

**REGION**



**Lower Brazos**  
**Regional Flood Planning Group**

**Thursday, November 20, 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 October 16, 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, October 16, 2025

Meeting agenda, materials, and audio recordings are available online at [www.lowerbrazosflood.org](http://www.lowerbrazosflood.org)

### 1. Call Meeting to Order and Attendance

Anthony Beach presided over the meeting in Waco, TX. Mr. Beach called the meeting to order at 10:00 am.

Anthony Beach	P	Alysha Girard	P
Bruce Bodson	P	<del>Matt Phillips</del> Alternate Aaron Abel	P
Sujeeth Draksharam	P	Kristina Ramirez	P
Tim Finley	P	Jonathan Steiber	A
Russell Ford	P	Mark Vogler	P
Charlotte Gilpin	P	<del>Brandon Wade</del> Alternate 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)

Anthony Beach opened the floor for public comments. No public comments.

### 3. Consent Agenda

#### 3.1. Approval of Minutes for the September 18, 2025 meeting

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

Anthony Beach opened the floor for approval of the consent agenda items as they were presented. Aaron Abel made the motion to approve the consent agenda items as presented and Sujeeth Draksharam seconded the motion. The motion passed unanimously.

### 4. Presentation from the US Army Corps of Engineers on the InFRM Watershed Hydrology Assessments

Helen Mossier with the US Army Corp of Engineers made a presentation on the InFRM Watershed Hydrology Assessments Study that is nearing completion in the Brazos Basin.

### 5. Discussion and possible action on the report from the technical consultant.

The Technical Consultant team provided a schedule overview and general updates on tasks currently underway. The Technical Consultant has completed the draft Task 2A Existing Conditions Flood Risk quilt and it is available on the map viewer on the Lower Brazos website. Accessibility changes have been made to make the data easier to view and understand. The Technical Consultant team provided an update on two changes being made to the draft Flood Quilt to finalize. Alysha Girard asked for the Technical Consultant team to be consistent on their labeling of Cursory TWDB data moving forward – can cause confusion when referring to it as “Fathom” in documentation and communications. The Technical Consultant team agreed.

The Technical Consultant Team provided an overview of the FMX requests received for inclusion in the 2028 Regional Flood Plan.

Sujeeth Draksharam asked if we could post the FMX request list online. Ryan mentioned that the list will be included in the Tech Memo which will be published. Alysha mentioned that this data is in draft form so isn't ready to publish quite yet.

The Technical Consultant presented an overview of Tasks 4C and 5B. Anthony Beech mentioned that mapping is being completed by other agencies. Ryan agreed that the TWDB has emphasized FMEs that produce FMPs or FMSs.

Sujeeth Draksharam mentioned that he would prefer focus on flood reduction for rural areas. In urban areas, the budget the RFPG will not be sufficient to address flood risk, so better to focus on rural areas.

Alysha Girard asked the Technical Consultant team to consider two other filters: number of downgraded FMPs (sponsors wanted FMP but didn't have the information, prioritize), likelihood of sponsor actually following through to apply for funding and implement the project (entity's timing, interest, and financial situation).

Alysha asked what population dataset is being used for this differentiation. The 2020 census is currently being used, but we can update to a more current dataset. Kristina Ramirez will send over the data set they use for their City for our reference as well. We can update the list based on a better dataset.

Alysha mentions that maybe we should utilize 25,000 as the threshold to align with our small/large municipality seat distinction. We could move the seat distinction to align with this rural definition if preferred.

Sujeeth mentions that there is substantial agriculture that might need to be considered. He also mentioned that maybe we should look at even a lower threshold, of 5,000 to see what the list would look like. Ryan points out that if you are looking at the really small populations, the FME areas might become less than one square mile. Maybe the combination of these two things (small but spread out) could be a threshold.

Technical Consultant can bring back before end of the year and look at any other ideas the group has at that time.

### 6. Report from:

#### 6.1. Texas Water Development Board (TWDB) staff

Tressa Olson provided the TWDB Report to the RFPG.

#### 6.2. Regional Planning Sponsor

No Sponsor report this month.

#### 6.3. Lower Brazos RFPG Liaisons and Chair

Alysha and Pam have put some items together for discussion on bylaws to discuss next month.

Potentially vote in December if there is interest in these items.

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

The next regular meeting will be on Thursday, November 20, 2025, at 10:00AM.

### Adjourn

Anthony Beach adjourned the meeting at 11:13 AM.

*Approved by the Region 8 Lower Brazos RFPG at the meeting held on November 20, 2025.*

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Matt Phillips, Secretary

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Alysha Girard, Chair



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

# Technical Consultant Update

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November 20, 2025



# Agenda

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**Task 2A – Existing Flood Risk Update**



