# Lower Colorado-Lavaca REGIONAL FLOOD PLANNING GROUP

**REGION 10** 

Technical Committee Meeting March 9, 2022

# Region 10 Lower Colorado-Lavaca RFPG Technical Committee Meeting

1. Call to Order

2. Welcome

3. Approval of minutes from the previous meeting

# Region 10 Lower Colorado-Lavaca Flood Planning Group Technical Committee Meeting

January 27, 2022

# LCRA Redbud Center 3601 Lake Austin Boulevard, Room 108N/S Austin, Texas 78703 9:00 AM

#### Roll call:

Voting Member	Role	Present (x) /Absent ()
	(elections occurred during meeting)	Alternate Present (*)
Kelly Payne	Chair	X
Kacey Cubine Paul	Vice Chair	X
Ann Yakimovicz	Secretary	X
Matt Hollon	Member	X
Brandon Klenzendorf	Member	X

#### **Quorum:**

Quorum: Yes

Number of voting members or alternates representing voting members present: 5

Number required for quorum per current voting membership of 5: 3

#### Other Meeting Attendees: \*\*

Tressa Olsen - TWDB

Mike Moya - Halff Associates, Inc. Mike Personett – Halff Associates, Inc. Cindy Englehardt – Halff Associates, Inc.

Jay Scanlon - Freese & Nichols

Cris Parker – HDR, Inc. Toby Li – HDR, Inc.

Karen Ford – WaterPR

Lauren Graber - LCRA Annette Keaveny - LCRA Marcin Tyszka - LCRA Jennifer Bassett - LCRA Fabiola De Carvalho

Bill Barker - Great Springs Project

#### Agenda:

#### 1. Call to Order

Lauren Graber called the meeting to order at 9:02 AM CST. A roll call of the planning group technical committee members was taken to record attendance and a quorum was established prior to calling the meeting to order.

#### 2. Welcome

Lauren Graber welcomed members and other attendees to the meeting.

#### 3. Public comments – limit 3 minutes per person

Lauren Graber called for public comments. No comments were given.

# 4. Discuss committee meeting process and update from the Planning Group Sponsor

Lauren Graber discussed the committee meeting process regarding public notice, the Texas Open Meetings Act, future hybrid meetings, and mileage reimbursement options for members.

# 5. Nominations, discussion, and possible action to elect Committee Chair, Vice Chair, and Secretary

Lauren Graber discussed the roles and responsibilities of the officers and called for nominations.

Chair – Ann Yakimovicz nominated and made a motion to name Kelly Payne as Chair. The motion was seconded by Matt Hollon. Motion passed 5 to 0.

Vice Chair – Matt Hollon nominated and made a motion to name Kacey Paul as Vice-Chair. The motion was seconded by Kelly Payne. Motion passed 5 to 0.

Secretary – Kacey Paul nominated and made a motion to name Ann Yakimovicz as Secretary. The motion was seconded by Kelly Payne. Motion passed 5 to 0.

#### 6. Technical Consultant Presentation & Discussion

Mike Personett and Cindy Englehardt (both Halff Associates, Inc.), and Cris Parker (HDR), provided updates, briefings, and discussion on the following:

- Requirements/guidelines related to Tasks 4B and 5 Evaluate & Recommend Flood Management Evaluations (FMEs), Flood Management Strategies (FMSs), and Associated Flood Mitigation Projects (FMPs)
  - i. Guidance key issues
    - 1. Achievable levels of flood risk reduction
    - 2. Emergency needs
    - 3. Cost-benefit
    - 4. Adverse impact
    - 5. Other considerations
  - ii. Standardized templates for presentation of results and recommendations
  - iii. Criteria for selection of FMEs to receive additional effort per Task 12

The team will continue refining the FMPs, FMEs, and FMSs list and then transition into Task 5. Cris discussed the minimum screening requirements. Kacey Paul mentioned that Burnet County is in the process of updating their 5-year emergency hazard mitigation action plan. Technical Committee members asked to see the full list and examples of FMPs, FMEs, and FMSs that the consultants are working with.

Halff presented and discussed a draft one-page FME template as an evaluation form. The FMP and FMS templates are currently under construction.

#### 7. Public comments – limit 3 minutes per person

Chair Kelly Payne called for public comments. No comments were given.

