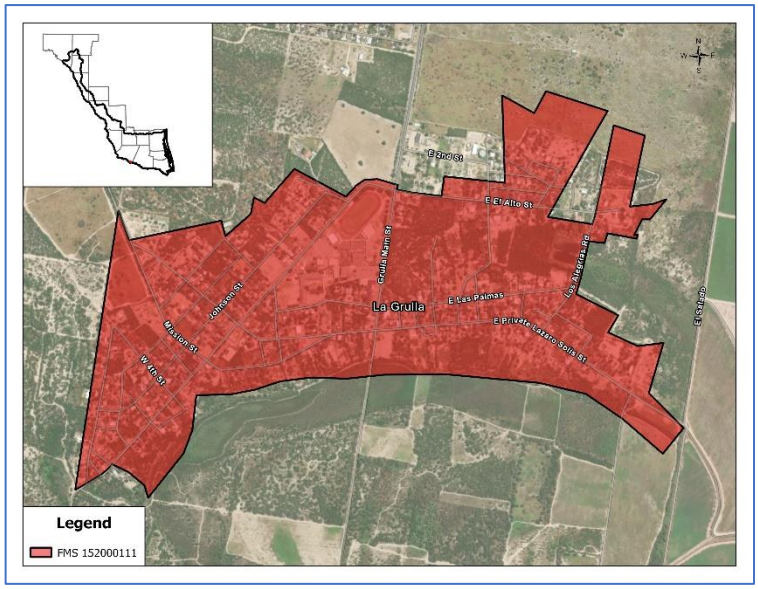
FMS 2 - Assessment, development, and updating of the City's ordinances, orders, policies, engineering specifications, guidance documents and other flood management tools. The objective is to update flood management planning tools to existing local, state, and federal standards, to include innovative methodologies, and to promote universal regional approaches. This study will target the development of new/revised ordinances, orders, policies, engineering guidance designs, operation and maintenance requirements and similar planning tools.

Strategy Type

- ☐ Education and Outreach Activities
- ✓ Regulatory and Guidance
- ☐ Flood Measurement and Warning
- ☐ Infrastructure Projects
- ☐ Other:

Strategy Area

City/ Cities	**La Grulla**
County/ Counties	**Starr**
HUC 8	**13090001**
HUC 12	**130900011107**
Study Area (sq. mi.)	1.16



Emergency Need

Yes ✓ No ☐

Known Flood Risk

History of Flooding?	Yes ✓ No ☐	Frequency of flooding:	100-year
Population at Risk	61	# of structures inundated	32
Roadways flooded	Yes ✓ No ☐	Miles inundated?	0.80
Critical Facilities Impacted	Yes ✓ No ☐	Agricultural Land impacted	Yes ✓ No ☐

Notes:

Strategy Costs

Total Cost:	$300,000	Study Sponsor:	La Grulla
Non-reoccurring Non-capital Cost (include in Total above):	$300,000	*These are one-time costs for program development, education campaign, and non-engineering study costs.*	
Estimated year to start:	2027	Entity with Oversight	La Grulla
Time to complete?	2028	Included in a Hazard Mitigation Action Plan or other plan?	Yes ☐ No ✓

Funding Dedicated?	Yes ☐ No ✓	(Potential) Source of Funding	

Have the flood risk and flood reduction impacts been evaluated?

Yes ☐ No ✓

Was the strategy missing sufficient data to assess whether the proposed strategy has a negative effect, per TWDB guidelines? Yes ☐ No ✓

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 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

RFPG Recommended

Yes ✓ No ☐

Region 15 Lower Rio Grande Regional Flood Planning Group

FMS

Flood Management Strategies
Fact Sheet

City of Palmview

FMS ID: 152000112

FMS Description

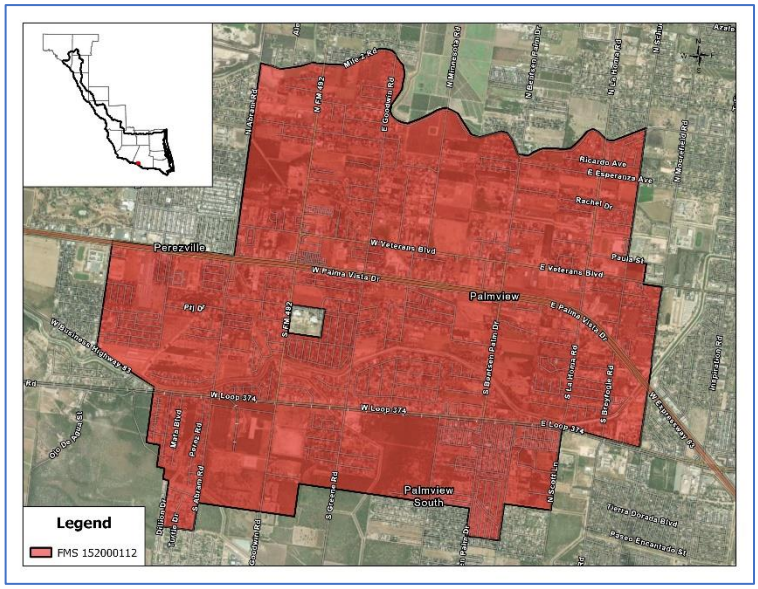
FMS 2 - Assessment, development, and updating of the City's ordinances, orders, policies, engineering specifications, guidance documents and other flood management tools. The objective is to update flood management planning tools to existing local, state, and federal standards, to include innovative methodologies, and to promote universal regional approaches. This study will target the development of new/revised ordinances, orders, policies, engineering guidance designs, operation and maintenance requirements and similar planning tools.

