# Lower Colorado-Lavaca REGIONAL FLOOD PLANNING GROUP

**REGION 10** 

June 9, 2022

1. Call to Order

2. Welcome

3. Approval of minutes from the previous meeting

#### Region 10 Lower Colorado-Lavaca Flood Planning Group Meeting May 2, 2022 9:30 AM Hybrid Meeting

#### Roll call:

Voting Member	Interest Category	Present (x) / Absent ( ) Alternate Present (*)
Terry Been	Agricultural interests	
Phillip Spenrath	Counties	X
Jason Ludwig	Electric generating utilities	X
Kirby Brown	Environmental interests	X
G. Nicholas "Nick" Textor	Flood districts	X
Brandon Klenzendorf	Industries	X
Matt Hollon	Municipalities	*Nick Kincaid
Frances Acuna	Public	X
Patrick Brzozowski	River authorities	X
Kelly Payne	River authorities	X
Ann Yakimovicz	Small business	X
Kacey Cubine Paul	Water districts	
Hank Smith	Water utilities	X

Non-voting Member	Agency	Present (x) / Absent ( ) Alternate Present (*)
Charles "CW" Schneider	Texas Commission on Environmental Quality	X (joined@ 9:36am)
Lauren Mayes	Texas Department of Agriculture	
Hollie Hischer	Texas Division of Emergency Management	
Shonda Mace	Texas General Land Office	X
Beth Bendik	Texas Parks and Wildlife Department	X (joined @ 10:41am)
Allen Nash	Texas State Soil and Water Conservation Board	X
Tressa Olsen	Texas Water Development Board	X
Mark Vogler	Region 8 – Lower Brazos Liaison	*Brian Fambrough
Chuck Brown	Region 9 – Upper Colorado Liaison	
Ronald G. Fieseler	Region 11 – Guadalupe Liaison	
Cara Tackett	Region 12 – San Antonio Liaison	

#### Quorum:

Quorum: Yes Number of voting members or alternates representing voting members present: 11

Number required for quorum per current voting membership of 13:7

### Other Meeting Attendees: \*\*

\*\*Meeting attendee names were gathered from those who entered information for joining the Zoom meeting.

James Bronikowski - TWDB Cindy Englehardt – Halff Associates, Inc. Cris Parker – HDR, Inc. Mike Personett – Halff Associates, Inc Jay Scanlon, Freese & Nichol Karen Ford – WaterPR Jennifer Bassett – LCRA Lauren Graber - LCRA Annette Keaveny – LCRA Marcin Tyszka – LCRA Erin Duhon – USACE Galveston Jorge Losoya Lisa McCracken Mairs – USACE Matt Nelson Sanjay Negi Stephen Rockwood Frank Trull Donald Warschak Ted Woolsey

All meeting materials are available for the public at: www.lowercoloradolavacaflood.org/meetings

### Agenda:

#### 1) Call to Order

Chair Phillip Spenrath called the meeting to order at 9:31 CDT. A roll call of the planning group members was taken to record attendance and a quorum was established prior to calling the meeting to order.

#### 2) Welcome

Chair Judge Spenrath welcomed members and other attendees to the meeting. Non-voting member representing TDEM has changed. James Guin changed positions at TDEM, so Hollie Hischer is now on the RFPG10 representing TDEM.

#### 3) Approval of minutes from the previous meeting

The draft meeting minutes were reviewed.

Patrick Brzozowski moved to approve the minutes, seconded by Ann Yakimovicz. The motion passed by a vote of 11-0.

#### 4) Public comments- limit 3 minutes per person

Chair Judge Spenrath called for public comments. No public comments were given.

#### 5) TWDB Update

Tressa Olsen gave an update on TWDB items:

- In April the TWDB staff provided informal comments on the January Technical Memo deliverables and the next letter for the March 7<sup>th</sup> deliverables will be provided this month.
- Friendly reminder to please submit the executed subcontract amendment once it is executed.
- TWDB will have a RFPG Chairs call on Wednesday, May 25<sup>th</sup> and a Tech Consultants call on Tuesday, May 24<sup>th</sup>.

### 6) Update from RFPG liaisons

Ann Yakimovicz reported that Region 9 is meeting on Thursday to discuss Chapters 3 and 4.

### 7) Update from the Planning Group Sponsor

The sponsor is working on Halff's revised subcontract and hope to get a copy to the TWDB shortly. In addition, we are busy coordinating multiple technical committee meetings as well as the full group meetings.

### 8) Discussion and potential action to approve mileage expenses for reimbursement

Lauren Graber presented the latest voting member mileage expenses for reimbursement. Kelly Payne moved to approve the mileage expenses, seconded by Kirby Brown. The motion passed by a vote of 11-0.

### 9) Update from the Technical Committee

Kelly Payne reported that the Technical Committee met on April 13<sup>th</sup> and April 28<sup>th</sup> to review the first 25 FMXs for the group to consider today. One project is not currently on the list for approval today. The committee is recommending a total of 24 FMXs this morning. We have two more meetings scheduled in May to continue approving FMXs to bring forward to the group at our June RFPG meeting.

## 10) Technical Consultant presentations and discussions related to regional flood planning

Mike Personett and Cindy Englehardt (from Halff Associates, Inc.), Karen Ford (Water PR), Cris Parker (HDR), and Jay Scanlon (FNI) provided updates, briefings, and discussion on the following:

- a) Project status
  - Public and Stakeholder Engagement
  - Updates on regional flood plan tasks 1-10
- b) Look-ahead

Planning group members asked questions and made comments during the presentation.

Ann Yakimovicz and Beth Bendik would like to see Chapter 8 include different ways of flood prevention, support for innovative approaches especially in small communities and develop a recommendation for green storm infrastructure and low impact development.

Chapter 8 comments should be emailed to Mike Personett, Karen Ford, or Lauren Graber to track before the next meeting.

## 11) Discussion and potential action on recommendations regarding Task 5 – FMEs, FMSs, and FMPs

To be considered as an FMP and move out of FME status, a project needs to have performed an adverse impacts evaluation to confirm the project does not create adverse impacts upstream or downstream.

After discussion, Kelly Payne moved to recommend 21 FMEs and 3 FMSs, subject to nonsubstantive changes and refinements, seconded by Ann Yakimovicz. A roll call vote was taken, and the motion passed by a vote of 11-0.

# 12) Accept public input on an initial flood hazard map to identify additional flood hazards in the Lower Colorado-Lavaca Flood Planning Region that may not have been identified on the initial map(s)

Flood risk map posted online:

https://www.lowercoloradolavacaflood.org/documents-for-public-view-1

Chair Phillip Spenrath called for public comments. No comments were received.

### 13) Public comments – limit 3 minutes per person

Chair Phillip Spenrath called for public comments.

No public comments were given.

### 14) Consider date and agenda items for next meeting

After general discussion, Chair Phillip Spenrath concluded that the next meeting will be held on Thursday, June 9th, 2022 @ 9:30 AM CDT.

Agenda items for the next meeting will include Task 5 and Task 8 recommendations.

The next Technical Committee Meeting will be held Tuesday, May 10th, 2022 @ 2:00 PM CDT.

### 15) Adjourn

Kelly Payne made a motion to adjourn, seconded by Kirby Brown. The motion passed 11-0 and the meeting was adjourned at 11:55AM CDT by Chair Phillip Spenrath.

Approved by the Lower Colorado-Lavaca RFPG at a meeting held on DATE.

Kelly Payne, SECRETARY

Phillip Spenrath, CHAIR

- 4. Public comments limit 3 minutes per person
- 5. TWDB Update
- 6. Update from RFPG liaisons
- 7. Update from Planning Group Sponsor

8. Discussion and potential action to approve mileage expenses for reimbursement

Date of Meeting	Description	Total Mileage	Per Mile Rate	Total
May 2, 2022	Region 10 RFPG Meeting – Spenrath	292	\$0.585	\$170.82
Approved Budget	Travel Cost Previously Approved	Cumulative Travel Cost	Balance	
\$16,000.00	\$511.33	\$682.15	\$15,317.85	

9. Update from the Technical Committee

# 10.Technical Consultant presentations and discussions related to regional flood planning

## a. Project status

- i. Public and stakeholder engagement strategies update
- ii. Updates on regional flood plan tasks 1-10
- iii. Task 5 Review and discuss draft summaries for Flood Management Strategies, Flood Management Evaluations, and Flood Mitigation Projects
- iv. Task 8 Review and discuss draft Administrative, Regulatory, and Legislative Recommendations
- v. Task 9 Review and discuss draft Flood Infrastructure Financing Analysis

## b. Look-ahead calendar

# LOWER COLORADO – LAVACA REGIONAL FLOOD PLAN A TEXAS INITIATIVE

**REGIONAL FLOOD PLANNING GROUP MEETING** JUNE 9, 2022



## **AGENDA**

### **Project Status**

- Review Workflow Chart
- Task 10 Public and Stakeholder Engagement
- Tasks 1-10 Status and Outlook
- Task 5 Review and Discuss Draft Summaries for:
  - Regional Flood Management Strategies
  - Flood Management Evaluations
  - Flood Mitigation Projects
- Task 8 Administrative, Regulatory, and Legislative Recommendations
- Task 9 Flood Infrastructure Financing Analysis

