

REGION



Lower Brazos
Regional Flood Planning Group

Thursday, September 18, 2025

10:00 AM

Brazos River Authority, Lt. Gen. Phillip J. Ford Central Office

4600 Cobbs Dr., Waco, TX 76710



1. Call Meeting to Order and Attendance



2. Public Input - comments on agenda items or flood planning issues (limited to 3 minutes each)

3. Consent Agenda

3.1. Approval of Minutes for the August 21, 2025, meeting

3.2. Approval and Certification of the Finance Report Expenditures

No Finance Report this month.

Meeting Minutes

REGION 8 - LOWER BRAZOS REGIONAL FLOOD PLANNING GROUP

Brazos River Authority, Lt. Gen. Phillip J. Ford Central Office,
4600 Cobbs Dr. Waco, TX 76710

10:00 a.m. – Thursday, August 21, 2025

Meeting agenda, materials, and audio recordings are available online at www.lowerbrazosflood.org

1. Call Meeting to Order and Attendance

Alysha Girard presided over the meeting in Waco, TX. Ms. Girard called the meeting to order at 10:00 am.

Anthony Beach Alt. Lee Ligenfelter	P	Alysha Girard	P
Bruce Bodson	P	Matt Phillips Alt. Aaron Abel	P
Sujeeth Draksharam	A	Kristina Ramirez	P
Tim Finley	P	Jonathan Steiber	P
Russell Ford	P	Mark Vogler	P
Charlotte Gilpin	P	Brandon Wade Alt. Virginia Migl	P

Quorum Present: **Yes.** A quorum is 7 of 12 voting members.

2. Public Input - Public comments on agenda items or flood planning issues (limited to 3 minutes each)

Alysha Girard opened the floor for public comments. No public comments.

3. Consent Agenda

3.1. Approval of Minutes for the July 17, 2025 meeting

3.2. Report, Approval and Certification of the Finance Report Expenditures

Alysha Girard opened the floor for approval of the Consent Agenda Items. The consent agenda items were approved as presented. Aaron Abel made the motion to approve the consent agenda items and Charlotte Gilpin seconded the motion. The motion passed unanimously.

4. Discussion and possible action on the report from the technical consultant.

The Technical Consultant Team provided an update on the overall schedule and general items that are underway. Comments on Chapter 1 are needed by September 18th.

The Chair encouraged representatives for cities and counties to attend the public roadshow meetings.

The Technical Consultant Team presented the draft existing conditions flood quilt. The Chair mentioned that it would be beneficial for each event layer to function independently so that viewers can see one event at a time.

The RFPG and Technical Team discussed the modifications made to the prioritization approach. The RFPG expressed concern with overestimation of pluvial flood risk in urban areas. The RFPG also expressed concern with underestimation in the lower portions of the region.

The Chair asked if InFRM results could be utilized to replace the mapping for larger rivers and creeks in the region.

The Technical Consultant team agreed that this could be done. The effort to develop hydraulic modeling and mapping using the updated hydrology produced by the InFRM effort could be completed as part of Task 4C. The Technical Consultant team will look into the availability of the InFRM data and potential impacts on the process if this effort were completed as part of Task 4C.

The RFPG discussed the purpose of the flood quilt, its impact on other flood planning tasks, and the importance of continuity with other regions. The TWDB emphasized that consideration of pluvial flood risk data is a required scope of work item for Task 2A. The TWDB requested that the final prioritization approach decided on by the RFPG is sent to them for approval.

The Technical Consultant team will bring examples of pluvial datasets for further discussion in the September RFPG meeting.

5. Report from:

5.1. Texas Water Development Board (TWDB) staff

Tressa Olson provided the TWDB Report to the RFPG.

5.2. Regional Planning Sponsor

Pam Hannemann provided the Sponsor report.

5.3. Lower Brazos RFPG Liaisons and Chair

Alysha gave a brief Chair's report.

6. Confirm next meeting date and discuss new business to be considered at next meeting

The next regular meeting will be on Thursday, September 18, 2025, at 10:00AM. The LBRFG will also hold several public Open House meetings throughout the planning area.

7. Adjourn

Alysha Girard adjourned the meeting at 11:44 AM.

Approved by the Region 8 Lower Brazos RFPG at the meeting held on September 18, 2025.

