

Flooding Resilience Through Multi-Level Strategic Planning and Regional Partnerships

Stormwater Taskforce Conference

June 8, 2022.



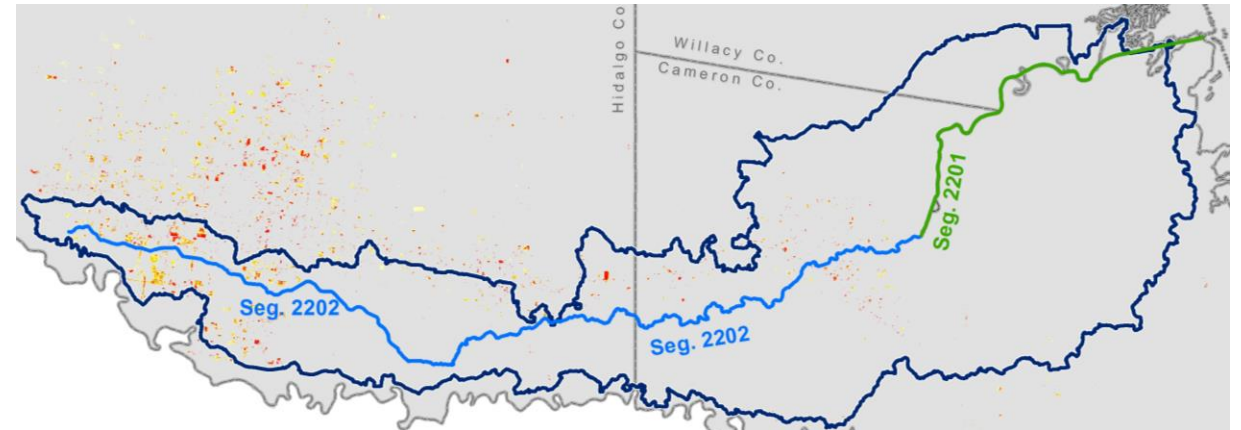
LRGV TPDES Stormwater Taskforce (1998)

- ▶ Founded in 1998, this coalition of 13 LRGV local governments (30 members today) joined to form the LRGV TPDES Stormwater Task Force (Task Force) in a joint effort to develop a proactive regional approach to comply with the TPDES Phase II Municipal Separate Stormwater Sewer System (MS4) rules.
- ▶ This grassroots regional effort has diversified its mission beyond compliance with state rules and now includes:
 - ▶ Watershed protection plan development
 - ▶ LID/GI promotion and implementation
 - ▶ Water quality initiatives