### Look-ahead Calendar



# **Project Status**

TASK 3A: Floo TASK 3B: Mith Flood mitig TASK 4A: Ne	iption bod risk od risk management practic bodplain management p tigation & managemen gation & managemen leeds analysis dentify FME, FMS, FMF ech memo	Ant goals Ant goals P P Pre-diaft Pre-dia	TASK 5: Evalua FMS, F TASK 6A: Impact TASK 6B: Contril water water ty & finance formation and acti / & legis, recomme	ts of regional plan bution/impacts of supply wities endations	ME, Pro-dr.	1								
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	TASK T	7: Flood response inf 8: Admin., regulatory 9: Flood infrastructur	formation and acti / & legis. recomme re finance	endations	EMENT				2					
		TASK 10	PUBLIC & STAKE	HOLDER ENGAGE	EMENT									
			-											
			Flood Plan Ent TASK 11: Addition	hancement onal outreach and	data collection			Pre-draft rev	iew:					
				mendment m evaluations and onal outreach & pre		od plan						A	e-draft review	
	Te	echnical Memo No. 1 January 7, 2022		Technical Memo	o No. 2	aft Regional Igust 1, 2022	Flood Plan		Final Janua	Regional ary 10, 202	Flood Plan			Amende Regional Flood Pla July 14, 2
	2021				202		1 222 12	10155 - 1 - 50055		19902 115		2023		
tay Jun July Au 1 2 3 4					May Jun . 13 14			Nov Dec 19 20			Mar Apr 23 24			July Aug 27 28

# TASKS 1 – 10 REGIONAL FLOOD PLAN

## **Status and Outlook**

## **Plan Development**

- Task 1 Planning Area Description
- Task 2 Existing and Future Condition Flood Risk Analysis
- Task 3 Floodplain Management Practices and Floodplain Management and Flood Mitigation Goals
- Task 4A Flood Mitigation Needs Analysis
- Task 4B & 5 Evaluation and Recommendation of Studies, Strategies & Projects
- Task 6 Impacts of Regional Flood Plan and Contributions to and Impacts on Water Supply
- Task 7 Flood Response Information and Activities
- Task 8 Administrative, Regulatory and Legislative Recommendations
- Task 9 Flood Infrastructure Financing Analysis
- Task 10 Public Participation and Plan Adoption





# Task 5

## Recommendation of Studies (FME), Strategies (FMS) and Associated Projects (FMP)

## **TASK 5 – RECOMMEND FMEs, FMSs AND FMPs** Status and Outlook

## Objective

 Evaluate and recommend flood management evaluations and strategies and flood mitigation projects for inclusion in the 2023 regional flood plan

## Requirements

- Continuation of Task 4B evaluation process
- Mitigate to 1.0% annual chance flood (100-year) where feasible
- Mitigation of more frequent events may be recommended
- No adverse impact (e.g., downstream flooding, water supply)
- Continue coordination with sponsors and other entities



TECHNICAL COMMITTEE April - June

RFPG REVIEW / APPROVAL May - July

DRAFT PLAN TO TWDB August 1, 2022

# TASK 5 – RECOMMEND FMEs, FMSs AND FMPs

### **Approval Process Continued**

## **Presented in "batches" to the Technical Committee**

- Batches based on file size
- Organized by county
- Technical Committee
  - Recommended with non-substantive edits/comments
  - Key comments have been addressed
  - Concurrent detailed team review and refinements ongoing

### **Substantial Completion in June**

- Final push for preliminary drafts of Chapters 4 and 5
- All FMX recommendations remain draft and are subject to continuing refinement

# **TASK 5 – RECOMMEND FMEs, FMSs AND FMPs**

### **Approval Process Continued**

## **RFPG can handle like a consent agenda**

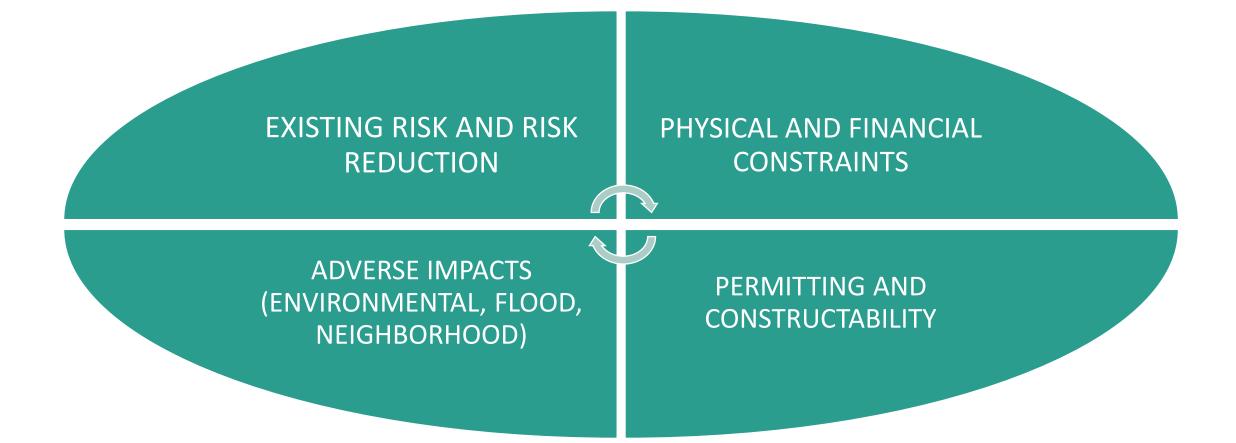
- Vote in groups or all together
- Pull any specific actions for discussion
- Editorial comments can be submitted through LCRA or discussed today

### Request approval of full package today with continued editorial license

- Separate Agenda Item for Approval
- Non-substantive changes
  - Maps ongoing effort to rescale
  - Costs review Sponsor data and update as needed
  - Identifying opportunities to combine FMXs

## **TASK 5 – RECOMMEND FMEs, FMSs AND FMPs**

### Key considerations in project development



# **TASK 5 - EXAMPLE FLOOD MITIGATION PROJECT**

## Jason Recker - City of Austin and Kim Patak - Freese and Nichols

## **Guadalupe Storm Drain Improvement Project**

- Project Overview
- Project Constraints
- Preliminary Engineering
  - Alternatives Considered
- Final Design
  - Improvements
  - Benefits
  - Level of Service
- Conclusion







HALFF Presentation

Existing Storm Drain Conduit

# **Guadalupe Street** Storm Drain Improvements Project

City of Austin Watershed Protection Department RFPG 10 Meeting | June 9, 2022



## **PROJECT TEAM**





Austin





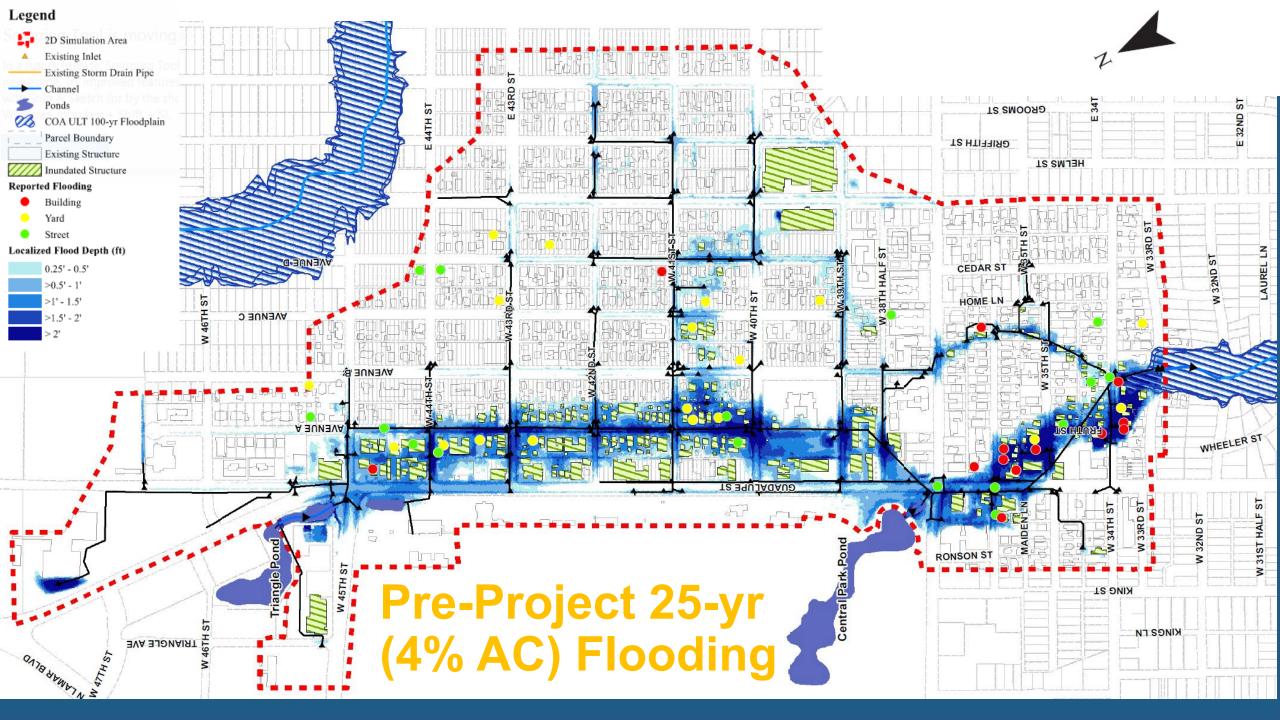
Existing Storm Drain Conduit

# Guadalupe Street Storm Drain Improvements Project

- Background
  - High priority local flood risk reduction area
  - Flooding Complaints
    - 16 Buildings
    - 14 Yards
    - 13 Streets
- Recent Rainfall Events
  - July 18, 2014
  - Memorial Day 2015
  - June 17, 2015
  - Halloween 2015