#### 8. Discuss future committee meetings

Mike recommended that the Technical Committee meet again in March and twice per month from April through June. Mike requested an additional Technical Committee meeting in July before the RFPG meets to approve submittal of the draft regional flood plan to TWDB.

After general discussion, Chair Kelly Payne concluded that the next meeting in March will be sent out to the committee as soon as available.

#### 9. Adjourn

Kacey Paul made a motion to adjourn, seconded by Ann Yakimovicz. The motion passed 5-0 and the meeting was adjourned at 11:36 AM CST by Chair Kelly Payne.

Approved by the Lower Colorado-Lavaca RFPG Technical Committee at a meeting held on
2022.
Ann Volving vice CCORTADY
Ann Yakimovicz, SECRETARY
Kelly Payne, CHAIR

# Region 10 Lower Colorado-Lavaca RFPG Technical Committee Meeting

4. Public comments – limit 3 minutes per person

5. Technical consultant presentation and discussion related to the results of Task 4B - Identification and Evaluation of Potential Flood Management Evaluations and Potentially Feasible Flood Management Strategies and Flood Mitigation Projects



# LOWER COLORADO – LAVACA REGIONAL FLOOD PLAN A TEXAS INITIATIVE

RFPG 10 TECHNICAL COMMITTEE | MARCH 9, 2022



# **AGENDA**

**Task 4B Screening Process/Status** 

**Task 4B Screening Updates** 

Potentially Feasible Projects (FMPs) – Structural and Non-structural Projects

**Potential Studies (FMEs)** 

Potentially Feasible Strategies (FMSs) – Proposed "Regional" Strategies

# TASK 4B – SCREENING PROCESS - STATUS

# **Proposed Selection Process – Task 4B-5 General Steps**



STEP 1

INITIAL SCREENING OF STUDIES, PROJECTS & STRATEGIES RECEIVED

Screen for minimum TWDB rules and guidance requirements



STEP 2

TASK 4B - SCREENING OF PROJECTS

Screen per TWDB flowchart and guidance



STEP 3

TASK 4B - SCREENING OF STUDIES

Screen for minimum TWDB guidance requirements



STEP 4

TASK 4B - SCREENING OF STRATEGIES

Screen for minimum TWDB guidance requirements

STEP 5

TASK 5 - DETAILED EVALUATIONS OF SELECTED STUDIES, PROJECTS & STRATEGIES

STEP 6

TASK 5 - FINAL RECOMMENDATIONS OF STUDIES, PROJECTS & STRATEGIES

TASK 4B – POTENTIAL PROJECTS, STUDIES, STRATEGIES

**Updates** 

0(290)

#### **FLOOD MANAGEMENT STRATEGIES (FMSs)**

- Infrastructure Project Planning
- Property/Easement Acquisition
- Elevation of Structures

- Education and Outreach
- Flood Warning and Measurement
- Regulatory and Guidance

656<sup>(294)</sup>

**SCREENED OUT** 

Do not meet minimum screening requirements

162<sup>(149)</sup>

#### **FLOOD MANAGEMENT STUDIES (FMEs)**

Flood Preparedness Study Floodplain
Modeling and
Mapping /
Risk
Identification

Flood
Mitigation
Alternatives
Analysis /
Feasibility
Assessment

Flood
Mitigation
Project
Preliminary
Engineering
(30% design)

30(106)

### **FLOOD MITIGATION PROJECTS (FMPs)**

Structural Infrastructure

14(27)

Advanced Analysis / Design (30 - 100% design)

- Bridge/culvert
- Storm drain
- Channel modifications

Non-Structural

<u> 13(79)</u>

#### **Project Implementation**

- Property/Easement Acquisition
- Floodproofing/Elevation of Structures
- Flood Warning Systems, Gauges
- Flood Readiness and Resilience