Strategy Type

- ☐ Education and Outreach Activities
- ✓ Regulatory and Guidance
- ☐ Flood Measurement and Warning
- ☐ Infrastructure Projects
- ☐ Other:

Strategy Area

City/ Cities	**Palmview**
County/ Counties	**Hidalgo**
HUC 8	**12110208**
HUC 12	**121102080100, 121102080300, 121102080200**
Study Area (sq. mi.)	40.61



Emergency Need

Yes ✓ No ☐

Known Flood Risk

History of Flooding?	Yes ✓ No ☐	Frequency of flooding:	100-year
Population at Risk	2,703	# of structures inundated	853
Roadways flooded	Yes ✓ No ☐	Miles inundated?	15.15
Critical Facilities Impacted	Yes ✓ No ☐	Agricultural Land impacted	Yes ✓ No ☐

Notes:

Strategy Costs

Total Cost:	$300,000	Study Sponsor:	Palmview
Non-reoccurring Non-capital Cost (include in Total above):	$300,000	*These are one-time costs for program development, education campaign, and non-engineering study costs.*	
Estimated year to start:	2027	Entity with Oversight	Palmview
Time to complete?	2028	Included in a Hazard Mitigation	Yes ☐ No ✓

		Action Plan or other plan?	
Funding Dedicated?	Yes ☐ No ✓	(Potential) Source of Funding	

Have the flood risk and flood reduction impacts been evaluated?

Yes ☐ No ✓

Was the strategy missing sufficient data to assess whether the proposed strategy has a negative effect, per TWDB guidelines? Yes ☐ No ✓

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 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

RFPG Recommended

Yes ✓ No ☐

Region 15 Lower Rio Grande Regional Flood Planning Group

FMS

Flood Management Strategies
Fact Sheet

City of Alton

FMS ID: 152000113

FMS Description

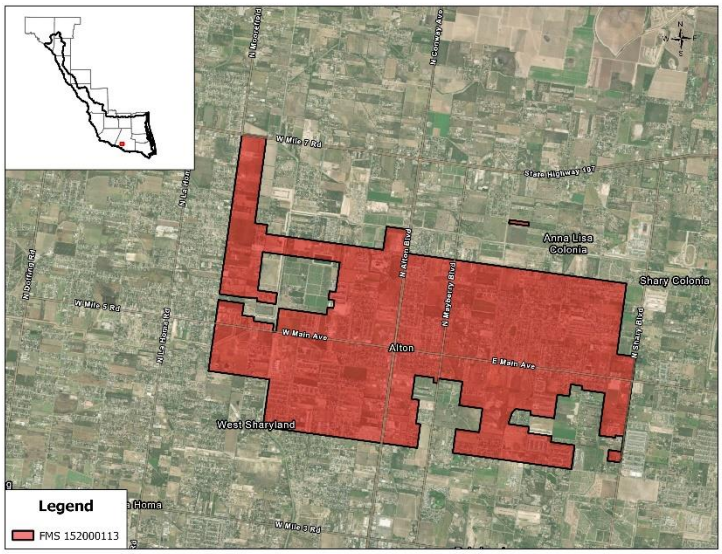
FMS 2 - Assessment, development, and updating of the City's ordinances, orders, policies, engineering specifications, guidance documents and other flood management tools. The objective is to update flood management planning tools to existing local, state, and federal standards, to include innovative methodologies, and to promote universal regional approaches. This study will target the development of new/revised ordinances, orders, policies, engineering guidance designs, operation and maintenance requirements and similar planning tools.

Strategy Type

- ☐ Education and Outreach Activities
- ✓ Regulatory and Guidance
- ☐ Flood Measurement and Warning
- ☐ Infrastructure Projects
- ☐ Other:

Strategy Area

City/ Cities	**Alton**
County/ Counties	**Hidalgo**
HUC 8	**12110208**
HUC 12	**121102080300, 121102080200**
Study Area (sq. mi.)	16.55



Emergency Need

Yes ✓ No ☐

Known Flood Risk

History of Flooding?	Yes ✓ No ☐	Frequency of flooding:	
Population at Risk	4,952	# of structures inundated	1,694
Roadways flooded	Yes ✓ No ☐	Miles inundated?	33.17
Critical Facilities Impacted	Yes ✓ No ☐	Agricultural Land impacted	Yes ☐ No ✓

Notes:

Strategy Costs

Total Cost:	$300,000	Study Sponsor:	Palmview
Non-reoccurring Non-capital Cost (include in Total above):	$300,000	*These are one-time costs for program development, education campaign, and non-engineering study costs.*	
Estimated year to start:	2027	Entity with Oversight	Palmview
Time to complete?	2028	Included in a Hazard Mitigation Action Plan or other plan?	Yes ☐ No ✓

Funding Dedicated?	Yes ☐ No ✓	(Potential) Source of Funding	

Have the flood risk and flood reduction impacts been evaluated?

