

# LOWER RIO GRANDE REGIONAL FLOOD PLANNING GROUP MEETING

*Agenda Item 8 – Technical Consultant Update*

April 26, 2023



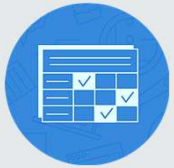
# AGENDA

## Discussion and Update on:

- ☐ Approval of the new FMX's
- ☐ Approval of additional FME's to study further
- ☐ Review of Received Comments and Responses
- ☐ Review of Ranking Criteria for FMX's
- ☐ Review of Possible Comments for Ranking Criteria

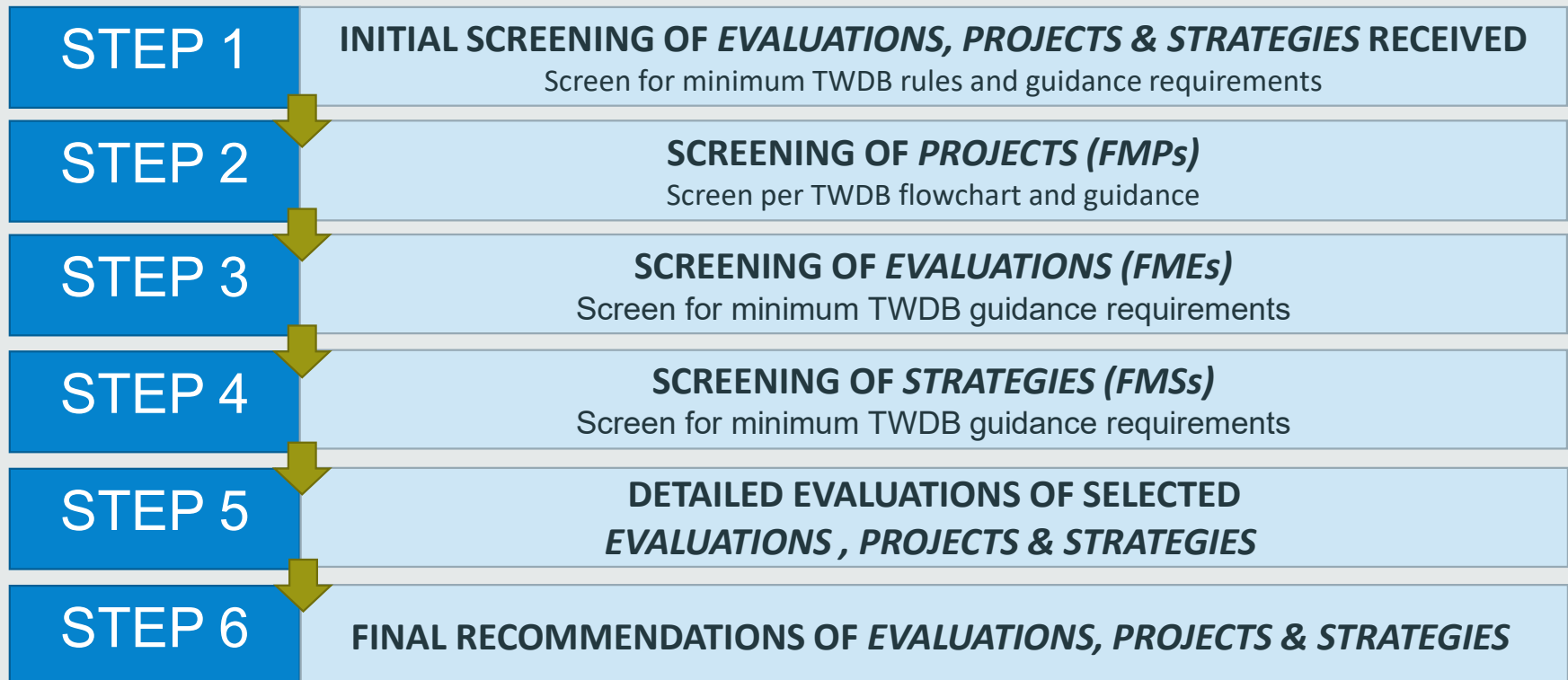


**TASK 12**  
**PERFORM IDENTIFIED**  
**FMES, IDENTIFY,**  
**EVALUATE, AND**  
**RECOMMEND**  
**ADDITIONAL FMPS**



# TASK 4B – Proposed Selection Process

## 5 General Steps





## **TASK 12 – PERFORM FMEs FOR ADDITIONAL FMPs**

### ***New FMEs received during Task 11 (Outreach)***

**New information received from the following entities:**

- ☐ Cameron County Drainage District. 3
- ☐ Cameron County Drainage District. 5
- ☐ City of Alton
- ☐ City of Brownsville
- ☐ City of Del Rio
- ☐ City of Edinburg
- ☐ City of Escobares
- ☐ City of Lyford
- ☐ City of McAllen
- ☐ City of Mission
- ☐ City of Rio Grande City (FMEs)
- ☐ City of Roma
- ☐ Webb County
- ☐ Starr County Hazard Mitigation Action Plan
- ☐ Webb Count Drainage District #1

# TASK 12 – APPROVAL FOR ADDITIONAL FMES

## *Newly Acquired Projects to move to FMES*

FME ID Number	FME Title	Entity	County	Cost
151000136	NM-104	City of Edinburg	Hidalgo	\$ 192,800.00
151000142	NM-111	City of Edinburg	Hidalgo	\$ 718,171.47
151000143	NM-112	City of Edinburg	Hidalgo	\$ 621,841.69
151000147	ES-100	City of Edinburg	Hidalgo	\$18,681,939.51
151000148	ES-101	City of Edinburg	Hidalgo	\$ 3,324,410.00
151000149	ES-102	City of Edinburg	Hidalgo	\$ 8,820,196.00
151000150	SM-101	City of Edinburg	Hidalgo	\$ 440,020.00
151000151	SM-102	City of Edinburg	Hidalgo	\$ 1,549,605.68
151000152	SM-103	City of Edinburg	Hidalgo	\$ 906,437.50
151000153	SM-104	City of Edinburg	Hidalgo	\$ 1,625,505.96
151000154	MC-100	City of Edinburg	Hidalgo	\$ 2,885,082.76

