

# Technical Committee Meeting



**SAN JACINTO REGIONAL FLOOD PLANNING GROUP**

**REGION 6**

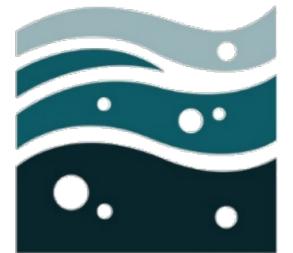
April 11, 2025

2:00 PM

Public Meeting

# Agenda Item #1

Call to Order



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# Agenda Item #2

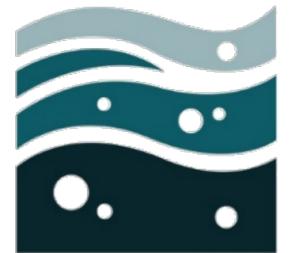
Welcome and Roll Call



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# Agenda Item #3

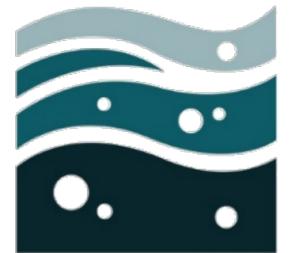
Registered Public Comments on Agenda Items  
(Limit of 3 Minutes Per Person)



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# Agenda Item #4

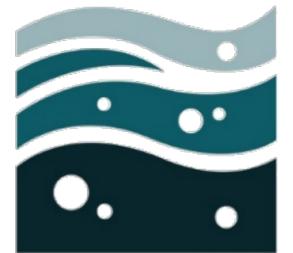
Nominations, discussion, and possible action to elect  
Committee Chair, Vice Chair, and Secretary



SAN JACINTO REGIONAL FLOOD PLANNING GROUP  
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# Agenda Item #5

Approval of Minutes  
September 2, 2022



SAN JACINTO REGIONAL FLOOD PLANNING GROUP  
**REGION 6**

# Agenda Item #5 - Approval of Meeting Minutes

**Meeting Minutes**  
**Region 6 San Jacinto Regional Flood Planning Group**  
September 2, 2022, at 1 PM  
Hybrid Meeting

Flood Control District: 9900 Northwest Fwy., Houston, Texas 77092 – Conference Room 100

<u>Executive Committee Member</u>	<u>Interest Category (Technical Committee role)</u>	<u>Present (x) / Absent ( ) / Alternate Present (*)</u>
Elisa Macia Donovan	Agricultural Interests (Chair)	X
Stephen Costello	Neches Region RFPG (Vice Chair)	X
Neil Gaynor	Upper Watershed (Secretary)	X
Bob Kosar	Coastal Communities	
Tina Petersen	Flood Districts	X

<u>Project Sponsor</u>	<u>Entity</u>	<u>Present(x)/Absent( )/ Alternate Present (*)</u>
Fatima Berrios	HCED	X
Claudia Garcia	HCED	X

**Quorum:**

Number of voting members or alternates that were present: (4 ) total, (4 ) at time of quorum

Number required for quorum per current voting membership of 5: 4

**Attendees\*\*:** Remote:

\*\*Meeting attendee names were gathered from the WebEx meeting platform.

- Bob Kosar
- Christian Ayala
- Evan Adrian (Torres & Associates)
- Jacob Torres ((Torres & Associates)
- Maggie Puckett (FNI)
- Stephanie Zertuche
- Stephen Costello
- Susan Chadwick

# Agenda Item #5 - Approval of Meeting Minutes

**Meeting Date: December 20, 2024**

**Start Time: 9:00 AM**

## **AGENDA ITEM 1: Call to Order**

- **Discussion/Action Items:**
  - The meeting was called to order at 1:00 PM.

## **AGENDA ITEM 2: Welcome and Roll Call**

- **Discussion/Action Items:**
  - Roll call was conducted (see attendee list).
  - A quorum was established.

## **AGENDA ITEM 3: Public Comments on Agenda Items**

- **Discussion/Action Items:**
  - One public comment received from Harris County addressed several concerns:
    - Equity in project sponsorship and considerations for distribution among sponsors.
    - Clarification on how project sponsors can select Flood Management Evaluations (FMEs).
    - Consideration of "level of effort" in the prioritization rankings for FMEs.
    - Definition and understanding of what "unique sponsors" means.
    - Importance of accessibility for critical facilities during disaster events.

## **AGENDA ITEM 4: Approval of Meeting Minutes – March 31, 2022**

- **Discussion/Action Items:**
  - There were no further comments or discussions on the March meeting minutes.

## **AGENDA ITEM 5: Discussion on prioritization framework for selecting FMEs to conduct under Task 12 for potential recommendation to the RFPG**

- **Discussion/Action Items:**
  - Prioritization Framework Discussion
    - Discussion centered on how to select FMEs under Task 12 for effective fund allocation.
    - Emphasis on developing a framework that aligns with the group's goals and objectives.
    - Key topics included flood risk evaluation, benefit-cost ratio calculations, and minimizing overlap with adjacent studies.
  - Criteria for Evaluation
    - Unique sponsor involvement to ensure breadth in project support.
    - Geographic variability to maximize coverage and benefits across different areas.



# Agenda Item #5 - Approval of Meeting Minutes

- Consideration of entities benefited, including municipalities and special districts, in the rankings.
- Survey for Feedback
  - A Menti survey was introduced to gather feedback on prioritization criteria and desired outcomes for Task 12.
  - Participants were asked to rank the importance of various criteria and desired project types.
- Future Steps
  - Plans to refine the prioritization framework based on meeting feedback.
  - Development of a draft list of prioritized FMEs for distribution to the technical committee.
  - Coordination with project sponsors to confirm agreements and priorities for FMEs.
  - Preparation for a recommendation of the prioritized list at the October Regional Flood Planning Group meeting.

## AGENDA ITEM 6: Next Key Milestones and Important Dates

- **Discussion/Action Items:**
  - Discussion about the potential need for another technical committee meeting before the October meeting to finalize feedback.
  - Public engagement open houses scheduled for the last week of September, close to the next RFPG meeting.

