

# FLOG/FIM Meeting Agenda, 2 May 2025

1. Update from the National Water Center (Derek Giardino)
2. Updates from federal and state agencies in Texas
3. Featured presentation from Texas General Land Office: [River Basin Flood Study \(RBFS\) Update and TDIS Data and Models Query Tool \(DMQT\) Demo](#)
4. Further Discussion



# Texas General Land Office

River Basin Flood Study (RBFS) Update & TDIS DMQT Demo

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# RBFS Study Goal



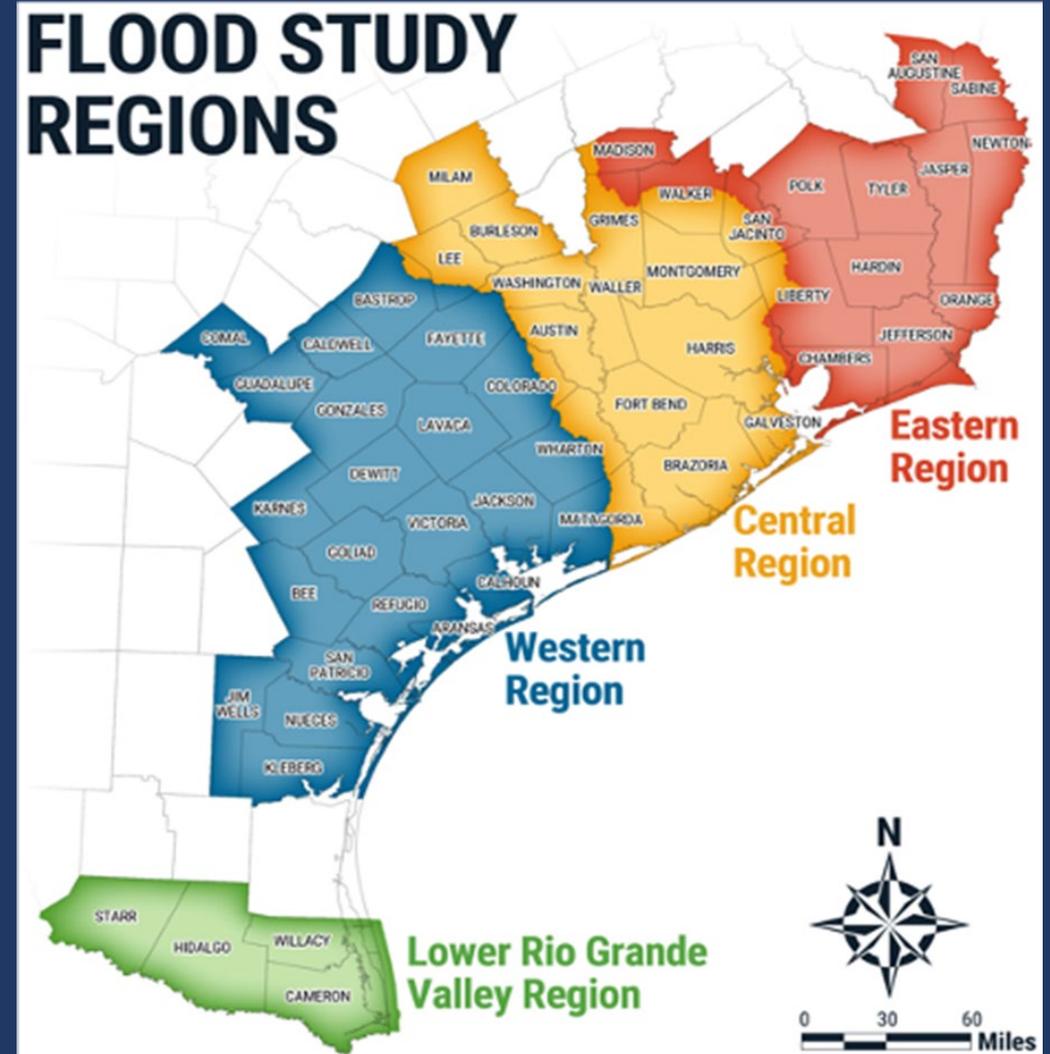
Accurately model and evaluate flood risks within the study area



Assist communities in developing cost-effective flood mitigation strategies



Determine potential funding sources for mitigation projects



# Strategic Framework

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# Hydraulic & Hydrologic Models