# TASK 12 – APPROVAL FOR ADDITIONAL FMES

## *Newly Acquired Projects to move to FMES*

FME ID Number	FME Title	Entity	County	Cost
151000155	MC-101	City of Edinburg	Hidalgo	192,800.00
151000156	Los Indios Diversion	CCDD3	Cameron	
151000157	Drain A – Downstream Improvements	CCDD3	Cameron	
151000158	Drain A Detention	CCDD3	Cameron	
151000159	Drain A Diversion	CCDD3	Cameron	
151000160	Drain C-Right Culvert Improvements	CCDD3	Cameron	\$ 2,649,000.00
151000161	Drain D Channel Improvements	CCDD3	Cameron	
151000162	Drain F-23 Culvert Improvements	CCDD3	Cameron	
151000163	Hwy 359 Colonias Drainage	WCDD1	Webb	\$ 100,000.00
151000164	Tanquecitos Colonia LOMR	WCDD1	Webb	\$ 150,000.00
151000165	Summers Regional Detention Pond & 100 – year channel system	WCDD1	Webb	\$ 4,885,000.00

# TASK 12 – APPROVAL FOR ADDITIONAL FMES

## *Newly Acquired Projects to move to FMES*

FME ID Number	FME Title	Entity	County	Cost
151000166	Lago Dam to Regional Pond Conversion	WCDD1	Webb	\$ 858,000.00
151000167	Los Presidentes Arterial Road Extension- Phase 1 and 2A	WCDD1	Webb	\$ 1,092,000.00
151000168	Concord Hills Extension and Drainage Improvements	WCDD1	Webb	\$ 1,522,000.00
151000169	Los Presidentes Pond and Channel Improvements	WCDD1	Webb	\$ 295,000.00
151000170	UISD/Garcia Pond Update	WCDD1	Webb	\$ 135,000.00
151000171	H&H Model and Flood Risk Map Update of Unstudied "A" Zones within WCDD	WCDD1	Webb	\$ 65,000.00
151000172	H&H Modeling and Localized Flood Mapping of Existing Creeks Outside of Regulatory Floodplain	WCDD1	Webb	\$ 50,000.00
151000173	ML02 Esperanza	City of Mission	Hidalgo	\$ 5,743,391.00
151000174	ML03 Tulipan	City of Mission	Hidalgo	\$ 2,245,013.00
151000175	ML04 Basham	City of Mission	Hidalgo	\$ 1,132,664.00



# TASK 12 – APPROVAL FOR ADDITIONAL FMES

## *Newly Acquired Projects to move to FMES*

FME ID Number	FME Title	Entity	County	Cost
151000176	ML05a Leandro	City of Mission	Hidalgo	\$ 1,656,408.00
151000177	ML05b Gabriel	City of Mission	Hidalgo	\$ 1,972,404.00
151000178	ML05c Trosper	City of Mission	Hidalgo	\$ 4,044,941.00
151000179	ML05d Holland B	City of Mission	Hidalgo	\$ 1,593,537.00
151000180	ML05e Mayberry C	City of Mission	Hidalgo	\$ 6,648,400.00
151000181	ML05f Miller	City of Mission	Hidalgo	\$ 908,181.00
151000182	ML05g Alyssa	City of Mission	Hidalgo	\$ 336,668.00
151000183	ML05h Mayberry B	City of Mission	Hidalgo	\$ 2,203,560.00
151000184	ML05i Stewart B	City of Mission	Hidalgo	\$ 2,103,420.00
151000185	ML06a Holland A	City of Mission	Hidalgo	\$ 2,940,588.00

# TASK 12 – APPROVAL FOR ADDITIONAL FMES

## *Newly Acquired Projects to move to FMES*

FME ID Number	FME Title	Entity	County	Cost
151000186	ML06b & ML06c Stacie / Conway A	City of Mission	Hidalgo	\$ 753,354.00
151000187	ML06d Conway B	City of Mission	Hidalgo	\$ 239,470.00
151000188	ML06e Augusta	City of Mission	Hidalgo	\$ 557,492.00
151000189	ML06f Thornwood	City of Mission	Hidalgo	\$ 431,140.00
151000190	ML06g Mayberry A	City of Mission	Hidalgo	\$ 1,103,732.00
151000191	ML06h Woodland	City of Mission	Hidalgo	\$ 689,370.00
151000192	ML06i Bryan	City of Mission	Hidalgo	\$ 3,352,771.00
151000193	ML06j Orange	City of Mission	Hidalgo	\$ 198,139.00
151000194	ML06k Stewart A	City of Mission	Hidalgo	\$ 2,322,862.00
151000195	ML06l Sundrop	City of Mission	Hidalgo	\$ 328,830.00

# TASK 12 – APPROVAL FOR ADDITIONAL FMES

## *Newly Acquired Projects to move to FMES*

FME ID Number	FME Title	Entity	County	Cost
151000196	ML06m & ML06n Tulip/Glasscock	City of Mission	Hidalgo	\$ 4,089,283.00
151000197	ML06o Solar	City of Mission	Hidalgo	\$ 916,920.00
151000198	ML06p Lower ECD	City of Mission	Hidalgo	\$ 918,332.00
151000199	ML08 Stonegate	City of Mission	Hidalgo	\$ 1,431,639.00
151000200	ML10a Country Club	City of Mission	Hidalgo	\$ 336,095.00
151000201	ML10b Sunset	City of Mission	Hidalgo	\$ 3,389,186.00
151000202	ML10c Griffin	City of Mission	Hidalgo	\$ 1,592,558.00
151000203	ML10d Driftwood	City of Mission	Hidalgo	\$ 1,709,875.00
151000204	ML11a Sunrise	City of Mission	Hidalgo	\$ 774,405.00
151000205	ML11b Shary B	City of Mission	Hidalgo	\$ 1,723,252.00

# TASK 12 – APPROVAL FOR ADDITIONAL FMES

## *Newly Acquired Projects to move to FMES*

FME ID Number	FME Title	Entity	County	Cost
151000206	ML11c Wernecke	City of Mission	Hidalgo	\$ 291,662.00
151000207	ML11d Grapefruit	City of Mission	Hidalgo	\$ 132,447.00
151000208	ML11e Norma	City of Mission	Hidalgo	\$ 398,198.00
151000209	MI02 El Dorado	City of Mission	Hidalgo	\$ 676,861.00
151000210	MI05 Greenlawn	City of Mission	Hidalgo	\$ 1,123,831.00
151000211	MI06a Erma	City of Mission	Hidalgo	\$ 2,409,059.00
151000212	MI06b Leal	City of Mission	Hidalgo	\$ 1,260,322.00
151000213	MI07a Farias	City of Mission	Hidalgo	\$ 1,946,185.00
151000214	MI07b Guadalupe	City of Mission	Hidalgo	\$ 1,681,487.00
151000215	MI07c Perkins	City of Mission	Hidalgo	\$ 1,378,333.00