Yes ☐ No ✓

Was the strategy missing sufficient data to assess whether the proposed strategy has a negative effect, per TWDB guidelines? Yes ☐ No ✓

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 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

RFPG Recommended

Yes ✓ No ☐

Region 15 Lower Rio Grande Regional Flood Planning Group

FMS

Flood Management Strategies
Fact Sheet

Willacy County

FMS ID: 152000114

FMS Description

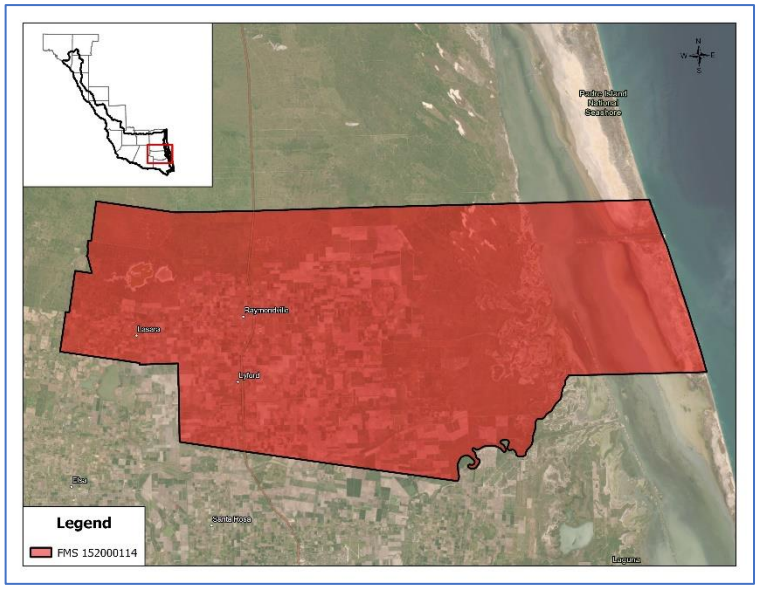
FMS 2 - Assessment, development, and updating of the County's ordinances, orders, policies, engineering specifications, guidance documents and other flood management tools. The objective is to update flood management planning tools to existing local, state, and federal standards, to include innovative methodologies, and to promote universal regional approaches. This study will target the development of new/revised ordinances, orders, policies, engineering guidance designs, operation and maintenance requirements and similar planning tools.

Strategy Type

- ☐ Education and Outreach Activities
- ✓ Regulatory and Guidance
- ☐ Flood Measurement and Warning
- ☐ Infrastructure Projects
- ☐ Other:

Strategy Area

City/ Cities	
County/ Counties	**Willacy**
HUC 8	**12110207, 12110208**
HUC 12	**121102080800, 121102081000, 121102080300, 121102080400, 121102080700, 121102080500, 121102070100, 121102081100, 121102070200**
Study Area (sq. mi.)	36.43



Emergency Need

Yes ✓ No ☐

Known Flood Risk

History of Flooding?	Yes ✓ No ☐	Frequency of flooding:	100-year
Population at Risk	11,895	# of structures inundated	4,777
Roadways flooded	Yes ✓ No ☐	Miles inundated?	273.04
Critical Facilities Impacted	Yes ✓ No ☐	Agricultural Land impacted	Yes ✓ No ☐

Notes:

Strategy Costs

Total Cost:	$500,000	Study Sponsor:	Willacy
Non-reoccurring Non-capital Cost (include in Total	$500,000	*These are one-time costs for program development, education campaign, and non-engineering study costs.*	

above):			
Estimated year to start:	2027	Entity with Oversight	Willacy
Time to complete?	2028	Included in a Hazard Mitigation Action Plan or other plan?	Yes ☐ No ✓
Funding Dedicated?	Yes ☐ No ✓	(Potential) Source of Funding	

Have the flood risk and flood reduction impacts been evaluated?

Yes ☐ No ✓

Was the strategy missing sufficient data to assess whether the proposed strategy has a negative effect, per TWDB guidelines? Yes ☐ No ✓

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 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

