TEXAS RIVER BASIN FLOOD STUDIES

A COORDINATED APPROACH TO FLOOD RISK MANAGEMENT

JULY 2023

RIVER BASIN FLOOD STUDY

The purpose of this document is to demonstrate how different flood planning efforts in Texas are coordinated in order to build resilience throughout the state.

Following the devastating impacts of flooding due to recent extreme weather events, the state of Texas received U.S. Department of Housing and Urban Development (HUD) Community Development Block Grants (through the Texas General Land Office) and expanded the Texas Water Development Board's authority to include flood planning. As a result, the Texas General Land Office (GLO) and the Texas Water Development Board (TWDB) are both undertaking significant steps to contribute to our state's flood resilience.

In September 2020, the GLO initiated the Combined River Basin Flood Studies, a one-time planning effort which will result in detailed flood risk information and mitigation strategies for the 49 counties which received a presidential disaster declaration due to the impact of Hurricane Harvey plus 4 counties in the Lower Rio Grande Valley that received a presidential disaster declaration for flooding in 2015 and/or 2016.

Concurrently, the TWDB formed 15 Regional Flood Planning Groups (RFPGs) statewide to conduct planning processes that will result in regional flood plans. The Texas Water Code required the RFPGs to deliver their initial regional flood plans to the TWDB in January 2023, and subsequent regional flood plans are required to be delivered every five years thereafter. The state flood plan, to be based on adopted regional plans, must be prepared and adopted by the TWDB by September 2024, and every five years thereafter.

Stakeholder engagement will occur throughout the implementation of the GLO and the TWDB's planning processes to ensure the diverse needs and interests of the state are incorporated.

These significant steps taken by the state of Texas will result in better prepared and more flood resilient communities throughout our state.

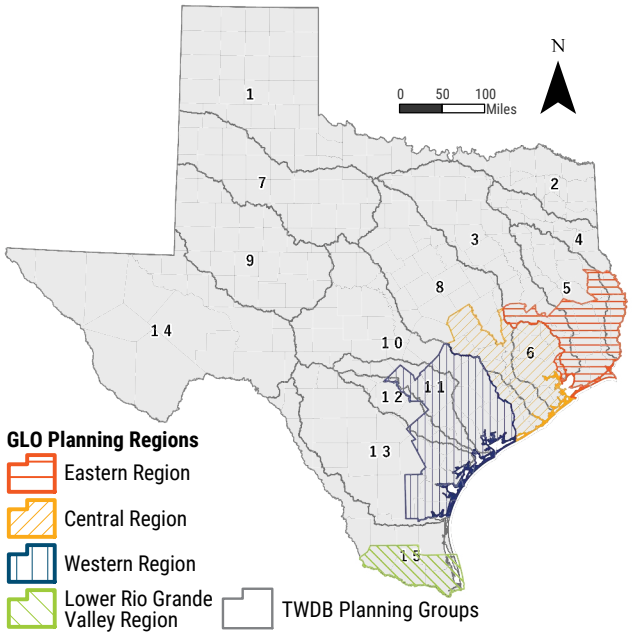
Flood Planning Process Delivery Partners

To deliver the Combined River Basin Flood Studies, the GLO is partnering with active federal and state agencies, seeking to draw from the strengths, expertise, and capabilities of public, private, and academic centers of excellence throughout the state of Texas. These agencies include:

- Local Governments and County Emergency Management Offices
- Texas Water Development Board (TWDB)
- Drainage Districts
- Texas Natural Resources Information System (TNRIS)
- Texas A&M AgriLife Extension – Community Health and Resource Management (CHARM)
- State River Authorities
- Federal Emergency Management Agency (FEMA)
- National Oceanic and Atmospheric Administration (NOAA)
- National Weather Service (NWS)
- Texas Department of Emergency Management (TDEM)
- United States Geological Survey (USGS)
- Universities, including Texas A&M University and University of Texas – Austin

Flood Planning Areas

Texas General Land Office and
Texas Water Development Board



About the Texas Disaster Information System

The Texas Disaster Information System (TDIS) is an interactive, web-based spatial data system designed to support preparedness, response, recovery, and mitigation for the state of Texas. This statewide system will utilize data and information collected and produced by the GLO and TWDB to provide users with the most current and accurate information available to assess related disaster risks, impacts, and mitigation strategies.

ONGOING FLOOD STUDIES: A SIDE-BY-SIDE COMPARISON

	GLO Combined River Basin Flood Studies	TWDB Regional Flood Planning
Study Leads	The Texas General Land Office (GLO)	The Texas Water Development Board (TWDB)
Study Contact Information	The study area has been divided into four combined river basin regions, including: ▸ **The Eastern Region** – David Mass, David.Mass.GLO@recovery.texas.gov ▸ **The Central Region** – David Mass, David.Mass.GLO@recovery.texas.gov ▸ **The Western Region** – Krystle Haney, Krystle.Haney.GLO@recovery.texas.gov ▸ **The Lower Rio Grande Region** – Krystle Haney, Krystle.Haney.GLO@recovery.texas.gov **Website:** recovery.texas.gov/planning-studies/river-basin-study/index.html *Note: The GLO Combined River Basin Flood Studies do not encompass the entire state of Texas.*	TWDB Contact: James Bronikowski, PE, CFM, james.bronikowski@twdb.texas.gov, FloodPlanning@twdb.texas.gov **Website:** www.twdb.texas.gov/flood/planning/index.asp
Approach	This is a one-time planning effort, and the data and information produced by the GLO will: ▸ Be utilized to support current and future Texas State Flood Plans (led by TWDB). ▸ Inform the Texas Disaster Information System (TDIS), a critical tool for the state to assist communities in the development of disaster recovery and mitigation plans. The following will be accomplished by the GLO's Combined River Basin Flood Studies: ▸ Evaluation of flood risks to Texans within the study regions, empowering Texas residents with flood risk information and tools. ▸ Development of cost-effective mitigation strategies to further the resilience of our Texas communities. ▸ Determination of funding sources for future mitigation projects to support the state's resilience and growth.	The TWDB is now administering a new state and regional flood planning process with flood planning regions based on river basins. These regional flood plans will be revised and updated every five years. The overarching goal of TWDB regional and state flood planning is to reduce the risk and impact of flooding to lives and property. This will be achieved by reducing the risk of flooding that currently exists and preventing creation of new flood risk by the means of responsible floodplain management practices.
Delivery Timeline	Risk analysis and baseline modeling are currently underway. Once flood risk for communities has been identified, an alternatives analysis will be conducted. Following project identification, the regional planning teams will assist communities with determining applicable funding sources. The planning process is expected to conclude in summer 2026. *Note: Some study teams are anticipated to complete work prior to the summer 2026 completion date identified in the above schedule.*	The TWDB's regional flood planning process was developed, and initial regional flood planning groups were formed in mid 2020. The first regional flood plans will be due in January 2023, and the first state flood plan will be due to the Texas Legislature by September 1, 2024. This planning process will be ongoing, and an updated plan will be developed by the TWDB every five years.
Flooding Types Considered	Coastal and riverine flooding within the study regions	Coastal flooding, riverine flooding, and dam safety
Total Budget (to Date)	**$100 Million Total** ($30M of HUD CDBG-DR funds for each of the Eastern, Central, and Western Regions; $10M of CDBG-MIT funds for the Lower Rio Grande Valley Region)	**$29.5 Million Total** (As appropriated by the 86th Texas Legislature)