

# Region Three Flood Planning Update

SAME Conference

February 28, 2025



# Outline

## **I. OVERVIEW OF FLOOD PLANNING PROCESS**

## **II. HIGHLIGHTS FROM FIRST ROUND**

## **III. 2023 AMENDMENT PROCESS**

## **IV. FLOOD INFRASTRUCTURE FUND (FIF) PROGRAM**

### **I. AMENDING THE PLAN**

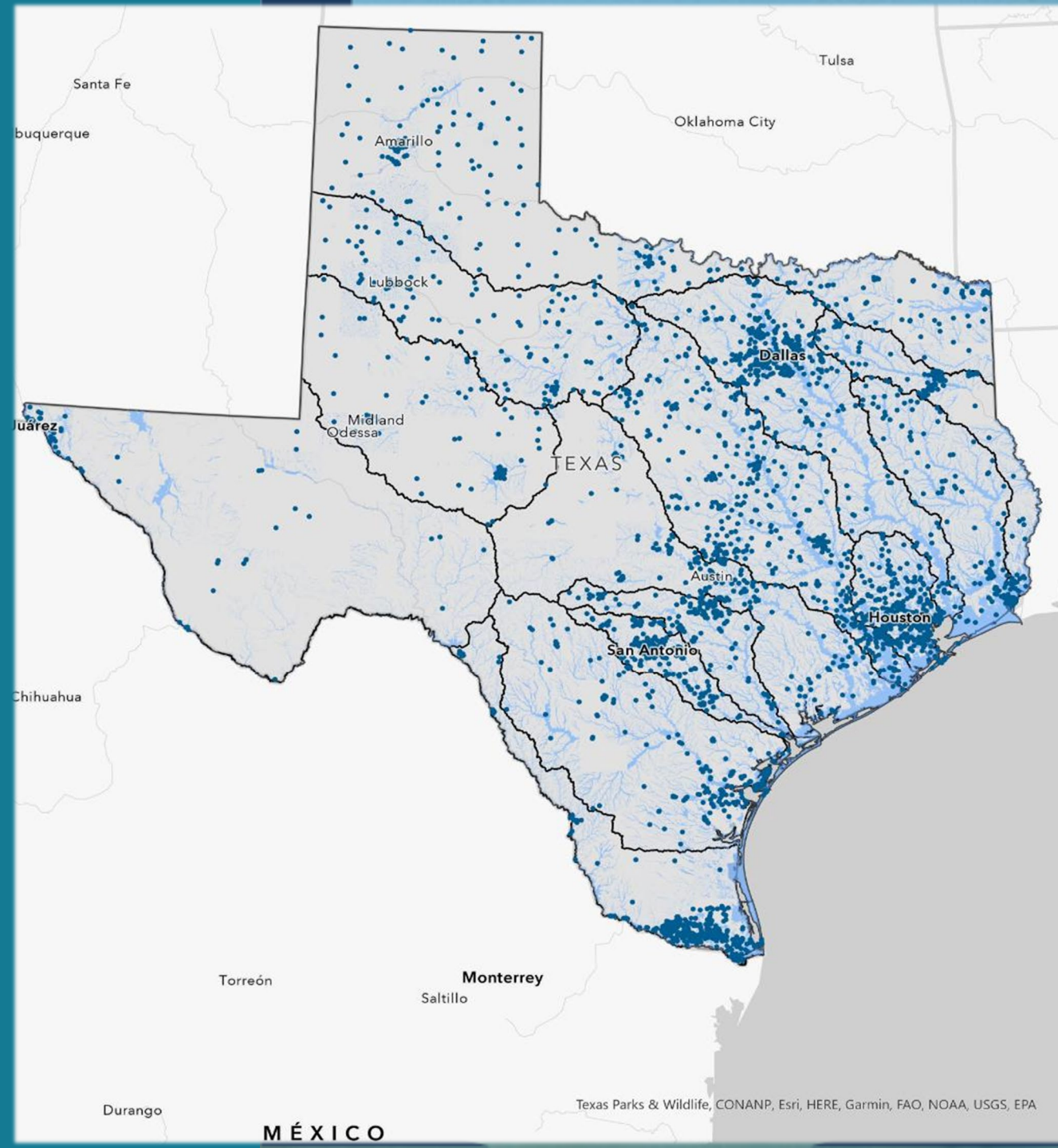
## **V. SECOND ROUND OF PLANNING**

### **I. TIMING AND WORKPLAN**

### **II. COMPARISON OF WORKPLANS FROM 1<sup>ST</sup> AND 2<sup>ND</sup> ROUNDS**

### **III. REGION STATS**

# Overview of Flood Planning Process



# TRINITY

## State Legislature Reacts

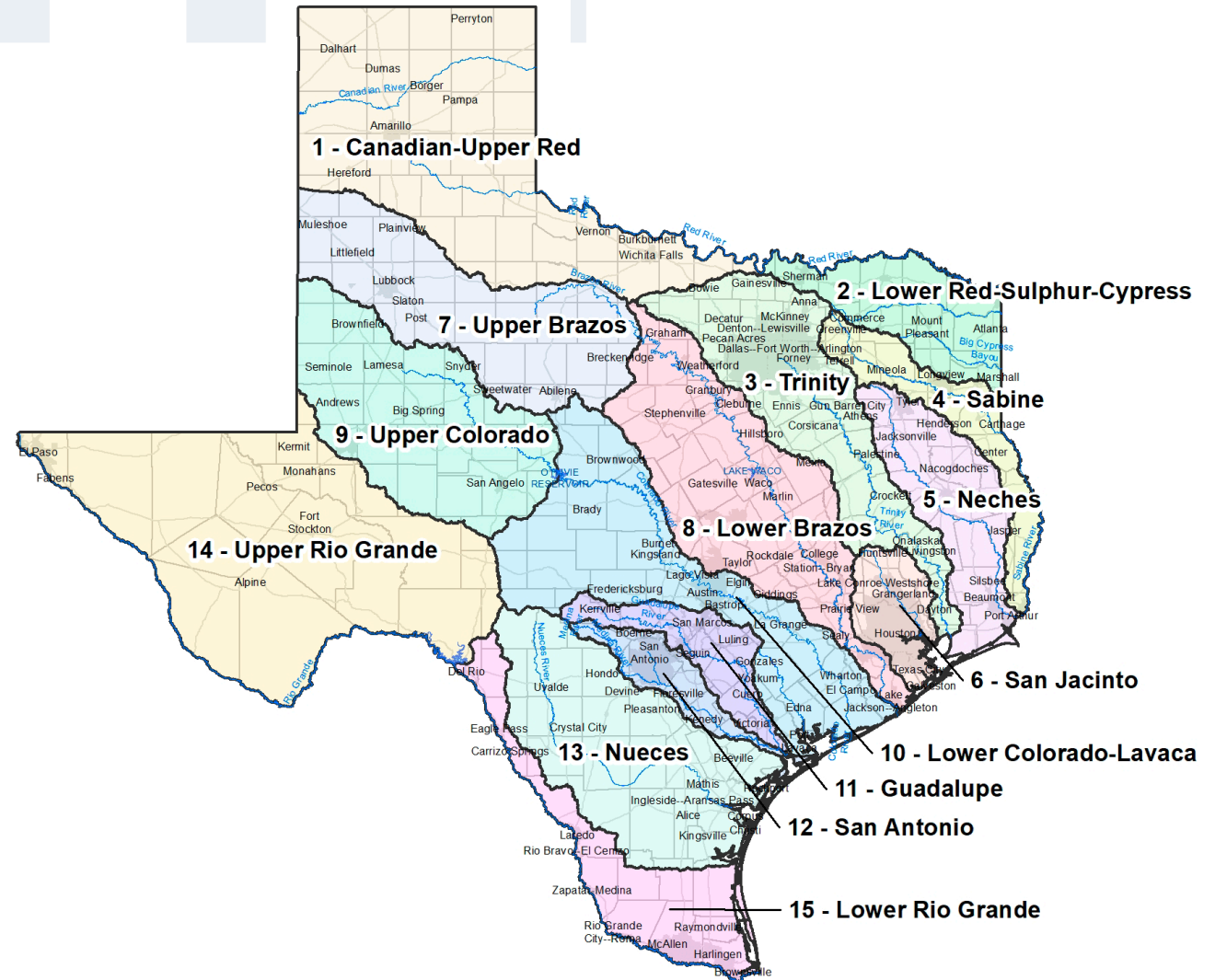
- In 2019 Texas Legislature passed SB 8 to established the first-ever State Flood Plan
- SB 8 charged the TWDB with developing, implementing and overseeing the process
- Regional flood planning is similar to the regional water planning process



