

An aerial photograph of a football stadium, likely at La Villa High School, which is completely inundated with floodwater. The stadium's red running track and blue football field are visible, with yard lines and yard numbers (10, 20, 30, 40, 50) clearly marked. The field features the word "CARDINALS" at the top end zone and "LA VILLA" at the bottom end zone, along with a large "LV" logo in the center. The surrounding area, including residential houses and green fields, is also flooded. The sky is overcast and grey.

FLOOD MANAGEMENT STRATEGIES (FMSs) FACT SHEETS

Rancho Viejo Action #3

FMS ID: 152000018

FMS Description

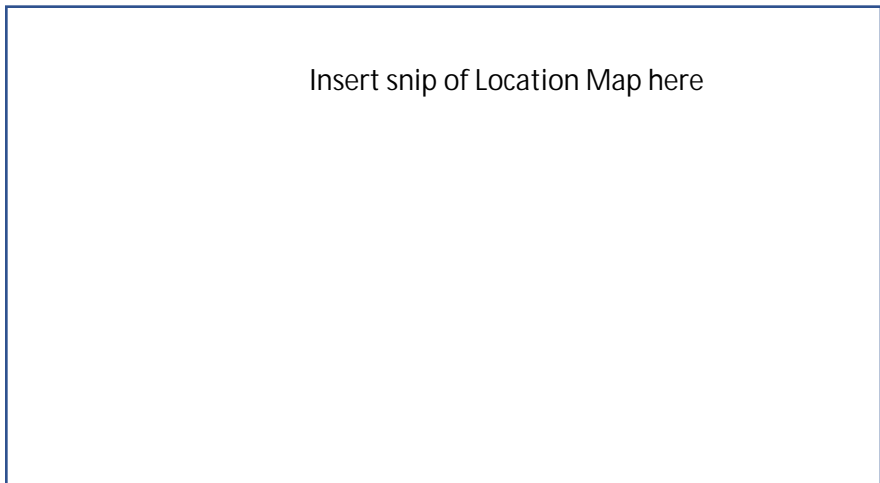
Adopt the International Building Code (IBC) and International Residential Code (IRC); revise and update regulatory floodplain maps; adopt higher standards in floodplain ordinances including freeboard, no-rise in the floodplain, cumulative substantial damage, etc.

Strategy Type

- Education and Outreach Activities
- Protected Areas
- Regulatory and Guidance
- Development Standards
- Flood Preparedness Programs
- 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):		<i>These are one-time costs for program development, education campaign, and non-engineering study costs.</i>	
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 <input checked="" type="checkbox"/> No <input type="checkbox"/>
Funding Dedicated?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	(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

Rancho Viejo Action #11

FMS ID: 152000019

FMS Description

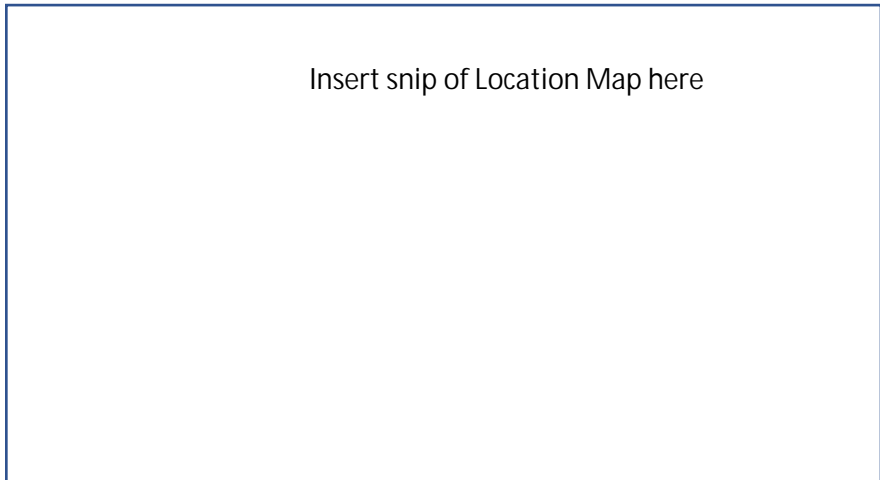
Update website with maps and information including StormReady data and links; Mail educational brochures to residents in hazard-prone areas on mitigation measures to reduce damages

Strategy Type

- Education and Outreach Activities
- Protected Areas
- Regulatory and Guidance
- Development Standards
- Flood Preparedness Programs
- 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):		<i>These are one-time costs for program development, education campaign, and non-engineering study costs.</i>	
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 <input checked="" type="checkbox"/> No <input type="checkbox"/>
Funding Dedicated?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	(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

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
- Regulatory and Guidance
- Flood Preparedness Programs
- Protected Areas
- Development Standards
- Other:

Strategy Area

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

Insert snip of Location Map here

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:	\$2,000,000	Study Sponsor:	Rio Hondo
Non-reoccurring Non-capital Cost (include in Total above):		<i>These are one-time costs for program development, education campaign, and non-engineering study costs.</i>	
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 <input checked="" type="checkbox"/> No <input type="checkbox"/>
Funding Dedicated?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	(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

San Benito Action #13

FMS ID: 152000021

FMS Description

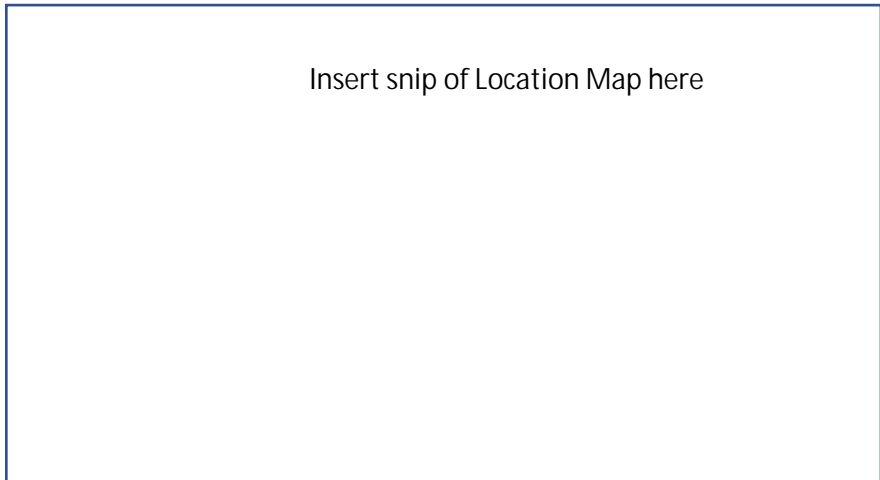
Adopt higher standards into the flood damage prevention ordinance to limit floodplain development and provide higher protection to structures in the floodplain

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):		<i>These are one-time costs for program development, education campaign, and non-engineering study costs.</i>	
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 <input checked="" type="checkbox"/> No <input type="checkbox"/>
Funding Dedicated?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	(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

South Padre Island Action #3

FMS ID: 152000023

FMS Description

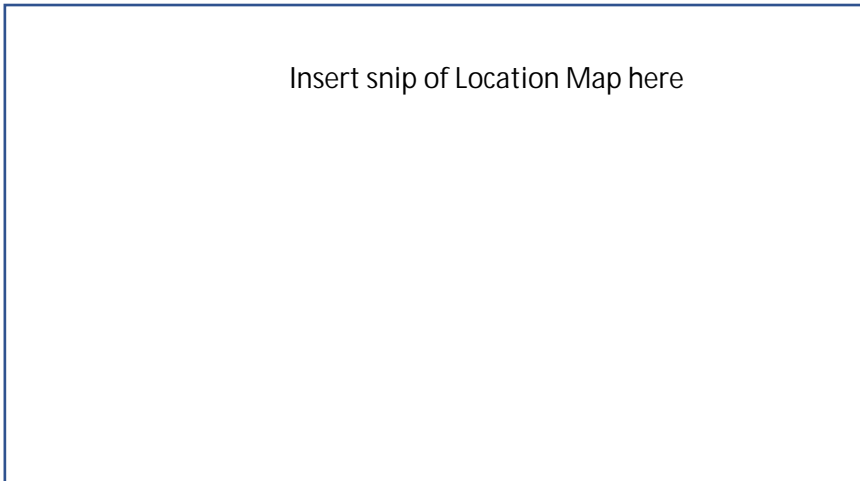
Adoption erosion control ordinance and prohibit development in high-hazard areas

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):		<i>These are one-time costs for program development, education campaign, and non-engineering study costs.</i>	
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 <input checked="" type="checkbox"/> No <input type="checkbox"/>
Funding Dedicated?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	(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