# TASK 12 – APPROVAL FOR ADDITIONAL FMES

## *Newly Acquired Projects to move to FMES*

FME ID Number	FME Title	Entity	County	Cost
151000216	MI09 Los Indios	City of Mission	Hidalgo	\$ 2,563,694.00
151000217	MI10a Melba Carter	City of Mission	Hidalgo	\$ 2,203,560.00
151000218	MI10b Astroland	City of Mission	Hidalgo	\$ 3,340,899.00
151000219	MI10c Keralum	City of Mission	Hidalgo	\$ 711,575.00
151000220	MI11 Lower Melba Carter (5-F)	City of Mission	Hidalgo	\$ 145,649.00
151000221	MI13a1 & MI13a2 Spikes & Jupiter	City of Mission	Hidalgo	\$ 5,031,398.00
151000222	MI13b Elm	City of Mission	Hidalgo	\$ 1,330,507.00
151000223	MI13c Ragland	City of Mission	Hidalgo	\$ 1,537,040.00
151000224	MI14a & MI14b Mission Medical Center / Travis	City of Mission	Hidalgo	\$ 371,543.00
151000225	MI16 Rosalinda	City of Mission	Hidalgo	\$ 690,604.00

# TASK 12 – APPROVAL FOR ADDITIONAL FMES

## *Newly Acquired Projects to move to FMES*

FME ID Number	FME Title	Entity	County	Cost
151000226	MI17 Taylor	City of Mission	Hidalgo	\$ 1,049,842.00
151000227	MI18a Frio	City of Mission	Hidalgo	\$ 1,621,613.00
151000228	MI18b Mission Palms	City of Mission	Hidalgo	\$ 361,846.00
151000229	MI19a Sabine	City of Mission	Hidalgo	\$ 1,327,063.00
151000230	Starr County Hazard Mitigation Plan Action #21	Starr County	SCDD	\$ 3,200,000.00
151000231	City of Del Rio Master Watershed Study Solution 1	City of Del Rio	Val Verde	\$ 1,500,000.00
151000232	CCDD5 - Enhanced Flood Warning System	Cameron County	Cameron	\$ 1,500,000.00
151000233	CCDD5 - Cameron County Levee Certification	Cameron County	Cameron	\$ 750,000.00
151000234	CCDD5 - Regional Detention and Channel Improvements	Cameron County	Cameron	
151000235	CCDD5 - Storm sewer, Bridge, and Culvert Improvements.	Cameron County	Cameron	

# TASK 12 – APPROVAL FOR ADDITIONAL FMES

## *Newly Acquired Projects to move to FMES*

FME ID Number	FME Title	Entity	County	Cost
151000236	Jefferson Street Storm Drain Improvements	City of Harlingen	Cameron	\$ 282,440.00
151000237	Business 77 & 13th Street Storm Sewer	City of Harlingen	Cameron	\$ -
151000238	21st Street Storm Sewer Improvements	City of Harlingen	Cameron	\$ 207,366.67
151000239	Treasure Hills/ 25th Street Storm Sewer Improvements	City of Harlingen	Cameron	\$ 172,624.00
151000240	5th & 7th Storm Sewer Improvements	City of Harlingen	Cameron	\$ 468,468.00
151000241	Lozano Street Small Detention Pond Project	City of Harlingen	Cameron	\$ 138,150.00
151000242	21st Street Storm Sewer Improvements	City of Harlingen	Cameron	\$ 92,172.00
151000243	Jackson Avenue Drainage Improvements Project	City of Harlingen	Cameron	\$ 18,810.00

# TASK 12 – APPROVAL FOR ADDITIONAL FMES

## *Newly Acquired Projects to move to FMES*

FME ID Number	FME Title	Entity	County	Cost
151000244	Hickory Hill Road Drainage Improvement Project	City of Harlingen	Cameron	\$ 31,000.00
151000245	Lozano Street Detention Facility	City of Harlingen	Cameron	\$ 52,700.00
151000246	Adam's Crossing Subdivision Storm Sewer Improvement Project	City of Harlingen	Cameron	\$ 57,500.00
151000247	Teegee and Fairpark Storm Sewer System Project	City of Harlingen	Cameron	\$ 56,398.00
151000248	Fairpark Blvd Storm Sewer System Improvement Project	City of Harlingen	Cameron	\$ 56,398.00
151000249	Jacaranda Storm Sewer System Improvement Project	City of Harlingen	Cameron	\$ 24,000.00
151000250	Ed Carey Storm Sewer System Improvement Project	City of Harlingen	Cameron	\$ 453,595.48
151000251	Pickens Storm Sewer Improvements Project	City of Harlingen	Cameron	\$ 199,360.00
151000252	Sunchase Storm Sewer Improvements	City of Harlingen	Cameron	\$ 30,671.25



# TASK 12 – APPROVAL FOR ADDITIONAL FMES

## *Newly Acquired Projects to move to FMES*

FME ID Number	FME Title	Entity	County	Cost
151000253	Sabal Palm Storm Sewer System Improvements	City of Harlingen	Cameron	\$ -
151000227	Summerfield Storm Sewer System Improvement Project	City of Mission	Hidalgo	\$ 1,621,613.00
151000228	Beck Ave Storm Sewer Improvement Project	City of Mission	Hidalgo	\$ 361,846.00
151000229	Jackson Monroe, and Van Buren Outfall Improvements Project	City of Mission	Hidalgo	\$ 1,327,063.00
151000230	1st Street Storm Sewer Improvement Project	Starr County	SCDD	\$ 3,200,000.00
151000231	Alcott Storm Sewer System Improvement Project	City of Del Rio	Val Verde	\$ 1,500,000.00
151000232	7th Street Storm Sewer Improvement Project	Cameron County	Cameron	\$ 1,500,000.00
151000233	Hoogland Street Storm Sewer Improvements	Cameron County	Cameron	\$ 750,000.00
151000234	Rose Street Storm Sewer Improvement Project	Cameron County	Cameron	
151000235	Beck and Breedlove Storm Sewer Improvement Project	Cameron County	Cameron	

# TASK 12 – APPROVAL FOR ADDITIONAL FMES

## *Newly Acquired Projects to move to FMES*

FME ID Number	FME Title	Entity	County	Cost
151000263	Dilworth Storm Sewer Improvement Project	City of Harlingen	Cameron	\$ -
151000264	Quail Run Street Storm Sewer Improvement Project	City of Harlingen	Cameron	\$ -
151000265	Hapner Street Storm Sewer Improvement Project	City of Harlingen	Cameron	\$ -
151000266	Rio Hondo Road Ditch Improvements	City of Harlingen	Cameron	\$ -
151000267	Cantu Lateral Ditch Improvement Project	City of Harlingen	Cameron	\$ -