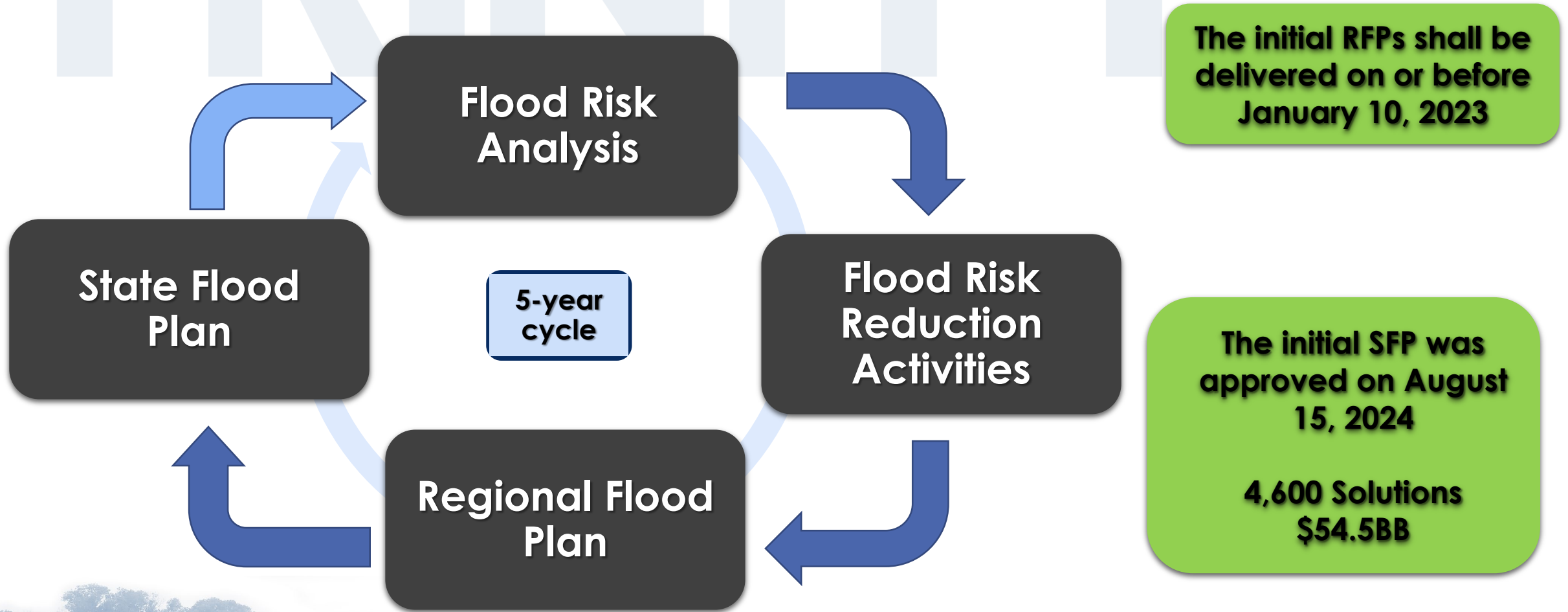


# Regional Flood Planning Groups (RFPGs)

- 2019 SB 8 established State Flood Planning Process
- 15 regions
- 12 interest groups for each region
  - Variety of interest categories
  - Appointments considered geographic representation
- Prepare and submit Regional Flood Plans



# Regional Flood Planning (RFP) Cycle



# Key Plan Components - Flood Mitigation Actions



## **FME - Flood Management Evaluations**

**Study** to assess flood risk and evaluate alternative solutions



## **FMP - Flood Mitigation Projects**

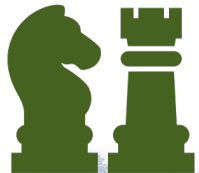
**Project** that has non-zero capital costs and mitigates flood hazards to life or property



## **FMS - Flood Management Strategies**

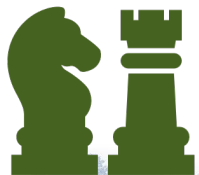
**Plan** to reduce flood risk or mitigate flood hazards to life or property

# Flood Mitigation Actions – Trinity Region

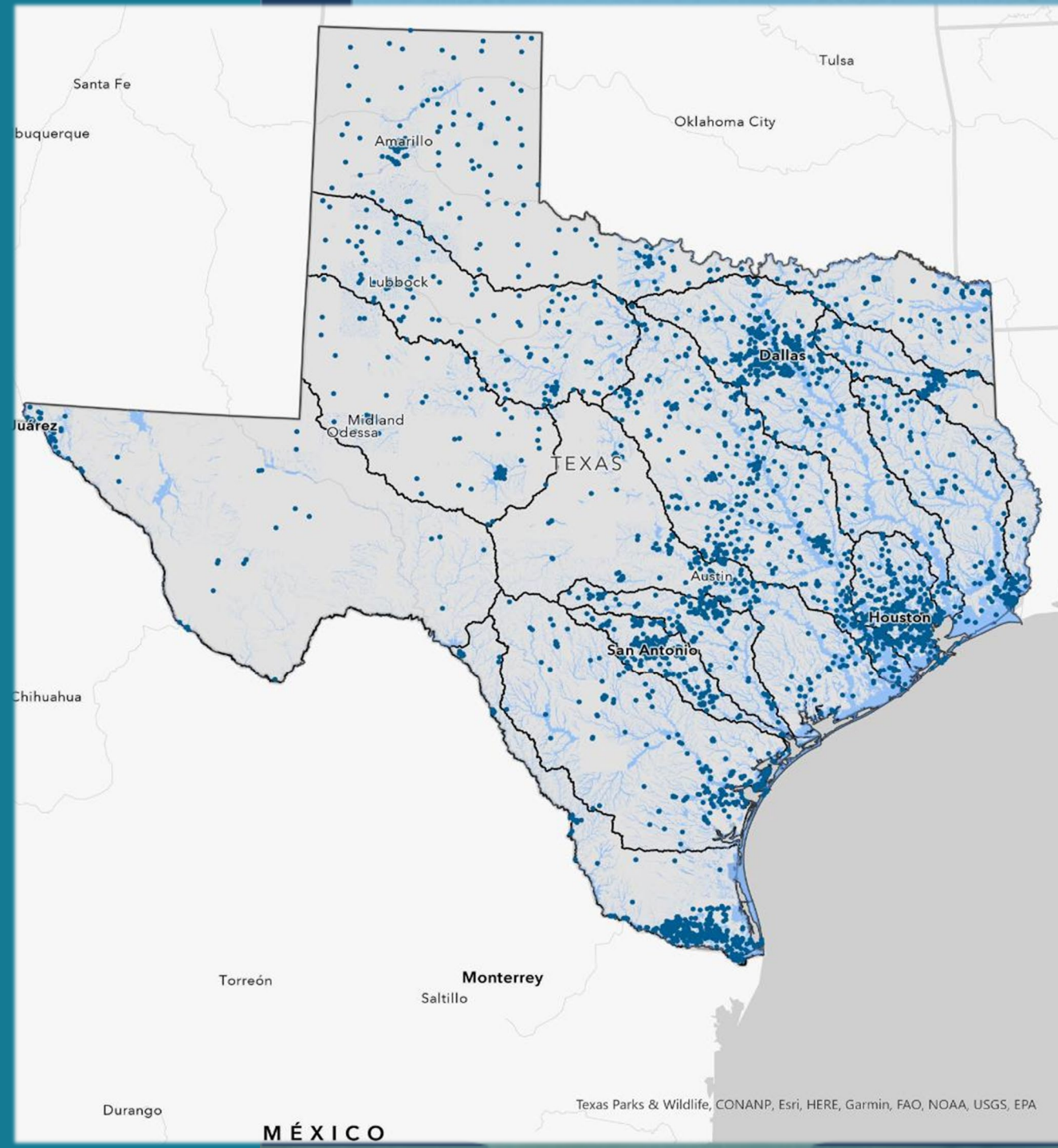




# Flood Mitigation Actions – Statewide



# 2023 Regional Plan Amendment



# Amending Regional and State Plans

- Regions can amend their plans at any time
- Can use Second Cycle funding for up to 2 revisions
- Submit to TWDB.
  - Amendments will be taken to Commissioners for approval as appropriate.