# Avenue A (May 2015)



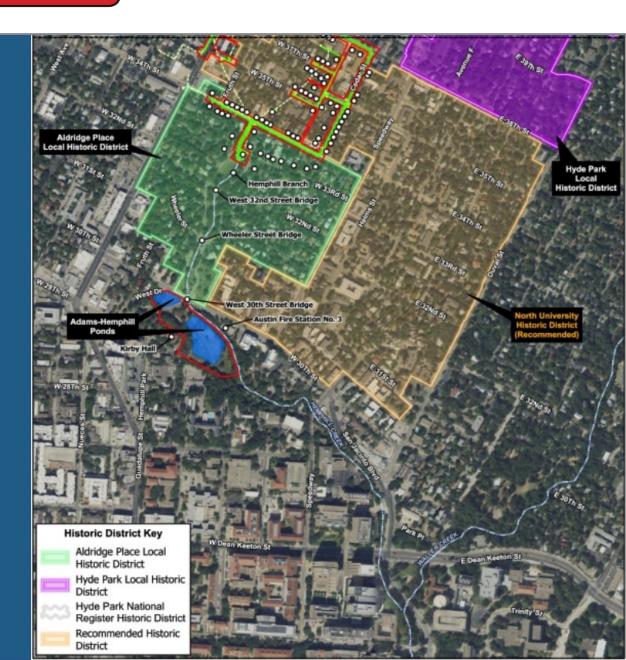


# **Existing System**

- Main storm system built in 1928
- Generally follows Avenue A to Hemphill Branch (W 33rd St)
- Size varies from 42 inch pipe to 9-ft x 5.5-ft box
- Central Park Pond designed in 1993
- Triangle Pond designed in 2004



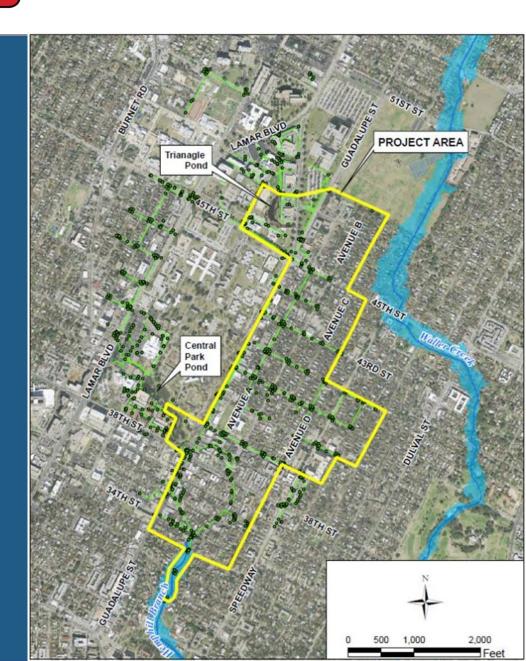
- Historic neighborhoods
- Historic outfall and downstream crossings
- Crossings critical to city grid
- Built out watershed
- Parkland



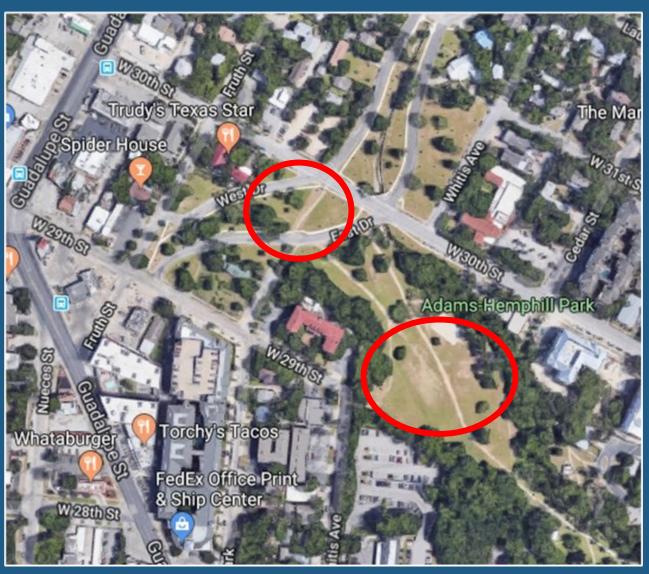
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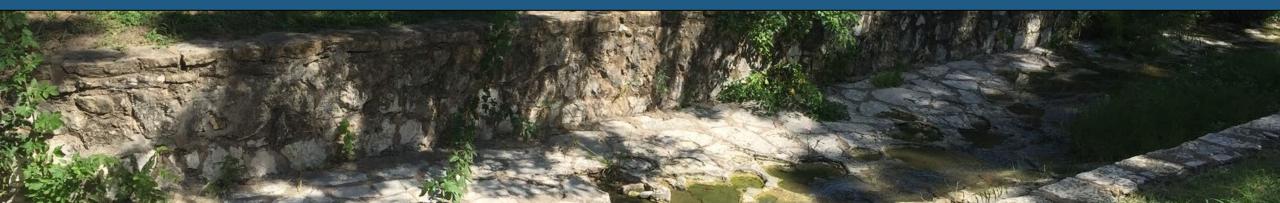


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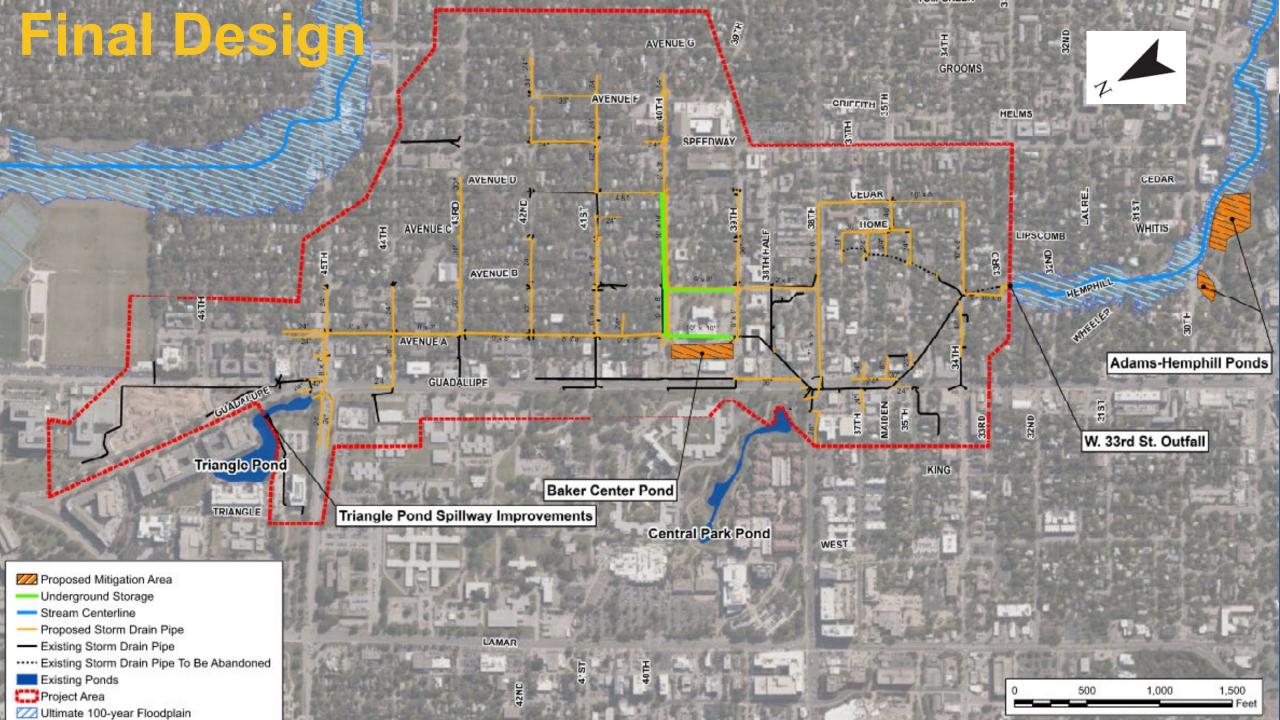


