





Bayview Action #19

FMS ID: 152000001

FMS Description

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

Strategy Type

- ☐ Education and Outreach Activities
- □ Protected Areas

- □ Regulatory and Guidance□ Development Standards
- ✓ Flood Preparedness Programs
- ☐ Other:

Strategy Area

City/ Cities Bayview

County/ Counties Cameron

HUC 8 12110208

HUC 12

Study Area (sq. mi.)

Emergency Need

Yes ✓ No 🗆

Known Flood Risk

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

Strategy Costs

Notes:

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



Yes ✓ No 🗆



Flood Management Strategies Fact Sheet

Have the flood risk and flood redu	uction imp	oacts been	evaluated?
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Yes □ No ✓		
Was the strategy missing sufficient data to assess whether the proTWDB guidelines?	posed sti	trategy has a negative effect, per Yes \square No \checkmark
Related Goals		
 Increase community access routes to critical facilities, evacuation routes, during and after a flooding event 		crease the # of entities that adopt higher than NFIP-inimum standards
 Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain 		evelop and maintain an operational stormwater asset anagement plan
☐ Increase the # of communities participating in the National Flood Insurance Program	□ Inc	crease the # of flood gauges (rainfall/stream) in the gion
 Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs 	□ Ind	crease the # of entities that have multi-year drainage P list
 Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards 	✓ Ind Ser flo	crease the # of entities that integrate National Weathe ervice and USGS Texas Water Science Center (TXWSC) good warning system information into their local apabilities to disseminate warnings
☐ Increase participation in the regional flood planning process		crease use of nature-based flood risk reduction project
 Provide regional detention that could be used for water reuse applications or as part of a floodplain management program 	res	evelop a regionally coordinated warning and emergend esponse program that can detect the flood threat and rovide timely warning of impending flood danger
 Increase acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use 	□ Inc	crease the amount of publicly owned land in the region at can be utilized for future regional stormwater frastructure
 Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website 	□ Inc inc Flo	crease the proficiency of floodplain managers by creasing the # of them that are certified as Certified coodplain Managers (CFM) with the Texas Floodplain lanagement Association
✓ Increase the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations	□ Inc	crease participation in the Community Rating System b acouraging Region 15 floodplain management program incorporate dedicated drainage fees to implement
Reduce the # of structures that have been subject to repeated flooding events through property buyouts	fut per	ture FMEs and FMPs; incorporate noncompliance enalties; and who regulate development in the future anditions floodplain
RFPG Recommended		





Bayview Action #7

FMS ID: 152000002

FMS Description

Approve and Adopt FEMA Flood Insurance Rate Maps

Strategy Type

- □ Education and Outreach Activities
- □ Protected Areas

- ✓ Regulatory and Guidance□ Development Standards
- $\ \ \Box \ \ \textbf{Flood Preparedness Programs}$
- $\ \ \Box$ Other:

Strategy Area

City/ Cities Bayview

County/ Counties Cameron

HUC 8 12110208

HUC 12

Study Area (sq. mi.)



Emergency Need

Yes ✓ No 🗆

Known Flood Risk

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

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





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Yes	□ No ✓		
	the strategy missing sufficient data to assess whether the pro OB guidelines?	pose	ed strategy has a negative effect, per Yes □ No ✓
Rela	ated Goals		
	Increase community access routes to critical facilities, evacuation routes, during and after a flooding event		Increase the # of entities that adopt higher than NFIP-minimum standards
	Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain		Develop and maintain an operational stormwater asset management plan
	Increase the # of communities participating in the National Flood Insurance Program		Increase the # of flood gauges (rainfall/stream) in the region
	Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs		Increase the # of entities that have multi-year drainage CIP list
✓	Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards		Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
	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 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 acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use		Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
	Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website		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 the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations		Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement
	Reduce the # of structures that have been subject to repeated flooding events through property buyouts		future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

RFPG Recommended





Bayview Action #8

FMS ID: 152000003

FMS Description

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

Strategy Type

Education and Outreach Activities

□ Protected Areas

☐ Regulatory and Guidance☐ Development Standards

☐ Flood Preparedness Programs

✓ Other:

Yes □ No □

Strategy Area

City/ Cities Bayview

County/ Counties Cameron

HUC 8 12110208

HUC 12

Study Area (sq. mi.)



Emergency Need

Yes ✓ No 🗆

Known Flood Risk

History of Flooding? Yes ✓ No □ Frequency of flooding:

Population at Risk # of structures inundated

Roadways flooded Yes □ No □ Miles inundated?

Critical Facilities Impacted Yes □ No □ Agricultural Land impacted

Notes:

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



Yes ✓ No 🗆



Flood Management Strategies Fact Sheet

Have the flood risk and flood reduction impacts been evaluated?

Yes	□ No ✓		
	s the strategy missing sufficient data to assess whether the pro DB guidelines?	pos∈	ed strategy has a negative effect, per Yes □ No ✓
Rel	ated Goals		
✓	Increase community access routes to critical facilities, evacuation routes, during and after a flooding event		Increase the # of entities that adopt higher than NFIP-minimum standards
	Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain		Develop and maintain an operational stormwater asset management plan
	Increase the # of communities participating in the National Flood Insurance Program		Increase the # of flood gauges (rainfall/stream) in the region
	Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs		Increase the # of entities that have multi-year drainage CIP list
	Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards		Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
	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 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 acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use		Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
	Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website		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 the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations		Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement
	Reduce the # of structures that have been subject to repeated flooding events through property buyouts		future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain
RFF	PG Recommended		

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Bayview Action #9

FMS ID: 152000004

FMS Description

Participate in the National Flood Insurance Program

Strategy Type

- □ Education and Outreach Activities
- □ Protected Areas

- ✓ Regulatory and Guidance□ Development Standards
- $\hfill \square$ Flood Preparedness Programs
- □ Other:

Strategy Area

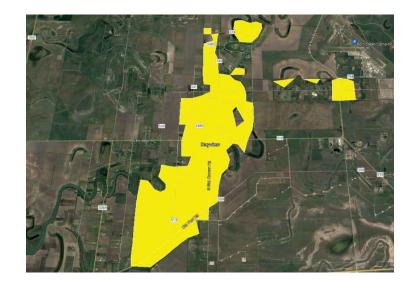
City/ Cities Bayview

County/ Counties Cameron

HUC 8 12110208

HUC 12

Study Area (sq. mi.)



Emergency Need

Yes ✓ No 🗆

Known Flood Risk

History of Flooding? Yes ✓ No □ Frequency of flooding:

Population at Risk # of structures inundated

Roadways flooded Yes □ No □ Miles inundated?

Critical Facilities Impacted Yes □ No □ Agricultural Land impacted Yes □ No □

Notes:

Strategy Costs

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

Yes	Nο	./
YPS	INIO	~



Flood Management Strategies Fact Sheet

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

Related Goals

	Increase community access routes to critical facilities,		Increase the # of entities that adopt higher than NFIP-minimum standards
	evacuation routes, during and after a flooding event		
	Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain		Develop and maintain an operational stormwater asset management plan
✓	Increase the # of communities participating in the National		Increase the # of flood gauges (rainfall/stream) in the
•	Flood Insurance Program		region
	Decrease the average age of FEMA Flood Insurance Rate		Increase the # of entities that have multi-year drainage
Ш	Maps used to define SFHAs		CIP list
	Increase the coverage of available flood hazard data by		Increase the # of entities that integrate National Weather
ш	completing studies with identified construction projects to		Service and USGS Texas Water Science Center (TXWSC)
	address flooding hazards		flood warning system information into their local
	addi C33 1100diliig Hazai d3		capabilities to disseminate warnings
	Increase participation in the regional flood planning process		Increase use of nature-based flood risk reduction projects
	Provide regional detention that could be used for water	П	Develop a regionally coordinated warning and emergency
	reuse applications or as part of a floodplain management		response program that can detect the flood threat and
	program		provide timely warning of impending flood danger
	Increase acreage of publicly protected open space in critical		Increase the amount of publicly owned land in the region
	flood risk areas that is reused for a beneficial public use		that can be utilized for future regional stormwater
	,		infrastructure
	Increase outreach and education activities, specifically		Increase the proficiency of floodplain managers by
	targeting municipal floodplain managers, hosted by Region		increasing the # of them that are certified as Certified
	15 RFPG and available on the website		Floodplain Managers (CFM) with the Texas Floodplain
			Management Association
	Increase the use reverse 911, TV, radio, social media, and		Increase participation in the Community Rating System by
	billboards to communicate flood warnings, evacuation		encouraging Region 15 floodplain management programs
	routes, and shelter locations		to incorporate dedicated drainage fees to implement
	Reduce the # of structures that have been subject to		future FMEs and FMPs; incorporate noncompliance
	repeated flooding events through property buyouts		penalties; and who regulate development in the future
			conditions floodplain

RFPG Recommended





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	Out	react	n Act	tivit	ies

□ 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:			

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



Yes ✓ No 🗆



Flood Management Strategies Fact Sheet

Yes	□ No ✓		
	s the strategy missing sufficient data to assess whether the pro DB guidelines?	pose	ed strategy has a negative effect, per Yes □ No ✓
Rel	ated Goals		
	Increase community access routes to critical facilities, evacuation routes, during and after a flooding event		Increase the # of entities that adopt higher than NFIP-minimum standards
	Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain		Develop and maintain an operational stormwater asset management plan
	Increase the # of communities participating in the National Flood Insurance Program		Increase the # of flood gauges (rainfall/stream) in the
	Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs		region Increase the # of entities that have multi-year drainage CIP list
	Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards		Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
	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 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 acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use		Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
✓	Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website		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 the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations		Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement
	Reduce the # of structures that have been subject to repeated flooding events through property buyouts		future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain
RFF	PG Recommended		





Brownsville Public Utilities Board Action #8 FMS ID: 152000006

FMS Description

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

Strategy Type

- ☐ Education and Outreach Activities
- □ Protected Areas

- ✓ Regulatory and Guidance□ Development Standards
- $\hfill \square$ Flood Preparedness Programs
- □ Other:

Strategy Area

City/ Cities Brownsville

County/ Counties Cameron

HUC 8 12110208

HUC 12

Study Area (sq. mi.)



Emergency Need

Yes ✓ No 🗆

Known Flood Risk

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

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





Have the flood risk and flood reduction impacts been evaluated?

Yes	□ No ✓		
	s the strategy missing sufficient data to assess whether the pro DB guidelines?	pose	d strategy has a negative effect, per Yes □ No ✓
Rel	ated Goals		
✓	Increase community access routes to critical facilities, evacuation routes, during and after a flooding event		Increase the # of entities that adopt higher than NFIP-minimum standards
	Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain		Develop and maintain an operational stormwater asset management plan
	Increase the # of communities participating in the National Flood Insurance Program		Increase the # of flood gauges (rainfall/stream) in the region
	Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs		Increase the # of entities that have multi-year drainage CIP list
	Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards		Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
	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 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 acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use		Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
	Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website		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 the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations		Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement
	Reduce the # of structures that have been subject to repeated flooding events through property buyouts		future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

RFPG Recommended





City Of Brownsville Action #2

FMS ID: 152000007

FMS Description

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

Strategy Type

Education and Outreach Activities		Education	and	Outreach	Activitie
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□ Protected Areas

✓ F	Regulatory	and G	Guidance
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☐ Flood Preparedness Programs

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

Voc	Nο	./
Yes	INIO	~



Flood Management Strategies Fact Sheet

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

Related Goals

Increase community access routes to critical facilities, evacuation routes, during and after a flooding event		Increase the # of entities that adopt higher than NFIP-minimum standards
Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain		Develop and maintain an operational stormwater asset management plan
Increase the # of communities participating in the National		Increase the # of flood gauges (rainfall/stream) in the
Flood Insurance Program		region
Decrease the average age of FEMA Flood Insurance Rate		Increase the # of entities that have multi-year drainage
Maps used to define SFHAs		CIP list
Increase the coverage of available flood hazard data by		Increase the # of entities that integrate National Weather
completing studies with identified construction projects to		Service and USGS Texas Water Science Center (TXWSC)
address flooding hazards		flood warning system information into their local
		capabilities to disseminate warnings
Increase participation in the regional flood planning process		Increase use of nature-based flood risk reduction projects
Provide regional detention that could be used for water		Develop a regionally coordinated warning and emergency
reuse applications or as part of a floodplain management		response program that can detect the flood threat and
program		provide timely warning of impending flood danger
Increase acreage of publicly protected open space in critical		Increase the amount of publicly owned land in the region
flood risk areas that is reused for a beneficial public use		that can be utilized for future regional stormwater
		infrastructure
Increase outreach and education activities, specifically		Increase the proficiency of floodplain managers by
targeting municipal floodplain managers, hosted by Region		increasing the # of them that are certified as Certified
15 RFPG and available on the website		Floodplain Managers (CFM) with the Texas Floodplain
044 TV	,	Management Association
Increase the use reverse 911, TV, radio, social media, and	✓	Increase participation in the Community Rating System by
billboards to communicate flood warnings, evacuation		encouraging Region 15 floodplain management programs
routes, and shelter locations		to incorporate dedicated drainage fees to implement
Reduce the # of structures that have been subject to		future FMEs and FMPs; incorporate noncompliance
repeated flooding events through property buyouts		penalties; and who regulate development in the future

conditions floodplain

RFPG Recommended





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

□ Development Standards

Strategy Type

- □ Education and Outreach Activities
- □ Protected Areas

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

Voc	Nο	./
Yes	INIO	~



RFPG Recommended

Yes ✓ No □

FMS

Flood Management Strategies Fact Sheet

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

Related Goals Increase community access routes to critical facilities, Increase the # of entities that adopt higher than NFIPevacuation routes, during and after a flooding event minimum standards Reduce the # of newly constructed vulnerable critical Develop and maintain an operational stormwater asset facilities within the existing and future 100-YR floodplain management plan Increase the # of communities participating in the National Increase the # of flood gauges (rainfall/stream) in the Flood Insurance Program Decrease the average age of FEMA Flood Insurance Rate Increase the # of entities that have multi-year drainage Maps used to define SFHAs Increase the coverage of available flood hazard data by Increase the # of entities that integrate National Weather completing studies with identified construction projects to Service and USGS Texas Water Science Center (TXWSC) address flooding hazards flood warning system information into their local capabilities to disseminate warnings Increase participation in the regional flood planning process Increase use of nature-based flood risk reduction projects Provide regional detention that could be used for water Develop a regionally coordinated warning and emergency response program that can detect the flood threat and reuse applications or as part of a floodplain management program provide timely warning of impending flood danger Increase acreage of publicly protected open space in critical Increase the amount of publicly owned land in the region flood risk areas that is reused for a beneficial public use that can be utilized for future regional stormwater infrastructure Increase outreach and education activities, specifically Increase the proficiency of floodplain managers by targeting municipal floodplain managers, hosted by Region increasing the # of them that are certified as Certified 15 RFPG and available on the website Floodplain Managers (CFM) with the Texas Floodplain Management Association Increase the use reverse 911, TV, radio, social media, and Increase participation in the Community Rating System by billboards to communicate flood warnings, evacuation encouraging Region 15 floodplain management programs routes, and shelter locations to incorporate dedicated drainage fees to implement Reduce the # of structures that have been subject to future FMEs and FMPs; incorporate noncompliance repeated flooding events through property buyouts penalties; and who regulate development in the future conditions floodplain





Indian Lake Action #9

FMS ID: 152000009

FMS Description

Prepare and advertise local evacuation plan and procedures

Strategy Type

- ✓ Education and Outreach Activities
- □ Protected Areas

- ☐ Regulatory and Guidance☐ Development Standards
- ✓ Flood Preparedness Programs
- ☐ Other:

Strategy Area

City/ Cities Indian Lake

County/ Counties Cameron

HUC 8 12110208

HUC 12

Study Area (sq. mi.)



Emergency Need

Yes ✓ No 🗆

Known Flood Risk

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

Strategy Costs

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

Voc	Nο	./
Yes	INIO	~



Flood Management Strategies Fact Sheet

penalties; and who regulate development in the future

conditions floodplain

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

Rel	ated Goals	
	Increase community access routes to critical facilities,	Increase the # of entities that adopt higher than NFIP-
	evacuation routes, during and after a flooding event	minimum standards
	Reduce the # of newly constructed vulnerable critical	Develop and maintain an operational stormwater asset
	facilities within the existing and future 100-YR floodplain	management plan
	Increase the # of communities participating in the National	Increase the # of flood gauges (rainfall/stream) in the
	Flood Insurance Program	region
	Decrease the average age of FEMA Flood Insurance Rate	Increase the # of entities that have multi-year drainage
	Maps used to define SFHAs	CIP list
	Increase the coverage of available flood hazard data by	Increase the # of entities that integrate National Weather
	completing studies with identified construction projects to	Service and USGS Texas Water Science Center (TXWSC)
	address flooding hazards	flood warning system information into their local
		capabilities to disseminate warnings
	Increase participation in the regional flood planning process	Increase use of nature-based flood risk reduction projects
	Provide regional detention that could be used for water	Develop a regionally coordinated warning and emergency
	reuse applications or as part of a floodplain management	response program that can detect the flood threat and
	program	provide timely warning of impending flood danger
	Increase acreage of publicly protected open space in critical	Increase the amount of publicly owned land in the region
	flood risk areas that is reused for a beneficial public use	that can be utilized for future regional stormwater infrastructure
	Increase outreach and education activities, specifically	Increase the proficiency of floodplain managers by
	targeting municipal floodplain managers, hosted by Region	increasing the # of them that are certified as Certified
	15 RFPG and available on the website	Floodplain Managers (CFM) with the Texas Floodplain
	13 Ki F G dilu avallable oli tile website	Management Association
✓	Increase the use reverse 911, TV, radio, social media, and	Increase participation in the Community Rating System by
	billboards to communicate flood warnings, evacuation	encouraging Region 15 floodplain management programs
	routes, and shelter locations	to incorporate dedicated drainage fees to implement
П	Reduce the # of structures that have been subject to	future FMEs and FMPs: incorporate noncompliance

RFPG Recommended

repeated flooding events through property buyouts





Port Isabel Action #10

FMS ID: 152000010

FMS Description

Prepare and advertise local evacuation plan

Strategy Type

- ✓ Education and Outreach Activities
- □ Protected Areas

- ☐ Regulatory and Guidance☐ Development Standards
- ✓ Flood Preparedness Programs
- ☐ Other:

Strategy Area

City/ Cities Port Isabel

County/ Counties Cameron

HUC 8 12110208

HUC 12

Study Area (sq. mi.)



Emergency Need

Yes ✓ No 🗆

Known Flood Risk

History of Flooding? Yes ✓ No □ Frequency of flooding:

Population at Risk # of structures inundated

Roadways flooded Yes □ No □ Miles inundated?

