

MONITORING AND RESEARCH SUBCOMMITTEE GALVESTON BAY COUNCIL

Meeting Minutes
Wednesday, December 14, 2022
9:30AM - 11:30AM

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: Lisa Marshall

Call to Order, Introductions (Via Microsoft Teams)

Attendees: Matt Abernathy (GBEP), Anna Armitage (TAMUG), Ryan Bare (HARC), Jim Dobberstein (Lee College), Kristi Fazioli (UHCL-EIH), Morgan Huette (Turtle Island Restoration Network), Lindsey Lippert (GBEP), Yina Liu (TAMU-Oceanography), Zulimar Lucena (USGS), Ellie Mann (H-GAC) Lisa Marshall (GBEP), Christian Rines (GBEP), Ryan Seymour (TCEQ-WQS), Chris Steffan (TPWD), Michael Shields (TAMU-GERG), Natasha Zarnstorff (GBF)

Approval of September 14, 2022 meeting minutes - approved.

Project Updates:

- Effect of Microplastics on the Base of Marine Food Webs - TAMUG: TAMUG is completing microplastic analysis and submitted a 90 day no cost extension to finish. Project has a new completion date of March 31, 2023.
- Regional Monitoring Database - HARC: Updates were given during presentation.
- The Distribution, Fate, and Transport of Emerging Contaminants in Galveston Bay - TAMU: TAMU was only able to collect at 5 out of 12 stations due to inclement weather on the last cruise. Sample size was increased by collecting multiple replicates.
- The Fate of Emerging Per- and Polyfluoroalkylated Substances (PFAS) Pollutants in Shellfish and Fish of Galveston Bay - TAMUG: TAMUG completed all the PFAS measurements in the biota and completed bioinformatics analysis of toxicology data to focus on biomarker analysis of the fatty acid body burdens within the data. Set up of fatty acid analysis is being completed and biota analysis performed.

Presentations:

An Overview of Phase One: The Galveston Bay Regional Monitoring Data Base - Ryan Bare, Ph.D, Houston Advanced Research Center - HARC just completed the first phase of the project which involved developing the portal and will serve as the

interface for all of the aggregated datasets that will be available for download. HARC is commencing work on the second phase of the project.

The Galveston Bay Dolphin Research Program - The Importance of Long Term Monitoring- Kristi Fazioli, Environmental Institute of Houston, University of Houston at Clear Lake - The bottlenose dolphins are a top predator and important bioindicators in Galveston Bay. Over the last eight years, the study area has focused on the upper Galveston Bay region to the west of the ship channel. Visual surveys and environmental data were used as well as dolphin activity. Human interaction data were also collected. Photographs were used to identify individuals and groups of dolphins. Biopsy sampling was conducted. Current main findings conclude that temperature and salinity factors determine encounter rates and the occurrence of skin lesions during freshwater events (ie. Hurricane Harvey.) Funding is needed for more biopsy sampling and to look at PCBs and additional emerging contaminants as well as how salinity fluctuations affect these animals.

Presentations available upon request.

Announcements/Path Forward Items:

- **Next meeting:** March 8, 2023, 9:30AM - 11:30AM
- GBEP will be hiring a new Monitoring and Research Coordinator and a Public Participation and Education Coordinator.
- TCEQ Executive Director and Deputy Director both leaving at the end of 2022.

Adjourn