## **TASK 11 – ENHANCED OUTREACH**

### ***Additional Information Received***

#### **Models received from**

- ☐ City of Edinburg
- ☐ City of Mission
- ☐ Cameron County Drainage District No. 3
- ☐ Cameron County Drainage District No.3



# **TASK 13/5 – AMENDED REGIONAL FLOOD PLAN / RECOMMENDATION OF FME, FMS & ASSOCIATED FMP**



## **TASK 12 – PERFORM FMEs FOR ADDITIONAL FMPs** *TWDB Requirements*

### **Objective:**

- ☐ “Perform” identified FMEs to recommended additional FMPs
  - ☐ Evaluate flood risks in areas with limited data
  - ☐ Evaluate flood risk reduction solutions
  - ☐ Preliminary engineering

### **Requirement:**

- ☐ RFPG must approve list of FMEs to be performed
  - ☐ Additional FMPs to be evaluated and recommended
- ☐ Must adhere to Task 4B/5 requirements
- ☐ Revise and re-submit relevant data deliverables and RFP chapters
- ☐ Results/recommendations to be included in the Amended Regional Flood Plan
  - ☐ due July 14, 2023

# TASK 12 - FMES FOR ADDITIONAL FMPS

*Newly Acquired Projects to move to FMPS (minor updates)*

FME ID Number	FME Title	BCA	County	Sponsor
151000134	NM-102	1.15	Hidalgo	City of Edinburg
151000135	NM-103	2.64	Hidalgo	City of Edinburg
151000137	NM-105	1.18	Hidalgo	City of Edinburg
151000138	NM-106	4.23	Hidalgo	City of Edinburg
151000139	NM-108	8.08	Hidalgo	City of Edinburg
151000141	NM-110	6.55	Hidalgo	City of Edinburg
151000142	NM-111	1.5	Hidalgo	City of Edinburg
151000144	NM-113	8.1	Hidalgo	City of Edinburg
151000145	NM-115	3.41	Hidalgo	City of Edinburg
151000146	NM-116	4	Hidalgo	City of Edinburg
151000147	ES-100	3.07	Hidalgo	City of Edinburg

# TASK 12 - FMES FOR ADDITIONAL FMPS

*Potential FMPS from Newly Acquired Projects(larger effort)*

FME ID Number	FME Title	BCA	County	Sponsor
151000156	Los Indios Diversion	Not Determined	Hidalgo	Cameron County Drainage District No. 3
151000157	Drain A Downstream Improvements	Not Determined	Hidalgo	Cameron County Drainage District No. 3
151000158	Drain A Detention	Not Determined	Hidalgo	Cameron County Drainage District No. 3
151000159	Drain A Diversion	Not Determined	Hidalgo	Cameron County Drainage District No. 3
151000160	Drain C-Right Culvert Improvements	Not Determined	Hidalgo	Cameron County Drainage District No. 3
151000161	Drain D Channel Improvements	Not Determined	Hidalgo	Cameron County Drainage District No. 3
151000162	Drain F-23 Culvert Improvements	Not Determined	Hidalgo	Cameron County Drainage District No. 3

# APPROVAL OF ADDITIONAL FMPS

## *Recommended List of FMEs to FMPs (previous list)*

FME ID Number	FME Title	BCA	County	Sponsor
151000066	Weslaco Stormwater Improvement Plan - South International Boulevard and Business 83	3.8	Hidalgo	City of Weslaco
151000076	Precinct 4 MDP - Risk Area F at Texas Rd. & Cesar Chavez Rd.	2.54	Hidalgo	Hidalgo County Precinct 4
151000071	Precinct 4 MDP - Risk Area A at Mile 8.5 Rd. & Ware Rd.	1.74	Hidalgo	Hidalgo County Precinct 4
151000089	Risk Area 15 Trib 3 Detention at Main Street	1.62	Maverick	City of Eagle Pass
151000074	Precinct 4 MDP - Risk Area D at S. McColl & Canton Rd.	1.4	Hidalgo	Hidalgo County Precinct 4
151000072	Precinct 4 MDP - Risk Area B at Mile 6 & North Ware Rd.	1.3	Hidalgo	Hidalgo County Precinct 4
151000095	Risk Area 8 Tributary 2 channel widening near Alexander Drive	1.1	Maverick	City of Eagle Pass
151000094	Risk Area 6 Trib 2 bypass & detention at Eagle Pass High School fields	1.08	Maverick	City of Eagle Pass
151000079	Precinct 4 MDP - Risk Area J at SH107 & FM 907	1.07	Hidalgo	Hidalgo County Precinct 4



# APPROVAL OF ADDITIONAL FMPS

## *Potential FMEs to Advance to FMPs (previous list)*

FME ID Number	FME Title	BCA	County	Sponsor
151000078	Precinct 4 MDP - Risk Area I at Sharp Rd. & E Monte Cristo Rd	0.63	Hidalgo	Hidalgo County Precinct 4
151000092	Risk Area 4 Bibb & Misty Willow storm drain	0.63	Maverick	City of Eagle Pass
151000064	Weslaco Stormwater Improvement Plan - Pleasantview Drive and 11th Street	0.5	Hidalgo	City of Weslaco
151000077	Precinct 4 MDP - Risk Area G at Hoehn Rd. & Mile 11 Rd.	0.5	Hidalgo	Hidalgo County Precinct 4
151000093	Risk Area 5 Debona Drive	0.49	Maverick	City of Eagle Pass



## **TASK 11 – ENHANCED OUTREACH**

### ***Additional Information Received***

#### **Models received from**

- ☐ City of Edinburg
- ☐ City of Mission
- ☐ Cameron County Drainage District No. 3
- ☐ Cameron County Drainage District No.3



# **COMMENTS ON THE FINAL REGIONAL FLOOD PLAN**



- 61 comments
- Addressed by April 11, 2023
- Information uploaded to OneDrive

- Revised Report PDF
- Revised Tables
- Revised Geodatabase file

- 7 comments
- 3 to be addressed in amended Regional Flood Plan

- 4 comments addressed now





# COMMENTS TO THE FINAL REGIONAL FLOOD PLAN

## *Noted deficiencies to be addressed*

### Level 1 comments

- ☐ Appendices A and B not included in Final RFP
  - ☐ Included in parts initially due to size
  - ☐ Uploaded in volumes
- ☐ Invalid Entries in Geodatabase (11 comments)
- ☐ Reconciling table values with geodatabase entries ( 44 comments)
- ☐ Wrong population value for several FMEs, recommended FMPs
- ☐ Missing table tying no negative impacts to each FMP
- ☐ Missing actual table 19 in the excel spreadsheet. Included as a PDF, but not in the excel
- ☐ Accessibility errors in the pdf.