# Amendment Request Summary



8 FMEs  
9 Entities Submitting



29 FMPs  
9 Entities Submitting

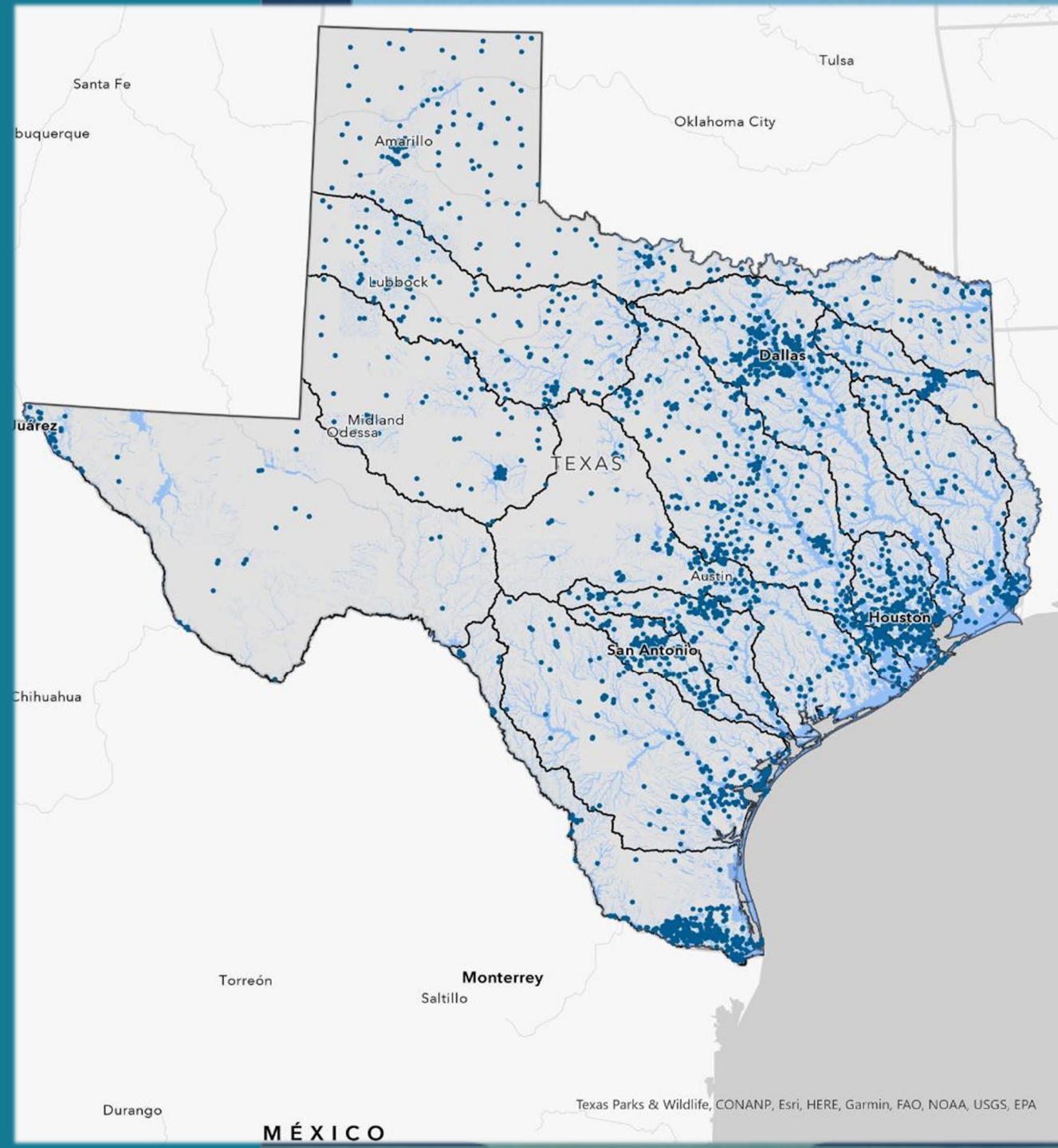


FMSs – 6 received  
2 Entities Submitting

- Received items have not been reviewed in entirety.
- Some FMP submittals will require additional information or will be included as FMEs.
- Submittals will be reviewed over the coming weeks to confirm substantial completion.



# Flood Infrastructure Fund (FIF)





# Flood Infrastructure Fund

Activities included in the State Plan are eligible for low interest loans or grants

Created by an amendment to the TX Constitution

Application for SFY 2024-2025 is closed

To qualify for 2026:

- Have submitted information to Region for inclusion in amendment
- Deadline to R3RFPG was December 1, 2024

Next chance for a new Activity/Solution: 2030-2031



# Flood Infrastructure Fund 2024-25 funding

Category	Percent	Total	15% Target for Federal Matching
FME	25%	\$93,750,000	\$14,062,500
FMP	65%	\$243,750,000	\$36,562,500
FMS	10%	\$37,500,000	\$5,625,000
TOTAL	100%	\$375,000,000	\$56,250,000



# Potential Changes to FIF

In 2023 SB 28 created the State Water Fund, later ratified via a Constitutional Amendment

*Move Flood Infrastructure Fund (FIF) into Texas Water Fund Structure:* Add FIF to the Water Fund structure thereby making it eligible to receive money out of the Water Fund, including from the constitutionally dedicated revenue stream.

Funding for new water supply projects, infrastructure repairs, upgrades and replacements, and **flood projects** will be distributed through NWSTF, SWIFT, FIF, the SRFs, etc., via loans and/or grants to **local sponsors and/or public-private partnerships** that will construct, own, operate, and maintain the desalination plants; produced water treatment plants; surface water sources; new reservoirs; replaced piping; new, upgraded, or repaired treatment facilities; **flood infrastructure**; and other new water infrastructure built using the dedicated funding. **Locally sponsored projects are and will remain under TWDB supervision.**



# Flood Infrastructure Fund Process

## Timing:

- State plan is adopted every five years
- Limit opportunities to amend the plan

## MOU (FMS/FMP):

- Required (by legislation) IF any part of the project watershed lies outside applicant's jurisdiction
- Signed by all political subdivisions within watershed

## BCR (FMP):

- Required for construction projects.
- Must score at least 1.0

## Affidavit (all):

- Activity was developed in cooperation with political subdivisions
- Held public meetings
- Compared to any other projects

Activity Included in Regional Plan

Activity Included in State Plan

Abridged Application

- TWDB reviews and prioritizes activities
- Flood Infrastructure Intended Use Plan (IUP)
  - SFY 2024-2025 IUP