South Padre Island Action #13

FMS ID: 152000022

FMS Description

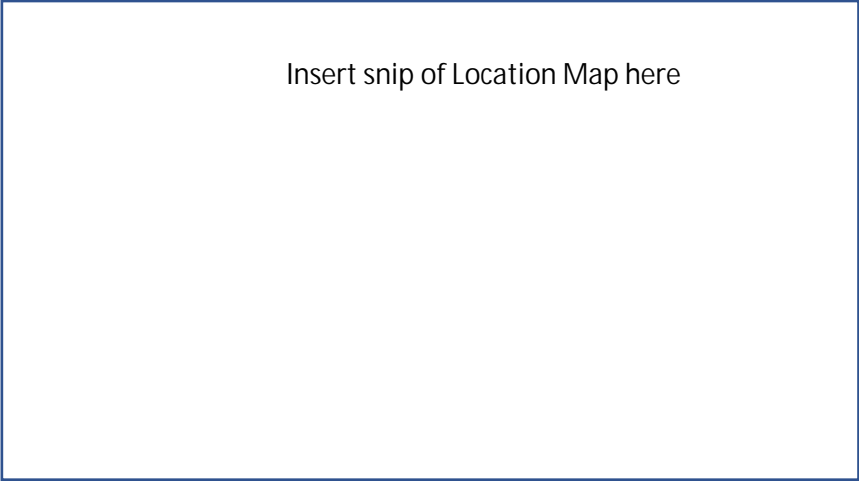
Adopt higher floodplain standards in local floodplain ordinance

Strategy Type

- Education and Outreach Activities
- Regulatory and Guidance
- Flood Preparedness Programs
- Protected Areas
- Development Standards
- 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):		<i>These are one-time costs for program development, education campaign, and non-engineering study costs.</i>	
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 <input checked="" type="checkbox"/> No <input type="checkbox"/>
Funding Dedicated?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	(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

Alamo #4-1.1

FMS ID: 152000024

FMS Description

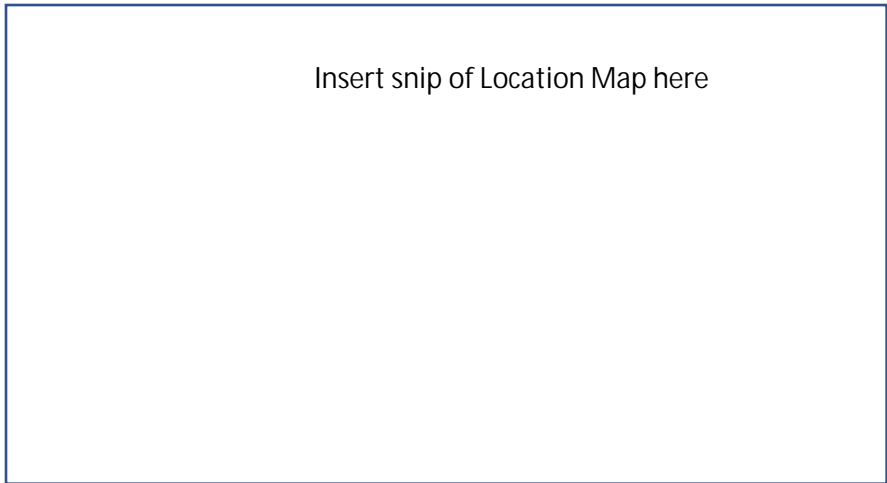
Alamo Pd Will Create A Working Evacuation List For Emergency Situations. Prioritize Flood Prone Areas

Strategy Type

- Education and Outreach Activities
- Regulatory and Guidance
- Flood Preparedness Programs
- Protected Areas
- Development Standards
- 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):		<i>These are one-time costs for program development, education campaign, and non-engineering study costs.</i>	
Estimated year to start:	2024	Entity with Oversight	Alamo
Time to complete?	2026	Included in a Hazard Mitigation Action Plan or other plan?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Funding Dedicated?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	(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
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- 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

Alamo #5-1.1

FMS ID: 152000025

FMS Description

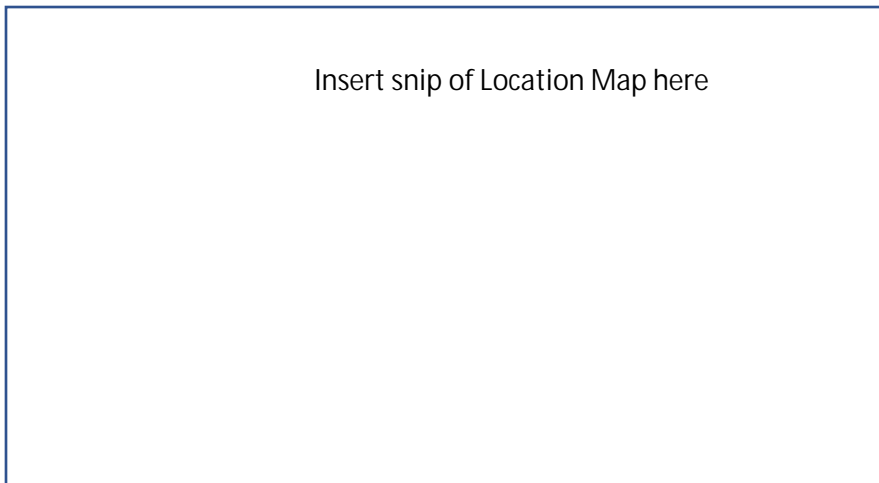
Implement Program To Provide Links To Weather Alerts And Departmental Phone Listings With Contact Personnel For Residents.

Strategy Type

- Education and Outreach Activities
- Regulatory and Guidance
- Flood Preparedness Programs
- Protected Areas
- Development Standards
- 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):		<i>These are one-time costs for program development, education campaign, and non-engineering study costs.</i>	
Estimated year to start:	2023	Entity with Oversight	Alamo
Time to complete?	2025	Included in a Hazard Mitigation Action Plan or other plan?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Funding Dedicated?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	(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
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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

Bayview Action #7

FMS ID: 152000002

FMS Description

Approve and Adopt FEMA Flood Insurance Rate Maps

Strategy Type

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

Strategy Area

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

Insert snip of Location Map here

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):		<i>These are one-time costs for program development, education campaign, and non-engineering study costs.</i>	
Estimated year to start:	2019	Entity with Oversight	Bayview
Time to complete?	2021	Included in a Hazard Mitigation Action Plan or other plan?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Funding Dedicated?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	(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

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
 Regulatory and Guidance
 Flood Preparedness Programs
 Protected Areas
 Development Standards
 Other:

Strategy Area

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

Insert snip of Location Map here

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):		<i>These are one-time costs for program development, education campaign, and non-engineering study costs.</i>	
Estimated year to start:	2018	Entity with Oversight	Bayview
Time to complete?	2020	Included in a Hazard Mitigation Action Plan or other plan?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Funding Dedicated?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	(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

Bayview Action #9

FMS ID: 152000004

FMS Description

Participate in the National Flood Insurance Program

Strategy Type

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

Strategy Area

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

Insert snip of Location Map here

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):		<i>These are one-time costs for program development, education campaign, and non-engineering study costs.</i>	
Estimated year to start:	2018	Entity with Oversight	Bayview
Time to complete?	2020	Included in a Hazard Mitigation Action Plan or other plan?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Funding Dedicated?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	(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

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
 Regulatory and Guidance
 Flood Preparedness Programs
 Protected Areas
 Development Standards
 Other:

Strategy Area

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

Insert snip of Location Map here

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:	Bayview
Non-reoccurring Non-capital Cost (include in Total above):		<i>These are one-time costs for program development, education campaign, and non-engineering study costs.</i>	
Estimated year to start:	2018	Entity with Oversight	Bayview
Time to complete?	2020	Included in a Hazard Mitigation Action Plan or other plan?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Funding Dedicated?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	(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

Brownsville Public Utilities Board Action #8

FMS ID: 152000006

FMS Description

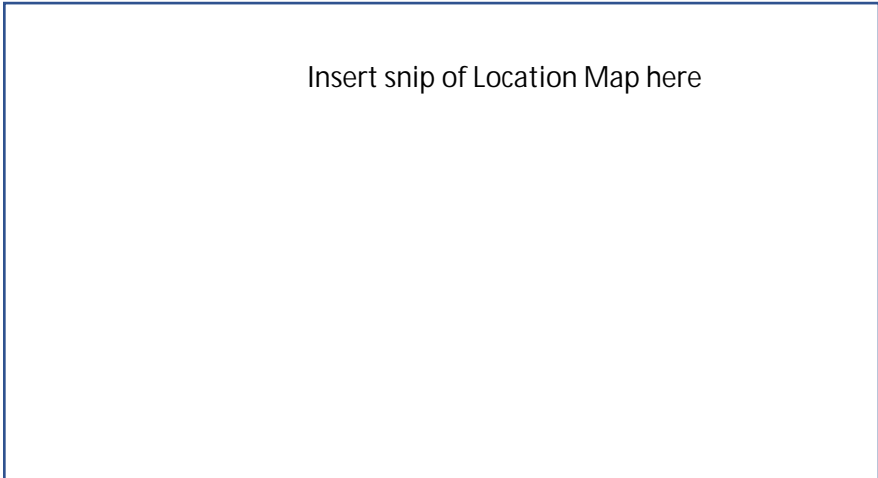
Develop program to annually remove buildup of silt in area Resacas that become cutoff from the river and contribute to flooding during severe flood or hurricane event

