

MONITORING AND RESEARCH SUBCOMMITTEE GALVESTON BAY COUNCIL

Meeting Minutes
Wednesday, December 13, 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: Lisa Marshall

Call to Order, Introductions (In-person and Via Microsoft Teams)

Attendees: Anna Armitage (TAMUG), Stacey Carr (TCEQ), Jim Dobberstein (Lee College), George Guillen (EIH-UHCL), Stephanie Glenn (HARC), Mandi Gordon (EIH-UHCL), David Hala (TAMUG), Jennifer Irving (HARC), Erin Kinney (HARC), Elizabeth Kompanik (TCEQ), Hui Liu (TAMUG), Yina Liu (TAMU), Jack Newton (SJRA), Jenny Oakley (EIH-UHCL), David Retchless (TAMUG), Hanadi Rifai (UH), Michael Shields (TAMU), Shane Simpson (SJRA), Matt Tillman (USCG), Kirsten Vernin (HARC), Katie Wilson (GCHD), Natasha Zarnstorff (GBF), Matthew Abernathy (GBEP), Ellen Creecy (GBEP), Kari Howard (GBEP), Lindsey Lippert (GBEP), Lisa Marshall (GBEP), Christian Rines (GBEP).

Approval of September 13, 2023 meeting minutes – Motion approved by Jenny Oakley, seconded by Natasha Zarnstorff.

New business:

Comprehensive Conservation and Management Plan (CCMP) Updates Discussion- Stephanie Glenn presented.

- An update is required not a revision. In this update we must ensure plan priorities are up to date, add issues, and integrate the Equity Strategy and the Galveston Bay Estuary Resilience Action Plan (ERAP) into CCMP.

1-3 word suggestions from subcommittee

- Hui- long term continuous monitoring and data gaps.
- Jenny - Agreed with the above comments. She suggested the Texas Coastal Study and the storm surge barrier and how the system is currently and could be affected in the future (water quality chemistry, inflows).
- Hanadi R- Integrating impacts of climate change.
- General agreement that baseline data is so important.

The subcommittee discussed the various update options:

- A highlights page that would spotlight the new documents/changes at the front of the plan.
- The tables throughout could be adjusted to consider the Equity Strategy and ERAP.

- Add a full page between pages with the needed changes for those sections.
- We can put the tables as an addendum in this update and add language to reference it throughout. The PDF must be accessible so we could do an appendix that is linked. *This was the most well received option.*
 - There are a lot of tables already so recommend restructure so it's not such a spiderweb of ways to find your answers. EPA comments are that they liked the tables that explain how it addresses the action item not just X or checkboxes.

Are there additional things to consider or add in during this update?

- Habitat and species monitoring.
- Update the language to more obviously link the action items that support each other to encourage projects to address things widely.
- Hui- A baseline understanding of how the system is working now to measure changes from storms or big disruptions (associated with storm surge barrier to have baseline data).
- Hanadi - add in the deepening and widening associated with the barrier and the channel itself- need specific goals the monitoring is trying to accomplish to inform the amount of monitoring needed to achieve the goal.
- George - Specific objectives for monitoring to inform the amount of monitoring used to meet specific objectives.

Should there be greater integration of action items across subcommittees?

- Yes. One suggestion is to delegate a person per subcommittee to be across subcommittee meetings and focused on integrating them or to host one big subcommittee meeting on joint goals/objectives.
- George - Yes and maybe Natural Resource Uses subcommittee could finish a project and then M&R could pick up monitoring of the longer-term effects of that project.

Which issues should be highlighted?

- David - PCPs along with PFAs.
- Jenny - Questioned if salinity would fit under geochemical stressors so maybe look at the geochemical stressors and what it includes and try to be less specific going forward.
- Specific contaminants added such as pharmaceuticals, personal care products.
- Species conflict and management.
- Mandi - Recommend not listing very specific things listed because that makes it harder to pivot or encompass things broader (for example in the plan it says birds and fish for species monitoring so that leaves out a lot of wildlife and can inhibit).
- Jim - monitoring across trophic levels
- Jenny - Coastal resiliency & acclimation

- George - toxin monitoring

Tracking and future state

- All the ERAP stressors could be incorporated into the Inform Science-Based Decision-Making priority.
- We want to link research back to the action plans, so we do want to track implementation of the plan. The implementation tracker does show which action items the projects address. We should track places where it changes legislation to trumpet that. Hard to track how the data is used by other agencies once its published and available.
- GIS habitat restoration tracker could also then integrate restoration projects.

Dr. David Hala - The Fate of Emerging PFOS Pollution in Shellfish and Fish of Galveston Bay

Data summary of key highlights for PFOs levels in biota from upper Mexico to Alabama 2021-2022. They can do human risk assessment for seafood consumption based on PFOs concentration in biota. Sampling is showing higher levels in Galveston Bay fish than pelagic fish with the highest levels in dolphins. Bivalves had negligible values of PFOs and were taken out from the dataset. Carnitine is showing potential as a biomarker for PFOs in fish. Still to determine chronic or sub-lethal PFOs exposure on organismal fitness.

Project Updates from M&R Project Managers

- Effect of Microplastics on the Base of Marine Food Webs - TAMUG (Christopher Marshall) Not in attendance
- Regional Monitoring Database - HARC (Ryan Bare) *In maintenance mode for RMD. It is up and running and accessible.*
- The Distribution, Fate, and Transport of Emerging Contaminants in Galveston Bay - TAMU (Yina Liu) *Finished time series so now crunching through numbers and will share results soon.*
- The Fate of Emerging Per- and Polyfluoroalkylated Substances (PFAS) Pollutants in Shellfish and Fish of Galveston Bay - TAMUG (David Hala). *Presented findings at this meeting.*
- Effects of Erosion Control Structures on Shoreline Marsh Species Populations - TAMUG (Anna Armitage). *This is completed and finished last travel to conference and final report is filed.*
- Long Term Monitoring of Living Shorelines - Lee College (Jim Dobberstein): *Started sampling this summer and will do another phase in the spring.*
- Monitoring Ecosystem Indicators for Science-Based Restoration and Enhancement - TAMUG (Hui Liu). *Going well and plan to sample more soon. Preliminary results presented in New Orleans next year. Quarter project report prepared and will be submitted to the office this week.*
- The Distribution and Fate of Highly Toxic Tire Rubber-Derived Chemicals in Galveston Bay - TAMUG (Michael Shields). *Close to wrapping up a draft of the QUAP to send to GBEP and waiting on A&M and TCEQ to reach their agreement.*

Announcements/Path Forward Items:

- **Next meeting:** March 13, 2024, 9:30 a.m. - 11:30 a.m.
- WSQ subcommittee meeting: Wednesday, December 13, 2023, 1:30 p.m.- 3:30 p.m.
- B&P meeting: Wednesday, January 10, 2024, 1:00 p.m. - 3:00 p.m.
- GBC meeting: Wednesday, January 17, 2024, 9:30 a.m.- 12:30 p.m.
- Announcement for the new M&R coordinator has been posted and will close December 22.

Adjourn