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## AGENDA ITEM 7: Consider Agenda Items for the next Technical Committee Meeting

- **Discussion/Action Items:**
  - No additional discussion on action items for the next meeting.

## AGENDA ITEM 8: Public Comments - Limit of 3 Minutes Per Person

- **Discussion/Action Items:**
  - No public comments were submitted.

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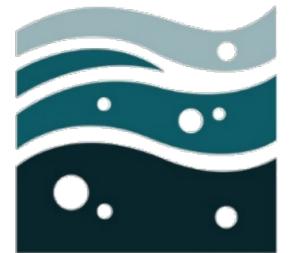
## AGENDA ITEM 9: Adjournment

- **Discussion/Action Items:**
  - The meeting was adjourned 2:22 PM

# Agenda Item #6

Task 2A

Existing Condition Flood Risk Analysis

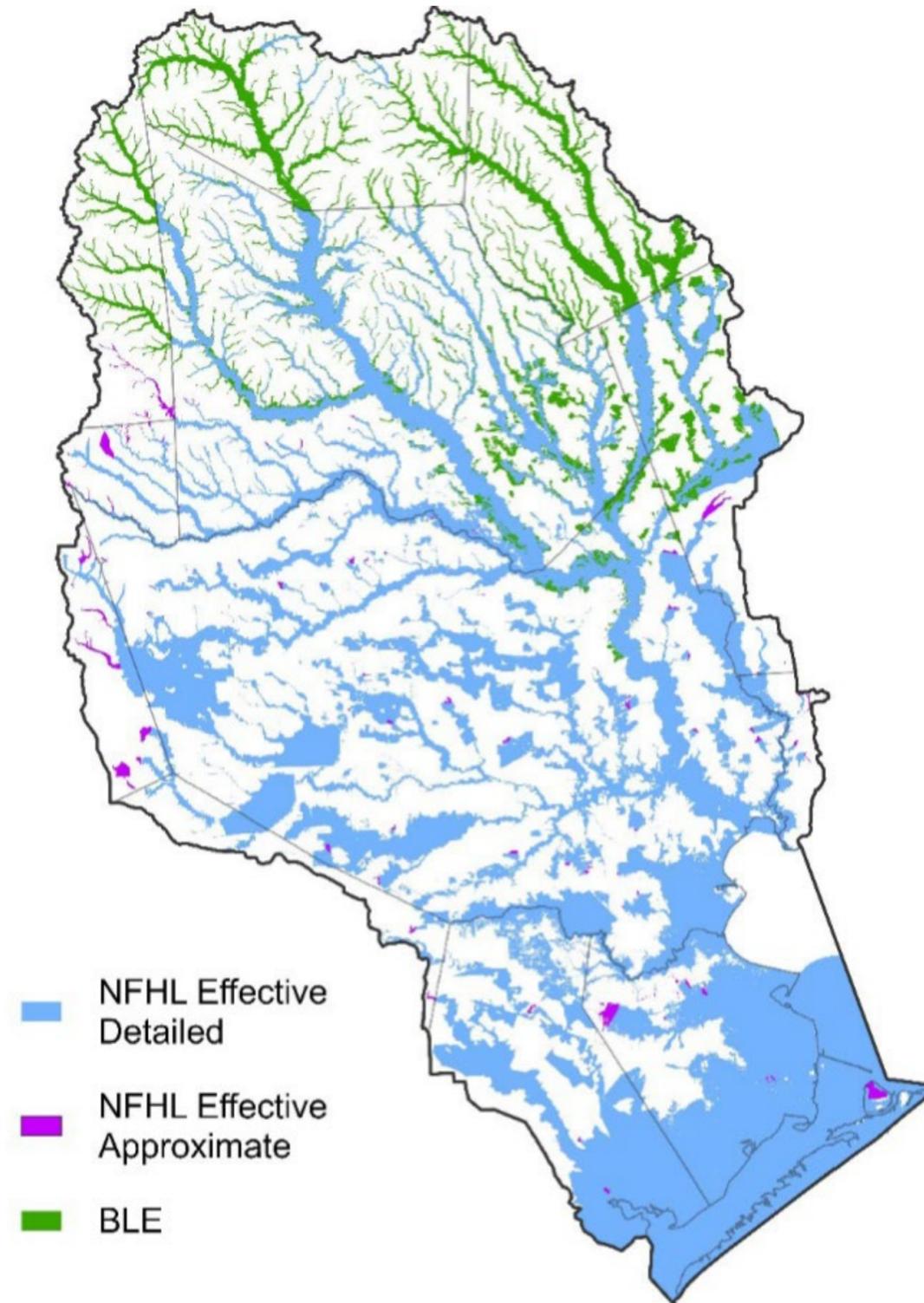


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# Task 2A - Existing Condition Flood Risk Analysis

Best Available Data from 2023 SJRFP:

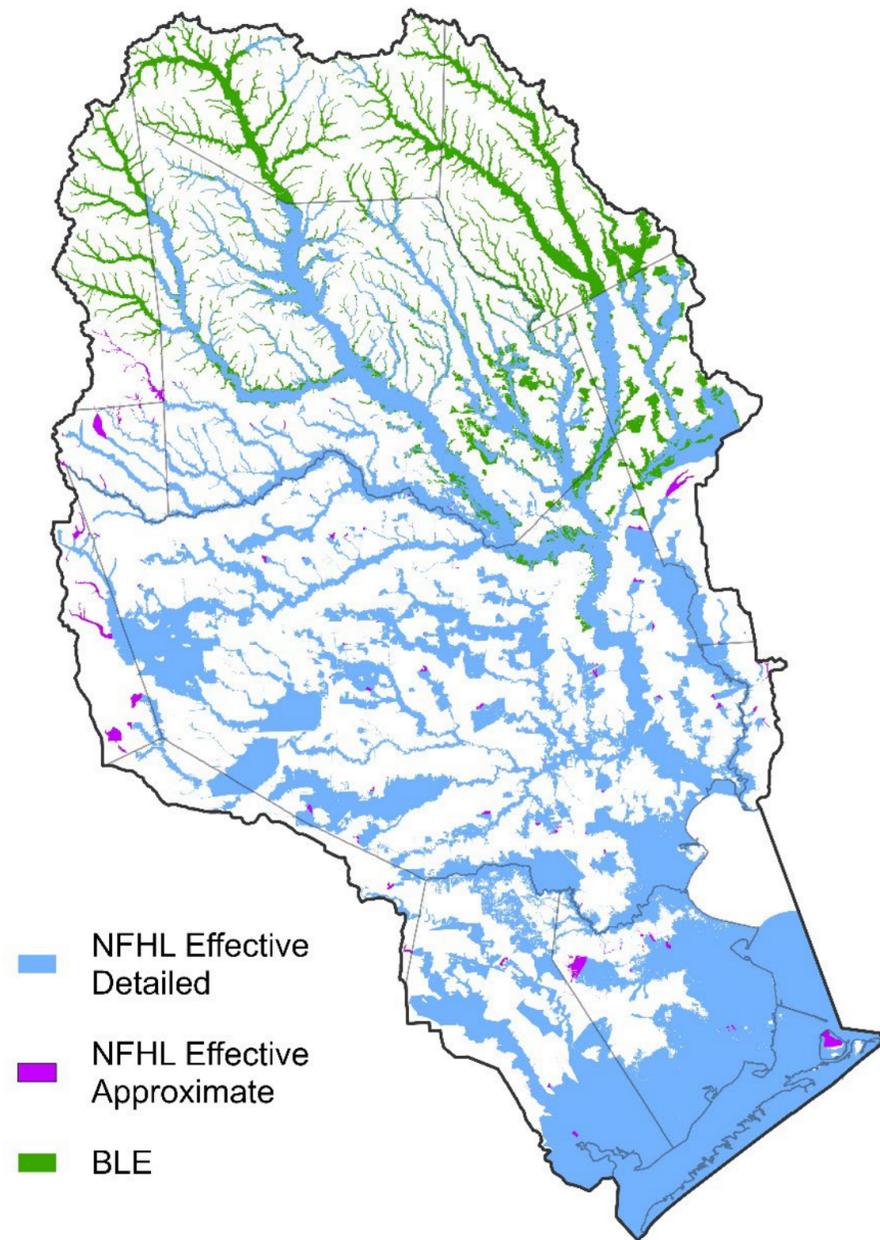
- Existing condition flood hazard for 10%, 1%, and 0.2% annual chance events
- Enhance understanding of flood risk
  - Opportunity to leverage recent studies that incorporate Atlas 14 rainfall, recent development, latest modeling software, and have been calibrated to recent flood events
- Other guidance and data updates:
  - Texas Flood SVI (TX F-SVI)
  - Added fields for base elevations for structures, inundation depth, and velocity



# Task 2A - Existing Condition Flood Risk Analysis

## First Cycle

### 1. Max on Max Flood Risk



## Second Cycle - TWDB Recommended

1. Community Models & Maps
2. FEMA Detailed (AE & VE)
3. 1D & 2D BLE
4. FEMA Non-Detailed (A & V)
5. Fathom (pluvial)

## Second Cycle - Technical Consultant Recommended

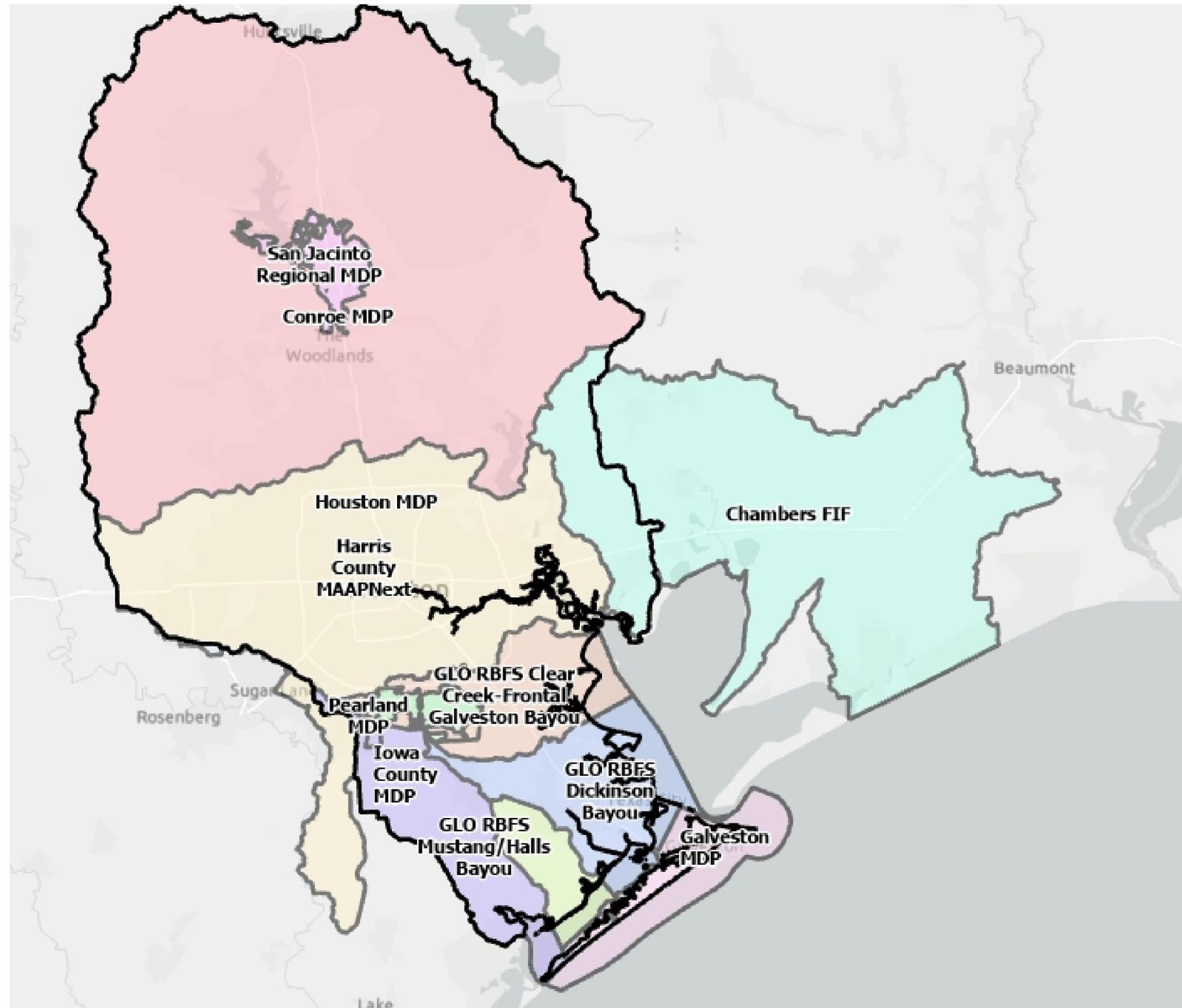
1. Community Models & Maps
  - Recent modeling with Atlas 14 rainfall (GLO, FIF Studies, MDPs, and MAAPnext pending availability)
2. 2D BLE
3. 1D BLE
4. FEMA NFHL or Fathom, dependent on case-by-case analysis