Matt Phillips, Secretary

Alysha Girard, Chair



4. Discussion and possible action on the report from the technical consultant

Technical Consultant Update

September 18, 2025



Agenda



General Updates



Task 1 – Planning Area Description Draft Chapter



Task 2A – Existing Flood Risk Update



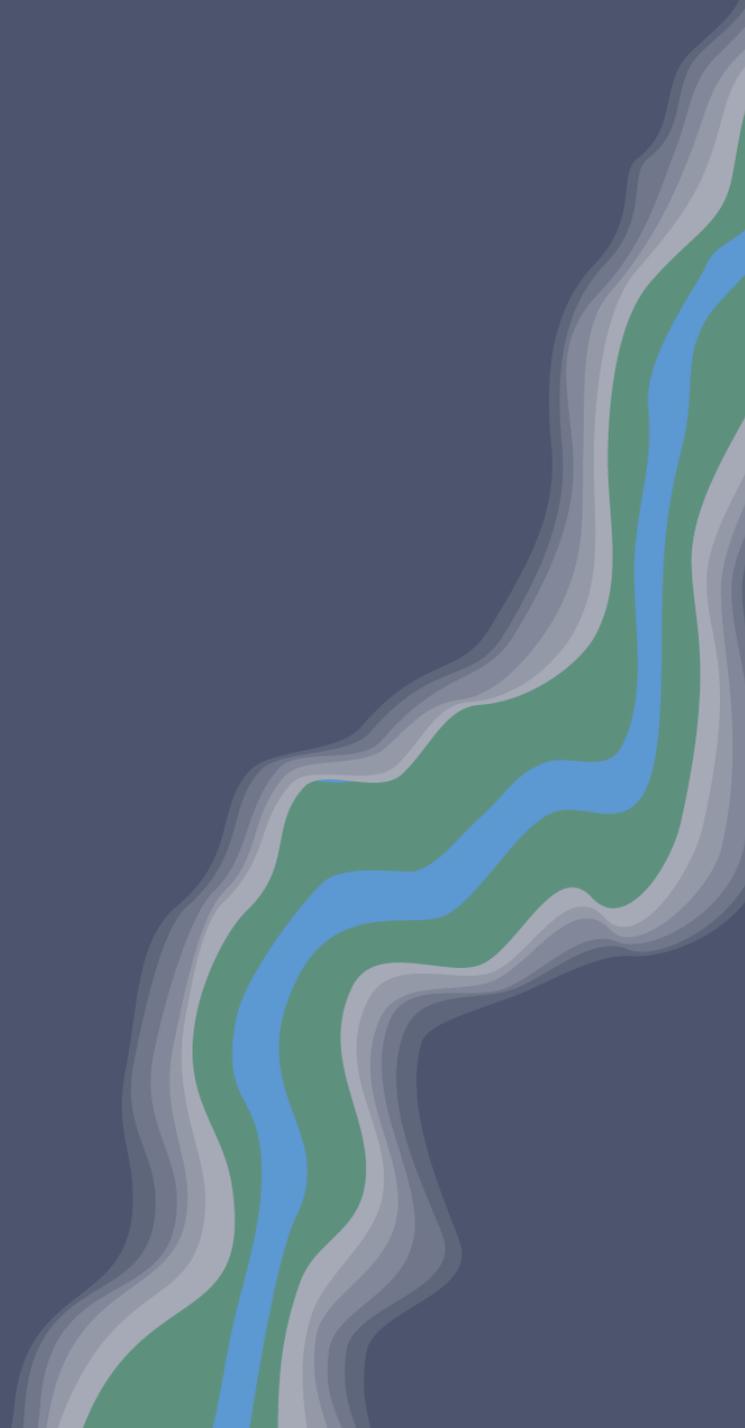
Task 3B – Needs Analysis Process



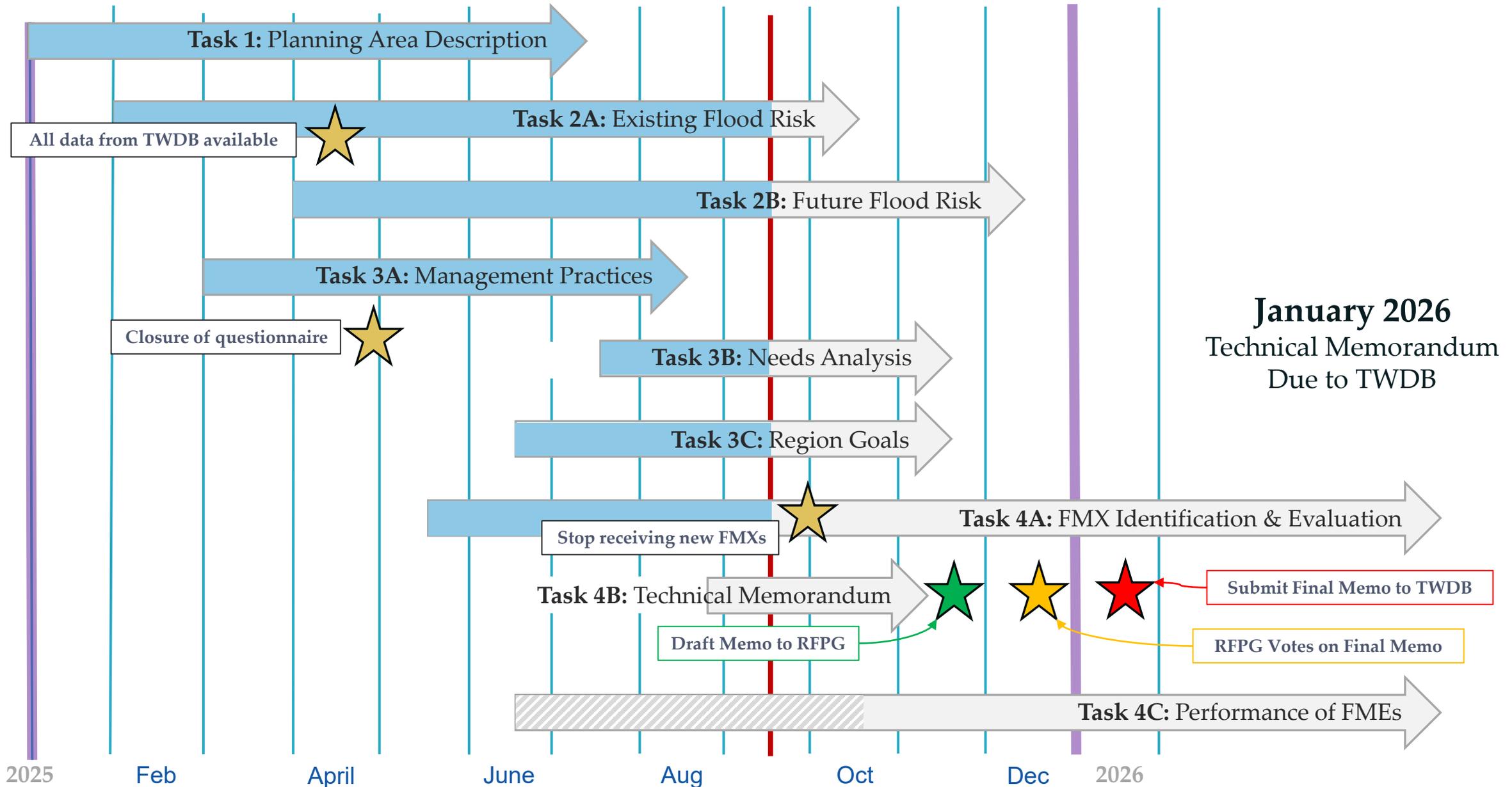
Task 10 – Public Roadshow Recap

General Updates

Ryan Londeen, PE, CFM



Schedule Updates



General Updates

Technical Call

- Tech Memo Checklist
- Task 5C – TWDB FMEs
- Q&A

Task 2B – Future Conditions Flood Risk

- Obtained TWDB approval for methodology presented to RFPG
- Finalization dependent on Task 2A

Task 3C - Goals

- Researching baseline metrics to build goals on
- Dependent on Task 2A and 3B analysis for current progress and risk

Task 4A – Identify FMXs

- Performed outreach for FMXs
- Collecting through end of September
- 28 FMXs gathered to date from 6 communities
- Additional communities have indicated their intent to submit

Outreach Effort

E-Blast – Save The Dates:

Aug. 14 – Waco, College Station, & Rosenberg

Outbound Emails	775
Emails Opened	239 (31%)
Email Links Clicked	22 (9%)

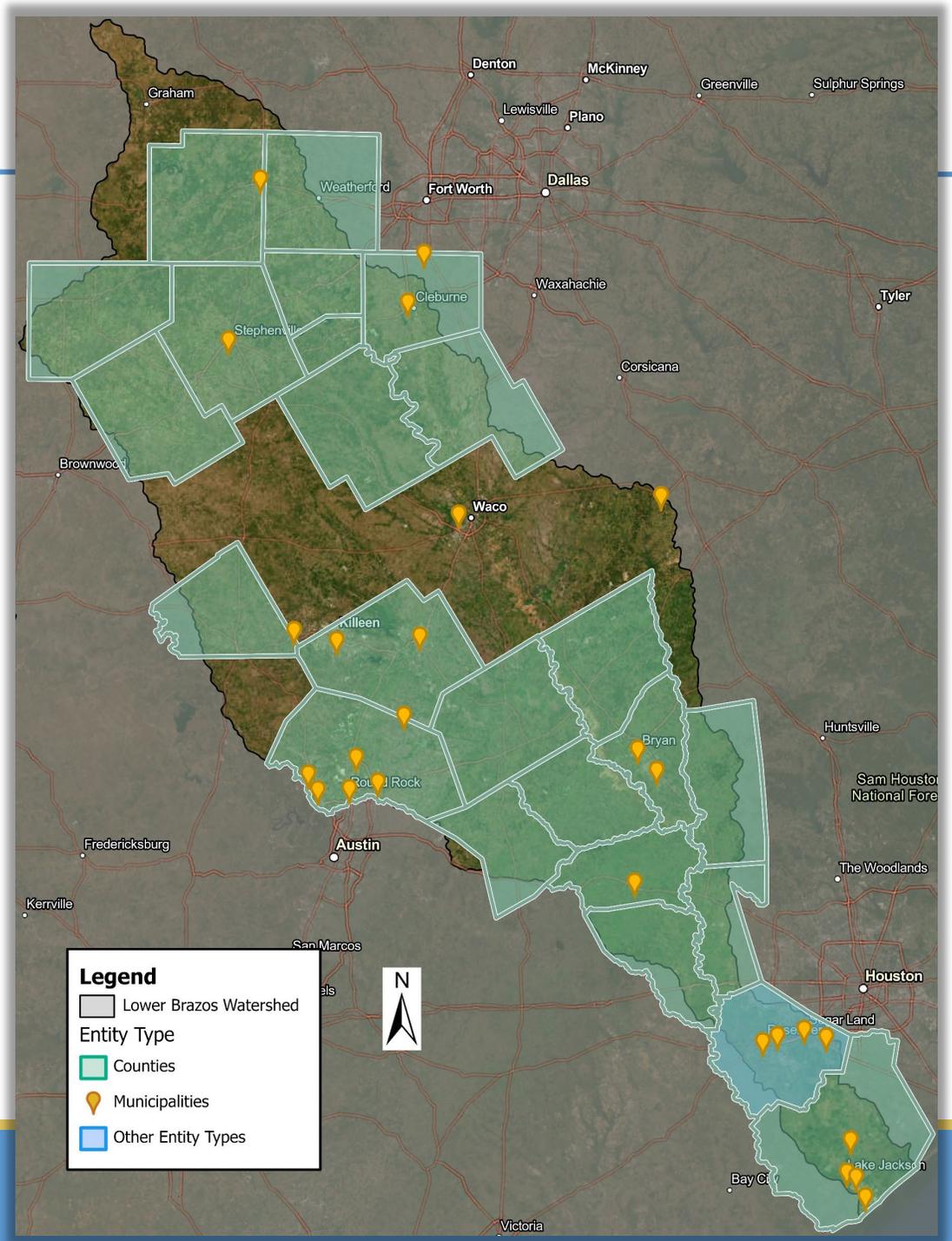
Sept. 2 – Granbury & Georgetown

Outbound Emails	771
Emails Opened	312 (40%)
Email Links Clicked	27 (9%)

Individual Outreach (8.19-9.10):