Critical Facilities Impacted Yes □ No □ Agricultural Land impacted Yes □ No □

Notes:

Strategy Costs

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

	_		
Ves		NΩ	✓



Flood Management Strategies Fact Sheet

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

Related Goals

	Increase community access routes to critical facilities,		Increase the # of entities that adopt higher than NFIP-
	evacuation routes, during and after a flooding event		minimum standards
	Reduce the # of newly constructed vulnerable critical		Develop and maintain an operational stormwater asset
	facilities within the existing and future 100-YR floodplain		management plan
	Increase the # of communities participating in the National		Increase the # of flood gauges (rainfall/stream) in the
	Flood Insurance Program		region
	Decrease the average age of FEMA Flood Insurance Rate		Increase the # of entities that have multi-year drainage
	Maps used to define SFHAs		CIP list
	Increase the coverage of available flood hazard data by	П	Increase the # of entities that integrate National Weather
	completing studies with identified construction projects to		Service and USGS Texas Water Science Center (TXWSC)
	address flooding hazards		flood warning system information into their local
	addi 000 Hooding Hazardo		capabilities to disseminate warnings
	Increase participation in the regional flood planning process		Increase use of nature-based flood risk reduction projects
	Provide regional detention that could be used for water		Develop a regionally coordinated warning and emergency
Ш	reuse applications or as part of a floodplain management		response program that can detect the flood threat and
	program		provide timely warning of impending flood danger
	Increase acreage of publicly protected open space in critical		Increase the amount of publicly owned land in the region
	flood risk areas that is reused for a beneficial public use		that can be utilized for future regional stormwater
			infrastructure
	Increase outreach and education activities, specifically		Increase the proficiency of floodplain managers by
	targeting municipal floodplain managers, hosted by Region		increasing the # of them that are certified as Certified
	15 RFPG and available on the website		Floodplain Managers (CFM) with the Texas Floodplain
			Management Association
✓	Increase the use reverse 911, TV, radio, social media, and		Increase participation in the Community Rating System by
	billboards to communicate flood warnings, evacuation		encouraging Region 15 floodplain management programs
	routes, and shelter locations		to incorporate dedicated drainage fees to implement
	Reduce the # of structures that have been subject to		future FMEs and FMPs; incorporate noncompliance
	repeated flooding events through property buyouts		penalties; and who regulate development in the future

conditions floodplain

RFPG Recommended





Port Isabel Action #11

FMS ID: 152000011

FMS Description

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

Strategy Type

- $\hfill \square$ 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:			

33			
Total Cost:	\$500	Study Sponsor:	Port Isabel
Non-reoccurring Non- capital Cost (include in Total above):		These are one-time costs for progra non-engineering study costs.	am development, education campaign, and
Estimated year to start:	2018	Entity with Oversight	Port Isabel
Time to complete?		Included in a Hazard Mitigation	Yes ✓ No □
	2020	Action Plan or other plan?	
Funding Dedicated?	Yes □ No 🗸	(Potential) Source of Funding	HMGP; General Funds





Yes	s □ No ✓	0.0	
	is the strategy missing sufficient data to assess whether the pro DB guidelines?	pose	ed strategy has a negative effect, per Yes □ No ✓
Rel	lated Goals		
	Increase community access routes to critical facilities, evacuation routes, during and after a flooding event Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain Increase the # of communities participating in the National		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
	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		region Increase the # of entities that have multi-year drainage CIP list Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
	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		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
	flood risk areas that is reused for a beneficial public use		that can be utilized for future regional stormwater infrastructure
	Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website		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 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 participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain
2FI	PG Recommended		





Port Isabel Action #12

FMS Description

Adopt NFIP model ordinance with higher floodplain standards

Strategy Type

- □ Education and Outreach Activities
- □ Protected Areas

- ✓ Regulatory and Guidance□ Development Standards
- $\hfill \square$ Flood Preparedness Programs
- ☐ Other:

FMS ID: 152000012

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

Yes	Nο	./
YAS	INO	~



Flood Management Strategies Fact Sheet

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

Related Goals Increase community access routes to critical facilities, Increase the # of entities that adopt higher than NFIPevacuation routes, during and after a flooding event minimum standards Reduce the # of newly constructed vulnerable critical Develop and maintain an operational stormwater asset facilities within the existing and future 100-YR floodplain management plan Increase the # of communities participating in the National Increase the # of flood gauges (rainfall/stream) in the Flood Insurance Program Decrease the average age of FEMA Flood Insurance Rate Increase the # of entities that have multi-year drainage Maps used to define SFHAs Increase the coverage of available flood hazard data by Increase the # of entities that integrate National Weather completing studies with identified construction projects to Service and USGS Texas Water Science Center (TXWSC) address flooding hazards flood warning system information into their local capabilities to disseminate warnings Increase participation in the regional flood planning process Increase use of nature-based flood risk reduction projects Provide regional detention that could be used for water Develop a regionally coordinated warning and emergency response program that can detect the flood threat and reuse applications or as part of a floodplain management program provide timely warning of impending flood danger Increase acreage of publicly protected open space in critical Increase the amount of publicly owned land in the region flood risk areas that is reused for a beneficial public use that can be utilized for future regional stormwater infrastructure Increase outreach and education activities, specifically Increase the proficiency of floodplain managers by targeting municipal floodplain managers, hosted by Region increasing the # of them that are certified as Certified 15 RFPG and available on the website Floodplain Managers (CFM) with the Texas Floodplain Management Association Increase the use reverse 911, TV, radio, social media, and Increase participation in the Community Rating System by billboards to communicate flood warnings, evacuation encouraging Region 15 floodplain management programs routes, and shelter locations to incorporate dedicated drainage fees to implement Reduce the # of structures that have been subject to future FMEs and FMPs; incorporate noncompliance repeated flooding events through property buyouts penalties; and who regulate development in the future

conditions floodplain

RFPG Recommended

Yes ✓ No □





Port Isabel Action #21

FMS ID: 152000013

FMS Description

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

Strategy Type

Education	and	Outi	reach	Activi	ties

□ 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.)

Resources Programme Profit Enclosed

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:			

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



Yes ✓ No 🗆



Flood Management Strategies Fact Sheet

Yes	□ No ✓		
	s the strategy missing sufficient data to assess whether the pro DB guidelines?	pose	d strategy has a negative effect, per Yes □ No ✓
Rel	ated Goals		
	Increase community access routes to critical facilities, evacuation routes, during and after a flooding event		Increase the # of entities that adopt higher than NFIP-minimum standards
	Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain		Develop and maintain an operational stormwater asset management plan
	Increase the # of communities participating in the National Flood Insurance Program		Increase the # of flood gauges (rainfall/stream) in the region
	Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs		Increase the # of entities that have multi-year drainage CIP list
	Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards		Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
	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 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 acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use		Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
	Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website		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 the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations		Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement
	Reduce the # of structures that have been subject to repeated flooding events through property buyouts		future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain
RFF	PG Recommended		





Port Isabel Action #25

FMS ID: 152000014

FMS Description

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

Strategy Type

□ E(ducation	and	Outreach	Activities

□ Protected Areas

☐ Regulatory and Guidance☐ Development Standards

✓ Flood Preparedness Programs

Strategy Area

City/ Cities Port Isabel

County/ Counties Cameron

HUC 8 12110208

HUC 12

Study Area (sq. mi.)



Emergency Need

Yes ✓ No 🗆

Known Flood Risk

History of Flooding? Yes ✓ No □ Frequency of flooding:

Population at Risk # of structures inundated

Roadways flooded Yes □ No □ Miles inundated?

Critical Facilities Impacted Yes □ No □ Agricultural Land impacted Yes □ No □

Notes:

Strategy Costs

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

Yes	Nο	./
YAS	ואוח	~



Flood Management Strategies Fact Sheet

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

Rel	latec	G	oa	S
	Increa	ase c	omr	nı

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

RFPG Recommended

Yes ✓ No 🗆

	Increase the # of entities that adopt higher than NFIP-
	minimum standards
	Develop and maintain an operational stormwater asset
	management plan
	Increase the # of flood gauges (rainfall/stream) in the
	region
	Increase the # of entities that have multi-year drainage
	CIP list
	Increase the # of entities that integrate National Weather
	Service and USGS Texas Water Science Center (TXWSC)
	flood warning system information into their local
	capabilities to disseminate warnings
	Increase use of nature-based flood risk reduction projects
\checkmark	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





Primera Action #1

FMS ID: 152000015

FMS Description

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

Strategy Type

- ☐ Education and Outreach Activities
- □ Protected Areas

- ✓ Regulatory and Guidance
- $\ \square$ Flood Preparedness Programs
- ☐ 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):		These are one-time costs for program development, education campaign, a non-engineering study costs.	
Estimated year to start:	2018	Entity with Oversight	Primera
Time to complete?		Included in a Hazard Mitigation	Yes ✓ No 🗆
	2020	Action Plan or other plan?	
Funding Dedicated?	Yes □ No 🗸	(Potential) Source of Funding	Local Funds

Yes	Nο	./
YPS	INIO	~



Flood Management Strategies Fact Sheet

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

Related Goals Increase community access routes to critical facilities, Increase the # of entities that adopt higher than NFIPevacuation routes, during and after a flooding event minimum standards Reduce the # of newly constructed vulnerable critical Develop and maintain an operational stormwater asset facilities within the existing and future 100-YR floodplain management plan Increase the # of communities participating in the National Increase the # of flood gauges (rainfall/stream) in the Flood Insurance Program Decrease the average age of FEMA Flood Insurance Rate Increase the # of entities that have multi-year drainage Maps used to define SFHAs Increase the coverage of available flood hazard data by Increase the # of entities that integrate National Weather completing studies with identified construction projects to Service and USGS Texas Water Science Center (TXWSC) address flooding hazards flood warning system information into their local capabilities to disseminate warnings Increase participation in the regional flood planning process Increase use of nature-based flood risk reduction projects Provide regional detention that could be used for water Develop a regionally coordinated warning and emergency response program that can detect the flood threat and reuse applications or as part of a floodplain management program provide timely warning of impending flood danger Increase acreage of publicly protected open space in critical Increase the amount of publicly owned land in the region flood risk areas that is reused for a beneficial public use that can be utilized for future regional stormwater infrastructure Increase outreach and education activities, specifically Increase the proficiency of floodplain managers by targeting municipal floodplain managers, hosted by Region increasing the # of them that are certified as Certified 15 RFPG and available on the website Floodplain Managers (CFM) with the Texas Floodplain Management Association Increase the use reverse 911, TV, radio, social media, and Increase participation in the Community Rating System by billboards to communicate flood warnings, evacuation encouraging Region 15 floodplain management programs routes, and shelter locations to incorporate dedicated drainage fees to implement Reduce the # of structures that have been subject to future FMEs and FMPs; incorporate noncompliance repeated flooding events through property buyouts 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
 □ Flood Preparedness Programs
- ☐ 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):		These are one-time costs for program development, education campaign, non-engineering study costs.	
Estimated year to start:	2019	Entity with Oversight	Primera
Time to complete?		Included in a Hazard Mitigation	Yes ✓ No □
	2021	Action Plan or other plan?	
Funding Dedicated?	Yes □ No 🗸	(Potential) Source of Funding	Local Funds; HMGP

Yes	Nο	./
YAS	INO	~



Flood Management Strategies Fact Sheet

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

Related Goals

Ш	increase community access routes to critical facilities,	V	increase the # of entitles that adopt higher than NFIP-
	evacuation routes, during and after a flooding event		minimum standards
	Reduce the # of newly constructed vulnerable critical		Develop and maintain an operational stormwater asset
	facilities within the existing and future 100-YR floodplain		management plan
	Increase the # of communities participating in the National		Increase the # of flood gauges (rainfall/stream) in the
	Flood Insurance Program		region
	Decrease the average age of FEMA Flood Insurance Rate		Increase the # of entities that have multi-year drainage
	Maps used to define SFHAs		CIP list
	Increase the coverage of available flood hazard data by		Increase the # of entities that integrate National Weather
	completing studies with identified construction projects to		Service and USGS Texas Water Science Center (TXWSC)
	address flooding hazards		flood warning system information into their local
			capabilities to disseminate warnings
	Increase participation in the regional flood planning process		Increase use of nature-based flood risk reduction projects
	Provide regional detention that could be used for water		Develop a regionally coordinated warning and emergency
	reuse applications or as part of a floodplain management		response program that can detect the flood threat and
	program		provide timely warning of impending flood danger
	Increase acreage of publicly protected open space in critical		Increase the amount of publicly owned land in the region
	flood risk areas that is reused for a beneficial public use		that can be utilized for future regional stormwater
			infrastructure
	Increase outreach and education activities, specifically		Increase the proficiency of floodplain managers by
	targeting municipal floodplain managers, hosted by Region		increasing the # of them that are certified as Certified
	15 RFPG and available on the website		Floodplain Managers (CFM) with the Texas Floodplain
			Management Association
	Increase the use reverse 911, TV, radio, social media, and		Increase participation in the Community Rating System by
	billboards to communicate flood warnings, evacuation		encouraging Region 15 floodplain management programs
	routes, and shelter locations		to incorporate dedicated drainage fees to implement
	Reduce the # of structures that have been subject to		future FMEs and FMPs; incorporate noncompliance
	repeated flooding events through property buyouts		penalties; and who regulate development in the future
			conditions floodplain

RFPG Recommended





Primera Action #8

FMS ID: 152000017

FMS Description

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

Strategy Type

- ☐ Education and Outreach Activities
- □ Protected Areas

- ☐ Regulatory and Guidance☐ Development Standards
- ✓ Flood Preparedness Programs
- ☐ Other:

Strategy Area

City/ Cities Primera

County/ Counties Cameron

HUC 8 12110208

HUC 12

Study Area (sq. mi.)

Princes

Emergency Need

Yes ✓ No 🗆

Known Flood Risk

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

Strategy Costs

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

Yes	Nο	./
YPS	INIO	~



RFPG Recommended

Yes ✓ No 🗆

FMS

Flood Management Strategies Fact Sheet

	s the strategy missing sufficient data to assess whether the pro DB guidelines?	opose	ed strategy has a negative effect, per Yes ✔ No 🗆
Rel	ated Goals		
	Increase community access routes to critical facilities,		Increase the # of entities that adopt higher than NFIP-
	evacuation routes, during and after a flooding event		minimum standards
	Reduce the # of newly constructed vulnerable critical		Develop and maintain an operational stormwater asset
	facilities within the existing and future 100-YR floodplain		management plan
	Increase the # of communities participating in the National Flood Insurance Program		Increase the # of flood gauges (rainfall/stream) in the region
	Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs		Increase the # of entities that have multi-year drainage CIP list
	Increase the coverage of available flood hazard data by		Increase the # of entities that integrate National Weather
	completing studies with identified construction projects to		Service and USGS Texas Water Science Center (TXWSC)
	address flooding hazards		flood warning system information into their local
	· ·		capabilities to disseminate warnings
	Increase participation in the regional flood planning process		Increase use of nature-based flood risk reduction projects
	Provide regional detention that could be used for water	\checkmark	Develop a regionally coordinated warning and emergency
	reuse applications or as part of a floodplain management		response program that can detect the flood threat and
	program		provide timely warning of impending flood danger
	Increase acreage of publicly protected open space in critical		Increase the amount of publicly owned land in the region
	flood risk areas that is reused for a beneficial public use		that can be utilized for future regional stormwater infrastructure
	Increase outreach and education activities, specifically		Increase the proficiency of floodplain managers by
	targeting municipal floodplain managers, hosted by Region		increasing the # of them that are certified as Certified
	15 RFPG and available on the website		Floodplain Managers (CFM) with the Texas Floodplain
	To the Gard available of the Woodsto		Management Association
	Increase the use reverse 911, TV, radio, social media, and		Increase participation in the Community Rating System by
	billboards to communicate flood warnings, evacuation		encouraging Region 15 floodplain management programs
	routes, and shelter locations		to incorporate dedicated drainage fees to implement
	Reduce the # of structures that have been subject to		future FMEs and FMPs; incorporate noncompliance
	repeated flooding events through property buyouts		penalties; and who regulate development in the future
			conditions floodplain

Page 2 of 2





Rancho Viejo Action #3

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.

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- $\hfill \square$ Education and Outreach Activities
- □ Protected Areas

- ✓ Regulatory and Guidance□ Development Standards
- ☐ Flood Preparedness Programs
- ☐ Other:

FMS ID: 152000018

Strategy Area

City/ Cities Rancho Viejo

County/ Counties Cameron

HUC 8 12110208

HUC 12

Study Area (sq. mi.)

Benetiv origin

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:

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





Have the flood risk and flood reduction impacts been evaluated?	Have th	ne flood i	risk and floc	d reduction	impacts been	evaluated?
---	---------	------------	---------------	-------------	--------------	------------

Yes □ No ✓			
Was the strategy missing sufficient data to assess whether the pro TWDB guidelines?	ed strategy has a ne	egative effect, per	Yes □ No ✓
Related Goals			
☐ Increase community access routes to critical facilities,		entities that adopt high	ner than NFIP-
evacuation routes, during and after a flooding event Reduce the # of newly constructed vulnerable critical	•	ntain an operational sto	ormwater asset
facilities within the existing and future 100-YR floodplain Increase the # of communities participating in the National	management plar	n flood gauges (rainfall/s	stream) in the
Flood Insurance Program	region		
 Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs 	Increase the # of of CIP list	entities that have mult	i-year drainage
 Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards 	Service and USGS flood warning sys	entities that integrate I Texas Water Science C stem information into the seminate warnings	Center (TXWSC)
□ Increase participation in the regional flood planning process	Increase use of na	ature-based flood risk r	
 Provide regional detention that could be used for water reuse applications or as part of a floodplain management program 	response program	ally coordinated warnir n that can detect the flo arning of impending flo	ood threat and
Increase acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use		unt of publicly owned l ed for future regional st	
 Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website 	Increase the profi increasing the # o	iciency of floodplain ma of them that are certifie gers (CFM) with the Tex ociation	ed as Certified
☐ Increase the use reverse 911, TV, radio, social media, and	Increase participa	ation in the Community	
billboards to communicate flood warnings, evacuation routes, and shelter locations		on 15 floodplain manaç dicated drainage fees t	
□ Reduce the # of structures that have been subject to repeated flooding events through property buyouts	future FMEs and I	FMPs; incorporate none no regulate developmer	compliance
REPG Recommended			





Rancho Viejo Action #11

FMS ID: 152000019

FMS Description

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

Strategy Type

✓ Education and Outreach Activities	 Regulatory and Guidance
□ Protected Areas	Development Standards

☐ Flood Preparedness Programs ☐ Development Standards ☐ Other:

Strategy Area

City/ Cities Rancho Viejo

County/ Counties Cameron

> HUC 8 12110208

HUC 12

Study Area (sq. mi.)

