

# EXHIBIT A

## **Lower Rio Grande Valley Flood Risk Management and Resilience Project**

The three counties (Cameron, Hidalgo and Willacy) that constitute the core of the Lower Rio Grande Valley Development Council's (LRGVDC) service area narrowly avoided major impact by hurricane Harvey. These counties did, however suffer significant damage during the floods of June 2018. This whitepaper describes a regional initiative to address systemic and repeated flooding, water quality impairments and ecological degradation within the Lower Rio Grande Valley (LRGV) in a holistic and integrated fashion.

The LRGV is characterized by a flat topography, with five major drainage pathways from west to east – the Raymondville Drain, the Hidalgo Main Drain, the International Boundary Water Commission's (IBWC) Floodway, the Arroyo Colorado, and the Rio Grande River. This drainage pattern is intersected and cross-hatched with numerous irrigation and drainage canals and ditches dating back to the early 1900's. This complex hydrography is further confounded by numerous overlapping political jurisdiction and local government entities that often have conflicting if not contradicting authority and responsibility over stormwater, drainage and flood control. The underlying hydrology of the region serves to further discretize and confound the analysis of water quality and watershed ecology with the five main drainage pathways effectively dominating watershed delineation. LRGV land use patterns have evolved dramatically over the last fifty (50) years with agricultural crop production giving way to ever expanding urban areas.

The complex hydrology of the LRGV necessitates assessment and implementation of flood management structural and non-structural controls that have compounding effects on local water quality.

Unfortunately, the complex governmental structures have historically limited the region's ability to plan in a holistic manner, with regional efforts disaggregating into a compendium of local projects that, while having localized benefit, demonstrate limited impact on systemic regional flooding issues. As a result of hurricane Dolly in 2008, the US Department of Commerce's Economic Development Administration, under Grant No. 08-79-04390, authorized the development of the Lower Rio Grande Valley Regional Economic Adjustment Plan For Building Disaster Resilient Communities, that was finalized in September of 2012. This extensive effort enumerates local projects broken down by county, and well as identifying the potential to establish one or more Stormwater Control District as a means of integrating regional efforts.

In the January of 2019, the LRGVDC unanimously voted to establish the Regional Water Resource Advisory Council (RWRAC) as an integrating body to facilitate the development and implementation of regional strategies for Flood Management & Mitigation, Water Supply, and Environmental Quality. This body, facilitated by the LRGV Stormwater Taskforce (SWTF), has aggressively pursued engagement of state and federal agency interest in supporting regional flood management efforts.

