MONITORING AND RESEARCH SUBCOMMITTEE
GALVESTON BAY COUNCIL

Meeting Minutes
Wednesday, March 8, 2023
9:30 a.m. – 11:30 a.m.

Subcommittee Chair: George Guillen, Environmental Institute of Houston-University of Houston Clear Lake (EIH-UHCL)

Subcommittee Vice Chair: Mike Lee, United States Geological Society (USGS)

GBEP Representative: Casey Taylor

Call to Order, Introductions (Via Microsoft Teams)

Attendees: Matt Abernathy (GBEP), Anna Armitage (TAMUG), Ryan Bare (HARC), Stacey Carr (TCEQ), Jill Csekitz (TCEQ), Ellen Creecy (GBEP), Jim Dobberstein (Lee College), Bryan Eastham (Public), Richard Gibbons (ABC), Jessisca Geiskopf (TPWD), David Hala (TAMUG), Kari Howard (GBEP), Morgan Huette (TIRN), Christine Jensen (TPWD), Moriah Johnson (Moriah Johnson LLC), Elizabeth Kompanik (TCEQ), Mike Lee (USGS), Lindsey Lippert (GBEP), Hui Liu (TAMUG), Yina Liu (TAMU-Oceanography), Zulimar Lucena (USGS), Ellie Mann (H-GAC) Lisa Marshall (GBEP), Antonietta Quigg (TAMUG), Hanadi Rifai (UH), Christian Rines (GBEP), Ryan Seymour (TCEQ-WQS), Chris Steffan (TPWD), Michael Shields (TAMU-GERG), Evan Turn, (TWDB), Woody Woodrow (USFWS), Natasha Zarnstorff (GBF)

Approval of December 14, 2022 meeting minutes – approved.

Member Spotlight Short Presentations:

- Michael Shields, Texas A&M University

  Presented on previous and current projects he's been involved with. His upcoming project will focus on 6PPD quinone in Galveston Bay, the compound recently discovered to be responsible for the salmon mortality events in the Seattle area.

Presentations:

Occurrence of Microplastics in Tributaries to Galveston Bay – Zulimar Lucena, United States Geological Survey – Preliminary data on the occurrence, abundance, and types of microplastics from Phase 1 of the project was presented. Microplastics collected ranged in size from 1.00-4.76mm in size and were found to have the highest concentration in urban areas, with the highest concentration being found in Clear Creek, followed by Friendswood and Buffalo Bayou. The most common microplastic type collected was fragments. Phase 2 of the project will look at the data found in Galveston Bay and Phase 3 will look at the combination of the two phases and focus on gaps based on previous monitoring.

Presentations available upon request.

Bipartisan Infrastructure Law Project Planning and Priorities

Subcommittee members discussed the BIL funds and agreed on three priorities that are important to M&R:

- Monitoring and research that captures a meaningful, quantifiable measure of a response action taken
- Monitoring and research that produces data applicable and transferable to multiple programs
- Projects that produce meaningful data that can be used for future implementation and management decisions

Project Updates:

- Effect of Microplastics on the Base of Marine Food Webs – TAMUG: Quantification was completed. Preparing to audit the project. Final report is being prepared.
- Regional Monitoring Database – HARC: Phase Two was released March 1, 2023. It includes new datasets within the data catalogue, many of which are available for download.
- The Distribution, Fate, and Transport of Emerging Contaminants in Galveston Bay – TAMU: Finished sample analysis for last quarter's cruise, data processing is ongoing. First cruise of the year for sampling to be completed March 24, 2023.
- The Fate of Emerging Per- and Polyfluoroalkylated Substances (PFAS) Pollutants in Shellfish and Fish of Galveston Bay – TAMUG: Completed PFAS body burden analysis of fish and oysters. Completed modeling analysis to predict toxicity biomarkers. Focus is now on lipid analysis.
- Galveston Bay Oyster Microplastics: Baselines and Impacts – TAMUG: Data collection is complete and classroom curriculum created.
- Effects of Erosion Control Structures on Shoreline Marsh Species Populations - TAMUG: No updates.
- Long Term Monitoring of Living Shorelines – Lee College: Working on the QAPP and ensuring methods are viable.
- Monitoring Ecosystem Indicators for Science-Based Restoration and Enhancement – TAMUG: Six cruises were completed, and samples collected. Sample processing and data analysis will be started. Training of staff is ongoing.

Announcements/Path Forward Items:

- **Next meeting**: June 14, 2023, 9:30 a.m. – 11:30 a.m.
- USGS will be hiring two hydrologist positions that will be posted to usajobs.gov

- USGS selected the Trinity San Jacinto River for basin number five as their latest location to examine factors in water availability.

Adjourn