

LOWER RIO GRANDE REGIONAL FLOOD PLANNING GROUP MEETING

RFPG Meeting
Agenda Items #9 - #11

August 20, 2025

AGENDA

- ☐ Item 9 – Discussion and Update from Technical Consultant
- ☐ Item 10 – Discussion and Possible Action on Existing Conditions Flood Quilt Hierarchy
- ☐ Item 11 – Discussion and Possible Action on Flood Mitigation and Floodplain Management Goals



Agenda Item No. 9

**Discussion and Update
From Technical
Consultant**



Chapter 1 Update

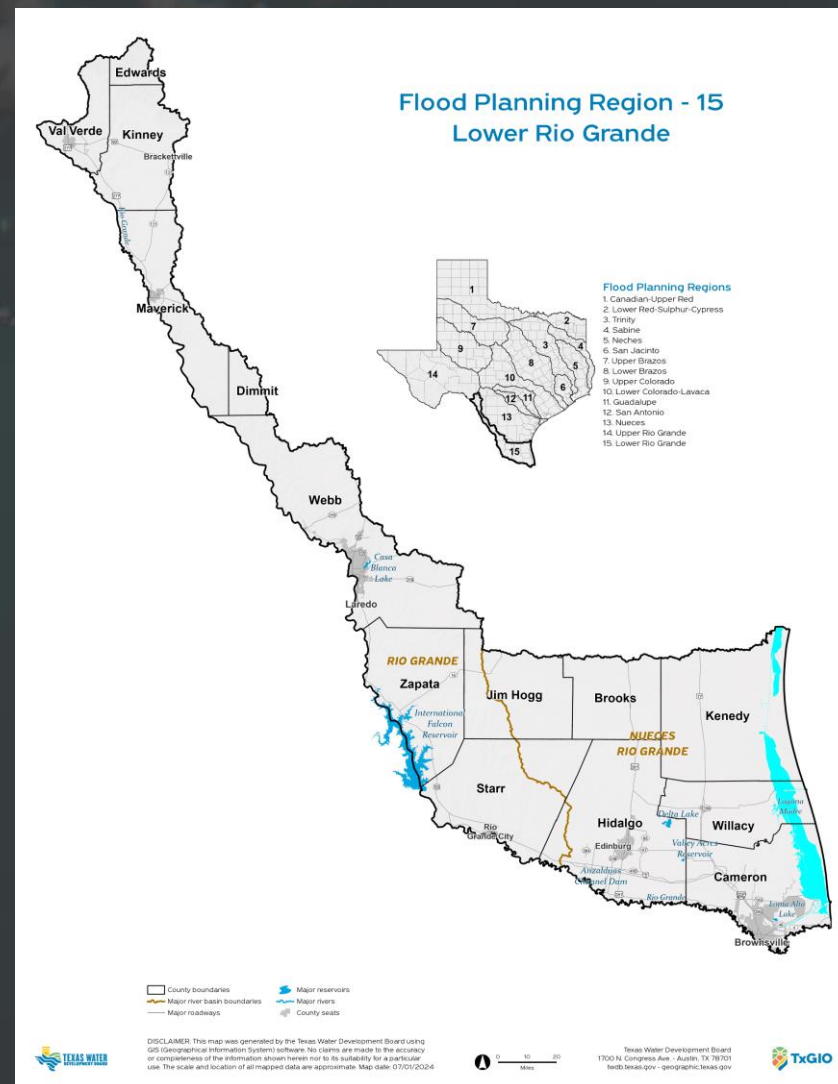
Task 1: Planning Area Description

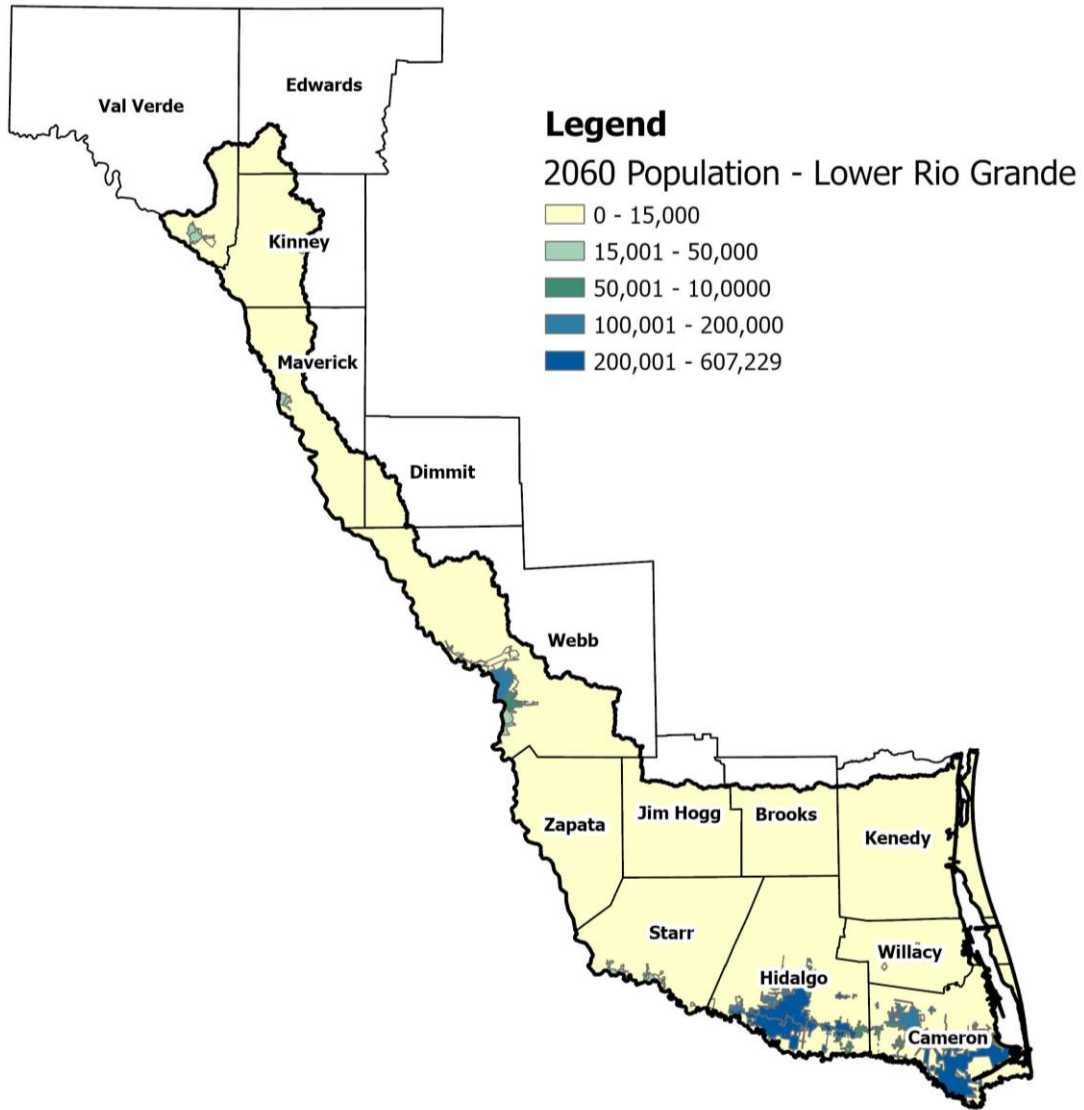


CH. 1 PLANNING AREA DESCRIPTION

Provides an overview of the Lower Rio Grande Regional Flood Planning Area (LRGRFPA), including:

- Social and Economic Character
- Major Flood Risks / Historical Flood Events
- Political Subdivisions with Flood-related Authority
- Extent of Flood Risk-related Regulations
- Agricultural and Natural Resources impacted by flooding
- Existing Flood Mitigation Planning Efforts
- Inventory and Assessment of Existing Flood Infrastructure