Model  
Type



Flood  
Types



Review

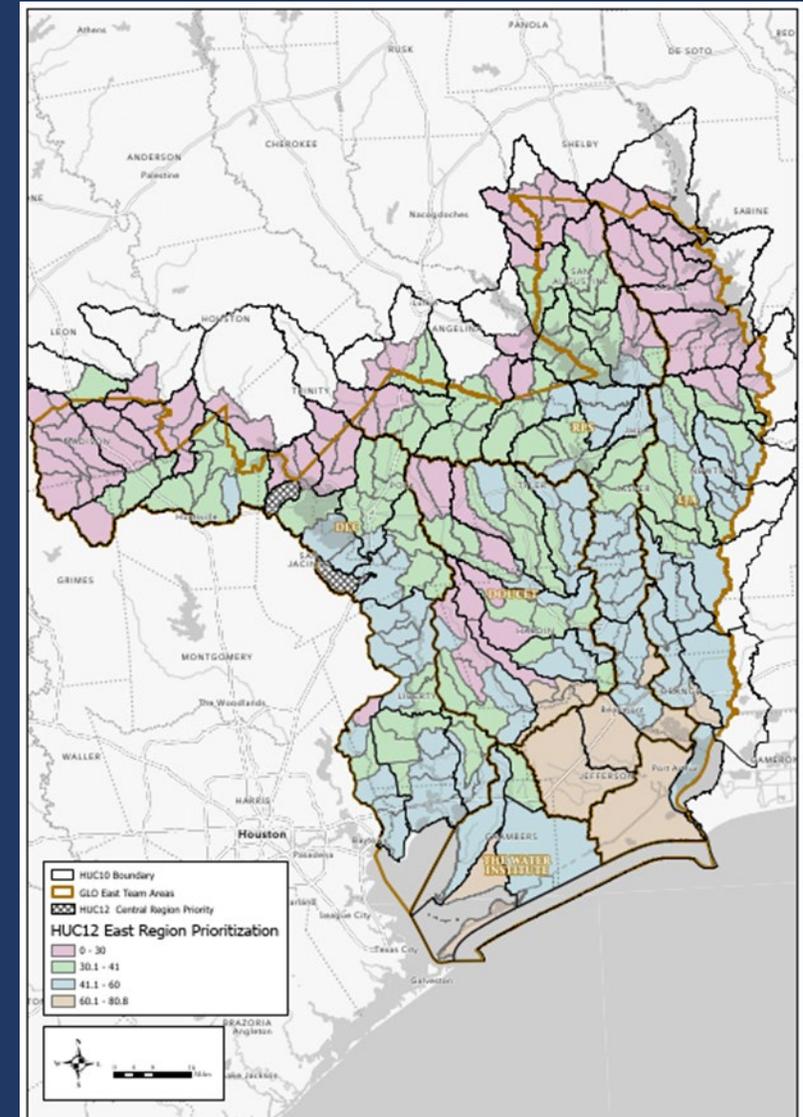
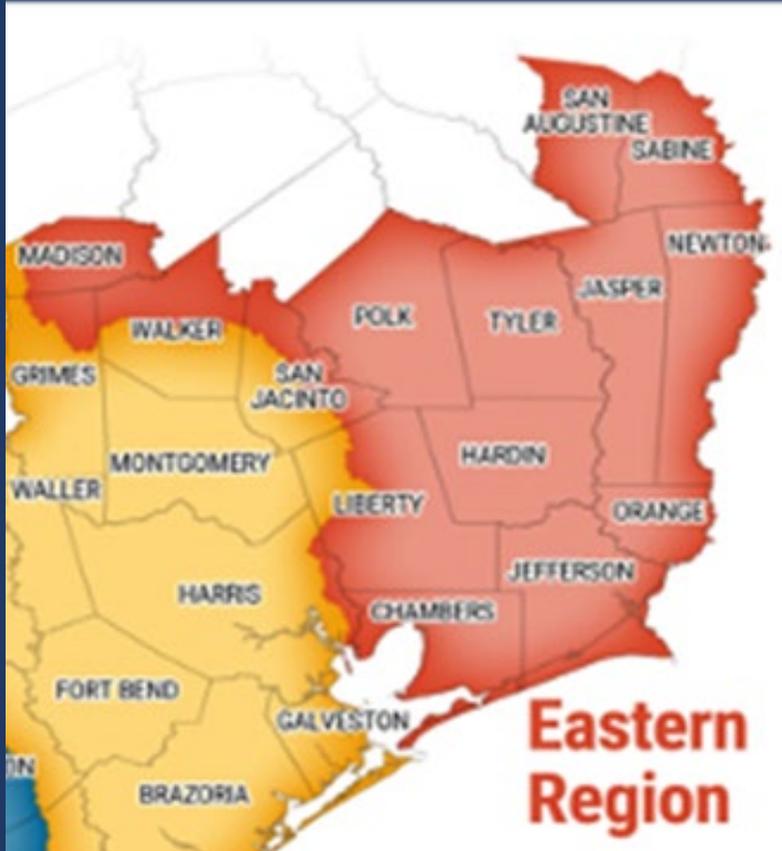