**Task 3B – Needs Analysis**



**Task 3C – Goals**



**Task 4A – FMX Identification**

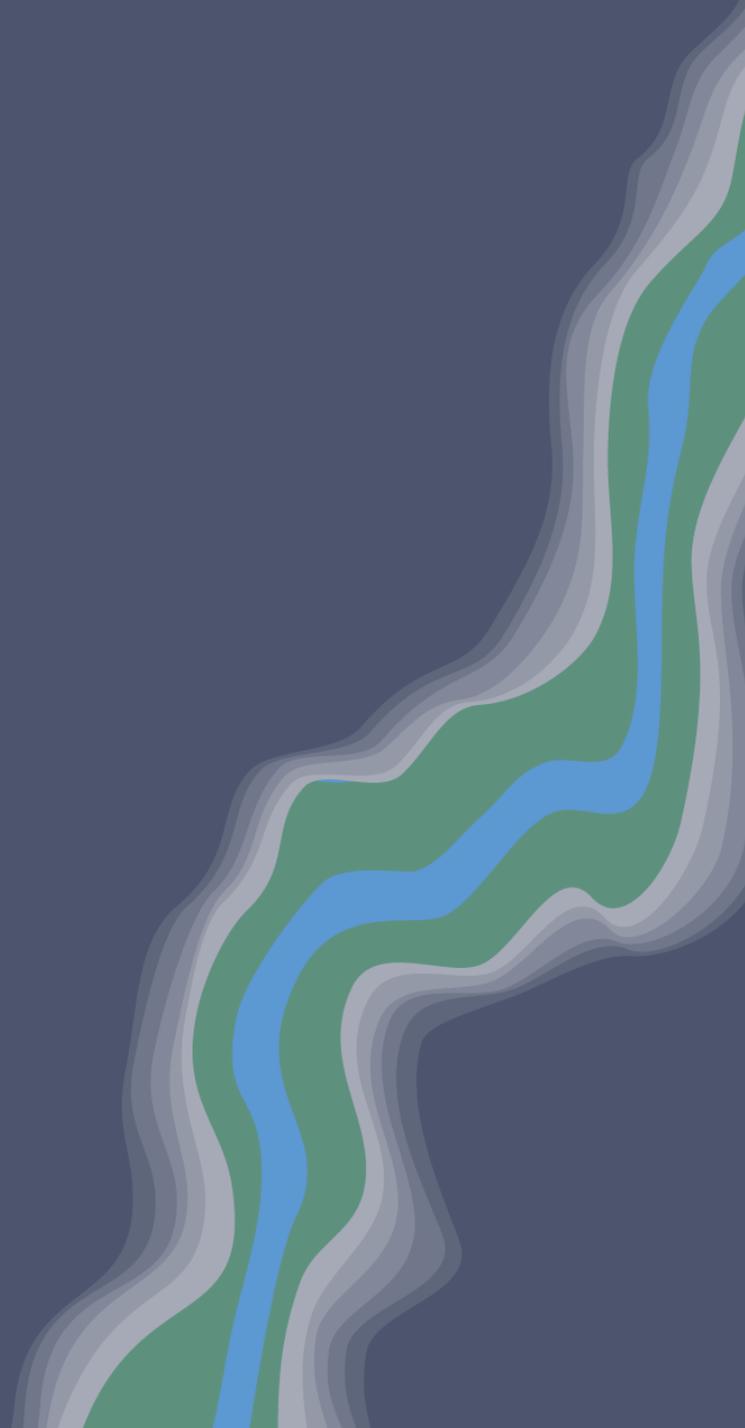


**Task 4C – Technical Memorandum**

# General Updates

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Ryan Londeen, PE, CFM





# Task 2A – Existing Conditions Flood Risk

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Ryan Londeen, PE, CFM

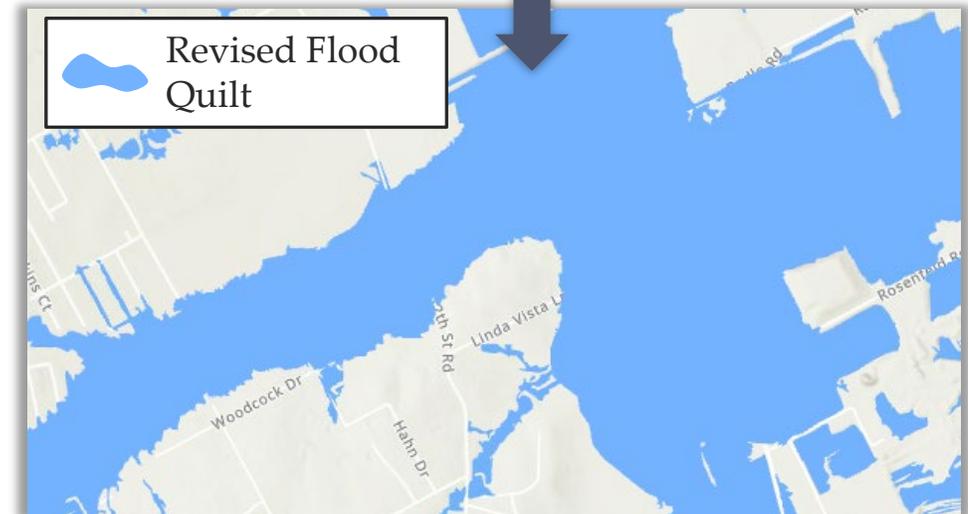
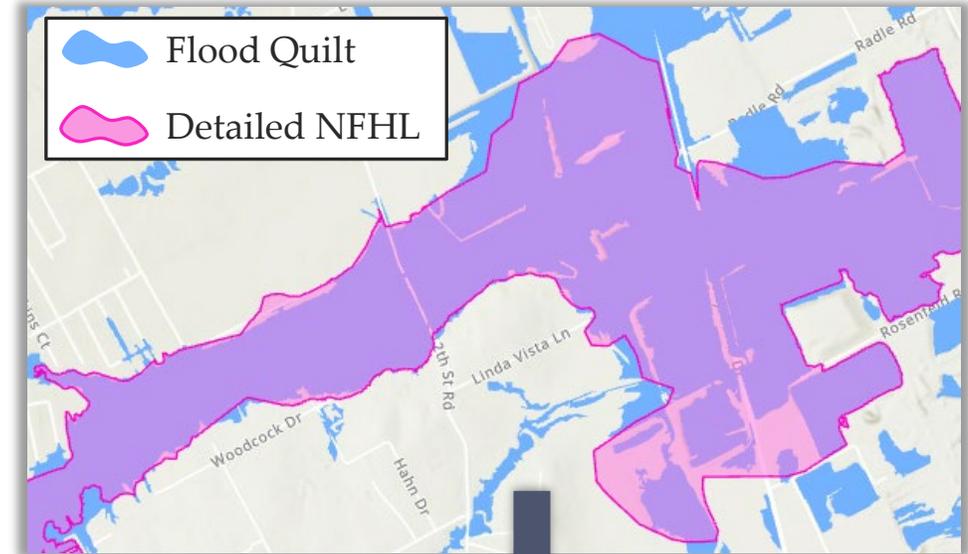
Nick Boardman, PE, CFM (FNI)



# 2A – Existing Conditions Flood Risk

## Detailed NFHL (Zone AE & VE)

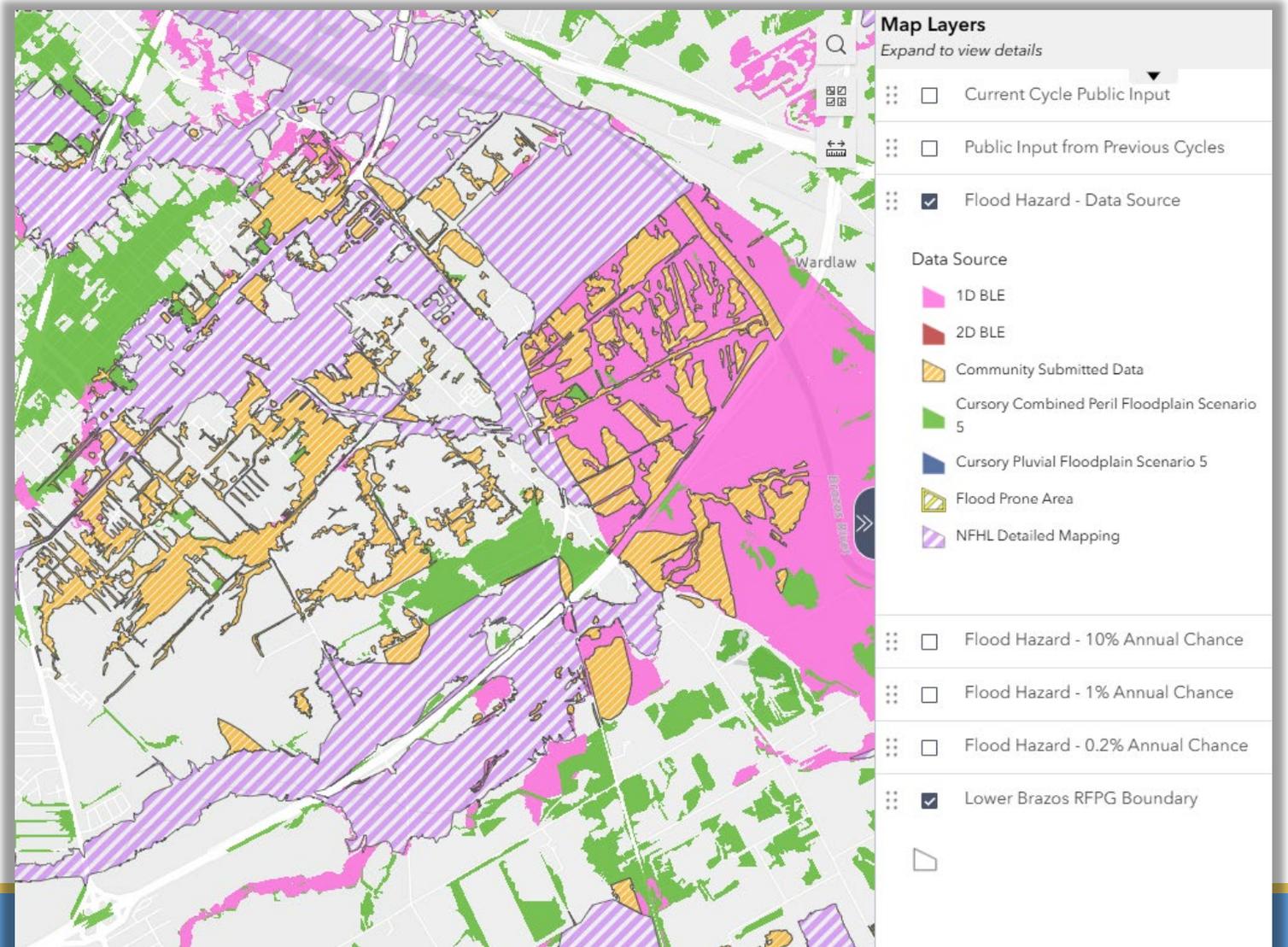
- Received feedback on draft flood quilt from TWDB on October 17<sup>th</sup>
- TWDB wants regulatory (FEMA) data to be visible within the flood quilt
  - Public perception
  - Conservative representation
- Added Detailed FEMA Zone AE data on top of flood quilt