# COMMENTS TO THE FINAL REGIONAL FLOOD PLAN

## *Noted deficiencies to be addressed*

### Level 2 comments

- ☐ Model IDs in the TDIS system did not match those in the model coverage feature class
  - ☐ Corrected
- ☐ Model number needed in name of model and the model folder in upload to OneDrive
- ☐ Target year for Short Term goal was 2023 and should have been 2033.
  - ☐ Corrected
- ☐ Map 19 needs to be corrected to reflect correct FME types
  - ☐ corrected
- ☐ Table 19 pdf has separate page for each entity. Consolidate to a continuous table
  - ☐ corrected
- ☐ Accessibility issues on figures in pdf.



# **REVIEW OF POTENTIAL RANKING CRITERIA OF FME, FMS & FMP**



# REVIEW OF FMX RANKING CRITERIA

## Posted Information

Attachment 1

Texas Water Development Board  
Flood Planning Division

DRAFT

Proposed 2024 State Flood Plan Flood Management Evaluation (FME), Flood Mitigation Project (FMP) and Flood Management Strategy (FMS) Ranking Criteria and Weight

Texas Water Code Sec. 16.061, (b) The state flood plan must include: ... (2) a statewide, ranked list of ongoing and proposed flood control and mitigation projects and strategies necessary to protect against the loss of life and property from flooding..."  
TWDB rules state that the state flood plan shall incorporate "a statewide, ranked list of recommended FMEs, FMSs, and FMPs that have associated one-time capital costs derived from the Board-approved RFPs (31 TAC §362.4 (c)(5)).

\* All flood risk and risk reduction information are for 1% annual chance storm.

	Criteria Name	Criteria Type	Criteria Grouping	FME Ranking Criteria	FME Ranking Weight	FME Grouping Weight	FMP Ranking Criteria	FMP Ranking Percent Weight	FMP Grouping Weight	FMS Ranking Criteria	FMS Ranking Percent Weight	FMS Grouping Weight
REPORTED DATA FROM FME, FMP, AND FMS FEATURE CLASSES	1 Emergency Need (Y/N)	Other		No	0.0%		No	0.0%		No	0.0%	
	2 Estimated number of structures at 100yr flood risk	Flood Risk	Life, Safety and Structures	Yes	15.0%	80.0%	No	0.0%	0.0%	Yes	10.0%	45.0%
	3 Residential structures at 100-year flood risk	Flood Risk		Yes	10.0%		No	0.0%		Yes	5.0%	
	4 Estimated Population at 100-year flood risk	Flood Risk		Yes	15.0%		No	0.0%		Yes	10.0%	
	5 Critical facilities at 100-year flood risk (#)	Flood Risk		Yes	20.0%		No	0.0%		Yes	10.0%	
	6 Number of low water crossings at flood risk (#)	Flood Risk	Mobility	Yes	20.0%	15.0%	No	0.0%	0.0%	Yes	10.0%	15.0%
	7 Estimated number of road closures (#)	Flood Risk		Yes	5.0%		No	0.0%		Yes	5.0%	
	8 Estimated length of roads at 100-year flood risk (Miles)	Flood Risk		Yes	10.0%		No	0.0%		Yes	10.0%	
	9 Estimated farm & ranch land at 100-year flood risk (acres)	Flood Risk	Agriculture	Yes	5.0%	5.0%	No	0.0%	0.0%	Yes	5.0%	5.0%
	10 Number of structures with reduced 100yr (1% annual chance) Floodplain	Flood Risk Reduction					Yes	5.0%		No	0.0%	
	11 Number of structures removed from 100yr (1% annual chance) Floodplain	Flood Risk Reduction	Life, Safety and Structures				Yes	5.0%	50.0%	Yes	10.0%	20.0%
	12 Percent of structures removed from 100yr (1% annual chance) Floodplain (Calculated by TWDB from reported data)	Flood Risk Reduction					Yes	10.0%				
	13 Residential structures removed from 100yr (1% annual chance) Floodplain	Flood Risk Reduction					No	0.0%		No	0.0%	
	14 Estimated Population removed from 100yr (1% annual chance) Floodplain	Flood Risk Reduction					Yes	10.0%		Yes	10.0%	
	15 Critical facilities removed from 100yr (1% annual chance) Floodplain (#)	Flood Risk Reduction	Mobility				Yes	10.0%		No	0.0%	
	16 Number of low water crossings removed from 100yr (1% annual chance) Floodplain (#)	Flood Risk Reduction					Yes	10.0%		No	0.0%	
	17 Estimated reduction in road closure occurrences	Flood Risk Reduction					No	0.0%		No	0.0%	
	18 Estimated length of roads removed from 100yr floodplain (Miles)	Flood Risk Reduction	Agriculture				Yes	5.0%	5.0%	No	0.0%	0.0%
	19 Estimated farm & ranch land removed from 100yr floodplain (acres)	Flood Risk Reduction					Yes	5.0%		No	0.0%	
	20 Cost per structure removed from 100-year floodplain	Other					No	0.0%		No	0.0%	
	21 Percent Nature-based Solution (by cost)	Other					Yes	2.5%		Yes	5.0%	
	22 Benefit-Cost Ratio	Other					Yes	2.5%				
	23 Water Supply Benefit (Y/N)	Other					Yes	5.0%		Yes	10.0%	
	Subtotal				100.0%			70.0%			100.0%	
FMP PROJECT DETAILS SCORING (COMPUTED BY RFPs. SOME DUPLICATION MAY EXIST)	24 Score 1: Severity - Pre-Project Average Depth of Flooding (100-year)	Flood Risk					Yes	5.0%				
	25 Score 2: Severity - Community Need (% Population)	Flood Risk					No	0.0%				
	26 Score 3: Flood Risk Reduction	Flood Risk Reduction					See above	0.0%				
	27 Score 4: Flood Damage Reduction	Flood Risk Reduction					Yes	2.5%				
	28 Score 5: Critical Facilities Damage Reduction	Flood Risk Reduction					No	0.0%				
	29 Score 6: Life and Safety	Flood Risk Reduction					Yes	5.0%				
	30 Score 7: Water Supply	Other Benefits					Yes	5.0%				
	31 Score 8: Social Vulnerability	Other					Yes	2.5%				
	32 Score 9: Nature-Based Solution	Other Benefits					See above	0.0%				
	33 Score 10: Multiple Benefits	Other Benefits					Yes	2.5%				
	34 Score 11: O&M	Other					Yes	2.5%				
	35 Score 12: Admin. Regulatory Obstacles	Other					No	0.0%				
	36 Score 13: Environmental Benefit	Other Benefits					Yes	2.5%				
	37 Score 14: Environmental Impact	Other Benefits					No	0.0%				
	38 Score 15: Mobility	Other Benefits					Yes	2.5%				
	39 Score 16: Regional (Geographic Distribution)	Other Benefits					No	0.0%				
	Subtotal				0.0%			30.0%			0.0%	
	Total				100.0%			100.0%			100.0%	

Working document generated for stakeholder feedback.