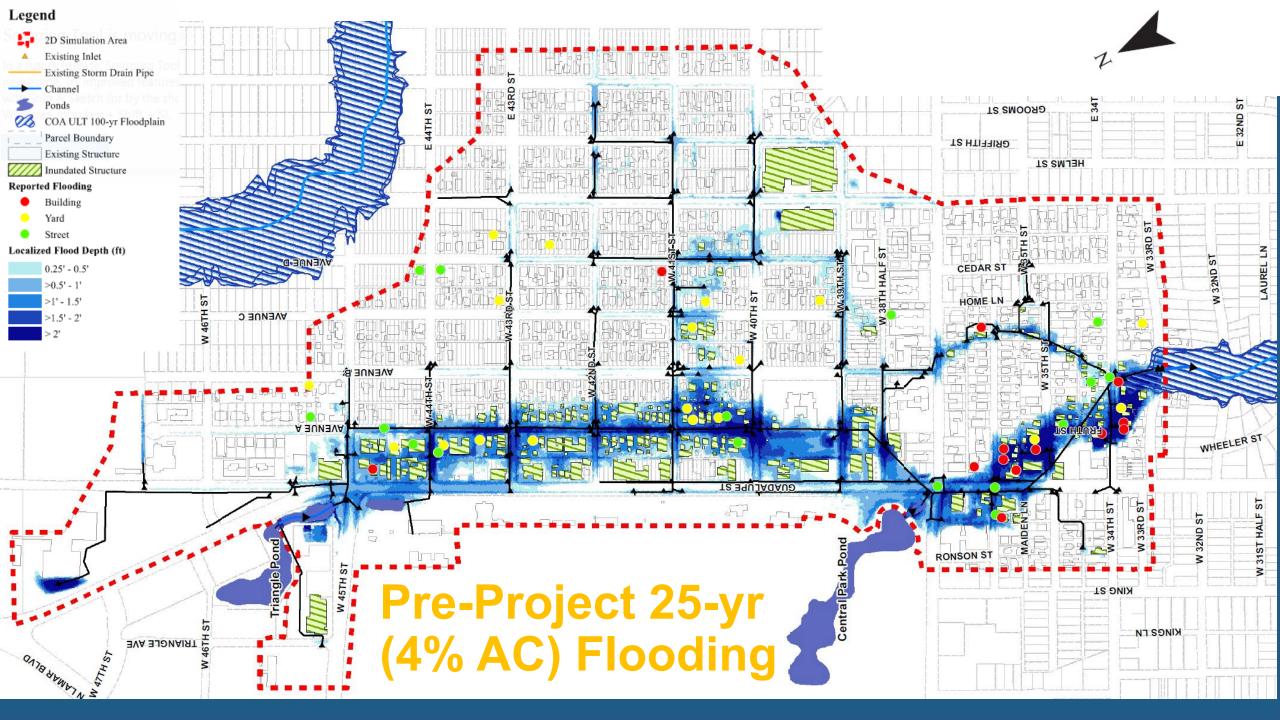
# **Preliminary Design**

- Detention Pond improvements
- Channel improvements
- Various trunk alignments
- Storm drain tunnel
- Diversion to Waller Creek
- Buyouts
- Elevating structures

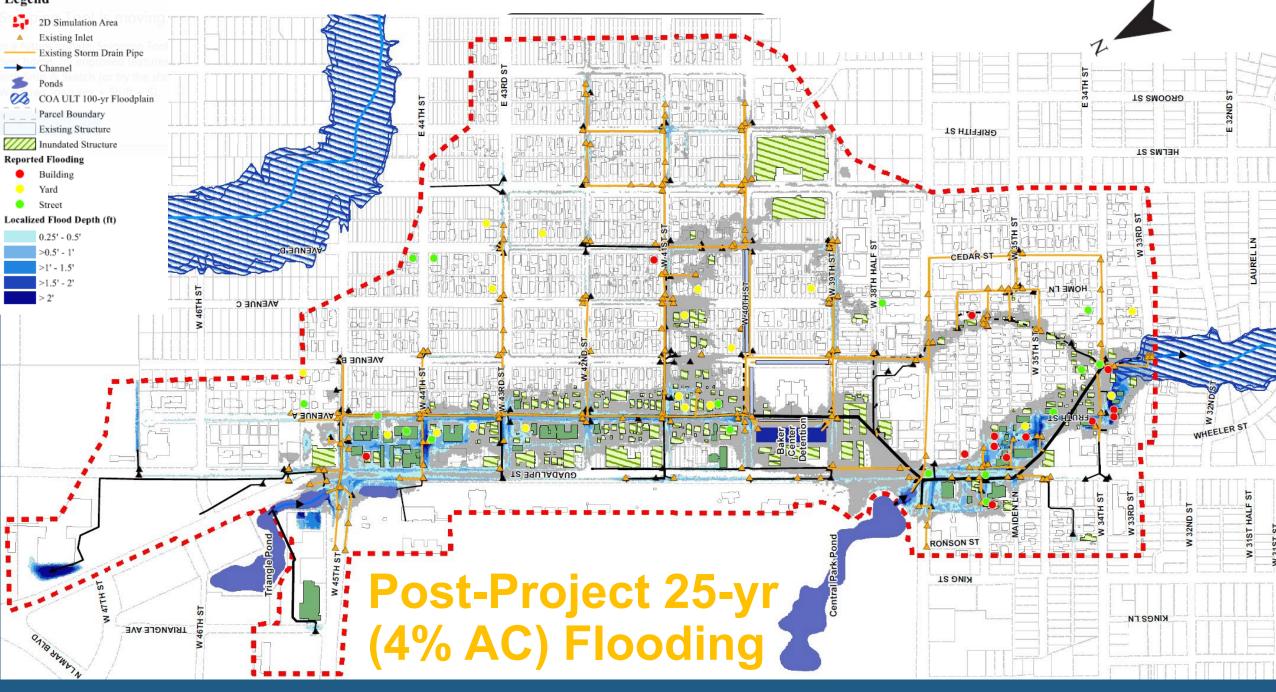


		Alternative 1	Alternative 2	Alternative 3				
		(DCM)	(25-yr LOS)	(10-yr LOS)				
Approximate Estimated Construction Cost		\$27,800,000	\$23,100,000	\$21,600,000				
Approximate I	Estimated Mitigation Construction Cost	\$19,200,000	\$8,200,000	\$7,300,000				
Approxin	nate Estimated Total Construction Cost	\$47,000,000	\$31,300,000	\$28,900,000				
Cost per Stru	cture Removed from 100-year Floodplain	\$212,670 \$175,84		\$203,521				
Cost per Stru	Cost per Structure Removed from 500-year Floodplain		\$254,472	\$277,885				
Summary of Structural Flooding Reduction								
10.55	Removed	104	104	104				
10-yr	Reduced	0	0	0				
25.50	Removed	163	163	158				
25-yr	Reduced	0	0	5				
100 yr	Removed	221	178	142				
100-yr	Reduced	0	43	79				
E00.vr	Removed	168	123	104				
500-yr	Reduced	131	176	195				
	Summary of Other Considerations							
Utility I	mpacts	High	High	Mid				
Traffic	mpacts	High	High	High				
Environmer	ntal Impacts	Low	Low	Low				