# 2A – Existing Conditions Flood Risk

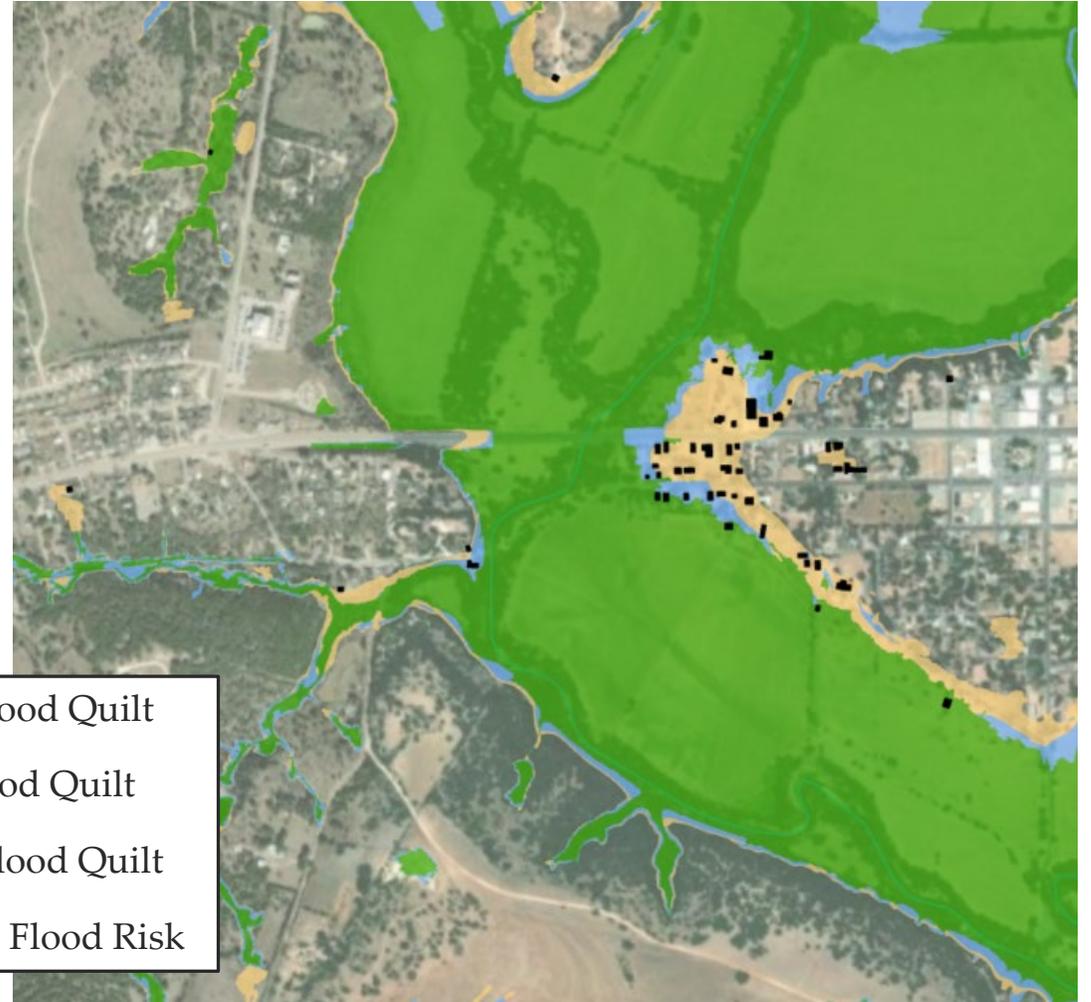
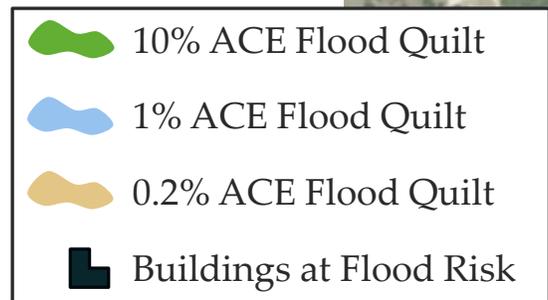
## Web Viewer

- Flood quilt on website includes FEMA updates
- Developed more intuitive source layer