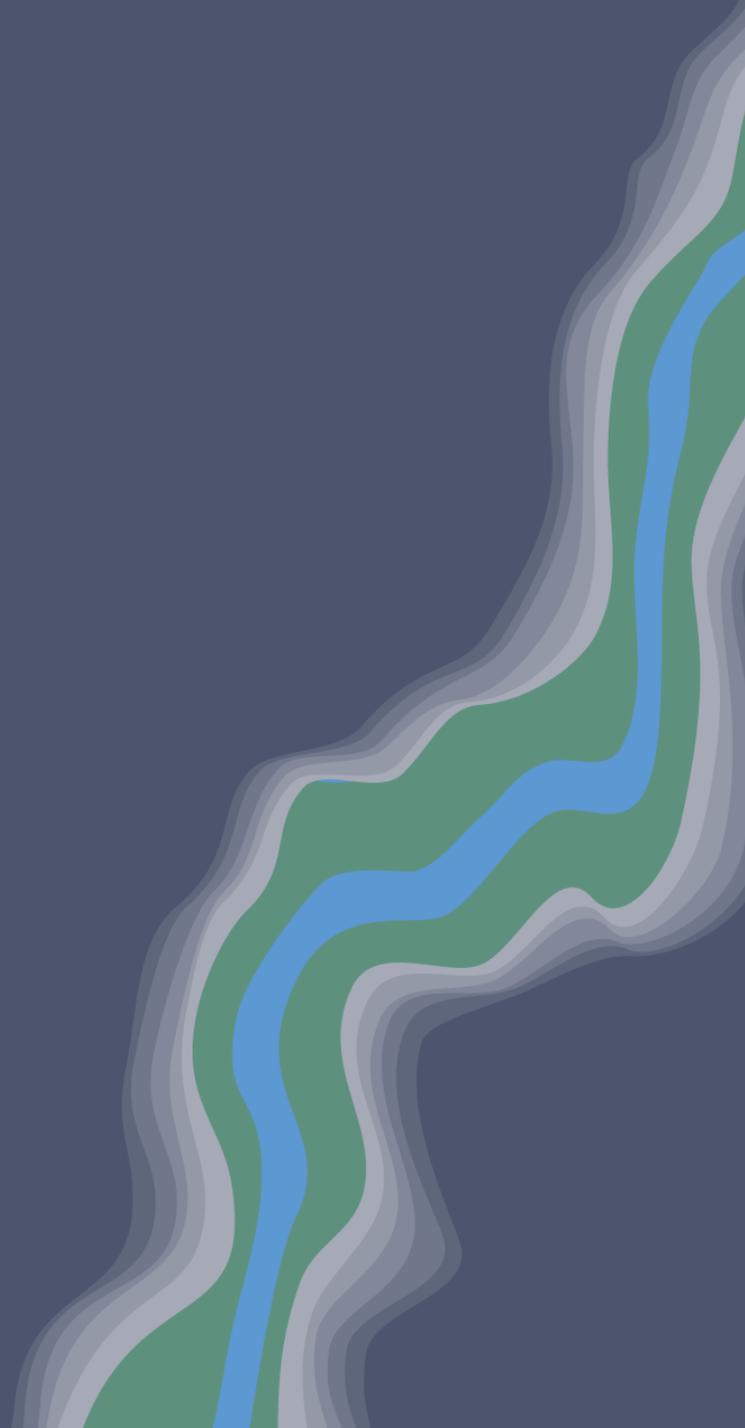
Subject: Roadshow + FMX Collection

- 51 Entities
 - 26 Municipalities
 - 24 Counties
 - 1 Other Type



Task 1 – Planning Area Description

Ryan Londeen, PE, CFM



Task 1: Planning Area Description

Draft Chapter 1 Provided for Review

Chapter 1: Lower Brazos Planning Area Description

1.1 Introduction: The Regional Flood Plan in Context

1.1.1 Origins of the State Flood Planning Process

In Texas, the billion-dollar flood disaster is becoming a regular occurrence. Between 2015 and 2017, flooding alone caused nearly \$5 billion in damages to Texas communities. In conjunction with the impact of Hurricane Harvey, the total cost in 2017 approached \$200 billion in financial losses (National Oceanic and Atmospheric Administration, 2021) and nearly 100 deaths. As Texas grappled with how to manage flood risk better and reduce loss of life and property from future disasters, the Texas Water Development Board (TWDB) prepared the first-ever statewide flood assessment, which described Texas' flood risks, provided an overview of roles and responsibilities, and included an estimate of potential flood mitigation costs and a summary of interest groups views on the future of flood planning.

This plan was prepared because:

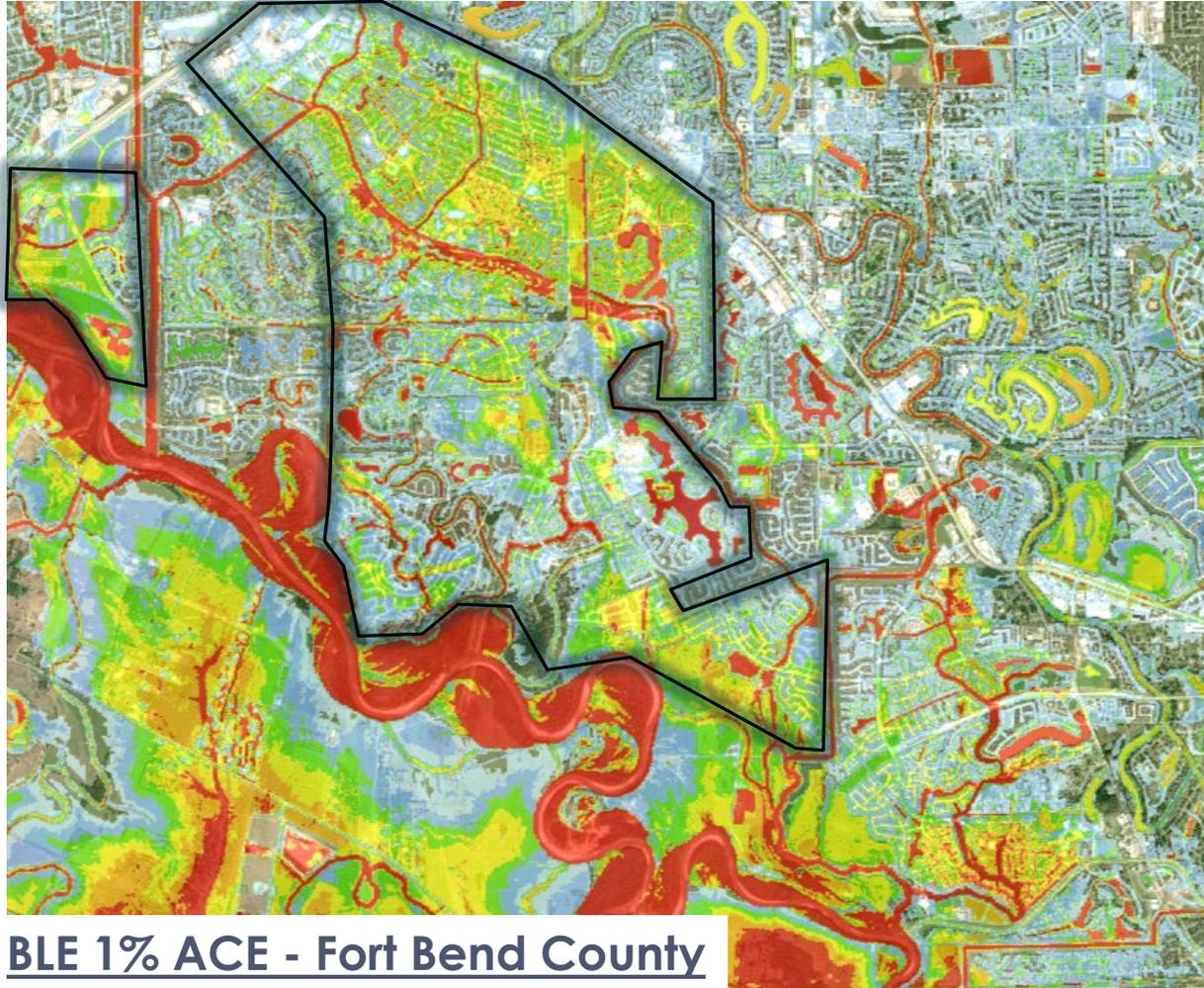
- flood risks, impacts, and mitigation costs had never been assessed at a statewide level
- flood risks pose a serious threat to lives and livelihoods
- much of Texas is unmapped or uses out-of-date maps (Peter M. Lake (Chairman of TWDB), 2019)

Task 2A: Existing Flood Risk

Ryan Londeen, PE, CFM



Task 2A – Flood Quilt Noted Concerns



Issue

Inundation in leveed areas in Fort Bend County are higher than what local officials expect

