# LOWER RIO GRANDE VALLEY WATERSHED ASSESSMENT













#### BACKGROUND AND PURPOSE



**Background:** The U.S. Army Corps of Engineers (USACE) in partnership with Cameron County is conducting a watershed assessment of Hidalgo, Cameron, Willacy, and Kenedy County. This assessment will identify the problems, opportunities, goals, and constraints facing agencies with water resource related responsibility in the region and will develop a strategic roadmap to inform future investment decisions by multiple agencies.

**Purpose:** This slide deck provides an overview of the draft shared vision, problems, opportunities and objectives for the study. Your feedback will be invaluable to the study process.



### PROJECT INFORMATION



#### **Authorization**

WRDA of 1986 (33.U.S.C. 2267a), Section 729, as amended in WRDA 2000, WRDA 2007, P.L. 110-114

#### **Non-Federal Sponsor**

Cameron County

#### **Estimate Cost - \$3M**

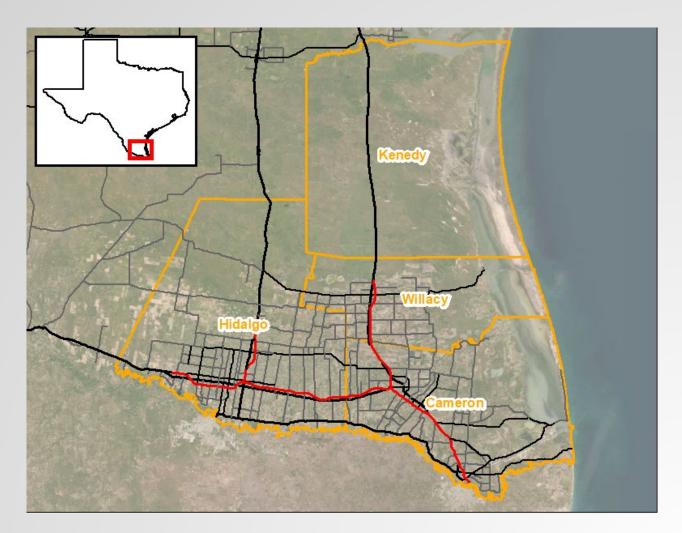
75% Federal contribution 25% Cameron county contribution

#### **Study Area**

Defined by HUC 10 Watersheds within or contributing to conditions in Cameron, Hidalgo, Willacy, and Kenedy counties

#### **Estimate schedule**

Study start date: Dec 2022 Study end date: Dec 2027

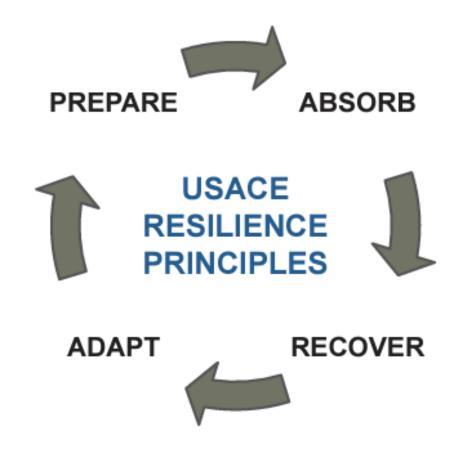




## WHAT DOES RESILIENCY MEAN TO USACE?



The U.S. Army Corps of Engineers defines resilience as "the ability to anticipate, prepare for and adapt to changing conditions and withstand, respond to, and recover rapidly from disruptions."





# WHAT DOES RESILIENCY MEAN TO THE LRGVWA?



#### The Lower Rio Grande Valley Watershed Assessment defines resiliency as....

Who?	Infrastructure, communities, water supply, environmental habitats
What?	Variable rainfall and availability of water. Severe droughts to severe flooding.
When?	Short and long-term
Where?	The Lower Rio Grande Valley (Cameron, Hidalgo, Willacy, and Kenedy counties)
Why?	Protect the economic, environmental, and social value of the Lower Rio Grande Valley
How?	Promote shared responsibility, identify a range of actions, and suggest regional investments



### SHARED VISION STATEMENT - DRAFT



Cameron County in partnership with Hidalgo, Willacy, and Kenedy County, and the State of Texas, recognize the challenges the Lower Rio Grande Valley faces. Water resource challenges are exacerbated by the growing need for affordable housing, including updated critical infrastructure needs; international water control policies; water supply and quality for potable, agriculture and aquatic ecosystem needs; as well as the management of risks associated with coastal storms, riverine flood risk and stormwater management.

These partners, in collaboration with USACE, other Federal Agencies and non-Federal stakeholders, seek to develop a comprehensive plan focused on water resource related resiliency across the entire LRGV. USACE, with its technical and engineering planning expertise will support the development of a plan to meet the long-term viability needs of the Region.



#### **PROBLEMS**



Socially vulnerable communities experience decreased economic resilience and increased risk to public safety from coastal, riverine, and stormwater flooding events.

Loss of floodplain functions in the region has reduced capacity in streams, rivers, and other bodies of water depended upon for stormwater management and drainage leading to an increased risk of inundation and degradation of natural resources.