# 2A – Exposure Analysis

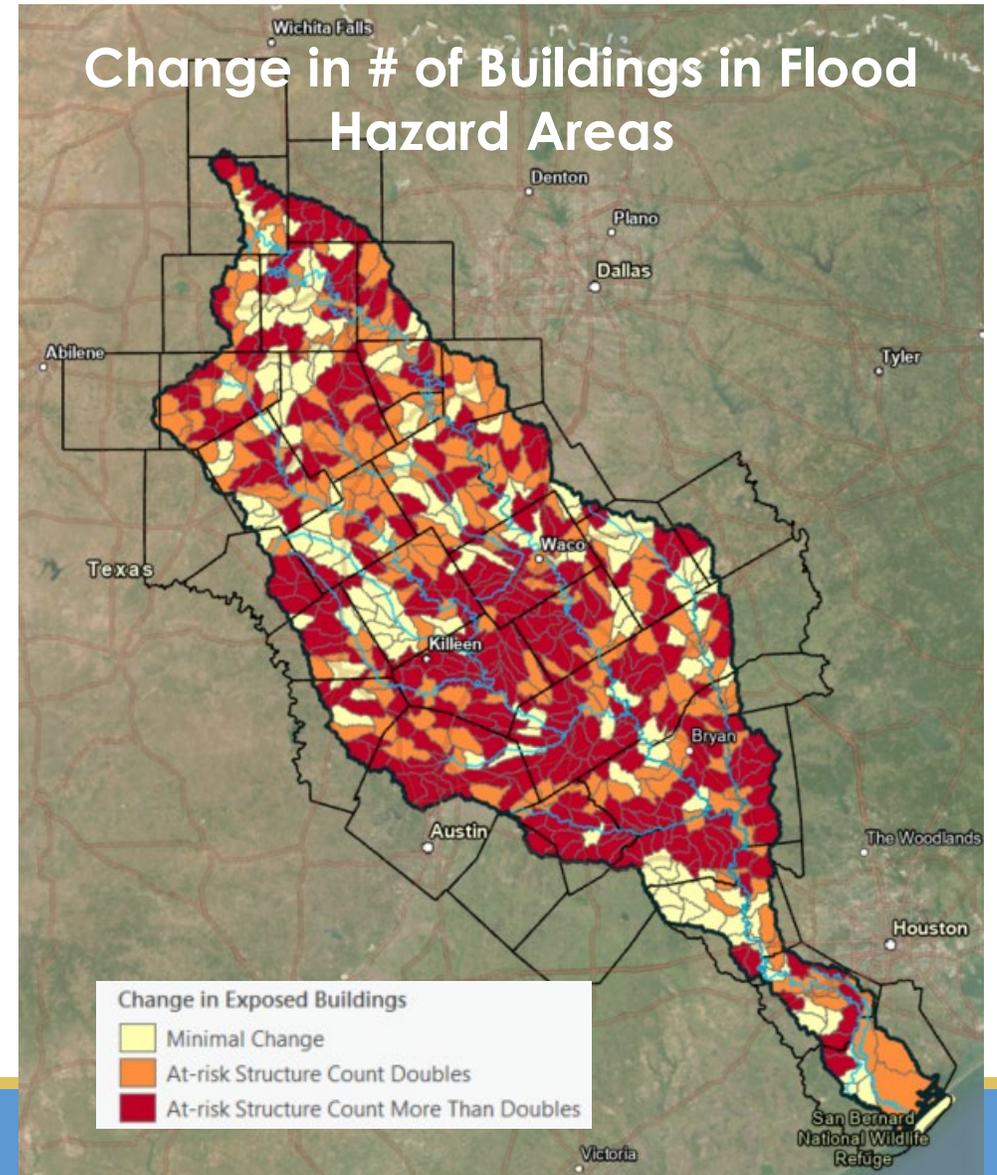
- Flood hazard (flood quilt) – location, magnitude and frequency of flooding
- **Flood exposure** – who and what might be harmed within region
- **Vulnerability** – identify vulnerabilities of communities and critical facilities



# 2A – Exposure Analysis Results

Generally, flood exposure increased across the region relative to Cycle 1:

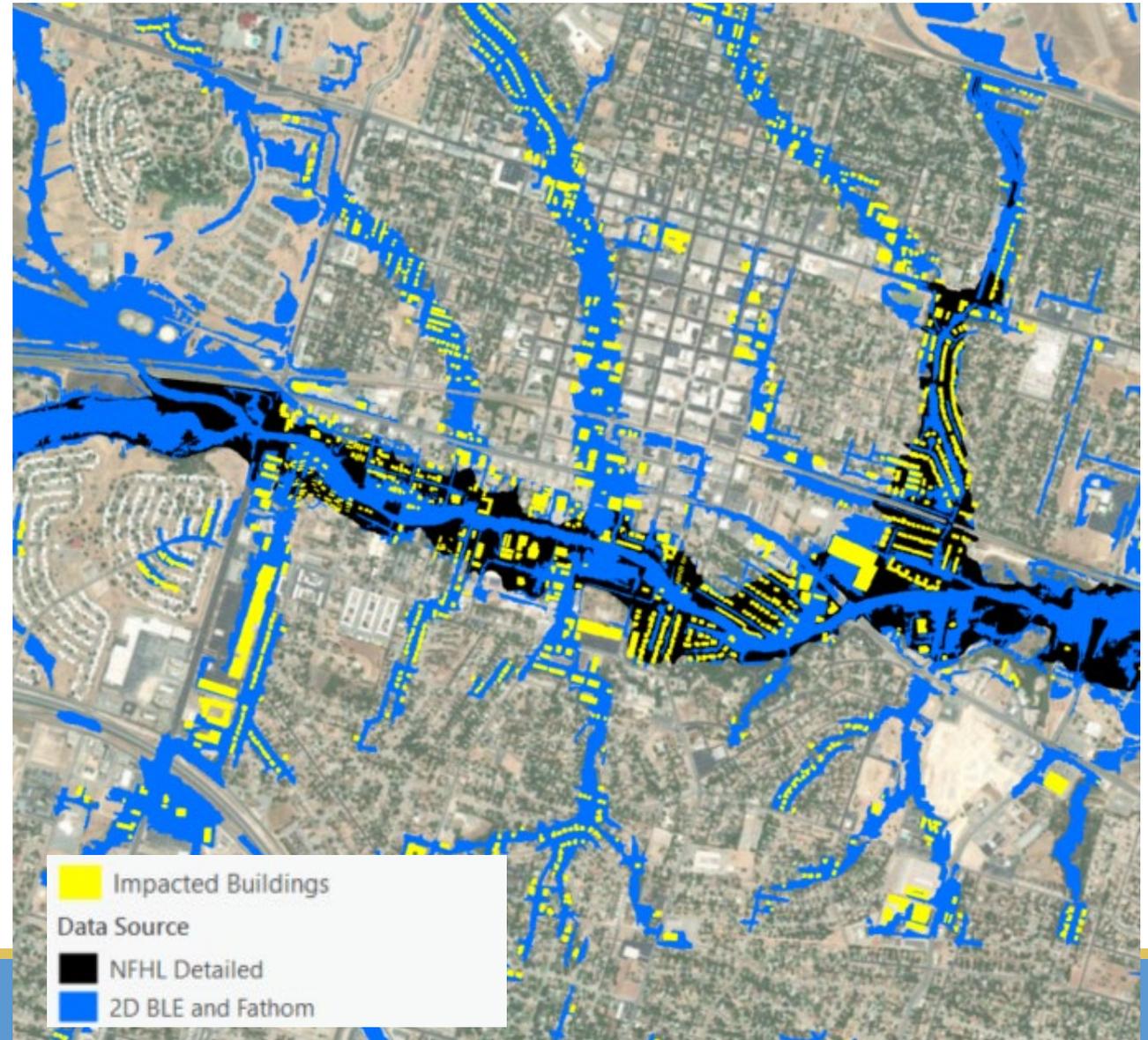
- Urban areas previously covered exclusively by FEMA data now are supplemented with Fathom data
- 1D BLE data is now supplemented with Fathom data



# 2A – Exposure Analysis Results

Common example of increasing flood hazard mapping in urban areas:

- NFHL was the sole data source for this area in Cycle 1 (black)
- Pluvial data was added in Cycle 2 across the entire region (blue)



# 2A – Exposure Analysis Results

- Totals include exposed buildings and infrastructure in all events up to and including the 0.2% ACE
- Buildings and Roadways observe the highest increase in exposure

Flood Exposure Metric	LBRFP Cycle 1	LBRFP Cycle 2
Buildings in Flood Hazard Areas	110,000	270,000
Critical Facilities in Flood Hazard Areas	310	550
Impacted Agricultural Area (sq mi)	950	1,400
Inundated Roadways	4,400	9,700
Low Water Crossings	940	1,100

Increase in exposure metrics is primarily due to comprehensive inclusion of pluvial data across the region

# Task 3B – Flood Mitigation Needs Analysis

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Nick Boardman, PE, CFM (FNI)