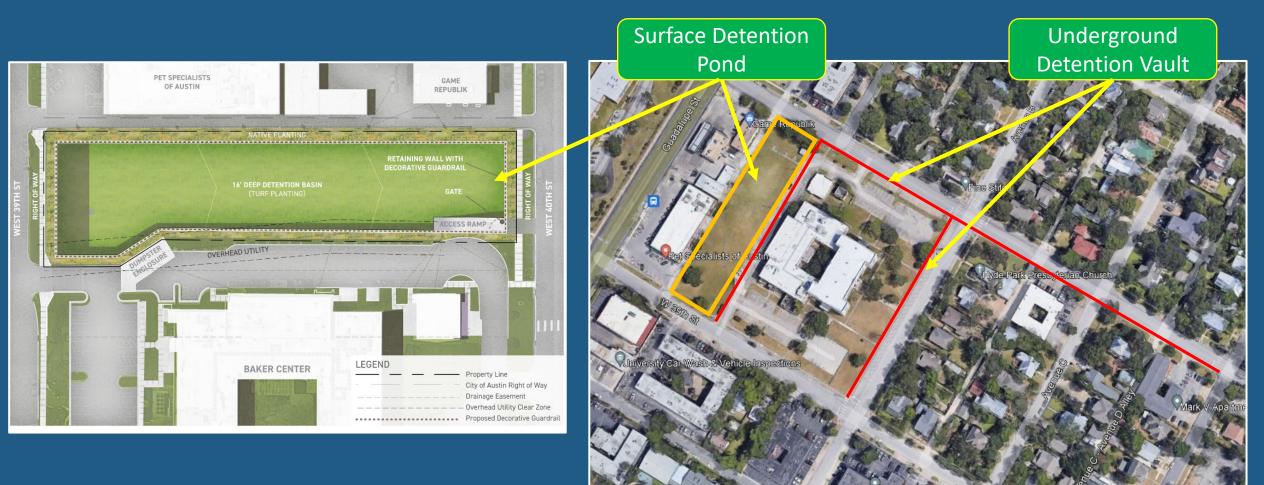




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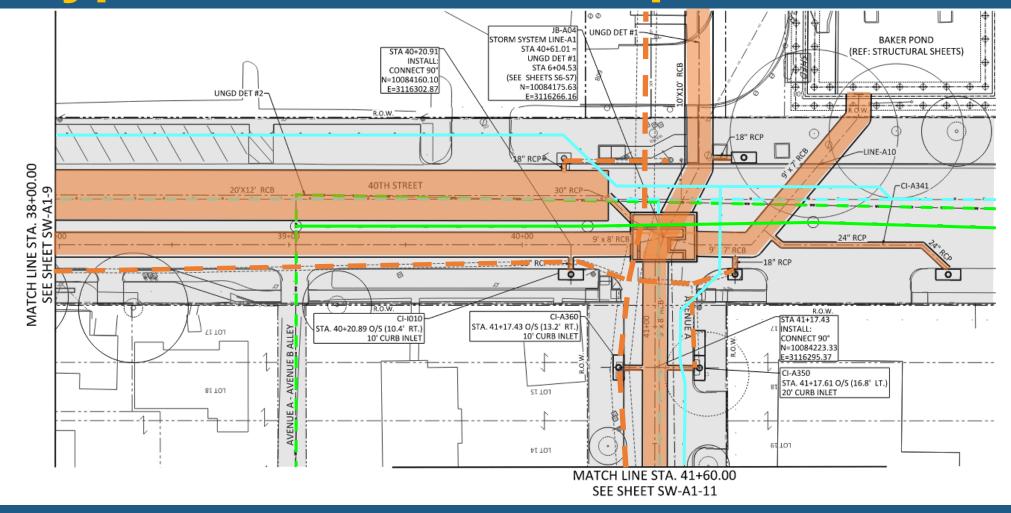


# **Baker Center Detention Pond**



ATX FLOOD SAFETY

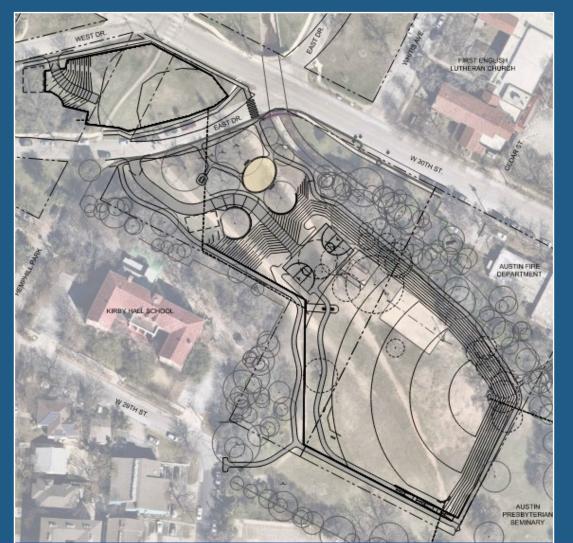
# **Typical Subsurface Improvements**



ATX FLOOD SAFETY

# **Adams Hemphill Park Detention Pond**

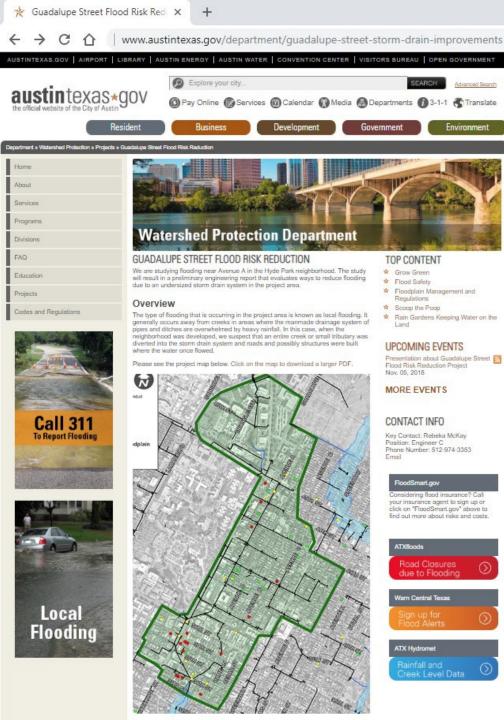




# Funding

- Drainage Charge
- Bonds (2023)
- TWDB Clean Water State Revolving Fund





# **Schedule**

• Currently in Design

**FLOOD SAFETY** 

ATX

- Design and Permitting
  - Present Spring 2025
- Construction Begins
  - ~ 2025

# • AustinTexas.gov/GuadalupeDrainage

### ATX FLOOD SAFETY

# Questions?

Jason Recker, PE Project Sponsor Watershed Protection Department, City of Austin (512) 974-2382 Jason.Recker@austintexas.gov

> FREES NICHO

WATERSHED

**Kim Patak, PE, CFM, ENV SP** Project Manager Freese and Nichols, Inc. (512) 617-3138

## **FLOOD MITIGATION PROJECTS: FMP BATCH 1**

	Action Number	Action Name	County	Batch Page Number	Tech Comm Rec (Y/N)	Tech Comm Rec Date	RFPG Rec (Y/N)	RFPG Rec Date
	103000001	Alum Creek - Cardinal Drive Improvements	Bastrop	1	Yes	5/25/2022		
	103000002	Alum Creek - Cardinal Drive Improvements (Tributary 11)	Bastrop	2	Yes	5/25/2022		
	103000003	Alum Creek - Cardinal Drive Improvements (Tributary 87)	Bastrop	3	Yes	5/25/2022		
	103000004	Alum Creek - Ponderosa Loop Improvements	Bastrop	4	Yes	5/25/2022		
	103000005	Gills Branch Flood Mitigation Improvements	Bastrop	5	Yes	5/25/2022		
	103000034	8 Low Water Crossings - Flood Warning System	Burnet	6	Yes	5/25/2022		
	103000041	Davitt St Water Plant Backup Generator	Colorado	7	Yes	5/25/2022		
	103000042	Beasley City Hall Backup Generator	Fort Bend	8	Yes	5/25/2022		
	103000043	Beasley City Fire Department Backup Generator	Fort Bend	9	Yes	5/25/2022		
	103000033	S Bowie Low Water Crossing - Flood Warning System	Gillespie	10	Yes	5/25/2022		
	103000035	Creek St at Barons Creek - Flood Warning System	Gillespie	11	Yes	5/25/2022		
	103000036	Highway St. Improvements	Gillespie	12	Yes	5/25/2022		
Batch 1	103000037	Lady Bird Golf Course Low Water Crossing - Flood Warning System	Gillespie	13	Yes	5/25/2022		
3ati	103000038	W Travis Low Water Crossing - Flood Warning System	Gillespie	14	Yes	5/25/2022		
	103000039	Windmill Oaks Subdivision - Flood Warning System	Gillespie	15	Yes	5/25/2022		
	103000030	Hays County Buyout	Hays	16	Yes	5/25/2022		
	103000019	Navidad River - Stem Branch Buyout	Jackson	17	Yes	5/25/2022		
	103000020	LaSalle Buyout	Jackson	18	Yes	5/25/2022		
	103000021	Goat Trail Buyout	Jackson	19	Yes	5/25/2022		
	103000022	County Road 106 Buyout	Jackson	20	Yes	5/25/2022		
	103000044	Emergency Management System Backup Generators	Jackson	21	Yes	5/25/2022		
	103000045	City of Edna Safe Room Backup Generator	Jackson	22	Yes	5/25/2022		
	103000046	City of Edna Sewer Lift Station Backup Generator	Jackson	23	Yes	5/25/2022		
	103000047	City of Ganado Sewer Lift Station Backup Generator	Jackson	24	Yes	5/25/2022		
	103000048	Jackson County Courthouse Backup Generator	Jackson	25	Yes	5/25/2022		
	103000050	City of Edna Hospital Backup Generator	Jackson	26	Yes	5/25/2022		