RFPG Recommended

Yes ✓ No ☐

Region 15 Lower Rio Grande Regional Flood Planning Group

FMS

Flood Management Strategies
Fact Sheet

City of Edinburg

FMS ID: 152000115

FMS Description

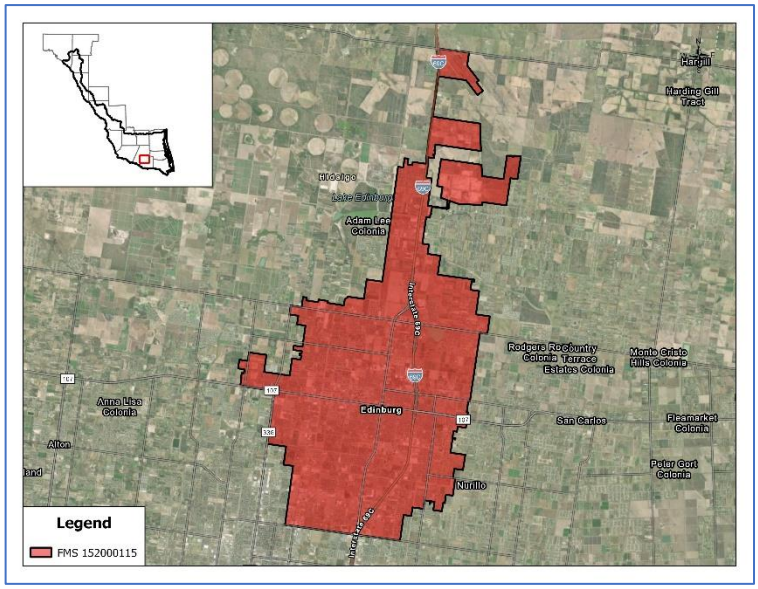
FMS 2 - Assessment, development, and updating of the City's ordinances, orders, policies, engineering specifications, guidance documents and other flood management tools. The objective is to update flood management planning tools to existing local, state, and federal standards, to include innovative methodologies, and to promote universal regional approaches. This study will target the development of new/revised ordinances, orders, policies, engineering guidance designs, operation and maintenance requirements and similar planning tools.

Strategy Type

- ☐ Education and Outreach Activities
- ✓ Regulatory and Guidance
- ☐ Flood Measurement and Warning
- ☐ Infrastructure Projects
- ☐ Other:

Strategy Area

City/ Cities	**Edinburg**
County/ Counties	**Hidalgo**
HUC 8	**12110208**
HUC 12	**121102080300, 121102080400, 121102080200**
Study Area (sq. mi.)	12.05



Emergency Need

Yes ✓ No ☐

Known Flood Risk

History of Flooding?	Yes ✓ No ☐	Frequency of flooding:	100-year
Population at Risk	47,171	# of structures inundated	11,174
Roadways flooded	Yes ✓ No ☐	Miles inundated?	252.65
Critical Facilities Impacted	Yes ✓ No ☐	Agricultural Land impacted	Yes ✓ No ☐

Notes:

Strategy Costs

Total Cost:	$500,000	Study Sponsor:	Edinburg
Non-reoccurring Non-capital Cost (include in Total above):	$500,000	*These are one-time costs for program development, education campaign, and non-engineering study costs.*	
Estimated year to start:	2027	Entity with Oversight	Edinburg
Time to complete?	2028	Included in a Hazard Mitigation	Yes ☐ No ✓

		Action Plan or other plan?	
Funding Dedicated?	Yes ☐ No ✓	(Potential) Source of Funding	

Have the flood risk and flood reduction impacts been evaluated?

Yes ☐ No ✓

Was the strategy missing sufficient data to assess whether the proposed strategy has a negative effect, per TWDB guidelines? Yes ☐ No ✓

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
- ☐ 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

RFPG Recommended

Yes ✓ No ☐

Region 15 Lower Rio Grande Regional Flood Planning Group

FMS

Flood Management Strategies
Fact Sheet

City of Mission

FMS ID: 152000116

FMS Description

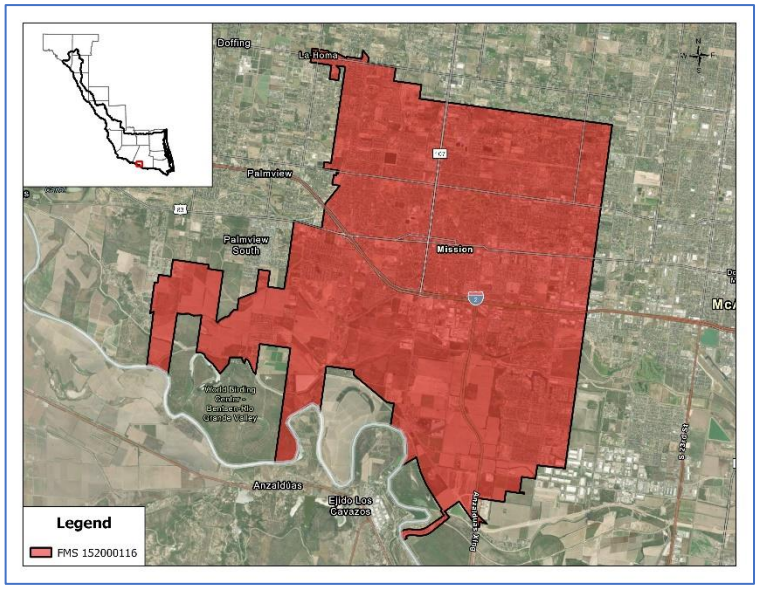
FMS 2 - Assessment, development, and updating of the City's ordinances, orders, policies, engineering specifications, guidance documents and other flood management tools. The objective is to update flood management planning tools to existing local, state, and federal standards, to include innovative methodologies, and to promote universal regional approaches. This study will target the development of new/revised ordinances, orders, policies, engineering guidance designs, operation and maintenance requirements and similar planning tools.