Strategy Type

- Education and Outreach Activities
- Regulatory and Guidance
- Flood Preparedness Programs
- Protected Areas
- Development Standards
- 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):		<i>These are one-time costs for program development, education campaign, and non-engineering study costs.</i>	
Estimated year to start:	2016	Entity with Oversight	Brownsville
Time to complete?	2018	Included in a Hazard Mitigation Action Plan or other plan?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Funding Dedicated?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	(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
- 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

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
- 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

Edcouch #3-1.1

FMS ID: 152000026

FMS Description

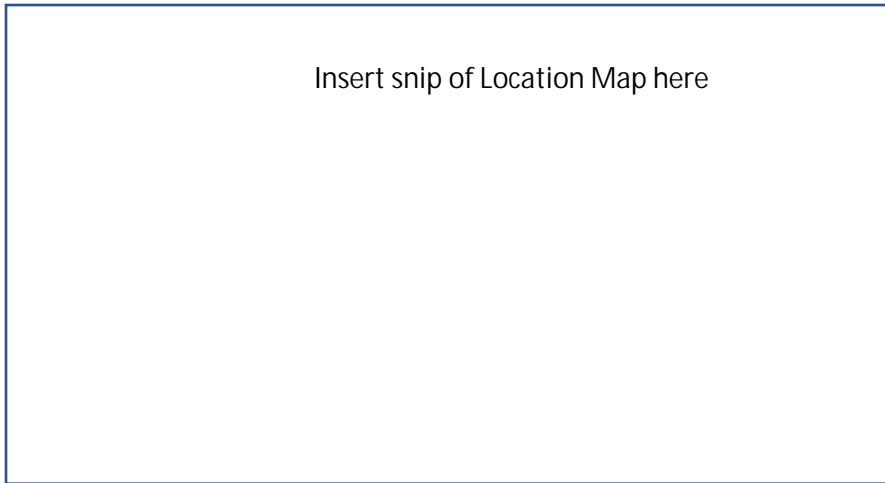
Complete Activities Required To Be A Nfip Participating Community

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):		<i>These are one-time costs for program development, education campaign, and non-engineering study costs.</i>	
Estimated year to start:	2021	Entity with Oversight	Edcouch
Time to complete?	2022	Included in a Hazard Mitigation Action Plan or other plan?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Funding Dedicated?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	(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

Edcouch #5-1.1

FMS ID: 152000027

FMS Description

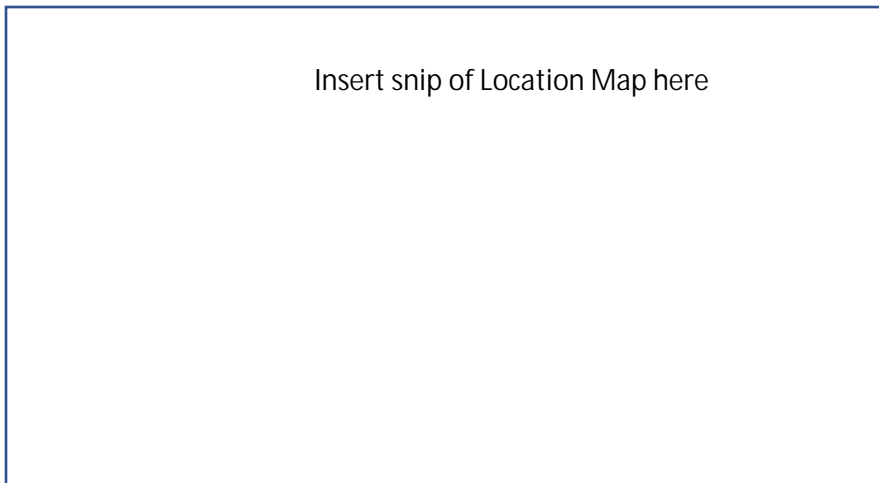
Implement Program To Provide Links To Weather Alerts And Departmental Phone Listings With Contact Personnel For Residents.

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):		<i>These are one-time costs for program development, education campaign, and non-engineering study costs.</i>	
Estimated year to start:	2021	Entity with Oversight	Edcouch
Time to complete?	2021	Included in a Hazard Mitigation Action Plan or other plan?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Funding Dedicated?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	(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

Edcouch #7-1.1

FMS ID: 152000028

FMS Description

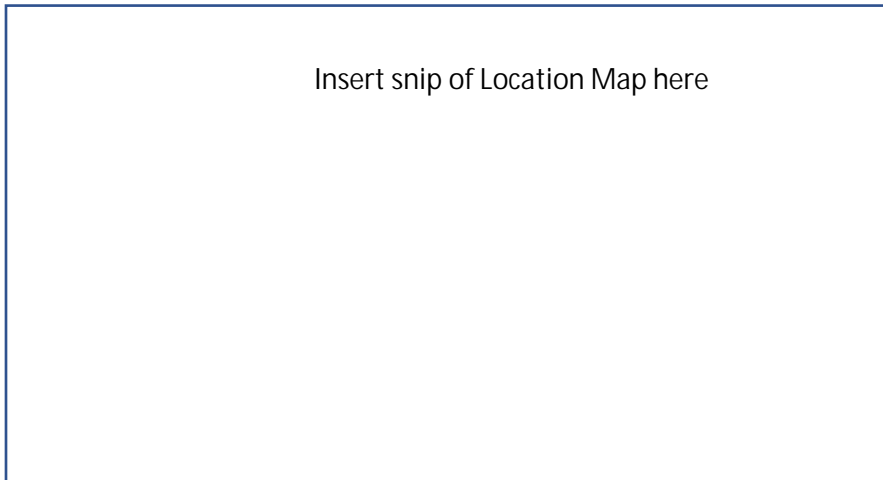
Develop Procedures For Mass Notifications To Citizens And Merchants During Natural Hazard Incident. Solicit Bids For System. Purchase Emergency Notification System And Install Distribute Information On New System And Conduct Training

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):		<i>These are one-time costs for program development, education campaign, and non-engineering study costs.</i>	
Estimated year to start:	2021	Entity with Oversight	Edcouch
Time to complete?	2023	Included in a Hazard Mitigation Action Plan or other plan?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Funding Dedicated?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	(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
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- Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website
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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
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- Increase the proficiency of floodplain managers by increasing the # of them that are certified as Certified Floodplain Managers (CFM) with the Texas Floodplain Management Association
- Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

RFPG Recommended

Yes No

Edinburg #1-1.2

FMS ID: 152000029

FMS Description

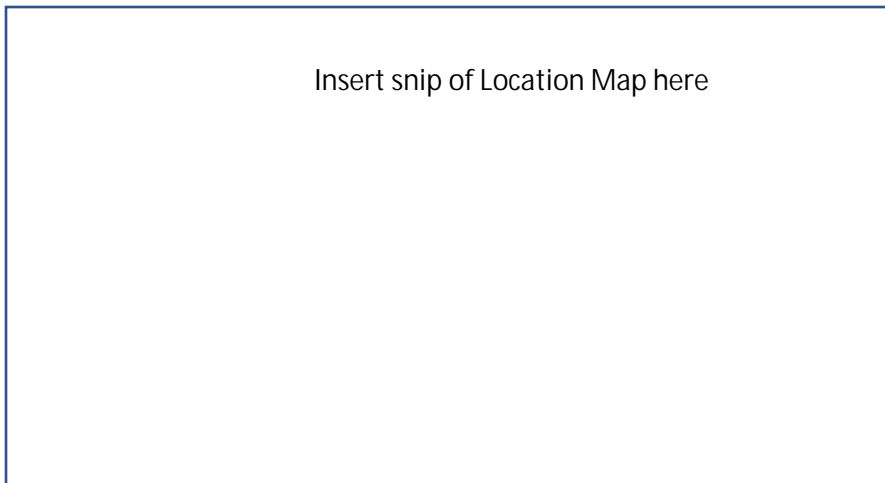
Implement Reverse 9-1-1 System

Strategy Type

- Education and Outreach Activities
 Regulatory and Guidance
 Flood Preparedness Programs
 Protected Areas
 Development Standards
 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):		<i>These are one-time costs for program development, education campaign, and non-engineering study costs.</i>	
Estimated year to start:	2021	Entity with Oversight	Edinburg
Time to complete?	2022	Included in a Hazard Mitigation Action Plan or other plan?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Funding Dedicated?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	(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
- 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

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.)