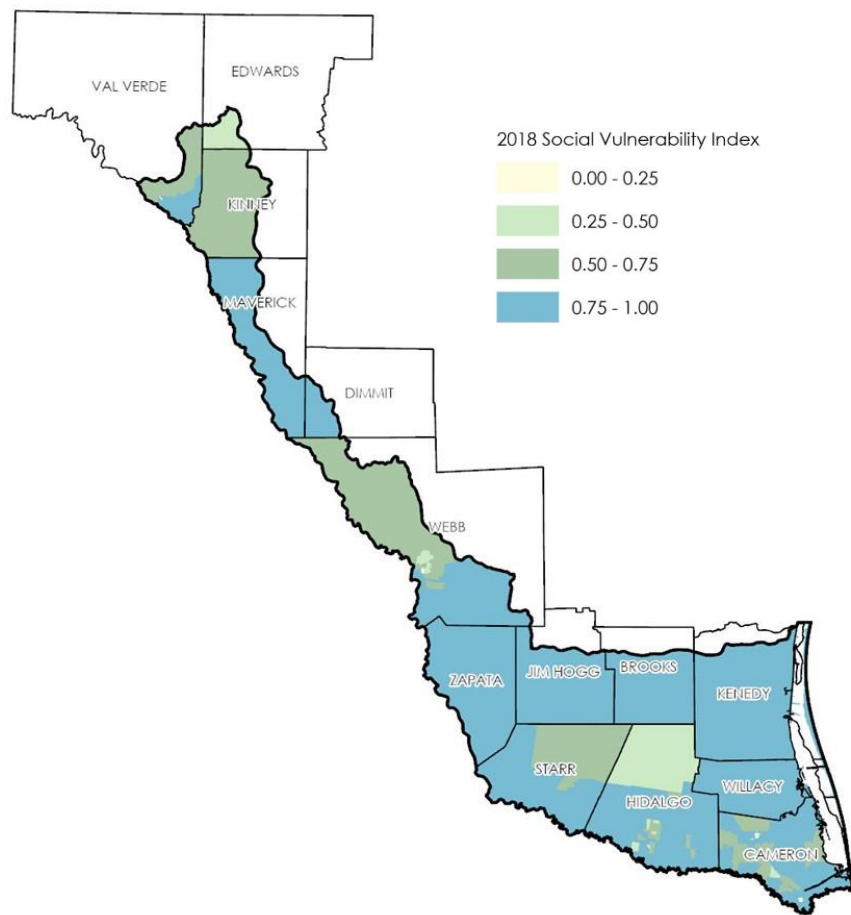
CH. 1 PLANNING AREA DESCRIPTION

- From 2030-2060, population is expected to increase from 1,939,505 to 2,120,563
 - This is a 9.3 increase over the next 30 years
 - Last cycle, estimates predicted a 62.3 percent increase
- The Median Household Income (MHI) ranges from \$31,310 in Brooks County to \$66,341 in Kinney County
 - MHI in the region's counties averages \$47,119, compared to the state's MHI of \$75,780
 - Last cycle, MHI for the region was \$37,595

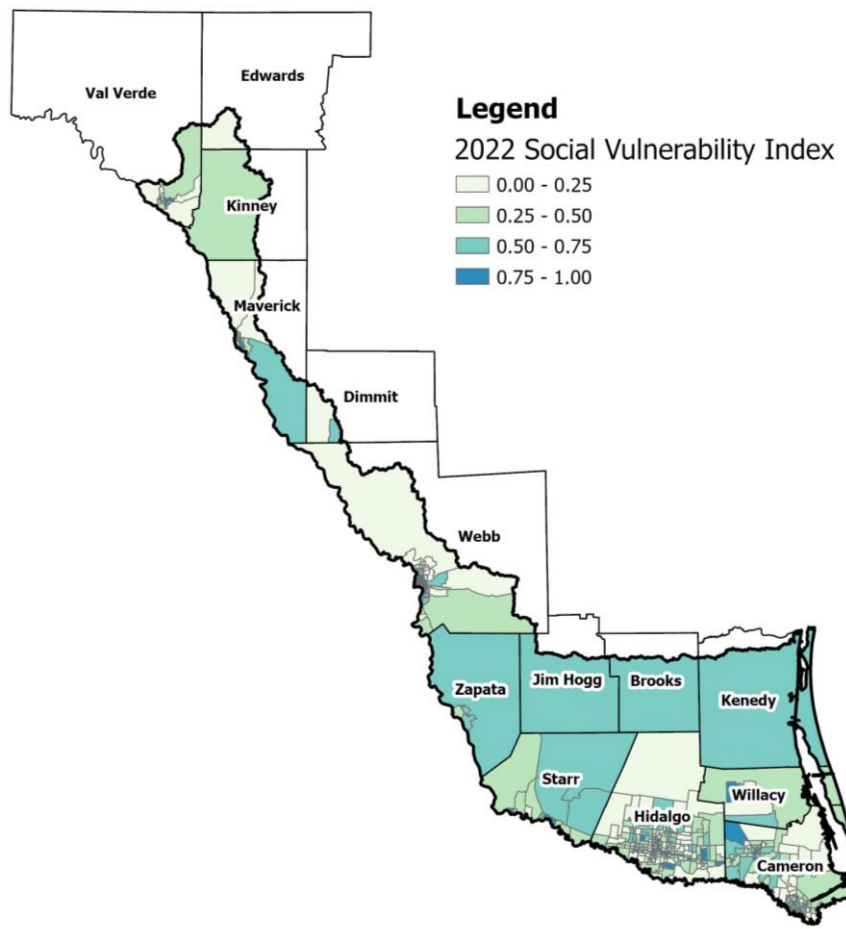


CH. 1 PLANNING AREA DESCRIPTION

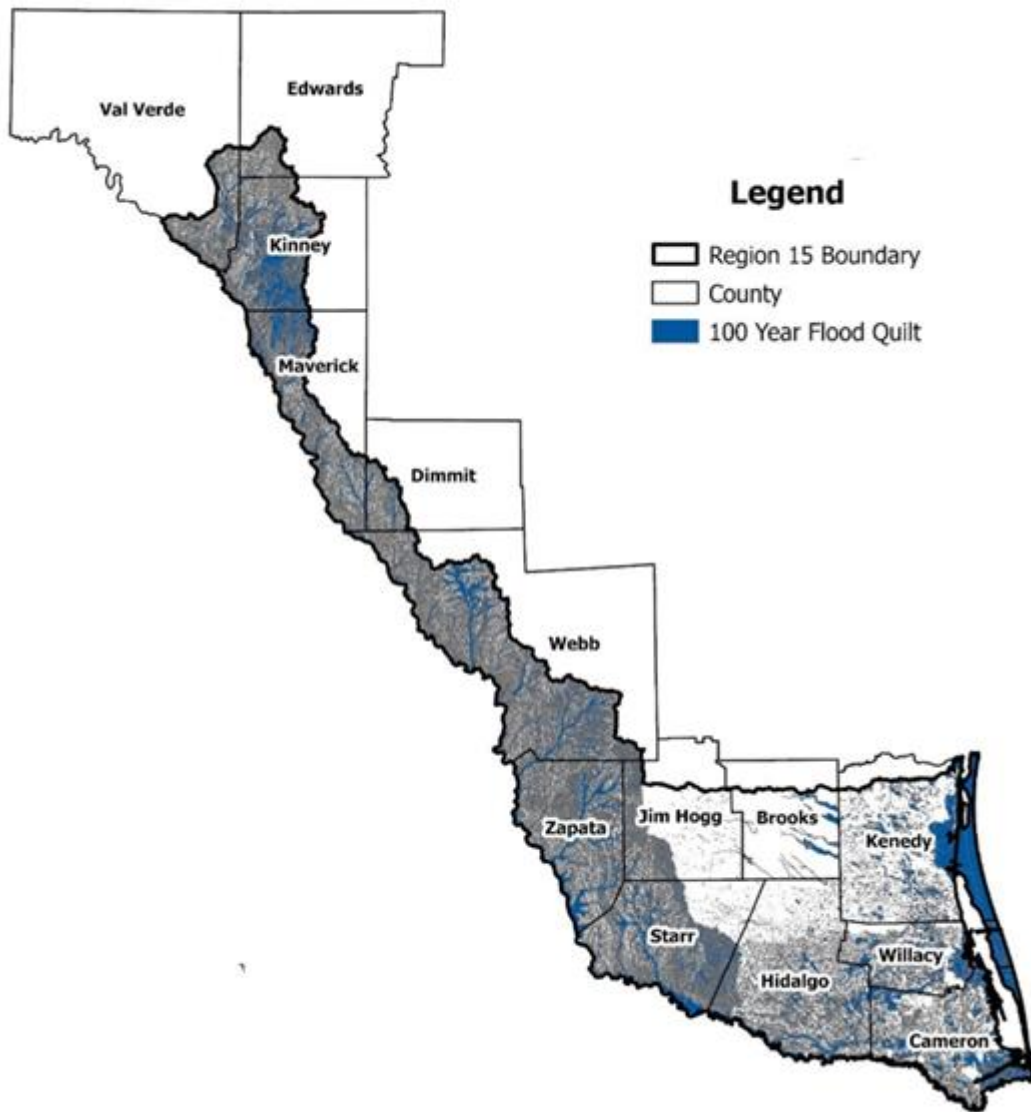
2023 Plan's SVI



2028 Plan's FSVI



- Social Vulnerability Index (SVI) method is measured on a scale of zero to one, with one being the highest level of vulnerability
- TWDB developed the Flood Social Vulnerability Index (FSVI) in February 2025 specifically to assess the vulnerability of communities to flooding events



CH. 1 PLANNING AREA DESCRIPTION

- Updated 100 Year Flood Quilt provided by TWDB
- One new flood event since last cycle:
DR-4871-TX (March 2025)
 - 5 - 20 inches of rain throughout Starr, Hidalgo, Willacy, and Cameron Counties
 - > 1,000 structures inundated
 - Hundreds of roads and highways including IH-69E frontage roads and key segments of the I-2 corridor flooded
 - Flights suspended at Valley International Airport in Harlingen
 - Property Damage estimated to be over \$100 million.