Strategy Type

- ☐ Education and Outreach Activities
- ✓ Regulatory and Guidance
- ☐ Flood Measurement and Warning
- ☐ Infrastructure Projects
- ☐ Other:

Strategy Area

City/ Cities	**Mission**
County/ Counties	**Hidalgo**
HUC 8	**12110208, 13090002**
HUC 12	**130900020305, 121102080100, 121102080300, 130900020301, 121102080200**
Study Area (sq. mi.)	7.30



Emergency Need

Yes ✓ No ☐

Known Flood Risk

History of Flooding?	Yes ✓ No ☐	Frequency of flooding:	100-year
Population at Risk	15,487	# of structures inundated	5,464
Roadways flooded	Yes ✓ No ☐	Miles inundated?	129.58
Critical Facilities Impacted	Yes ✓ No ☐	Agricultural Land impacted	Yes ✓ No ☐

Notes:

Strategy Costs

Total Cost:	$500,000	Study Sponsor:	Mission
Non-reoccurring Non-capital Cost (include in Total above):	$500,000	*These are one-time costs for program development, education campaign, and non-engineering study costs.*	
Estimated year to start:	2027	Entity with Oversight	Mission

Time to complete?	2028	Included in a Hazard Mitigation Action Plan or other plan?	Yes ☐ No ✓
Funding Dedicated?	Yes ☐ No ✓	(Potential) Source of Funding	

Have the flood risk and flood reduction impacts been evaluated?

Yes ☐ No ✓

Was the strategy missing sufficient data to assess whether the proposed strategy has a negative effect, per TWDB guidelines? Yes ☐ No ✓

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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- ☐ Provide regional detention that could be used for water reuse applications or as part of a floodplain management program
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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 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

RFPG Recommended

Yes ✓ No ☐

Region 15 Lower Rio Grande Regional Flood Planning Group

FMS

Flood Management Strategies
Fact Sheet

City of San Juan

FMS ID: 152000117

FMS Description

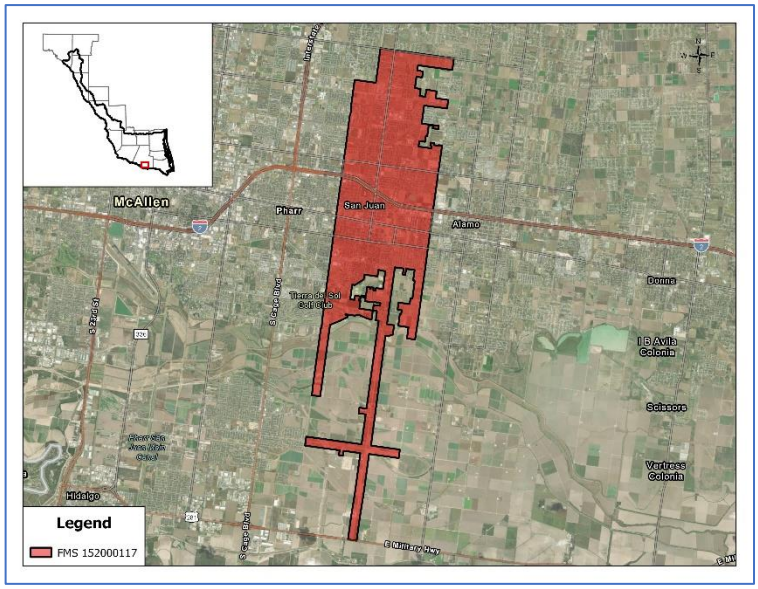
FMS 2 - Assessment, development, and updating of the City's ordinances, orders, policies, engineering specifications, guidance documents and other flood management tools. The objective is to update flood management planning tools to existing local, state, and federal standards, to include innovative methodologies, and to promote universal regional approaches. This study will target the development of new/revised ordinances, orders, policies, engineering guidance designs, operation and maintenance requirements and similar planning tools.

Strategy Type

- ☐ Education and Outreach Activities
- ✓ Regulatory and Guidance
- ☐ Flood Measurement and Warning
- ☐ Infrastructure Projects
- ☐ Other:

Strategy Area

City/ Cities	**Mission**
County/ Counties	**Hidalgo**
HUC 8	**12110208**
HUC 12	**121102080100, 121102080300**
Study Area (sq. mi.)	0.56



Emergency Need

Yes ✓ No ☐

Known Flood Risk

History of Flooding?	Yes ✓ No ☐	Frequency of flooding:	
Population at Risk	9,696	# of structures inundated	2,591
Roadways flooded	Yes ✓ No ☐	Miles inundated?	62.42
Critical Facilities Impacted	Yes ✓ No ☐	Agricultural Land impacted	Yes ☐ No ✓

Notes:

Strategy Costs

Total Cost:	$500,000	Study Sponsor:	San Juan
Non-reoccurring Non-capital Cost (include in Total above):	$500,000	*These are one-time costs for program development, education campaign, and non-engineering study costs.*	
Estimated year to start:	2027	Entity with Oversight	San Juan
Time to complete?	2028	Included in a Hazard Mitigation Action Plan or other plan?	Yes ☐ No ✓

Funding Dedicated?	Yes ☐ No ✓	(Potential) Source of Funding	

Have the flood risk and flood reduction impacts been evaluated?