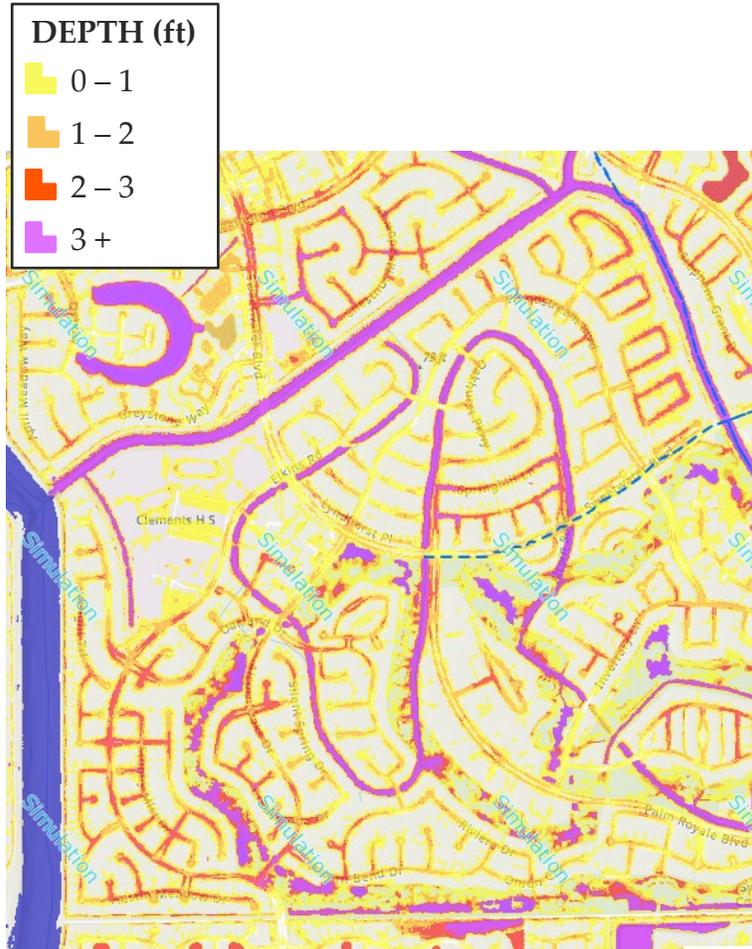
Cause

2D BLE models do not appear to be modeling levees well

Solution

Prioritize fathom data highest in the urban areas in Fort Bend County

Task 2A – Flood Quilt Noted Concerns



Local Model

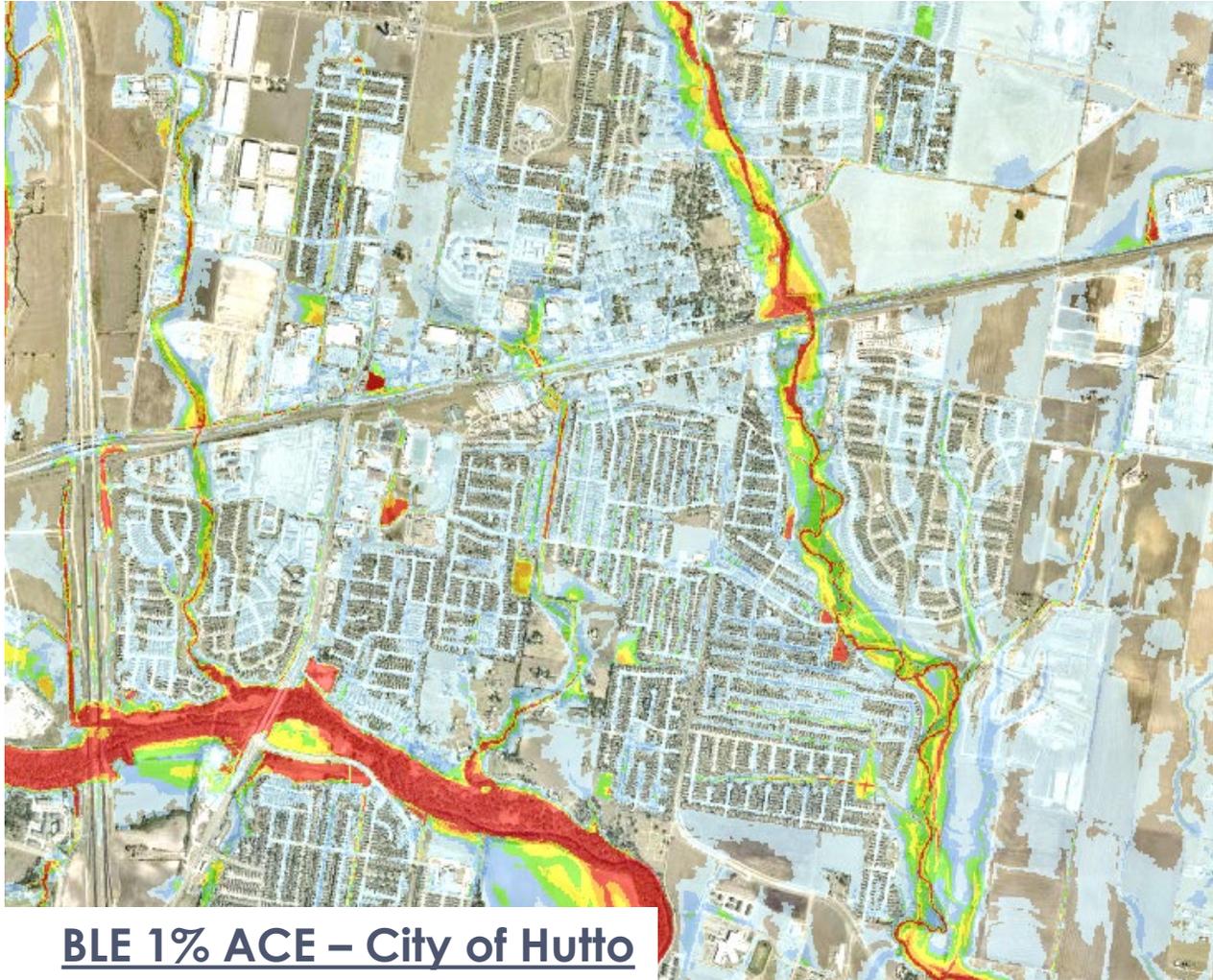


2D BLE



Fathom

Task 2A – Flood Quilt Noted Concerns



Issue

Inundation in urban areas like City of Hutto are higher than what local officials expect

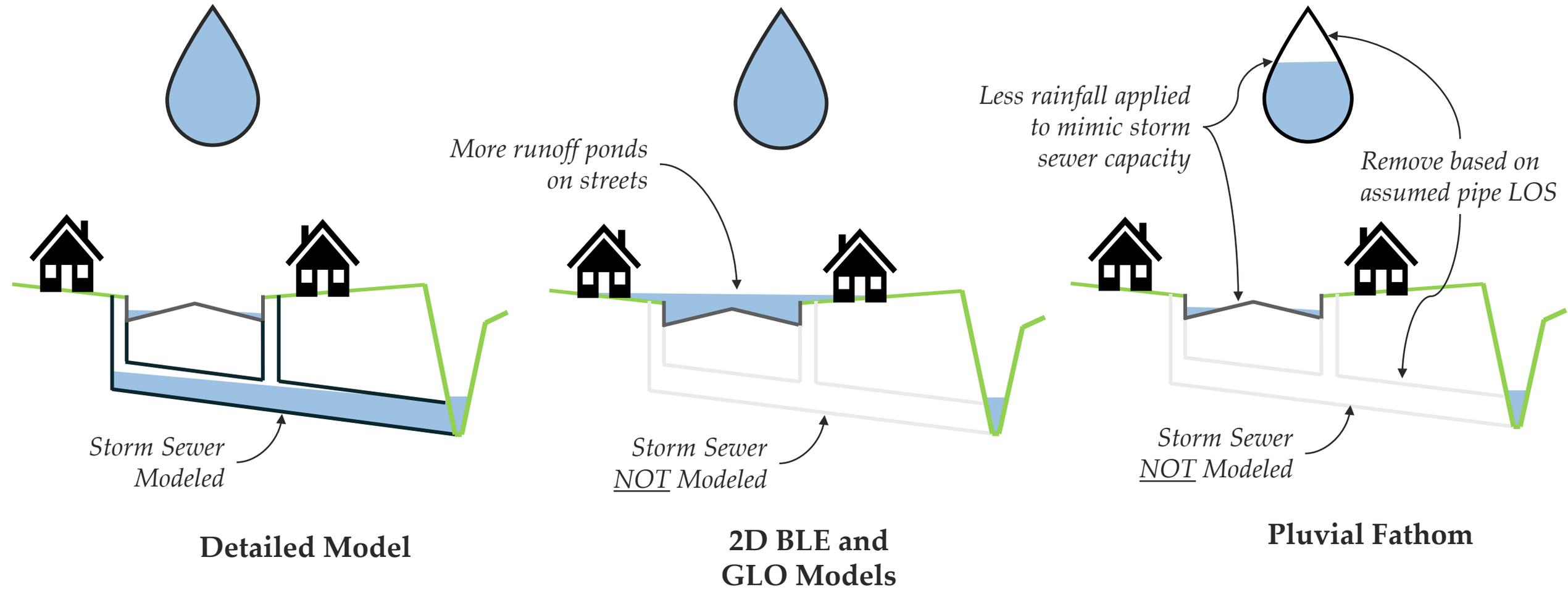
Cause

Potential: 2D BLE and GLO models appear to be overestimating urban flood risk due to not modeling storm sewer (inconclusive)