CH. 1 PLANNING AREA DESCRIPTION

Last cycle, the TWDB provided an original list of political subdivisions within the Lower Rio Grande Region that were thought to potentially have some degree of flood-related authority.

Political Subdivisions with Flood-Related Authority (85 total)

- Counties (14 total)
- Municipalities by County (54 total)
- River Authorities (0 total)
- Flood Districts (10 total)
- Irrigation Districts with Flood Control Authority (5 total)
- Municipal Utility Districts with Flood Control Authority (2 total)

Interest groups with no flood authority* (28 total)

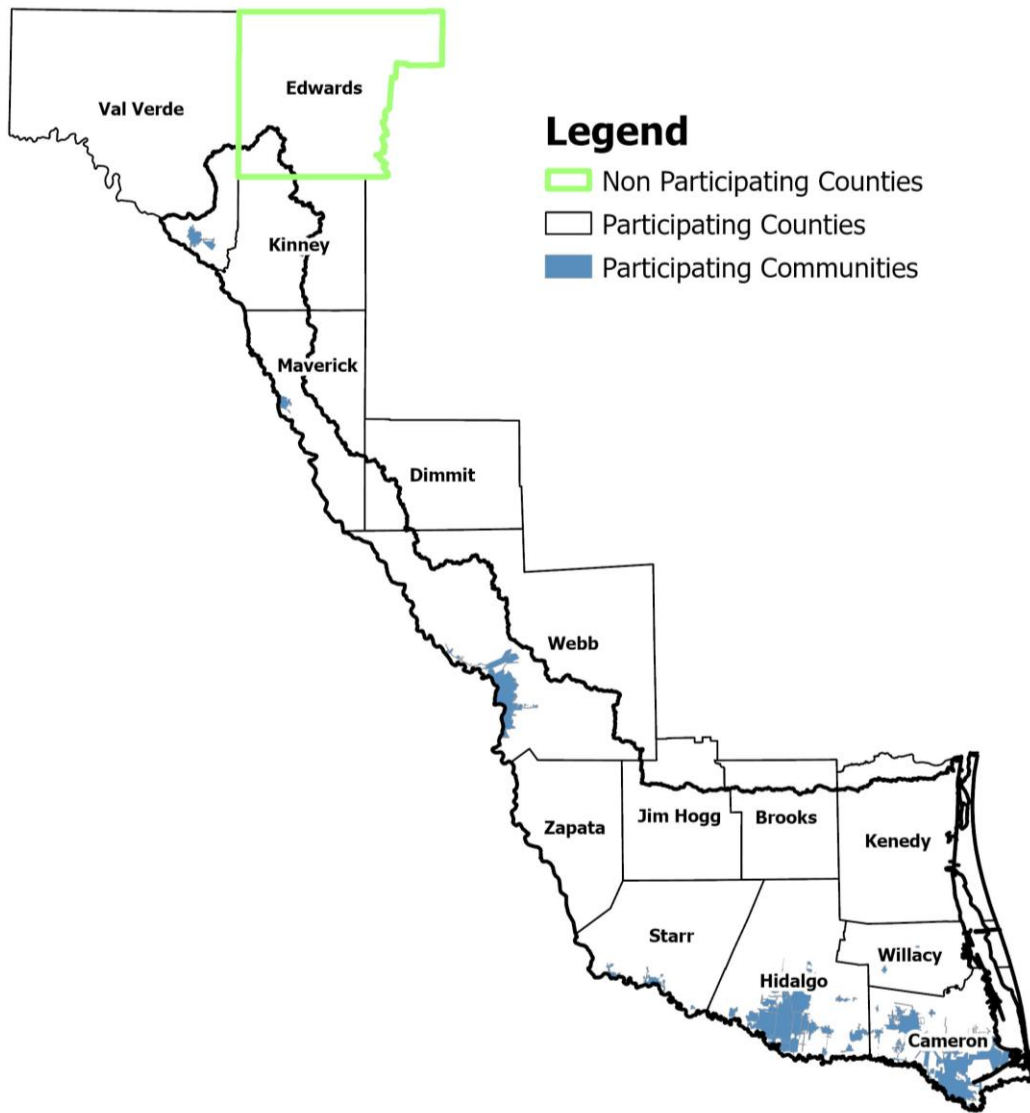
- Irrigation Districts with no Flood Control Authority (15 total)
- Special conservation and reclamation district (1 total)
- Municipal Utility Districts with no Flood Control Authority (8 total)
- Council of Governments with no flood control authority (4 total)

Entities removed from the original TWDB list (15 total)

- Navigation Districts with no Flood Control Authority (3 total)
- Water Districts with no Flood Control Authority (12 total)



See Handout A for full list



CH. 1 PLANNING AREA DESCRIPTION

Flood Risk-Related Regulations within the Region

- 91 percent of eligible entities (49 of 54 municipalities and 13 of 14 counties) participate in the NFIP
- The Texas Water Code §16.315 requires NFIP participants to:
 - Adopt a floodplain management ordinance
 - Designate a floodplain administrator
 - Interpret local floodplain management regulations and review for compliance with NFIP standards.



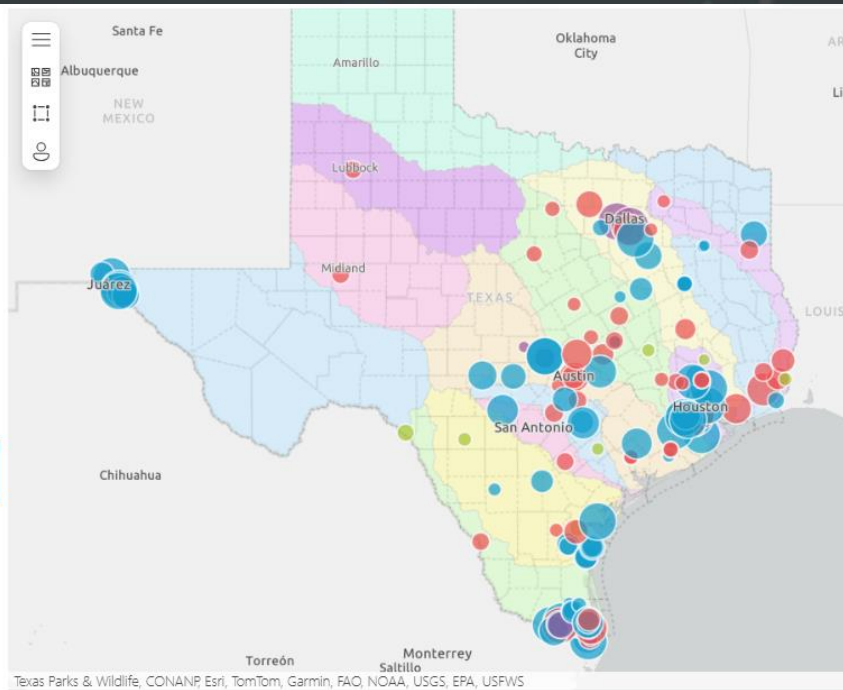
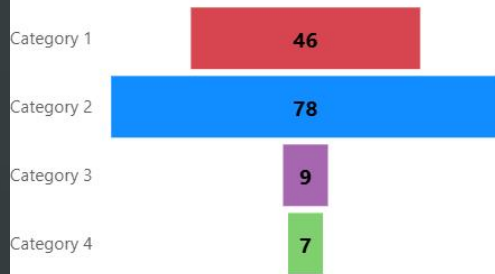
CH. 1 PLANNING AREA DESCRIPTION