Priority List

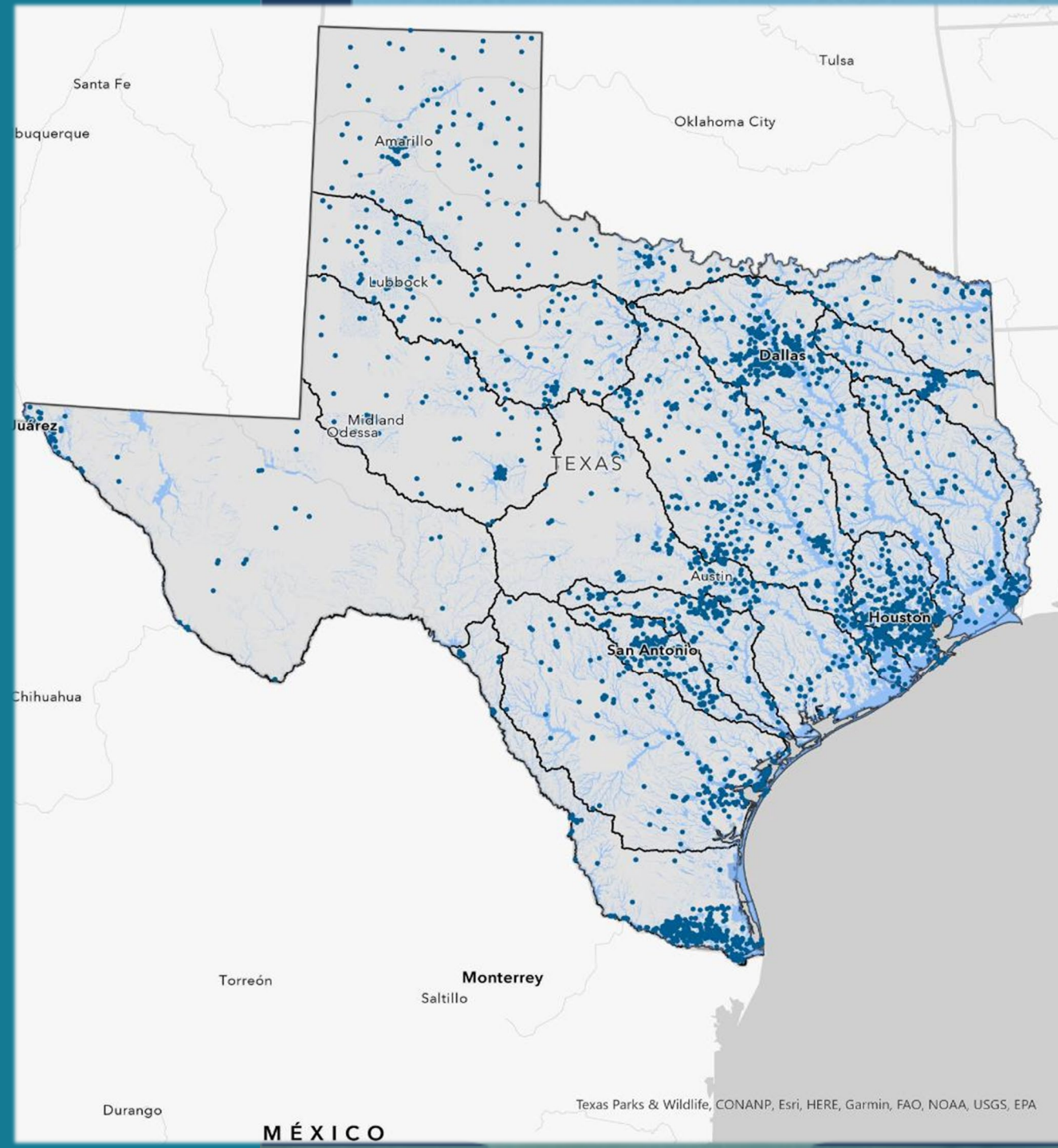
- Scoring matrix

Full Financial Assistance Applications

- Priority projects are invited to apply

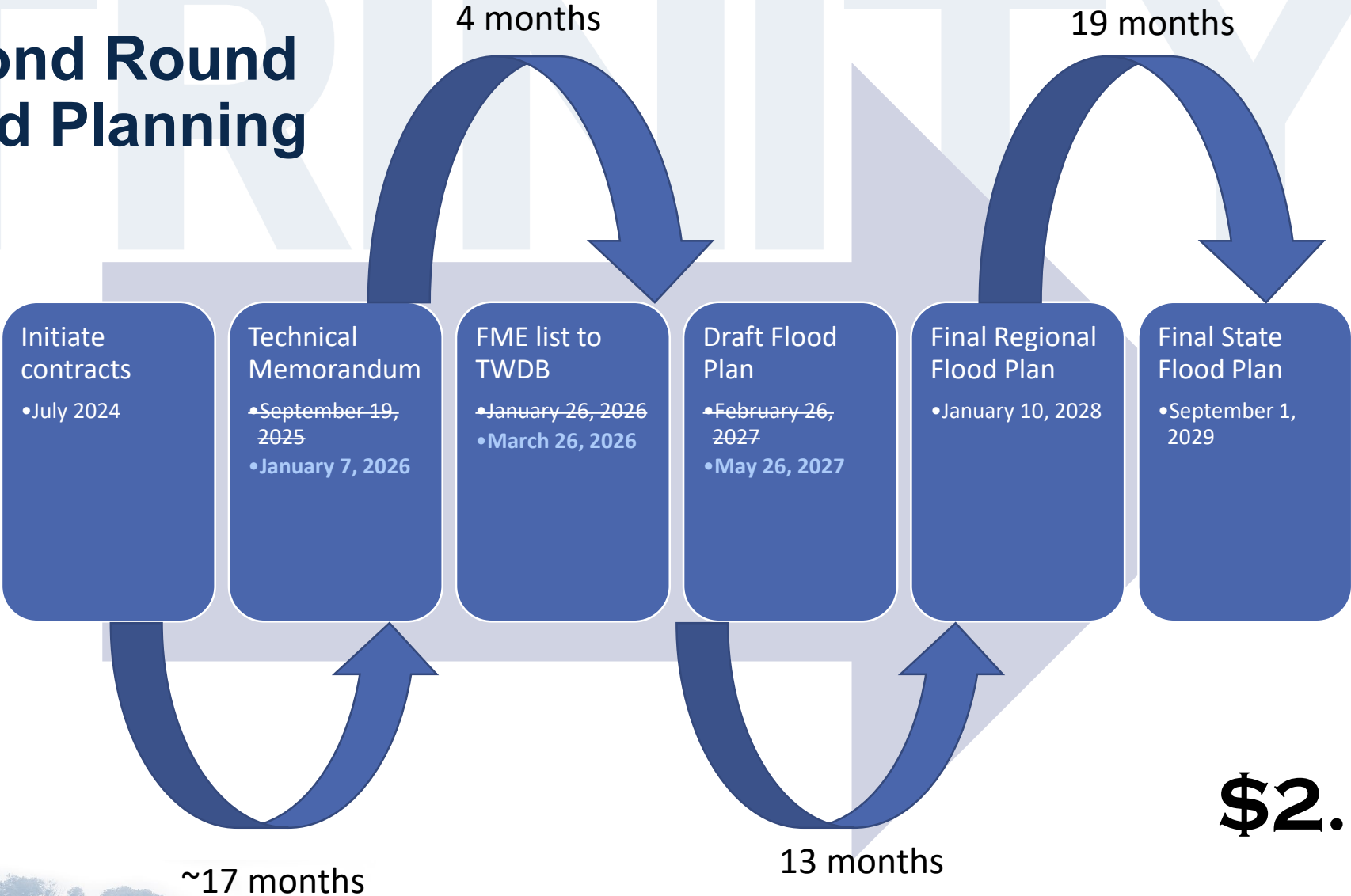
Currently Accepting Comments  
Through March 10

# Regional Planning Second Cycle





# Second Round Flood Planning



With ~~POTENTIAL~~  
new deliverable  
dates!

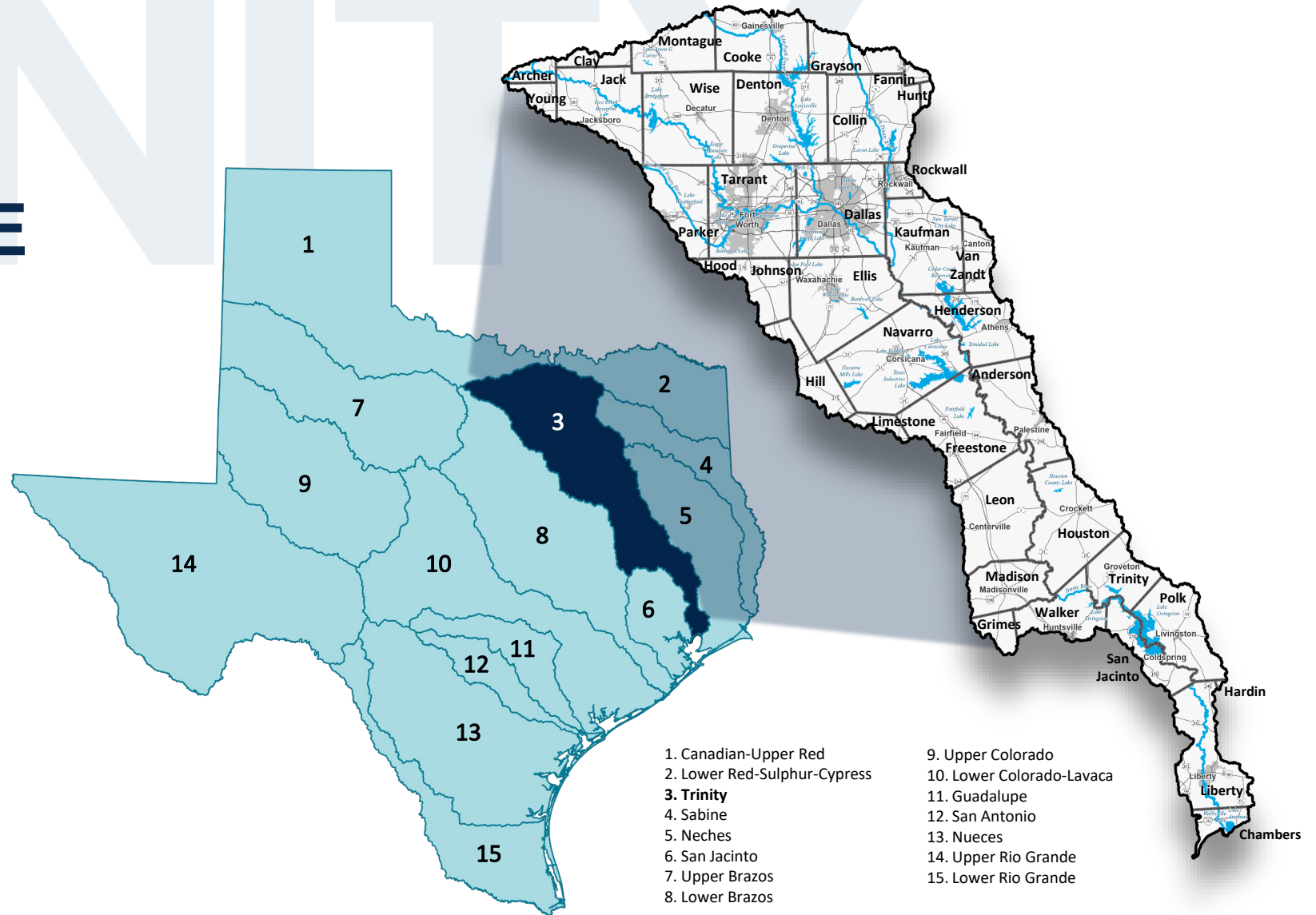
**\$2.875M**



Task	Description	
	2023	2028
1	Planning Area Description	
2	Flood Risk Analysis	
2A	Existing Condition Flood Risk Analysis	Existing condition flood risk analyses
2B	Future Condition Flood Risk Analysis	Future condition flood risk analyses
3	Floodplain management practices, needs analysis and flood protection goals	
3A	Evaluation and Recommendations on Floodplain Management Practices	Evaluation and recommendations on floodplain management practices
3B	Flood Mitigation and Floodplain Management Goals	Flood Mitigation Needs Analysis
3C	Flood mitigation and	
4		<b>The RFPG shall utilize this task to perform a portion of the identified Flood Management Evaluations identified in Task 4A and, in doing so, identify and evaluate additional Flood Mitigation Projects that could be recommended under Task 5A.</b>
4A	Flood Mit	
4B	Identification and Evaluation of Potentially Feasible Flood Management Projects	
4C	Prepare and Submit Technical Memorandum	
		Performance of Identified flood management evaluation
5	Recommendation of Flood Management Evaluations and Flood Management Strategies and Associated Flood Mitigation Projects	
6	Plan impacts and contribution to water supply of the regional flood plan	
6A	Impacts of Regional Flood Plan	Impacts of Regional Flood Plan
6B	Contributions to a	development and the State
7	<b>Collect information from local sponsors of FMEs, FMSs, and FMPs regarding implementation of previously recommended FMXs</b>	
8		
9		
10	Public Participation and Plan Adoption	
11	Outreach and Data Collection	Implementation and comparison to previous regional flood plan

# TRINITY REGION, BY THE NUMBERS

- 38 COUNTIES
- ~18,000 SQUARE MILES
- ~27% within the 1% annual chance flood event



# TRINITY REGION, BY THE NUMBERS

## ANTICIPATED POPULATION GROWTH

20+%

forecasted increase in population  
between 2024 and 2050

## TRINITY RIVER BASIN FEMA FLOOD CLAIMS (1988 – SEPT 2024)

Over 5,800  
Flood Claims

\$426.5 M  
Flood Claims Paid

## FLOOD EVENTS (1980-2024)

Over 150+ major flood events have  
occurred in the last 25 years with  
significant losses to life and property.