# REVIEW OF FMX RANKING CRITERIA

## *FME Ranking Criteria*

	Criteria Name	Criteria Type	Criteria Grouping	FME Ranking Criteria	FME Ranking Weight	FME Grouping Weight
1	Emergency Need (Y/N)	Other		No	0.0%	
2	Estimated number of structures at 100yr flood risk	Flood Risk	Life, Safety and Structures	Yes	15.0%	80.0%
3	Residential structures at 100-year flood risk	Flood Risk		Yes	10.0%	
4	Estimated Population at 100-year flood risk	Flood Risk		Yes	15.0%	
5	Critical facilities at 100-year flood risk (#)	Flood Risk		Yes	20.0%	
6	Number of low water crossings at flood risk (#)	Flood Risk		Yes	20.0%	
7	Estimated number of road closures (#)	Flood Risk	Mobility	Yes	5.0%	15.0%
8	Estimated length of roads at 100-year flood risk (Miles)	Flood Risk		Yes	10.0%	
9	Estimated farm & ranch land at 100-year flood risk (acres)	Flood Risk	Agriculture	Yes	5.0%	5.0%

## Highest Ranked FME for Region 15

- ❑ 75 - Webb County Flood Risk Maps
- ❑ 151 – Starr County Drainage District Flood Risk Maps
- ❑ 152 – Morenos, Garceno and Kelsey Creek Culvert/Bridge Improvements

2336 Total FMEs



# REVIEW OF FMX RANKING CRITERIA

## FMS Rank Criteria

### Highest Ranked FMS for Region 15

- ❑ 13 – Hidalgo County Early Warning System for new jurisdictions
- ❑ 13 – Hidalgo County updated building codes and regulatory floodplain standards
- ❑ 13 – Hidalgo County Update of website and maps with Stormready links, and educational mailout

	Criteria Name	Criteria Type	Criteria Grouping	FMS Ranking Criteria	FMS Ranking Percent Weight	FMS Grouping Weight
REPORTED DATA FROM FME, FMP and FMS FEATURE CLASSES	1 Emergency Need (Y/N)	Other		No	0.0%	
	2 Estimated number of structures at 100yr flood risk	Flood Risk	Life, Safety and Structures	Yes	10.0%	45.0%
	3 Residential structures at 100-year flood risk	Flood Risk		Yes	5.0%	
	4 Estimated Population at 100-year flood risk	Flood Risk		Yes	10.0%	
	5 Critical facilities at 100-year flood risk (#)	Flood Risk		Yes	10.0%	
	6 Number of low water crossings at flood risk (#)	Flood Risk		Yes	10.0%	
	7 Estimated number of road closures (#)	Flood Risk	Mobility	Yes	5.0%	15.0%
	8 Estimated length of roads at 100-year flood risk (Miles)	Flood Risk		Yes	10.0%	
	9 Estimated farm & ranch land at 100-year flood risk (acres)	Flood Risk	Agriculture	Yes	5.0%	5.0%
	10 Number of structures with reduced 100yr (1% annual chance) Floodplain	Flood Risk Reduction	Life, Safety and Structures	No	0.0%	20.0%
	11 Number of structures removed from 100yr (1% annual chance) Floodplain	Flood Risk Reduction		Yes	10.0%	
	12 Percent of structures removed from 100yr (1% annual chance) Floodplain (Calculated by TWDB from reported data)	Flood Risk Reduction				
	13 Residential structures removed from 100yr (1% annual chance) Floodplain	Flood Risk Reduction		No	0.0%	
	14 Estimated Population removed from 100yr (1% annual chance) Floodplain	Flood Risk Reduction		Yes	10.0%	
	15 Critical facilities removed from 100yr (1% annual chance) Floodplain (#)	Flood Risk Reduction		No	0.0%	
	16 Number of low water crossings removed from 100yr (1% annual chance) Floodplain (#)	Flood Risk Reduction		No	0.0%	
	17 Estimated reduction in road closure occurrences	Flood Risk Reduction	Mobility	No	0.0%	0.0%
	18 Estimated length of roads removed from 100yr floodplain (Miles)	Flood Risk Reduction		No	0.0%	
	19 Estimated farm & ranch land removed from 100yr floodplain (acres)	Flood Risk Reduction	Agriculture	No	0.0%	0.0%
	20 Cost per structure removed from 100-year floodplain	Other		No	0.0%	
	21 Percent Nature-based Solution (by cost)	Other		Yes	5.0%	
	22 Benefit-Cost Ratio	Other				
	23 Water Supply Benefit (Y/N)	Other		Yes	10.0%	
	<b>Subtotal</b>				<b>100.0%</b>	

375 Total FMSs



# REVIEW OF FMX RANKING CRITERIA

## FMP Rank Criteria

### Highest Ranked FME for Region 15

- ❑ 55 – Southwest Pharr Drainage Mitigation Project
- ❑ 76 – North Pharr Drainage Mitigation Project