Rancho Viejo

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:			

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



Yes ✓ No 🗆



Flood Management Strategies Fact Sheet

Yes	□ No ✓		
	s the strategy missing sufficient data to assess whether the pro DB guidelines?	opose	ed strategy has a negative effect, per Yes □ No ✓
Rel	ated Goals		
	Increase community access routes to critical facilities, evacuation routes, during and after a flooding event		Increase the # of entities that adopt higher than NFIP-minimum standards
	Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain		Develop and maintain an operational stormwater asset management plan
	Increase the # of communities participating in the National Flood Insurance Program		Increase the # of flood gauges (rainfall/stream) in the region
	Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs		Increase the # of entities that have multi-year drainage CIP list
	Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards	✓	Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
	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 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 acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use		Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
	Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website		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 the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations		Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement
	Reduce the # of structures that have been subject to repeated flooding events through property buyouts		future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain
RFF	PG Recommended		





Rio Hondo Action #4

FMS ID: 152000020

FMS Description

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

Strategy Type

- ☐ Education and Outreach Activities
- □ Protected Areas

- ✓ Regulatory and Guidance
- $\ \square$ Flood Preparedness Programs
- ☐ Development Standards ☐ Other:

Strategy Area

City/ Cities Rio Hondo

County/ Counties Cameron

HUC 8 12110208

HUC 12

Study Area (sq. mi.)



Emergency Need

Yes ✓ No 🗆

Known Flood Risk

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

Strategy Costs

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

Yes	Nο	./
YAS	INO	~



Flood Management Strategies Fact Sheet

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

Related Goals Increase community access routes to critical facilities, Increase the # of entities that adopt higher than NFIPevacuation routes, during and after a flooding event minimum standards Reduce the # of newly constructed vulnerable critical Develop and maintain an operational stormwater asset facilities within the existing and future 100-YR floodplain management plan Increase the # of communities participating in the National Increase the # of flood gauges (rainfall/stream) in the Flood Insurance Program Decrease the average age of FEMA Flood Insurance Rate Increase the # of entities that have multi-year drainage Maps used to define SFHAs Increase the coverage of available flood hazard data by Increase the # of entities that integrate National Weather completing studies with identified construction projects to Service and USGS Texas Water Science Center (TXWSC) address flooding hazards flood warning system information into their local capabilities to disseminate warnings Increase participation in the regional flood planning process Increase use of nature-based flood risk reduction projects Provide regional detention that could be used for water Develop a regionally coordinated warning and emergency response program that can detect the flood threat and reuse applications or as part of a floodplain management program provide timely warning of impending flood danger Increase acreage of publicly protected open space in critical Increase the amount of publicly owned land in the region flood risk areas that is reused for a beneficial public use that can be utilized for future regional stormwater infrastructure Increase outreach and education activities, specifically Increase the proficiency of floodplain managers by targeting municipal floodplain managers, hosted by Region increasing the # of them that are certified as Certified 15 RFPG and available on the website Floodplain Managers (CFM) with the Texas Floodplain Management Association Increase the use reverse 911, TV, radio, social media, and Increase participation in the Community Rating System by billboards to communicate flood warnings, evacuation encouraging Region 15 floodplain management programs routes, and shelter locations to incorporate dedicated drainage fees to implement Reduce the # of structures that have been subject to future FMEs and FMPs; incorporate noncompliance repeated flooding events through property buyouts 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	Outrea	ch Acti	vities

□ 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:			

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





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Yes	□ No ✓	0.0	
	s the strategy missing sufficient data to assess whether the pro DB guidelines?	pose	ed strategy has a negative effect, per Yes □ No ✓
Rel	ated Goals		
	Increase community access routes to critical facilities, evacuation routes, during and after a flooding event Reduce the # of newly constructed vulnerable critical	√	Increase the # of entities that adopt higher than NFIP- minimum standards Develop and maintain an operational stormwater asset
	facilities within the existing and future 100-YR floodplain Increase the # of communities participating in the National Flood Insurance Program		management plan Increase the # of flood gauges (rainfall/stream) in the region
	Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs		Increase the # of entities that have multi-year drainage CIP list
	Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards		Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
	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 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 acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use		Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
	Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website		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 the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations		Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement
	Reduce the # of structures that have been subject to repeated flooding events through property buyouts		future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain
DE	DC Pacammandad		

RFPG Recommended





South Padre Island Action #13

FMS ID: 152000022

FMS Description

Adopt higher floodplain standards in local floodplain ordinance

Strategy Type

- ☐ Education and Outreach Activities
- □ Protected Areas

- ✓ Regulatory and Guidance
- $\hfill \square$ Flood Preparedness Programs
- ☐ 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):		These are one-time costs for program development, education campaign, and non-engineering study costs.		
Estimated year to start:	2021	Entity with Oversight	South Padre Island	
Time to complete?	2023	Included in a Hazard Mitigation	Yes ✓ No 🗆	
		Action Plan or other plan?		
Funding Dedicated?	Yes □ No 🗸	(Potential) Source of Funding	HMGP; Local Funds	

Yes	Nο	./
YAC	1/1//	v



Flood Management Strategies Fact Sheet

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

Related Goals Increase community access routes to critical facilities, Increase the # of entities that adopt higher than NFIPevacuation routes, during and after a flooding event minimum standards Reduce the # of newly constructed vulnerable critical Develop and maintain an operational stormwater asset facilities within the existing and future 100-YR floodplain management plan Increase the # of communities participating in the National Increase the # of flood gauges (rainfall/stream) in the Flood Insurance Program Decrease the average age of FEMA Flood Insurance Rate Increase the # of entities that have multi-year drainage Maps used to define SFHAs Increase the coverage of available flood hazard data by Increase the # of entities that integrate National Weather completing studies with identified construction projects to Service and USGS Texas Water Science Center (TXWSC) address flooding hazards flood warning system information into their local capabilities to disseminate warnings Increase participation in the regional flood planning process Increase use of nature-based flood risk reduction projects Provide regional detention that could be used for water Develop a regionally coordinated warning and emergency response program that can detect the flood threat and reuse applications or as part of a floodplain management program provide timely warning of impending flood danger Increase acreage of publicly protected open space in critical Increase the amount of publicly owned land in the region flood risk areas that is reused for a beneficial public use that can be utilized for future regional stormwater infrastructure Increase outreach and education activities, specifically Increase the proficiency of floodplain managers by targeting municipal floodplain managers, hosted by Region increasing the # of them that are certified as Certified 15 RFPG and available on the website Floodplain Managers (CFM) with the Texas Floodplain Management Association Increase the use reverse 911, TV, radio, social media, and Increase participation in the Community Rating System by billboards to communicate flood warnings, evacuation encouraging Region 15 floodplain management programs routes, and shelter locations to incorporate dedicated drainage fees to implement Reduce the # of structures that have been subject to future FMEs and FMPs; incorporate noncompliance repeated flooding events through property buyouts 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

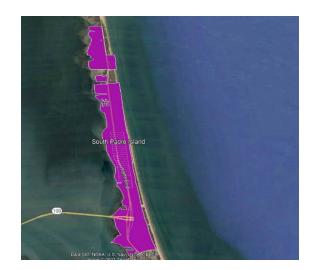
City/ Cities South Padre Island

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):		These are one-time costs for progra non-engineering study costs.	am development, education campaign, and
Estimated year to start:	2018	Entity with Oversight	South Padre Island
Time to complete?		Included in a Hazard Mitigation	Yes ✓ No 🗆
	2020	Action Plan or other plan?	
Funding Dedicated?	Yes □ No 🗸	(Potential) Source of Funding	HMGP; Local Funds

Yes	Nο	./
YPS	INIO	~



Flood Management Strategies Fact Sheet

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

Related Goals Increase community access routes to critical facilities, Increase the # of entities that adopt higher than NFIPevacuation routes, during and after a flooding event minimum standards Reduce the # of newly constructed vulnerable critical Develop and maintain an operational stormwater asset facilities within the existing and future 100-YR floodplain management plan Increase the # of communities participating in the National Increase the # of flood gauges (rainfall/stream) in the Flood Insurance Program Decrease the average age of FEMA Flood Insurance Rate Increase the # of entities that have multi-year drainage Maps used to define SFHAs Increase the coverage of available flood hazard data by Increase the # of entities that integrate National Weather completing studies with identified construction projects to Service and USGS Texas Water Science Center (TXWSC) address flooding hazards flood warning system information into their local capabilities to disseminate warnings Increase participation in the regional flood planning process Increase use of nature-based flood risk reduction projects Provide regional detention that could be used for water Develop a regionally coordinated warning and emergency response program that can detect the flood threat and reuse applications or as part of a floodplain management program provide timely warning of impending flood danger Increase acreage of publicly protected open space in critical Increase the amount of publicly owned land in the region flood risk areas that is reused for a beneficial public use that can be utilized for future regional stormwater infrastructure Increase outreach and education activities, specifically Increase the proficiency of floodplain managers by targeting municipal floodplain managers, hosted by Region increasing the # of them that are certified as Certified 15 RFPG and available on the website Floodplain Managers (CFM) with the Texas Floodplain Management Association Increase the use reverse 911, TV, radio, social media, and Increase participation in the Community Rating System by billboards to communicate flood warnings, evacuation encouraging Region 15 floodplain management programs routes, and shelter locations to incorporate dedicated drainage fees to implement Reduce the # of structures that have been subject to future FMEs and FMPs; incorporate noncompliance repeated flooding events through property buyouts 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

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 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:			

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





Have the flood risk and flood reduction impacts been evaluated?

Yes	□ No ✓		
	s the strategy missing sufficient data to assess whether the pro DB guidelines?	pose	ed strategy has a negative effect, per Yes □ No ✓
Rel	ated Goals		
✓	Increase community access routes to critical facilities, evacuation routes, during and after a flooding event		Increase the # of entities that adopt higher than NFIP-minimum standards
	Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain		Develop and maintain an operational stormwater asset management plan
	Increase the # of communities participating in the National Flood Insurance Program		Increase the # of flood gauges (rainfall/stream) in the region
	Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs		Increase the # of entities that have multi-year drainage CIP list
	Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards		Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
	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 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 acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use		Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
	Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website		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 the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations		Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement
	Reduce the # of structures that have been subject to repeated flooding events through property buyouts		future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

RFPG Recommended





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	Educat	on and (Outreach	Activitie
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☐ 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 \square	Miles inundated?		
Critical Facilities Impacted	Yes 🗆	No \square	Agricultural Land impacted	Yes □	No \square

Strategy Costs

Notes:

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

Yes	Nο	./
YAS	INO	~



Flood Management Strategies Fact Sheet

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

Related Goals Increase community access routes to critical facilities, Increase the # of entities that adopt higher than NFIPevacuation routes, during and after a flooding event minimum standards Reduce the # of newly constructed vulnerable critical Develop and maintain an operational stormwater asset facilities within the existing and future 100-YR floodplain management plan Increase the # of communities participating in the National Increase the # of flood gauges (rainfall/stream) in the Flood Insurance Program Decrease the average age of FEMA Flood Insurance Rate Increase the # of entities that have multi-year drainage Maps used to define SFHAs Increase the coverage of available flood hazard data by Increase the # of entities that integrate National Weather completing studies with identified construction projects to Service and USGS Texas Water Science Center (TXWSC) address flooding hazards flood warning system information into their local capabilities to disseminate warnings Increase participation in the regional flood planning process Increase use of nature-based flood risk reduction projects Provide regional detention that could be used for water Develop a regionally coordinated warning and emergency response program that can detect the flood threat and reuse applications or as part of a floodplain management program provide timely warning of impending flood danger Increase acreage of publicly protected open space in critical Increase the amount of publicly owned land in the region flood risk areas that is reused for a beneficial public use that can be utilized for future regional stormwater infrastructure Increase outreach and education activities, specifically Increase the proficiency of floodplain managers by targeting municipal floodplain managers, hosted by Region increasing the # of them that are certified as Certified 15 RFPG and available on the website Floodplain Managers (CFM) with the Texas Floodplain Management Association Increase the use reverse 911, TV, radio, social media, and Increase participation in the Community Rating System by billboards to communicate flood warnings, evacuation encouraging Region 15 floodplain management programs routes, and shelter locations to incorporate dedicated drainage fees to implement Reduce the # of structures that have been subject to future FMEs and FMPs; incorporate noncompliance repeated flooding events through property buyouts 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
- □ Protected Areas

- ✓ Regulatory and Guidance
- $\hfill \square$ Flood Preparedness Programs
- ☐ 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 □

Strategy Costs

Notes:

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

Yes	Nο	./
YPS	INIO	~



Flood Management Strategies Fact Sheet

encouraging Region 15 floodplain management programs

to incorporate dedicated drainage fees to implement

penalties; and who regulate development in the future

future FMEs and FMPs; incorporate noncompliance

conditions floodplain

Was the strategy missing sufficient data to assess whether the proposed strategy has a negative effect, per Yes □ No ✓ TWDB guidelines? Related Goals Increase community access routes to critical facilities, Increase the # of entities that adopt higher than NFIPevacuation routes, during and after a flooding event minimum standards Reduce the # of newly constructed vulnerable critical Develop and maintain an operational stormwater asset facilities within the existing and future 100-YR floodplain management plan Increase the # of communities participating in the National Increase the # of flood gauges (rainfall/stream) in the Flood Insurance Program Decrease the average age of FEMA Flood Insurance Rate Increase the # of entities that have multi-year drainage Maps used to define SFHAs Increase the coverage of available flood hazard data by Increase the # of entities that integrate National Weather completing studies with identified construction projects to Service and USGS Texas Water Science Center (TXWSC) address flooding hazards flood warning system information into their local capabilities to disseminate warnings Increase participation in the regional flood planning process Increase use of nature-based flood risk reduction projects Provide regional detention that could be used for water Develop a regionally coordinated warning and emergency response program that can detect the flood threat and reuse applications or as part of a floodplain management program provide timely warning of impending flood danger Increase acreage of publicly protected open space in critical Increase the amount of publicly owned land in the region flood risk areas that is reused for a beneficial public use that can be utilized for future regional stormwater infrastructure Increase outreach and education activities, specifically Increase the proficiency of floodplain managers by targeting municipal floodplain managers, hosted by Region increasing the # of them that are certified as Certified 15 RFPG and available on the website Floodplain Managers (CFM) with the Texas Floodplain Management Association Increase the use reverse 911, TV, radio, social media, and Increase participation in the Community Rating System by

RFPG Recommended

routes, and shelter locations

billboards to communicate flood warnings, evacuation

Reduce the # of structures that have been subject to

repeated flooding events through property buyouts

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
- $\hfill \square$ Regulatory and Guidance
- ✓ Flood Preparedness Programs

☐ Other:

□ Protected Areas

- $\ \square$ Development Standards

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		These are one-time costs for program development, education campaign, ar non-engineering study costs.			
above):		non-engineering study costs.			
Estimated year to start:	2021	Entity with Oversight	Edcouch		
Time to complete?	2021	Included in a Hazard Mitigation	Yes ✓ No □		
		Action Plan or other plan?			
Funding Dedicated?	Yes □ No 🗸	(Potential) Source of Funding	Jurisdiction Budget		



Flood Management Strategies Fact Sheet

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

Rel	ated Goals		
	Increase community access routes to critical facilities,		Increase the # of entities that adopt higher than NFIP-
	evacuation routes, during and after a flooding event		minimum standards
	Reduce the # of newly constructed vulnerable critical		Develop and maintain an operational stormwater asset
	facilities within the existing and future 100-YR floodplain		management plan
	Increase the # of communities participating in the National		Increase the # of flood gauges (rainfall/stream) in the
	Flood Insurance Program		region
	Decrease the average age of FEMA Flood Insurance Rate		Increase the # of entities that have multi-year drainage
	Maps used to define SFHAs		CIP list
	Increase the coverage of available flood hazard data by		Increase the # of entities that integrate National Weather
	completing studies with identified construction projects to		Service and USGS Texas Water Science Center (TXWSC)
	address flooding hazards		flood warning system information into their local
			capabilities to disseminate warnings
	Increase participation in the regional flood planning process		Increase use of nature-based flood risk reduction projects
	Provide regional detention that could be used for water		Develop a regionally coordinated warning and emergency
	reuse applications or as part of a floodplain management		response program that can detect the flood threat and
	program		provide timely warning of impending flood danger
	Increase acreage of publicly protected open space in critical		Increase the amount of publicly owned land in the region
	flood risk areas that is reused for a beneficial public use		that can be utilized for future regional stormwater
			infrastructure
	Increase outreach and education activities, specifically		Increase the proficiency of floodplain managers by
	targeting municipal floodplain managers, hosted by Region		increasing the # of them that are certified as Certified
	15 RFPG and available on the website		Floodplain Managers (CFM) with the Texas Floodplain
,	044 TV 11 11 11	_	Management Association
✓	Increase the use reverse 911, TV, radio, social media, and		Increase participation in the Community Rating System by
	billboards to communicate flood warnings, evacuation		encouraging Region 15 floodplain management programs
_	routes, and shelter locations		to incorporate dedicated drainage fees to implement
	Reduce the # of structures that have been subject to		future FMEs and FMPs; incorporate noncompliance
	repeated flooding events through property buyouts		penalties; and who regulate development in the future
			conditions floodplain

RFPG Recommended





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	Regulatory and Guidance

□ Protected Areas □ Development Standards

✓ Flood Preparedness Programs

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:

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



Yes ✓ No 🗆



Flood Management Strategies Fact Sheet

Yes	□ No ✓		
	s the strategy missing sufficient data to assess whether the pro DB guidelines?	pos∈	ed strategy has a negative effect, per Yes □ No ✓
Rel	ated Goals		
	Increase community access routes to critical facilities, evacuation routes, during and after a flooding event Reduce the # of newly constructed vulnerable critical		Increase the # of entities that adopt higher than NFIP- minimum standards Develop and maintain an operational stormwater asset
	facilities within the existing and future 100-YR floodplain Increase the # of communities participating in the National		management plan Increase the # of flood gauges (rainfall/stream) in the
	Flood Insurance Program Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs		region Increase the # of entities that have multi-year drainage CIP list
	Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards		Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
	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 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 acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use		Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
	Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website		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 the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations		Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement
	Reduce the # of structures that have been subject to repeated flooding events through property buyouts		future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain
RFF	PG Recommended		





Edinburg #1-1.2

FMS Description

Implement Reverse 9-1-1 System

Strategy Type

- ☐ Education and Outreach Activities
- □ Protected Areas

- ☐ Regulatory and Guidance☐ Development Standards
- ✓ Flood Preparedness Programs

FMS ID: 152000029

Strategy Area

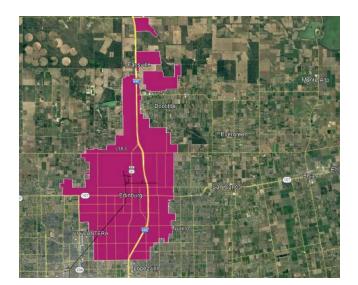
City/ Cities Edinburg

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

Voc	Nο	./
Yes	INIO	~



Flood Management Strategies Fact Sheet

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

Rel	ated Goals	
	Increase community access routes to critical facilities,	Increase the # of entities that adopt higher than NFIP-
	evacuation routes, during and after a flooding event	minimum standards
	Reduce the # of newly constructed vulnerable critical	Develop and maintain an operational stormwater asset
	facilities within the existing and future 100-YR floodplain	management plan
	Increase the # of communities participating in the National	Increase the # of flood gauges (rainfall/stream) in the
	Flood Insurance Program	region
	Decrease the average age of FEMA Flood Insurance Rate	Increase the # of entities that have multi-year drainage
	Maps used to define SFHAs	CIP list
	Increase the coverage of available flood hazard data by	Increase the # of entities that integrate National Weather
	completing studies with identified construction projects to	Service and USGS Texas Water Science Center (TXWSC)
	address flooding hazards	flood warning system information into their local
		capabilities to disseminate warnings
	Increase participation in the regional flood planning process	Increase use of nature-based flood risk reduction projects
	Provide regional detention that could be used for water	Develop a regionally coordinated warning and emergency
	reuse applications or as part of a floodplain management	response program that can detect the flood threat and
	program	provide timely warning of impending flood danger
	Increase acreage of publicly protected open space in critical	Increase the amount of publicly owned land in the region
	flood risk areas that is reused for a beneficial public use	that can be utilized for future regional stormwater
		infrastructure
	Increase outreach and education activities, specifically	Increase the proficiency of floodplain managers by
	targeting municipal floodplain managers, hosted by Region	increasing the # of them that are certified as Certified
	15 RFPG and available on the website	Floodplain Managers (CFM) with the Texas Floodplain
,		Management Association
✓	Increase the use reverse 911, TV, radio, social media, and	Increase participation in the Community Rating System by
	billboards to communicate flood warnings, evacuation	encouraging Region 15 floodplain management programs
	routes, and shelter locations	to incorporate dedicated drainage fees to implement
	Reduce the # of structures that have been subject to	future FMEs and FMPs; incorporate noncompliance
	repeated flooding events through property buyouts	penalties; and who regulate development in the future

conditions floodplain

RFPG Recommended





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.)