# POTENTIALLY FEASIBLE STRUCTURAL FMPs

Tributary 8, Ponderosa Loop

Gills Branch

FM 685, Wilbarger Creek

E Pflugerville Pkwy, Wilbarger

Creek

**Highland Park Subdivision** 

Cele Rd, Wilbarger Creek Trib 210

Gregg Ln, Wilbarger Creek Trib 220

Cameron Rd, Wilbarger Creek

Alum Creek Watershed
Bastrop County Flood

Protection Planning Study -

Alum Creek Watershed

100% Design Report - Gillis

**Branch Flood Mitigation** 

**Improvements** 

**Bastrop County Flood** 

Protection Planning Study -

Wilbarger Creek Watershed

**Bastrop County Flood** 

Protection Planning Study -

Wilbarger Creek Watershed

**Bastrop County Flood** 

Protection Planning Study -

Wilbarger Creek Watershed

Bastrop County Flood

Protection Planning Study -

Wilbarger Creek Watershed
Bastrop County Flood
Protection Planning Study -

Wilbarger Creek Watershed
Bastrop County Flood

Protection Planning Study -

Wilbarger Creek Watershed

2020

3/30/2021

4/19/2021

4/19/2021

4/19/2021

4/19/2021

4/19/2021

4/19/2021

**Bastrop County** 

City of Bastrop

City of

Pflugerville

City of

Pflugerville

**Travis County** 

**Travis County** 

**Travis County** 

**Travis County** 

Community	Source Name	Source Date	Project Location	Project Description	Project Cost	Current Level of Service	Proposed Level of Service	Rainfall Data	
<b>↓</b> ↑	▼	▼		▼ The state of th	▼	▼	▼	▼	
	Bastrop County Flood			2 box culverts: 4x3 west					
Bastrop County	Protection Planning Study -	2020	Cardinal Drive	4 box culverts: 4x2 east	\$545,000	2-year	10-year	Atlas 14	
	Alum Creek Watershed			310 LF raised roadway					
	Bastrop County Flood			E have guilton when 740					
Bastrop County	Protection Planning Study -	2020	Tributary 11, Cardinal Drive	5 box culverts: 7x6	\$719,200	2-year	25-year	Atlas 14	
	Alum Creek Watershed			360 LF raised roadway					
	Bastrop County Flood			2 have guilton when PvC					
Bastrop County	Protection Planning Study -	2020	Tributary 87, Cardinal Drive	3 box culverts: 8x6	\$351,900	2-year	500-year	Atlas 14	
	Aluma Craak Matarahad	2020		100 LF raised roadway					

3 box culverts: 8x5

192 LF raised roadway

5,050 LF channel benching, 175 LF channel

improvements, increased capacity at crossings,

landscape walls
Integrated with E. Pflugerville Prkwy improvement,

100' wide channel bench 1,700 LF, four 50' span bridge,

810 LF raise road

Integrated with FM685 improvement, 100' wide

channel bench 1,700 LF, four 50' span bridge, remove

concrete drop structure

Add two 8'x4' RCBs; grading US overbank; 1.5' tall 150'

long berm

Four 50' span bridge, 1160 LF raise road

Four 50' span bridge, 870 LF raise road

Six 50' span bridge, 1520 LF raised roadway, channel

grading

\$430,900

\$6,372,820

\$8,302,700

\$3,090,700

\$578,100

\$4,349,700

\$5,503,400

\$3,142,400

2-year

25-year

5-year

25-yaer

50-year

2-year

2-year

2-year

25-year

100-year

100-year

100-year

100-year

100-year

100-year

100-year

Atlas 14

# POTENTIALLY FEASIBLE STRUCTURAL FMPs

Community	Source Name	Source Date Project Location		Project Description	Project Cost	Current Level of Service	Proposed Level of Service	Rainfall Data
Travis County	2011 Bond Program	l 2011	McNeil Rd from Howard Ln to	Drainage improvements and detention throughout the neighborhood to keep the roadway from overtopping during storm events and allowing residents to enter/exit the neighborhood	\$25,000,000	50% (2-year)	0.2% (500-year)	Atlas 14
Travis County	2017 Bond Program	2017	Spicewood Springs Rd Low Water Crossing #1 Only	Bridge to replace undersized box culvert	\$4,541,879	50% (2-year)	0.2% (500-year)	Supplemen tal funding provided for Atlas 14 scoping
Travis County	2017 Bond Program	2017		Construct subdivision drainage improvements as defined in the Drainage Study and 30% Design H&H Tech Memo (February 2019, HDR) and associated 30% schematics.	\$5,626,000	50% (2-year)	1% (100-year)	Atlas 14

- More may come from City of Austin, still vetting internally
- More may come from current Sponsor outreach effort