# 3B – Flood Risk Scoring

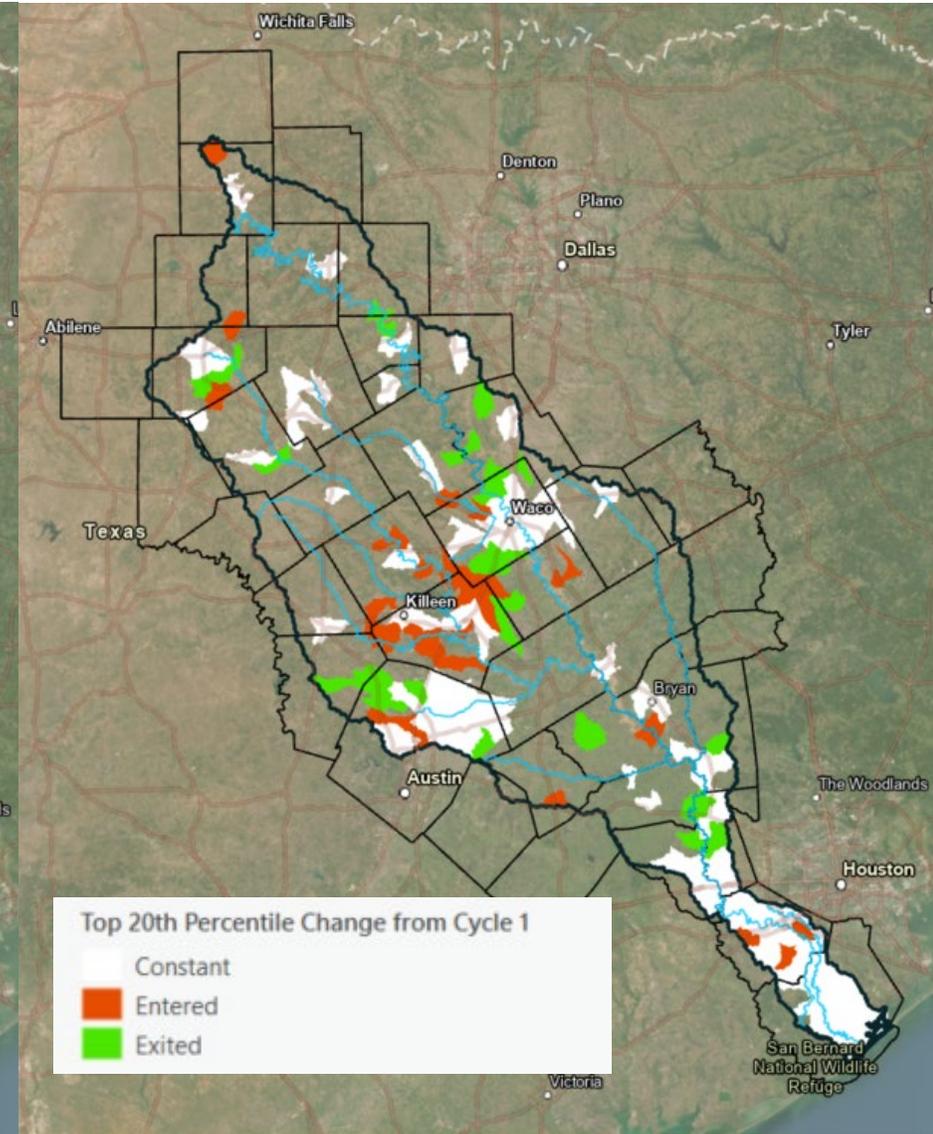
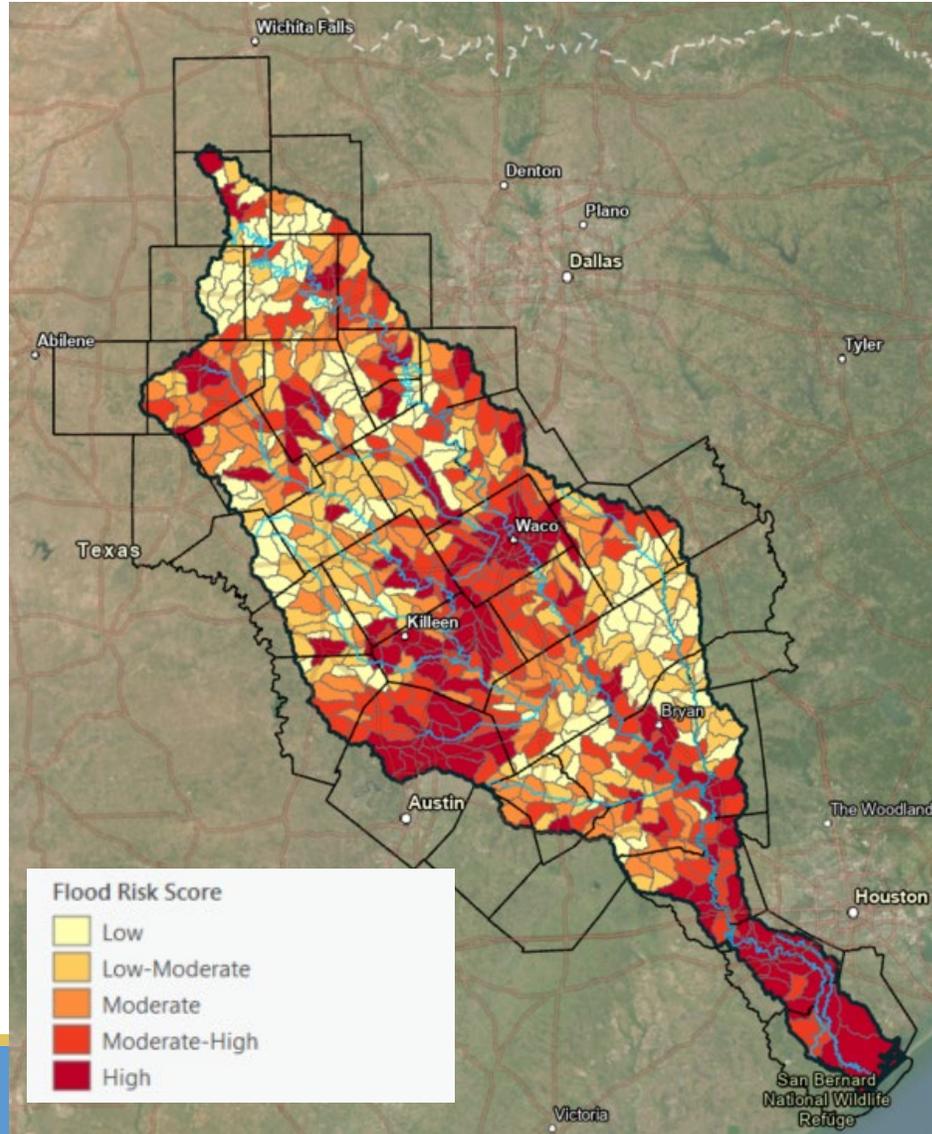
## Scoring Categories

## Weighting

◦ Num. of Buildings in Flood-Prone Areas	10%	} <b>Threat to Life and Property</b>
◦ Num. of Low Water Crossings	10%	
◦ <b>Inundated Roadway Mileage</b>	10%	
◦ Agricultural Areas in Flood-Prone Areas	15%	
◦ Num. of Critical Facilities in Flood Prone Areas	10%	} <b>Emergency Need</b>
◦ Damaged or Failing Infrastructure	10%	
◦ <b>Num. of Flood-related Fatalities (county level)</b>	7.5%	} <b>Historic Data</b>
◦ Num. of Disaster Declarations (county level)	7.5%	
◦ Num. of FEMA Claims	10%	} <b>Vulnerability</b>
◦ Social Vulnerability Index	10%	

# 3B – Flood Risk Results

Watersheds with highest flood risk based on Needs Analysis are consistent between previous cycle and now.



