

319 Clean Water Act NPS Program
Lower Laguna Madre and Brownsville Ship Channel, USIBWC Floodway, Hidalgo/Willacy and
Raymondville Drain Watershed Planning Projects

June 9, 2022 09:00-10:00

Attendees

1. Melissa Gonzalez
2. Junseok Ho
3. Willy Cupit
4. Melinda Gonzeles
5. Augusto Sanchez Gonzalez, Cameron County
10. Andy Ernest, RATES
11. Linda Navarro, RATES
12. Ben Vondrak-RATES
13. William Kirkey, RATES
14. Velinda Reyes, Hidalgo County (Pct. 4)
15. David de la Fuente, City of Edinburg
16. Robert Valenzuela, City of Edinburg
17. Pamela Mogisha, Texas A&M-Kingsville
18. Patrick Kerr, USACE, Galveston District
19. JJ. Ibarra, City of Elsa
20. Kristin DeBone, TCEQ
21. Heather Robinson, TCEQ
22. Joe Hinojosa, Santa Cruz Irrigation District #15
23. Eduardo Gonzales, Willacy County Commissioner, Precint 4
24. Juan Roman, Texas A&M-Kingsville
25. Bob Bank
26. Abelardo Bocanegra, Mission Texas
27. Edgar Gonzalez, Mission Texas
28. David A. Garza, Cameron County
29. Ellie Torres, Hidalgo Texas

Welcome and Introduction

Dr. Andrew Ernest opened meeting with welcome and introduction.

Project Status

Dr. Ernest provided provided a brief summary of the Lower Laguna Madre-Brownsville Ship Channel WPP. The project has been authorized for a no cost extension to enable completion of the scope of work at 3 RTHS monitoring location and the addition of discharge measurements at San Martin Lake. Extension was requested to address delays in monitoring activities associated with Covid, staffing changes, and access during inclement weather. Additional data collection activities at San Martin designed to help characterize the tidal flux of San Martin Lake and address observations, by Hudson Deyoe, of elevated nutrient loads in San Martin Lake.

Linda Navarro provided Status of the North and Central Watershed. A summary of the study area and importance of a watershed characterization was provided. Current data from adjacent efforts on these watersheds was presented such as watershed delineation, flow data, water quality data, and H&H Models. For water quality data, TCEQ screening levels were compared against water quality results from these North and Central Waterways: Raymondville Drain, IBWC North Floodway, Hidalgo Willacy Main Drain. The water quality results show surpassing levels for bacteria, total nitrogen, and chlorophyll a for all three waterways.

Melissa Gonzalez inquired if NPS loads in North and Central Watersheds originated from agricultural sources. It was acknowledged that the scope of sampling and analysis was insufficient to identify NPS contaminant sources. Bacteria source tracking relies on DNA analysis, which is costly. Dr. Fuller mentioned that additional analysis conducted by the Nueces River Authority as part of the Clean River Program may include extended parameters (for example pesticides) that may be applicable toward identification of NPS sources.

Dr. Christopher Fuller provided an update on the North and Central Watershed Phase II WPP which is scheduled to be executed in September 2022. This project leverages monitoring being conducted as part of a TWDB- Freshwater Flows project at RTHS stations located on the Raymondville Drain, Hidalgo/Willacy Drain, and USIBWC North Main Drain. Current monitoring program mimics parameters being measured in the LLM-BSC WPP including: quarterly flows and water quality analysis; and continuous stage height and meteorological parameters. In the TCEQ Phase II project, continuous monitoring will be extended to include water quality sonde measurements.

Dr. Christopher Fuller provided a summary of the TGLO Coastal Management Plan- Project of Special Merit project intitles Lower Laguna Madre Hydrodynamic Characterization which is scheduled to begin Summer 2022. This project will involve continuous monitoring of LLM hydrodynamics at 4 NOAA asset and 2 new monitoring stations to be established in the Arroyo Colorado and near San Martin Lake. This project is intended to characterize LLM hydrodynamics to address storm surge modeling data requirements. However, this data is equally relevant to characterizing NPS contaminant transport processes in the Lower Laguna Madre. Ability monitoring of currents in San Martin Lake and Arroyo Colorado will enable characterization of their respective tidal fluxes.

Dr. Christopher Fuller provide summary of the National Science Foundation project Sustainable Regional Systems Research Networks: Shared Destinies-Hydro-social Infrastructure for Community Involvement in Fragmented Border Communities. This development project is being led by the University of Texas at El Paso with partners at University of California-San Diego, UTRGV, and RATES. This project is investigating the cross border water issues related to water quantity and quality at three representative border regions: San Diego-Tijuana; El Paso-Juarez; and Brownsville/McAllen-Matamoros/Reynosa. This project involves a combination of surveys and workshops held at each border region. The 1st of the surveys were distributed in May 2022.

TCEQ Proposal Developments for fiscal year 2022 were discussed. Kristin DeBone and Heather Robinson indicated due date for this round of proposals is July 15, 2022. They indicate that subsequent proposals for the Brownsville -Ship Channel be billed as "Implementation Project" as apposed to a sub-sequent phase. It was expressed to leverage on-going activities where possible. Dr. Christopher Fuller indicated that he was preparing a monitoring proposal, in consultation with Tony Reisinger-Texas Sea Grant, for San Martin Lake and South Bay to address concerns about bacteria loading in the respective water bodies. David Garza-Commissioner Cameron County suggested need for additional monitoring at Cayman Channel- Bahia Grande.

Next Meeting

It was suggested that separate stakeholder meetings be held for: Lower Laguna Madre-Brownsville Ship Channel; and North and Central Watersheds. Although these meeting can be held in back to back venues for convenience. The next North and Central Watershed meeting should involve review of the Draft Final Report and is targeted for the end of July.