# POTENTIALLY FEASIBLE NON-STRUCTURAL FMPs

Hays County

1EWP - Chase Cemetery

Site 5 - LaSalle RC&D

Site 8 - Gasch/Kutach

Onion Creek Meadows

Thoroughbred Farms

Arroyo Doble & Onion Creek

Site 6 - Goat Trail

Bluff Springs

Twin Creeks

2017

May 2016

May 2016

May 2016

May 2016

11/22/2017

11/22/2017

11/22/2017

11/22/2017

11/22/2017

Hays County HMP

Jackson County HMP

Jackson County HMP

Jackson County HMP

Jackson County HMP

Travis County Flood Mitigation Study

**Travis County Flood Mitigation Study** 

**Travis County Flood Mitigation Study** 

**Travis County Flood Mitigation Study** 

Travis County Flood Mitigation Study

Hays County

**Jackson County** 

Jackson County

Jackson County

Jackson County

**Travis County** 

**Travis County** 

**Travis County** 

**Travis County** 

Travis County

Community 	Source Name	Source Date	Project Location	Project Type	Project Description	Project Cost	Rainfall Data
City of Buda	Drainage Bond Program Flood Mitigation Study	2018	Lifschutz Headwaters Drainage Project Area	Property Buyouts	Voluntary, targeted buyouts for 1 or more properties	TBD	Atlas 14 Proxy (500yr)
City of Jonestown	Travis County HMP	March 2017	Sandy Creek, Pecan Park	Property Buyouts	Acquisition of property located in floodway	>\$100,000	
City of Jonestown	Travis County HMP	March 2017	Lake Travis and Cross Street	Property Buyouts	Acquisition of property located in floodplain	>\$100,000	

**Property Buyouts** 

Property Buyouts

Property Buyouts

**Property Buyouts** 

Property Buyouts

**Property Elevations** 

**Property Elevations** 

**Property Elevations** 

Property Buyouts

Property Buyouts

Action to mitigate 38 identified properties

Elevations of 15 at-risk homes in the 1% ACE

Elevations of 6 at-risk homes in the 1% ACE

Buyouts of 20 at-risk homes in the 1% ACE

Buyout of 1 at-risk home in the 1% ACE

Elevation of 36 homes in the 1% ACE

Navidad River property acquisition

Property acquisition

Lavaca River acquisition

Arenosa Creek acquisition

\$15,000,000

>\$100,000

>\$100,000

>\$100,000

>\$100,000

\$2,637,720

\$6,599,430

\$845,100

\$3,812,443

\$200,000

no

no

no

no

no

# POTENTIAL FLOOD MANAGEMENT STUDIES (FMEs)

#### **162 Potential Studies**

- ~130 Flood Mitigation Projects that need more analysis (Preliminary
   Engineering 30% Design+) to determine if "Potentially Feasible" Projects
- ~15 Flood Mitigation Alternatives/Feasibility Analyses
- ~5 Floodplain Modeling and Mapping/Flood Risk Identification
- ~12 Flood Preparedness Studies

# **Sample of Potential Studies**

Community ↓1	Source Name	Source Date	Project Location	Project Description	Project Cost	Current Level of Service	Proposed Level of Service	Benefit-Cost Ratio
Blanco County	Blanco County HMP	October 2016		Update and maintain Emergency Management Plan	<\$10,000	n/a	n/a	
City of Fredericksburg	City of Fredericksburg DMP	8/26/2016	College/N Llano, Sycamore/Travis	Storm sewer system; H&H impact assessment necessary	\$15,092,720			
Kerr County	Kerr County HMP	2018		Local Flood Warning System	\$1,000,000	n/a	n/a	
Matagorda County	Matagorda County HMP	February 2017		Update flood insurance study & FIRMS	\$10,000 to \$100,000	n/a	n/a	n/a

# **TWDB Definitions**

- "A proposed plan to reduce flood risk or mitigate flood hazards to life or property."
- "Any proposed action that doesn't qualify as an FME or FMP"
- "RFPG has flexibility with Strategies" (not required to include in RFP)
- "Strategy must quantify the estimated flood risk being addressed and potential level of flood risk reduction"