# 3B – Knowledge Gaps Scoring

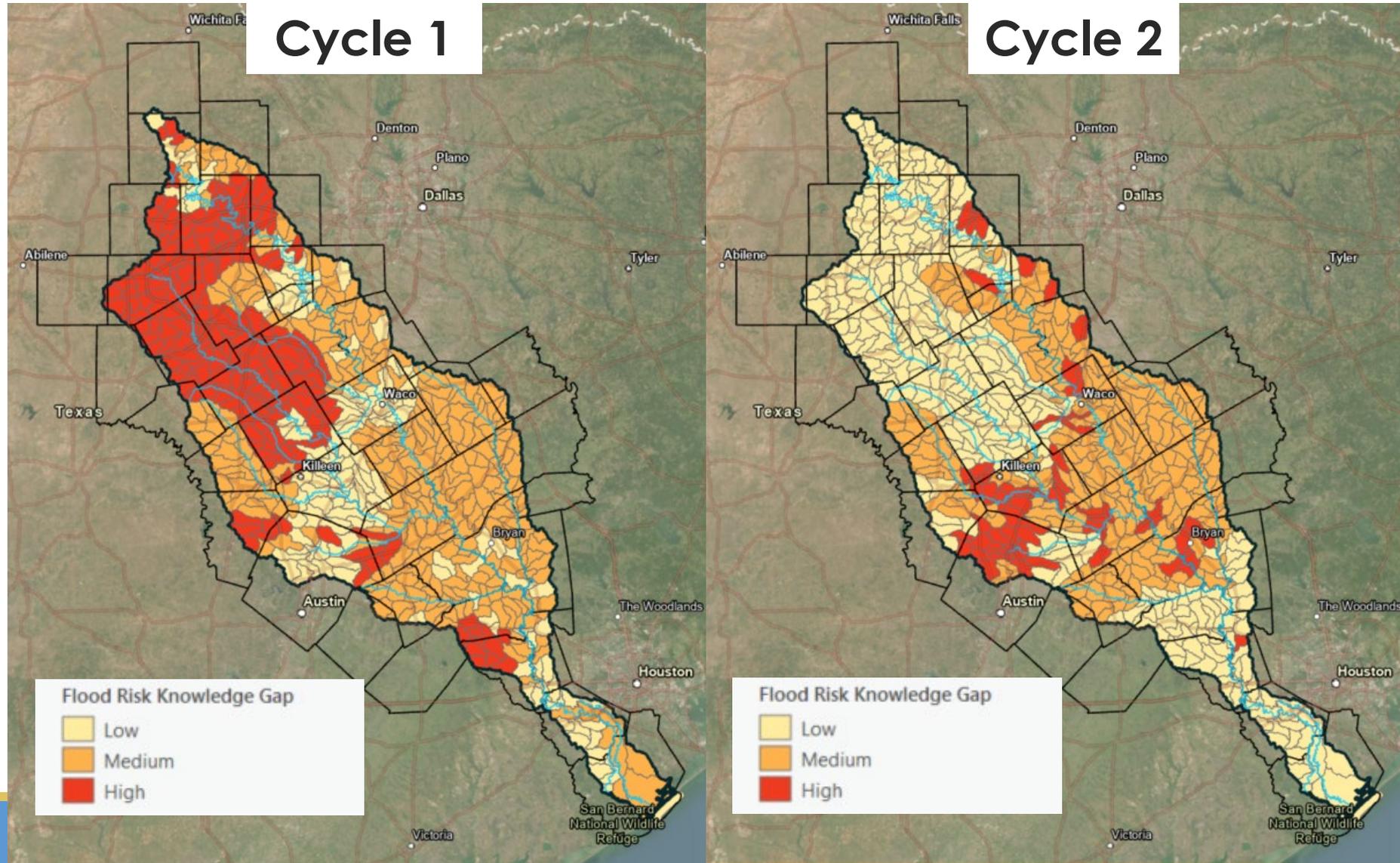
Scoring	0	1	2	3	4	5
Modeling and Mapping	Detailed fluvial AND pluvial*	Detailed fluvial*	2D BLE or ROG	1D BLE/Fathom		

\*Detailed modeling for **pluvial and fluvial flood types** is needed to achieve modeling and mapping score of 0 if HUC12 includes more than 1 square mile of area within limits of municipality with population exceeding 5,000

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

# 3B – Knowledge Gaps Results

- Knowledge gaps reduced overall due to availability of 2D BLE data
- Updated scoring provides clearer view of modeling and mapping needs



# Task 3C: Flood Mitigation & Management Goals

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Rachel Herr, PE, CFM (Halff)

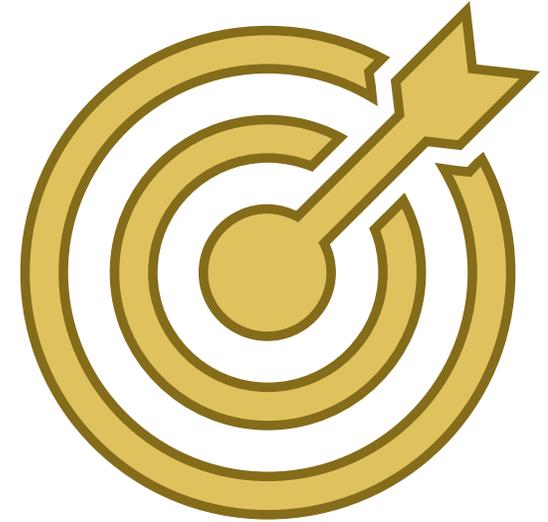
**RFPG Approval!**

# 3C – Intent

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## Task Intent

- Identify specific and achievable flood mitigation and floodplain management goals for the region along with target years by which to meet those goals
- Recognize risk remaining even if goals are fully met
- Identify short-term (10 years) and long-term goals (30 years)
- All goals must fall under a TWDB list of ‘themes’
- All recommended FMXs **must** “support specific RFPG flood mitigation and/or management goals”

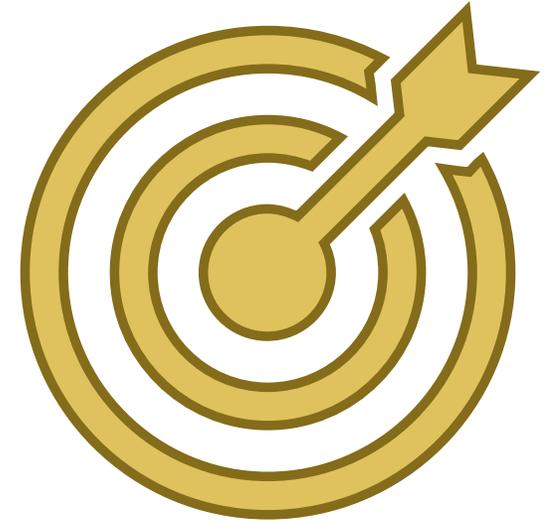


# 3C – Progress

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## Task Progress

- Reviewed previous goals to determine if they are still relevant
- Examined all of the goals that had ‘establish baseline’ and worked to determine what that baseline should be
- Evaluated all goals for progress made