# Task 2A - Existing Condition Flood Risk Analysis

Second Cycle - Technical Consultant Recommended

1. Community Models & Maps
  - Recent modeling with Atlas 14 rainfall (GLO, FIF Studies, MDPs, and MAAPnext pending availability)
2. 2D BLE\*
3. 1D BLE\*
4. FEMA NFHL or Fathom, dependent on case-by-case analysis

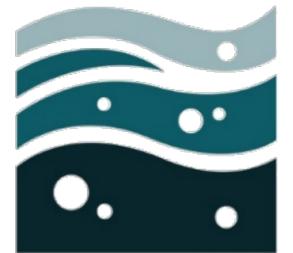
\*Note: 2D BLE available in northern portion of region, 1D BLE available in southern portion. BLE is not available within Harris County.



# Agenda Item #7

Task 2B

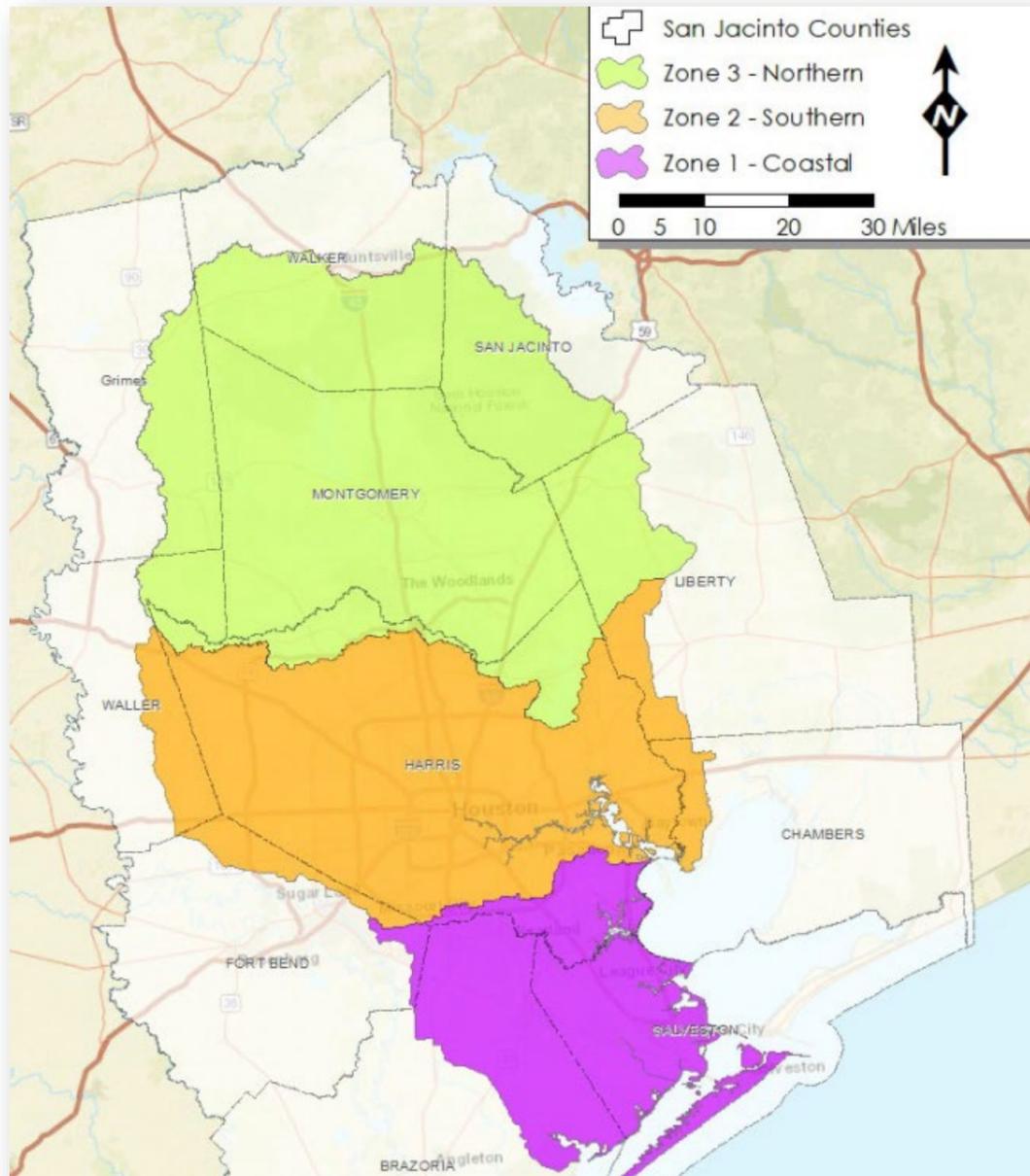
Future Condition Flood Risk Analysis



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# Task 2B - Future Conditions Flood Risk Analysis