# **TWDB Definitions**

FMS	FMS	Description	Associate	Counties	HUC10s <sup>C</sup>	Watersheds	Strategy	Strategy	Flood Risk	Sponsor	Entities	Emerg	Estimated	Potential					Flood Ris	k ^				
ID	Name		d Goals (ID)				Туре	Area (sqmi)	Type (Riverine, Coastal, Urban, Playa, Other)		with Oversight	Need (Y/N)	Strategy Cost (\$)	Sources and Amount	Area in 100-year (1% annual chance) Floodplain	Area in 500-year (0.2% annual chance) Floodplain	Estimated number of structures at 100-year flood risk *	Residenti al structures at flood risk	Estimated Population at flood risk	Critical facilities at flood risk (#)	Number of low water crossings at flood risk (#)	Estimated number of road closures (#)	Estimate d length of roads at flood risk (Miles)	Estimated farm & ranch land at flood risk (acres) **
1	Flood County Acquisiti on	Property acquisition program in Flood County	Goal B	Flood	1234567 890	Purple Creek, Blue Creek	Property Acquisitio n	250	Riverine, Urban	Flood County	Flood County	N	75,000,000	Federal, State, Local, Private	60	80	500	450	1,200	3	5	10	7	100
2	Public Awarene ss Campaig n	Public awareness of flood risk to the public	Goal C	All	All	All	Education	(Region area)	All	X River Authority	List of entities in region	N	1,000,000	Private, Local	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
3	Blue Creek	Provide detention in	Goal A	Flood	123456 7890	Purple Creek	Regional Detention	150	Riverine	Flood County	Flood County	Υ	10,000,000	Federal, State,	12	20	350	250	700	3	5	10	7	100

4	Resilienc	resilience in	Goal C	Salty	123456 7891	Salty Bay	Protection	12 F	MSID						Reduction in	Flood Risk						Cost/	Consideration	Negative	Negative	Water
	Y	Coastal County					5			Number of	Number of	Number of	Habitable	Estimated	Critical	Number	Estimated	Estimated	Estimated	Estimated	Estimated	Structure removed	of Nature- based Solution	(Y/N)	Impact Mitigation	Supply Benefit
6	Promoti on of Rainwat er Harvesti	Diversion of flood flow from upper watershed to lower watershed in Green River Basin Promotion of Rainwater Harvesting with Rain Foreast Based release	Goal A	Red, Yellow	123456 7888, 1234567 889	Upper Red	Infrastruc ture  Regulator y Incentive	(Ri Ar		structures with reduced 100- year (1% annual chance) Flood risk	removed from 100- year (1% annual chance) Flood risk	removed from 500- year (0.2% annual chance) Flood risk	structures removed from 100- year (1% annual chance) Flood risk	Population removed from 100- year (1% annual chance) Flood risk	facilities removed from 100- year (1% annual chance) Flood risk (#)	of low water crossings removed from 100-year (1% annual chance) Flood risk (#)	reduction in road closure occurrences	length of roads removed from 100- year flood risk (Miles)	active farm & ranch land removed from 100- year flood risk (acres)	reduction in fatalities (if available) <sup>0</sup>	reduction in injuries (if available) <sup>0</sup>		(Y/N)		(Y/N)	(Y/N)
	ns	Baseu release					0 0			0	375	0	375	1,000	0	0	0	0	0	n.	8	200,000	Υ	N	N	N
							ii .		18	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<sup>8</sup> Esti	nated farn	nber of structu n & ranch land	at 100-year	r flood risk	(acres) sh	hould only inc				150	100	125	100	280	2	3	4	3	2	6	10 S	44,444	γ	N	N	N
Lea	e blank if	too many for to	ext field len	gth (254 c	haracters).			4		6,000	3,000	15,000	3,000	8,250	9	2	38	250	10	8	2	833	Υ	N	N	N
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										N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Υ	N	N	Y
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D This field may be left blank during the 1st planning cycle. However, RFPGs are strongly encouraged to provide this information when applicable and available.