## **FLOOD MITIGATION PROJECTS: FMP BATCH 2**

	Action Number	Action Name	County	Batch Page Number	Tech Comm Rec (Y/N)	Tech Comm Rec Date	RFPG Rec (Y/N)	RFPG Rec Date
	103000049	City of Boerne Backup Generators	Kendall	27	Yes	5/25/2022		
	103000051	Various Streets - Flood Early Warning System	Menard	28	Yes	5/25/2022		
	103000006	FM 685 Crossing Improvements	Travis	29	Yes	5/25/2022		
	103000007	E. Pflugerville Parkway Crossing Improvements	Travis	30	Yes	5/25/2022		
	10300008	Highland Park Subdivision Culvert Improvements	Travis	31	Yes	5/25/2022		
	103000009	Cele Road Crossing Improvements	Travis	32	Yes	5/25/2022		
	103000010	Gregg Lane Crossing Improvements	Travis	33	Yes	5/25/2022		
	103000011	Cameron Road Crossing Improvements	Travis	34	Yes	5/25/2022		
	103000012	McNeil Drainage Improvements	Travis	35	Yes	5/25/2022		
	103000013	Spicewood Springs Road Low Water Crossing #1	Travis	36	Yes	5/25/2022		
	103000014	Arroyo Doble/Twin Creeks Drainage Phase 3-7 Drainage System	Travis	37	Yes	5/25/2022		
	103000015	Dalton Lane Crossing Improvements	Travis	38	Yes	5/25/2022		
12	103000016	Highland Hills Crossing Improvements	Travis	39	Yes	5/25/2022		
Batch 2	103000017	Shoal Creek - Nueces St Flood Risk Reduction Project	Travis	40	Yes	5/25/2022		
Ba	103000018	Waller Creek - Guadalupe Street Flood Risk Reduction	Travis	41	Yes	5/25/2022		
	103000023	Sandy Creek/Pecan Park Areas Buyout	Travis	42	Yes	5/25/2022		
	103000024	Lake Travis/Cross Street Area Buyout	Travis	43	Yes	5/25/2022		
	103000025	Onion Creek Structure Elevation	Travis	44	Yes	5/25/2022		
	103000026	Bluff Springs Elevation	Travis	45	Yes	5/25/2022		
	103000027	Onion Creek Meadows Elevation	Travis	46	Yes	5/25/2022		
	103000028	Thoroughbred Farm Buyout	Travis	47	Yes	5/25/2022		
	103000029	Twin Creeks Buyout	Travis	48	Yes	5/25/2022		
	103000031	South Austin Regional WWTP / Sand Hill Energy Center Flood Reduction	Travis	49	Yes	5/25/2022		
	103000032	Walnut Creek Wastewater Treatment Plant Flood Wall	Travis	50	Yes	5/25/2022		
	103000040	Red Bud Trail - Flood Warning System	Travis	51	Yes	5/25/2022		
	103000052	Jonestown Flood Early Warning System	Travis	52	Yes	5/25/2022		
	103000053	Steiner Ranch WWTP Backup Generator	Travis	53	Yes	5/25/2022		

## **FLOOD MANAGEMENT EVALUATIONS: FME BATCH 2A**

	Action	Action Name	County	Batch Page	Tech Comm	Tech Comm	RFPG Rec	RFPG Rec
	Number			Number	Rec (Y/N)	Rec Date	(Y/N)	Date
	101000001	Drainage System Improvements	Bastrop	1	Yes	5/25/2022		
	10100004	Gotier Trace Low Water Crossings	Bastrop	2	Yes	5/25/2022		
	10100005	Lakeview Drive & Tuck Street	Bastrop	3	Yes	5/25/2022		
	10100008	Clear Springs Lake Dam	Bastrop	4	Yes	5/25/2022		
Batch 2A-1	101000023	Gills Branch	Bastrop	5	Yes	5/25/2022		
h 2	101000027	FM 812 at Little Alum Creek	Bastrop	6	Yes	5/25/2022		
atcl	101000028	FM 812 at Alum Creek South	Bastrop	7	Yes	5/25/2022		
Ä	101000102	Piney Creek Benching	Bastrop	8	Yes	5/25/2022		
	101000103	Design System Improvements - JC Madison Addition	Bastrop	9	Yes	5/25/2022		
	101000104	Citywide drainage system improvements	Bastrop	10	Yes	5/25/2022		
	101000125	Alum Creek - Tributary 8, Bowie Drive	Bastrop	11	Yes	5/25/2022		
	101000108	Develop New/Updated Floodplain Maps	Blanco	12	Yes	5/25/2022		
	101000113	Burnet County Flood Early Warning System	Burnet	13	Yes	5/25/2022		
	101000109	CR 332 Drainage Improvements	Brazoria	14	Yes	5/25/2022		
	101000110	Various culverts along Stevenson Slough	Brazoria	15	Yes	5/25/2022		
	101000136	Highway 36	Brazoria	16	Yes	5/25/2022		
-2	101000121	Various Streets - Install Flood Early Warning Systems	Fort Bend	17	Yes	5/25/2022		
2A-2	101000029	Magnolia St	Brown	18	Yes	5/25/2022		
Batch	101000111	Adopt Flood Insurance Rate Maps	Brown	19	Yes	5/25/2022		
Bat	101000137	CR257 at Pecan Bayou (Tenmile Crossing)	Brown	20	Yes	5/25/2022		
	101000160	Delaware Creek Flood Study	Brown	21	Yes	5/25/2022		
	101000032	Mission Hills Street	Burnet	22	Yes	5/25/2022		
	101000114	Shade Grove flood study	Burnet	23	Yes	5/25/2022		
	101000116	Whitman Branch Bypass; Oak Ridge Drive Creek	Burnet	24	Yes	5/25/2022		
	101000159	Watewater Treatment Plant Flood Study	Burnet	25	Yes	5/25/2022		
	101000161	VFW Flood Study	Burnet	26	Yes	5/25/2022		
	101000171	Citywide Floodplain Remapping	Burnet	27	Yes	5/25/2022		
ကု	101000034	Lum Rd, Hilltop Rd, FM 2919 N	Fort Bend	28	Yes	5/25/2022		
2A-3	101000035	Drainage improvements to Crawford outlet right-of-way	Fort Bend	29	Yes	5/25/2022		
Batch	101000037	Gene and Church Streets	Fort Bend	30	Yes	5/25/2022		
Bat	101000038	800 Block W San Antonio	Gillespie	31	Yes	5/25/2022		
	101000039	South End of Acorn Street	Gillespie	32	Yes	5/25/2022		
	101000042	Bowie & Peach Street	Gillespie	33	Yes	5/25/2022		
	101000044	112 W Park	Gillespie	34	Yes	5/25/2022		

## **FLOOD MANAGEMENT EVALUATIONS: FME BATCH 2B**

	Action Number	Action Name	County	Batch Page Number	Tech Comm Rec (Y/N)	Tech Comm Rec Date	RFPG Rec (Y/N)	RFPG Rec Date
	101000048	Trailmoor near Llano Hwy	Gillespie	1	Yes	5/25/2022		
	101000050	Drainage Channel near EMS Building	Gillespie	2	Yes	5/25/2022		
	101000051	Bob White Trail	Gillespie	3	Yes	5/25/2022		
	101000053	N Edison Low Water Crossing	Gillespie	4	Yes	5/25/2022		
ц Ц Ц	101000054	Schubert Low Water Crossing	Gillespie	5	Yes	5/25/2022		
Batch 2B-1	101000055	200 Block N Orange	Gillespie	6	Yes	5/25/2022		
ato	101000056	Crockett St south of Travis	Gillespie	7	Yes	5/25/2022		
	101000057	Cross Mountain West	Gillespie	8	Yes	5/25/2022		
	101000058	N Milam at West Travis	Gillespie	9	Yes	5/25/2022		
	101000122	Carriage Hills	Gillespie	10	Yes	5/25/2022		
	101000123	Post Oak Subdivision	Gillespie	11	Yes	5/25/2022		
	101000059	Repair of Little Barton Creek Dam	Hays	12	Yes	5/25/2022		
	101000060	Floodplain/floodway audit	Hays	13	Yes	5/25/2022		
	101000158	Citywide Storm Drain Infrastructure Modeling	Travis	14	Yes	5/25/2022		
-2	101000063	Stormwater Diversion Project	Jackson	15	Yes	5/25/2022		
2B	101000066	County Road 480	Jackson	16	Yes	5/25/2022		
Batch 2B-2	101000129	Palmetto Bend Spillway	Jackson	17	Yes	5/25/2022		
Ba	101000092	Citywide Drainage Study	Victoria	18	Yes	5/25/2022		
	101000093	Various Streets - Upgrade Existing Roadway Crossings	Victoria	19	Yes	5/25/2022		
	101000118	Sandy Oaks Subdivision	Colorado	20	Yes	5/25/2022		
	101000106	Various Streets - Upgrade Low Water Crossings	Blanco	21	Yes	5/25/2022		
	101000179	Various Streets - Install Floow Early Warning System	Kendall	22	Yes	5/25/2022		
	101000177	Countywide Floodplain Map Update	Gillespie	23	Yes	5/25/2022		
	101000069	Llano River Erosion	Kimble	24	Yes	5/25/2022		
2B-3	101000183	South Polk Street Study	Lee	25	Yes	5/25/2022		
2B	101000070	Llano River Channel Maintenance/Improvements	Llano	26	Yes	5/25/2022		
Batch	101000073	Comanche Rancherias Subdivision	Llano	27	Yes	5/25/2022		
Ba	101000071	Drainage Ditch Maintenance/Improvements	Llano	28	Yes	5/25/2022		
	101000075	Airport Drainage Improvements	Matagorda	29	Yes	5/25/2022		
	101000077	Update Flood Insurance Study & Flood Insurance Rate Maps	Matagorda	30	Yes	5/25/2022		
	101000076	Tres Palacios River	Matagorda	31	Yes	5/25/2022		