## AGRICULTURAL FLOOD LOSSES

Significant historical flood losses, most  
recently 2015 and 2016

## FLOOD-RELATED PRESIDENTIAL DISASTER DECLARATIONS (1966 – JULY 2024)

40

Major Disaster Declarations

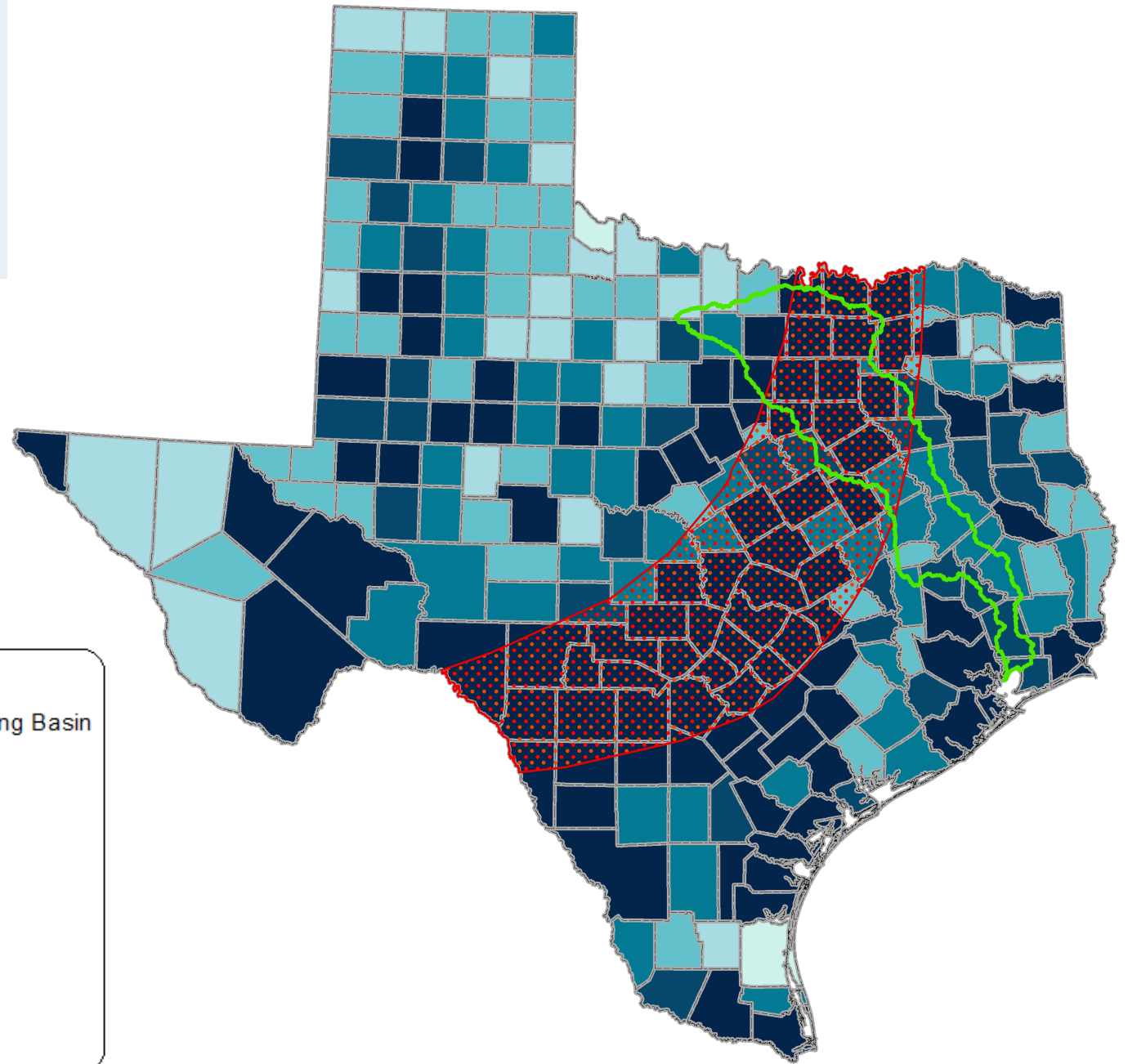
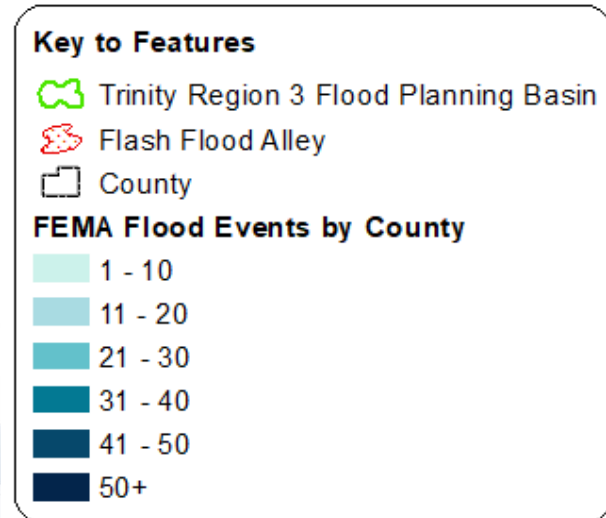
6

Emergency Declarations

35% of Disaster Declarations and 50%  
of Emergency Declarations have  
occurred within the region since 2008

# TRINITY REGION, BY THE NUMBERS

- Documented storm events and “Flash Flood Alley”



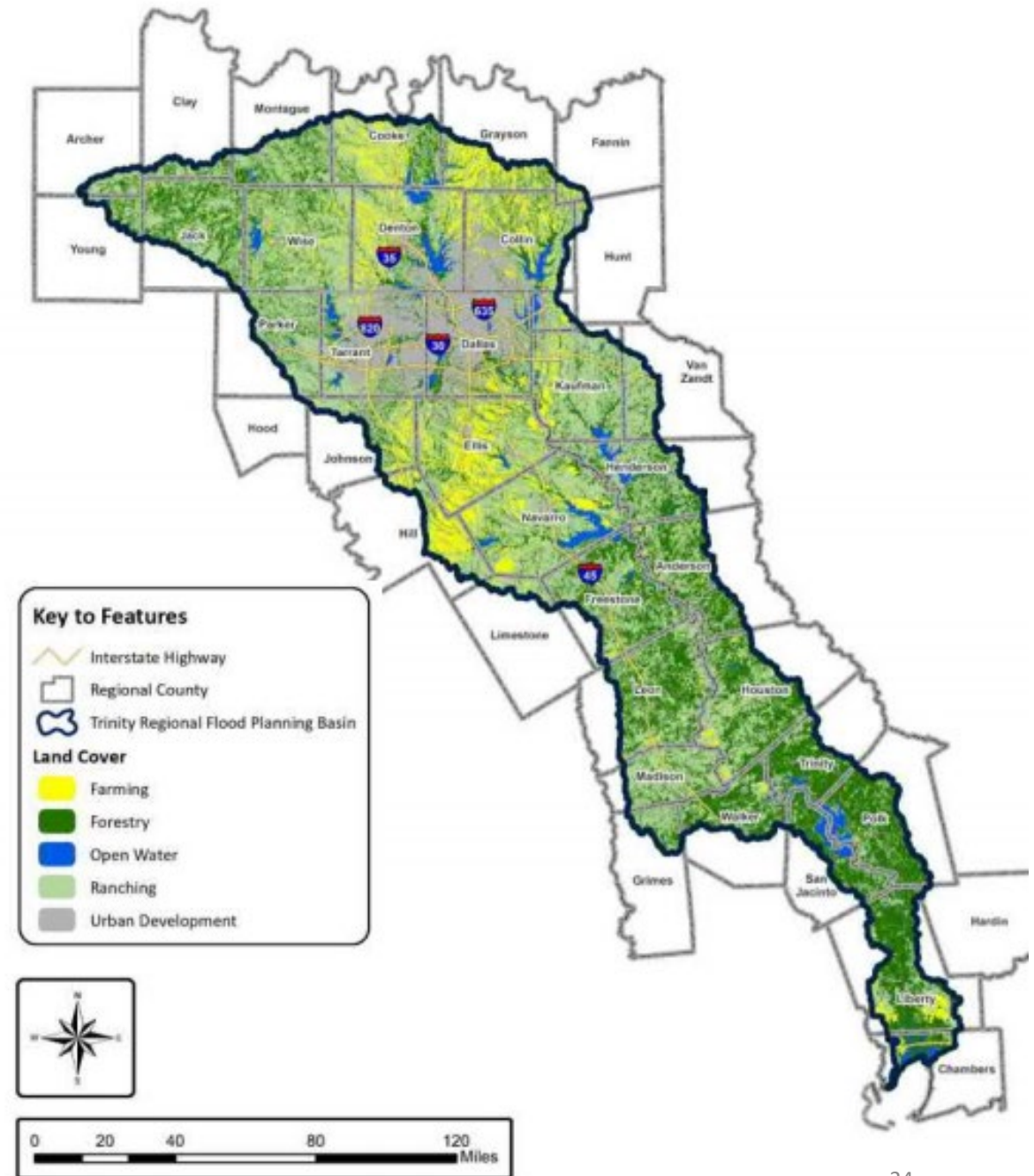
Source – FEMA NOAA Storm Data (1996 - 2019) 23  
REGIONAL FLOOD PLANNING GROUP