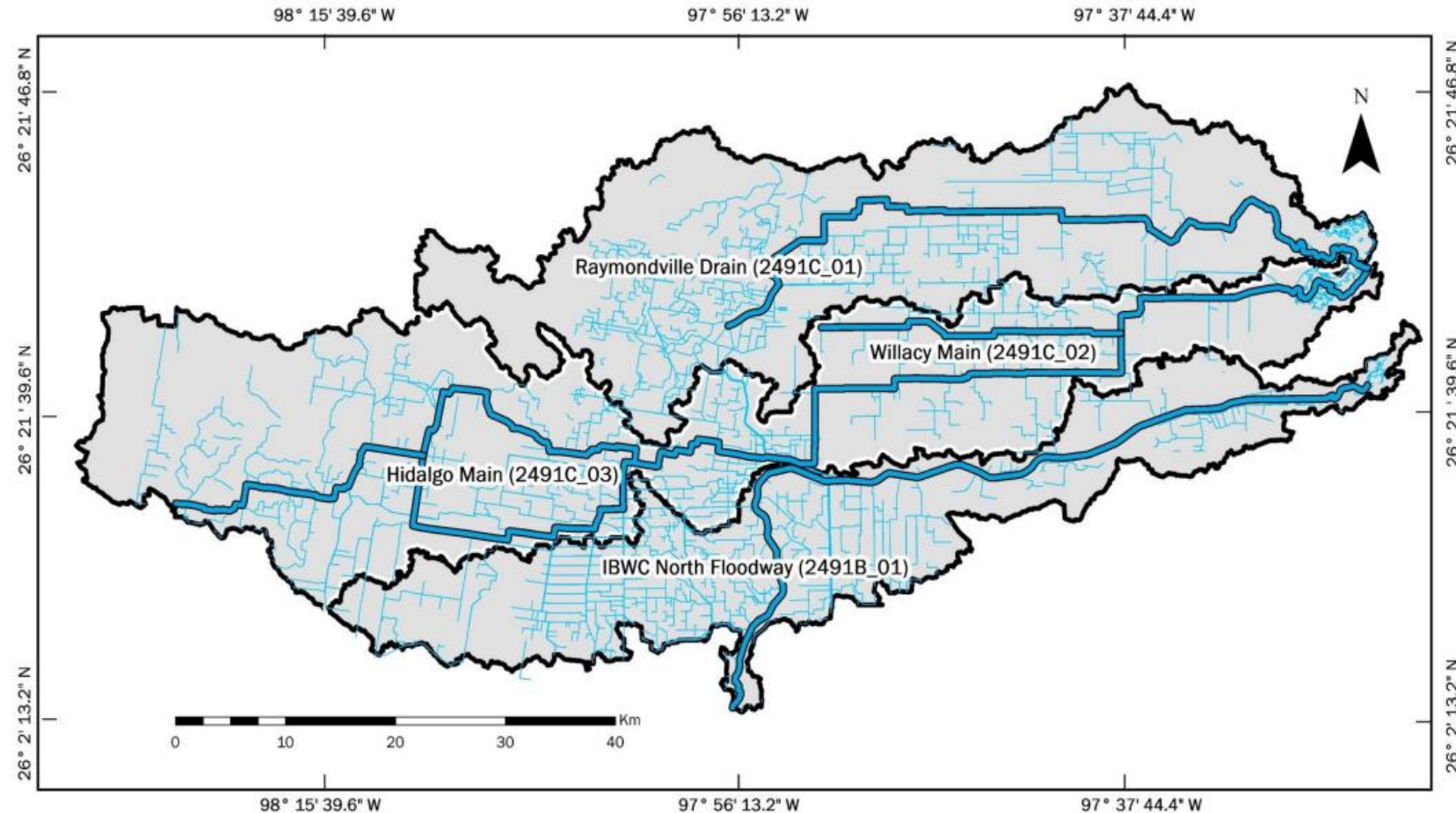
Arroyo Colorado Watershed Protection Plan (2006)

- ▶ In 2002 a TMDL study in the Arroyo Colorado (AC) watershed indicated low DO mostly related to the loading of nutrients and oxygen-demanding substances from the watershed.
- ▶ This study spawned the development of a partnership of local, state and federal stakeholders called the Arroyo Colorado Watershed Partnership (Partnership), who were tasked with developing a **community-based** watershed protection plan (WPP) to improve water quality in the Arroyo Colorado.
- ▶ Stake holders involved included
 - ▶ TAMU TWRI
 - ▶ LRGV TPDES Stormwater Taskforce
 - ▶ TAMU-Kingsville
 - ▶ All municipalities, drainage and irrigation districts within the watershed.



Development of additional WPPs

- ▶ In 2016 and 2017, through UTRGV and the Taskforce, funding from the CWA 319(h) program was secured
- ▶ This work will cover the entire tri-county region
- ▶ Local AND federal stake holders.