For salls Everances San Sarios Elsa War Attlefa For Nullio

Emergency Need

Yes ✓ No 🗆

Known Flood Risk

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

Strategy Costs

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

Yes	Nο	./
YAC	1/1//	v



Flood Management Strategies Fact Sheet

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

Rel	ated Goals	
	Increase community access routes to critical facilities,	Increase the # of entities that adopt higher than NFIP-
	evacuation routes, during and after a flooding event	minimum standards
	Reduce the # of newly constructed vulnerable critical	Develop and maintain an operational stormwater asset
	facilities within the existing and future 100-YR floodplain	management plan
	Increase the # of communities participating in the National	Increase the # of flood gauges (rainfall/stream) in the
	Flood Insurance Program	region
	Decrease the average age of FEMA Flood Insurance Rate	Increase the # of entities that have multi-year drainage
	Maps used to define SFHAs	CIP list
	Increase the coverage of available flood hazard data by	Increase the # of entities that integrate National Weather
	completing studies with identified construction projects to	Service and USGS Texas Water Science Center (TXWSC)
	address flooding hazards	flood warning system information into their local
		capabilities to disseminate warnings
	Increase participation in the regional flood planning process	Increase use of nature-based flood risk reduction projects
	Provide regional detention that could be used for water	Develop a regionally coordinated warning and emergency
	reuse applications or as part of a floodplain management	response program that can detect the flood threat and
	program	provide timely warning of impending flood danger
	Increase acreage of publicly protected open space in critical	Increase the amount of publicly owned land in the region
	flood risk areas that is reused for a beneficial public use	that can be utilized for future regional stormwater
		infrastructure
	Increase outreach and education activities, specifically	Increase the proficiency of floodplain managers by
	targeting municipal floodplain managers, hosted by Region	increasing the # of them that are certified as Certified
	15 RFPG and available on the website	Floodplain Managers (CFM) with the Texas Floodplain
,		Management Association
✓	Increase the use reverse 911, TV, radio, social media, and	Increase participation in the Community Rating System by
	billboards to communicate flood warnings, evacuation	encouraging Region 15 floodplain management programs
	routes, and shelter locations	to incorporate dedicated drainage fees to implement
	Reduce the # of structures that have been subject to	future FMEs and FMPs; incorporate noncompliance
	repeated flooding events through property buyouts	penalties; and who regulate development in the future

conditions floodplain

RFPG Recommended





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 🗆

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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:			

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





Have the flood risk and flood redu	uction imp	oacts been	evaluated?
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Yes	□ No ✓		
	s the strategy missing sufficient data to assess whether the pro DB guidelines?	pose	d strategy has a negative effect, per Yes □ No ✓
Rel	ated Goals		
	Increase community access routes to critical facilities, evacuation routes, during and after a flooding event		Increase the # of entities that adopt higher than NFIP-minimum standards
	Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain		Develop and maintain an operational stormwater asset management plan
	Increase the # of communities participating in the National Flood Insurance Program		Increase the # of flood gauges (rainfall/stream) in the region
	Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs		Increase the # of entities that have multi-year drainage CIP list
	Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards		Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
	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 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 acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use		Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
	Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website		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 the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations		Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement
	Reduce the # of structures that have been subject to repeated flooding events through property buyouts		future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain
> E			

RFPG Recommended





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
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□ 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:			

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





	Have the flood ris	sk and flood re	eduction imp	pacts been	evaluated?
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Yes	□ No ✓		
	s the strategy missing sufficient data to assess whether the pro DB guidelines?	pose	ed strategy has a negative effect, per Yes □ No ✓
Rel	ated Goals		
	Increase community access routes to critical facilities, evacuation routes, during and after a flooding event Reduce the # of newly constructed vulnerable critical		Increase the # of entities that adopt higher than NFIP- minimum standards Develop and maintain an operational stormwater asset
	facilities within the existing and future 100-YR floodplain Increase the # of communities participating in the National		management plan Increase the # of flood gauges (rainfall/stream) in the
	Flood Insurance Program Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs		region Increase the # of entities that have multi-year drainage CIP list
	Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards		Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
	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 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 acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use		Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
	Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website		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 the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations		Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement
	Reduce the # of structures that have been subject to repeated flooding events through property buyouts		future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

RFPG Recommended





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	□ Regulatory and Guidance	☐ Flood Preparedness Programs
□ Protected Areas	□ Development Standards	✓ 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:			

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



No □

Yes ✓



Flood Management Strategies Fact Sheet

Yes □ No ✓	•
Was the strategy missing sufficient data to assess whether the proTWDB guidelines?	oposed strategy has a negative effect, per Yes □ No ✓
Related Goals	
 Increase community access routes to critical facilities, evacuation routes, during and after a flooding event 	 Increase the # of entities that adopt higher than NFIP- minimum standards
 Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain 	 Develop and maintain an operational stormwater asset management plan
☐ Increase the # of communities participating in the National Flood Insurance Program	☐ Increase the # of flood gauges (rainfall/stream) in the region
 Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs 	 Increase the # of entities that have multi-year drainage CIP list
 Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards 	 Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
 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 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 acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use	 Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
 Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website 	 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 the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations 	 Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement
 Reduce the # of structures that have been subject to repeated flooding events through property buyouts 	future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain
RFPG Recommended	





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

Strategy Area

City/ Cities

County/ Counties Hidalgo

HUC 8 12110207

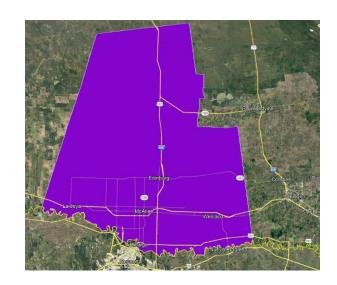
12110233

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:			

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



Yes ✓ No □



Flood Management Strategies Fact Sheet

Have the flood risk and flo	lood reduction imp	pacts been eva	aluated?
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Yes	□ No ✓		
	s the strategy missing sufficient data to assess whether the pro DB guidelines?	pos∈	ed strategy has a negative effect, per Yes □ No ✓
Rel	ated Goals		
	Increase community access routes to critical facilities, evacuation routes, during and after a flooding event Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain Increase 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		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
	program Increase acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use		Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
	Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website		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 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		Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement future FMEs and FMPs; incorporate noncompliance
	repeated flooding events through property buyouts		penalties; and who regulate development in the future conditions floodplain
RFF	PG Recommended		





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

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☐ 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

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 \square	Miles inundated?		
Critical Facilities Impacted	Yes 🗆	No \square	Agricultural Land impacted	Yes □	No □
Notes:					

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





Have the flood risk and flood redu	uction imp	oacts been	evaluated?
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Yes	□ No ✓		
	s the strategy missing sufficient data to assess whether the pro DB guidelines?	pose	d strategy has a negative effect, per Yes □ No ✓
Rel	ated Goals		
	Increase community access routes to critical facilities, evacuation routes, during and after a flooding event		Increase the # of entities that adopt higher than NFIP-minimum standards
	Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain		Develop and maintain an operational stormwater asset management plan
	Increase the # of communities participating in the National Flood Insurance Program		Increase the # of flood gauges (rainfall/stream) in the region
	Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs		Increase the # of entities that have multi-year drainage CIP list
	Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards		Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
	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 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 acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use		Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
	Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website		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 the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations		Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement
	Reduce the # of structures that have been subject to repeated flooding events through property buyouts		future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain
> E			

RFPG Recommended





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

□ Protected Areas

✓	Regulatory and Guidance
	Development Standards

 $\hfill \square$ Flood Preparedness Programs

☐ 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:

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





Have the flood risk and flood reduction	on impacts been evaluated?
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Yes	□ No ✓		
	s the strategy missing sufficient data to assess whether the pro DB guidelines?	pose	ed strategy has a negative effect, per Yes □ No ✓
Rel	ated Goals		
	Increase community access routes to critical facilities, evacuation routes, during and after a flooding event		Increase the # of entities that adopt higher than NFIP-minimum standards
	Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain		Develop and maintain an operational stormwater asset management plan
	Increase the # of communities participating in the National Flood Insurance Program Postroase the average are of FEMA Flood Insurance Pate.		Increase the # of flood gauges (rainfall/stream) in the region
□	Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs		Increase the # of entities that have multi-year drainage CIP list
•	Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards		Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
	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 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 acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use		Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
	Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website		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 the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations		Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement
	Reduce the # of structures that have been subject to repeated flooding events through property buyouts		future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain
RFF	PG Recommended		





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		Education	and	Outreach	Activitie
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□ 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 \square	Miles inundated?		
Critical Facilities Impacted	Yes □	No \square	Agricultural Land impacted	Yes □	No \square

Strategy Costs

Notes:

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



Yes ✓ No 🗆



Flood Management Strategies Fact Sheet

Have the flood risk and flood reduction	on impacts been evaluated?
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Yes	□ No ✓		
	s the strategy missing sufficient data to assess whether the pro DB guidelines?	pose	ed strategy has a negative effect, per Yes □ No ✓
Rel	ated Goals		
	Increase community access routes to critical facilities, evacuation routes, during and after a flooding event		Increase the # of entities that adopt higher than NFIP-minimum standards Develop and maintain an energtional starmwater asset
	Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain		Develop and maintain an operational stormwater asset management plan
	Increase the # of communities participating in the National Flood Insurance Program Decrease the average age of FEMA Flood Insurance Rate		Increase the # of flood gauges (rainfall/stream) in the region Increase the # of entities that have multi-year drainage
	Maps used to define SFHAs Increase the coverage of available flood hazard data by		CIP list Increase the # of entities that integrate National Weather
	completing studies with identified construction projects to address flooding hazards		Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
	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 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 acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use		Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
✓	Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website		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 the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations		Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement
	Reduce the # of structures that have been subject to repeated flooding events through property buyouts		future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain
RFF	PG Recommended		





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

Educat	tion a	and	Out	reach	Activ	ities

□ Protected Areas

Regulatory and Guidance
Development Standards

✓ Flood Preparedness Programs

☐ Other:

Strategy Area

City/ Cities La Villa

County/ Counties Hidalgo

HUC 8 12110208

HUC 12

Study Area (sq. mi.)

Emergency Need

Yes ✓ No □



Known Flood Risk

History of Flooding? Yes ✓ No □ Frequency of flooding:

Population at Risk # of structures inundated

Roadways flooded Yes □ No □ Miles inundated?

Critical Facilities Impacted Yes □ No □ Agricultural Land impacted Yes □ No □

Notes:

Strategy Costs

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

Have the flood risk and flood reduction impacts been evaluated?

Yes □ No ✓



Flood Management Strategies Fact Sheet

future FMEs and FMPs; incorporate noncompliance

conditions floodplain

penalties; and who regulate development in the future

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

Related Goals Increase community access routes to critical facilities, Increase the # of entities that adopt higher than NFIPevacuation routes, during and after a flooding event minimum standards Reduce the # of newly constructed vulnerable critical Develop and maintain an operational stormwater asset facilities within the existing and future 100-YR floodplain management plan Increase the # of communities participating in the National Increase the # of flood gauges (rainfall/stream) in the Flood Insurance Program Decrease the average age of FEMA Flood Insurance Rate Increase the # of entities that have multi-year drainage Maps used to define SFHAs Increase the coverage of available flood hazard data by Increase the # of entities that integrate National Weather completing studies with identified construction projects to Service and USGS Texas Water Science Center (TXWSC) address flooding hazards flood warning system information into their local capabilities to disseminate warnings Increase participation in the regional flood planning process Increase use of nature-based flood risk reduction projects Provide regional detention that could be used for water Develop a regionally coordinated warning and emergency reuse applications or as part of a floodplain management response program that can detect the flood threat and provide timely warning of impending flood danger program Increase acreage of publicly protected open space in critical Increase the amount of publicly owned land in the region flood risk areas that is reused for a beneficial public use that can be utilized for future regional stormwater infrastructure Increase outreach and education activities, specifically Increase the proficiency of floodplain managers by targeting municipal floodplain managers, hosted by Region increasing the # of them that are certified as Certified 15 RFPG and available on the website Floodplain Managers (CFM) with the Texas Floodplain Management Association Increase the use reverse 911, TV, radio, social media, and Increase participation in the Community Rating System by billboards to communicate flood warnings, evacuation encouraging Region 15 floodplain management programs routes, and shelter locations to incorporate dedicated drainage fees to implement

RFPG Recommended

Reduce the # of structures that have been subject to

repeated flooding events through property buyouts

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 a	nd Outread	ch 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-		These are one-time costs for program development, education campaign, and		
capital Cost (include in Total		non-engineering study costs.		
above):				
Estimated year to start:	2021	Entity with Oversight	La Villa	
Time to complete?		Included in a Hazard Mitigation	Yes ✓ No 🗆	
	2023	Action Plan or other plan?		
Funding Dedicated?	Yes □ No 🗸	(Potential) Source of Funding	Jurisdiction Budget	

V	NI -	/
Vρς	Nο	✓



Flood Management Strategies Fact Sheet

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

Rel	ated Goals	
	Increase community access routes to critical facilities,	Increase the # of entities that adopt higher than NFIP-
	evacuation routes, during and after a flooding event	minimum standards
	Reduce the # of newly constructed vulnerable critical	Develop and maintain an operational stormwater asset
	facilities within the existing and future 100-YR floodplain	management plan
	Increase the # of communities participating in the National	Increase the # of flood gauges (rainfall/stream) in the
	Flood Insurance Program	region
	Decrease the average age of FEMA Flood Insurance Rate	Increase the # of entities that have multi-year drainage
	Maps used to define SFHAs	CIP list
	Increase the coverage of available flood hazard data by	Increase the # of entities that integrate National Weather
	completing studies with identified construction projects to	Service and USGS Texas Water Science Center (TXWSC)
	address flooding hazards	flood warning system information into their local
		capabilities to disseminate warnings
	Increase participation in the regional flood planning process	Increase use of nature-based flood risk reduction projects
	Provide regional detention that could be used for water	Develop a regionally coordinated warning and emergency
	reuse applications or as part of a floodplain management	response program that can detect the flood threat and
	program	provide timely warning of impending flood danger
	Increase acreage of publicly protected open space in critical	Increase the amount of publicly owned land in the region
	flood risk areas that is reused for a beneficial public use	that can be utilized for future regional stormwater
		infrastructure
	Increase outreach and education activities, specifically	Increase the proficiency of floodplain managers by
	targeting municipal floodplain managers, hosted by Region	increasing the # of them that are certified as Certified
	15 RFPG and available on the website	Floodplain Managers (CFM) with the Texas Floodplain
		Management Association
\checkmark	Increase the use reverse 911, TV, radio, social media, and	Increase participation in the Community Rating System by
	billboards to communicate flood warnings, evacuation	encouraging Region 15 floodplain management programs
	routes, and shelter locations	to incorporate dedicated drainage fees to implement
	Reduce the # of structures that have been subject to	future FMEs and FMPs; incorporate noncompliance
	repeated flooding events through property buyouts	penalties; and who regulate development in the future

conditions floodplain

RFPG Recommended





McAllen #11-1.1 FMS ID: 152000040

FMS Description

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

Strategy Type

 Education and Outreach Activities 	Regulatory and Guidance	✓ Flood Preparedness Programs
□ Protoctad Arass	□ Develonment 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 🗸 No 🗆	Frequency of flooding:		
Population at Risk		# of structures inundated		
Roadways flooded	Yes □ No □	Miles inundated?		
Critical Facilities Impacted	Yes □ No □	Agricultural Land impacted	Yes □	No 🗆
Notes:				

Strategy Costs

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

Yes	No	✓



Flood Management Strategies Fact Sheet

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

Rel	ated Goals	
	Increase community access routes to critical facilities, evacuation routes, during and after a flooding event	Increase the # of entities that adopt higher than NFIP-minimum standards
	Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain	Develop and maintain an operational stormwater asset management plan
	Increase the # of communities participating in the National Flood Insurance Program	Increase the # of flood gauges (rainfall/stream) in the region
	Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs	Increase the # of entities that have multi-year drainage CIP list
	Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards	Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
	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 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 acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use	Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
	Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website	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 the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations	Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement
	Reduce the # of structures that have been subject to repeated flooding events through property buyouts	future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

RFPG Recommended





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

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Education	and O	utreach	Activities	

□ Protected Areas

☐ Regulatory and Guidance☐ Development Standards

✓ Flood Preparedness Programs

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

Vρς	Nο	✓



Flood Management Strategies Fact Sheet

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

Rel	ated Goals	
	Increase community access routes to critical facilities,	Increase the # of entities that adopt higher than NFIP-
	evacuation routes, during and after a flooding event	minimum standards
	Reduce the # of newly constructed vulnerable critical	Develop and maintain an operational stormwater asset
	facilities within the existing and future 100-YR floodplain	management plan
	Increase the # of communities participating in the National	Increase the # of flood gauges (rainfall/stream) in the
	Flood Insurance Program	region
	Decrease the average age of FEMA Flood Insurance Rate	Increase the # of entities that have multi-year drainage
	Maps used to define SFHAs	CIP list
	Increase the coverage of available flood hazard data by	Increase the # of entities that integrate National Weather
	completing studies with identified construction projects to	Service and USGS Texas Water Science Center (TXWSC)
	address flooding hazards	flood warning system information into their local
		capabilities to disseminate warnings
	Increase participation in the regional flood planning process	Increase use of nature-based flood risk reduction projects
	Provide regional detention that could be used for water	Develop a regionally coordinated warning and emergency
	reuse applications or as part of a floodplain management	response program that can detect the flood threat and
	program	provide timely warning of impending flood danger
	Increase acreage of publicly protected open space in critical	Increase the amount of publicly owned land in the region
	flood risk areas that is reused for a beneficial public use	that can be utilized for future regional stormwater
		infrastructure
	Increase outreach and education activities, specifically	Increase the proficiency of floodplain managers by
	targeting municipal floodplain managers, hosted by Region	increasing the # of them that are certified as Certified
	15 RFPG and available on the website	Floodplain Managers (CFM) with the Texas Floodplain
		Management Association
\checkmark	Increase the use reverse 911, TV, radio, social media, and	Increase participation in the Community Rating System by
	billboards to communicate flood warnings, evacuation	encouraging Region 15 floodplain management programs
	routes, and shelter locations	to incorporate dedicated drainage fees to implement
	Reduce the # of structures that have been subject to	future FMEs and FMPs; incorporate noncompliance
	repeated flooding events through property buyouts	penalties; and who regulate development in the future
		conditions floodplain

RFPG Recommended





McAllen #1-2.1 FMS ID: 152000042

FMS Description

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

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□ Education and Outreach Activities

□ Protected Areas

Regulatory and Guidance	
Development Standards	

✓ Flood Preparedness Programs

☐ Other:

Strategy Area

City/ Cities McAllen

County/ Counties Hidalgo

HUC 8 12110208

HUC 12

Study Area (sq. mi.)