Insert snip of Location Map here

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):		<i>These are one-time costs for program development, education campaign, and non-engineering study costs.</i>	
Estimated year to start:		Entity with Oversight	Edinburg
Time to complete?	Completed	Included in a Hazard Mitigation Action Plan or other plan?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Funding Dedicated?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	(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

Edinburg #9-1.2

FMS ID: 152000031

FMS Description

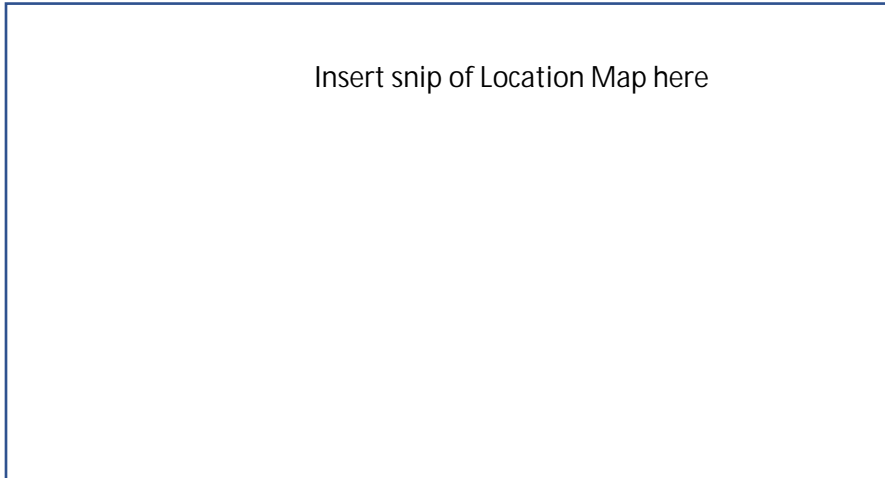
Develop Procedures For Mass Notifications To Citizens And Merchants During Natural Hazard Incident. Solicit Bids For System. Purchase Emergency Notification System And Install Distribute Information On New System And Conduct Training

Strategy Type

- Education and Outreach Activities
 Regulatory and Guidance
 Flood Preparedness Programs
 Protected Areas
 Development Standards
 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):		<i>These are one-time costs for program development, education campaign, and non-engineering study costs.</i>	
Estimated year to start:		Entity with Oversight	Edinburg
Time to complete?	Completed	Included in a Hazard Mitigation Action Plan or other plan?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Funding Dedicated?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	(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

Hidalgo #5-1.1

FMS ID: 152000032

FMS Description

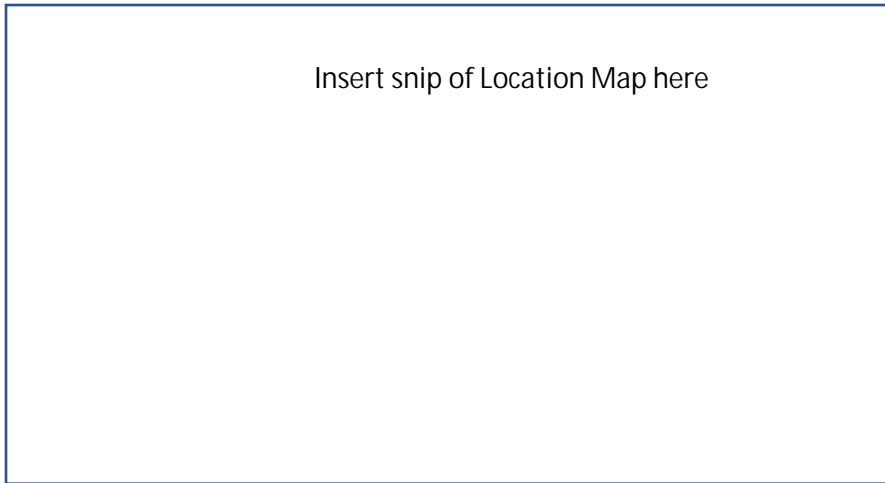
Implement Program To Provide Links To Weather Alerts And Departmental Phone Listings With Contact Personnel For Residents.

Strategy Type

- Education and Outreach Activities
- Protected Areas
- Regulatory and Guidance
- Development Standards
- Flood Preparedness Programs
- 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):		<i>These are one-time costs for program development, education campaign, and non-engineering study costs.</i>	
Estimated year to start:	2022	Entity with Oversight	Hidalgo
Time to complete?	2023	Included in a Hazard Mitigation Action Plan or other plan?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Funding Dedicated?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	(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

Hidalgo County #2-2.1

FMS ID: 152000036

FMS Description

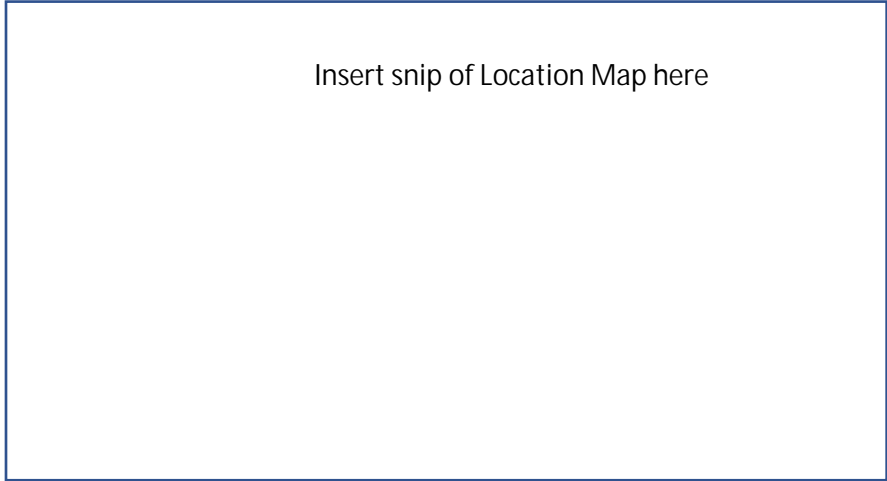
Incorporate Assessments of Hazards, Including Hurricane, Flood, Wild Land Fires, And Severe Storms, Into Site Selection And Design For New Buildings And When Siting Or Leasing County Facilities

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):		<i>These are one-time costs for program development, education campaign, and non-engineering study costs.</i>	
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 <input checked="" type="checkbox"/> No <input type="checkbox"/>
Funding Dedicated?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	(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

Hidalgo County #3-1.2

FMS ID: 152000037

FMS Description

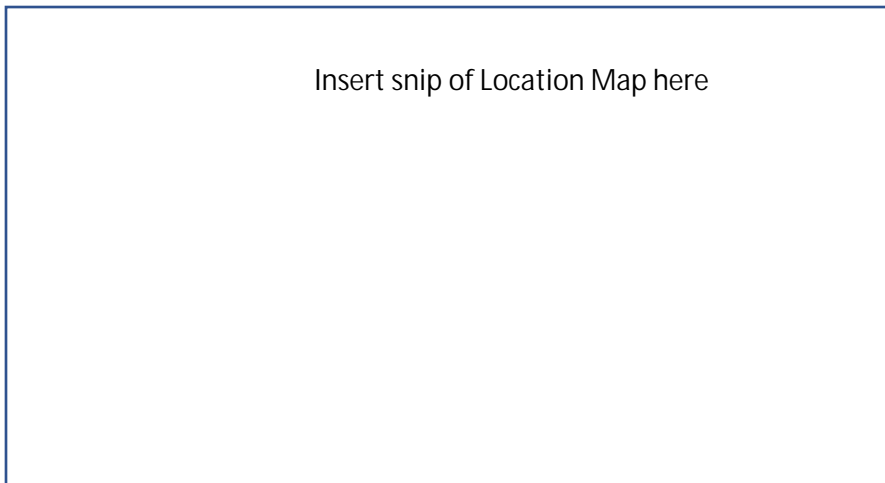
Enhance The Appropriate Websites To Provide Convenient Access To Most Current Hazard Maps.

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):		<i>These are one-time costs for program development, education campaign, and non-engineering study costs.</i>	
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 <input checked="" type="checkbox"/> No <input type="checkbox"/>
Funding Dedicated?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	(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

Hidalgo County #11-1.2

FMS ID: 152000033

FMS Description

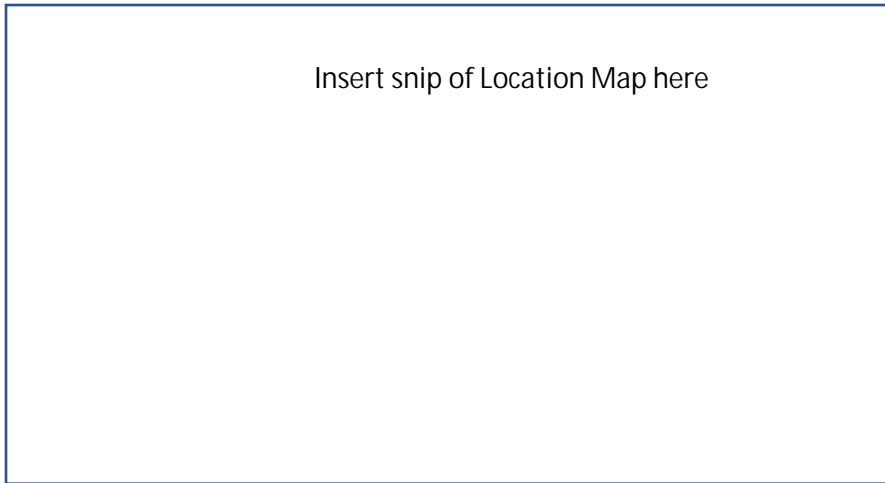
Implement An Inspection, Maintenance, And Enforcement Program To Ensure Continued Structural Integrity of Dams And Levees.