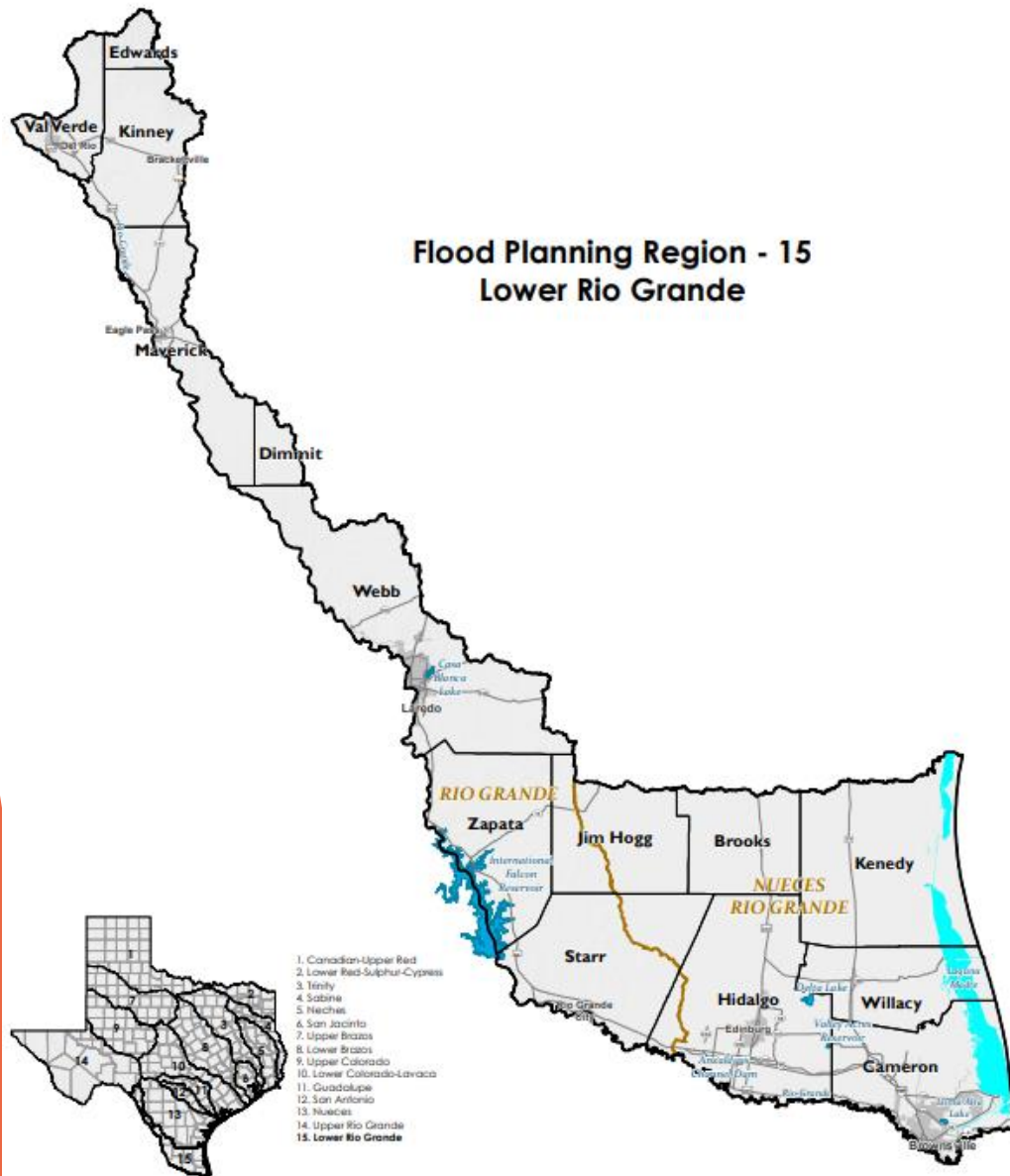


LRGVDC Regional Water Resources Advisory Committee (RWRAC)

- ▶ Started in 2017 as an informal workgroup with the LRGVDC to discuss drainage and flooding issues at a tri-county level (Hidalgo, Cameron and Willacy).
- ▶ In 2019 the LRGVDC formed RWRAC to educate, promote, foster, and coordinate community and regional planning efforts on the environmental, economic, and other social impacts of existing, new or proposed regulations, policies, and control regarding water resources management at HUC8 level (HUC12110208).



TWDB- Regional Flood Planning Group Region 15



The Regional Flood Planning Group Region 15 main goal is to minimize the impact of flooding in the Region 15 Flood Planning Group Area while considering the public safety, economic, environmental and societal implications of its recommendation.