Source: NOAA Brownsville/Rio Grande Valley, TX Weather Forecast Office Storm Summary (The Great June Flood of 2018 in the RGV (weather.gov))





### **PROBLEMS**





Mercedes Lateral Ditch Work. Image accessed from https://www.hcdd1.org/page/projects

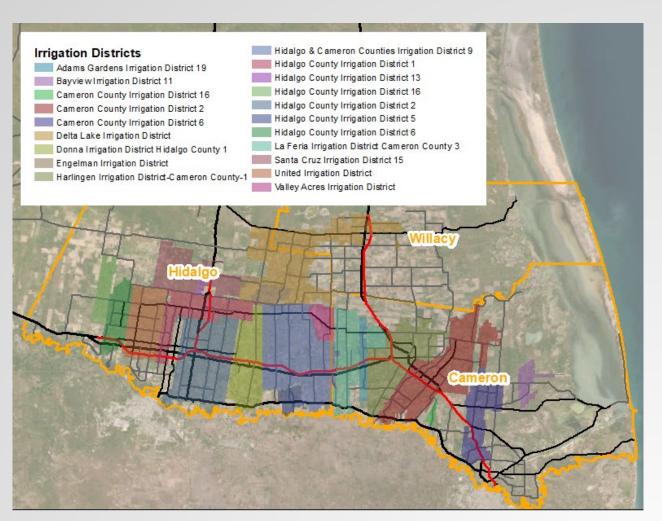
Increased drought conditions and demand for water supply to support population growth, agriculture and ranching production has stressed water supply and water quality across the region.



#### **PROBLEMS**



Lack of regional, comprehensive, long range watershed management plans degrade regional resilience to water resource problems and increases risk to public health and safety.



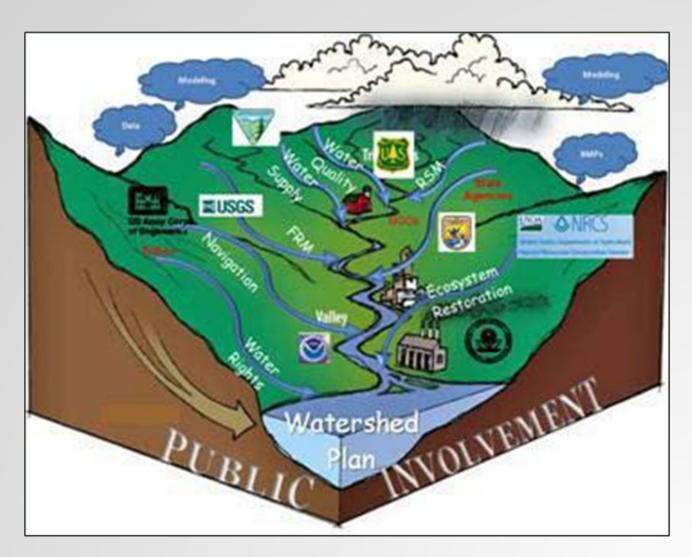


#### **OPPORTUNITIES**



#### Opportunities exist to:

- Improve resilience of the region
- Manage the risks associated with flooding
- Utilize natural and nature-based features
- Improve floodplain management and restore floodplain functionality



### STUDY GOALS AND OBJECTIVES



Study goals: To provide a comprehensive water resource management strategy for the LRGV.

**Objectives:** Actions we want to accomplish with the assessment

- 1.) Support community resiliency and recovery from flood and drought related events.
- 2.) Increase community outreach to improve the public's understanding of flood risk and provide them with the tools to reduce risks.
- 3.) Improve reliability and resiliency of water resources to meet increasing demand during drought through integrated watershed management.
- 4.) Increase long-term resilience of infrastructure and environment to inland and coastal (RSLC) climate stressors.

### **COLLABORATIVE APPROACH**



- U.S. Army Corps of Engineers
- State of Texas
- Federal, State, and Local Agencies
- Cameron, Hidalgo, Willacy, and Kenedy counties
- Those that live and work in the Lower Rio Grande Valley

### **ENGAGEMENT STRATEGY**



- Working groups set up by challenges to include:
  - ✓ Riverine Flooding
  - ✓ Coastal Flooding
  - ✓ Interior Drainage/stormwater
  - ✓ Economic Development/Socially Vulnerable Communities
  - ✓ Ecosystem Restoration
  - √ Water Supply
- Public meetings and engagements schedule coming soon!

Sign

Cost-Share

Agreement

Dec

2022

### STUDY SCHEDULE



SINGLE-PHASE Watershed Assessments

#### **Conduct Annual IPR's**

Recommendations

Identification of spin-off studies

2



Develop a PMP

Sponsor provides

proportional share

of funding and/or

in-kind contributions

- Watershed Vision
- Study framework
- Draft Report Synopsis
- Risk Register
- Decision Management Plan
- Presentation

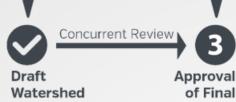
Aug 2024



Assessment/

Milestone

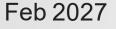
- Report synopsis
- Risk register
- Decision Management Plan
- Decision Log
- Presentation



Approval of Final Watershed Plan

Report

Milestone





Plan

### **SUBMIT COMMENTS TO:**



Comments can be submitted to <a href="mailto:CESWG-PM-LRGVWA@usace.army.mil">CESWG-PM-LRGVWA@usace.army.mil</a>.

Comments accepted anytime, but most helpful to have by July 24, 2024.