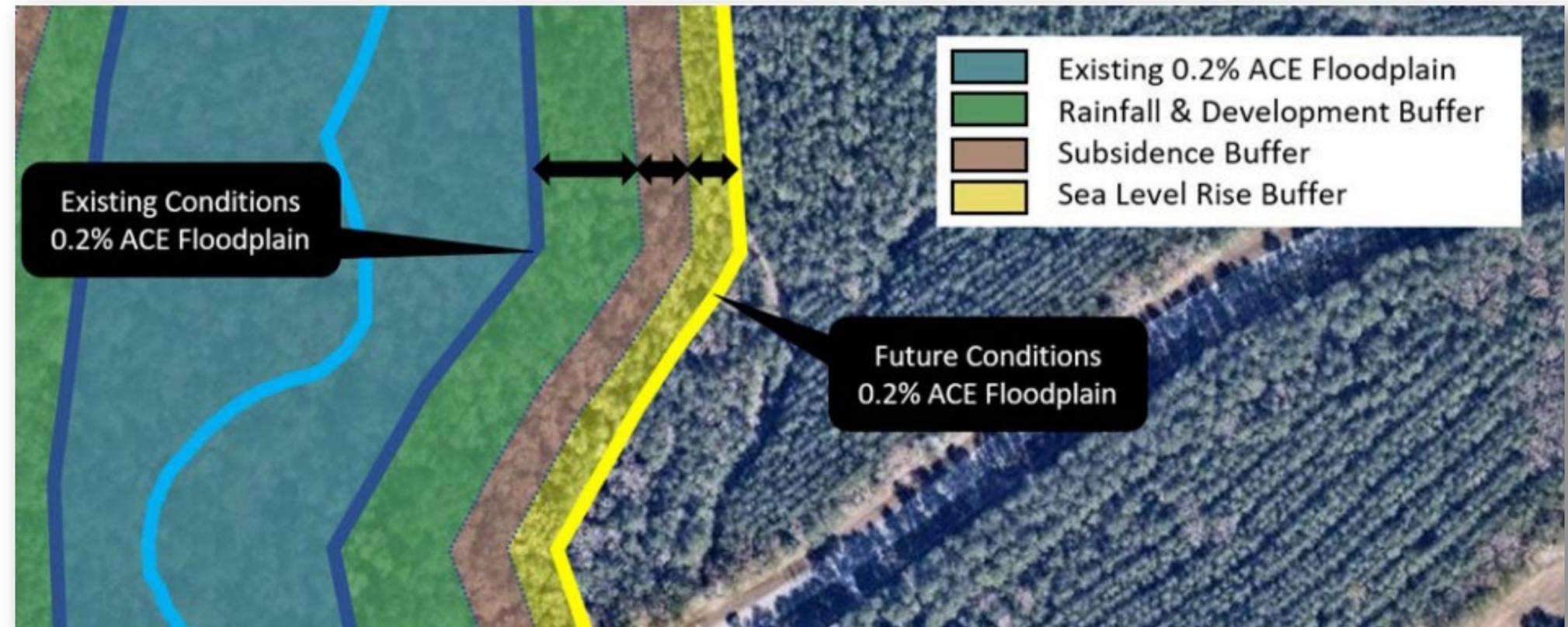
Last Cycle: RFPGs were tasked to determine future flood risk (30-year forecast)



## Future 100-year flood risk



## Future 500-year flood risk



# Task 2B - Future Conditions Flood Risk Analysis

This Cycle: RFPGs will analyze future flood risk for 10-year (new!), 100-year, and 500-year events

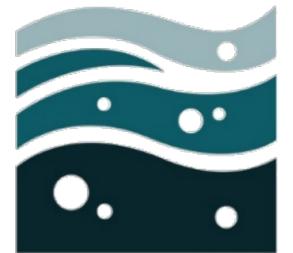
## Possible Data Sources

- Future Conditions community models
  - Modify Existing Conditions models based on factors that affect future flood risk
  - **Future Conditions Fathom Data**
- 
- Accounts for future climate, sea level rise, subsidence, land use change
  - Not yet available
  - Once released, will be reviewed against existing conditions flood hazard data

# Agenda Item #8

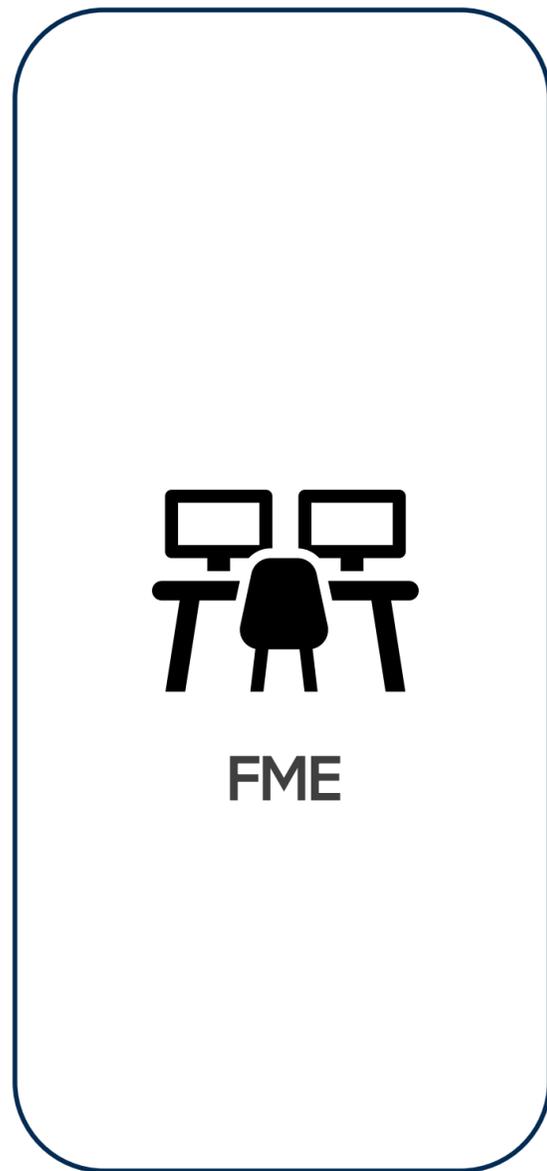
Task 4C

Selection of FMEs



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# Tracks for FMEs to FMPs in 2<sup>nd</sup> Cycle