The first regional flood plans will be due in January 2023, and the first state flood plan will be due September 1, 2024

TWDB-Flood Infrastructure Fund



Texas Water
Development Board

Total Active Projects

32

Committed Amount

\$112,038,744

Category 1

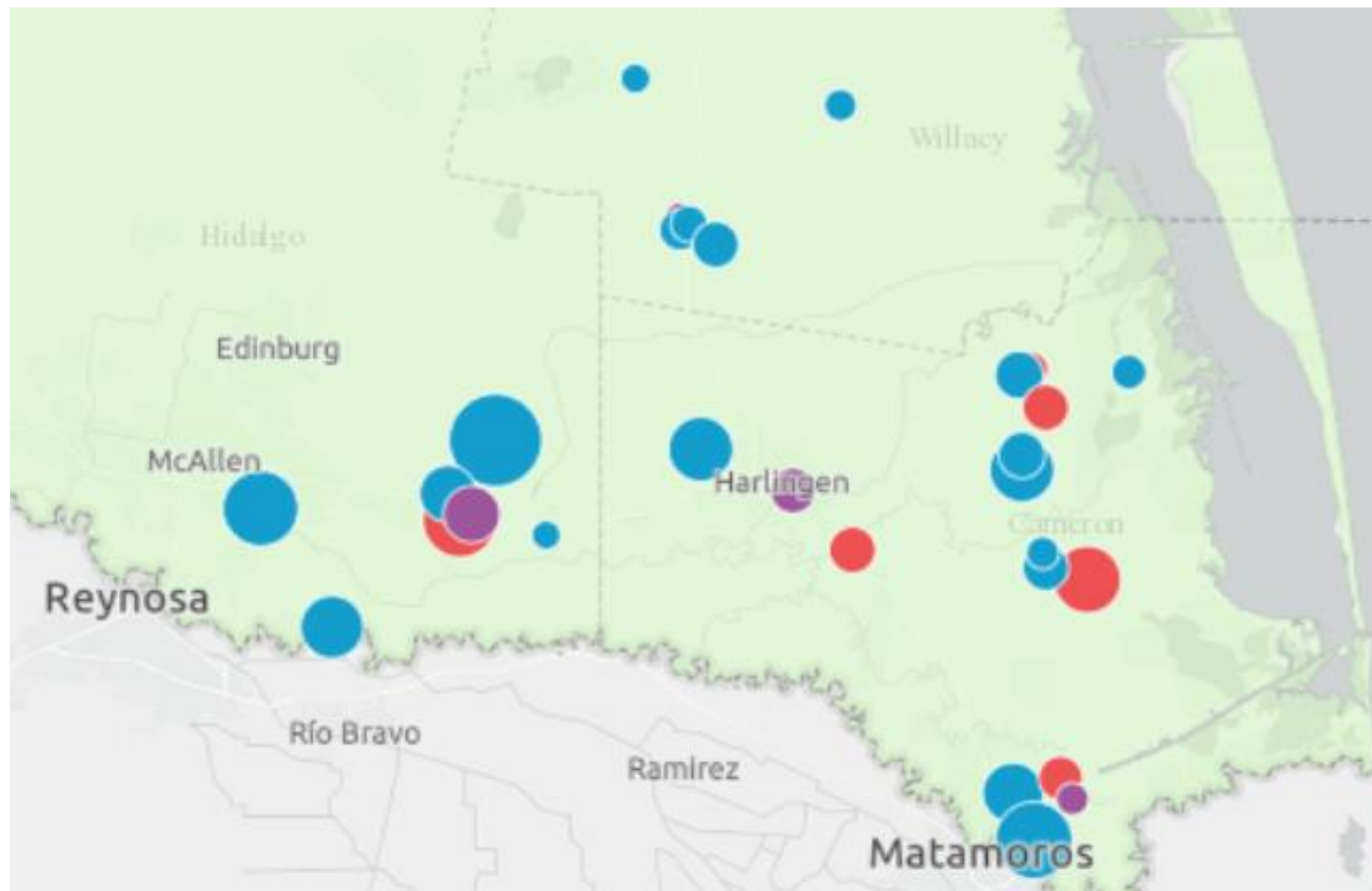
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Category 2