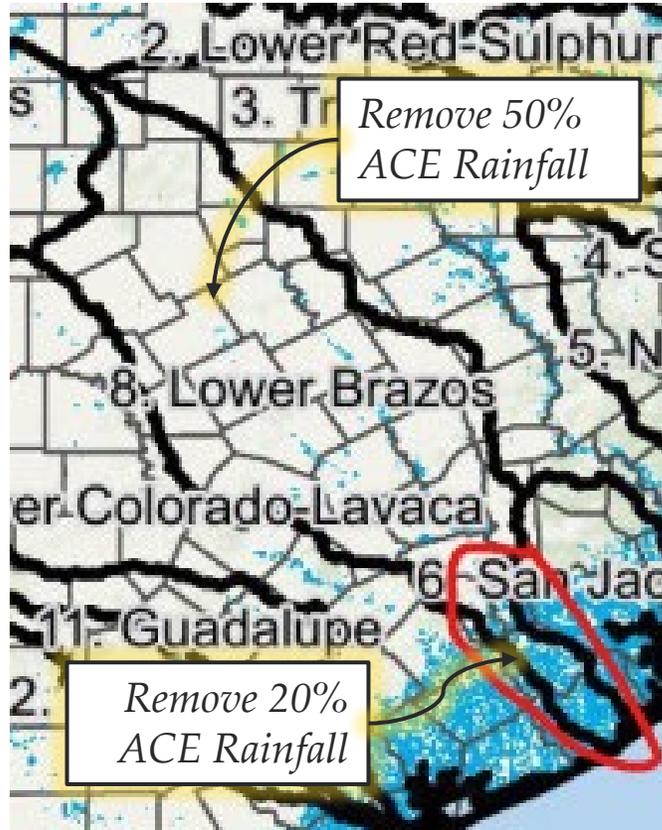
Solution

Prioritize fathom data in urban areas that have a population > 5k

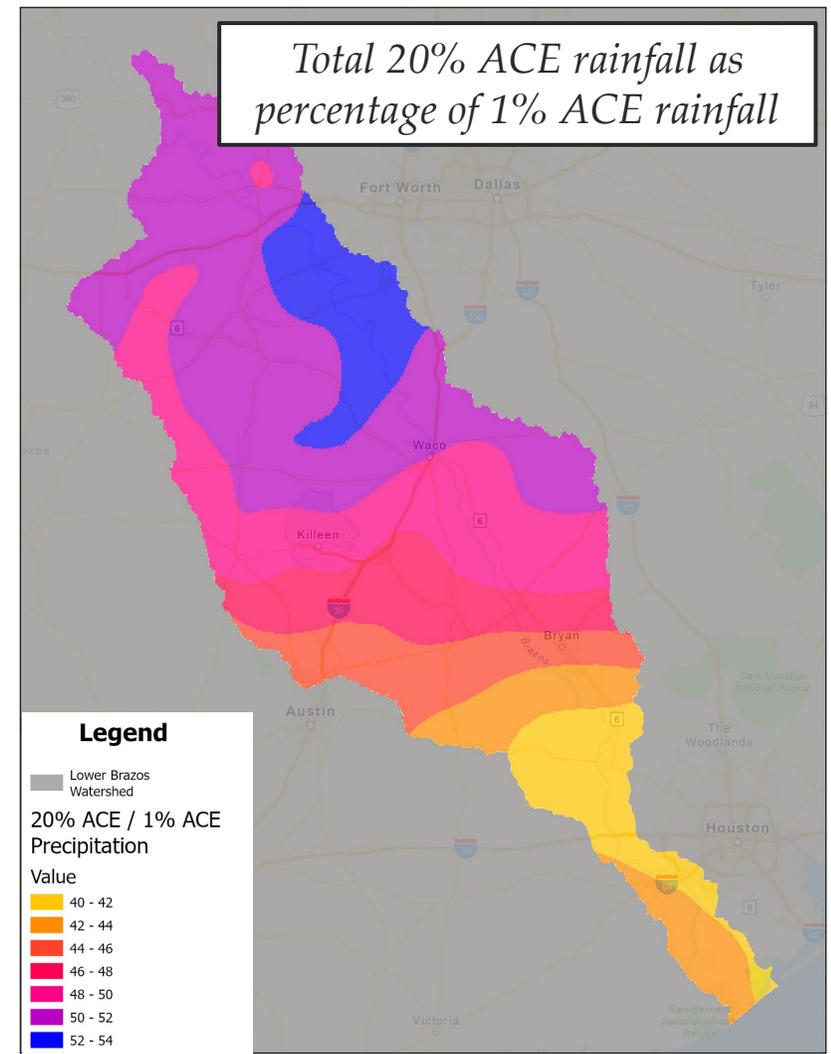
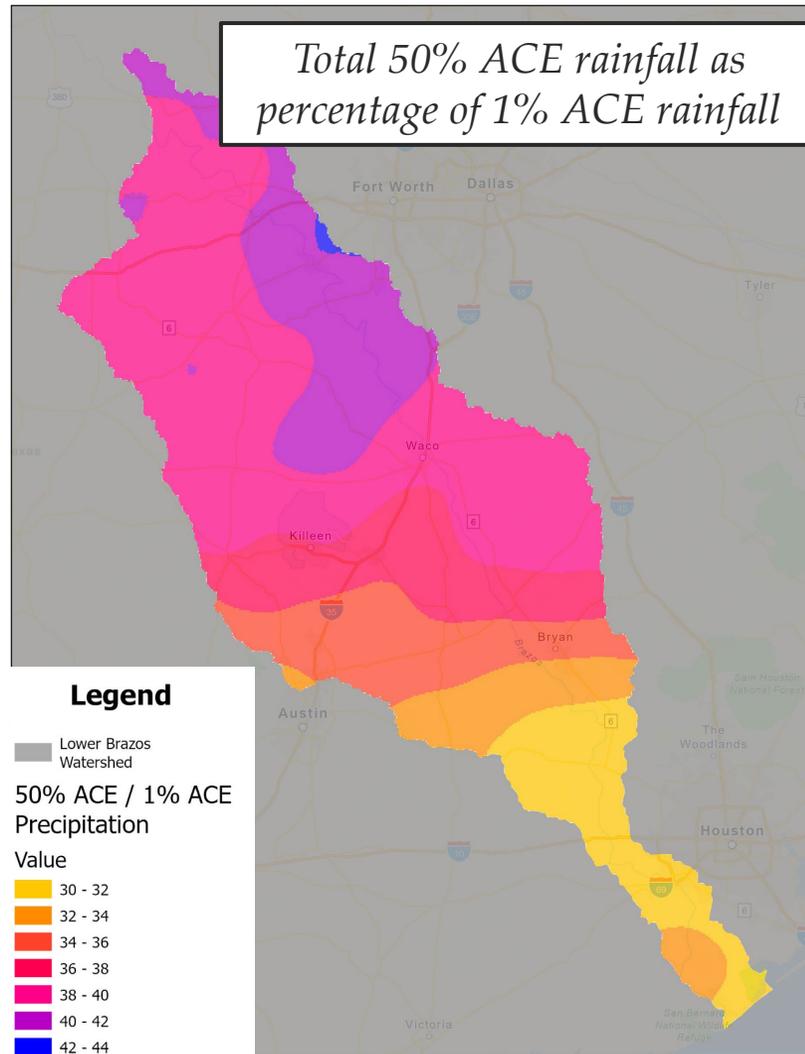
Task 2A – Urban Fathom