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):		<i>These are one-time costs for program development, education campaign, and non-engineering study costs.</i>	
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 <input checked="" type="checkbox"/> No <input type="checkbox"/>
Funding Dedicated?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	(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
- 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

Hidalgo County #12-1.1

FMS ID: 152000034

FMS Description

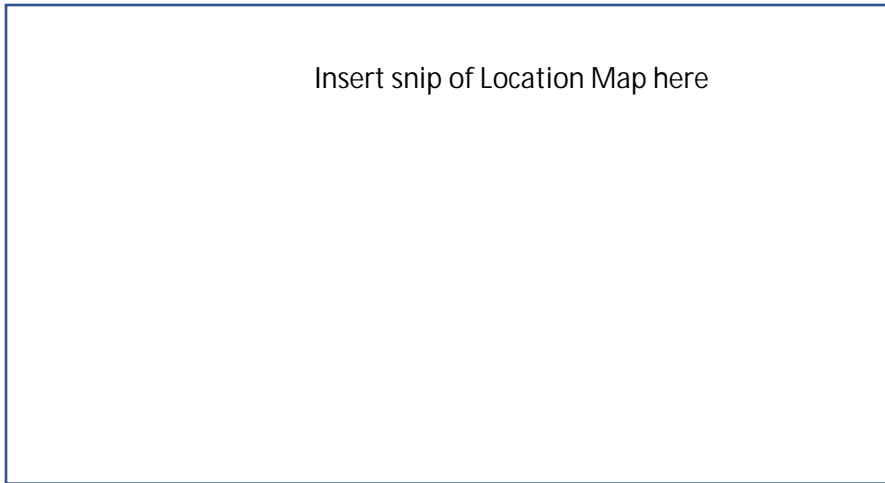
Implement Program To Provide Links To Weather Alerts And Departmental Phone Listings With Contact Personnel For Residents.

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):		<i>These are one-time costs for program development, education campaign, and non-engineering study costs.</i>	
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 <input checked="" type="checkbox"/> No <input type="checkbox"/>
Funding Dedicated?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	(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
- 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

Hidalgo County #14-1.1

FMS ID: 152000035

FMS Description

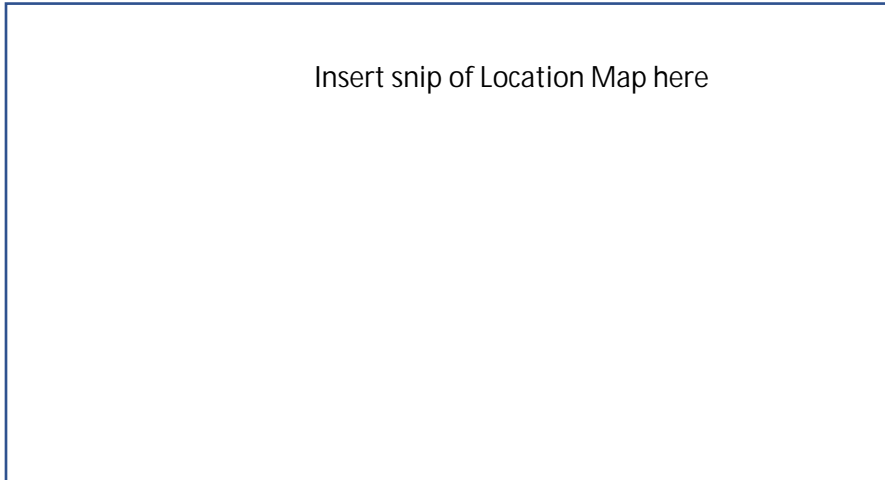
Develop Procedures For Mass Notifications To Citizens And Merchants During Natural Hazard Incident. Solicit Bids For System. Purchase Emergency Notification System And Install Distribute Information On New System And Conduct Training

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):		<i>These are one-time costs for program development, education campaign, and non-engineering study costs.</i>	
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 <input checked="" type="checkbox"/> No <input type="checkbox"/>
Funding Dedicated?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	(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
- 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

Indian Lake Action #2

FMS ID: 152000005

FMS Description

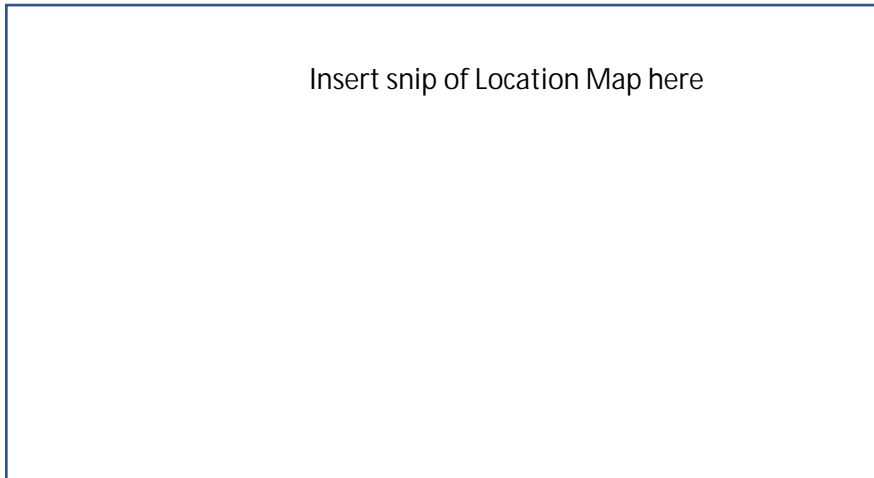
Educate property owners about residential mitigation measures for all natural hazards such as the need to elevate structures, implementing residential mitigation measures, install retaining walls, and avoid building in high hazard areas

Strategy Type

- Education and Outreach Activities
- 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):		<i>These are one-time costs for program development, education campaign, and non-engineering study costs.</i>	
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 <input checked="" type="checkbox"/> No <input type="checkbox"/>
Funding Dedicated?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	(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

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.)

Insert snip of Location Map here

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):		<i>These are one-time costs for program development, education campaign, and non-engineering study costs.</i>	
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 <input checked="" type="checkbox"/> No <input type="checkbox"/>
Funding Dedicated?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	(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

Indian Lake Action #11

FMS ID: 152000008

FMS Description

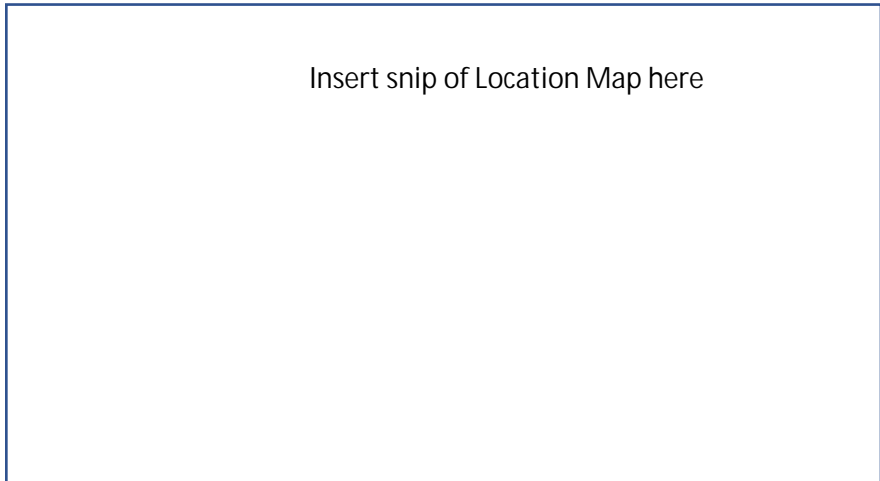
Adopt revised floodplain ordinance to include model ordinance language and higher NFIP standards such as freeboard

Strategy Type

- Education and Outreach Activities
- 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):		<i>These are one-time costs for program development, education campaign, and non-engineering study costs.</i>	
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 <input checked="" type="checkbox"/> No <input type="checkbox"/>
Funding Dedicated?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	(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