Emergency Need

Yes ✓ No 🗆



Known Flood Risk

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

Strategy Costs

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

Yes	No	✓



Flood Management Strategies Fact Sheet

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

Related Goals

	Increase community access routes to critical facilities, evacuation routes, during and after a flooding event	Increase the # of entities that adopt higher than NFIP-minimum standards
	Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain	Develop and maintain an operational stormwater asset management plan
	Increase the # of communities participating in the National Flood Insurance Program	Increase the # of flood gauges (rainfall/stream) in the region
	Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs	Increase the # of entities that have multi-year drainage CIP list
	Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards	Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
	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 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 acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use	Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
	Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website	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 the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations	Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement
	Reduce the # of structures that have been subject to repeated flooding events through property buyouts	future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

RFPG Recommended





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 a	nd Outread	ch Activities

□ Protected Areas

☐ Regulatory and Guidance☐ Development Standards

✓ Flood Preparedness Programs

☐ Other:

Strategy Area

City/ Cities Mercedes

County/ Counties Hidalgo

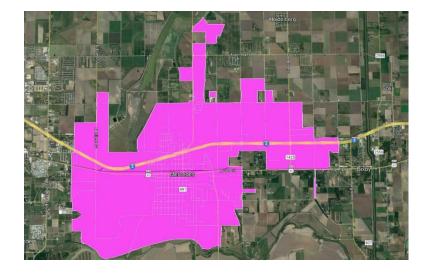
HUC 8 12110208

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

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Flood Management Strategies Fact Sheet

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

Related Goals

	Increase community access routes to critical facilities, evacuation routes, during and after a flooding event	Increase the # of entities that adopt higher than NFIP-minimum standards
	Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain	Develop and maintain an operational stormwater asset management plan
	Increase the # of communities participating in the National	Increase the # of flood gauges (rainfall/stream) in the
	Flood Insurance Program Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs	region Increase the # of entities that have multi-year drainage CIP list
	Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards	Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
	Increase participation in the regional flood planning process	Increase use of nature-based flood risk reduction projects
	Provide regional detention that could be used for water reuse applications or as part of a floodplain management program	Develop a regionally coordinated warning and emergency response program that can detect the flood threat and provide timely warning of impending flood danger
	Increase acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use	Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
	Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website	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 the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations	Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement
	Reduce the # of structures that have been subject to repeated flooding events through property buyouts	future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

RFPG Recommended





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

Educat	tion a	and	Outr	each	Activi	ties

□ Protected Areas

Regulatory and Guidance
Development Standards

 $\hfill \square$ Flood Preparedness Programs

✓ Other:

Strategy Area

City/ Cities Mercedes

County/ Counties Hidalgo

HUC 8 12110208

HUC 12

Study Area (sq. mi.)

Emergency Need

Yes ✓ No □



Known Flood Risk

History of Flooding? Yes ✓ No □ Frequency of flooding:

Population at Risk # of structures inundated

Roadways flooded Yes □ No □ Miles inundated?

Critical Facilities Impacted Yes □ No □ Agricultural Land impacted Yes □ No □

Notes:

Strategy Costs

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

Have the flood risk and flood reduction impacts been evaluated?

Yes □ No ✓



Flood Management Strategies Fact Sheet

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

Rel	ated Goals	
	Increase community access routes to critical facilities, evacuation routes, during and after a flooding event	Increase the # of entities that adopt higher than NFIP-minimum standards
	Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain	Develop and maintain an operational stormwater asset management plan
	Increase the # of communities participating in the National Flood Insurance Program	Increase the # of flood gauges (rainfall/stream) in the region
	Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs	Increase the # of entities that have multi-year drainage CIP list
	Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards	Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
	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 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 acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use	Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
	Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website	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 the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations	Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement
	Reduce the # of structures that have been subject to repeated flooding events through property buyouts	future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

RFPG Recommended





Mission #1-1.1 FMS ID: 152000045

FMS Description

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

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

Strategy Area

City/ Cities Mission

County/ Counties Hidalgo

HUC 8 12110208

HUC 12

Study Area (sq. mi.)

Emergency Need

Yes ✓ No 🗆

Known Flood Risk

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

Strategy Costs

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

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Flood Management Strategies Fact Sheet

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

Related Goals

	Increase community access routes to critical facilities, evacuation routes, during and after a flooding event	Increase the # of entities that adopt higher than NFIP-minimum standards
	Reduce the # of newly constructed vulnerable critical	Develop and maintain an operational stormwater asset
	facilities within the existing and future 100-YR floodplain Increase the # of communities participating in the National	management plan Increase the # of flood gauges (rainfall/stream) in the
_	Flood Insurance Program	region
	Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs	Increase the # of entities that have multi-year drainage CIP list
	Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards	Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
	Increase participation in the regional flood planning process	Increase use of nature-based flood risk reduction projects
	Provide regional detention that could be used for water reuse applications or as part of a floodplain management program	Develop a regionally coordinated warning and emergency response program that can detect the flood threat and provide timely warning of impending flood danger
	Increase acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use	Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
	Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website	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 the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations	Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement
	Reduce the # of structures that have been subject to repeated flooding events through property buyouts	future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future

conditions floodplain

RFPG Recommended





Mission #7-1.1 FMS ID: 152000046

FMS Description

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

Strategy Type

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

Strategy Area

City/ Cities Mission

County/ Counties Hidalgo

HUC 8 12110208

HUC 12

Study Area (sq. mi.)

Emergency Need

Yes ✓ No 🗆

Control of the contro

Known Flood Risk

History of Flooding?	Yes ✓ N	Vo □	Frequency of flooding:		
Population at Risk			# of structures inundated		
Roadways flooded	Yes 🗆 N	10 🗆	Miles inundated?		
Critical Facilities Impacted	Yes 🗆 N	√o □	Agricultural Land impacted	Yes □	No □
Notes:					

Strategy Costs

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

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Flood Management Strategies Fact Sheet

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

Rel	ated Goals	
	Increase community access routes to critical facilities, evacuation routes, during and after a flooding event	Increase the # of entities that adopt higher than NFIP-minimum standards
	Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain	Develop and maintain an operational stormwater asset management plan
	Increase the # of communities participating in the National Flood Insurance Program	Increase the # of flood gauges (rainfall/stream) in the region
	Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs	Increase the # of entities that have multi-year drainage CIP list
	Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards	Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
	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 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 acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use	Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
	Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website	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 the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations	Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement
	Reduce the # of structures that have been subject to repeated flooding events through property buyouts	future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

RFPG Recommended





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 🗆

Abam-Perezvile Abam-Perezvile

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

Yes	No	√
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Flood Management Strategies Fact Sheet

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

Rel	ated Goals		
	Increase community access routes to critical facilities,		Increase the # of entities that adopt higher than NFIP-
	evacuation routes, during and after a flooding event Reduce the # of newly constructed vulnerable critical	П	minimum standards Develop and maintain an operational stormwater asset
	facilities within the existing and future 100-YR floodplain		management plan
	Increase the # of communities participating in the National		Increase the # of flood gauges (rainfall/stream) in the
_	Flood Insurance Program	_	region
	Decrease the average age of FEMA Flood Insurance Rate		Increase the # of entities that have multi-year drainage
	Maps used to define SFHAs		CIP list
	Increase the coverage of available flood hazard data by		Increase the # of entities that integrate National Weather
	completing studies with identified construction projects to		Service and USGS Texas Water Science Center (TXWSC)
	address flooding hazards		flood warning system information into their local
	Increase participation in the regional flood planning process		capabilities to disseminate warnings
	Increase participation in the regional flood planning process Provide regional detention that could be used for water		Increase use of nature-based flood risk reduction projects Develop a regionally coordinated warning and emergency
	reuse applications or as part of a floodplain management	Ш	response program that can detect the flood threat and
	program		provide timely warning of impending flood danger
	Increase acreage of publicly protected open space in critical		Increase the amount of publicly owned land in the region
	flood risk areas that is reused for a beneficial public use		that can be utilized for future regional stormwater
	·		infrastructure
	Increase outreach and education activities, specifically		Increase the proficiency of floodplain managers by
	targeting municipal floodplain managers, hosted by Region		increasing the # of them that are certified as Certified
	15 RFPG and available on the website		Floodplain Managers (CFM) with the Texas Floodplain
,	language the consequence O11 TV and a control word and		Management Association
✓	Increase the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation		Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs
	routes, and shelter locations		to incorporate dedicated drainage fees to implement
	Reduce the # of structures that have been subject to		future FMEs and FMPs; incorporate noncompliance
	repeated flooding events through property buyouts		penalties; and who regulate development in the future
			conditions floodplain

RFPG Recommended





Palmyiew #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.)

Gelinday Felinday South Abram-Perdzville

Yes □ No □

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

Notes:

Strategy Costs

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





Have the flood risk and flood reduction impacts been evaluated?

Yes □ No ✓						
Was the strategy missing sufficient data to assess whether the proposed strategy has a negative effect, per Yes □ No ✓ IWDB guidelines?						
elated Goals						
☐ Increase community access routes to critical facilities, evacuation routes, during and after a flooding event	r	Increase the # of entities that adopt higher than NFIP-minimum standards				
Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain	r	Develop and maintain an operational stormwater asset management plan				
☐ Increase the # of communities participating in the National Flood Insurance Program	r	Increase the # of flood gauges (rainfall/stream) in the region				
 Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs 	(Increase the # of entities that have multi-year drainage CIP list				
 Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards 	f	Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings				
 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 	□ [r	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 acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use		Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure				
 Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website 	i F	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 the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations	ϵ	Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement				
Reduce the # of structures that have been subject to repeated flooding events through property buyouts	f	future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain				

RFPG Recommended



Flood Management Strategies Fact Sheet

Pharr #10-1.1 FMS ID: 152000049

FMS Description

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

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

Strategy Area

City/ Cities

County/ Counties Hidalgo

HUC 8 12110208

HUC 12

Study Area (sq. mi.)

Emergency Need

Yes ✓ No 🗆

Known Flood Risk

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

Strategy Costs

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





Have the flood risk and flood reduction impacts been evaluated?

Yes	□ No ✓					
	Was the strategy missing sufficient data to assess whether the proposed strategy has a negative effect, per Yes □ No ✓ IWDB guidelines?					
Rel	ated Goals					
	Increase community access routes to critical facilities, evacuation routes, during and after a flooding event		Increase the # of entities that adopt higher than NFIP-minimum standards			
	Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain		Develop and maintain an operational stormwater asset management plan			
	Increase the # of communities participating in the National Flood Insurance Program		Increase the # of flood gauges (rainfall/stream) in the region			
	Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs		Increase the # of entities that have multi-year drainage CIP list			
	Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards		Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings			
	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 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 acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use		Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure			
	Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website		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 the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations		Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement			
	Reduce the # of structures that have been subject to repeated flooding events through property buyouts		future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain			
> E						

RFPG Recommended





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		Education	and	Outreach	Activitie
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□ 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.)

CONTROL OF THE CENTER OF THE C

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

Yes	Nο	./
YPS	INIO	~



Flood Management Strategies Fact Sheet

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

Rel	ated Goals	
	Increase community access routes to critical facilities,	Increase the # of entities that adopt higher than NFIP-
	evacuation routes, during and after a flooding event	minimum standards
	Reduce the # of newly constructed vulnerable critical	Develop and maintain an operational stormwater asset
	facilities within the existing and future 100-YR floodplain	management plan
	Increase the # of communities participating in the National	Increase the # of flood gauges (rainfall/stream) in the
	Flood Insurance Program	region
	Decrease the average age of FEMA Flood Insurance Rate	Increase the # of entities that have multi-year drainage
	Maps used to define SFHAs	CIP list
	Increase the coverage of available flood hazard data by	Increase the # of entities that integrate National Weather
	completing studies with identified construction projects to	Service and USGS Texas Water Science Center (TXWSC)
	address flooding hazards	flood warning system information into their local
		capabilities to disseminate warnings
	Increase participation in the regional flood planning process	Increase use of nature-based flood risk reduction projects
	Provide regional detention that could be used for water	Develop a regionally coordinated warning and emergency
	reuse applications or as part of a floodplain management	response program that can detect the flood threat and
	program	provide timely warning of impending flood danger
	Increase acreage of publicly protected open space in critical	Increase the amount of publicly owned land in the region
	flood risk areas that is reused for a beneficial public use	that can be utilized for future regional stormwater
		infrastructure
	Increase outreach and education activities, specifically	Increase the proficiency of floodplain managers by
	targeting municipal floodplain managers, hosted by Region	increasing the # of them that are certified as Certified
	15 RFPG and available on the website	Floodplain Managers (CFM) with the Texas Floodplain
,		Management Association
✓	Increase the use reverse 911, TV, radio, social media, and	Increase participation in the Community Rating System by
	billboards to communicate flood warnings, evacuation	encouraging Region 15 floodplain management programs
	routes, and shelter locations	to incorporate dedicated drainage fees to implement
	Reduce the # of structures that have been subject to	future FMEs and FMPs; incorporate noncompliance
	repeated flooding events through property buyouts	penalties; and who regulate development in the future

conditions floodplain

RFPG Recommended





Alamo #4-1.2 FMS ID: 152000051

FMS Description

Provide Traffic Control And Evacuation Assistance During Emergency Situations

Strategy Type

- □ Education and Outreach Activities
- □ Protected Areas

- ✓ Regulatory and Guidance□ Development Standards
- $\hfill \square$ Flood Preparedness Programs
- ☐ Other:

Strategy Area

City/ Cities Alamo

County/ Counties Hidalgo

HUC 8 12110208

HUC 12

Study Area (sq. mi.)

Alance South Alanc

Emergency Need

Yes ✓ No 🗆

Known Flood Risk

History of Flooding?

Population at Risk

Roadways flooded

Yes □ No □ Frequency of flooding:

of structures inundated

Miles inundated?

Yes □ No □ Agricultural Land impacted Yes □ No □

Notes:

Strategy Costs

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





Have the flood risk and flood reduction impacts been evaluated?

Yes	S □ No ✓		
	as the strategy missing sufficient data to assess whether the pro /DB guidelines?	pos∈	ed strategy has a negative effect, per Yes □ No ✓
Rel	lated Goals		
✓	Increase community access routes to critical facilities, evacuation routes, during and after a flooding event		Increase the # of entities that adopt higher than NFIP-minimum standards
	Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain		Develop and maintain an operational stormwater asset management plan
	Increase the # of communities participating in the National Flood Insurance Program		Increase the # of flood gauges (rainfall/stream) in the region
	Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs		Increase the # of entities that have multi-year drainage CIP list
	Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards		Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
	Increase participation in the regional flood planning process		Increase use of nature-based flood risk reduction projects
	Provide regional detention that could be used for water reuse applications or as part of a floodplain management program		Develop a regionally coordinated warning and emergency response program that can detect the flood threat and provide timely warning of impending flood danger
	Increase acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use		Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
	Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website		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 the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations		Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement
	Reduce the # of structures that have been subject to repeated flooding events through property buyouts		future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

RFPG Recommended

Yes ✓No □





Starr County Hazard Mitigation Plan Action #2 FMS ID: 152000052

FMS Description

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

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 Education and Outreach Activitie 	S

□ Protected Areas

✓ Regulatory and Guidance□ Development Standards

☐ Flood Preparedness Programs

☐ Other:

Strategy Area

City/ Cities County Wide

County/ Counties Starr County

HUC 8

HUC 12

Study Area (sq. mi.)

I Source of the states of the

Emergency Need

Yes ✓ No 🗆

Known Flood Risk

History of Flooding? Yes ✓ No □ Frequency of flooding:

Population at Risk # of structures inundated

Roadways flooded Yes □ No □ Miles inundated?

Critical Facilities Impacted Yes □ No □ Agricultural Land impacted Yes □ No □

Notes:

Strategy Costs

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





Have the flood risk and flood reduction impacts been evaluated?

Yes	□ No ✓		
	s the strategy missing sufficient data to assess whether the pro DB guidelines?	pose	ed strategy has a negative effect, per Yes □ No ✓
Rel	ated Goals		
✓	Increase community access routes to critical facilities, evacuation routes, during and after a flooding event		Increase the # of entities that adopt higher than NFIP-minimum standards
	Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain		Develop and maintain an operational stormwater asset management plan
	Increase the # of communities participating in the National Flood Insurance Program		Increase the # of flood gauges (rainfall/stream) in the region
	Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs		Increase the # of entities that have multi-year drainage CIP list
	Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards		Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
	Increase participation in the regional flood planning process		Increase use of nature-based flood risk reduction projects
	Provide regional detention that could be used for water reuse applications or as part of a floodplain management program		Develop a regionally coordinated warning and emergency response program that can detect the flood threat and provide timely warning of impending flood danger
	Increase acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use		Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
	Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website		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 the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations		Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement
	Reduce the # of structures that have been subject to repeated flooding events through property buyouts		future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

RFPG Recommended

Yes ✓ No □





Starr County Hazard Mitigation Plan Action #6 FMS ID: 152000053

FMS Description

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

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	JJ	<i>J</i> I

Educat	tion	and	Out	reach	Activ	ities

□ Protected Areas

✓	Regulatory and Guidance
	Development Standards

☐ Flood Preparedness Programs

Strategy Area

City/ Cities Rio Grande City

County/ Counties Starr

HUC 8

HUC 12

Study Area (sq. mi.)