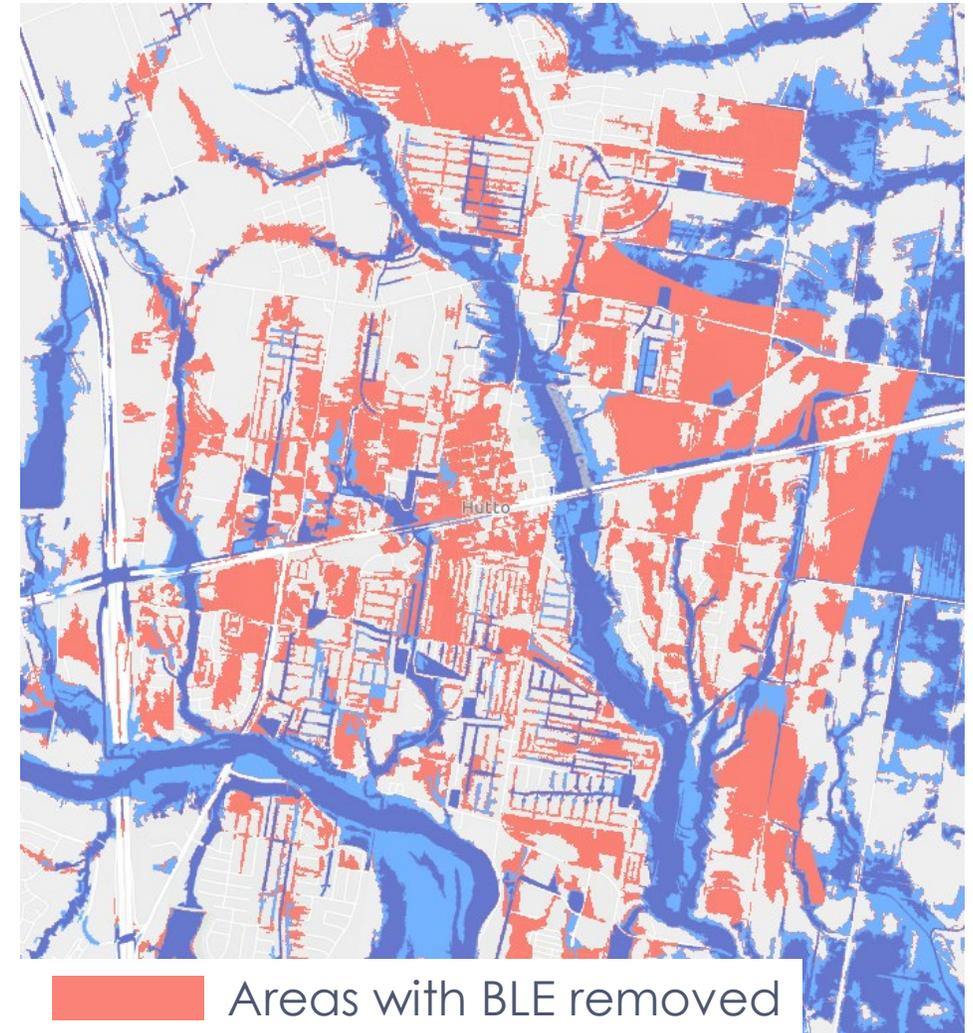
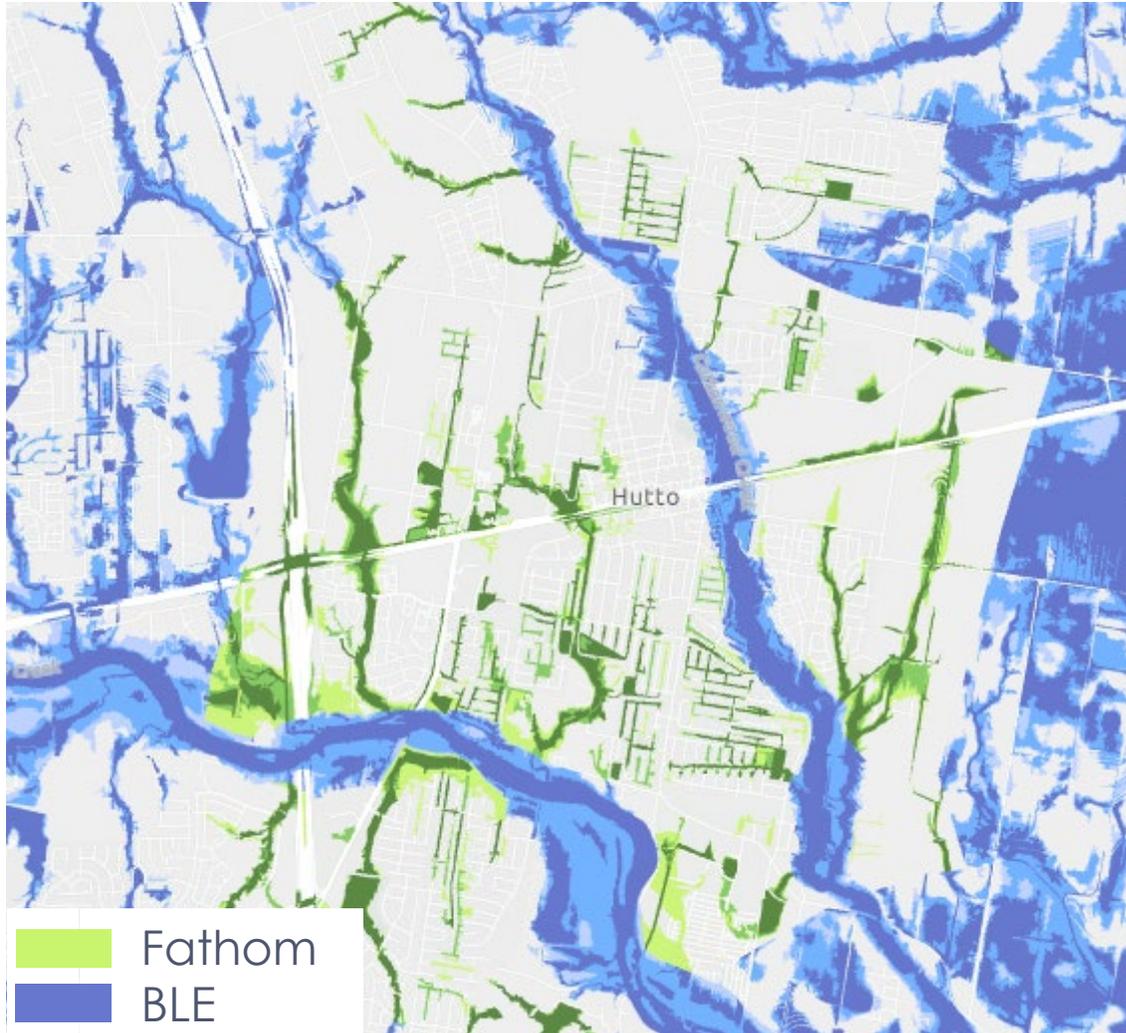
Task 2A – Urban Fathom



Identified Areas of High Artificial Drainage Need (DRAFT)

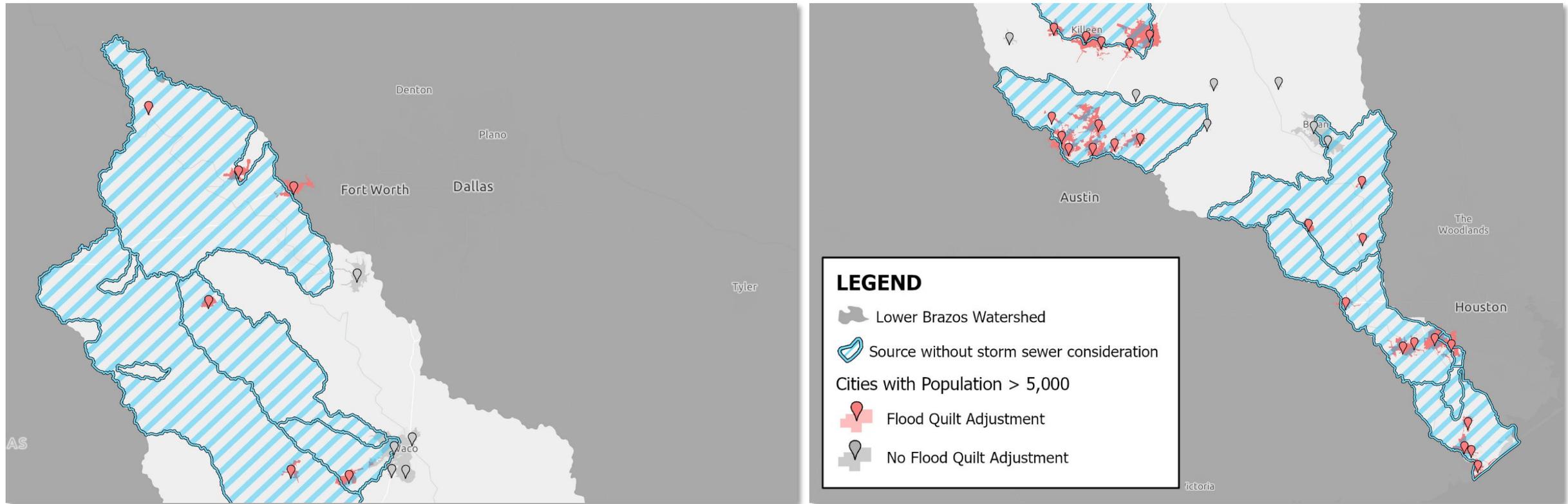


Task 2A – Fathom vs 2D BLE (Hutto)



Task 2A – Urban Areas in Region

Pluvial Fathom to be used in urban areas with a population greater than 5k instead of 2D BLE or GLO modeling results



Task 2A – Flood Quilt Data Prioritization

Revised prioritization based on detailed review and comparison of datasets.

Initial Prioritization Approach

1. Community Models / Maps
2. FEMA Detailed (AE & VE) – Large Rivers
3. BLE 2D
4. FEMA Detailed (AE & VE) – Small Rivers, recent data
5. BLE 1D
6. Fathom (pluvial)*