# TRINITY REGION, BY THE NUMBERS

Upper Basin – D/FW Service Based Economy  
Important agricultural areas throughout

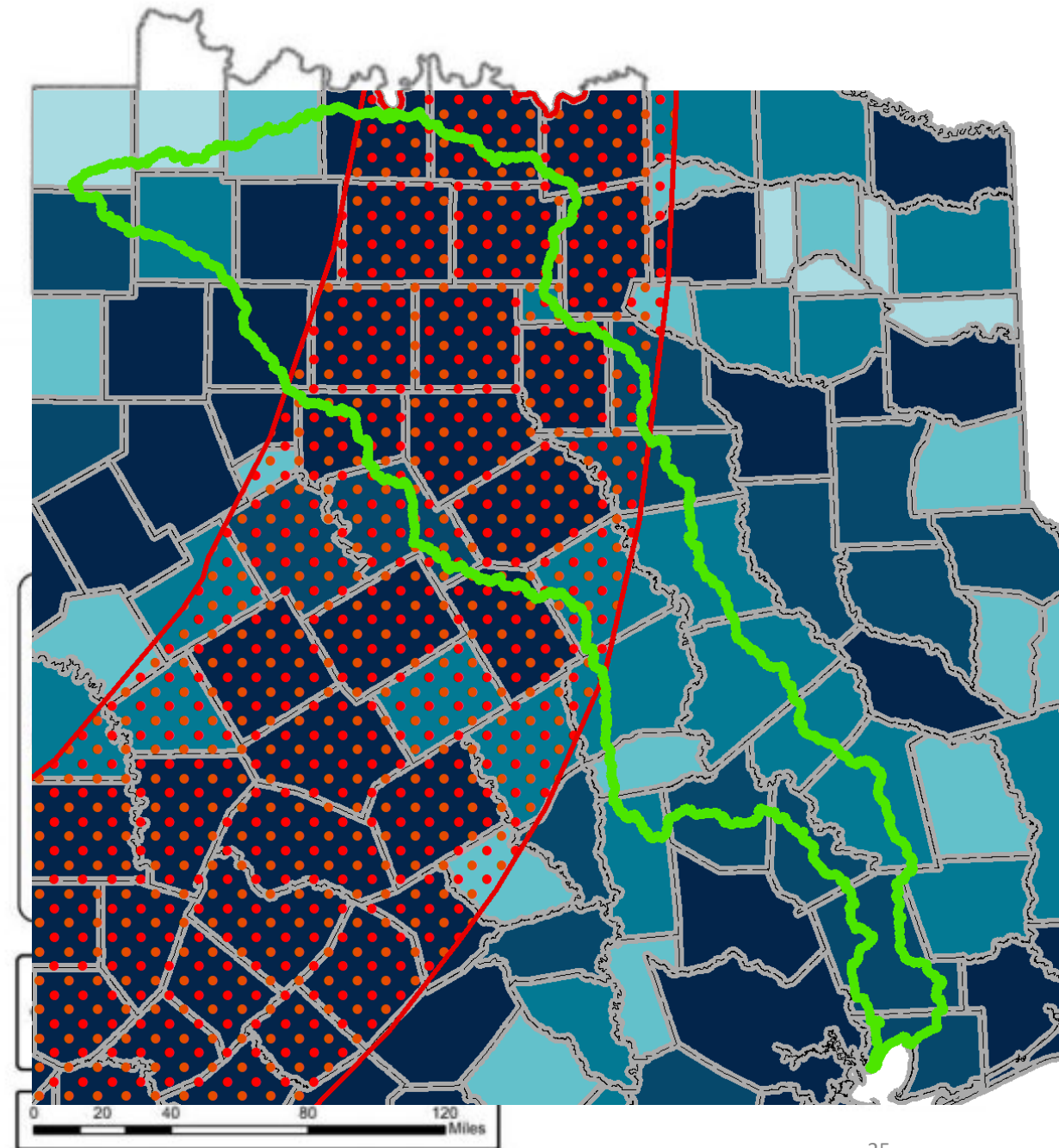
- Row crops in Blackland prairies
- Ranchland in middle Trinity
- Rice in lower Trinity



# TRINITY REGION, BY THE NUMBERS

Upper Basin – D/FW Service Based Economy  
Important agricultural areas throughout

- Row crops in Blackland prairies
- Ranchland in middle Trinity
- Rice in lower Trinity





# TRINITY

## Blackland Prairie



# AGRICULTURAL, RANCHING AND NATURAL AREAS MANAGEMENT

## Trinity River Basin

WORKING LANDS CHANGE

**-495,917 ac**

↓ -5.90% since 1997



MARKET VALUE CHANGE

**\$7,108.97**

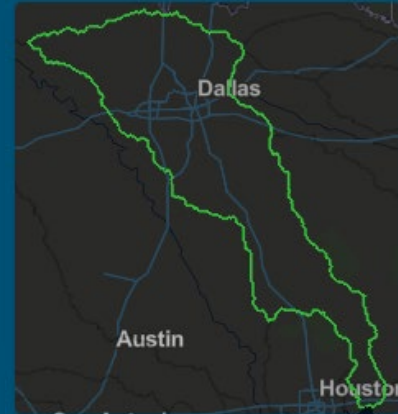
↑ 541.13% since 1997



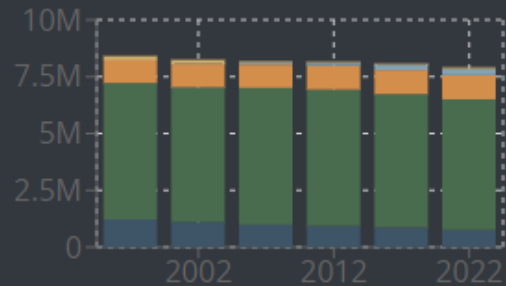
POPULATION CHANGE

**3,377,184**

↑ 62.65% since 1997

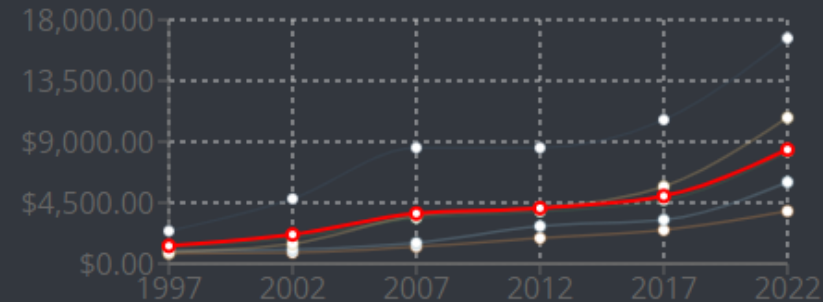


Working Lands ACRES



■ Cropland ■ Grazing Land  
■ Timber ■ Wildlife Management  
■ Other

Working Lands MARKET VALUE (\$/AC)



○ Cropland ○ Grazing Land ○ Timber  
○ Wildlife Management ○ Other ○ Average



# NFIP Participation





77%

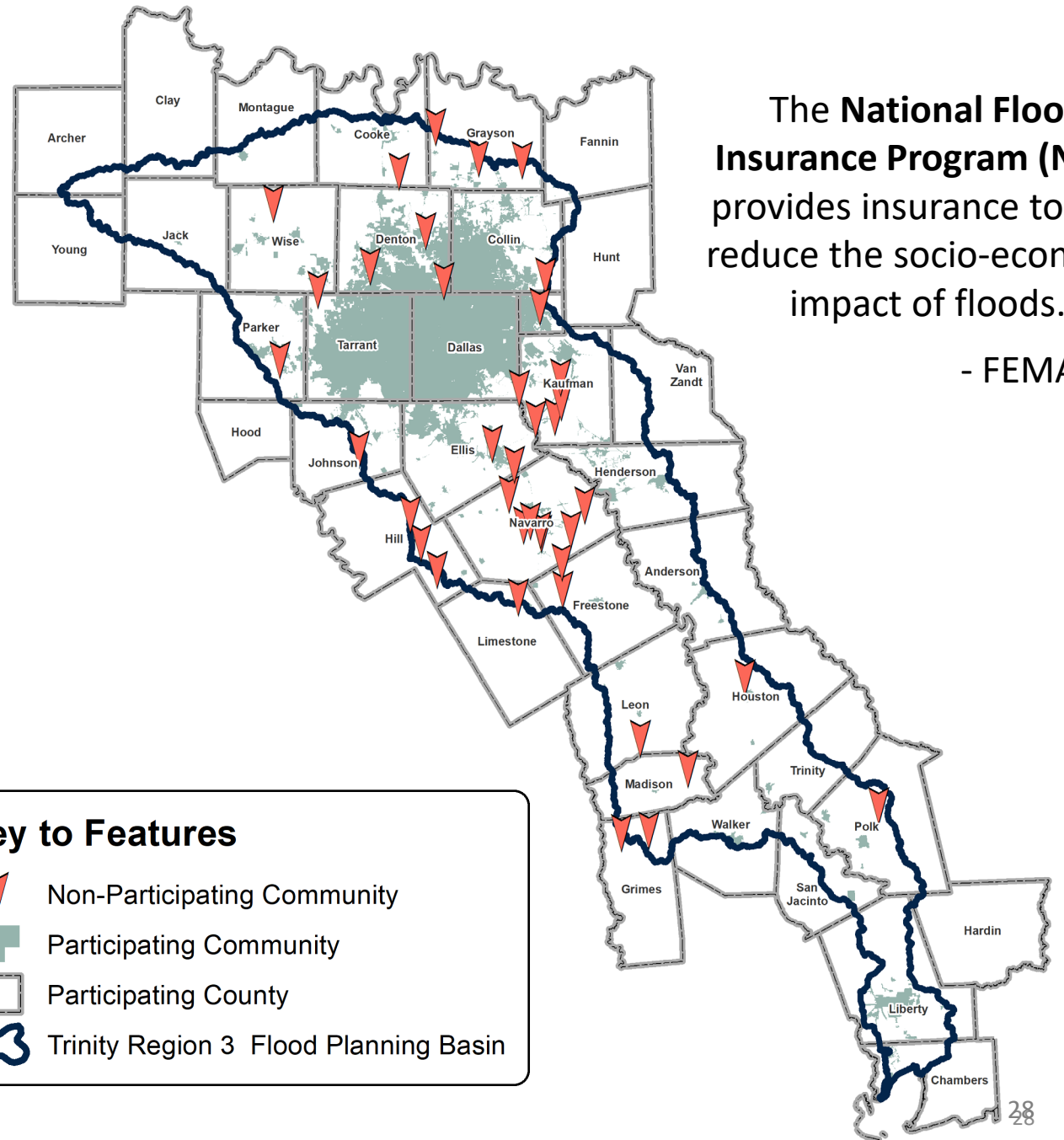
# of Communities  
Participating in  
NFIP