La Villa #6-1.1

FMS ID: 152000038

FMS Description

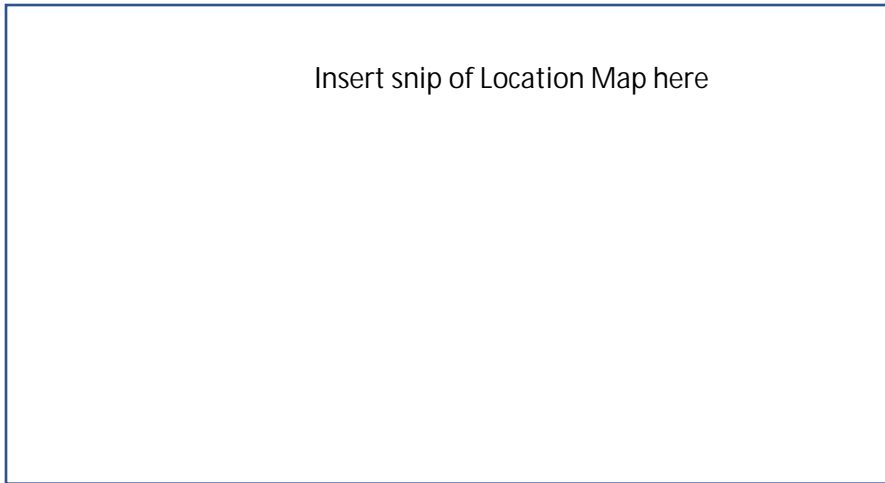
Implement Program To Provide Links To Weather Alerts And Departmental Phone Listings With Contact Personnel For Residents.

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):		<i>These are one-time costs for program development, education campaign, and non-engineering study costs.</i>	
Estimated year to start:		Entity with Oversight	La Villa
Time to complete?	Completed	Included in a Hazard Mitigation Action Plan or other plan?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Funding Dedicated?	Yes <input type="checkbox"/> No <input type="checkbox"/>	(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

La Villa #8-1.1

FMS ID: 152000039

FMS Description

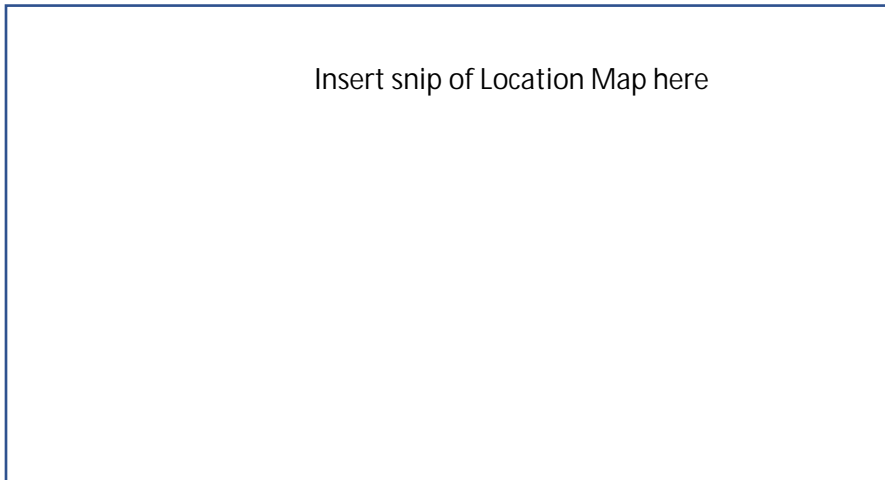
Develop Procedures For Mass Notifications To Citizens And Merchants During Natural Hazard Incident. Solicit Bids For System. Purchase Emergency Notification System And Install Distribute Information On New System And Conduct Training

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):		<i>These are one-time costs for program development, education campaign, and non-engineering study costs.</i>	
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 <input checked="" type="checkbox"/> No <input type="checkbox"/>
Funding Dedicated?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	(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

McAllen #1-2.1

FMS ID: 152000042

FMS Description

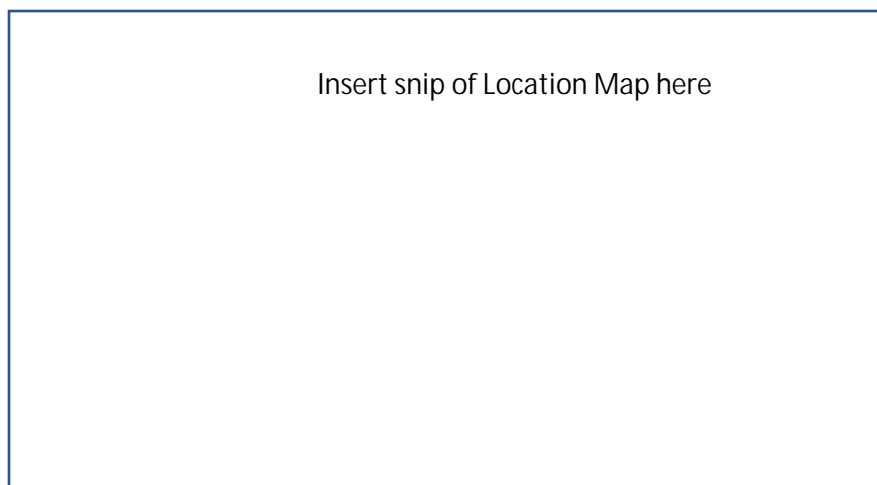
Provide A Means of Disseminating Emergency Information To The Citizens of McAllen

Strategy Type

- Education and Outreach Activities
 Regulatory and Guidance
 Flood Preparedness Programs
 Protected Areas
 Development Standards
 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 <input checked="" type="checkbox"/> No <input type="checkbox"/>	Frequency of flooding:	
Population at Risk		# of structures inundated	
Roadways flooded	Yes <input type="checkbox"/> No <input type="checkbox"/>	Miles inundated?	
Critical Facilities Impacted	Yes <input type="checkbox"/> No <input type="checkbox"/>	Agricultural Land impacted	Yes <input type="checkbox"/> No <input type="checkbox"/>

Notes:

Strategy Costs

Total Cost:	\$500,000	Study Sponsor:	McAllen
Non-reoccurring Non-capital Cost (include in Total above):		<i>These are one-time costs for program development, education campaign, and non-engineering study costs.</i>	
Estimated year to start:	2021	Entity with Oversight	McAllen
Time to complete?	2022	Included in a Hazard Mitigation Action Plan or other plan?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Funding Dedicated?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	(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
- 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

McAllen #1-2.1

FMS ID: 152000041

FMS Description

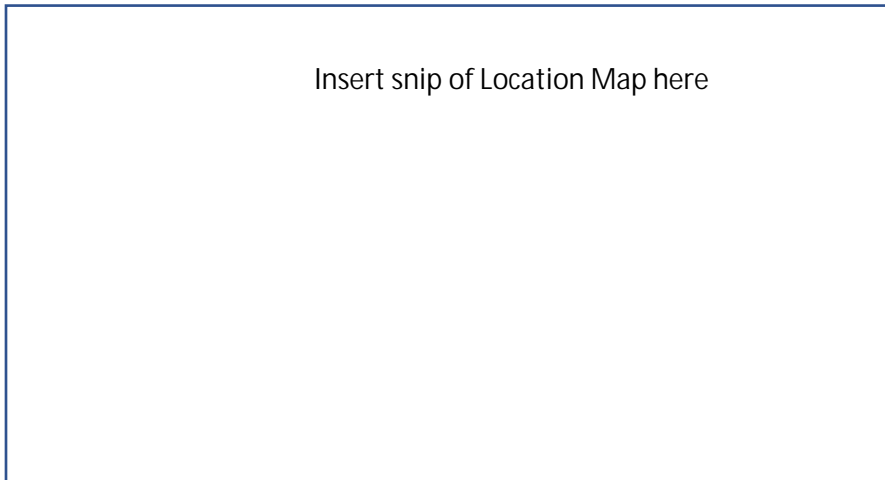
Develop Emergency Notification Awareness System For Traveling Public Via Transportation System In The Event of Severe Weather In McAllen

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):		<i>These are one-time costs for program development, education campaign, and non-engineering study costs.</i>	
Estimated year to start:	2021	Entity with Oversight	McAllen
Time to complete?	2024	Included in a Hazard Mitigation Action Plan or other plan?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Funding Dedicated?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	(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
- 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

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

Mercedes #9-1.1

FMS ID: 152000044

FMS Description

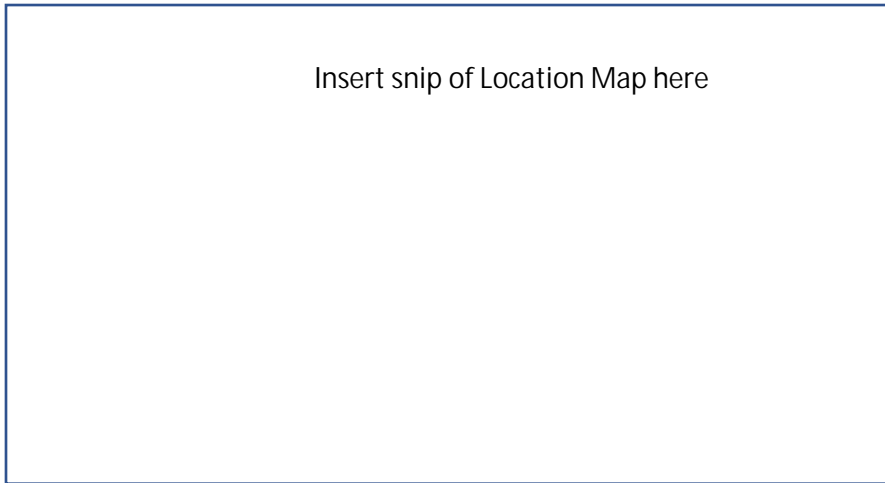
Implement Program To Provide Links To Weather Alerts And Departmental Phone Listings With Contact Personnel For Residents.