## **FLOOD MANAGEMENT EVALUATIONS: FME BATCH 2C**

	Action Number	Action Name	County	Batch Page Number	Tech Comm Rec (Y/N)	Tech Comm Rec Date	RFPG Rec (Y/N)	RFPG Rec Date
	101000067	Various Streets - Install Flood Early Warning System	Real and others	1	Yes	5/25/2022		
	101000078	Hooten Holler in Richland Springs	San Saba	2	Yes	5/25/2022		
	101000180	Countywide Floodplain Map Update	Sutton and others	3	Yes	5/25/2022		
	101000082	Citywide Drainage Study	Travis	5	Yes	5/25/2022		
2C	101000084	Bee Creek Drainage Improvements	Travis	6	Yes	5/25/2022		
Batch	101000086	Citywide Drainage Study	Travis	7	Yes	5/25/2022		
Bat	101000163	Jones Brothers Park Flooding	Travis, Williamson	8	Yes	5/25/2022		
	101000090	Various Streets - Upgrade Existing Roadway Crossings	Victoria	9	Yes	5/25/2022		
	101000100	Pecan Street	Wharton	10	Yes	5/25/2022		
	101000101	Town & Country Drive	Wharton	11	Yes	5/25/2022		
	101000162	Countywide Floodplain Map Update	Wharton, Fort Bend	12	Yes	5/25/2022		

## **FLOOD MANAGEMENT EVALUATIONS: FME BATCH 3A-3B**

	Action Number	Action Name	County	Batch Page Number	Tech Comm Rec (Y/N)	Tech Comm Rec Date	RFPG Rec (Y/N)	RFPG Rec Date
	101000009	Pecan Shores Subdivision	Bastrop	1	Yes	5/25/2022		
	101000010	Hidden Shores Subdivision	Bastrop	2	Yes	5/25/2022		
	101000011	Waters Edge Terrace Subdivision	Bastrop	3	Yes	5/25/2022		
	101000026	Smithville Recreation Center Expansion	Bastrop	4	Yes	5/25/2022		
4	101000155	Taylor Lane Drainage Improvements	Bastrop	5	Yes	5/25/2022		
Batch 3A	101000156	Stormwater Detention at Morris Park	Bastrop	6	Yes	5/25/2022		
3atc	101000105	Update and Maintain Emergency Management Plan	Blanco	7	Yes	5/25/2022		
ш	101000138	Dam Emergency Action Plan	Burnet	8	Yes	5/25/2022		
	101000165	Whitman Branch Regional Detention Pond	Burnet	9	Yes	5/25/2022		
	101000166	Ave J Bridge Replacement	Burnet	10	Yes	5/25/2022		
	101000167	Broadway Street at Whitman Branch Low Water Crossing	Burnet	11	Yes	5/25/2022		
	101000168	1431/281 Detention	Burnet	12	Yes	5/25/2022		
	101000169	Backbone Branch Detention Pond	Burnet	13	Yes	5/25/2022		
	101000170	Marble Falls Creek Walk	Burnet	14	Yes	5/25/2022		
	101000172	2nd Street at Backbone Creek Low Water Crossing	Burnet	15	Yes	5/25/2022		
	101000173	Ave L at Whitman Creek Low Water Crossing	Burnet	16	Yes	5/25/2022		
m	101000174	Broadway at Backbone Creek Low Water Crossing	Burnet	17	Yes	5/25/2022		
Batch 3B	101000119	Frisch Auf Buyout	Fayette	18	Yes	5/25/2022		
atc	101000120	Flood Proof Wastewater Treatment Plants	Fayette	19	Yes	5/25/2022		
ш	101000178	Low Water Crossing's at 4 Locations	Gillespie	20	Yes	5/25/2022		
	101000061	Prepare Evacuation Plan	Hays	21	Yes	5/25/2022		
	101000126	Flood Proofing Repetitive Loss Structure	Hays	22	Yes	5/25/2022		
	101000153	City of Buda Garlic Creek Culvert	Hays	23	Yes	5/25/2022		
	101000064	Land Purchase for New EMS/Fire/Police Building	Jackson	24	Yes	5/25/2022		

## **FLOOD MANAGEMENT EVALUATIONS: FME BATCH 3C-3D**

	Action Number	Action Name	County	Batch Page Number	Tech Comm Rec (Y/N)	Tech Comm Rec Date	RFPG Rec (Y/N)	RFPG Rec Date
	101000127	Wastewater Treatment Plant Floodproofing	Jackson	25	Yes	5/25/2022		
	101000128	City Hall Hardening and Safe Room	Jackson	26	Yes	5/25/2022		
	101000065	Jackson County Hospital District	Jackson	27	Yes	5/25/2022		
	101000068	Lake Junction Dredging	Kimble	28	Yes	5/25/2022		
	101000072	Prepare Evacuation Plan	Llano	29	Yes	5/25/2022		
h 3C	101000130	Relocate Fire Department Building	Llano	30	Yes	5/25/2022		
Batch	101000175	102 Beach Drive Low Water Crossing	Llano	31	Yes	5/25/2022		
	101000176	124 Sunrise Drive Low Water Crossing	Llano	32	Yes	5/25/2022		
	101000074	Construct Emergency Operation Center	Matagorda	33	Yes	5/25/2022		
	101000131	Police Station Relocation and Safe Room	Matagorda	34	Yes	5/25/2022		
	101000181	Harris Hallow Neighborhood Flooding	Menard	35	Yes	5/25/2022		
	101000080	Community Evacuation Plan	Travis	36	Yes	5/25/2022		
	101000083	Community Evacuation Plan	Travis	37	Yes	5/25/2022		
	101000085	Create Emergency Evacuation Plan	Travis	38	Yes	5/25/2022		
	101000088	Review and Update Floodplain Management Plan	Travis	39	Yes	5/25/2022		
	101000089	Develop an Emergency Operations and Evacuation Plan	Travis	40	Yes	5/25/2022		
3D	101000133	Identify and Buyout Repetitive Loss Properties	Travis	41	Yes	5/25/2022		
Batch	101000164	East Reed Road Flooding	Travis	42	Yes	5/25/2022		
Bat	101000091	Harden City Buildings, Critical Infrastructure	Victoria	43	Yes	5/25/2022		
	101000095	Identify and Buyout Repetitive Loss Properties	Victoria	44	Yes	5/25/2022		
	101000098	Tres Palacios, Blue Crek, East Mustang Creek	Victoria	45	Yes	5/25/2022		
	101000096	Harden County Buildings, Critical Infrastructure, and Government	Victoria	46	Yes	5/25/2022		
	101000099	Use Digital Maps of All Hazards and Educate Residents	Wharton	47	Yes	5/25/2022		

# **TASK 5 – RECOMMEND FMEs, FMSs AND FMPs**

### **Additional Activities for Incorporation**

Action Number	Action Name	Description
101000184	City of Wharton Project 13	Implement warning systems
101000185	City of Wharton Project 15	Update/implement Drainage Master Plan
101000186	City of Wharton Project 16	Improve drainage infrastructure throughout the city (Bridge, culvert, channel, levee, and dam projects)
101000187	City of Edna Project 14	Implement drainage improvements, including culvert upgrades, channel widening, regional detention, bridge upgrades, and storm sewer improvements
101000188	City of Edna Project 15	Develop a City-wide Drainage Master Plan focused on local drainage issues. This plan will merge with the regional FIF study of Dry Creek
101000189	City of Edna Project 8	Improve wastewater treatment plant to make it more flood resilient and improve treatment capacity and I&I.
101000190	City of Ganado Project 9	Coordinate with JCCWDD to develop region detention and channel widening improvements along Devers Creek.
101000191	City of Ganado Project 10	Drainage improvements throughout the City, including culvert improvements, detention, channel improvements, bridge improvements, and storm sewer improvements
101000192	City of Ganado Project 13	Develop a drainage master plan with a focus on identifying flood reduction projects for local drainage issues.
101000193	City of La Ward 1	Develop a drainage master plan with a focus on local drainage issues using Atlas 14 rainfall
101000194	City of La Ward 7	Portable electronic signs
102000004	Regional Strategy #4	Stream Corridor Protection and Restoration



# Task 8 Policy Recommendations

## **TASK 8 – POLICY RECOMMENDATIONS**

## **Draft Chapter 8**

# RFPGs may adopt recommendations on policy issues related to floodplain management and flood mitigation planning and implementation:

- Legislative recommendations considered necessary to facilitate floodplain management and flood mitigation planning and implementation.
- Other regulatory or administrative recommendations considered necessary to facilitate floodplain management and flood mitigation planning and implementation.
- Any other recommendations that the RFPG believes are needed and desirable to achieve its regional flood mitigation and floodplain management goals.
- Recommendations regarding potential, new revenue-raising opportunities, including potential new municipal drainage utilities or regional flood authorities, that could fund the development, operation, and maintenance of floodplain management or flood mitigation activities in the region.