The **National Flood Insurance Program (NFIP)** provides insurance to help reduce the socio-economic impact of floods.

- FEMA

## Key to Features

-  Non-Participating Community
-  Participating Community
-  Participating County
-  Trinity Region 3 Flood Planning Basin





# Existing Conditions Flood Risk Assessment

## FLOOD TYPE

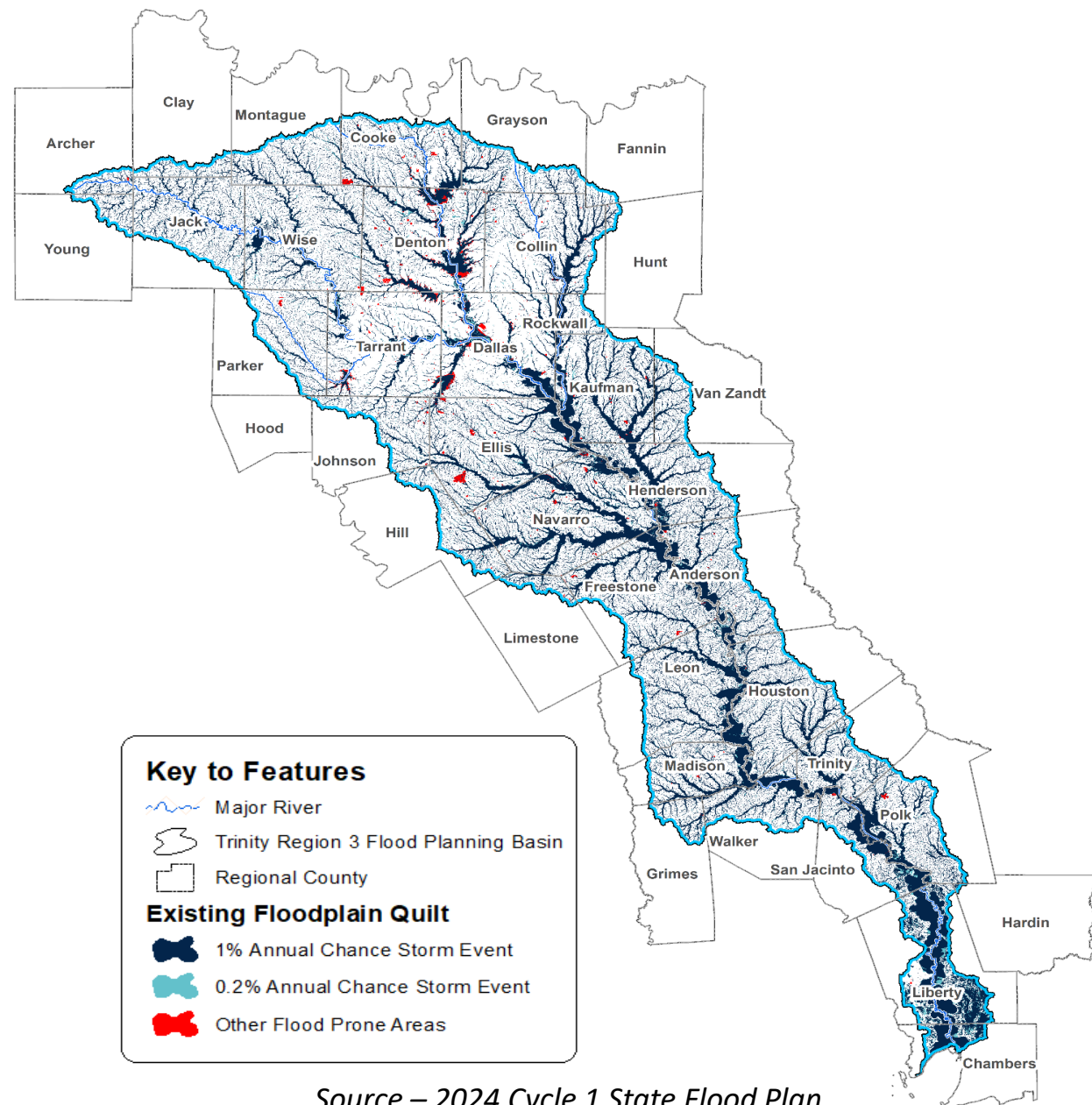
- Riverine
- Coastal
- Pluvial including Urban flooding

## FLOOD EVENT TYPES

- 100-Year
- 500-Year

## DATA SOURCES

- TWDB Flood Quilt
- FEMA
- Regional/Community Data
- FATHOM



Source – 2024 Cycle 1 State Flood Plan

# Future Conditions Flood Risk Assessment

## FLOOD TYPE

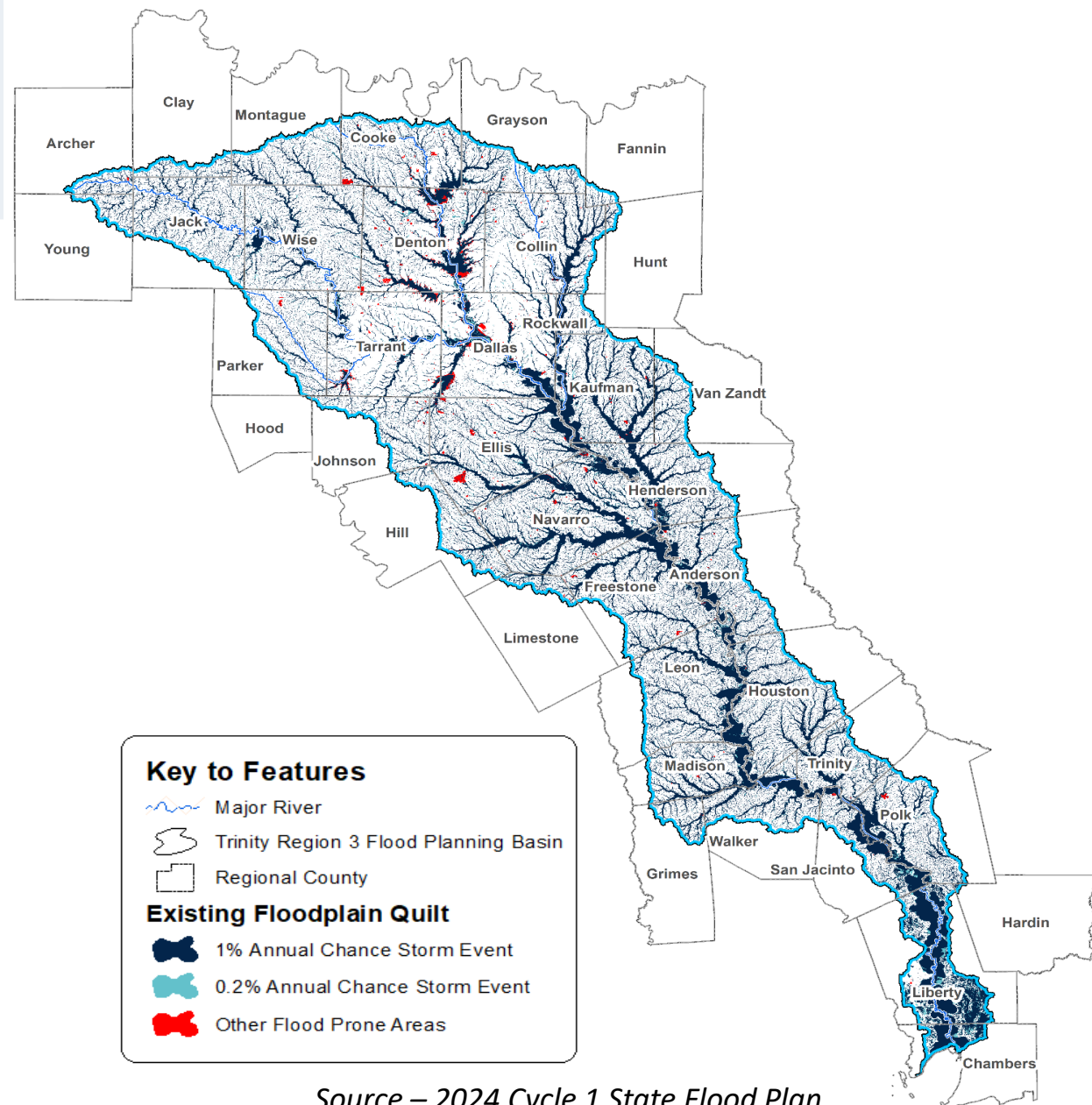
- Riverine
- Coastal
- Pluvial including Urban flooding