Resconded St. Maderoist Sample St. Equatorist Equa

Emergency Need

Yes ✓ No 🗆

Known Flood Risk

History of Flooding? Yes ✓ No □

Population at Risk #

Roadways flooded Yes □ No □

Critical Facilities Impacted Yes □ No □ Agr

Notes:

Frequency of flooding:
of structures inundated
Miles inundated?

Agricultural Land impacted Yes
No

Strategy Costs

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





Have the flood risk and flood reduction impacts been evaluated?

Yes	□ No ✓		
	s the strategy missing sufficient data to assess whether the pro DB guidelines?	pos∈	ed strategy has a negative effect, per Yes □ No ✓
Rel	ated Goals		
✓	Increase community access routes to critical facilities,		Increase the # of entities that adopt higher than NFIP-
	evacuation routes, during and after a flooding event Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain		minimum standards Develop and maintain an operational stormwater asset management plan
	Increase the # of communities participating in the National Flood Insurance Program		Increase the # of flood gauges (rainfall/stream) in the region
	Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs		Increase the # of entities that have multi-year drainage CIP list
	Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards		Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
	Increase participation in the regional flood planning process		Increase use of nature-based flood risk reduction projects
	Provide regional detention that could be used for water reuse applications or as part of a floodplain management program		Develop a regionally coordinated warning and emergency response program that can detect the flood threat and provide timely warning of impending flood danger
	Increase acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use		Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
	Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website		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 the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations		Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement
	Reduce the # of structures that have been subject to repeated flooding events through property buyouts		future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

RFPG Recommended

Yes ✓No □





Starr County Hazard Mitigation Plan Action #10 FMS ID: 152000054

FMS Description

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

Strategy Type

- $\hfill\Box$ Education and Outreach Activities
- □ Protected Areas

- ✓ Regulatory and Guidance□ Development Standards
- $\hfill \square$ Flood Preparedness Programs
- □ Other:

Strategy Area

City/ Cities Roma

County/ Counties Starr

HUC 8

HUC 12

Study Area (sq. mi.)



Emergency Need

Yes ✓ No 🗆

Known Flood Risk

History of Flooding? Yes ✓ No □ Frequency of flooding:

Population at Risk # of structures inundated

Roadways flooded Yes □ No □ Miles inundated?

Critical Facilities Impacted Yes □ No □ Agricultural Land impacted Yes □ No □

Notes:

Strategy Costs

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





Have the flood risk and flood reduction impacts been evaluated?

	ve the hood risk and hood reduction imp	uac	is been evaluated?
	s the strategy missing sufficient data to assess whether the pro DB guidelines?	pose	ed strategy has a negative effect, per Yes □ No ✓
Rel	lated Goals		
✓	Increase community access routes to critical facilities, evacuation routes, during and after a flooding event		Increase the # of entities that adopt higher than NFIP-minimum standards
	Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain		Develop and maintain an operational stormwater asset management plan
	Increase the # of communities participating in the National Flood Insurance Program		Increase the # of flood gauges (rainfall/stream) in the region
	Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs		Increase the # of entities that have multi-year drainage CIP list
	Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards		Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
	Increase participation in the regional flood planning process		Increase use of nature-based flood risk reduction projects
	Provide regional detention that could be used for water reuse applications or as part of a floodplain management program		Develop a regionally coordinated warning and emergency response program that can detect the flood threat and provide timely warning of impending flood danger
	Increase acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use		Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
	Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website		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 the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations		Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement
	Reduce the # of structures that have been subject to repeated flooding events through property buyouts		future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

RFPG Recommended





Starr County Hazard Mitigation Plan Action #19 FMS ID: 152000055

FMS Description

Develop maintenance schedule for creeks within jurisdiction

Strategy Type

П	Education	and	Outreach	Activities
ш.	Luucation	ariu	Outreach	ACTIVITIES

□ Protected Areas

✓	Regulatory and Guidance
	Development Standards

 $\hfill \square$ Flood Preparedness Programs

□ Other:

Strategy Area

City/ Cities County Wide

County/ Counties Starr

HUC 8

HUC 12

Study Area (sq. mi.)



Emergency Need

Yes ✓ No 🗆

Known Flood Risk

History of Flooding? Yes ✓ No □ Frequency of flooding:

Population at Risk # of structures inundated

Roadways flooded Yes □ No □ Miles inundated?

Critical Facilities Impacted Yes □ No □ Agricultural Land impacted Yes □ No □

Notes:

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





Have the flood risk and flood reduction impacts been evaluated?

Yes	□ No ✓		
	s the strategy missing sufficient data to assess whether the pro DB guidelines?	pos∈	ed strategy has a negative effect, per Yes □ No ✓
Rel	ated Goals		
✓	Increase community access routes to critical facilities, evacuation routes, during and after a flooding event		Increase the # of entities that adopt higher than NFIP-minimum standards
	Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain		Develop and maintain an operational stormwater asset management plan
	Increase the # of communities participating in the National Flood Insurance Program		Increase the # of flood gauges (rainfall/stream) in the region
	Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs		Increase the # of entities that have multi-year drainage CIP list
	Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards		Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
	Increase participation in the regional flood planning process		Increase use of nature-based flood risk reduction projects
	Provide regional detention that could be used for water reuse applications or as part of a floodplain management program		Develop a regionally coordinated warning and emergency response program that can detect the flood threat and provide timely warning of impending flood danger
	Increase acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use		Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
	Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website		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 the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations		Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement
	Reduce the # of structures that have been subject to repeated flooding events through property buyouts		future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain.

RFPG Recommended





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

FMS ID: 152000056

FMS Description

Secure funding to become/join drainage district

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on a	tegy 1	
O C. C.		. <i>,</i>

- □ Education and Outreach Activities
 □ Protected Areas
 □ Regulatory and Guidance
 □ Flood Preparedness Programs
 ✓ Other:
- Strategy Area

City/ Cities Laguna Vista

County/ Counties Cameron

HUC8

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:

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





Have the flood risk and flood reduction impacts been evaluated?

	ve the hood risk and hood reduction imp	uac	is been evaluated?
	s the strategy missing sufficient data to assess whether the pro DB guidelines?	pose	ed strategy has a negative effect, per Yes □ No ✓
Rel	lated Goals		
✓	Increase community access routes to critical facilities, evacuation routes, during and after a flooding event		Increase the # of entities that adopt higher than NFIP-minimum standards
	Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain		Develop and maintain an operational stormwater asset management plan
	Increase the # of communities participating in the National Flood Insurance Program		Increase the # of flood gauges (rainfall/stream) in the region
	Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs		Increase the # of entities that have multi-year drainage CIP list
	Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards		Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
	Increase participation in the regional flood planning process		Increase use of nature-based flood risk reduction projects
	Provide regional detention that could be used for water reuse applications or as part of a floodplain management program		Develop a regionally coordinated warning and emergency response program that can detect the flood threat and provide timely warning of impending flood danger
	Increase acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use		Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
	Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website		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 the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations		Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement
	Reduce the # of structures that have been subject to repeated flooding events through property buyouts		future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

RFPG Recommended





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

FMS Description

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

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

Strategy Area

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

Emergency Need

Yes ✓ No 🗆

Known Flood Risk

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

Strategy Costs

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



FMS ID: 152000057





Have the flood risk and flood reduction impacts been evaluated?

Yes	□ No ✓		
	s the strategy missing sufficient data to assess whether the pro DB guidelines?	pose	ed strategy has a negative effect, per Yes □ No ✓
Rel	ated Goals		
✓	Increase community access routes to critical facilities, evacuation routes, during and after a flooding event		Increase the # of entities that adopt higher than NFIP-minimum standards
	Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain		Develop and maintain an operational stormwater asset management plan
	Increase the # of communities participating in the National		Increase the # of flood gauges (rainfall/stream) in the
	Flood Insurance Program Decrease the average age of FEMA Flood Insurance Rate Many used to define SELIAS		region Increase the # of entities that have multi-year drainage CIP list
	Maps used to define SFHAs Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards		Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
	Increase participation in the regional flood planning process		Increase use of nature-based flood risk reduction projects
	Provide regional detention that could be used for water reuse applications or as part of a floodplain management program		Develop a regionally coordinated warning and emergency response program that can detect the flood threat and provide timely warning of impending flood danger
	Increase acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use		Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
	Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website		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 the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations		Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement
	Reduce the # of structures that have been subject to repeated flooding events through property buyouts		future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

RFPG Recommended





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

FMS ID: 152000058

FMS Description

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

Strategy Type

Education and Outreach Activities

□ Protected Areas

Regulatory and Guidance
Development Standards

☐ Flood Preparedness Programs

✓ Other:

Strategy Area

City/ Cities County Wide

County/ Counties Cameron

HUC 8

HUC 12

Study Area (sq. mi.)

MITTE QUITURA DISTRICT

Emergency Need

Yes ✓ No 🗆

Known Flood Risk

History of Flooding? Yes ✓ No □

Population at Risk

Roadways flooded Yes □ No □

Critical Facilities Impacted Yes □ No □

Frequency of flooding:
of structures inundated
Miles inundated?

Agricultural Land impacted Yes
No

Strategy Costs

Notes:

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



RFPG Recommended

Yes ✓No 🗆



Flood Management Strategies Fact Sheet

Fun	iding Dedicated?	Yes □ No ✓	(Potentia	I) Sou	ırce of Funding	Identify Grants; Police De Budget	epartment	
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 Yes □ No ✓								
	DB guidelines?		•	•	O.			
Rel	ated Goals							
✓	Increase community acce					of entities that adopt highe	er than NFIP-	
	evacuation routes, during				minimum stand			
	Reduce the # of newly confacilities within the existing				Develop and ma management pl	aintain an operational stor an	rmwater asset	
	Increase the # of commun	nities participating in th	•		Increase the # o	of flood gauges (rainfall/st	ream) in the	
	Flood Insurance Program		nac Data		region	of antitios that have multi	voor droipago	
	Decrease the average age Maps used to define SFHA		псе кате		CIP list	of entities that have multi-	year urainaye	
	Increase the coverage of					of entities that integrate N		
	completing studies with it	dentified construction	projects to			GS Texas Water Science Ce		
	address flooding hazards					ystem information into th	eir local	
	lananan mankisinakian in k		-!			lisseminate warnings		
	Increase participation in t					nature-based flood risk re		
	Provide regional detentio reuse applications or as p					nally coordinated warning am that can detect the flo		
	program	iai t oi a nooupiain mai	iagement			warning of impending floo		
	Increase acreage of public	rly protected open spa	ce in critical			nount of publicly owned la		
	flood risk areas that is reu	9				zed for future regional sto	•	
					infrastructure			
	Increase outreach and ed	ucation activities, spec	ifically		Increase the pro	oficiency of floodplain mai	nagers by	
	targeting municipal flood					of them that are certified		
	15 RFPG and available on	the website			Floodplain Man	agers (CFM) with the Texa	as Floodplain	
					Management As	ssociation		
	Increase the use reverse 9	911, TV, radio, social m	iedia, and		Increase particip	pation in the Community <mark>F</mark>	Rating System by	
	billboards to communicat		uation			gion 15 floodplain manage		
	routes, and shelter location					dedicated drainage fees to		
	Reduce the # of structure					d FMPs; incorporate nonc	•	
	repeated flooding events	through property buy	outs			vho regulate development	t in the future	
					conditions flood	ıpıaın		





Sewer Manhole Rainguards

FMS ID: 152000059

FMS Description

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

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□ 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
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 \square
Notes:				

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





Have the flood risk and flood reduction impacts been evaluated?

Yes	□ No ✓		
	s the strategy missing sufficient data to assess whether the pro DB guidelines?	pos∈	ed strategy has a negative effect, per Yes □ No ✓
Rel	ated Goals		
✓	Increase community access routes to critical facilities,		Increase the # of entities that adopt higher than NFIP-
	evacuation routes, during and after a flooding event Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain		minimum standards Develop and maintain an operational stormwater asset management plan
	Increase the # of communities participating in the National Flood Insurance Program		Increase the # of flood gauges (rainfall/stream) in the region
	Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs		Increase the # of entities that have multi-year drainage CIP list
	Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards		Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
	Increase participation in the regional flood planning process		Increase use of nature-based flood risk reduction projects
	Provide regional detention that could be used for water reuse applications or as part of a floodplain management program		Develop a regionally coordinated warning and emergency response program that can detect the flood threat and provide timely warning of impending flood danger
	Increase acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use		Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
	Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website		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 the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations		Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement
	Reduce the # of structures that have been subject to repeated flooding events through property buyouts		future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

RFPG Recommended





City of Progreso - Progreso Storm Ditch improvement Equipment

FMS Description

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

Strategy Type

Education and Outreach Activities

Protected Areas

□ Regulatory and Guidance□ Development Standards

☐ Flood Preparedness Programs ✓ Other:

Strategy Area

City/ Cities Progresso

County/ Counties Hidalgo

HUC 8

HUC 12

Study Area (sq. mi.)

Fice pass

FMS ID: 152000060

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:			

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



Yes ✓ No 🗆



Flood Management Strategies Fact Sheet

			Budget			
Hav	Have the flood risk and flood reduction impacts been evaluated?					
	•					
res	□ No ✓					
\/\/a	s the strategy missing sufficient data to assess whether	the propose	d strategy has a negative effect, per Yes □ No ✓			
	DB quidelines?	тте ргорозе	a strategy has a negative effect, per			
	22 gardonnoo.					
Rel	ated Goals					
✓	Increase community access routes to critical facilities,		Increase the # of entities that adopt higher than NFIP-			
	evacuation routes, during and after a flooding event		minimum standards			
	Reduce the # of newly constructed vulnerable critical		Develop and maintain an operational stormwater asset			
	facilities within the existing and future 100-YR floodpl		management plan			
	Increase the # of communities participating in the Nat	tional \square	Increase the # of flood gauges (rainfall/stream) in the			
	Flood Insurance Program	ata \Box	region			
	Decrease the average age of FEMA Flood Insurance Ra	ate 🗆	Increase the # of entities that have multi-year drainage CIP list			
	Maps used to define SFHAs Increase the coverage of available flood hazard data by	OV 🗆	Increase the # of entities that integrate National Weather			
	completing studies with identified construction project		Service and USGS Texas Water Science Center (TXWSC)			
	address flooding hazards	,13 10	flood warning system information into their local			
	addi 633 1100ding Hazarda		capabilities to disseminate warnings			
	Increase participation in the regional flood planning p	rocess	Increase use of nature-based flood risk reduction projects			
	Provide regional detention that could be used for wat		Develop a regionally coordinated warning and emergency			
	reuse applications or as part of a floodplain managem		response program that can detect the flood threat and			
	program		provide timely warning of impending flood danger			
	Increase acreage of publicly protected open space in o		Increase the amount of publicly owned land in the region			
	flood risk areas that is reused for a beneficial public us	se	that can be utilized for future regional stormwater			
			infrastructure			
	Increase outreach and education activities, specifically		Increase the proficiency of floodplain managers by			
	targeting municipal floodplain managers, hosted by R	egion	increasing the # of them that are certified as Certified			
	15 RFPG and available on the website		Floodplain Managers (CFM) with the Texas Floodplain			
	Increase the use reverse 0.11 TV radio social modia	and \Box	Management Association			
	Increase the use reverse 911, TV, radio, social media, billboards to communicate flood warnings, evacuation		Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs			
	routes, and shelter locations	1	to incorporate dedicated drainage fees to implement			
	Reduce the # of structures that have been subject to		future FMEs and FMPs; incorporate noncompliance			
	repeated flooding events through property buyouts		penalties; and who regulate development in the future			
	The state of the s		conditions floodplain			
חבי	00 December 1 - 1		•			
KFF	PG Recommended					





City of Indian Lake - Indian lake Drainage Infrastructure Funding Study

FMS ID: 152000061

FMS Description

Develop Plan for funding for future drainage infrastructure

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□ 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
HUC 12

Study Area (sq. mi.)

Emergency Need

Yes ✓ No 🗆

New York of the Control of the Contr

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:

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





Have the flood risk and flood reduction impacts been evaluated?

Yes	□ No ✓		
	s the strategy missing sufficient data to assess whether the pro DB guidelines?	pose	d strategy has a negative effect, per Yes □ No ✓
Rel	ated Goals		
✓	Increase community access routes to critical facilities, evacuation routes, during and after a flooding event		Increase the # of entities that adopt higher than NFIP-minimum standards
	Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain		Develop and maintain an operational stormwater asset management plan
	Increase the # of communities participating in the National Flood Insurance Program		Increase the # of flood gauges (rainfall/stream) in the region
	Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs		Increase the # of entities that have multi-year drainage CIP list
	Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards		Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
	Increase participation in the regional flood planning process		Increase use of nature-based flood risk reduction projects
	Provide regional detention that could be used for water reuse applications or as part of a floodplain management program		Develop a regionally coordinated warning and emergency response program that can detect the flood threat and provide timely warning of impending flood danger
	Increase acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use		Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
	Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website		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 the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations		Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement
	Reduce the # of structures that have been subject to repeated flooding events through property buyouts		future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

RFPG Recommended





Cameron County Drainage District No.1 - San FMS ID: 152000062 Martin Lake dredging

FMS Description

Develop plan to fund and dredge lake to increase storage capacity

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VILITITUM	1000
Strategy	IVDE
	. , 0 0

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

Strategy Area

City/ Cities Brownsville County/ Counties Cameron HUC 8 HUC 12

Study Area (sq. mi.)

Yes ✓ No 🗆

Emergency Need

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:				

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







Have the flood risk and flood reduction impacts been evaluated?

Yes	□ No ✓		
	s the strategy missing sufficient data to assess whether the pro DB guidelines?	pose	d strategy has a negative effect, per Yes □ No ✓
Rel	ated Goals		
✓	Increase community access routes to critical facilities, evacuation routes, during and after a flooding event		Increase the # of entities that adopt higher than NFIP-minimum standards
	Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain		Develop and maintain an operational stormwater asset management plan
	Increase the # of communities participating in the National Flood Insurance Program		Increase the # of flood gauges (rainfall/stream) in the region
	Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs		Increase the # of entities that have multi-year drainage CIP list
	Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards		Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
	Increase participation in the regional flood planning process		Increase use of nature-based flood risk reduction projects
	Provide regional detention that could be used for water reuse applications or as part of a floodplain management program		Develop a regionally coordinated warning and emergency response program that can detect the flood threat and provide timely warning of impending flood danger
	Increase acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use		Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
	Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website		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 the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations		Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement
	Reduce the # of structures that have been subject to repeated flooding events through property buyouts		future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

RFPG Recommended





Cameron County Drainage District No.1 - Ditch FMS ID: 152000063 1 outfall dredging

FMS Description

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

Strategy Type

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

Strategy Area

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



Emergency Need

Yes ✓ No □

Known Flood Risk

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

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





Have the flood risk and flood reduction impacts been evaluated?