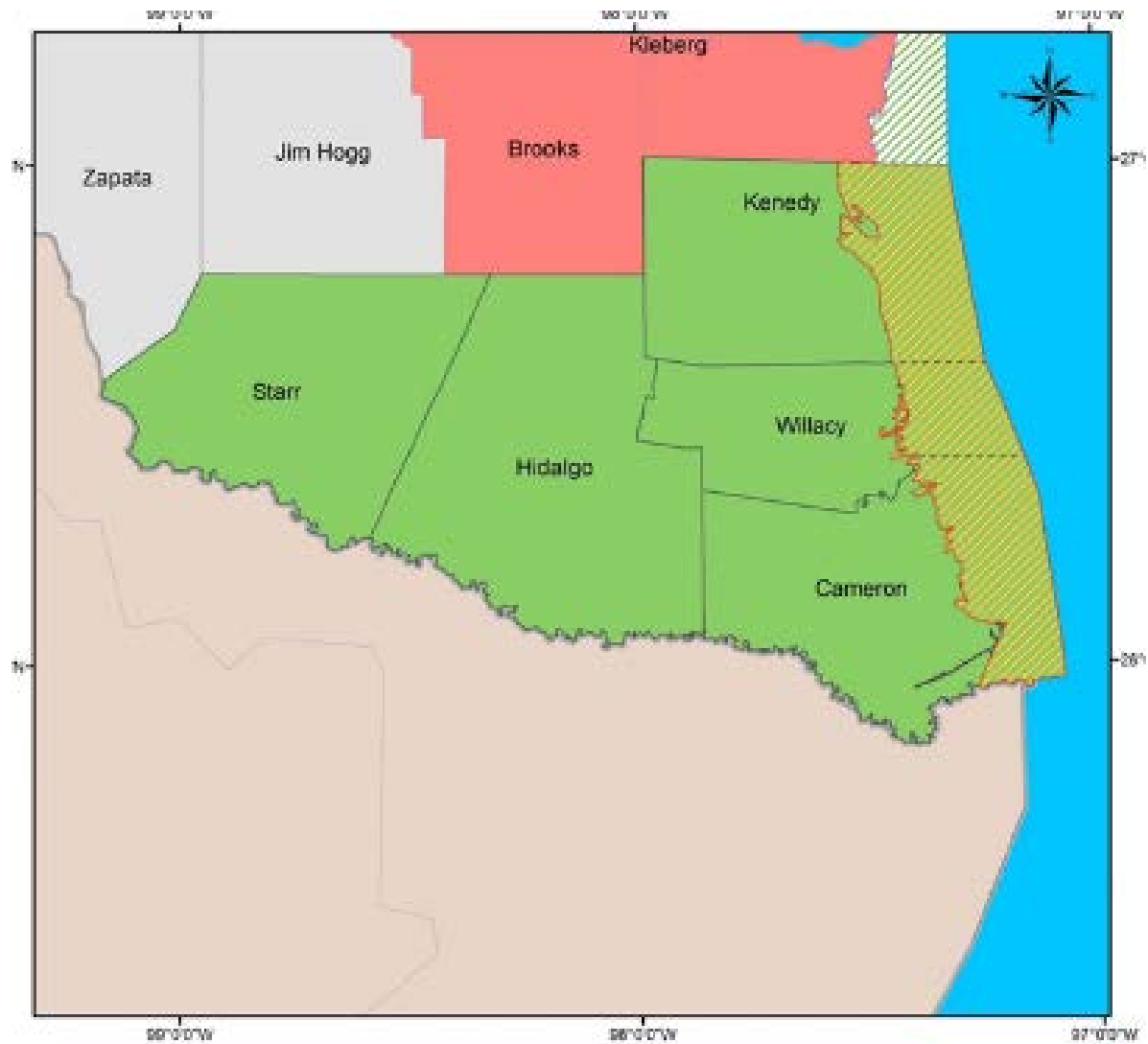
The region has a history ecological and environmental management, including an initiative to designate the Lower Laguna Madre as a National Estuary (Figure 3). Figure 4 depicts the currently active Watershed Management projects being executed in coordination with the RWRAC. Shortly after, during

the May 2019 meeting of the International Boundary Water Commission (IBWC) Lower Rio Grande Valley Citizen's Forum, a compelling case was made for the deployment of a regional real-time monitoring network. At the end of that month, during the annual joint SWTF Conference and U.S. Army Corps of Engineers (USACE), Galveston District, Coastal Science and Engineering Collaborative (CSEC) symposium, a plethora of state and federal agencies engaged with LRGV local governmental entities in order to begin the process of developing, funding and implementing regional structural and non-structural systemic solutions to flooding and water quality impairments in the LRGVDC. Core to this goal is a holistic, regional hydrologic, hydraulic and watershed characterization.





Section 7001 of the Water Resources Reform and Development Act (WRRDA) 2014, as amended, requires that the Secretary of the Army annually submit to the Congress a report that identifies, for potential congressional authorization, completed feasibility reports, proposed feasibility studies submitted by non-Federal interests, proposed modifications to authorized water resources development projects or feasibility studies, and proposed modifications to environmental infrastructure program authorities.

The annual Report to Congress on Future Water Resources Development is to be based, in part, upon annual requests for proposals for authorization from non-Federal interests. The proposal period for the 2020 Report to Congress opens on April 29, 2019 for 120 days. The deadline for proposals is August 27, 2019.

Cameron, Hidalgo and Willacy Counties, in coordination with the LRGVDC RWRAC do seek to submit a proposal to develop a holistic, regional hydrologic, hydraulic and watershed characterization for inclusion in the annual Report to Congress on Future Water Resources Development.