1. Technical Consultant performs in 2<sup>nd</sup> Cycle



2. TWDB Performs in 2<sup>nd</sup> Cycle

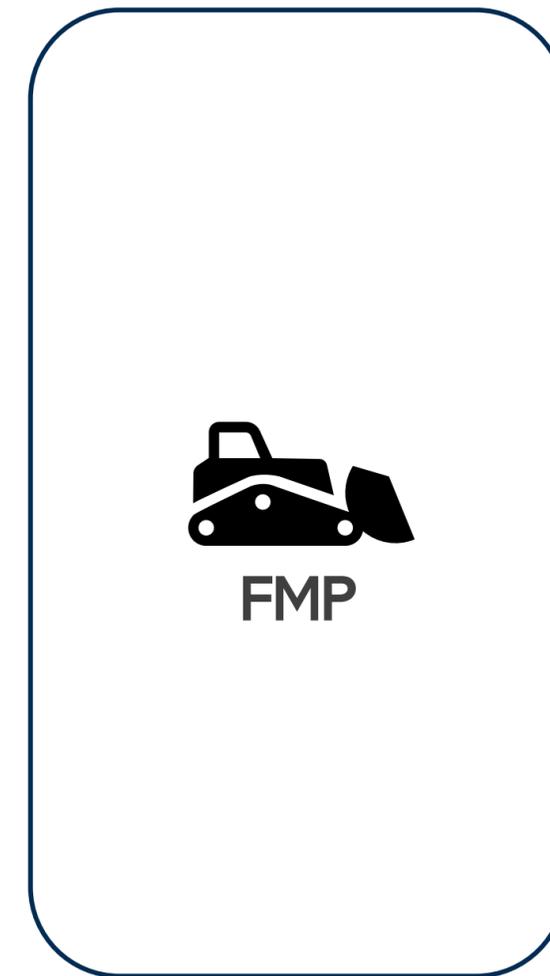


3. Sponsor performs via other initiative

*(FIF funding, CDBG-MIT COG MOD, GLO RBFS, etc.)*



4. FME deferred for future opportunity



# Task 4C - Performance of FMEs

Task 4C Budget = \$942,500

*Top ranked FMEs in State Flood Plan  
Estimated Costs < \$900k*

FME ID	FME Name	Sponsor	FME Type	Estimated Cost (\$)
061000197	Harris County Wide - Investigation of City of Houston Properties for Conversion to Stormwater Detention Basins	Harris County Flood Control District	Project Planning	\$ 500,000.00
061000438	Greens Bayou, Jackson Bayou, White Oak Bayou, Cypress Creek and San Jacinto River Areas Subdivision Drainage Mitigation Project	Harris County	Project Planning	\$ 30,000.00
061000439	Greens Bayou, White Oak Bayou and Cypress Creek Areas Subdivision Drainage Mitigation Project	Harris County	Project Planning	\$ 30,000.00
061000465	Catalina	Houston	Project Planning	\$ 30,000.00
061000421	Clear Creek - Hughes Stormwater Detention (SWD) Basin	Harris County Flood Control District	Project Planning	\$ 30,000.00
061000180	Brays Bayou Watershed Study	Harris County Flood Control District	Watershed Planning	\$ 620,000.00
061000534	Brays Bayou Local Drainage Study	Harris County	Watershed Planning	\$ 334,000.00
061000420	Clear Creek - Friendswood Detention Basin Near FM 528 in Friendswood	Harris County Flood Control District	Project Planning	\$ 30,000.00
061000191	Spring Creek - Construction of a Reservoir along Spring Creek	Harris County Flood Control District	Project Planning	\$ 870,000.00
061000539	Spring Creek Local Drainage Study	Harris County	Watershed Planning	\$ 343,000.00