Level of  
Detail



Tiers

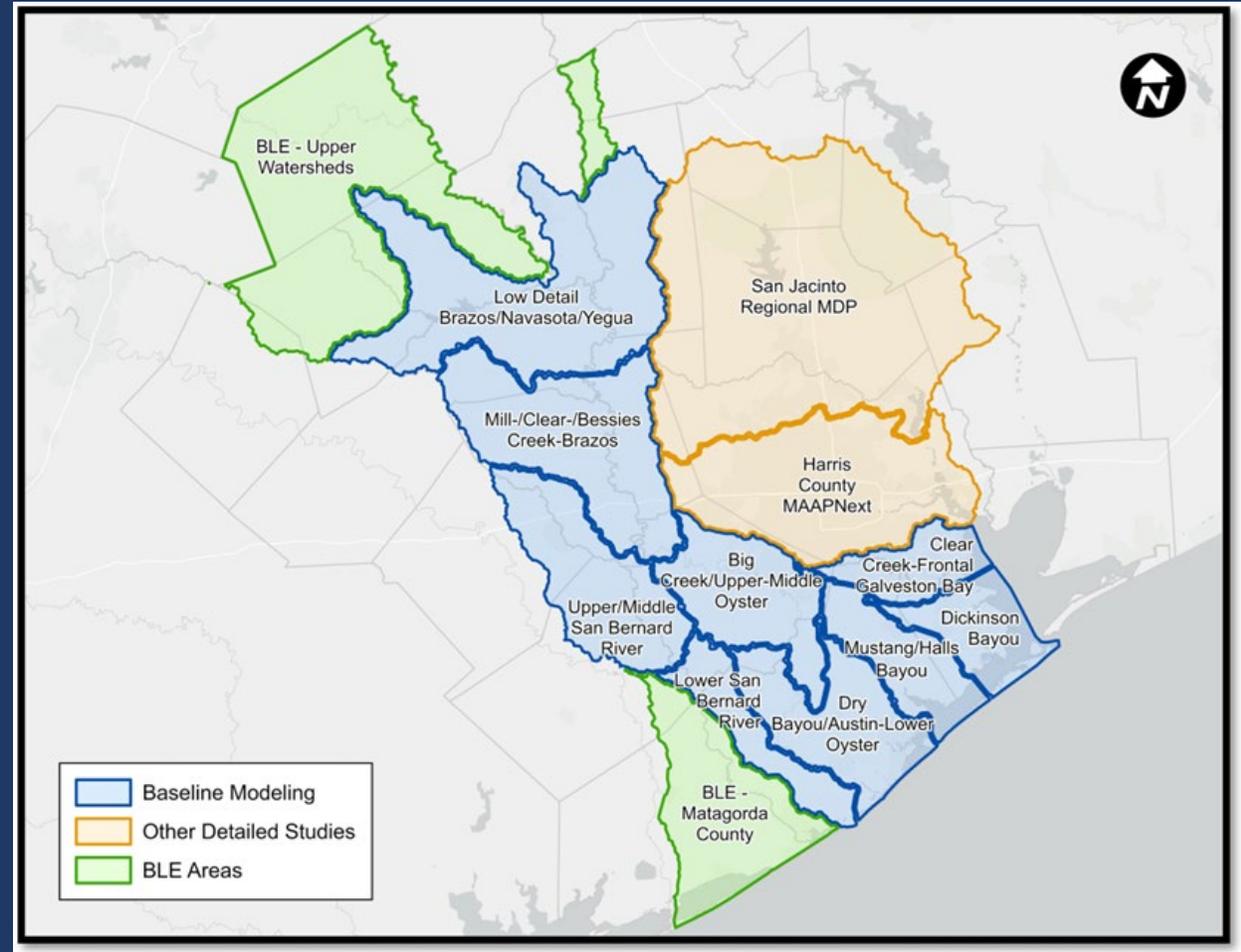
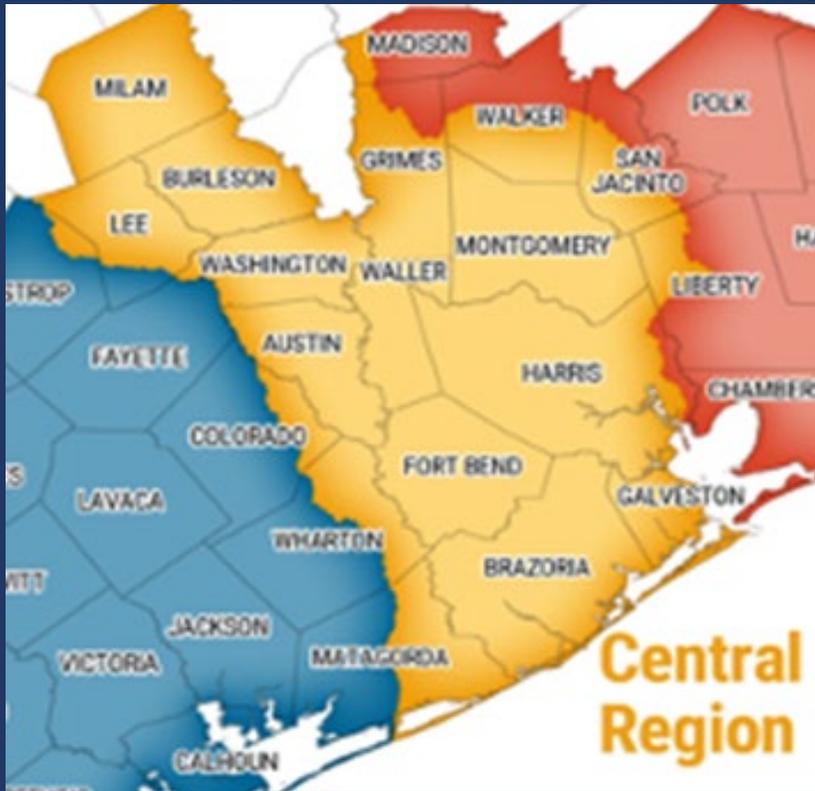
# East Region