22

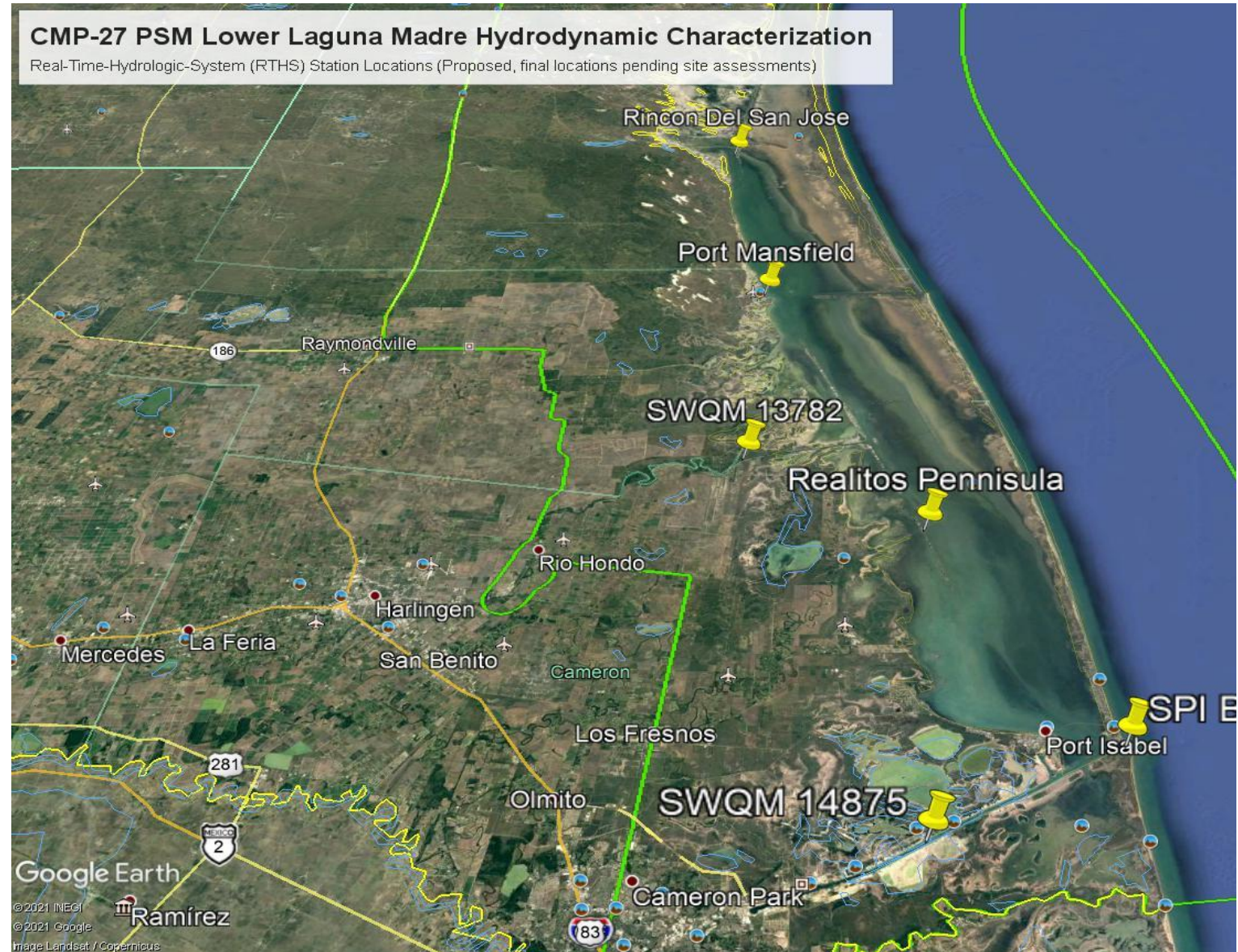
Category 3

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TGLO-CMP PSM: Laguna Madre Hydro Dynamic Characterization

- ▶ **GOAL:** Filling data gaps in ongoing coast wide programs:
 - ▶ TCEQ Watershed Protection Plans;
 - ▶ TWDB-Texas Integrated Flooding Framework (TIFF);
 - ▶ Freshwater Inflows Program, and Flood Infrastructure Fund programs;
 - ▶ and TGLO Flood Study.
- ▶ This study will evaluate mitigation and abatement strategies to reduce disaster impacts and increase community resiliency
- ▶ Funding - \$852K (no match)