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):		<i>These are one-time costs for program development, education campaign, and non-engineering study costs.</i>	
Estimated year to start:	2022	Entity with Oversight	Mercedes
Time to complete?	2024	Included in a Hazard Mitigation Action Plan or other plan?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Funding Dedicated?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	(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

Mercedes #11-1.1

FMS ID: 152000043

FMS Description

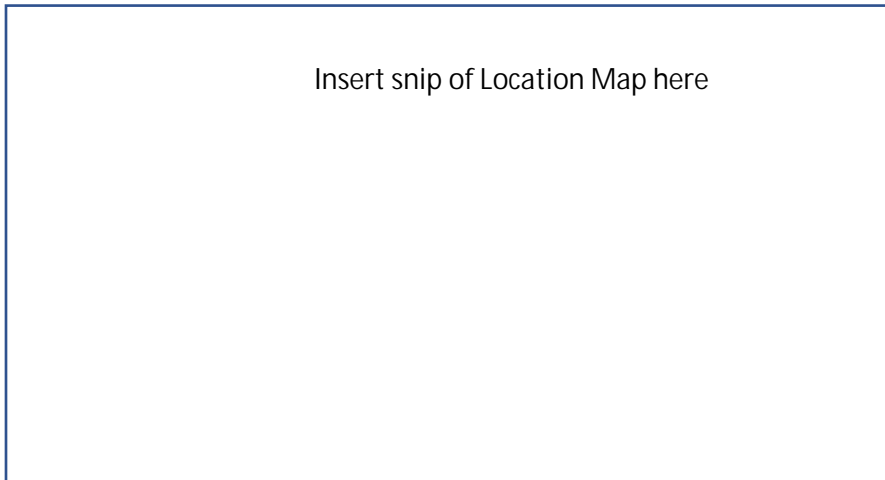
Develop Procedures For Mass Notifications To Citizens And Merchants During Natural Hazard Incident. Solicit Bids For System. Purchase Emergency Notification System And Install Distribute Information On New System And Conduct Training

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):		<i>These are one-time costs for program development, education campaign, and non-engineering study costs.</i>	
Estimated year to start:	2021	Entity with Oversight	Mercedes
Time to complete?	2023	Included in a Hazard Mitigation Action Plan or other plan?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Funding Dedicated?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	(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

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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- 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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RFPG Recommended

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

Palmview #5-1.1

FMS ID: 152000047

FMS Description

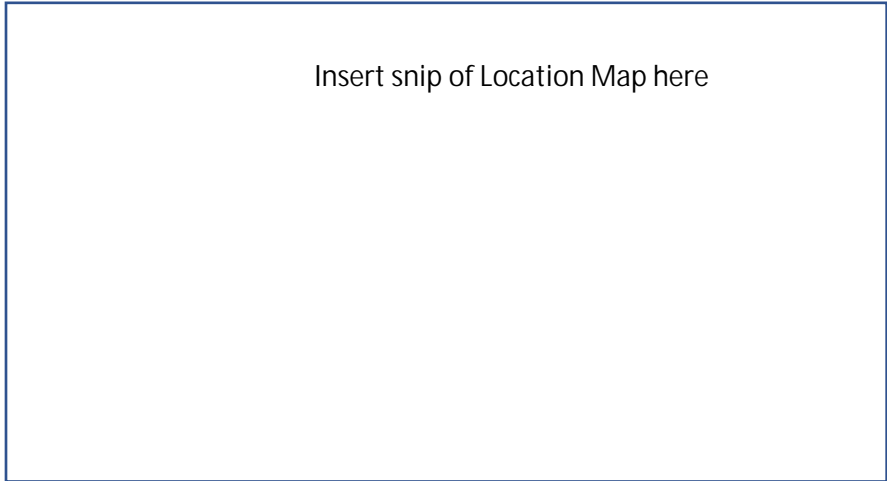
Implement Program To Provide Links To Weather Alerts And Departmental Phone Listings With Contact Personnel For Residents.

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):		<i>These are one-time costs for program development, education campaign, and non-engineering study costs.</i>	
Estimated year to start:		Entity with Oversight	Palmview
Time to complete?	Completed	Included in a Hazard Mitigation Action Plan or other plan?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Funding Dedicated?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	(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

Palmview #7-1.1

FMS ID: 152000048

FMS Description

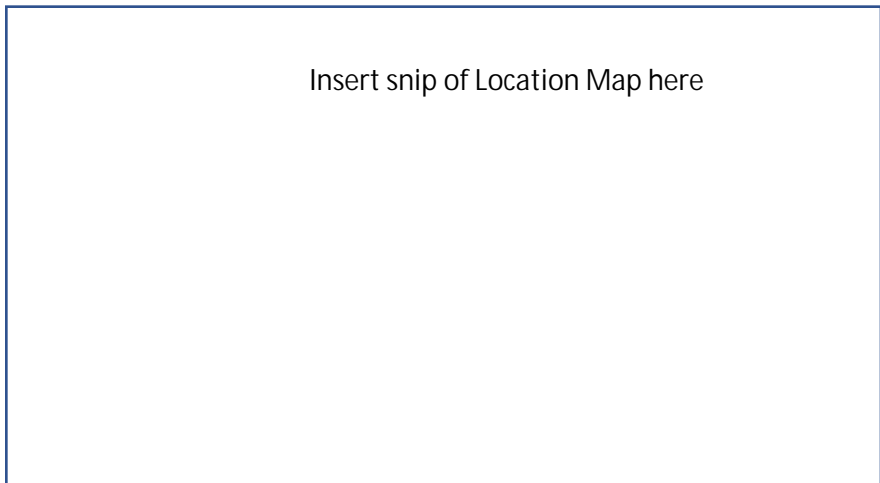
Develop Procedures For Mass Notifications To Citizens And Merchants During Natural Hazard Incident. Solicit Bids For System. Purchase Emergency Notification System And Install Distribute Information On New System And Conduct Training.

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):		<i>These are one-time costs for program development, education campaign, and non-engineering study costs.</i>	
Estimated year to start:		Entity with Oversight	Palmview
Time to complete?	Completed	Included in a Hazard Mitigation Action Plan or other plan?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Funding Dedicated?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	(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

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.)

Insert snip of Location Map here

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):		<i>These are one-time costs for program development, education campaign, and non-engineering study costs.</i>	
Estimated year to start:		Entity with Oversight	Pharr
Time to complete?	Completed	Included in a Hazard Mitigation Action Plan or other plan?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Funding Dedicated?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	(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

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.)

Insert snip of Location Map here

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):		<i>These are one-time costs for program development, education campaign, and non-engineering study costs.</i>	
Estimated year to start:		Entity with Oversight	Pharr
Time to complete?	Completed	Included in a Hazard Mitigation Action Plan or other plan?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Funding Dedicated?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	(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
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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

Alamo #4-1.2

FMS ID: 152000051

FMS Description

Provide Traffic Control And Evacuation Assistance During Emergency Situations

Strategy Type

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

Strategy Area

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

Insert snip of Location Map here

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):		<i>These are one-time costs for program development, education campaign, and non-engineering study costs.</i>	
Estimated year to start:	2024	Entity with Oversight	Alamo
Time to complete?	2026	Included in a Hazard Mitigation Action Plan or other plan?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Funding Dedicated?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	(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
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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

Port Isabel Action #10

FMS ID: 152000010

FMS Description

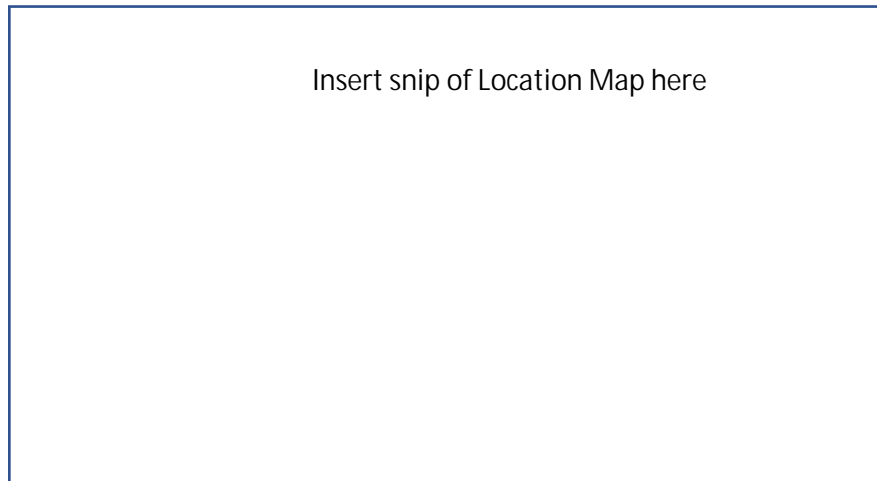
Prepare and advertise local evacuation plan