Active and Completed Project Commitments

140

Committed Amount

\$669,444,393



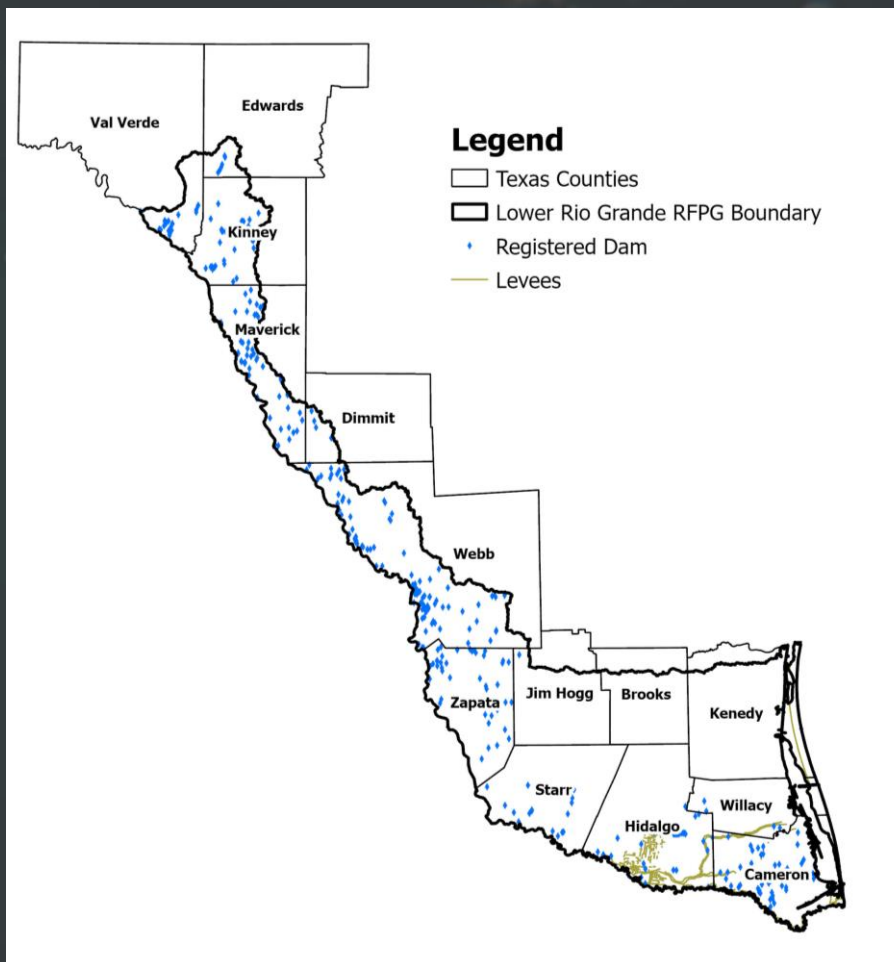
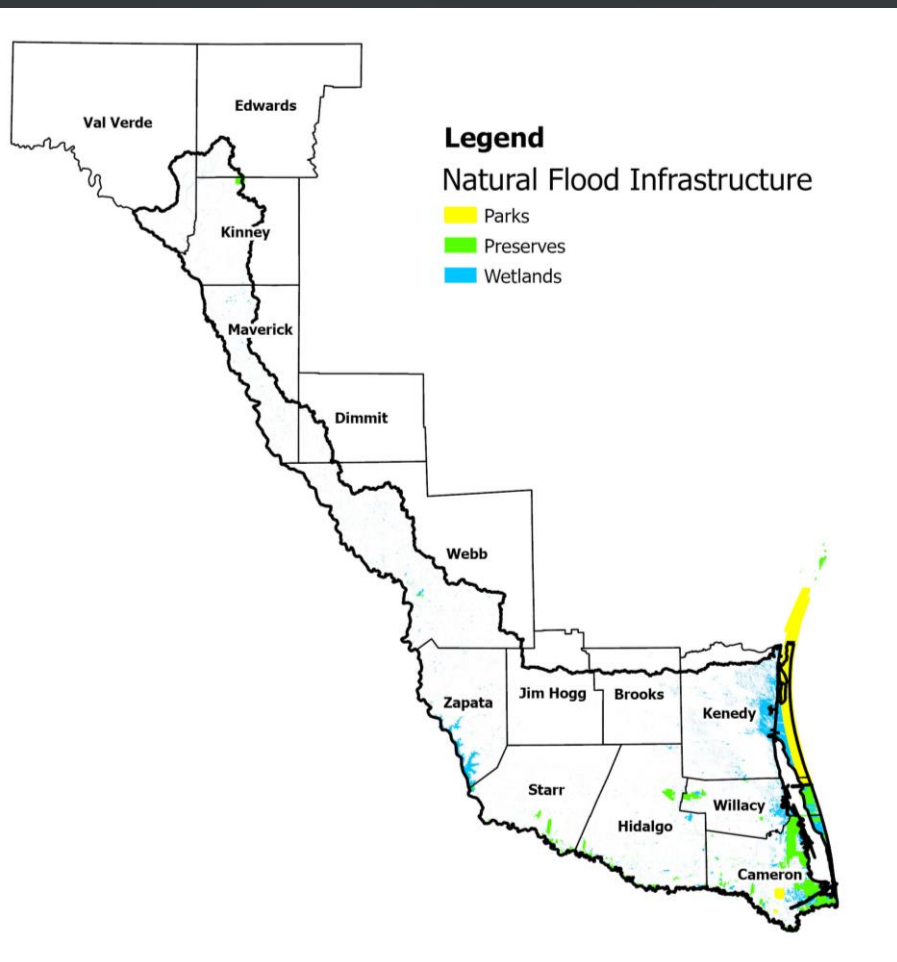
Most of the active Flood Mitigation Planning Efforts that are currently ongoing are funded by the Flood Infrastructure Fund. Within Region 15:

- Three (3) FIF – Category 1 projects are currently underway (\$2,425,000)
- Fourteen (14) FIF – Category 2 projects are currently underway (\$61,407,292)
- Two (2) FIF – Category 3 projects are currently underway (\$3,149,178)
- One (1) FIF – Category 4 project is currently underway (\$500,000)



CH. 1 PLANNING AREA DESCRIPTION

Inventory and Assessment of Existing Flood Infrastructure



Condition

- Deficient
- Non-Deficient
- Unknown

Functionality

- Functional
- Non-Functional
- Unknown

Confidence

- High
- Low
- None



Chapter 2 Update

Task 2a: Existing Conditions Flood Risk Analysis



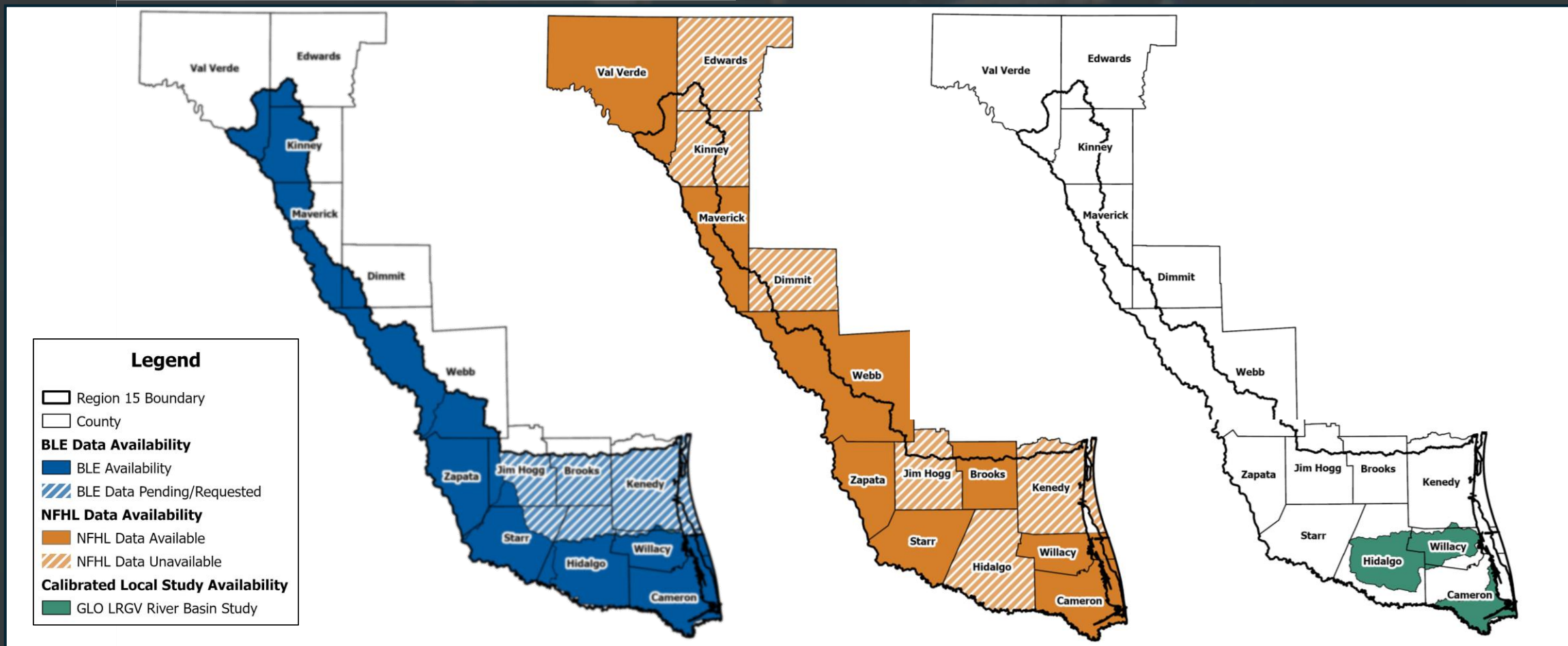
TASK 2A: EXISTING CONDITIONS FLOOD RISK ANALYSIS

- Purpose
 - Flood Risk Identification and Mapping
 - Flood Exposure Estimation
 - Vulnerability Assessment





