

MONITORING AND RESEARCH SUBCOMMITTEE GALVESTON BAY COUNCIL

Meeting Minutes
Wednesday, June 14, 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), Caroline Artmire (TPWD), Shalyn Bauschlicher (USEPA), Glenn Clingenpeel (TRA), Ellen Creecy (GBEP), Emily Cox (EIH - UHCL), Jim Dobberstein (Lee College), Michael Gahn (TAMUG), Jessisca Geiskopf (TPWD), Melodie Grubbs (Morro Bay NEP), Kari Howard (GBEP), Morgan Huette (TIRN), Christine Jensen (TPWD), Cassidy Kempf (HPARD), Elizabeth Kompanik (TCEQ), Mike Lee (USGS), Lindsey Lippert (GBEP), Hui Liu (TAMUG), Chris Marshall (TAMUG), Lisa Marshall (GBEP), Vanessa Mintzer (GBF), Cass Nieman (USEPA), Arsum Pathak (NWF), Lene Petersen (TAMUG), Antonietta Quigg (TAMUG), Hanadi Rifai (UH), Christian Rines (GBEP), Kirsten Vernin (HARC), Huy Vu (USEPA), Jean Wright (H-GAC)

Approval of March 8, 2023 meeting minutes – Motion approved by Christine Jensen, second by George Guillen

Member Spotlight Short Presentations:

- Emily Cox, Environmental Institute of Houston - University of Houston Clear Lake

Estimating Abundance of Microplastics in Surface Waters and Sediments of the Galveston Bay Watershed - This project seeks to estimate the occurrence and distribution of microplastics of the shoreline and open based sites of Galveston Bay due to the current lack of baseline microplastic pollution data in the area. More microplastics were found at the shoreline versus open based sites, with fragments being the most abundant type found followed by fibers. An increase in microplastics was also found with an increase in rain and turbidity in the area.

Presentation:

The Status of the Oyster Fishery in Galveston Bay - Christine Jensen, Texas Parks and Wildlife Department - Galveston Bay has historically been the largest producer of oysters in Texas. But recently, Matagorda, San Antonio, and Aransas Bay have made up most of the harvest. This is due to several factors. There has been a decrease in the amount of available substrate, reduced freshwater inflow from droughts along with saline conditions and disease, and an increase in flooding and sedimentation due to

hurricanes and large storm events. To achieve sustainable harvests, TPWD is mapping reefs, focusing on restoration, supporting private harvests through mariculture, reducing fishing pressures with area closures and additional licensing requirements, using a vessel monitoring system, and using alternative gear for dredge surveys. Mortality events however are still occurring, and additional monitoring and research is needed.

Presentations available upon request.

Clean Water Act 320 Funding Planning and Priorities

Subcommittee members discussed the CWA 320 funds and agreed on three priorities that are important to M&R:

- Meaningful and effective monitoring of existing and new projects (NRU/WSQ/PPE support)
- Exposure and response to emerging contaminants across trophic levels
- Reestablishing dermo monitoring programs (Ex. Oyster Sentinel)

Project component: A check box to be included in proposal form indicating that results will be translated to plain language/practical knowledge.

Project Updates:

- Effect of Microplastics on the Base of Marine Food Webs - TAMUG: All data has been collected and analysis is being finished. Final report is being prepared. Findings will be presented at the Galveston Bay Council meeting July 19, 2023.
- Regional Monitoring Database - HARC: Phase Three is in progress. Datasets currently online and available are being updated. Datasets including the North American Breeding Survey data and TPWD ecological mapping systems data for the lower Galveston Bay watershed are being added. New interactive tools including the social vulnerability index from the CDC and the Texas Parks and Wildlife Coastal Creel Survey are being added. Phase Three updated will be released late summer or early fall.
- The Distribution, Fate, and Transport of Emerging Contaminants in Galveston Bay - TAMU: Progress is on track. March cruise took place in May, June cruise is scheduled for June 22, 2023. QA field/desk audit to be conducted June 19, 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: Project is complete and review of final report is ongoing.

- Effects of Erosion Control Structures on Shoreline Marsh Species Populations TAMUG: Sampling is complete and final report is being prepared.
- Long Term Monitoring of Living Shorelines - Lee College: QAPP has been approved and field work to begin.
- Monitoring Ecosystem Indicators for Science-Based Restoration and Enhancement - TAMUG: Waiting on TCEQ approval of the QAPP. Sampling is being conducted, preliminary data available in the fall.

Announcements/Path Forward Items:

- **Next meeting:** September, 2023, 9:30 a.m. - 11:30 a.m.

Adjourn