USACE 2022 WRDA Section 729- watershed Assessment

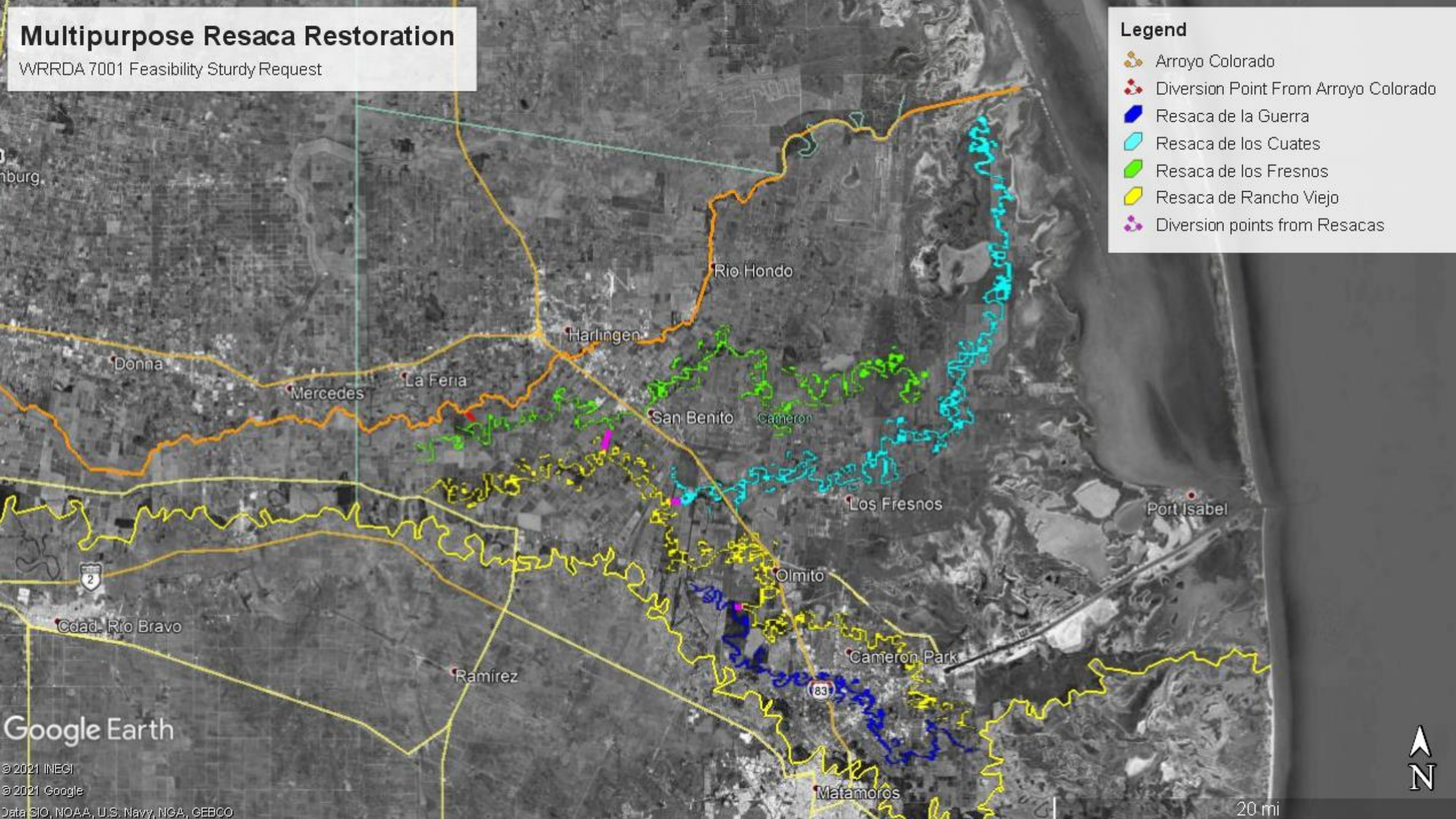
- ▶ This study will investigate Flood Risk Management (FRM) opportunities in the LRGV by analyzing the tri-county region as a single watershed, identifying feasible risk reduction measures, and optimize performance as a regional network encompassing Cameron, Hidalgo and Willacy Counties.