# **Previous Status - Screening of FMSs per Screening Step 2-3**

- 290 Potentially Feasible Strategies "parked" in FMS bucket
- Most were thoughts and ideas from community Hazard Mitigation Plans
- Broad and vague
  - Not a Project or Study
  - Difficult, if not impossible, to quantify flood risk/risk reduction
  - Many do relate to an approved RFPG Goal
- RFPG not required to recommend strategies
- RFPG could consider making general thematic recommendations

### **Current Status**

Screened these "strategies" out

# **Examples of "Strategies" Screened Out – Common Themes**

## **Education and Outreach**

Community <b>↓</b> ↑	Source Name	Source Date	Project Title ▼	Project Description	RFPG Goal ↓†	Project Cost
Austin County	Austin County HMP	September 2019	A6 Education and Mitigation Techniques	Outreach and education campaign for hazards to reduce loss of life/property	1.1	\$7,000
City of East Bernard	Wharton County HMP	October 2016	City of East Bernard Project 3	Organize outreach program for vulnerable populations	1.1	<\$10,000
City of Highland Haven	Burnet County HMP	October 2016	City of Highland Haven 5	Provide education for flood procedures; Turn Around  Don't Drown	1.1	<\$10,000
Coleman County	West Central Texas HMP	2017	Coleman County 6	Turn Around Don't Drown program	1.1	1000
Fort Bend Unincorporated	Fort Bend County HMP Update	2018	Fort Bend Unincorporated 27	Develop PSA for mitigation techniques	1.1	\$5,000
Hays County	Hays County HMP	2018	Attend Advanced Local FM Courses	Send members of staff/elected officials to floodplain admin training	1.1	\$250 / staff
Victoria County	Victoria County HMP	July 2021	Victoria County 3	Conduct all-hazards education and awareness program to educate citizens	1.1	\$20,000
Wharton County	Wharton County HMP	October 2016	Wharton County Project 15	Educate homeowners on hazards	1.1	<\$10,000

# **Examples of "Strategies" Screened Out – Common Themes**

# **Regulatory Improvements**

Community	Source Name	₩	Source Date	Project Title	Project Description	RFPG Goal	Project Cost
Village of Point  Venture  2017	lic Information and	opening/o	·	re Database; Add mechanical VCs and flood prone roadways Point Venture 2 Ning system	2.1 >\$100,000  Review Flood Ordinance for flood prevention  2.1 \$95,000	4.3	<\$10,000
Villageon & Bear Creek	cation ro <b>HBYଶ</b> େହଃnty HMP <del>ble County PA 1</del>	Improve e		Flood Ordinance Higher	©reate higher standards increase protection  2.1 \$250,000	4.3	Minimal
City012B2017city Me	na M áta got da te dunty HMP of Sonora PA 5	Early warı County-w	ningewetany & 1917 n ide warning system	City of Bay City Project 10	Review floodplain നട്ടിളില്ലില്ലെ ordinance 2.1 \$250,000	4.3	<\$10,000
Cityun Boonwoodic	Mills County & City of Bro oria County 2 HMP	<b>୦୭ଏ:ନଧ୍ୟର</b> ନ୍ତ <b>ି</b> system	and implement area February 2017	-wide emergency notification City of Brownwood Project 28	Manufactured home sized door requirements	4.3	<\$10,000
City of Burnet Wh	arten Revesustyjamp	Implemen	t Whataber Govinty F	left dy BriningtSystem	\$10,000 to Building cogendoption	4.3	<\$10,000
City of Palacios	Matagorda County HMP		February 2017	City of Palacios Project 1/	Adopt "Higher Standard" riverine flood damage prevention ordinances	4.3	<\$10,000
City of Sunrise Beach Village	Llano County HMP		July 2016	City of Sunrise Beach Village 11	Adopt building requirements to minimize the risk of property damage or loss	4.2,4.3	\$10,000 to \$100,000
Menard County	Concho Valley HMP		2012-2017	Menard County 3	Ensure NFIP compliance	4.1	Minimal