# 3C – 2024 Adopted Goals Revisited

Goal	Baseline	Revised Baseline	Short Term (2033)	Long Term (2053)	Progress Made
Increase the number of counties and communities enrolled in the NFIP	Participating Communities – 152 (85%) Participating Counties – 41 (95%)	Participating Communities – <b>163/193</b> (85%) Participating Counties – 41/43 (95%)	<b>Communities Enrolled – 90%</b> <b>Counties Enrolled – 100%</b>	<b>Communities Enrolled – 95%</b> <b>Counties Enrolled – 100%</b>	Some additional enrollment but also counted communities differently
Increase the number of counties and communities that have adopted higher than NFIP standards, including directing development away from the floodplain	39 out of a total of 221 counties and communities have higher standards	<b>68</b> out of a total of 221 counties and communities have higher standards	<b>Increase the number of counties and communities with higher standards by an additional 10%</b>	<b>Increase the number of counties and communities with higher standards by 40%</b>	Previous participation: 18% New participation: 29%

**RED:** New information, added, or revised text.

**GREEN:** Updates to metrics based on latest data.

# 3C – 2024 Adopted Goals Revisited

Goal	Baseline	Revised Baseline	Short Term (2033)	Long Term (2053)	Progress Made
Increase the number of <b>cities and counties</b> entities that have adopted the best available <b>rainfall statistics data (currently Atlas 14*)</b> and science for their designs and plans in the <b>Coastal and Upper Coastal Regions</b> .	Number of <b>cities and counties</b> entities that are utilizing the latest data	Of the 15 counties and 12 cities covered, 6 counties and 9 cities utilize Atlas 14 (56%)**	<del>Establish a baseline measurement</del> <b>75% of all entities</b>	<del>80% of all entities</del> <b>Entities in the Coastal and Upper Coastal Regions have adopted Atlas 15 rainfall data.</b>	Established a baseline measurement

\*Atlas 15 is currently scheduled for release in 2026

\*\*Or defer to TxDOT criteria, which utilizes Atlas 14

**RED:** New information, added, or revised text.

**GREEN:** Updates to metrics based on latest data.

# 3C – 2024 Adopted Goals Revisited

Goal	Baseline	Revised Baseline	Short Term (2033)	Long Term (2053)	Progress Made
Improve safety at low water crossings by adding warning systems/signage or improving low water crossings in high-risk areas	895 existing low water crossings	1,183 existing low water crossings	<b>Improve 90 low water crossings</b>	<b>Improve 270 low water crossings</b>	Increasing accuracy of baseline following floodplain revisions
Reduce the number of structures that are at risk of flooding during the 1% annual chance flood event by both structural and non-structural means	17,732 structures in the floodplain quilt	177,025 structures in the floodplain quilt	<b>Reduce risk to 5% of structures</b>	<b>Reduce risk to 15% of structures</b>	Increasing accuracy of baseline following floodplain revisions
Reduce the number of critical facilities that are at risk of flooding during the 1% annual chance of flooding to above the 0.2% annual chance flood event by both structural and non-structural means	538 critical facilities are within the floodplain quilt	1,866 critical facilities are within the floodplain quilt	Establish the quantity of at-risk critical facilities in the region <b>Reduce risk to 1% of facilities</b>	<b>Reduce risk to 10% of facilities</b>	Increasing accuracy of baseline following floodplain revisions

**RED:** New information, added, or revised text.

**GREEN:** Updates to metrics based on latest data.

# 3C – 2024 Adopted Goals Revisited

Goal	Baseline	Revised Baseline	Short Term (2033)	Long Term (2053)	Progress Made
Increase the accuracy of flood hazard data in the region by performing detailed studies using the best available terrain, land use, and precipitation data to reduce gaps in floodplain mapping	N/A	<i>Number being determined by effort during Task 3B</i>	Establish a baseline measurement <b>Reduce the total area of Map Gaps by 10%</b>	<b>50% data gap reduction</b>	Established a baseline measurement
Increase the number of communities with warning and emergency response programs that can detect flooding threats and provide timely warning of impending flood danger*	N/A	6 out of 43 counties have programs that detect flood threats and provide timely warning of impending flood danger	Establish a baseline measurement <b>Increase the number of communities with programs by 20%</b>	<b>Increase the number of communities with programs by 40%</b>	Established a baseline measurement and determined a number of communities that are interested in warning systems

*\*Physical gauges that are connected to a locally managed early warning system*

**RED:** New information, added, or revised text.

**GREEN:** Updates to metrics based on latest data.

# 3C – 2024 Adopted Goals Revisited

Goal	Baseline	Revised Baseline	Short Term (2033)	Long Term (2053)	Progress Made
Increase the number of flood gauges in the region	N/A	144 regional gauges*	Establish a baseline measurement <b>Install gauge locations at two of the 18 potential locations identified in Task 12 of Cycle 1</b>	Add gauges based on the results of the evaluation (increase by 30%)	Identified quantity and types of gauges in the region  Determined recommendations on additional gauge areas
Increase public outreach and education <del>activities</del> <b>programs</b> to improve awareness of flood hazards and the benefits of flood planning in the region	N/A	There are currently no known public outreach activities focused on flood hazards**	<del>Develop outreach and education program</del> <b>Have one community host educational program(s) on an annual basis</b>	<del>Majority participation in annual events throughout the basin</del> <b>Have two communities host educational program(s) on an annual basis</b>	Established a baseline measurement

\*34 gauges operated by HCFCD, 110 USGS gauges

\*\*Outside of those mandated by participation in the NFIP

**RED:** New information, added, or revised text.

**GREEN:** Updates to metrics based on latest data.

# 3C – Vote

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**Seeking RFPG approval!**

**Vote to adopt the goals as presented, with non-substantive changes pending any comments from RFPG members.**



# Task 4A: Identification of Potentially Feasible FMXs

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Jenna Blohm, CFM

# FMX Request Overview

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## Requests from 25 Communities