TASK 2A: TWDB FLOOD QUILT DATA SOURCES





TASK 2A: FLOOD MAPPING DATA SOURCES AND PRIORITIZATION

Ranking	Description	Sub Category Ranking
1	National Flood Hazard Layer	Pending Data
		Preliminary Data
		Effective Data
2	Base Level Engineering Data	
3	NFHL (Approximate Study Areas)	
4	First American Flood Data Services (FADS)	
5	Other Potential Data Sources	Fathom
		USACE of Federal Data
		Regional Data
		Local Data



CH. 2 EXISTING CONDITIONS FLOOD RISK ANALYSIS

FLOOD TYPE

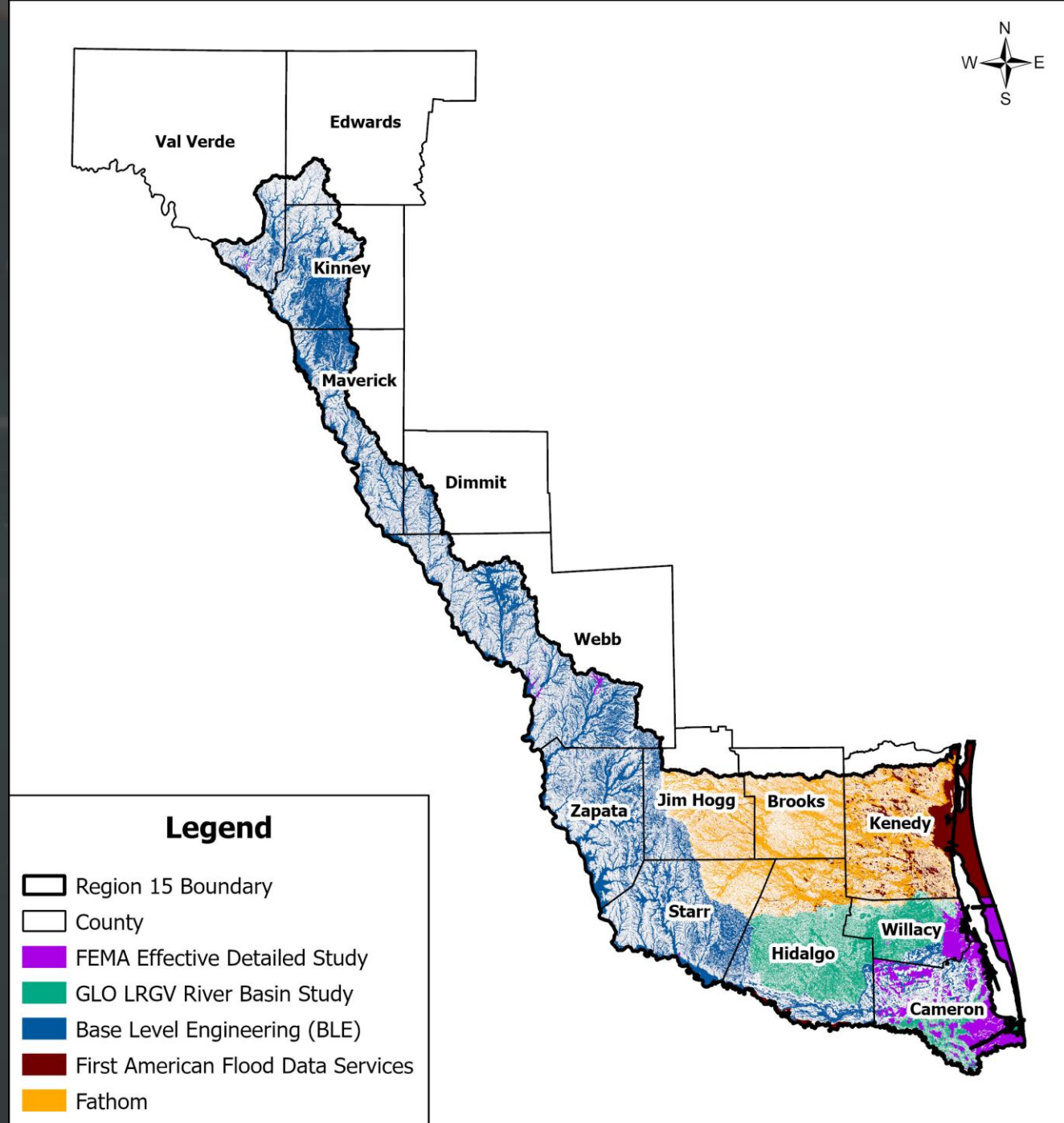
- Riverine
- Coastal
- Pluvial including Urban flooding

FLOOD EVENT TYPES

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

DATA SOURCES

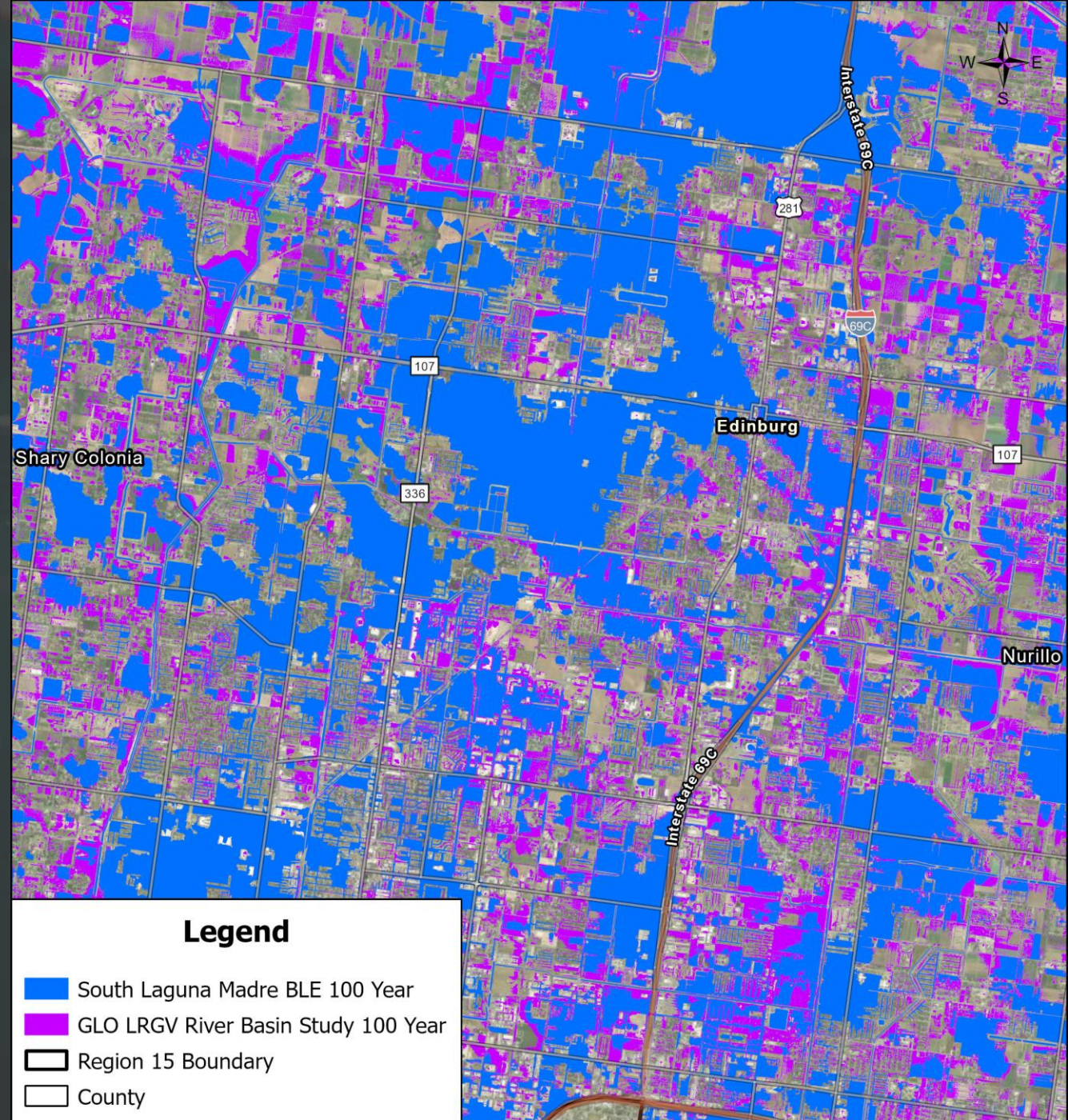
- TWDB Flood Quilt
- FEMA
- Regional/Community Data
- FATHOM