Multipurpose Resaca Restoration

WRRDA 7001 Feasibility Study Request

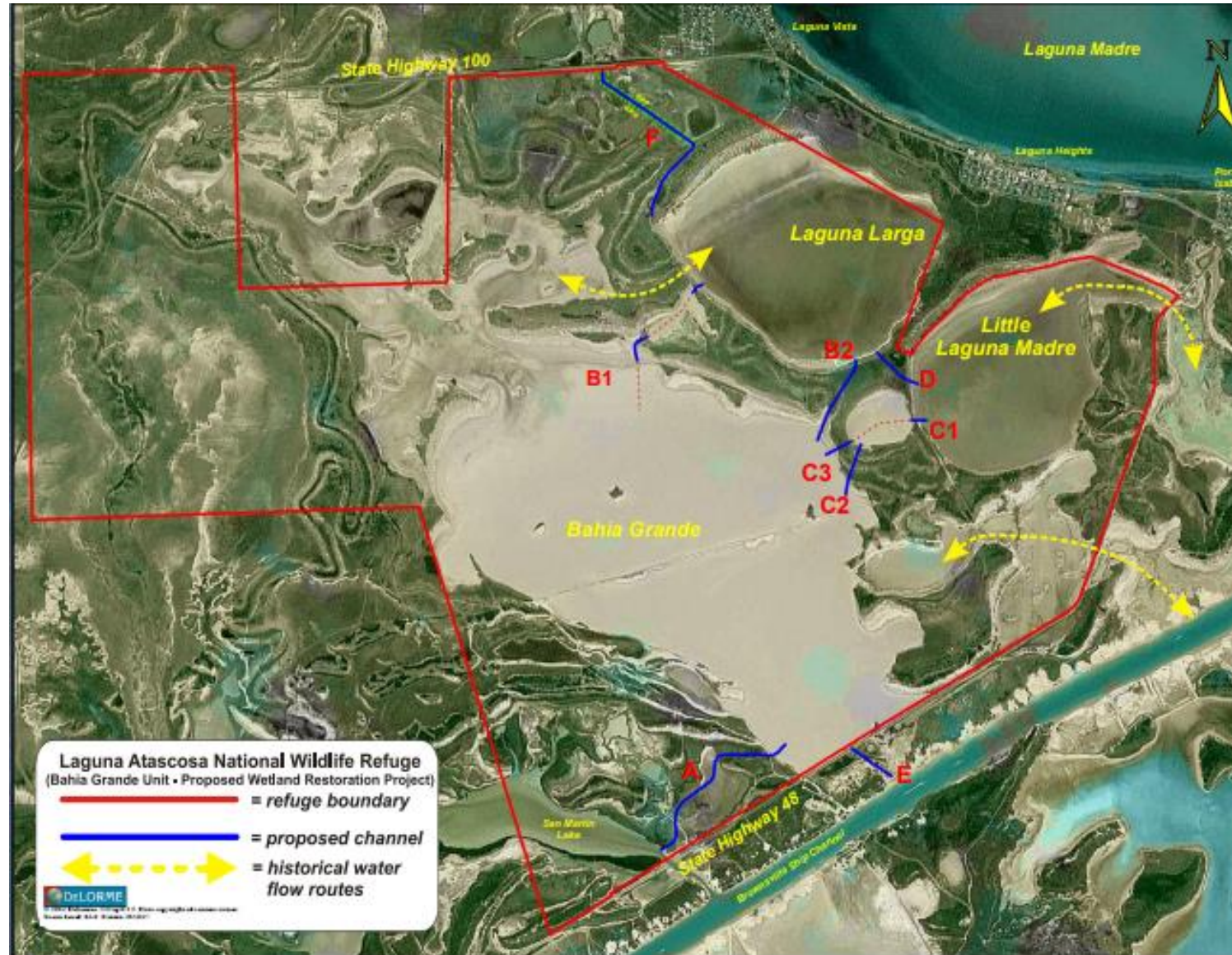
Legend

- Arroyo Colorado
- Diversion Point From Arroyo Colorado
- Resaca de la Guerra
- Resaca de los Cuates
- Resaca de los Fresnos
- Resaca de Rancho Viejo
- Diversion points from Resacas



Google Earth

Bahia Grande Restoration Project



Bahia Grande Restoration Project



Bahia Grande Restoration Project



Thank You