205 Total FMEs

	Criteria Name	Criteria Type	Criteria Grouping	FMP Ranking Criteria	FMP Ranking Percent Weight	FMP Grouping Weight
REPORTED DATA FROM FME, FMP and FMS FEATURE CLASSES	1 Emergency Need (Y/N)	Other		No	0.0%	
	2 Estimated number of structures at 100yr flood risk	Flood Risk	Life, Safety and Structures	No	0.0%	0.0%
	3 Residential structures at 100-year flood risk	Flood Risk		No	0.0%	
	4 Estimated Population at 100-year flood risk	Flood Risk		No	0.0%	
	5 Critical facilities at 100-year flood risk (#)	Flood Risk		No	0.0%	
	6 Number of low water crossings at flood risk (#)	Flood Risk		No	0.0%	
	7 Estimated number of road closures (#)	Flood Risk	Mobility	No	0.0%	0.0%
	8 Estimated length of roads at 100-year flood risk (Miles)	Flood Risk		No	0.0%	
	9 Estimated farm & ranch land at 100-year flood risk (acres)	Flood Risk	Agriculture	No	0.0%	0.0%
	10 Number of structures with reduced 100yr (1% annual chance) Floodplain	Flood Risk Reduction		Yes	5.0%	50.0%
	11 Number of structures removed from 100yr (1% annual chance) Floodplain	Flood Risk Reduction	Life, Safety and Structures	Yes	5.0%	
	12 Percent of structures removed from 100yr (1% annual chance) Floodplain (Calculated by TWDB from reported data)	Flood Risk Reduction		Yes	10.0%	
	13 Residential structures removed from 100yr (1% annual chance) Floodplain	Flood Risk Reduction		No	0.0%	
	14 Estimated Population removed from 100yr (1% annual chance) Floodplain	Flood Risk Reduction		Yes	10.0%	
	15 Critical facilities removed from 100yr (1% annual chance) Floodplain (#)	Flood Risk Reduction		Yes	10.0%	
	16 Number of low water crossings removed from 100yr (1% annual chance) Floodplain (#)	Flood Risk Reduction		Yes	10.0%	
	17 Estimated reduction in road closure occurrences	Flood Risk Reduction	Mobility	No	0.0%	5.0%
	18 Estimated length of roads removed from 100yr floodplain (Miles)	Flood Risk Reduction		Yes	5.0%	
	19 Estimated farm & ranch land removed from 100yr floodplain (acres)	Flood Risk Reduction	Agriculture	Yes	5.0%	5.0%
	20 Cost per structure removed from 100-year floodplain	Other		No	0.0%	
	21 Percent Nature-based Solution (by cost)	Other		Yes	2.5%	
	22 Benefit-Cost Ratio	Other		Yes	2.5%	
	23 Water Supply Benefit (Y/N)	Other		Yes	5.0%	
	<b>Subtotal</b>				<b>70.0%</b>	
FMP PROJECT DETAILS SCORING (COMPUTED BY RFG, SOME DUPLICATION MAY EXIST)	24 Score 1: Severity - Pre-Project Average Depth of Flooding (100-year)	Flood Risk		Yes	5.0%	
	25 Score 2: Severity - Community Need (% Population)	Flood Risk		No	0.0%	
	26 Score 3: Flood Risk Reduction	Flood Risk Reduction		See above	0.0%	
	27 Score 4: Flood Damage Reduction	Flood Risk Reduction		Yes	2.5%	
	28 Score 5: Critical Facilities Damage Reduction	Flood Risk Reduction		No	0.0%	
	29 Score 6: Life and Safety	Flood Risk Reduction		Yes	5.0%	
	30 Score 7: Water Supply	Other Benefits		Yes	5.0%	
	31 Score 8: Social Vulnerability	Other		Yes	2.5%	
	32 Score 9: Nature-Based Solution	Other Benefits		See above	0.0%	
	33 Score 10: Multiple Benefits	Other Benefits		Yes	2.5%	
	34 Score 11: O&M	Other		Yes	2.5%	
	35 Score 12: Admin, Regulatory Obstacles	Other		No	0.0%	
	36 Score 13: Environmental Benefit	Other Benefits		Yes	2.5%	
	37 Score 14: Environmental Impact	Other Benefits		No	0.0%	
	38 Score 15: Mobility	Other Benefits		Yes	2.5%	
	39 Score 16: Regional (Geographic Distribution)	Other Benefits		No	0.0%	
	<b>Subtotal</b>				<b>30.0%</b>	
<b>Total</b>					<b>100.0%</b>	



# REVIEW OF FMX RANKING CRITERIA

## *Halff's response*

### General feedback

- ☐ Recommend that legislation be changed to remove the ranking requirement from the regional and state flood planning effort.
  - ☐ Rural FMXs ranked lowest
  - ☐ Greatest needs along coasts
  - ☐ May be interpreted as ranking for funding
  - ☐ RFPG interpretations of fields could skew ranks
- ☐ As it is a requirement, the following recommendations were made:
  - ☐ Consider population affected as a %, rather than a raw number of people
  - ☐ Consider size of area benefitting as a %, rather than a raw size
  - ☐ Consider regional rankings of FMXs
  - ☐ Consider multiple list, such as urban, rural, and coastal
  - ☐ Consider rankings by type, such as low water crossing, regional detention, etc.



# REVIEW OF FMX RANKING CRITERIA

## *Halff's response*

### FME Ranking Criteria and Weights feedback

- ❑ Rural areas do not have the resources to calculate the ranking criteria metrics, thus assumptions may have been made by RFPs based on generalized information.
- ❑ Halff recommended the following:
  - ❑ Consider population affected as a %, rather than a raw number of people
  - ❑ Avoid double counting throughout the scoring process.
    - ❑ # structures vs # residential structures
  - ❑ Comments on Grouping weight:

	Criteria Name	Criteria Type	Criteria Grouping	FME Ranking Criteria	FME Ranking Weight	FME Grouping Weight	FME Grouping Weight	
1	Emergency Need (Y/N)	Other		No	0.0%			
2	Estimated number of structures at 100yr flood risk	Flood Risk	Life, Safety and Structures	Yes	15.0%	80.0%	25.0%	structures
3	Residential structures at 100-year flood risk	Flood Risk		Yes	10.0%		15.0%	population
4	Estimated Population at 100-year flood risk	Flood Risk		Yes	15.0%		20.0%	Critical Facility
5	Critical facilities at 100-year flood risk (#)	Flood Risk		Yes	20.0%			
6	Number of low water crossings at flood risk (#)	Flood Risk	Mobility	Yes	20.0%	15.0%	35.0%	Roadway
7	Estimated number of road closures (#)	Flood Risk		Yes	5.0%			
8	Estimated length of roads at 100-year flood risk (Miles)	Flood Risk	Agriculture	Yes	10.0%	5.0%		
9	Estimated farm & ranch land at 100-year flood risk (acres)	Flood Risk		Yes	5.0%		5.0%	ag



# REVIEW OF FMX RANKING CRITERIA

## *Halff's response*

### FMP Ranking Criteria and Weights feedback

- ☐ The current ranking is weighted heavily towards coastal areas. This results in urbanized and rural areas ranking lower.
- ☐ Halff recommended the following:
  - ☐ Consider population affected as a %, rather than a raw number of people
  - ☐ Avoid double counting throughout the scoring process.
    - ☐ # structures vs # residential structures
  - ☐ Consider reducing the number of categories considered in the ranking calculation, such as water supply, SVI, and O&M.
  - ☐ Consider removing flood damage reduction scoring categories that appear to double count elements in the calculation. The line item for flood reduction double counts the metrics from number of structures removed and % structures removed from the floodplain.