CH. 2 EXISTING CONDITIONS FLOOD RISK ANALYSIS

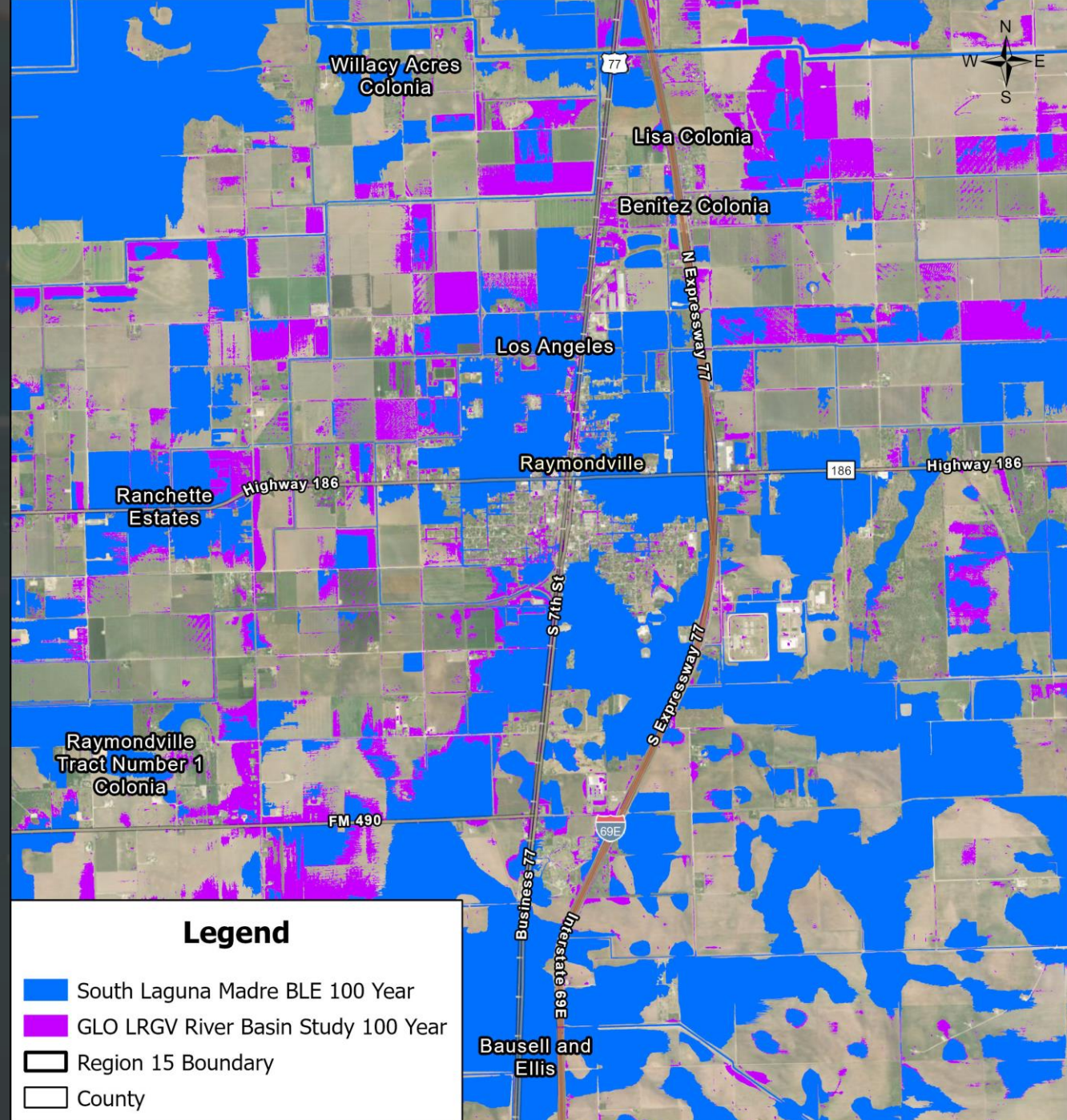
- GLO LRGV River Basin Study
- Calibrated Model
- External Review Process and Approval
- Example: Edinburg Area





CH. 2 EXISTING CONDITIONS FLOOD RISK ANALYSIS

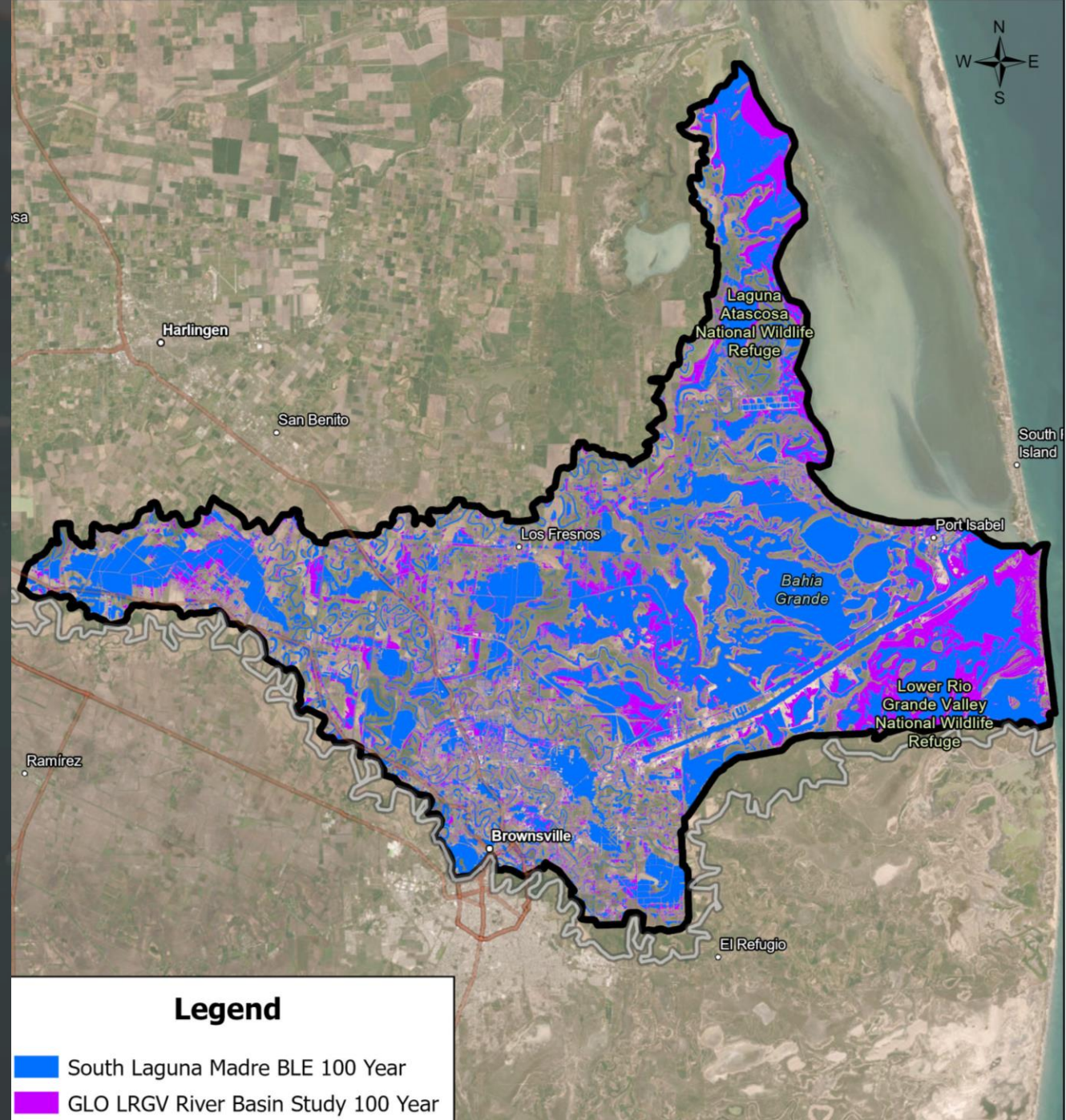
- GLO LRGV River Basin Study
- Calibrated Model
- External Review Process and Approval
- Example: Raymondville Area