## **Examples of "Strategies" Screened Out – Common Themes**

# **County / City-wide Flood Warning**

Community	<b>↓</b> ↑	Source Name	<b>*</b>	Source Date	Project Title	Project Description	RFPG Goal	Project Cost
Baistoobpe (C2011fby	Bastr	cka€tooptÇ&wojsydtlS4P	Maintain/ opening/c	Improve Road Closu October 2016 losing devices on LV	ıre Database; Add mechanical Bastrop County Project 34 VCs and flood prone roadways	Maintain/Improve Road Closure Database; Add mechanical >\$100,000 opening/closing devices on LWCs and flood prone roadways	2.1	>\$100,000
City of Othrazoria	Public Educa	Information and Brazoria County HMP Ition	Develop s	evere w <b>2011 h</b> er warr	Public Information and ling system Education	D.	2.1	\$95,000
City o2f011u8da	City c	Haydaanty HMP	Improve e	mergen <b>20/1&amp;</b> 0mmun	Caitiyconf/Buadhaifig system	<b>½</b> m¹prove emergency <b>₫⁄dinimma</b> hication/warning system	2.1	Minimal
Kin <b>2n01</b> n2 + C2001n7ty	Kimbl	<b>€6oalmoy\/RAN4</b> y HMP	Early warı	ning <b>£/0:12</b> m2 <b>/0:1</b> plan	Kimble County PA 1	ይarly warning system 25 (ዓ.1300)	2.1	\$250,000
M <b>201</b> 242001U7hty	Mena	CcbCobaty: Alkey HMP	Early war	ning <b>2/0:12</b> m2/031plan	Menard County PA 4	ይarly warning system 😘 ር ር ƙ	2.1	\$30,000
Su <b>2t0</b> 01r2 C2001r7ty	City c	<b>CSonobo</b> aVPaAl <b>ē</b> y HMP	County-w	ide w <b>20112</b> n <b>g01/3</b> tem	City of Sonora PA 5	മ്പunty-wide warnin 255 പ്രാൻ	2.1	\$250,000
Vict <b>ol</b> yi2001unty	Victo	ڻáœtoαiat∳œunty HMP	Purchase system	and implement area July 2021	-wide emergency notification Victoria County 2	Purchase and implement area-wide emergency notification 2.1 \$50,000 system	2.1	\$50,000
Wharton County	Whar	ta/m@ciont&&vojscH191P	Implemen	t \ October 2016 y F	Nowahamandiogostystenonject9	\$10,000 to Proplement Wharton County Flood Warning System \$100,000	2.1	\$10,000 to \$100,000

**Examples of "Strategies" Screened Out – Common Themes** 

**County / City-wide Property Acquisitions (Buyouts)** 

Com <b>ติจตกก</b> งมnity 📢	Sour <b>โดยไฟเลสาใช่</b> ame	SounSæUDateDate	e Proj <b>e⊄oĵä⊄l</b> eTitle	Proj <b>ළ ே ந</b> e t மின்னர் ption	RFPG Gର୍ଚ୍ଚିକ୍ଷା	al Proj <b>ẽcoj⊛o\$</b> tCos
City 6ift Boy Bity City	MatagocolauloguntyPHMP	Febrical Pyu 2012 7201	City 6ity of Bity Pity Pco Bect 9	Institustitud ในทอล์แกร์เล็อง ยี เออเรียบแระ protgo angram	5.1 5.1	>\$100,000
BastBastCapilGoyun Bastr	3HCA (\$.1086 <b>a)19T(</b> (7080)) <b>(0.108</b> 7CHB)(\$\text{RHB}  V  P	. Octomogoboetevil	ure Database; Add mechanical Bast <b>Bas</b> tCowlObyUnbyl <b>erb</b> iect 47 VCs and flood prone roadways	2/all undauntaury dauty a dit in 1000 met suifferingenterpretitions loss	5.1 5.1	>\$100,000
City Gift Worft Me Halls	BurneuroetrotyumkyHMP			Buy duty cust desidential each coencies pial penaperty	5.1 5.1	>\$1 <b>0\$,000</b>
FortRend Public 2017 Unin <b>dompcomper</b> at <b>Ed</b> uca	: Information and Fort <b>Bertu® Codu Gigy பாடிர் PU நெடியும் bet</b> Ition Source Name Source Date	evere w <b>ænt@e1</b> %arr Project Title	Frosta Bendido importedated Project Description	Buy duty restricted title in the concording of t	5.1 5.1	TBD
2018 City o Ha <b>3G12 and by</b> unty Kimbl 2012-2017 Mena	f Buda 13 Improve 6 HG9HatxsiXtylintxjHMP Early wari	mergency communing system & Dian	cation/warning system Prop <b>ercy Medy Medy in tho</b> n in Sou <b>ងើ ខេងមេខានង៤៧១ អាក្រសួលស្វែ</b> unty Institute voluntary flood buy-out program	2.1 Minimal Property a style in the style in	5.1 5.1	\$8,0 <b>\$8,000</b> ,
2012-2017 City c City <b>6it Wict Wila</b> Uria July byog Marble Fallyict 8	f Sonora PA5 Victoria codi coyuniwi PIMP coder 1516 w ger Sounty HMP ochus Pa8e	ide warning system Bastrop ( punjing peo 54 and imple half to area	CYPLINE TO SHOP USE OF THE PROPERTY OF THE PRO	Balolemplengantunodum 250 1600000000000000000000000000000000000	5.1 5.1	\$3,0 <b>\$8,000</b> ,
Fort Bend Fort Bend Whar	system ort Bend County HMP Update 2018 ton County Project 9 Implemen	Fort Bend Unincorporated 10 t Wharton County F Property (1501) Property (1501) Southeastern Hays County	Mitigate repetitive loss properties; acquisition/elevation/demolition	\$10,000 to  2.1  Identify tipe description to repeteboeitoes to eace description to the repeteboeitoes as \$8,000,000	e of 5.1, <b>3.1</b> , 3	1 \$7,0 <b>\$0,080</b>
City of Victoria V	ctoria County HMP July 2021	City of Victoria 10	Implement voluntary acquisition program for flood properties	repetitive \$3,000,000		
WCTCOG	West Central Texas HMP	2012-2017	WCTCOG 5  Identify/initiate acquisition & relocation; cre	AssisAssisAncoumitties i tries l'empla mello ce tre caetre délipée i tios s strustrines ures ate database of	5.1	TBD