Yes	□ No ✓		
	s the strategy missing sufficient data to assess whether the pro DB guidelines?	pose	ed strategy has a negative effect, per Yes □ No ✓
Rel	ated Goals		
✓	Increase community access routes to critical facilities, evacuation routes, during and after a flooding event		Increase the # of entities that adopt higher than NFIP-minimum standards
	Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain		Develop and maintain an operational stormwater asset management plan
	Increase the # of communities participating in the National Flood Insurance Program		Increase the # of flood gauges (rainfall/stream) in the region
	Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs		Increase the # of entities that have multi-year drainage CIP list
	Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards		Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
	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 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 acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use		Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
	Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website		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 the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations		Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement
	Reduce the # of structures that have been subject to repeated flooding events through property buyouts		future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

RFPG Recommended





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

FMS ID: 152000064

FMS Description

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

Strategy Type

Protected Areas

Regulatory and Guidance
Development Standards

☐ Flood Preparedness Programs

✓ Other:

Strategy Area

City/ Cities South Padre Island

County/ Counties Cameron

HUC 8

HUC 12

Study Area (sq. mi.)



Emergency Need

Yes ✓ No 🗆

Known Flood Risk

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

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





Have the flood risk and flood reduction impacts been evaluated?

Yes	□ No ✓		
	s the strategy missing sufficient data to assess whether the pro DB guidelines?	pose	ed strategy has a negative effect, per Yes □ No ✓
Rel	ated Goals		
✓	Increase community access routes to critical facilities, evacuation routes, during and after a flooding event		Increase the # of entities that adopt higher than NFIP-minimum standards
	Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain		Develop and maintain an operational stormwater asset management plan
	Increase the # of communities participating in the National Flood Insurance Program		Increase the # of flood gauges (rainfall/stream) in the region
	Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs		Increase the # of entities that have multi-year drainage CIP list
	Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards		Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
	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 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 acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use		Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
	Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website		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 the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations		Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement
	Reduce the # of structures that have been subject to repeated flooding events through property buyouts		future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

RFPG Recommended





Willacy County Drainage District No.1 - WCDD1 FMS ID: 152000065 pump station improvements

FMS Description

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

Strategy Type

 Education and Outreach Activitie
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□ Protected Areas

□ Regulatory and Guidance□ Development Standards

☐ Flood Preparedness Programs

✓ Other:

Strategy Area

City/ Cities County Wide

County/ Counties Willacy

HUC8

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:

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





Have the flood risk and flood reduction impacts been evaluated?

Yes	□ No ✓		
	s the strategy missing sufficient data to assess whether the pro DB guidelines?	pos∈	ed strategy has a negative effect, per Yes □ No ✓
Rel	ated Goals		
✓	Increase community access routes to critical facilities, evacuation routes, during and after a flooding event		Increase the # of entities that adopt higher than NFIP-minimum standards
	Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain		Develop and maintain an operational stormwater asset management plan
	Increase the # of communities participating in the National Flood Insurance Program		Increase the # of flood gauges (rainfall/stream) in the region
	Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs		Increase the # of entities that have multi-year drainage CIP list
	Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards		Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
	Increase participation in the regional flood planning process		Increase use of nature-based flood risk reduction projects
	Provide regional detention that could be used for water reuse applications or as part of a floodplain management program		Develop a regionally coordinated warning and emergency response program that can detect the flood threat and provide timely warning of impending flood danger
	Increase acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use		Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
	Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website		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 the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations		Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement
	Reduce the # of structures that have been subject to repeated flooding events through property buyouts		future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

RFPG Recommended





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

FMS ID: 152000066

FMS Description

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

Strategy Type

- ☐ Education and Outreach Activities
- □ Protected Areas

- □ Regulatory and Guidance□ Development Standards
- ☐ Flood Preparedness Programs

s ✓ Other:

Strategy Area

City/ Cities Harlingen

County/ Counties Cameron

HUC 8 12110208

HUC 12

Study Area (sq. mi.) 40.4

Rogers act Theire Bonds Casinol Casin

Yes □ No □

Emergency Need

Yes ✓ No 🗆

Known Flood Risk

History of Flooding?

Population at Risk

Roadways flooded

Yes □ No □ Frequency of flooding:

of structures inundated

Miles inundated?

Yes □ No □ Agricultural Land impacted

Notes:

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





Have the flood risk and flood reduction impacts been evaluated?

Yes	□ No ✓		
	s the strategy missing sufficient data to assess whether the pro DB guidelines?	pos∈	ed strategy has a negative effect, per Yes □ No ✓
Rel	ated Goals		
✓	Increase community access routes to critical facilities,		Increase the # of entities that adopt higher than NFIP-
	evacuation routes, during and after a flooding event Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain		minimum standards Develop and maintain an operational stormwater asset management plan
	Increase the # of communities participating in the National Flood Insurance Program		Increase the # of flood gauges (rainfall/stream) in the region
	Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs		Increase the # of entities that have multi-year drainage CIP list
	Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards		Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
	Increase participation in the regional flood planning process		Increase use of nature-based flood risk reduction projects
	Provide regional detention that could be used for water reuse applications or as part of a floodplain management program		Develop a regionally coordinated warning and emergency response program that can detect the flood threat and provide timely warning of impending flood danger
	Increase acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use		Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
	Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website		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 the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations		Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement
	Reduce the # of structures that have been subject to repeated flooding events through property buyouts		future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

RFPG Recommended





City of Edinburg - Planning, Operation & **Maintenance**

FMS Description

Develop and Implement a planning, operation & Maintenance plan

Strategy Type

□ Protected Areas

Regulatory and Guidance
Development Standards

☐ Flood Preparedness Programs

✓ Other:

FMS ID: 152000067

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? Frequency of flooding: Yes ✓ No □ Population at Risk # of structures inundated Roadways flooded Yes □ No □ Miles inundated? Critical Facilities Impacted Agricultural Land impacted Yes □ No □ Yes □ No □ Notes:

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





Have the flood risk and flood reduction impacts been evaluated?

	ve the hood risk and hood reduction imp	uac	is been evaluated?
	s the strategy missing sufficient data to assess whether the pro DB guidelines?	pose	ed strategy has a negative effect, per Yes □ No ✓
Rel	lated Goals		
✓	Increase community access routes to critical facilities, evacuation routes, during and after a flooding event		Increase the # of entities that adopt higher than NFIP-minimum standards
	Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain		Develop and maintain an operational stormwater asset management plan
	Increase the # of communities participating in the National Flood Insurance Program		Increase the # of flood gauges (rainfall/stream) in the region
	Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs		Increase the # of entities that have multi-year drainage CIP list
	Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards		Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
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	Increase the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations		Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement
	Reduce the # of structures that have been subject to repeated flooding events through property buyouts		future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

RFPG Recommended





City of La Villa - Planning, Operation & Maintenance

FMS ID: 152000068

FMS Description

Develop and Implement a planning, operation & Maintenance plan

Strategy Type

- ☐ Education and Outreach Activities
- □ Protected Areas

- □ Regulatory and Guidance□ Development Standards
- ☐ Flood Preparedness Programs
- ✓ Other:

Strategy Area

City/ Cities La Villa

County/ Counties Hidalgo

HUC 8 12110208

HUC 12

Study Area (sq. mi.) 0.72

Yes □ No □

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

Notes:

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





Have the flood risk and flood reduction impacts been evaluated?

	ve the hood risk and hood reduction imp	uac	is been evaluated?
	s the strategy missing sufficient data to assess whether the pro DB guidelines?	pose	ed strategy has a negative effect, per Yes □ No ✓
Rel	lated Goals		
✓	Increase community access routes to critical facilities, evacuation routes, during and after a flooding event		Increase the # of entities that adopt higher than NFIP-minimum standards
	Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain		Develop and maintain an operational stormwater asset management plan
	Increase the # of communities participating in the National Flood Insurance Program		Increase the # of flood gauges (rainfall/stream) in the region
	Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs		Increase the # of entities that have multi-year drainage CIP list
	Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards		Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
	Increase participation in the regional flood planning process		Increase use of nature-based flood risk reduction projects
	Provide regional detention that could be used for water reuse applications or as part of a floodplain management program		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 use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations		Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement
	Reduce the # of structures that have been subject to repeated flooding events through property buyouts		future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

RFPG Recommended





City of Mission - Planning, Operation & Maintenance

FMS ID: 152000069

FMS Description

Develop and Implement a planning, operation & Maintenance plan

Strategy Type

□ Protected Areas

☐ Regulatory and Guidance

☐ Flood Preparedness Programs

No □

☐ Development Standards ✓ Other:

Strategy Area

City/ Cities Mission

County/ Counties Hidalgo

HUC 8 12110208

HUC 12

Study Area (sq. mi.) 36.3



Emergency Need

Yes ✓ No □

Known Flood Risk

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

Strategy Costs

Notes:

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





Have the flood risk and flood reduction impacts been evaluated?

	ve the hood risk and hood reduction imp	uac	is been evaluated?
	s the strategy missing sufficient data to assess whether the pro DB guidelines?	pose	ed strategy has a negative effect, per Yes □ No ✓
Rel	lated Goals		
✓	Increase community access routes to critical facilities, evacuation routes, during and after a flooding event		Increase the # of entities that adopt higher than NFIP-minimum standards
	Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain		Develop and maintain an operational stormwater asset management plan
	Increase the # of communities participating in the National Flood Insurance Program		Increase the # of flood gauges (rainfall/stream) in the region
	Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs		Increase the # of entities that have multi-year drainage CIP list
	Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards		Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
	Increase participation in the regional flood planning process		Increase use of nature-based flood risk reduction projects
	Provide regional detention that could be used for water reuse applications or as part of a floodplain management program		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 outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website		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 the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations		Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement
	Reduce the # of structures that have been subject to repeated flooding events through property buyouts		future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

RFPG Recommended





City of Primera - Planning, Operation & Maintenance

FMS ID: 152000070

FMS Description

Develop and Implement a planning, operation & Maintenance plan

Strategy Type

- ☐ Education and Outreach Activities
- □ Protected Areas

- ☐ Regulatory and Guidance☐ Development Standards
- ☐ Flood Preparedness Programs✓ Other:

Strategy Area

City/ Cities Primera

County/ Counties Cameron

HUC 8 12110208

HUC 12

Study Area (sq. mi.) 2.7

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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:

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





Have the flood risk and flood reduction impacts been evaluated?

	ve the hood risk and hood reduction imp	uac	is been evaluated?
	s the strategy missing sufficient data to assess whether the pro DB guidelines?	pose	ed strategy has a negative effect, per Yes □ No ✓
Rel	lated Goals		
✓	Increase community access routes to critical facilities, evacuation routes, during and after a flooding event		Increase the # of entities that adopt higher than NFIP-minimum standards
	Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain		Develop and maintain an operational stormwater asset management plan
	Increase the # of communities participating in the National Flood Insurance Program		Increase the # of flood gauges (rainfall/stream) in the region
	Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs		Increase the # of entities that have multi-year drainage CIP list
	Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards		Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
	Increase participation in the regional flood planning process		Increase use of nature-based flood risk reduction projects
	Provide regional detention that could be used for water reuse applications or as part of a floodplain management program		Develop a regionally coordinated warning and emergency response program that can detect the flood threat and provide timely warning of impending flood danger
	Increase acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use		Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
	Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website		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 the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations		Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement
	Reduce the # of structures that have been subject to repeated flooding events through property buyouts		future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

RFPG Recommended





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

FMS ID: 152000071

FMS Description

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

Strategy Type

- ☐ Education and Outreach Activities
- □ Protected Areas

- □ Regulatory and Guidance□ Development Standards
- ☐ Flood Preparedness Programs✓ Other:

Strategy Area

City/ Cities La Feria

County/ Counties Cameron

HUC 8 12110208

HUC 12

Study Area (sq. mi.) 5.4

Ratamosa Las Pain Feidelberg Soils La Pain Notiti Adam's Gardens La Parte BROY Randelville

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:

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





Have the flood risk and flood reduction impacts been evaluated?

Yes	□ No ✓		
	s the strategy missing sufficient data to assess whether the pro DB guidelines?	pos∈	ed strategy has a negative effect, per Yes □ No ✓
Rel	ated Goals		
✓	Increase community access routes to critical facilities,		Increase the # of entities that adopt higher than NFIP-
	evacuation routes, during and after a flooding event Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain		minimum standards Develop and maintain an operational stormwater asset management plan
	Increase the # of communities participating in the National Flood Insurance Program		Increase the # of flood gauges (rainfall/stream) in the region
	Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs		Increase the # of entities that have multi-year drainage CIP list
	Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards		Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
	Increase participation in the regional flood planning process		Increase use of nature-based flood risk reduction projects
	Provide regional detention that could be used for water reuse applications or as part of a floodplain management program		Develop a regionally coordinated warning and emergency response program that can detect the flood threat and provide timely warning of impending flood danger
	Increase acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use		Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
	Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website		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 the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations		Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement
	Reduce the # of structures that have been subject to repeated flooding events through property buyouts		future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

RFPG Recommended





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

FMS ID: 152000072

FMS Description

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

Strategy Type

- $\hfill \square$ Education and Outreach Activities
- □ Protected Areas

- ☐ Regulatory and Guidance☐ Development Standards
- ☐ Flood Preparedness Programs
- ✓ Other:

Strategy Area

City/ Cities La Joya

County/ Counties Hidalgo

HUC 8 12110208

HUC 12

Study Area (sq. mi.) 10.8



Emergency Need

Yes ✓ No □

Known Flood Risk

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

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





Have the flood risk and flood reduction impacts been evaluated?

Yes	ve the nood risk and nood reduction in p	uac	is been evaluateu:
	s the strategy missing sufficient data to assess whether the pro DB guidelines?	pose	ed strategy has a negative effect, per Yes □ No ✓
Rel	lated Goals		
✓	Increase community access routes to critical facilities, evacuation routes, during and after a flooding event		Increase the # of entities that adopt higher than NFIP-minimum standards
	Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain		Develop and maintain an operational stormwater asset management plan
	Increase the # of communities participating in the National Flood Insurance Program		Increase the # of flood gauges (rainfall/stream) in the region
	Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs		Increase the # of entities that have multi-year drainage CIP list
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	Increase participation in the regional flood planning process		Increase use of nature-based flood risk reduction projects
	Provide regional detention that could be used for water reuse applications or as part of a floodplain management program		Develop a regionally coordinated warning and emergency response program that can detect the flood threat and provide timely warning of impending flood danger
	Increase acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use		Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
	Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website		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 the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations		Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement
	Reduce the # of structures that have been subject to repeated flooding events through property buyouts		future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

RFPG Recommended





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

FMS ID: 152000073

FMS Description

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

Strategy Type

- ☐ Education and Outreach Activities
- □ Protected Areas

- ☐ Regulatory and Guidance
- ☐ Flood Preparedness Programs
- ☐ Development Standards ✓ Other:

Strategy Area

City/ Cities Los Fresnos

County/ Counties Cameron

HUC 8 12110208

HUC 12

Study Area (sq. mi.) 4.1

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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:

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





Have the flood risk and flood reduction impacts been evaluated?

Yes	ve the nood risk and nood reduction in p	uac	is been evaluateu:
	s the strategy missing sufficient data to assess whether the pro DB guidelines?	pose	ed strategy has a negative effect, per Yes □ No ✓
Rel	lated Goals		
✓	Increase community access routes to critical facilities, evacuation routes, during and after a flooding event		Increase the # of entities that adopt higher than NFIP-minimum standards
	Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain		Develop and maintain an operational stormwater asset management plan
	Increase the # of communities participating in the National Flood Insurance Program		Increase the # of flood gauges (rainfall/stream) in the region
	Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs		Increase the # of entities that have multi-year drainage CIP list
	Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards		Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
	Increase participation in the regional flood planning process		Increase use of nature-based flood risk reduction projects
	Provide regional detention that could be used for water reuse applications or as part of a floodplain management program		Develop a regionally coordinated warning and emergency response program that can detect the flood threat and provide timely warning of impending flood danger
	Increase acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use		Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
	Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website		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 the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations		Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement
	Reduce the # of structures that have been subject to repeated flooding events through property buyouts		future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

RFPG Recommended





City of Mercedes - Planning, Operation & Maintenance

FMS ID: 152000074

FMS Description

Develop and Implement a planning, operation & Maintenance plan

Strategy Type

 Education and Outreach Activitie
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□ Protected Areas

$\hfill \square$ Regulatory and Guidance

☐ Flood Preparedness Programs

☐ Development Standards ✓ Other:

Strategy Area

City/ Cities Mercedes

County/ Counties Hidalgo

HUC 8 100000000

HUC 12

Study Area (sq. mi.) 27

Indian Hills Relatives Westabletig Mercedes Lago Grande

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:			

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





Have the flood risk and flood reduction impacts been evaluated?

	ve the hood risk and hood reduction imp	uac	is been evaluated?
	s the strategy missing sufficient data to assess whether the pro DB guidelines?	pose	ed strategy has a negative effect, per Yes □ No ✓
Rel	lated Goals		
✓	Increase community access routes to critical facilities, evacuation routes, during and after a flooding event		Increase the # of entities that adopt higher than NFIP-minimum standards
	Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain		Develop and maintain an operational stormwater asset management plan
	Increase the # of communities participating in the National Flood Insurance Program		Increase the # of flood gauges (rainfall/stream) in the region
	Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs		Increase the # of entities that have multi-year drainage CIP list
	Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards		Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
	Increase participation in the regional flood planning process		Increase use of nature-based flood risk reduction projects
	Provide regional detention that could be used for water reuse applications or as part of a floodplain management program		Develop a regionally coordinated warning and emergency response program that can detect the flood threat and provide timely warning of impending flood danger
	Increase acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use		Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
	Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website		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 the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations		Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement
	Reduce the # of structures that have been subject to repeated flooding events through property buyouts		future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

RFPG Recommended





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

FMS ID: 152000075

FMS Description

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

Strategy Type

- ☐ Education and Outreach Activities
- □ Protected Areas

- ☐ Regulatory and Guidance
- ☐ Flood Preparedness Programs
- ☐ Development Standards ✓ Other:

Strategy Area

City/ Cities Palmhurst

County/ Counties Hidalgo

HUC 8 12110208

HUC 12

Study Area (sq. mi.) 4.5

Test Story land Assert Story Committee Red yourse Brown Cost Daylottee Cos

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 □

Strategy Costs

Notes:

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





Have the flood risk and flood reduction impacts been evaluated?