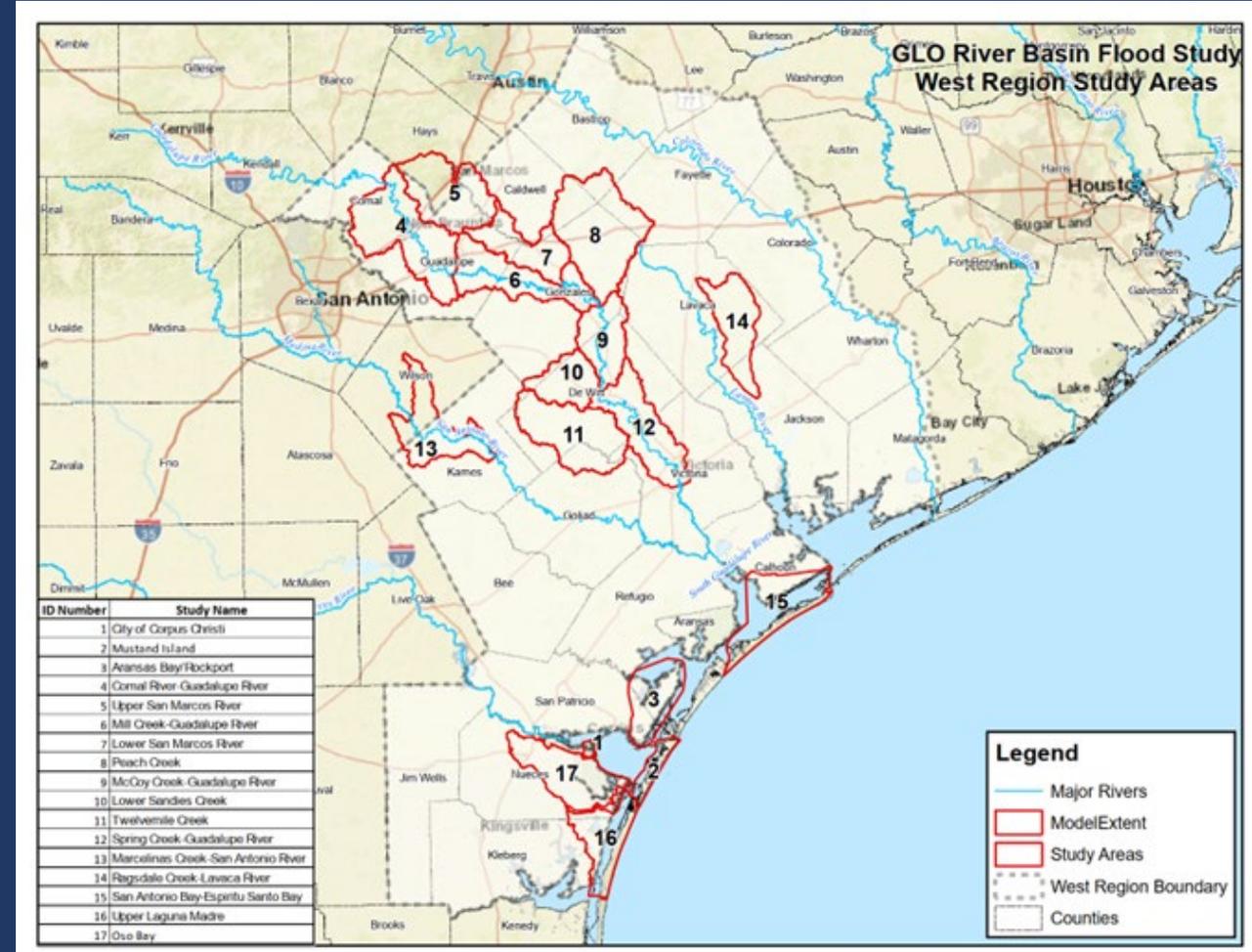
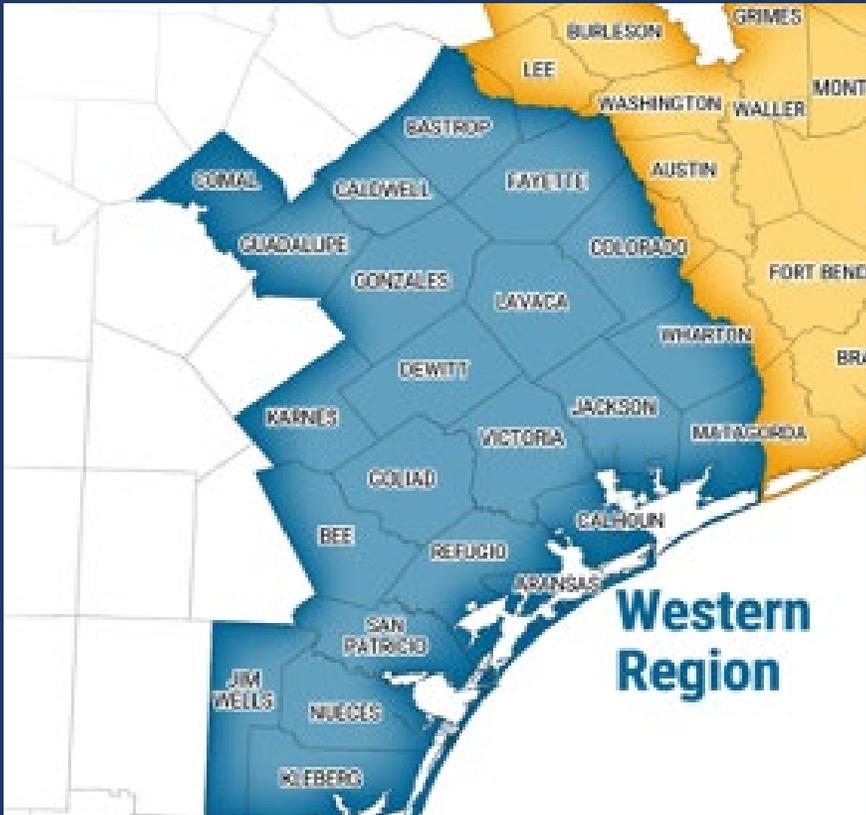
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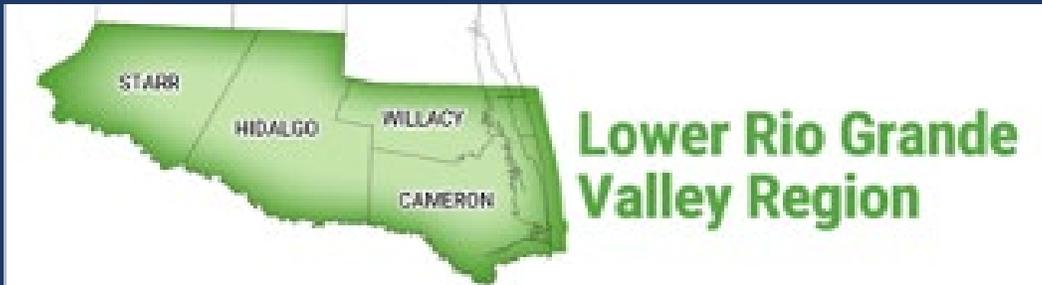
# Central Region