Yes ☐ No ✓

Was the strategy missing sufficient data to assess whether the proposed strategy has a negative effect, per TWDB guidelines? Yes ☐ No ✓

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 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

RFPG Recommended

Yes ✓ No ☐

Region 15 Lower Rio Grande Regional Flood Planning Group

FMS

Flood Management Strategies
Fact Sheet

City of Donna

FMS ID: 152000118

FMS Description

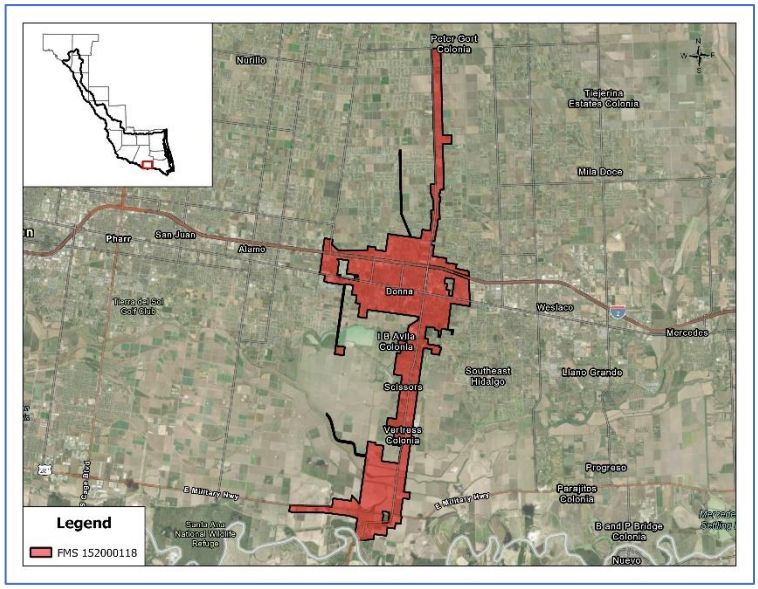
FMS 2 - Assessment, development, and updating of the City's ordinances, orders, policies, engineering specifications, guidance documents and other flood management tools. The objective is to update flood management planning tools to existing local, state, and federal standards, to include innovative methodologies, and to promote universal regional approaches. This study will target the development of new/revised ordinances, orders, policies, engineering guidance designs, operation and maintenance requirements and similar planning tools.

Strategy Type

- ☐ Education and Outreach Activities
- ✓ Regulatory and Guidance
- ☐ Flood Measurement and Warning
- ☐ Infrastructure Projects
- ☐ Other:

Strategy Area

City/ Cities	**Donna**
County/ Counties	**Hidalgo**
HUC 8	**12110208, 13090002**
HUC 12	**121102080100, 121102080300, 130900020311**
Study Area (sq. mi.)	2.08



Emergency Need

Yes ✓ No ☐

Known Flood Risk

History of Flooding?	Yes ✓ No ☐	Frequency of flooding:	100-year
Population at Risk	9,715	# of structures inundated	3,107
Roadways flooded	Yes ✓ No ☐	Miles inundated?	59.76
Critical Facilities Impacted	Yes ✓ No ☐	Agricultural Land impacted	Yes ✓ No ☐

Notes:

Strategy Costs

Total Cost:	$500,000	Study Sponsor:	Donna
Non-reoccurring Non-capital Cost (include in Total above):	$500,000	*These are one-time costs for program development, education campaign, and non-engineering study costs.*	
Estimated year to start:	2027	Entity with Oversight	Donna
Time to complete?	2028	Included in a Hazard Mitigation	Yes ☐ No ✓

		Action Plan or other plan?	
Funding Dedicated?	Yes ☐ No ✓	(Potential) Source of Funding	

Have the flood risk and flood reduction impacts been evaluated?

Yes ☐ No ✓

Was the strategy missing sufficient data to assess whether the proposed strategy has a negative effect, per TWDB guidelines? Yes ☐ No ✓

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 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

RFPG Recommended

Yes ✓ No ☐

Region 15 Lower Rio Grande Regional Flood Planning Group

FMS

Flood Management Strategies
Fact Sheet

City of Harlingen

FMS ID: 152000119

FMS Description

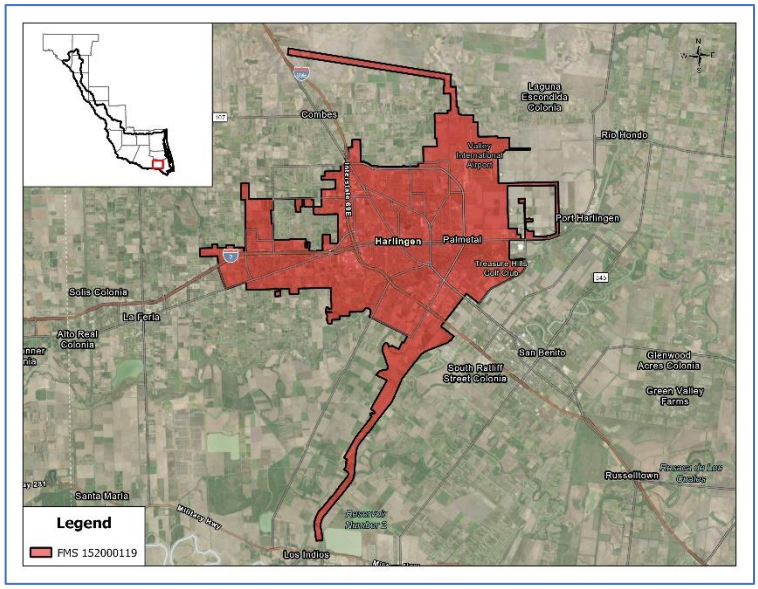
FMS 2 - Assessment, development, and updating of the City's ordinances, orders, policies, engineering specifications, guidance documents and other flood management tools. The objective is to update flood management planning tools to existing local, state, and federal standards, to include innovative methodologies, and to promote universal regional approaches. This study will target the development of new/revised ordinances, orders, policies, engineering guidance designs, operation and maintenance requirements and similar planning tools.