CH. 2 EXISTING CONDITIONS FLOOD RISK ANALYSIS

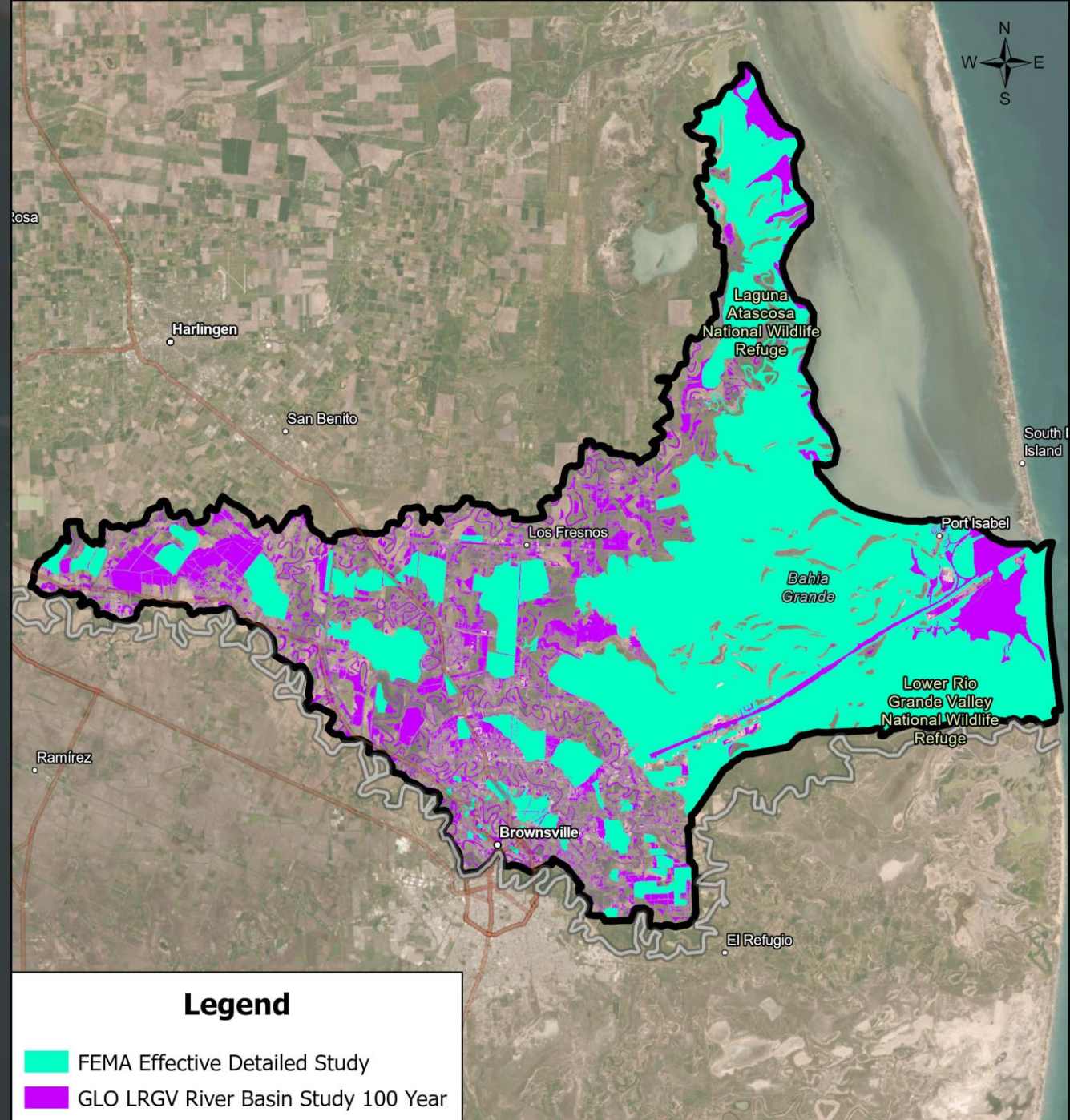
- GLO LRGV River Basin Study
- Calibrated Model
- External Review Process and Approval
- Example: Brownsville to Port Isabel HUC and Coastal Area





CH. 2 EXISTING CONDITIONS FLOOD RISK ANALYSIS

- Proposed Existing Flood Quilt in Brownsville to Port Isabel HUC and Coastal Area
 - FEMA Flood Hazard Data
 - GLO LRGV River Basin Study in lieu of BLE





Chapter 3 Update

Task 3c: Flood Mitigation and Floodplain Management Goals



CH. 3C FLOODPLAIN MANAGEMENT GOALS



Specific &
Achievable



Short-term (10 yrs)
&/or
Long-term (30 yrs)



Residual
Risk



Regionwide
or Subregional



CH. 3C FLOODPLAIN MANAGEMENT GOALS

Goal Categories/ Objectives	Category 1. Education and Outreach	Category 2. Flood Warning and Readiness	Category 3. Flood Studies and Analysis	Category 4. Regulatory and Guidance	Category 5. Property Acquisition, Structure Elevation and Floodproofing	Category 6. Flood Infrastruc ture Projects
Protect Life	●	●	●	●	●	●
Protect Infrastructure		●	●	●	●	●
Protect Property		●	●	●	●	●
Protect the Environment			●	●	●	●
Protect/Enhance Water Supply				●	●	●
Sustain the Economy		●		●	●	●
Realize Multiple Benefits				●	●	●
Increase Public Awareness	●	●	●	●	●	
Build Community Support	●	●	●	●		



CH. 3C FLOODPLAIN MANAGEMENT GOALS – EDUCATION AND OUTREACH

Proposed Goal Statement	Preliminary Approx. Baseline Measurement	Short Term (2033) First Cycle	Long Term (2053) First Cycle	Short Term (2038)	Long Term (2058)
Increase the number of Region 15 entities participating in public outreach and education activities to improve awareness of flood hazards and benefits of flood planning in the region.	15%	20% - 30%	60%	?	?
Increase the number of entities and public stakeholders participating in the regional flood planning process.	19%	30% - 40%	70%	?	?



CH. 3C FLOODPLAIN MANAGEMENT

GOALS – FLOOD WARNING AND READINESS

Proposed Goal Statement	Preliminary Approx. Baseline Measurement	Short Term (2033) <i>First Cycle</i>	Long Term (2053) <i>First Cycle</i>	Short Term (2038)	Long Term (2058)
Develop a regionally coordinated warning and emergency response program that can detect the flood threat and provide timely warning of impending flood danger to the most populated areas of the region.	37% (working towards goal) 0% currently covered	40% - 50%	70%	?	?
Increase the number of flood gauges (rainfall/stream) in the region.	65 current gages (increased from 8 in 2021)	30% - 40%	70%	?	?



CH. 3C FLOODPLAIN MANAGEMENT GOALS – FLOOD STUDIES AND ANALYSIS

Proposed Goal Statement	Preliminary Approx. Baseline Measurement	Short Term (2033) <i>First Cycle</i>	Long Term (2053) <i>First Cycle</i>	Short Term (2038)	Long Term (2058)
Decrease the average age of FEMA Flood Insurance Rate Maps used to define SFHAs in the region.	401 FIRMs <20 yrs (out of 506)	30% - 40%	70%	?	?
Increase the coverage of available flood hazard data in the region by completing studies in areas identified as having gaps in flood mapping data.	17%	30% - 40%	70%	?	?
Develop and maintain an operational stormwater asset management plan.	9%	40% - 50%	70%	?	?



CH. 3C FLOODPLAIN MANAGEMENT GOALS – REGULATORY AND GUIDANCE (FLOOD PREVENTION)

Proposed Goal Statement	Preliminary Approx. Baseline Measurement	Short Term (2033) <i>First Cycle</i>	Long Term (2053) <i>First Cycle</i>	Short Term (2038)	Long Term (2058)
Increase the number of Region 15 communities participating in the National Flood Insurance Program (NFIP).	91%	100%	100%	?	?
Increase the number of entities that adopt higher than NFIP-minimum standards	18%	40% - 50%	60% - 70%	?	?
Increase participation in the Community Rating System (CRS).	2%	30% - 40%	50%	?	?



CH. 3C FLOODPLAIN MANAGEMENT GOALS – REGULATORY AND GUIDANCE (FLOOD PREVENTION)

Proposed Goal Statement	Preliminary Approx. Baseline Measurement	Short Term (2033) <i>First Cycle</i>	Long Term (2053) <i>First Cycle</i>	Short Term (2038)	Long Term (2058)
Increase the number of entities that have a dedicated drainage fee to help implement future Flood Mitigation Evaluations (FMEs) and Flood Mitigation Projects (FMPs).	2%	30% - 40%	50%	?	?
Increase the number of communities that impose penalties for noncompliance with standards.	2%	30% - 40%	50%	?	?
Reduce increases in future flood risk to life and property by regulating development in future conditions floodplains.	2%	30% - 40%	50%	?	?