# Task 4C - Performance of FMEs

Task 4C Budget = \$942,500

*Top ranked FMEs in State Flood Plan based on unique sponsors*

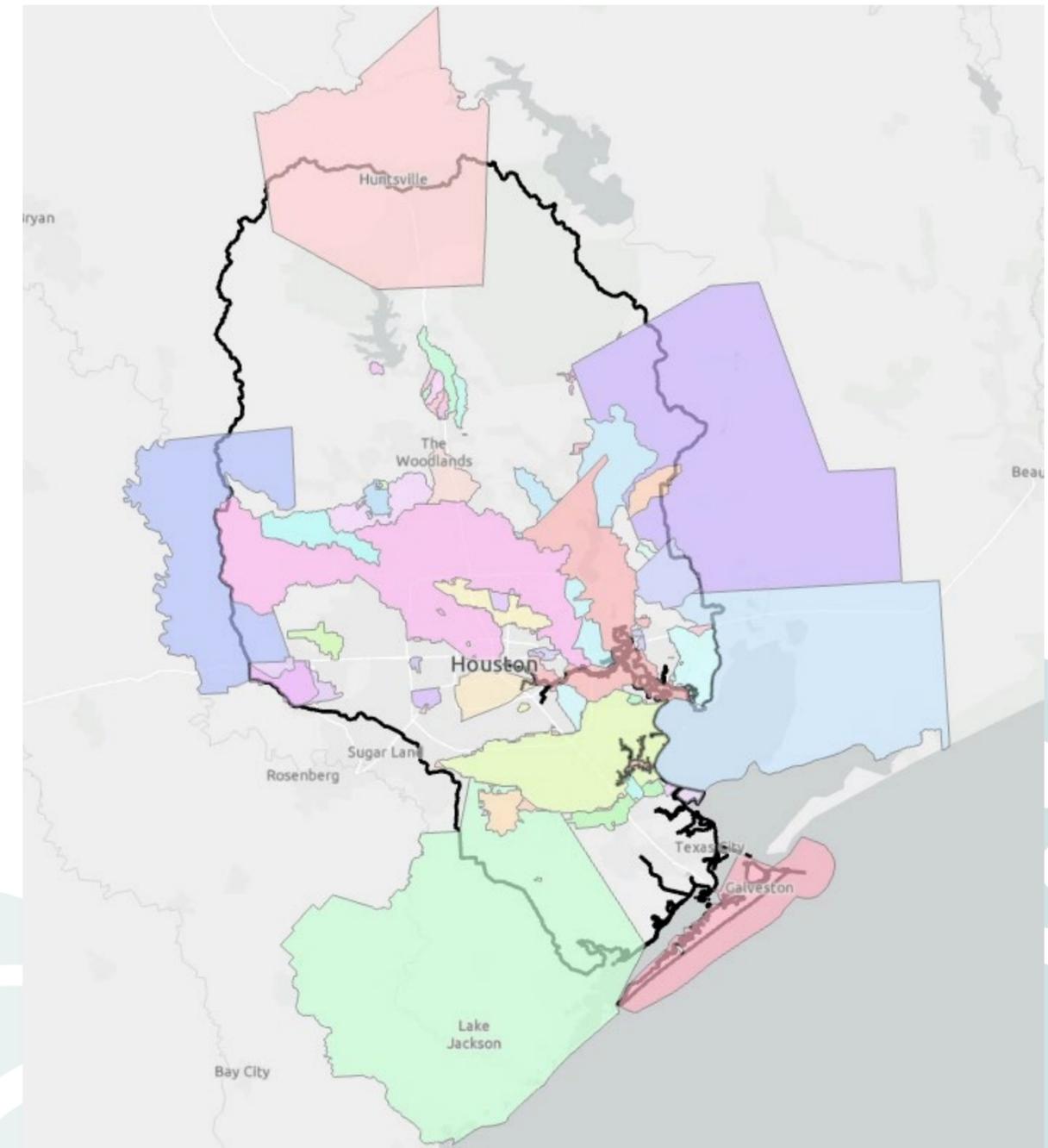
FME ID	FME Name	Sponsor	FME Type	Estimated Cost (\$)
061000197	Harris County Wide - Investigation of City of Houston Properties for Conversion to Stormwater Detention Basins	Harris County Flood Control District	Project Planning	\$ 500,000.00
061000438	Greens Bayou, Jackson Bayou, White Oak Bayou, Cypress Creek and San Jacinto River Areas Subdivision Drainage Mitigation Project	Harris County	Project Planning	\$ 30,000.00
061000283	City of South Houston Master Drainage Plan	South Houston	Watershed Planning	\$ 210,000.00
061000496	Feasibility Study - Convert Enderli Reservoir into a Detention Pond	Liberty County WCID 1	Project Planning	\$ 350,000.00
061000013	City of Bellaire Local Drainage System Asset Management	Bellaire	Project Planning	\$ 300,000.00

# Task 4C - Performance of FMEs

Task 4C Budget = \$942,500

- Total FMEs  $\leq$  \$50K
  - 118, \$3.75M
- Total FMEs  $\leq$  \$50K, Minor Updates
  - 82, \$2.5M
- Est # of FMEs Performed
  - 32

*Top ranked FMEs based on remaining projects \$30-\$50K needing minor updates (BCA, Atlas 14 rainfall, etc) to maximize FMPs.*



# Task 4C - Performance of FMEs

Task 4C Budget = \$942,500

*FME criteria based on Task 12 methodology from the First RFP Cycle*

Recommended Criteria	Priority Ranking		
	Low Priority (1)	Medium Priority (3)	High Priority (5)
Level of Effort	Effort may be outside of budget constraints (\$150k to > \$100k)	Reasonable Effort based on budget/schedule (\$100k to > \$30k)	Low Effort and can likely be completed quickly and efficiently (≤ \$30k)
Model/Data Availability	No model/project data available	Some project data readily available	Necessary models and project data readily available
Known Flood Risk	Low Known Flood Risk	Medium Known Flood Risk	High Known Flood Risk
Number of Entities Benefitted	1-2	3	Greater than 3
Critical Facilities at risk	Less than Median	Above Median	Above Average
Structures at risk	Less than Median	Above Median	Above Average
Population at risk	Less than Median	Above Median	Above Average
Unique Sponsor	Another FME has higher priority for Sponsor	NA	Highest priority FME of Unique Sponsor
Nature Based Solutions	No Nature Based Solution considered in the evaluation	NA	Nature Based Solution(s) considered in the evaluation
Priority within Subwatershed (HUC10)	Another FME has higher priority for Subwatershed based on other criteria	NA	Highest priority FME of Subwatershed based on other criteria
Social Vulnerability Index (SVI)	Low (Less than 0.33)	Medium (0.33-0.66)	High (Greater than 0.66)
Mobility/Length of Inundated Roadway	Less than Median	Above Median	Above Average

Criteria	Weight
Level of Effort	1.0
Model/Data Availability	0.7
Known Flood Risk	0.25
Number of Entities Benefitted	0.2
Critical Facilities at Risk	0.25
Structures at Risk	0.25
Nature-Based Solutions	0.5
Social Vulnerability Index (SVI)	0.5
Mobility	0.3
Population at Risk	0.25
Unique Sponsor	1.0
Subwatershed Priority	1.0

NOTE: If sponsor concurrence is not received, FME may not be considered.