Strategy Type

- ☐ Education and Outreach Activities
- ✓ Regulatory and Guidance
- ☐ Flood Measurement and Warning
- ☐ Infrastructure Projects
- ☐ Other:

Strategy Area

City/ Cities	**Harlingen**
County/ Counties	**Cameron**
HUC 8	**12110208, 13090002**
HUC 12	**121102080600, 121102080300, 121102080700, 121102080900**
Study Area (sq. mi.)	2.75



Emergency Need

Yes ✓ No ☐

Known Flood Risk

History of Flooding?	Yes ✓ No ☐	Frequency of flooding:	100-year
Population at Risk	16,552	# of structures inundated	4,647
Roadways flooded	Yes ✓ No ☐	Miles inundated?	174.59
Critical Facilities Impacted	Yes ✓ No ☐	Agricultural Land impacted	Yes ✓ No ☐

Notes:

Strategy Costs

Total Cost:	$500,000	Study Sponsor:	Harlingen
Non-reoccurring Non-capital Cost (include in Total above):	$500,000	*These are one-time costs for program development, education campaign, and non-engineering study costs.*	
Estimated year to start:	2027	Entity with Oversight	Harlingen
Time to complete?	2028	Included in a Hazard Mitigation	Yes ☐ No ✓

		Action Plan or other plan?	
Funding Dedicated?	Yes ☐ No ✓	(Potential) Source of Funding	

Have the flood risk and flood reduction impacts been evaluated?

Yes ☐ No ✓

Was the strategy missing sufficient data to assess whether the proposed strategy has a negative effect, per TWDB guidelines? Yes ☐ No ✓

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 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

RFPG Recommended

Yes ✓ No ☐

Region 15 Lower Rio Grande Regional Flood Planning Group

FMS

Flood Management Strategies
Fact Sheet

City of Alamo

FMS ID: 152000120

FMS Description

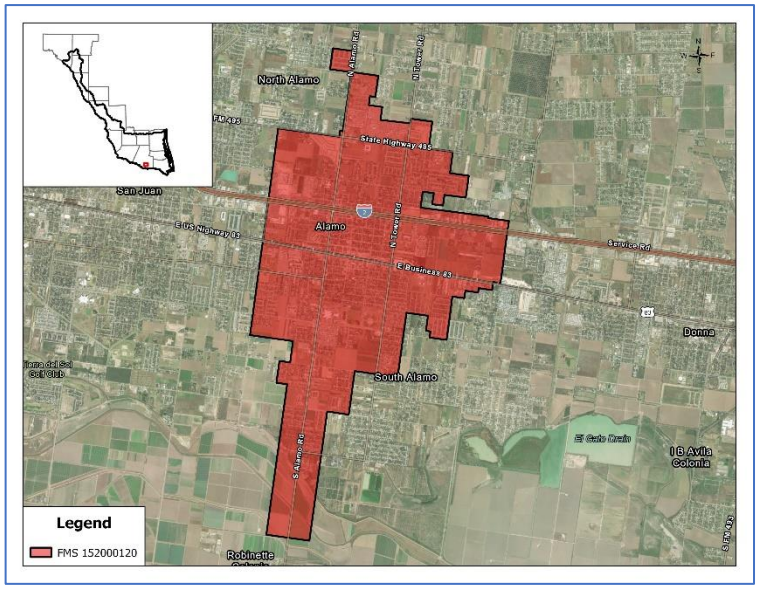
FMS 2 - Assessment, development, and updating of the City's ordinances, orders, policies, engineering specifications, guidance documents and other flood management tools. The objective is to update flood management planning tools to existing local, state, and federal standards, to include innovative methodologies, and to promote universal regional approaches. This study will target the development of new/revised ordinances, orders, policies, engineering guidance designs, operation and maintenance requirements and similar planning tools.