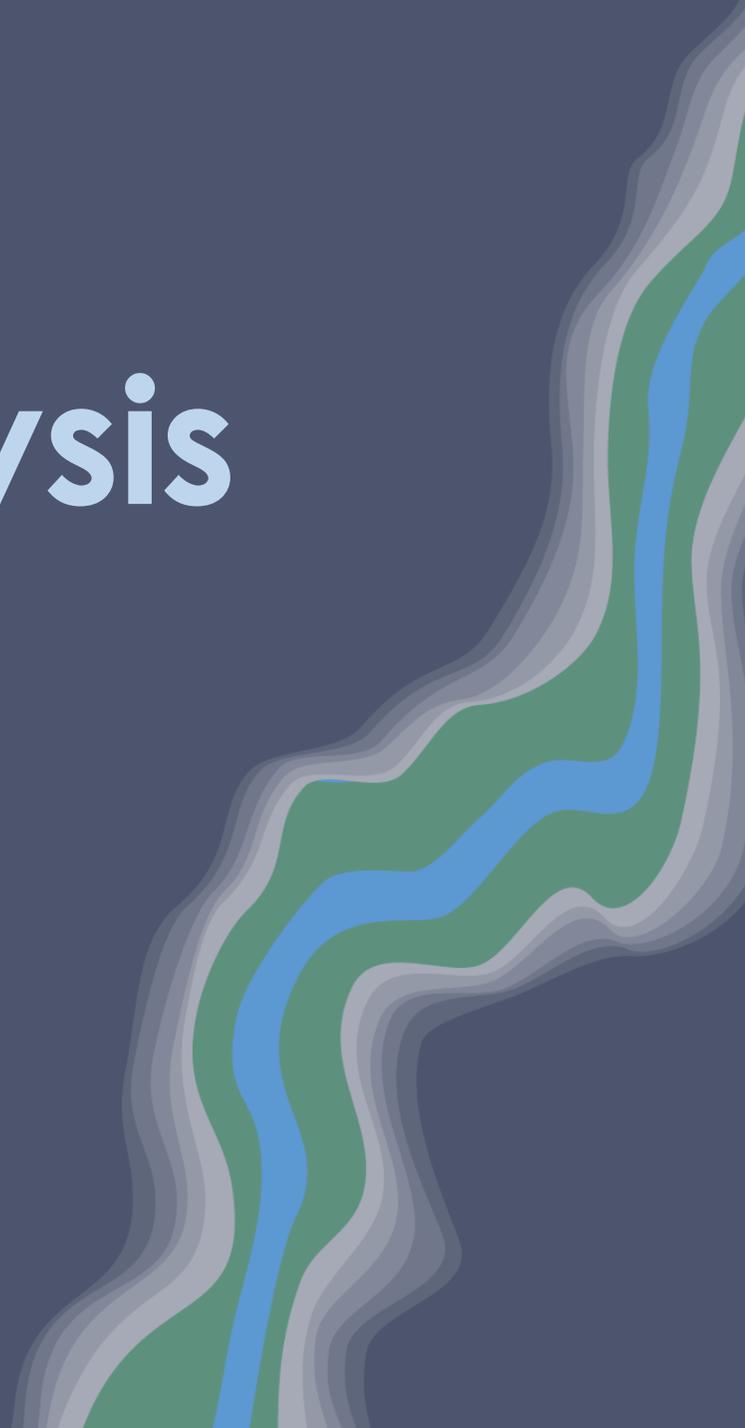
*Data gap filler, where applicable

Revised Prioritization Approach

1. Community Models / Maps
2. ~~FEMA Detailed (AE & VE) – Large Rivers~~
3. **Fathom (Urban > 5k population)**
4. BLE 2D
5. FEMA Detailed (AE & VE) – Small Rivers, recent data
6. Maximum of BLE 1D & Fathom

Task 3B: Needs Analysis Process

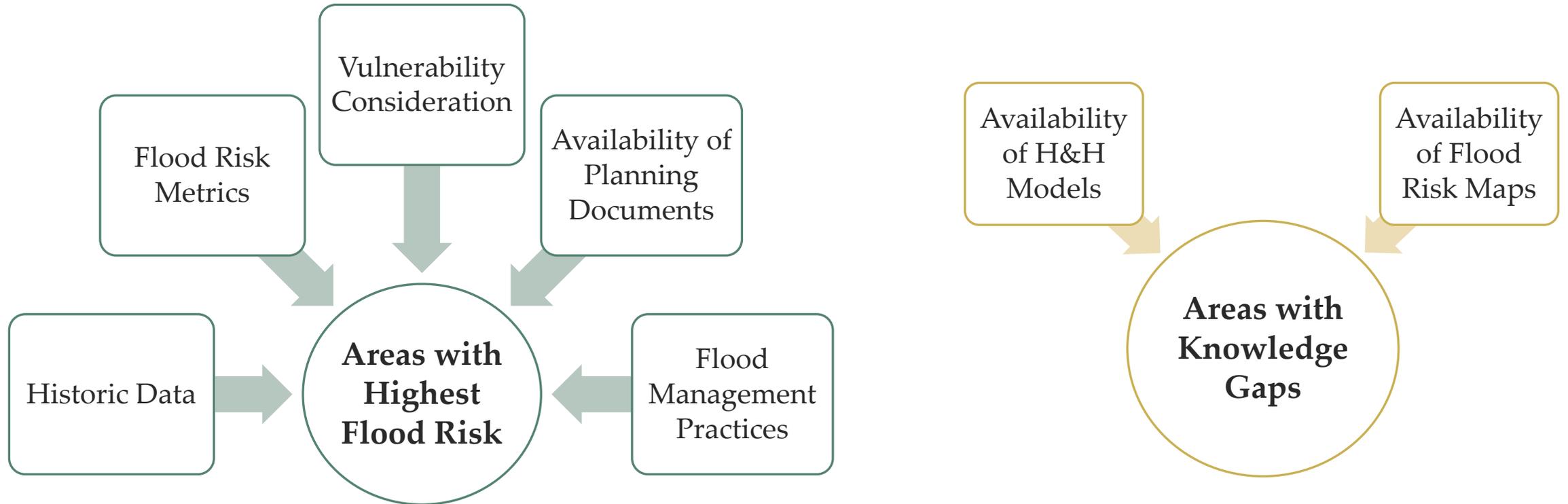
Nick Boardman, PE, CFM (Freese & Nichols)



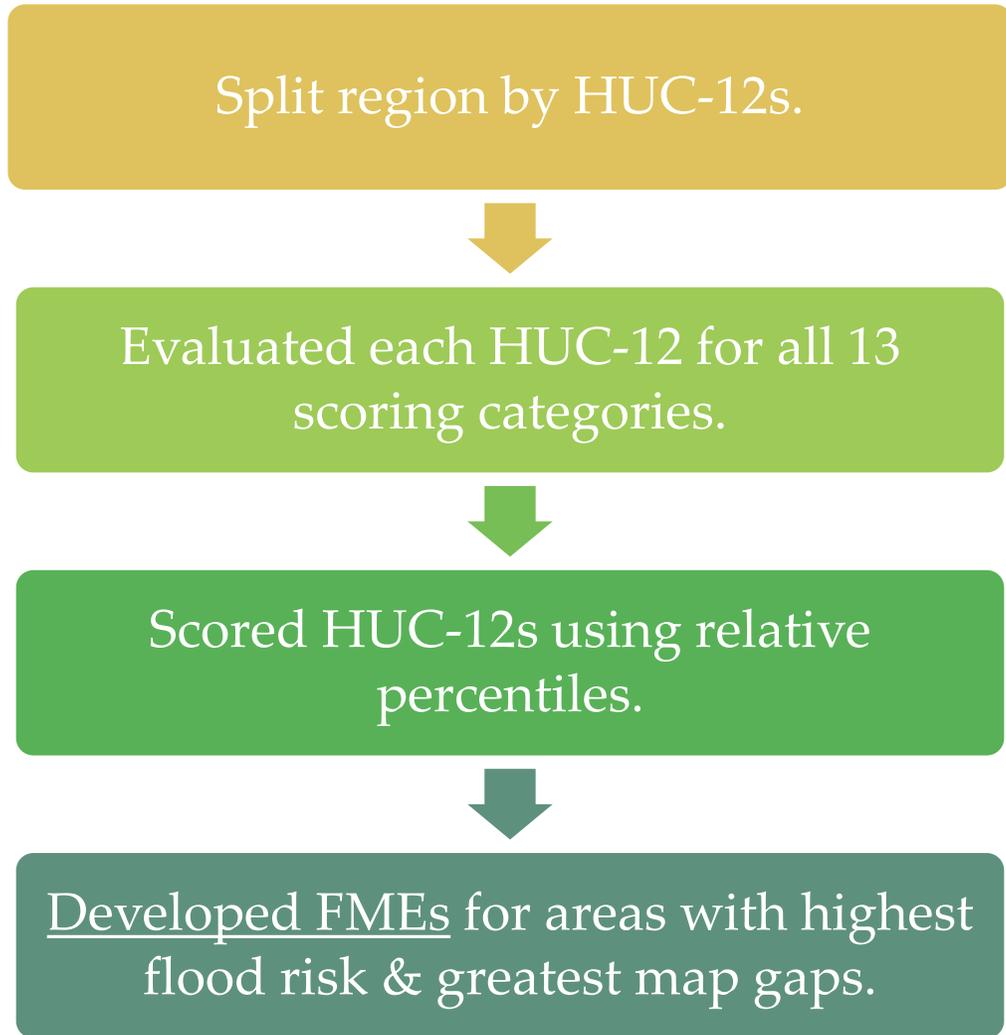
3B – Task Overview

Goal

Identify locations within the flood planning region that have the greatest need for flood risk mitigation and/or flood risk studies.