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):		<i>These are one-time costs for program development, education campaign, and non-engineering study costs.</i>	
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 <input checked="" type="checkbox"/> No <input type="checkbox"/>
Funding Dedicated?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	(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

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

Port Isabel Action #12

FMS ID: 152000012

FMS Description

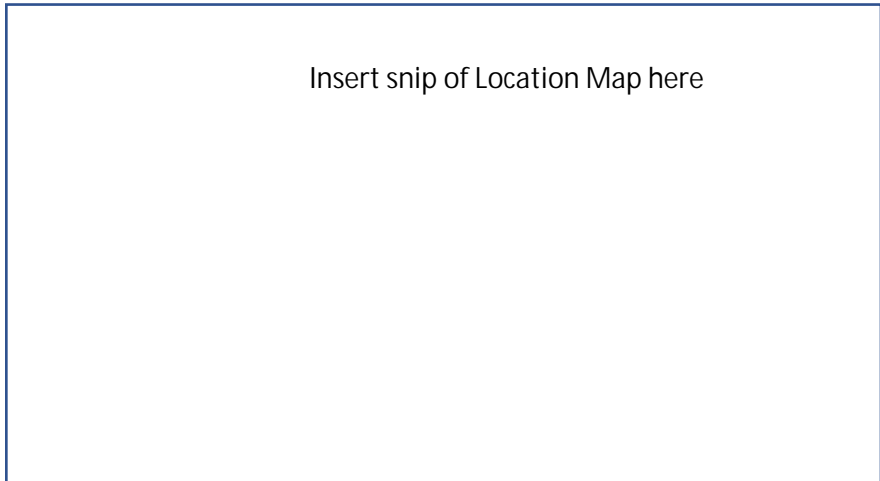
Adopt NFIP model ordinance with higher floodplain standards

Strategy Type

- Education and Outreach Activities
- Regulatory and Guidance
- Flood Preparedness Programs
- Protected Areas
- Development Standards
- 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):		<i>These are one-time costs for program development, education campaign, and non-engineering study costs.</i>	
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 <input checked="" type="checkbox"/> No <input type="checkbox"/>
Funding Dedicated?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	(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

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
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- Increase the proficiency of floodplain managers by increasing the # of them that are certified as Certified Floodplain Managers (CFM) with the Texas Floodplain Management Association
- Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

RFPG Recommended

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

Primera Action #1

FMS ID: 152000015

FMS Description

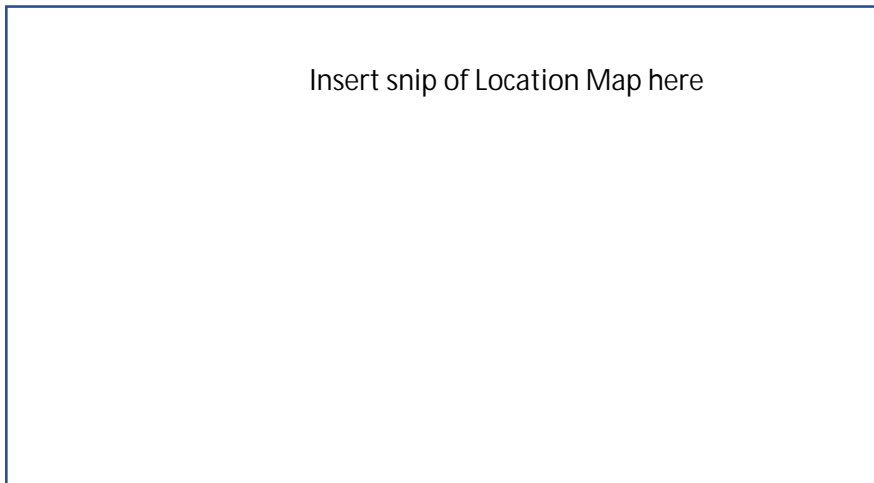
Amend subdivision ordinances to require retention or detention ponds in any new subdivision

Strategy Type

- Education and Outreach Activities
 Regulatory and Guidance
 Flood Preparedness Programs
 Protected Areas
 Development Standards
 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):		<i>These are one-time costs for program development, education campaign, and non-engineering study costs.</i>	
Estimated year to start:	2018	Entity with Oversight	Primera
Time to complete?	2020	Included in a Hazard Mitigation Action Plan or other plan?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Funding Dedicated?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	(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

Primera Action #8

FMS ID: 152000017

FMS Description

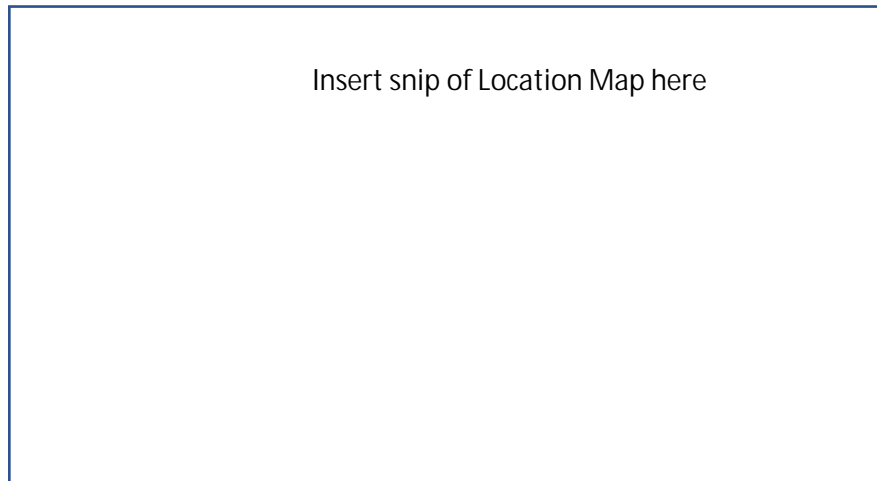
Implement early warning system to new areas of the jurisdiction to alert residents of impending severe weather

Strategy Type

- Education and Outreach Activities
 Regulatory and Guidance
 Flood Preparedness Programs
 Protected Areas
 Development Standards
 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):		<i>These are one-time costs for program development, education campaign, and non-engineering study costs.</i>	
Estimated year to start:	2018	Entity with Oversight	Primera
Time to complete?	2020	Included in a Hazard Mitigation Action Plan or other plan?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Funding Dedicated?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	(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

Primera Action #10

FMS ID: 152000016

FMS Description

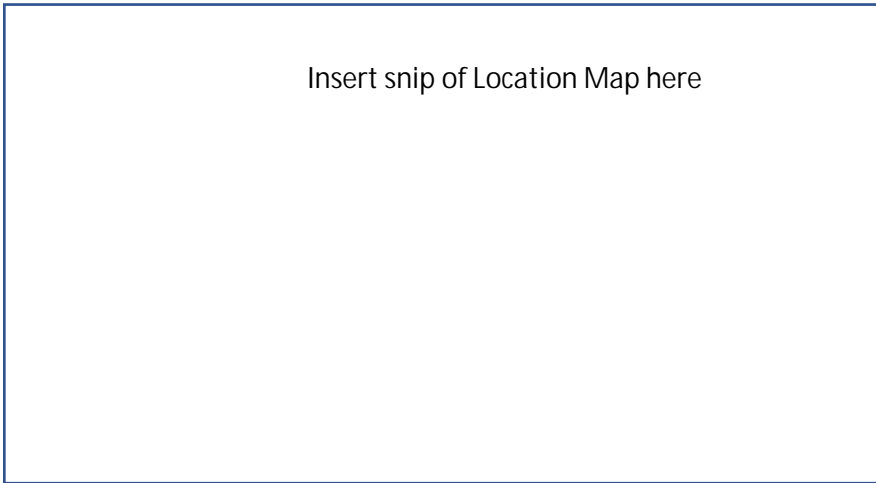
Adopt higher floodplain standards such as freeboard and cumulative substantial damage

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):		<i>These are one-time costs for program development, education campaign, and non-engineering study costs.</i>	
Estimated year to start:	2019	Entity with Oversight	Primera
Time to complete?	2021	Included in a Hazard Mitigation Action Plan or other plan?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Funding Dedicated?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	(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