Strategy Type

- ☐ Education and Outreach Activities
- ✓ Regulatory and Guidance
- ☐ Flood Measurement and Warning
- ☐ Infrastructure Projects
- ☐ Other:

Strategy Area

City/ Cities	**Alamo**
County/ Counties	**Hidalgo**
HUC 8	**12110208**
HUC 12	**121102080100, 121102080300**
Study Area (sq. mi.)	16.52



Emergency Need

Yes ✓ No ☐

Known Flood Risk

History of Flooding?	Yes ✓ No ☐	Frequency of flooding:	100-year
Population at Risk	9,335	# of structures inundated	3,056
Roadways flooded	Yes ✓ No ☐	Miles inundated?	58.46
Critical Facilities Impacted	Yes ✓ No ☐	Agricultural Land impacted	Yes ✓ No ☐

Notes:

Strategy Costs

Total Cost:	$500,000	Study Sponsor:	Alamo
Non-reoccurring Non-capital Cost (include in Total above):	$500,000	*These are one-time costs for program development, education campaign, and non-engineering study costs.*	
Estimated year to start:	2027	Entity with Oversight	Alamo
Time to complete?	2028	Included in a Hazard Mitigation Action Plan or other plan?	Yes ☐ No ✓

Funding Dedicated?	Yes ☐ No ✓	(Potential) Source of Funding	

Have the flood risk and flood reduction impacts been evaluated?

Yes ☐ No ✓

Was the strategy missing sufficient data to assess whether the proposed strategy has a negative effect, per TWDB guidelines? Yes ☐ No ✓

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 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

RFPG Recommended

Yes ✓ No ☐

Region 15 Lower Rio Grande Regional Flood Planning Group

FMS

Flood Management Strategies
Fact Sheet

County of Kenedy

FMS ID: 152000121

FMS Description

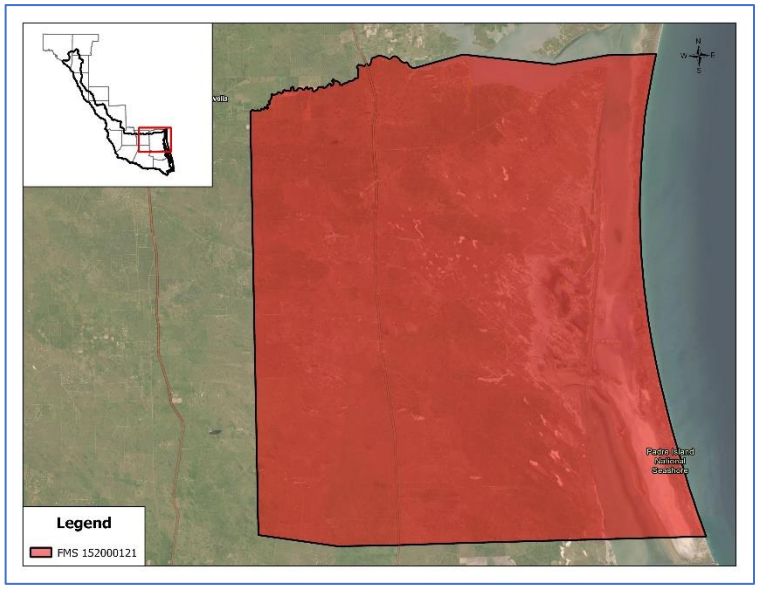
FMS 2 - Assessment, development, and updating of the County's ordinances, orders, policies, engineering specifications, guidance documents and other flood management tools. The objective is to update flood management planning tools to existing local, state, and federal standards, to include innovative methodologies, and to promote universal regional approaches. This study will target the development of new/revised ordinances, orders, policies, engineering guidance designs, operation and maintenance requirements and similar planning tools.

Strategy Type

- ☐ Education and Outreach Activities
- ✓ Regulatory and Guidance
- ☐ Flood Measurement and Warning
- ☐ Infrastructure Projects
- ☐ Other:

Strategy Area

City/ Cities	
County/ Counties	**Kenedy**
HUC 8	**12110205, 12110206, 12110203, 12110207, 12110208**
HUC 12	**121102030100, 121102050706, 121102060501, 121102060502, 121102050807, 121102080500, 121102070100, 121102070200**
Study Area (sq. mi.)	1782.61



Emergency Need

Yes ✓ No ☐

Known Flood Risk

History of Flooding?	Yes ✓ No ☐	Frequency of flooding:	100-year
Population at Risk	28	# of structures inundated	53
Roadways flooded	Yes ✓ No ☐	Miles inundated?	62.94
Critical Facilities Impacted	Yes ✓ No ☐	Agricultural Land impacted	Yes ✓ No ☐

Notes:

Strategy Costs

Total Cost:	$300,000	Study Sponsor:	Kenedy
Non-reoccurring Non-capital Cost (include in Total	$300,000	*These are one-time costs for program development, education campaign, and non-engineering study costs.*	

above):			
Estimated year to start:	2027	Entity with Oversight	Kenedy
Time to complete?	2028	Included in a Hazard Mitigation Action Plan or other plan?	Yes ☐ No ✓
Funding Dedicated?	Yes ☐ No ✓	(Potential) Source of Funding	

Have the flood risk and flood reduction impacts been evaluated?

Yes ☐ No ✓

Was the strategy missing sufficient data to assess whether the proposed strategy has a negative effect, per TWDB guidelines? Yes ☐ No ✓

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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- ☐ Reduce the # of structures that have been subject to repeated flooding events through property buyouts
- ☐ 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

RFPG Recommended

Yes ✓ No ☐