CH. 3C FLOODPLAIN MANAGEMENT GOALS – PROPERTY ACQUISITION, STRUCTURE ELEVATION, AND FLOODPROOFING

Proposed Goal Statement	Preliminary Approx. Baseline Measurement	Short Term (2033) <i>First Cycle</i>	Long Term (2053) <i>First Cycle</i>	Short Term (2038)	Long Term (2058)
Reduce the number of structures that have been subject to repeated flooding events through property buyouts.	TBD	\$10 M	\$50 M	?	?
Increase the acreage of publicly protected open space in critical flood risk areas.	TBD	300K acres	600-800K acres	?	?
Remove existing structures from 1% annual chance floodplain by structural elevation and floodproofing.	TBD	70%	100%	?	?



CH. 3C FLOODPLAIN MANAGEMENT GOALS – FLOOD INFRASTRUCTURE PROJECTS

Proposed Goal Statement	Preliminary Approx. Baseline Measurement	Short Term (2033) <small>First Cycle</small>	Long Term (2053) <small>First Cycle</small>	Short Term (2038)	Long Term (2058)
Increase the number of nature-based flood risk reduction projects.	TBD	\$10 M	\$50 M	?	?
Reduce the number of vulnerable critical facilities within the existing 1% annual chance floodplain event.	12%	70%	100%	?	?
Increase the number of entities that provide regional detention as part of their floodplain management program.	22%	30%	60%	?	?



Chapter 4 Update

**Update on Amendment Submitted
April 1, 2025**

**Task 4a: Identification and Evaluation
of Potential FMXs**



UPDATE ON RFP AMENDMENT

- Amendment Submitted on April 1, 2025
 - 89 New FMEs, 11 New FMPs, 35 New FMSs
 - Submittals from over 30 Region 15 Stakeholders
- RFI Received from TWDB on July 28, 2025
 - 40 minor comments received
 - Comments were addressed and resulted in minor updates to geodatabase and tables
 - Complete RFI response submitted to TWDB on 8/13/25
- TWDB considering request to incorporate additional FMXs into amendment pending view of formal written request





TASK 4A: IDENTIFICATION AND EVALUATION OF POTENTIAL FMXS

- Call for FMXs for 2028 Regional Flood Plan posted to Region 15 website
 - Emails to Region 15 Stakeholders
 - Email List and Targeted Emails
 - Follow up Virtual Meetings with Stakeholders
 - Phone Call Outreach in Progress
- **FMX Submittals Due September 19, 2025**



FMX = FMSs, FMEs, and FMPs



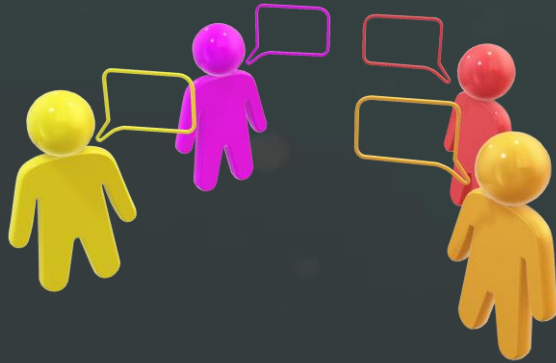
Chapter 10 Update

Task 10: Public Participation/Outreach



CH. 10 PUBLIC PARTICIPATION / OUTREACH

- Calls, Emails, Virtual Meetings, In-Person Meetings



RFPG Contact Log						
Date	Sender	Sender Organization	Contact Name	Entity Contacted	Format	Outreach Messaging
4/21/2025		LRGVTF	Carlan Marin GM & Ben Escobar	CCDD3	In-Person Meeting	
4/23/2025		LRGVTF	Maricela Gonzales	City of Donna	In-Person Meeting	
4/24/2025		LRGVTF	Anabel G. Salinas	CCDD1	In-Person Meeting	
4/24/2025		LRGVTF	Raul Garcia	City of Los Fresnos	In-Person Meeting	
7/23/2025	Anne Whitko	Halff	Maria Rangel, Miranda Garcia	City of Pharr	E-Mail	follow up on survey tool
7/23/2025	Anne Whitko	Halff	Candy Hobbs	Kinney Cty	Virtual Meeting	discussion of County MDP and FMX submittals for 2028 RFP
8/1/2025	Anne Whitko	Halff		Multiple Entities	E-Mail	Call for FMXs for 2028 RFP
8/8/2025	Anne Whitko, Kristina Leal, Elmer Hinojosa	Halff	Roberto Hernandez	Harlingen	Virtual Meeting	discussion on current FIF study (anticipated to conclude by end of Aug.) and required information to include in 2028 plan (and possibility of adding to previous amendment)
8/11/2025	Anne Whitko	Halff	Candy Hobbs	Key Cty	Phone Call	responding to questions on FMXs
8/15/2025	Anne Whitko	Halff	Kenneth Blum	San Antonio, TX	Phone Call	responding to questions on FMXs



CH. 10 PUBLIC PARTICIPATION / OUTREACH

- Public Meeting Scheduled to present FMX submittal process and draft existing conditions flood risk data
 - TWDB Regional Flood Planning Requirement
 - Will be preparing web map to facilitate review and comments from public
- Coordinating an additional meeting in Laredo



HELP SHAPE THE LOWER RIO GRANDE
REGIONAL FLOOD PLAN

SEPTEMBER 10, 2025
4:00 PM TO 6:00 PM

REGION 15 LOWER RIO GRANDE REGIONAL FLOOD PLANNING GROUP PUBLIC MEETING

UTRGV Center for Innovation and Commercialization
307 E. Railroad St. WCIC 118
Weslaco, Texas 78596

RSVP & Questions:
evelyn@texaspathfinder.com



CH. 10 PUBLIC PARTICIPATION / OUTREACH

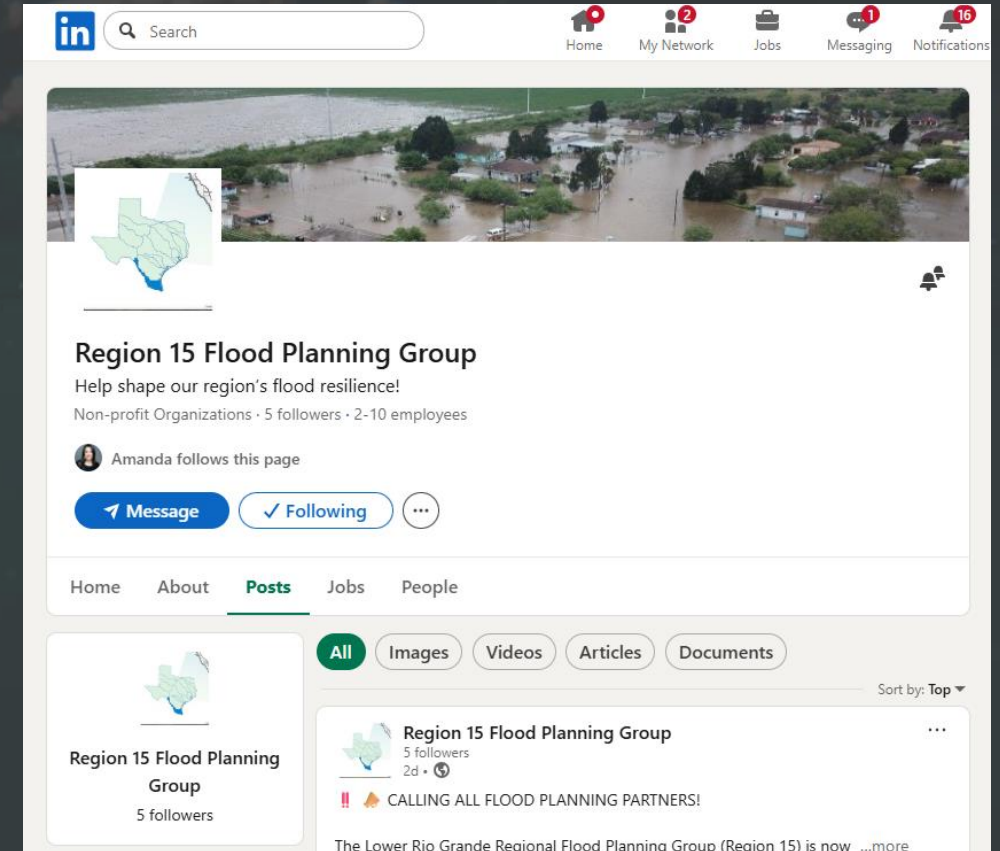
Region 15 on Social Media

- Posted Introduction/Welcome, Survey Link, call for FMXs, Region 15 website link

Facebook: <https://www.facebook.com/profile.php?id=61578625946987>

X (formerly
Twitter): <https://x.com/Region15LRGRFP>

LinkedIn: <https://www.linkedin.com/company/region-15-flood-planning-group/>





Agenda Item No. 10

**Discussion and Possible
Action on Existing
Conditions Flood Quilt
Hierarchy**



Agenda Item No. 11

**Discussion and Possible
Action on Flood
Mitigation and Floodplain
Management Goals**