# REVIEW OF FMX RANKING CRITERIA

## Halff's response

### FMP Ranking Criteria and Weights feedback, *continued*

#### □ Comments on Grouping weight:

	Criteria Name	Criteria Type	FMP Ranking Criteria	FMP Ranking Percent Weight	FMP Grouping Weight	
22	Benefit-Cost Ratio	Other	Yes	2.5%	5.0%	Economics
34	Score 11: O&M	Other	Yes	2.5%		Economics
31	Score 8: Social Vulnerability	Other	Yes	2.5%	2.5%	SVI
14	Estimated Population removed from 100yr (1% annual chance) Floodplain	Flood Risk Reduction	Yes	10.0%	10.0%	Population
29	Score 6: Life and Safety	Flood Risk Reduction	Yes	5.0%	10.0%	Risk Reduction
24	Score 1: Severity - Pre-Project Average Depth of Flooding (100-year)	Flood Risk	Yes	5.0%		Risk Reduction
15	Critical facilities removed from 100yr (1% annual chance) Floodplain (#)	Flood Risk Reduction	Yes	10.0%	10.0%	Critical Facilities
10	Number of structures with reduced 100yr (1% annual chance) Floodplain	Flood Risk Reduction	Yes	5.0%	22.5%	Structures
11	Number of structures removed from 100 yr (1% annual chance) Floodplain	Flood Risk Reduction	Yes	5.0%		Structures
12	Percent of structures removed from 100yr (1% annual chance) Floodplain (Calculated by	Flood Risk Reduction	Yes	10.0%		Structures
27	Score 4: Flood Damage Reduction	Flood Risk Reduction	Yes	2.5%		Structures
16	Number of low water crossings removed from 100yr (1% annual chance) Floodplain (#)	Flood Risk Reduction	Yes	10.0%	17.5%	Roadway
18	Estimated length of roads removed from 100yr floodplain (Miles)	Flood Risk Reduction	Yes	5.0%		Roadway
38	Score 15: Mobility	Other Benefits	Yes	2.5%		Roadway
19	Estimated farm & ranch land removed from 100yr floodplain (acres)	Flood Risk Reduction	Yes	5.0%	5.0%	Ag
23	Water Supply Benefit (Y/N)	Other	Yes	5.0%	10.0%	Water Supply
30	Score 7: Water Supply	Other Benefits	Yes	5.0%		Water Supply
36	Score 13: Environmental Benefit	Other Benefits	Yes	2.5%	2.5%	Environmental
21	Percent Nature-based Solution (by cost)	Other	Yes	2.5%	2.5%	Nature Based
33	Score 10: Multiple Benefits	Other Benefits	Yes	2.5%	2.5%	Other Benefits



# REVIEW OF FMX RANKING CRITERIA

## *Halff's response*

### FMS Ranking Criteria and Weights feedback

- ☐ Scoring appears to skew toward existing flood risk vs flood risk reduction.
- ☐ Halff recommended the following:
  - ☐ Consider population affected as a %, rather than a raw number of people
  - ☐ Avoid double counting throughout the scoring process.
    - ☐ # structures vs # residential structures





# REVIEW OF FMX RANKING CRITERIA

## Halff's response

### FMS Ranking Criteria and Weights feedback, *continued*

□ Comments on Grouping weight:

	Criteria Name	Criteria Type	FMS Ranking Criteria	FMS Ranking Percent Weight	FMS Group Weight	
9	Estimated farm & ranch land at 100-year flood risk (acres)	Flood Risk	Yes	5.0%	5.0%	Agriculture
5	Critical facilities at 100-year flood risk (#)	Flood Risk	Yes	10.0%	10.0%	Critical Facilities
21	Percent Nature-based Solution (by cost)	Other	Yes	5.0%	5.0%	Nature Based
4	Estimated Population at 100-year flood risk	Flood Risk	Yes	10.0%	20.0%	Population
14	Estimated Population removed from 100yr (1% annual chance) Floodplain	Flood Risk Reduction	Yes	10.0%		Population
6	Number of low water crossings at flood risk (#)	Flood Risk	Yes	10.0%	25.0%	Roadway
7	Estimated number of road closures (#)	Flood Risk	Yes	5.0%		Roadway
8	Estimated length of roads at 100-year flood risk (Miles)	Flood Risk	Yes	10.0%		Roadway
2	Estimated number of structures at 100yr flood risk	Flood Risk	Yes	10.0%	25.0%	Structures
3	Residential structures at 100-year flood risk	Flood Risk	Yes	5.0%		Structures
11	Number of structures removed from 100yr (1% annual chance) Floodplain	Flood Risk Reduction	Yes	10.0%		Structures
23	Water Supply Benefit (Y/N)	Other	Yes	10.0%	10.0%	Water Supply



**NEXT  
MEETING?**



## **TASK 12 – PERFORM FMEs FOR ADDITIONAL FMPs**

### *Scope of Work for FMEs Selected*

#### **Potential Scope of Work**

- ☐ Data Collection
  - ☐ Site visits
  - ☐ Survey
- ☐ Update hydrologic and hydraulic modeling
  - ☐ Atlas 14 rainfall, LiDAR
- ☐ Update alternatives analysis
- ☐ Verify no adverse impacts
- ☐ Evaluate potential constraints
- ☐ Update cost estimates
- ☐ Conduct cost-benefit analysis
- ☐ Perform FMP evaluation with RFPG
  - ☐ Financial Survey
- ☐ Prepare documentation for inclusion in Amended RFP



# GOALS FOR UPCOMING MEETINGS

*Regional Flood Plan Due January 10, 2023*

## ☐ October

- ☐ Public Meeting(s) to accept comments on the Draft RFP
- ☐ Intake comments on RFP
- ☐ Continue with Task 11, 12 & 13

## ☐ November

- ☐ Review Comments
- ☐ Review changes to Draft
- ☐ Continue with Task 11, 12 & 13

## ☐ December

- ☐ Approve Revised Draft Regional Flood Plan
- ☐ Continue with Task 11, 12 & 13

## ☐ January 2023

- ☐ Submit Final RFP
- ☐ Continue with Task 11, 12 & 13

**Regional Flood Plan Amendment  
due July 14, 2023**



**WRITTEN  
COMMENTS  
WELCOMED.**