### Legend

-  Upper Laguna Madre
-  Lower Laguna Madre
-  Gulf Coast Estuary Program
-  Lower Laguna Madre Estuary Program

Source: TNRIS & Gulf Coast Joint Venture



Figure 1. Lower Laguna Madre Estuary Program



RESEARCH, APPLIED  
TECHNOLOGY  
EDUCATION AND SERVICE



UTRGV

Saltillo Flats

Port Mansfield

Raymondville Drain

Willacy Main

Hidalgo Main

North Floodway

McAllen



Watershed Coordinator

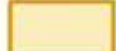

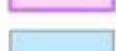
Arroyo Colorado

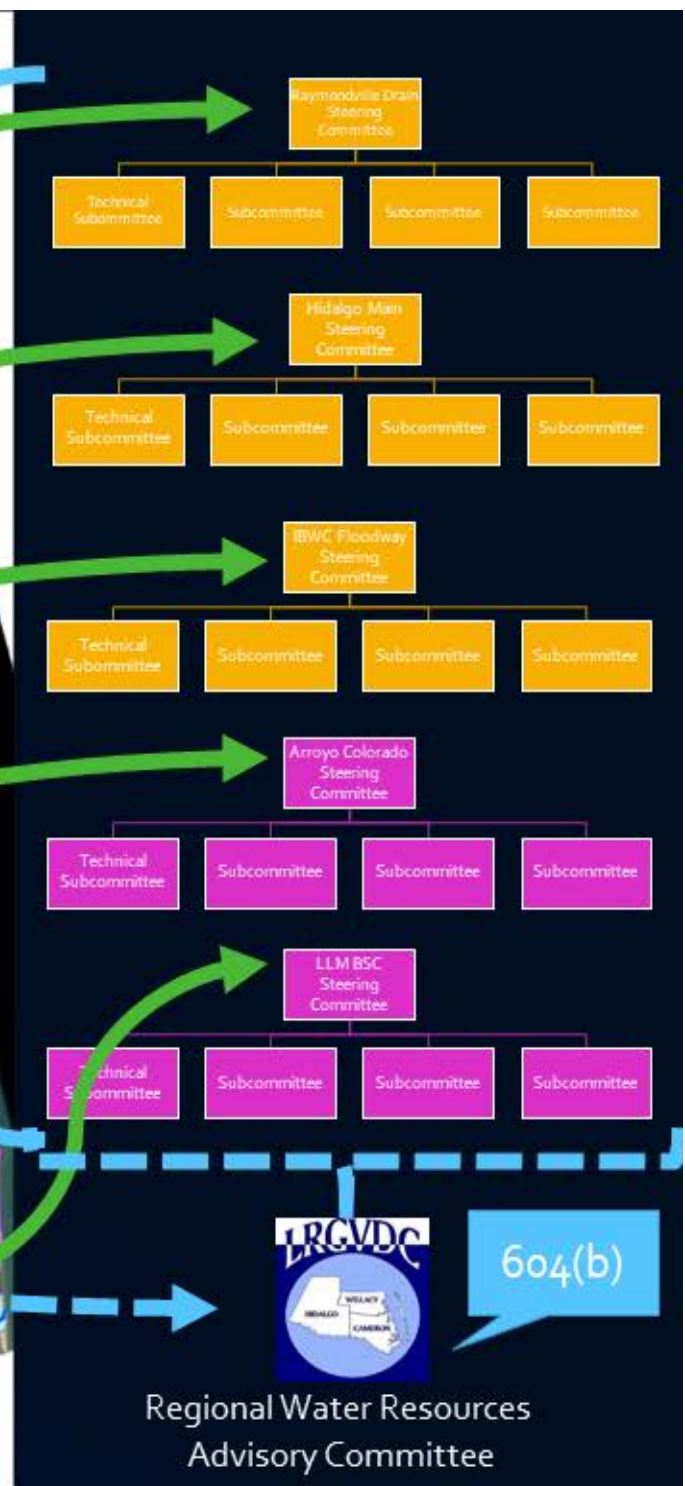
CC Ditch 2

CC Ditch 1

Ship Channel

Rio Grande

-  Watershed Characterization
-  Watershed Protection Plan
-  Rio Grande Watershed Initiative



604(b)

Regional Water Resources  
Advisory Committee