Yes	ve the nood risk and nood reduction in p	uac	is been evaluateu:
	s the strategy missing sufficient data to assess whether the pro DB guidelines?	pose	ed strategy has a negative effect, per Yes □ No ✓
Rel	lated Goals		
✓	Increase community access routes to critical facilities, evacuation routes, during and after a flooding event		Increase the # of entities that adopt higher than NFIP-minimum standards
	Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain		Develop and maintain an operational stormwater asset management plan
	Increase the # of communities participating in the National Flood Insurance Program		Increase the # of flood gauges (rainfall/stream) in the region
	Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs		Increase the # of entities that have multi-year drainage CIP list
	Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards		Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
	Increase participation in the regional flood planning process		Increase use of nature-based flood risk reduction projects
	Provide regional detention that could be used for water reuse applications or as part of a floodplain management program		Develop a regionally coordinated warning and emergency response program that can detect the flood threat and provide timely warning of impending flood danger
	Increase acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use		Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
	Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website		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 the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations		Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement
	Reduce the # of structures that have been subject to repeated flooding events through property buyouts		future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

RFPG Recommended





City of Palmview - Planning, Operation & Maintenance

FMS ID: 152000076

FMS Description

Develop and Implement a planning, operation & Maintenance plan

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		J			

Education ar	nd Outreach	Activities
Education ar	nd Outreach	Activitie

□ Protected Areas

☐ Regulatory and Guidance

☐ Flood Preparedness Programs

☐ Development Standards ✓ Other:

Strategy Area

City/ Cities Palmview

County/ Counties Hidalgo

HUC 8 12110208

HUC 12

Study Area (sq. mi.) 0.6



Emergency Need

Yes ✓ No □

Known Flood Risk

History of Flooding? Yes ✓ No □ Frequency of flooding:

Population at Risk # of structures inundated

Roadways flooded Yes □ No □ Miles inundated?

Critical Facilities Impacted Yes □ No □ Agricultural Land impacted Yes □ No □

Notes:

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





Have the flood risk and flood reduction impacts been evaluated?

	ve the hood risk and hood reduction imp	uac	is been evaluated?
	s the strategy missing sufficient data to assess whether the pro DB guidelines?	pose	ed strategy has a negative effect, per Yes □ No ✓
Rel	lated Goals		
✓	Increase community access routes to critical facilities, evacuation routes, during and after a flooding event		Increase the # of entities that adopt higher than NFIP-minimum standards
	Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain		Develop and maintain an operational stormwater asset management plan
	Increase the # of communities participating in the National Flood Insurance Program		Increase the # of flood gauges (rainfall/stream) in the region
	Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs		Increase the # of entities that have multi-year drainage CIP list
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	Increase participation in the regional flood planning process		Increase use of nature-based flood risk reduction projects
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	Reduce the # of structures that have been subject to repeated flooding events through property buyouts		future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

RFPG Recommended





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

FMS ID: 152000077

FMS Description

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

Strategy Type

□ Protected Areas

Regulatory and Guidance
Development Standards

☐ Flood Preparedness Programs

✓ Other:

Strategy Area

City/ Cities San Benito

County/ Counties Cameron

HUC 8 12110208

HUC 12

Study Area (sq. mi.) 16.4

Lozano Artoyo Colorado Estates San Benito Green Valley Farms El Camino Angosto Rangerville As Palmas Judates Lozano Artoyo Colorado Estates Creen Valley Farms El Camino Angosto Rangerville Rangerville Rangerville Rangerville Rangerville

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:			

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





Have the flood risk and flood reduction impacts been evaluated?

Yes	ve the nood risk and nood reduction in p	uac	is been evaluateu:
	s the strategy missing sufficient data to assess whether the pro DB guidelines?	pose	ed strategy has a negative effect, per Yes □ No ✓
Rel	lated Goals		
✓	Increase community access routes to critical facilities, evacuation routes, during and after a flooding event		Increase the # of entities that adopt higher than NFIP-minimum standards
	Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain		Develop and maintain an operational stormwater asset management plan
	Increase the # of communities participating in the National Flood Insurance Program		Increase the # of flood gauges (rainfall/stream) in the region
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	Reduce the # of structures that have been subject to repeated flooding events through property buyouts		future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

RFPG Recommended





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

FMS ID: 152000078

FMS Description

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

Strategy Type

Education and	Outreach	Activitie
Education and	Outreach	Activitie

□ Protected Areas

☐ Regulatory and Guidance☐ Development Standards

☐ Flood Preparedness Programs

✓ Other:

Strategy Area

City/ Cities San Juan

County/ Counties Hidalgo

HUC 8 12110208

HUC 12

Study Area (sq. mi.) 11.9



Emergency Need

Yes ✓ No □

Known Flood Risk

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

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





Have the flood risk and flood reduction impacts been evaluated?

Yes	□ No ✓		
	s the strategy missing sufficient data to assess whether the pro DB guidelines?	pos∈	ed strategy has a negative effect, per Yes □ No ✓
Rel	ated Goals		
✓	Increase community access routes to critical facilities,		Increase the # of entities that adopt higher than NFIP-
	evacuation routes, during and after a flooding event Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain		minimum standards Develop and maintain an operational stormwater asset management plan
	Increase the # of communities participating in the National Flood Insurance Program		Increase the # of flood gauges (rainfall/stream) in the region
	Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs		Increase the # of entities that have multi-year drainage CIP list
	Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards		Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
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	Reduce the # of structures that have been subject to repeated flooding events through property buyouts		future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

RFPG Recommended





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

FMS Description

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

Strategy Type

Education	and	Outreach	Activitie
Education	and	Outreach	Activitie

□ Protected Areas

☐ Regulatory and Guidance □ Development Standards

☐ Flood Preparedness Programs

✓ Other:

FMS ID: 152000079

Strategy Area

City/ Cities Weslaco

County/ Counties Hidalgo

> HUC 8 12110208

HUC 12

Study Area (sq. mi.) 16.4

Emergency Need

Yes ✓ No 🗆

Known Flood Risk

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

Notes:

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





Have the flood risk and flood reduction impacts been evaluated?

Yes	□ No ✓		
	s the strategy missing sufficient data to assess whether the pro DB guidelines?	pos∈	ed strategy has a negative effect, per Yes □ No ✓
Rel	ated Goals		
✓	Increase community access routes to critical facilities,		Increase the # of entities that adopt higher than NFIP-
	evacuation routes, during and after a flooding event Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain		minimum standards Develop and maintain an operational stormwater asset management plan
	Increase the # of communities participating in the National Flood Insurance Program		Increase the # of flood gauges (rainfall/stream) in the region
	Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs		Increase the # of entities that have multi-year drainage CIP list
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	Increase participation in the regional flood planning process		Increase use of nature-based flood risk reduction projects
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	Reduce the # of structures that have been subject to repeated flooding events through property buyouts		future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

RFPG Recommended





City of Alamo - Planning, Operation & Maintenance

FMS ID: 152000080

FMS Description

Develop and Implement a planning, operation & Maintenance plan

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Strategy	IVDE
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 Education and Outreach Activitie
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□ Protected Areas

□ Regulatory and Guidance□ Development Standards

☐ Flood Preparedness Programs

✓ Other:

Yes □ No □

Strategy Area

City/ Cities Alamo

County/ Counties Hidalgo

HUC 8 12110208

HUC 12

Study Area (sq. mi.) 7.5



Emergency Need

Yes ✓ No □

Known Flood Risk

History of Flooding?

Population at Risk

Roadways flooded

Yes □ No □ Frequency of flooding:

of structures inundated

Miles inundated?

Yes □ No □ Agricultural Land impacted

Notes:

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





Have the flood risk and flood reduction impacts been evaluated?

Yes	No ✓	oac	its been evaluated:
	is the strategy missing sufficient data to assess whether the pro DB guidelines?	pos∈	ed strategy has a negative effect, per Yes □ No ✓
Re	lated Goals		
✓	Increase community access routes to critical facilities,		Increase the # of entities that adopt higher than NFIP-
	evacuation routes, during and after a flooding event Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain		minimum standards Develop and maintain an operational stormwater asset management plan
	Increase the # of communities participating in the National Flood Insurance Program		Increase the # of flood gauges (rainfall/stream) in the region
	Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs		Increase the # of entities that have multi-year drainage CIP list
	Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards		Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
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	Provide regional detention that could be used for water reuse applications or as part of a floodplain management program		Develop a regionally coordinated warning and emergency response program that can detect the flood threat and provide timely warning of impending flood danger
	Increase acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use		Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
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	Increase the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations		Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement
	Reduce the # of structures that have been subject to repeated flooding events through property buyouts		future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

RFPG Recommended





City of Alton – Flood Warning System, Planning, FMS ID: 152000081 Operation & Maintenance

FMS Description

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

Strategy Type

Education and	Outreach Activities

□ Protected Areas

Regulatory and Guidance
Development Standards

☐ Flood Preparedness Programs

✓ Other:

Strategy Area

City/ Cities Alton

County/ Counties Hidalgo

HUC 8 12110208

HUC 12

Study Area (sq. mi.) 7.2

Alton West Sharyland GARDENIA

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:			

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





Have the flood risk and flood reduction impacts been evaluated?

Yes	□ No ✓		
	s the strategy missing sufficient data to assess whether the pro DB guidelines?	pos∈	ed strategy has a negative effect, per Yes □ No ✓
Rel	ated Goals		
✓	Increase community access routes to critical facilities,		Increase the # of entities that adopt higher than NFIP-
	evacuation routes, during and after a flooding event Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain		minimum standards Develop and maintain an operational stormwater asset management plan
	Increase the # of communities participating in the National Flood Insurance Program		Increase the # of flood gauges (rainfall/stream) in the region
	Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs		Increase the # of entities that have multi-year drainage CIP list
	Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards		Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
	Increase participation in the regional flood planning process		Increase use of nature-based flood risk reduction projects
	Provide regional detention that could be used for water reuse applications or as part of a floodplain management program		Develop a regionally coordinated warning and emergency response program that can detect the flood threat and provide timely warning of impending flood danger
	Increase acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use		Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
	Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website		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 the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations		Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement
	Reduce the # of structures that have been subject to repeated flooding events through property buyouts		future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

RFPG Recommended





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

FMS ID: 152000082

FMS Description

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

Strategy Type

□ Protected Areas

Regulatory and Guidance
Development Standards

☐ Flood Preparedness Programs

✓ Other:

Strategy Area

City/ Cities Brownsville

County/ Counties Cameron

HUC 8 12110208

HUC 12

Study Area (sq. mi.) 145.9

Control Bayes Strong California La Joseph South Patre Island Bayes South Patre Island Control Bayes South

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:			

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





Have the flood risk and flood reduction impacts been evaluated?

Yes	□ No ✓		
	s the strategy missing sufficient data to assess whether the pro DB guidelines?	pos∈	ed strategy has a negative effect, per Yes □ No ✓
Rel	ated Goals		
✓	Increase community access routes to critical facilities,		Increase the # of entities that adopt higher than NFIP-
	evacuation routes, during and after a flooding event Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain		minimum standards Develop and maintain an operational stormwater asset management plan
	Increase the # of communities participating in the National Flood Insurance Program		Increase the # of flood gauges (rainfall/stream) in the region
	Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs		Increase the # of entities that have multi-year drainage CIP list
	Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards		Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
	Increase participation in the regional flood planning process		Increase use of nature-based flood risk reduction projects
	Provide regional detention that could be used for water reuse applications or as part of a floodplain management program		Develop a regionally coordinated warning and emergency response program that can detect the flood threat and provide timely warning of impending flood danger
	Increase acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use		Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
	Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website		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 the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations		Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement
	Reduce the # of structures that have been subject to repeated flooding events through property buyouts		future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

RFPG Recommended





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

FMS ID: 152000083

FMS Description

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

Strategy Type

- ☐ Education and Outreach Activities
- □ Protected Areas

- ☐ Regulatory and Guidance
- □ Development Standards
- ☐ Flood Preparedness Programs

ent Standards ✓ Other:

Strategy Area

City/ Cities

County/ Counties Cameron

HUC 8 12110208

HUC 12

Study Area (sq. mi.) 1276

Arryo Gardens-La Tina Ranch New Orders See Service Remute: San Pedro San

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:

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





Have the flood risk and flood reduction impacts been evaluated?

Yes	□ No ✓		
	s the strategy missing sufficient data to assess whether the pro DB guidelines?	pos∈	ed strategy has a negative effect, per Yes □ No ✓
Rel	ated Goals		
✓	Increase community access routes to critical facilities,		Increase the # of entities that adopt higher than NFIP-
	evacuation routes, during and after a flooding event Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain		minimum standards Develop and maintain an operational stormwater asset management plan
	Increase the # of communities participating in the National Flood Insurance Program		Increase the # of flood gauges (rainfall/stream) in the region
	Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs		Increase the # of entities that have multi-year drainage CIP list
	Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards		Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
	Increase participation in the regional flood planning process		Increase use of nature-based flood risk reduction projects
	Provide regional detention that could be used for water reuse applications or as part of a floodplain management program		Develop a regionally coordinated warning and emergency response program that can detect the flood threat and provide timely warning of impending flood danger
	Increase acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use		Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
	Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website		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 the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations		Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement
	Reduce the # of structures that have been subject to repeated flooding events through property buyouts		future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

RFPG Recommended





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

FMS ID: 152000084

FMS Description

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

Strategy Type

- ☐ Education and Outreach Activities
- □ Protected Areas

- $\hfill \square$ Regulatory and Guidance
- ☐ Flood Preparedness Programs
- ☐ Development Standards ✓ Other:

Strategy Area

City/ Cities Combes

County/ Counties Cameron

HUC 8 12110208

HUC 12

Study Area (sq. mi.) 3.6

Lasana

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 \square

Notes:

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





Have the flood risk and flood reduction impacts been evaluated?

Yes	□ No ✓		
	s the strategy missing sufficient data to assess whether the pro DB guidelines?	pos∈	ed strategy has a negative effect, per Yes □ No ✓
Rel	ated Goals		
✓	Increase community access routes to critical facilities,		Increase the # of entities that adopt higher than NFIP-
	evacuation routes, during and after a flooding event Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain		minimum standards Develop and maintain an operational stormwater asset management plan
	Increase the # of communities participating in the National Flood Insurance Program		Increase the # of flood gauges (rainfall/stream) in the region
	Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs		Increase the # of entities that have multi-year drainage CIP list
	Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards		Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
	Increase participation in the regional flood planning process		Increase use of nature-based flood risk reduction projects
	Provide regional detention that could be used for water reuse applications or as part of a floodplain management program		Develop a regionally coordinated warning and emergency response program that can detect the flood threat and provide timely warning of impending flood danger
	Increase acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use		Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
	Increase outreach and education activities, specifically targeting municipal floodplain managers, hosted by Region 15 RFPG and available on the website		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 the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations		Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement
	Reduce the # of structures that have been subject to repeated flooding events through property buyouts		future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

RFPG Recommended





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

FMS ID: 152000085

FMS Description

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

Strategy Type

□ Protected Areas

Regulatory and Guidance
Development Standards

☐ Flood Preparedness Programs

No □

✓ Other:

Strategy Area

City/ Cities Donna

County/ Counties Hidalgo

HUC 8 12110208

HUC 12

Study Area (sq. mi.) 14.4



Emergency Need

Yes ✓ No □

Known Flood Risk

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

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





Have the flood risk and flood reduction impacts been evaluated?

Yes	□ No ✓		
	s the strategy missing sufficient data to assess whether the pro DB guidelines?	pos∈	ed strategy has a negative effect, per Yes □ No ✓
Rel	ated Goals		
✓	Increase community access routes to critical facilities,		Increase the # of entities that adopt higher than NFIP-
	evacuation routes, during and after a flooding event Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain		minimum standards Develop and maintain an operational stormwater asset management plan
	Increase the # of communities participating in the National Flood Insurance Program		Increase the # of flood gauges (rainfall/stream) in the region
	Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs		Increase the # of entities that have multi-year drainage CIP list
	Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards		Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
	Increase participation in the regional flood planning process		Increase use of nature-based flood risk reduction projects
	Provide regional detention that could be used for water reuse applications or as part of a floodplain management program		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 use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations		Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement
	Reduce the # of structures that have been subject to repeated flooding events through property buyouts		future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

RFPG Recommended





City of Elsa – Flood Warning System, Planning, FMS ID: 152000086 Operation & Maintenance

FMS Description

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

Strategy Type

Education and Outreach Activities

□ Protected Areas

Regulatory and Guidance
Development Standards

☐ Flood Preparedness Programs

✓ Other:

Strategy Area

City/Cities Elsa

County/ Counties Hidalgo

HUC 8 12110208

HUC 12

Study Area (sq. mi.) 2.0

Emergency Need

Yes ✓ No □

Known Flood Risk

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

Strategy Costs

Notes:

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





Have the flood risk and flood reduction impacts been evaluated?

Yes	ve the hood risk and hood reduction imp	uac	is been evaluated?
	s the strategy missing sufficient data to assess whether the pro DB guidelines?	pose	ed strategy has a negative effect, per Yes □ No ✓
Rel	lated Goals		
✓	Increase community access routes to critical facilities, evacuation routes, during and after a flooding event		Increase the # of entities that adopt higher than NFIP-minimum standards
	Reduce the # of newly constructed vulnerable critical facilities within the existing and future 100-YR floodplain		Develop and maintain an operational stormwater asset management plan
	Increase the # of communities participating in the National Flood Insurance Program		Increase the # of flood gauges (rainfall/stream) in the region
	Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs		Increase the # of entities that have multi-year drainage CIP list
	Increase the coverage of available flood hazard data by completing studies with identified construction projects to address flooding hazards		Increase the # of entities that integrate National Weather Service and USGS Texas Water Science Center (TXWSC) flood warning system information into their local capabilities to disseminate warnings
	Increase participation in the regional flood planning process		Increase use of nature-based flood risk reduction projects
	Provide regional detention that could be used for water reuse applications or as part of a floodplain management program		Develop a regionally coordinated warning and emergency response program that can detect the flood threat and provide timely warning of impending flood danger
	Increase acreage of publicly protected open space in critical flood risk areas that is reused for a beneficial public use		Increase the amount of publicly owned land in the region that can be utilized for future regional stormwater infrastructure
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	Increase the use reverse 911, TV, radio, social media, and billboards to communicate flood warnings, evacuation routes, and shelter locations		Increase participation in the Community Rating System by encouraging Region 15 floodplain management programs to incorporate dedicated drainage fees to implement
	Reduce the # of structures that have been subject to repeated flooding events through property buyouts		future FMEs and FMPs; incorporate noncompliance penalties; and who regulate development in the future conditions floodplain

RFPG Recommended