# Task 9

## Flood Infrastructure Financing Analysis

### Mark Evans – Freese & Nichols

### **Objective**

- Report on how sponsors of recommended FMPs propose to finance actions
  - Coordinate and communicate with individual local governments, regional authorities, and other political subdivisions
  - Perform a survey of FME and FMP sponsors
  - Coordinate with FME and FMP sponsors and endeavor to verify needs and costs associated are sufficiently represented in the RFP for future funding determinations
  - Assist the RFPG with the development of recommendations regarding the proposed role of the State in financing flood infrastructure projects

### **Federal Sources of Flood Project Funding**

Source	Federal Agency	State Agency	Top Survey Response	Program Name	Grant (G)	Loan (L)	Post- Disaster (D)
	FEMA	TWDB	Х	Hazard Mitigation Grant Program (HMGP)	G	-	D
	FEMA	TWDB	Х	Flood Mitigation Assistance Grant Program (FMA)		-	-
	FEMA	TDEM	M Building Resilient Infrastructure and Communities (BRIC)		G	-	-
	FEMA	TCEQ	Rehabilitation of High Hazard Potential Dam Grant Program		G	-	-
	HUD	GLO	Х	Community Development Block Grant - Mitigation (CDBG-MIT)	G	-	-
Federal	HUD	GLO	Х	Community Development Block Grant - Disaster Recovery Funds (CDBG- DR)		-	D
Fe	HUD	TDA		Community Development Block Grant Program for Rural Texas (TxCDBG)	G	-	-
	FEMA	TBD		Safeguarding Tomorrow through Ongoing Risk Mitigation (STORM)	-	L	-
	USACE	-		Continuing Authorities Program (CAP)	G	-	-
	USACE	-		Partnerships through Water Resources Development Acts (WRDA)	G	-	D
	FEMA	TDEM		Public Assistance (PA)	G	-	D
	EPA	TWDB		Clean Water State Revolving Fund (CWSRF)	G*	L	-
	NRCS	TSSWCB		Structural Dam Repair Grant Program	G	-	-

\* The CWSRF program offers principal forgiveness, which is similar to grant funding

### State and Local Sources of Flood Project Funding

Source	State Agency	Top Survey Response	Program Name	Grant (G)	Loan (L)	Post- Disaster (D)
	TWDB		Flood Infrastructure Fund (FIF)	G	L	-
State	TWDB		Texas Water Development Fund (Dfund)	-	L	-
Sta	TSSWCB		Operation and Maintenance (O&M) Grant Program	G	-	-
	TSSWCB		Flood Control Dam Infrastructure Projects – Supplemental Funding	G	-	-
	-		General Fund	-	-	-
Local	-	x	Bonds	-	-	-
	-		Drainage and/or Stormwater Utility Fees	-	_	-

New "One-Stop-Shop" for Flood Mitigation Funding



#### **Flood Information Clearinghouse**

Welcome to the Flood Information Clearinghouse (FLICC), the first "one-stop-shop" for information on flood mitigation funding opportunities for Texas' communities. This site is a work in progress and will being developed and improved. Is there something you would like to see added? Please share your ideas with <u>flicc@twdb texas.gov</u>.

This site is primarily for local governments and other entities of the state such as cities, councils of governments,

### www.texasfloodclearinghouse.org

- Six state agencies represented on committee:
  - Texas Division of Emergency Management
  - General Land Office
  - Texas Water development Board
  - Texas State Soil and Water Conservation Board
  - Texas Department of Agriculture
  - Texas Commission on Environmental Quality
- Upon request communities receive guidance on which funding sources are available and a "best fit"

### **Challenges in Accessing Funding**

### **Local Funding:**

- With few exceptions (e.g., COA Waller Creek Tunnel), flood mitigation projects generally do not generate revenue
- Communities mostly rely on tax revenue direct appropriations and/or GO bonds
- Flood projects typically compete with other community needs
- Few communities have established drainage utilities with steady fee-based revenue
- Some communities have difficulty accessing private financing

### **Other:**

- High demand there's always greater need than there is available funding
- Complex or burdensome application or program requirements and prolonged timelines of funding programs

### **Suggestions for Competitive Funding Applications**

### **Application Tips**

- Certain funding programs have minimum requirements for eligible applicants, such as NFIP participation, building code adoption, approved Hazard Mitigation Plan, etc.
- Larger scale projects can better compete for funding, demonstrating a higher level of benefits. Consider combining several smaller projects into one regional approach.
- Some programs give extra points for "Construction-Ready" projects.
- Prepare early by looking at prior notices of funding opportunities and successful projects.
  Make sure to understand program goals and scoring criteria.
- Watch for and understand procurement rules.
- Identify match requirements and source of match before applying.
- On Federal grants, consider professional grant management services to avoid issues leading to funds recapture.

### **Connection with Task 8: Legislative recommendations**

### **Draft Chapter 8 recommendations that address funding challenges**

- Certain funding programs have minimum requirements for eligible applicants, such as NFIP participation, building code adoption, approved Hazard Mitigation Plan, etc.
- Allow counties to establish drainage utilities and to collect drainage utility fees in unincorporated areas.
- Enact legislation updating the state building code to a more recent edition (e.g., the 2018 edition of the International Building Code and International Residential Code).
  - Without a current mandatory state building code, local entities in Texas do not qualify for/do not score competitively for some federal funding programs, such as FEMA's Building Resilient Infrastructure and Communities (BRIC) Grant.
- Increase funding for and technical assistance to develop accurate watershed models and floodplain maps.
- Establish and fund a state program to assist counties and cities with the assessment and prioritization of low water crossings.
- Reduce or eliminate barriers to and provide incentives for the planning, funding, and implementation of inter-jurisdictional flood risk reduction measures, either structural and/or non-structural.
- Provide direct technical assistance to economically distressed communities and/or those with high social vulnerability with the preparation of funding applications for federal and/or state financial assistance for flood planning and implementation of flood risk reduction measures.

# Suggest recommendation to provide regular appropriations to replenish the TWDB Flood Infrastructure Fund (FIF)

RFPG-10 Meeting: June 9, 2022

HALFF Presentation

### **Challenges in Accessing Funding**

### Goals

- Indicate how Sponsors propose to finance recommended FMEs, FMSs, and FMPs
- Describe what role the RFPG proposes for the State in financing recommended FMEs, FMSs, and FMPs

Table 19: Fl	MS, FMP, FME fundir	ng survey t	emplate format (with il	lustrative examples	;)							
						Est	imated costs in p	lan	Estimated percent	MP, or FME estimat	d cost	
									Sponsor	Funding		
RFPG Number	Sponsor Entity Name	FMS or FMP or FME	FMS FMP FME - Name	Regional plan's unique FMS/FMP/FME identification number	Target year of full implementation	Non- construction costs	Construction- related costs	Total estimated cost	ANTICIPATED SOURCE of Sponsor funding (e.g., taxes; general revenue; dedicated revenue incl. fees)	FUNDING TO BE FINANCED BY SPONSOR (including local, county, or regional mechanisms available but not yet fully utilized)	Other Funding Needed (including state, federal and/ or other funding)	TOTAL (auto) sum must = 100%
21	City of Howdy	FMP	Widen main downtown channel	2003	2028	\$3,484,000	\$8,129,000	\$11,613,000	stormwater fees	75%	25%	100%
21	Major River Authority	FMP	Levee improvements	3001	2030	\$37,544,000	\$212,754,000	\$250,298,000	fees	50%	50%	100%

Exhibit C Technical Guidelines for Regional Flood Planning (April 2021), Table 19



# Look-Ahead

# **2022 RFPG MEETINGS – THROUGH SEPTEMBER 2022**

### June

- 6/9/22 RFPG Meeting TODAY
  - Discussion and possible action re: Task 5 and Task 8 recommendations
  - Task 9 Flood Infrastructure Finance review of findings and consider potential recommendations
- 6/16/22 and 6/30/22 Technical Committee Meetings (if needed)
  - Presentation, discussion, and possible action re: Committee approval of FMS/FME/FMP recommendations

### July

- 7/7/22 RFPG Meeting
  - Presentation and discussion of complete draft Regional Flood Plan Chapters 1-10
  - Consider and take action to approve recommendations Task 5, Task 8, and Task 9
  - Discuss and provide guidance re: next steps of Regional Flood Plan adoption and Regional Flood Plan amendment process
- 7/11/22 Technical Committee Meeting (if needed)
- 7/18/22 RFPG Meeting
  - Approve submittal of final draft Regional Flood Plan (due to TWDB August 1, 2022)

# **2022 RFPG MEETINGS – THROUGH SEPTEMBER 2022**

### August

• 8/4/22 RFPG meeting (if needed)

### September

- 9/1/22 RFPG meeting (if needed)
- 9/15/22 RFPG meeting and "official" public meeting to accept comments on the draft Regional Flood Plan



# Wrap Up

# **Region 10 Lower Colorado-Lavaca RFPG**

11. Discussion and potential action on recommendations regarding Task 5 - FMEs, FMSs, and FMPs

\*See summaries file for details

# **Region 10 Lower Colorado-Lavaca RFPG**

12. Public comments – limit 3 minutes per person

13. Consider date and agenda items for next meeting

14. Adjourn