**Examples of "Strategies" Screened Out – Common Themes** 

**County / City-wide Low Water Crossing Studies / Improvements** 

Community	<u>↑</u>	Source Name	Ţ	Source Date	Project Title	Project Description	RFPG Goal	Project Cost
7@¥ <del>1</del> 0\$93661\$6	Bastr	₩€\$wfqqfpdjTexas4HMP	Maintain/	Improve Road Closu losing devices on LV	re Database: Add mechanical VCs and flood prone roadways	biggrade/elevate r <b>୍ରଶ୍ରଶ୍ରନ୍ତ/୭୦୪</b> ୧ 500-year flood	6.2	TBD
City of Austin 2017		: Citivo of Austinahlu P		_	City of Austin 21	Inspection program to inspect scour potential for small	3.2, 4.3	\$117,500
City of Olasy City	•	Matagasta County HMP	•	- , ,		Ratise bridges above BMEnimal	4.2; 6.1	>\$100,000
2012-2017 City of Dripping 2012-2017 Springs 2012-2017	Mena	e County PA 1 HOUS COLYMBA HMP If Sonora PA 5	Early war	hing system & plan ning system & plan ide warning system	Dubbung Shungs To	2.1 \$250,000 Placement of warning signs at all locations at designated 2.1 LWCs; gates at high traffic locations	2.1	\$100,000
	•				ida anaanaanaa, matifiaatian	2.1	3.2	Minimal
Edwards County	Whar	ton County Project 9 Edwards County HMP	Implemer	t Wharton County F March 2012	lood Warning System Edwards County 7	\$10,000 to Analysis to determine expected flood levels. Map LWCs and roadways prone to flooding.	3.2	Minimal
Fort Bend Unincorporated		Fort Bend County HMP U	pdate	2018	Leort Bend Unincorporated 6	Develop Feasibility Study to identify where stream, rain, and LWC gauges are needed	3.2	\$250,000

# **New Potential Direction from TWDB on "Strategies"**

- Can be regional in nature
- Do not have to have Sponsor
- Do not have to have cost

# Potential Regional Strategies for Consideration

- Flood Mitigation Education and Outreach (addresses RFPG Goal 1.1)
- Strengthen Flood Management Regulations (addresses RFPG Goal 4)
- Develop Regional Flood Warning Measures (Addresses RFPG Goal 2.1)
- Identify and Fund Buy-out Programs (addresses RFPG Goal 5.1)
- Area-wide Low Water Crossing Flood Mitigation Studies and Projects (addresses multiple RFPG goals)



# Wrap Up

# Region 10 Lower Colorado-Lavaca RFPG Technical Committee Meeting

6. Public comments- limit 3 minutes per person

7. Consider date and agenda items for next meeting

8. Adjourn