# West Region



# LRGV Region



# RBFS Model Availability

- 47/75 Baseline Models Complete
- 17 available in DMQT
- All available by end of June



**Legend**

- ▲ EuroTop USACE Coastal Texas Study Save Points
- USACE Coastal Texas Study Save Points
- CGRRMS
- Barge Dock
- COFPS Seawall (Sloped Wall)
- Museum Buildings (Vertical Wall)
- Museum Floodwall (Vertical Wall)
- Port Coastal Structure (Vertical Wall)
- Salt Flats Levee (Levee)
- USACE Seawall (Vertical Wall)

Corpus Christi Flood Risk Reduction System

### Hydrologic Approach

- Rain-on-Mesh with NOAA Atlas 14 Precipitation
- Initial & Constant Loss Infiltration
  - USACE Fort Worth District method for determining losses based on % sand
- Radar rainfall verified against NOAA gage data from Corpus Christi International Airport and Corpus Christi Naval Air Station
- Wave overtopping inflow time series included for the Corpus Christi Flood Risk Reduction System (levee)
  - Wave overtopping starts to occur during the 100-year surge-only event
- Existing land use datasets
  - Land Use dataset from the City of Corpus Christi and SLAMM Land Cover Model
- Future land use datasets
  - Integrated Future Land Use dataset from the City of Corpus Christi and SLAMM Land Cover Model

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## DOWNTOWN CORPUS CHRISTI (HUC10:1211020202) 100% MODELING REPORT

The enclosed hydrologic and hydraulic models, final report, and GIS data were developed for the Texas General Land Office (GLO) for its Regional River Basin Flood Study project. The purpose of these models, final report, and associated GIS data is to better understand existing conditions for the GLO study. These products should not be used for construction or bidding purposes. For areas where FEMA effective FIRM maps do not include regulatory flood zones, or where Zone A is depicted, these maps could be considered best available data at the discretion of the local floodplain administrator. Enclosed models, reports, and GIS data may require additional effort to support a FEMA map update. The Texas General Land Office and AECOM make no representations or warranties regarding the accuracy or completeness of the information provided in the enclosed documents or the data from which they were produced. No representations or warranties are made regarding the utility of any of the data or data representations for purposes other than those stated above. Not for use beyond those included in and specific to the scope of the RBFS project.

Study Area Designation: Downtown Corpus Christi  
Vendor/Region: AECOM / West Region  
Model Completion Date: 01/27/2025  
Hydrologic Model: Downtown Corpus Christi - FECHMS version 4.1.0  
Hydraulic Model: Downtown Corpus Christi - FECHAS version 6.4.1  
Horizontal Datum: North American Datum 1983 (NAD83)  
Vertical Datum: North American Vertical Datum 1988 (NAVD88)  
Projection: Texas Central Albers Equal Area  
Linear Units: U.S. Feet (Horizontal and Vertical)