3B – 2023 Cycle



Scoring Categories

- Num. of Buildings in Flood-Prone Areas
- Num. of Low Water Crossings
- Agricultural Areas in Flood-Prone Areas
- Num. of Critical Facilities in Flood Prone Areas
- Num. of Communities NOT in NFIP
- Num. of Communities with CRS Rating < 10
- Damaged or Failing Infrastructure
- Hazard Mitigation Action Plans
- Num. of Disaster Declarations
- Num. of FEMA Claims
- Social Vulnerability Index
- Identified as a Flood Map Gap
- Areas without H&H Models

Flood Risk

Knowledge Gaps

3B – HUC-12 Scale



3B – Flood Risk Recommendation

Scoring Categories	2023	2028	
◦ Num. of Buildings in Flood-Prone Areas	10%	10%	} Threat to Life and Property
◦ Num. of Low Water Crossings	10%	10%	
◦ Inundated Roadway Mileage		10%	
◦ Agricultural Areas in Flood-Prone Areas	10%	15%	
◦ Num. of Critical Facilities in Flood Prone Areas	10%	10%	
◦ Num. of Communities NOT in NFIP	6%		} Flood Management Practices
◦ Num. of Communities with CRS Rating < 10	4%		
◦ Damaged or Failing Infrastructure	10%	10%	} Emergency Need
◦ Hazard Mitigation Action Plans	10%		} Existing Planning Documents
◦ Num. of Flood-related Fatalities (county level)		7.5%	} Historic Data
◦ Num. of Disaster Declarations (county level)	10%	7.5%	
◦ Num. of FEMA Claims	10%	10%	
◦ Social Vulnerability Index	10%	10%	} Vulnerability

3B – Knowledge Gaps

Previous Cycle (2023):

Scoring Categories	0	5
Mapping	BLE, NFHL, Community	Fathom, Zone A
H&H Models	NFHL, Community	BLE, Fathom, Zone A

3B – Knowledge Gaps Recommendation

Current Cycle Recommendation:

Assign score based on available modeling and mapping data and apply multiplier to score based on near-term population growth projections provided by TWDB

Scoring	0	1	2	3	4	5
Modeling and Mapping	Detailed (pluvial AND fluvial)*	Detailed (pluvial OR fluvial)*	2D BLE or ROG	1D BLE/Fathom		

*current population data considered to determine whether detailed modeling for both pluvial and fluvial flood types is needed to achieve modeling and mapping score of 0

Multiplier	1	1.25	1.5	1.75	2
Population Growth (2040)	0 to 20 pct	20 to 40 pct	40 to 60 pct	60 to 80 pct	80 to 100 pct

Public Roadshow Recap

Connor Stokes, ENV SP (Holloway)



Roadshow Schedule

Location	Venue	Date
Waco	Brazos River Authority Central Office 4600 Cobbs Dr, Waco, TX 76710	Aug. 21, 2025
College Station	Visit College Station Event Center 1207 Texas Ave, College Station, TX 77840	Aug. 26, 2025
Rosenberg	Rosenberg Civic Center 3825 Highway 36 South, Rosenberg, TX 77471	Aug. 28, 2025
Granbury	Hood County Annex I 1410 W. Pearl Street Granbury, TX 76048	Sept. 9, 2025
Georgetown	Georgetown Community Center 445 E. Morrow St, Georgetown, TX 78626	Sept. 11, 2025

Roadshow Format

Meeting Format:

- Flexible, open house format with no formal presentation
- Topic-specific stations staffed by project team
- TWDB representation
- Attendees receive “How to Participate” handout on arrival
- Exhibit boards and maps at each station
- Informational video plays in viewing area
- Comment forms and drop box provided



Georgetown



Rosenberg



College Station



Granbury

Roadshow Materials

Welcome Materials:

- Sign-in sheets
- "How to Participate" handouts
- Staff name tags

Informational Materials:

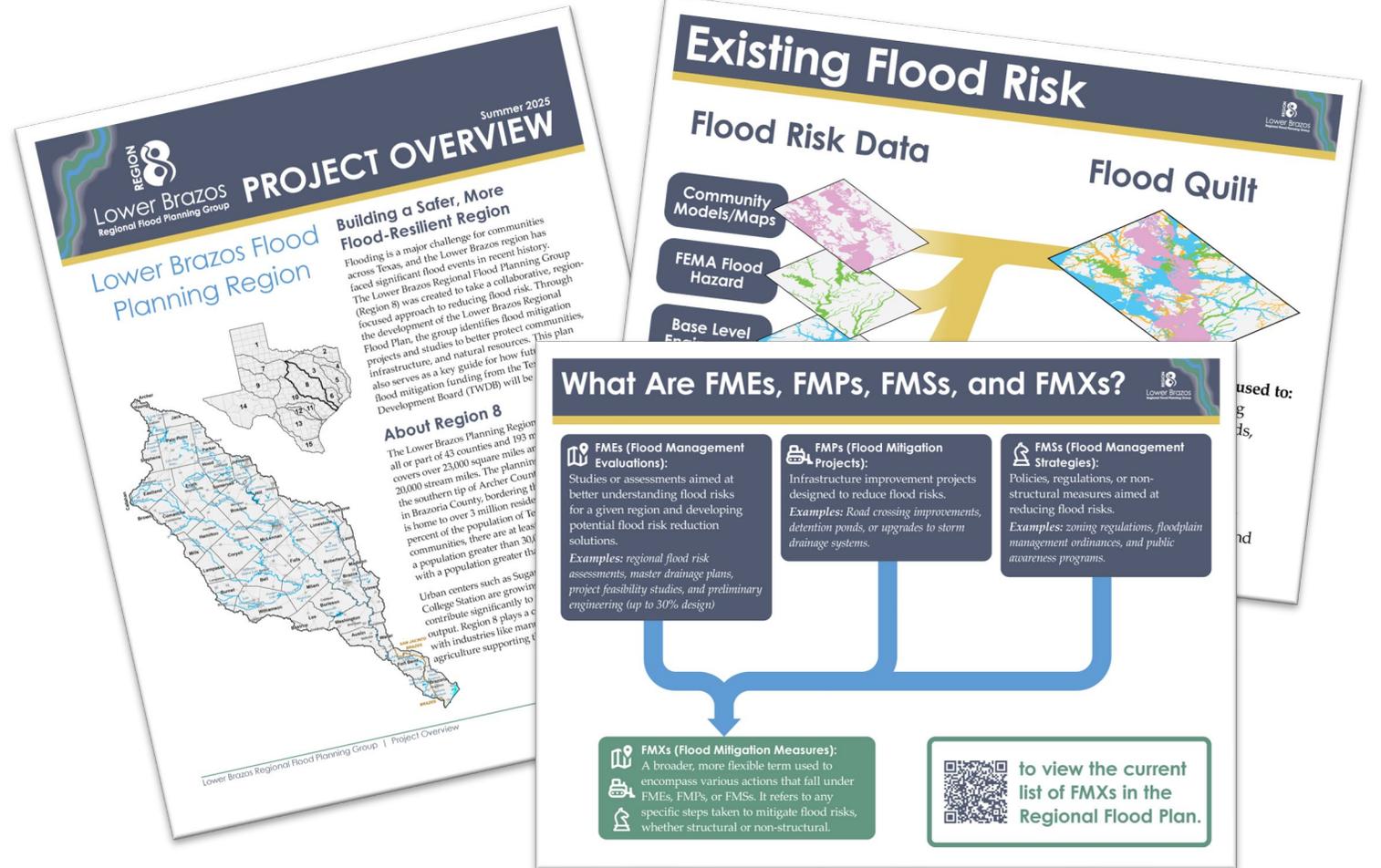
- Exhibit boards, maps, and handouts
- Interactive flood risk map viewer
- FMX list
- Looping video presentation

Feedback Materials:

- Comment forms and drop box
- QR code for digital feedback

Accessibility:

- English and Spanish materials
- ADA-compliant layout and formatting



Example Meeting Materials

Roadshow Summary

Meeting	Attendance	Communities Represented	Flood Risk Map Comments
Waco	0	0	0
College Station	10	5	10
Rosenberg	19	8	2
Granbury	6	3	16
Georgetown	16	4	9
Total	51	20	37



QUESTIONS AND COMMENTS

For more information or to contact the RFPG visit:
lowerbrazosflood.org

LOOKING AHEAD

OCTOBER 2025

- Task 2A: Existing Conditions Flood Quilt
- Task 4C: Performance of FMEs Discussion
- Task 5C: TWDB FMEs Discussion

NOVEMBER 2025

- Task 2A: Exposure Analysis Results
- Task 2B: Future Conditions Flood Quilt
- Task 3B: Needs Analysis Results
- **Task 3C: Goals Results**
- **Draft Technical Memo**

Gold = RFPG Decision or Vote



5. Report from:

5.1. Texas Water Development Board (TWDB) staff

5.2. Regional Planning Sponsor

5.3. Lower Brazos RFPG Chair

5.3.1. Bylaws Discussion



Bylaws - Article XII. Committees Section 1. Establishment

The Region 8 Lower Brazos RFPG may by a majority vote of the voting members present establish committees, subcommittees, and subgroups to assist and advise the Region 8 Lower Brazos RFPG in the development of the regional flood plan, as set forth in 31 TAC §361.12(c). The committee, subcommittee, or subgroup may be formed to address specific issues assigned by the Region 8 Lower Brazos RFPG and may have a specified term of membership.



6. Confirm the next meeting date and discuss new business to be considered at the next meeting

3rd Thursday of the month for regular RFPG meetings – October 16, 2025, at 10:00 AM

REGION



Lower Brazos
Regional Flood Planning Group

7. Adjourn