## FLOOD EVENT TYPES

- 10-Year
- 100-Year
- 500-Year

## DATA SOURCES

- TWDB Flood Quilt
- FEMA
- Regional/Community Data
- FATHOM



Source – 2024 Cycle 1 State Flood Plan



# 2023 RFP Future Flood Risk Analysis

## 1%

Minimum: Current 1%

Maximum: Current 0.2%

## 0.2%

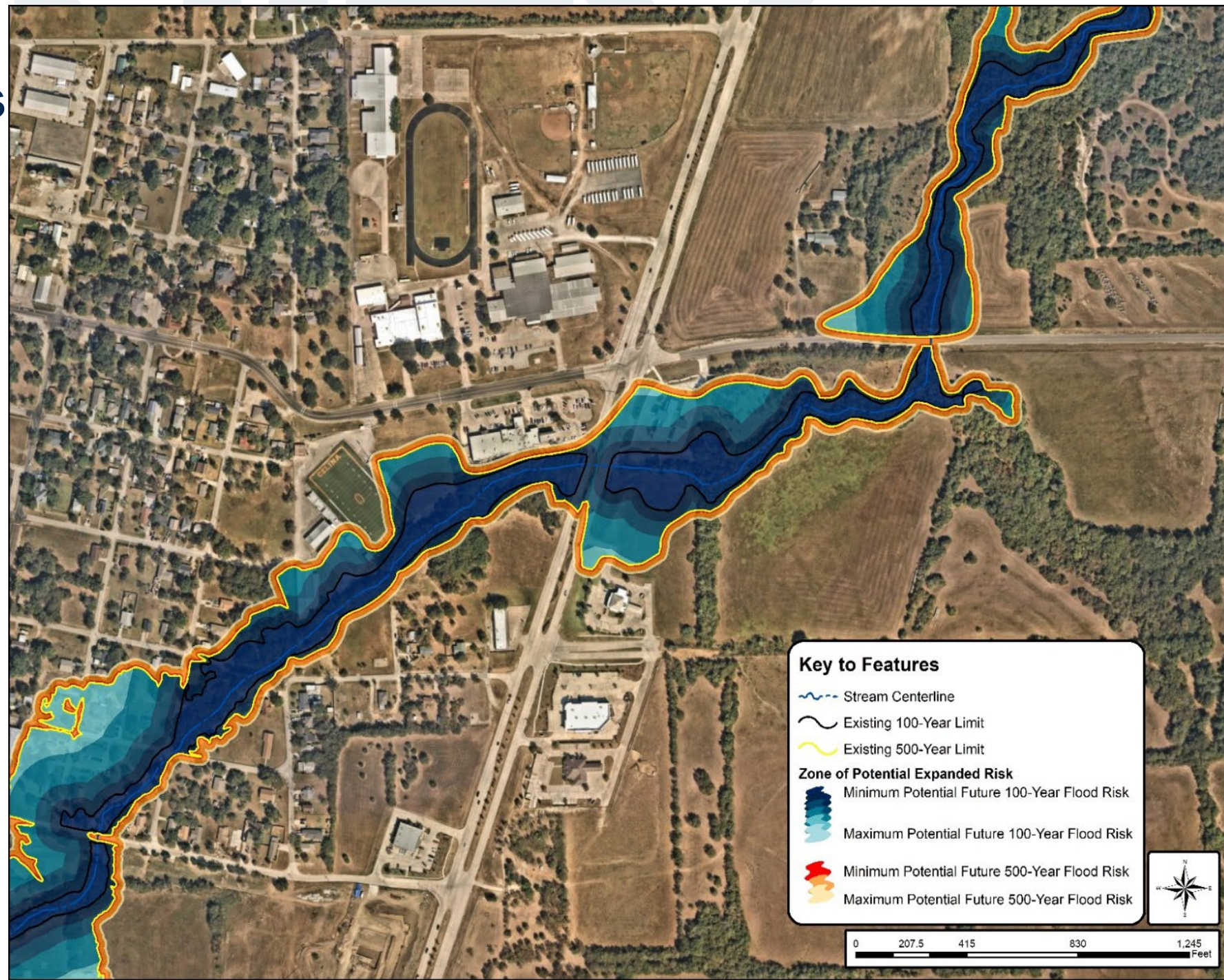
Minimum: Current 0.2%

Maximum: Current plus 40 ft.

## TWDB Future Conditions

FATHOM dataset: In progress

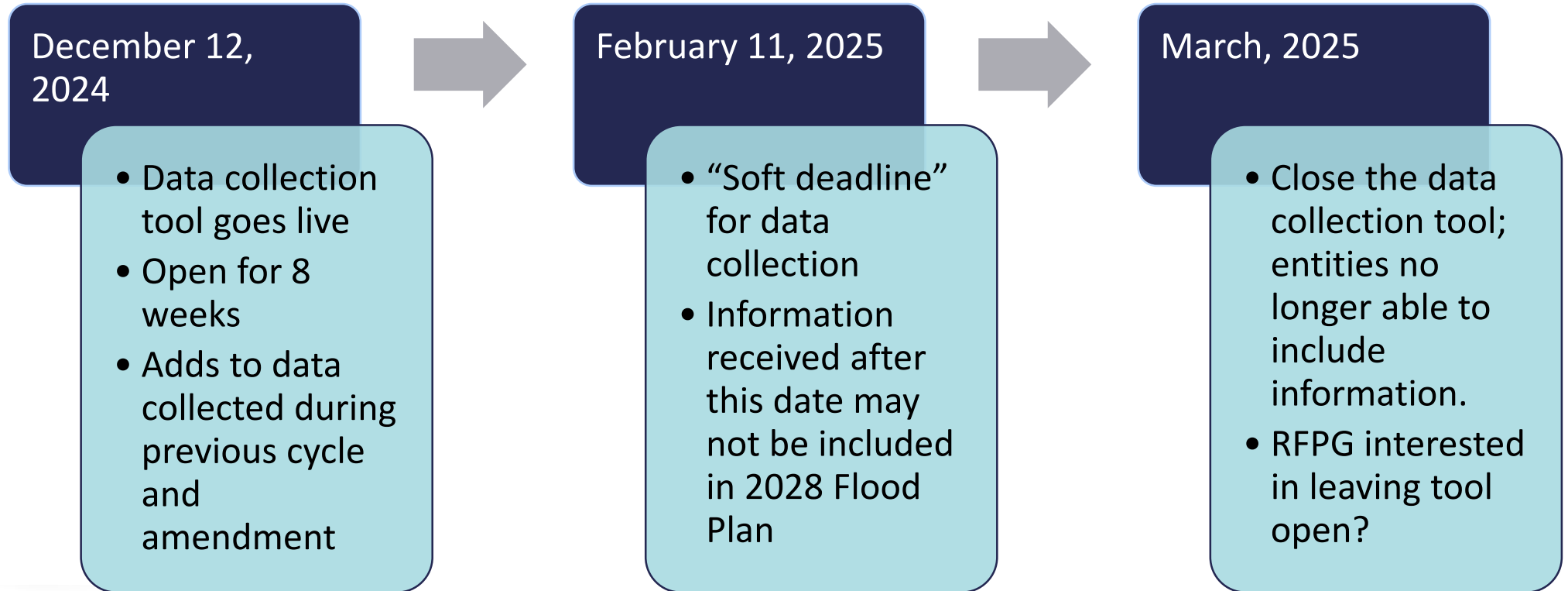
- Land Use
- Precipitation Changes
- Sea Level Rises
- Subsidence





# Data Collection Tool

<https://trinity.halff.com/>



Data collected in previous cycle to be carried forward if no new, improved information is available.



# LOOK-AHEAD

## March 12, 2025

- Approve amendment request to the 2023 State Flood Plan
- Present Chapter 1 for approval
- Determine approach for ID-ing FMXs (Task 4A)
- Determine approach for selecting FMEs to upgrade to FMPs (4A)

## April 1, 2025

- Consultant sends amendment request to TWDB

## May, 2025

- Present results existing exposure analysis (Task 2A)
- Present results future exposure analysis (Task 2B)
- Present Chapter 2 for approval
- Approve selection of FMEs for FMP Conversion (4A)

## July, 2025

- Present results of Tasks 3A, 3B, 3C
- Present Chapter 3 for approval
- RFPG Elections

## September, 2025

- Present Task 4A for approval
- Present Tech Memo for approval (Task 4B) – due to TWDB Sept 19, 2025

Notes:  
deadline.

Yellow highlight indicates hard

Thank you for your time!

**Glenn Clingenpeel**

[ClingenpeelG@trinityra.org](mailto:ClingenpeelG@trinityra.org)

<https://trinityfpg.org/> Sign up and subscribe!