December 13, 2024



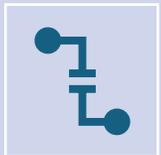
# Hot Spot Analysis



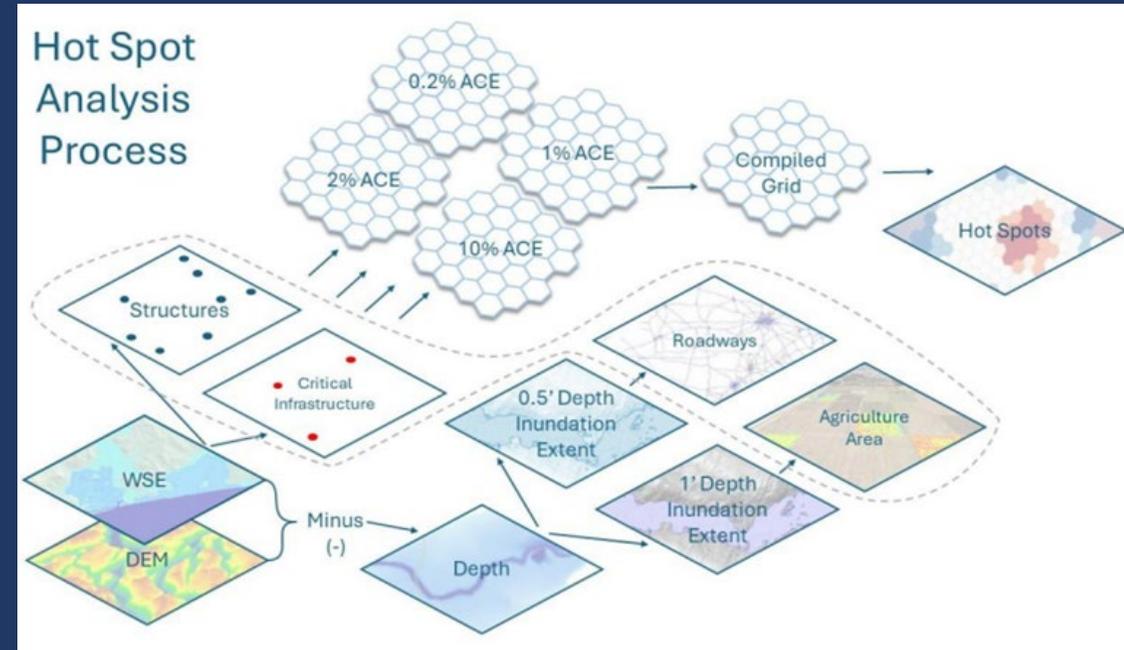
Identify Hot Spots



Map out Hot Spot Locations

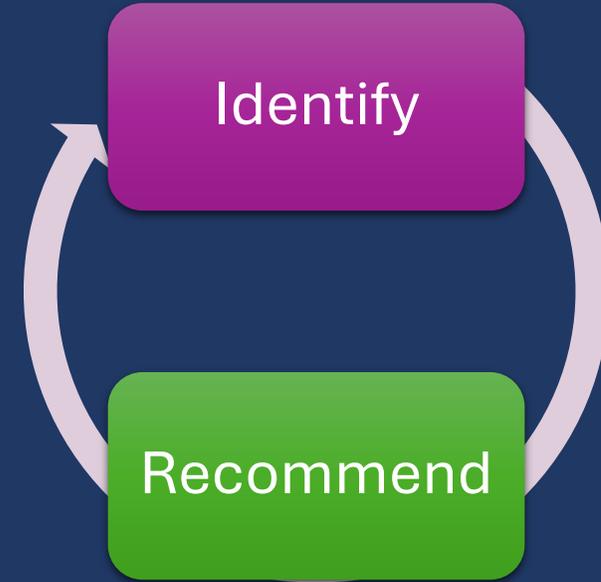


Group into Mitigation Areas

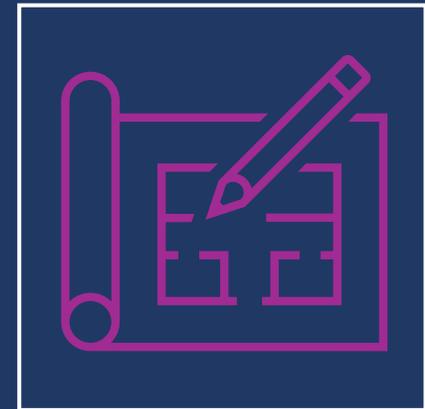
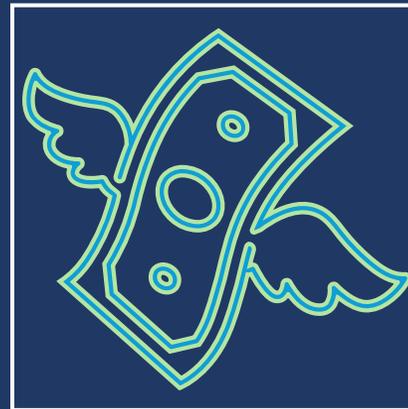