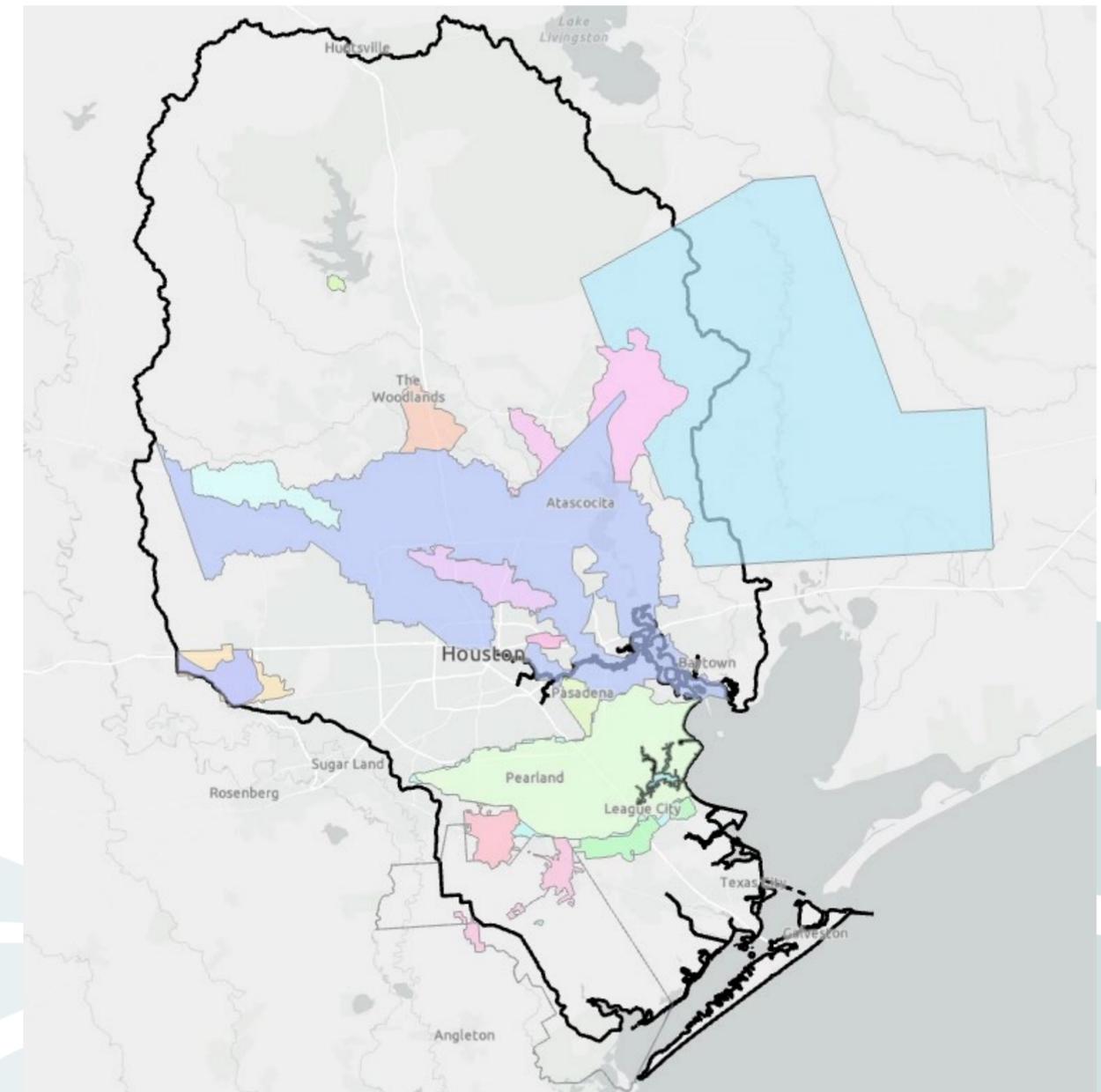
# Task 4C - Performance of FMEs

Task 4C Budget = \$942,500

Sponsor	FME #	Estimated Cost (\$)
Harris County Flood Control District	14	\$ 420,000.00
Harris County	6	\$ 180,000.00
City of Houston	1	\$ 30,000.00
City of Alvin	1	\$ 50,000.00
City of League City	1	\$ 50,000.00
Liberty County	1	\$ 30,000.00
Fort Bend County Drainage District	1	\$ 30,000.00
Brazoria County	1	\$ 30,000.00
City of Manvel	1	\$ 30,000.00
Montgomery County	1	\$ 30,000.00
City of Conroe	1	\$ 30,000.00
Willow Fork Drainage District	1	\$ 30,000.00

*FME criteria based on Task 12 methodology from the First RFP Cycle, <= \$100K.*

*Note: Rural sponsors removed from list; FMEs recommended to be performed by TWDB*



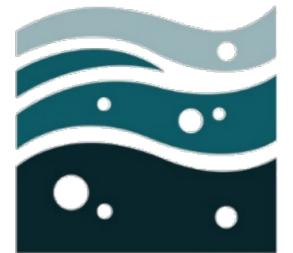
Meeting	Milestone/Action
January 2025	RFPG Meeting 2028 RFP Overview, Task 1, Amendment Update Discuss Process to Select FMEs to Perform (Task 4C)
March 2025	RFPG Meeting – <i>Action Needed</i> Recommend FMXs; Adopt Amendment Finalize Public Survey Review Task 1, Task 2A/2B, Task 4C
May 2025	RFPG Meeting – <i>Action Needed</i> Select FMEs to Perform (Task 4C) Discuss Task 2B, Task 3B Needs Analysis Consider updates to Minimum Standards (Task 3A)
June/August 2025	RFPG Meeting Review results of Tasks 2A/2B Review results of Needs Analysis (Task 3B) Consider updates to goals (Task 3C)
September 2025	RFPG Meeting – <i>Action Needed</i> Adopt Goals (Task 3C); Recommend Min Standards (Task 3A) Present list of identified FMXs for recommendation
November 2025	RFPG Meeting – <i>Action Needed</i> Vote to Approve Tech Memo Discuss FIF Technical Assistance ahead of FY26-27 Call for Apps

## Future Meeting Dates & Content



# Agenda Item #9

Consider Agenda Items for Next Meeting

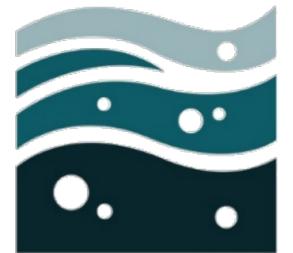


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# Agenda Item #10

Public Comments

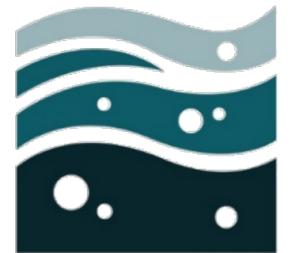
Limit 3 Minutes Per Person



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# Agenda Item #11

Adjournment



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