- 6 counties
- 4 MUDs & LIDs
- 13 municipalities

## 98 FMX Requests

- 20 FMEs
- 75 FMPs
- 2 FMSs

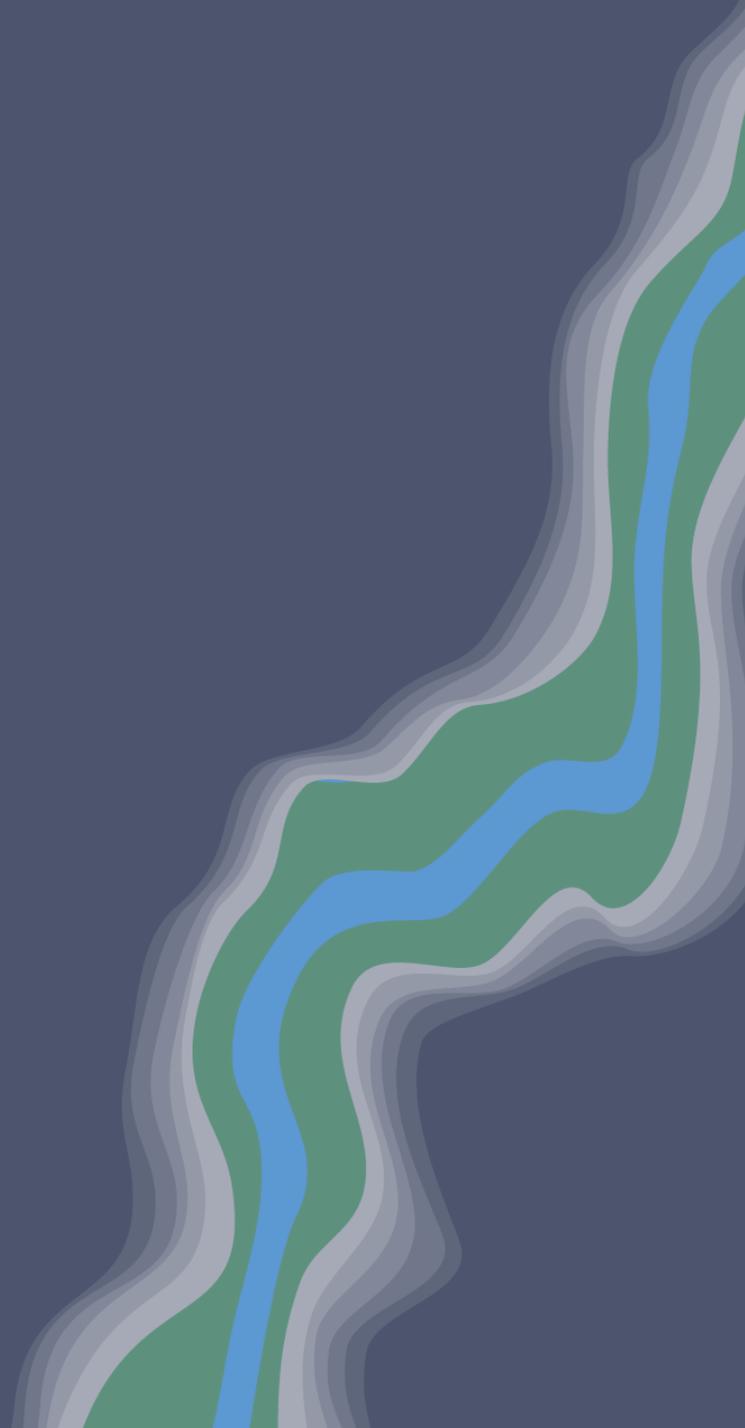
## Additional Details

- Provided supplemental handout with full list of FMXs received
- Ongoing coordination and evaluation may change list

# Task 4C: Technical Memorandum

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Ryan Londeen, PE, CFM



# 4C – Technical Memorandum Schedule

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Draft Tech  
Memo to RFPG

**NOV 21**

Revised Tech  
Memo to RFPG  
and posted  
online

**DEC 12**

Consultant  
team will  
submit Tech  
Memo to  
TWDB

**JAN 7**



**DEC 4**

Comments  
from RFPG **!**  
provided to  
consultant  
team

**DEC 18**  
**(Meeting)**

RFPG vote to  
approve  
Revised Tech  
Memo



# QUESTIONS AND COMMENTS

For more information or to contact the RFPG visit:  
[lowerbrazosflood.org](http://lowerbrazosflood.org)

# LOOKING AHEAD

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## DECEMBER 2025

- **Final Technical Memorandum**
- **Task 4C: Performance of FMEs – potential decision**
- **Task 5B: TWDB Performance of FMEs – potential decision**

## JANUARY / FEBRUARY 2025

- **Task 4C: Performance of FMEs**
- **Task 5B: TWDB Performance of FMEs**

**Gold = RFPG Decision or Vote**



## **5. Discussion and possible action on the update of the Bylaws**



# Lower Brazos

## Regional Flood Planning Group

<b>Region 8 Bylaws Proposed Change</b>	
<b>Article Section</b>	<b>Summary of Recommended Change</b>
Article V. Section 1 - Composition	Change to add text to capture the split of the Municipal seat into two seats
Article V. Section 4 – Selection of members	Remove the timeline for when to fill vacancies.  Recommended Change “At the expiration of a voting member’s term, or after the removal of or unanticipated resignation of a voting member, the Region 8 Lower Brazos RFPG shall post public notice.
Article V. Section 4 – Selection of members	Remove the timeline requirement for review of nominations received by the Executive Committee. Recommended Change: Strikethrough “no sooner than ten calendar days after the deadline for submitting nominations”.
Article VIII. Section 1 – Officers, Restrictions, and Terms of Office	Change officer terms from one year to two years.
Article VIII. Section 2 - Selection	Updated paragraph (b). Consider aligning elections with renewal of terms of office During election years (even years), elections to be held at the first meeting following the renewal of terms. (usually mid-summer).
Article VIII. Section 5 – Duties of Each Officer	Paragraph (c) Secretary – retitle Secretary as Second Vice Chair, and reassigning these tasks to the Clerk/Admin. Agent
Article IX. Section 8 - Minutes	Paragraph (b) revise timeline to be consistent with the meeting materials rule requirement of providing meeting minutes to the full group no later than three days prior to the next regular meeting.
Article X Section 3 – Approving Recommended FMXs	Update to reflect that the planning group will approve the list of recommended FME, FMS, and FMP by voting on the list by consensus, but not less than a majority vote of the voting members present. The purpose of this change is clarifying a vote doesn’t need to be taken on each individual FMX but rather each list of FMEs, FMSs, and FMPs.



## **Region 8 Bylaws *Proposed Change***

### *Article V. Section 1 - Composition*

- Change to add text to capture the split of the Municipal seat into two seats



## **Region 8 Bylaws *Proposed Change***

### *Article V. Section 4 – Selection of members*

- Remove the timeline for when to fill vacancies.
- Recommended Change “At the expiration of a voting member’s term, or after the removal of or unanticipated resignation of a voting member, the Region 8 Lower Brazos RFPG shall post public notice.
- Remove the timeline requirement for review of nominations received by the Executive Committee. Recommended Change: Strikethrough “no sooner than ten calendar days after the deadline for submitting nominations”.



## **Region 8 Bylaws *Proposed Change***

*Article VIII. Section 1 – Officers, Restrictions, and Terms of Office*

- Change officer terms from one year to two years.



## **Region 8 Bylaws *Proposed Change***

### *Article VIII. Section 2 - Selection*

- Update paragraph (b). Consider aligning elections with renewal of terms of office  
During election years (even years), elections to be held at the first meeting following the renewal of terms. (usually mid-summer).



## **Region 8 Bylaws *Proposed Change***

### *Article VIII. Section 5 – Duties of Each Officer*

- Paragraph C. Secretary – retitle Secretary as Second Vice Chair, and reassigning these tasks to the Clerk/Admin. Agent



## **Region 8 Bylaws *Proposed Change***

### *Article X. Section 3 – Approving Recommended FMXs*

- Update to reflect that the planning group will approve the list of recommended FME, FMS, and FMP by voting on the list by consensus, but not less than a majority vote of the voting members present.

*The purpose of this change is clarifying a vote doesn't need to be taken on each individual FMX but rather each list of FMEs, FMSs, and FMPs.*



## **6. Report from:**

**6.1. Texas Water Development Board (TWDB) staff**

**6.2. Regional Planning Sponsor**

**6.3. Lower Brazos RFPG Chair**



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

3<sup>rd</sup> Thursday of the month for regular RFBPG meetings – December 18, 2025, at 10:00 AM

**REGION**



**Lower Brazos**  
**Regional Flood Planning Group**

## **8. Adjourn**