# Next Steps

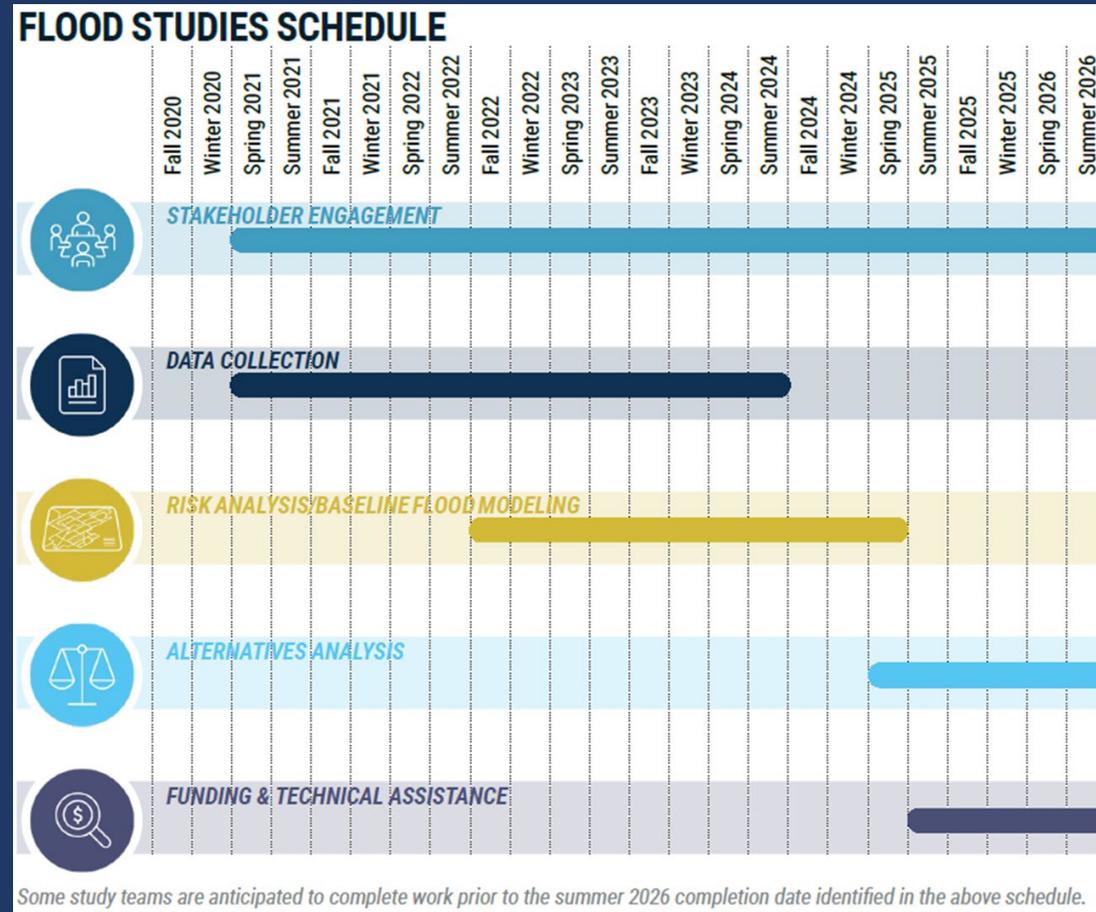
- Phase 4- Alternatives Analysis and recommended alternatives



- Phase 5 (FTA) – Funding and Technical Assistance



# RBFS Schedule



# Questions?

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Contact Krystle Haney or Skyler LeVrier



[Krystle.Haney.glo@recovery.texas.gov](mailto:Krystle.Haney.glo@recovery.texas.gov)

[Skyler.LeVrier.glo@recovery.texas.gov](mailto:Skyler.LeVrier.glo@recovery.texas.gov)



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