

GALVESTON BAY ESTUARY PROGRAM (GBEP)

Galveston Bay Council (GBC) Meeting Minutes – January 20, 2021

Attendees:

Galveston Bay Council Chair: Glenn Clingenpeel (Trinity River Authority)

Galveston Bay Council Vice-Chair: Albert Gonzales (Low Income Communities)

Estuary Program Staff Lead: Lisa Marshall (GBEP)

Due to issues with COVID-19, the January 20, 2021 quarterly GBC meeting was held through the WebEx conferencing service.

Members Present: Scott Alford, Glenn Clingenpeel, Winfred Colbert, Jeff DallaRosa, Vance Darr, Bryan Eastham, Elizabeth Fazio Hale, Lori Hamilton, Cruz Hinojosa, John Huffman, Brian Koch, Audrey Kuklenz, Kristen Lambrecht, Mike Lee, Helen Paige, Nancy Parra, Pamela Plotkin, Lisa Rickards, Caimee Schoenbaechler, Ronnie Schultz, Rusty Senac, Linda Shead, Shane Simpson, Charrish Stevens, Bob Stokes, Sue Theiss, Jeff Taebel, Matthew Tilimon, Maria Valdez, Kirk Wiles, Tracy Woody

Members Not Present/Delegates: Albert Gonzales, Garry McMahan*, Ana Partin, Russ Poppe*, Melissa Porter, Taylor Rieck, Mary Beth Stengler,

(*=Member designated a proxy)

Proxies Present (GBC member absent/designated proxy): Garry McMahan/Mollie Powell, Russ Poppe/Glenn Laird, Melissa Porter/Joshua Oyer

Current Vacancies: None

Other Attendees: George Guillen, Amanda Hackney, Marc Hanke, Amin Kiaghadi, Kerry Niemann, Dianna Ramirez, Carion Taylor,

Additional GBEP Staff Present: Cynthia Clevenger, Kristen McGovern, Christian Rines, Doretta Thomas, Patricia Thompson

Call to Order: Introduction of Members and Delegates

Glenn Clingenpeel brought the meeting to order.

Action Item: Approval of October 21, 2020 Meeting Minutes

Mr. Clingenpeel opened the meeting with approval of the minutes. A motion was requested for approval. Rusty Senac moved to approve the minutes, and a second was made by Nancy Parra.

Report of the Chair

Mr. Clingenpeel indicated the GBC will likely not be meeting in person in April due to COVID-19 numbers and reminded Council members they are encouraged to attend subcommittee meetings, especially now with the meetings being virtual.

Report of the Program (Lisa Marshall)

Ms. Marshall made two announcements:

- GBEP will be going to Commissioners' Agenda on February 10, 2021, to get the GBC members' new terms approved.
- The GBEP staff would like GBC members to provide feedback on the GBC and the GBC meetings; to determine if GBC members are satisfied with the GBC meetings and if GBEP is meeting their expectations. A questionnaire will be sent out in the next couple of weeks and we would appreciate everyone's participation.

Presentation and Discussion: *Pelican Island Bridge Replacement - Seeking Reef Enhancement/Mitigation/Re-purpose Opportunities* - Sue Theiss, Texas Department of Transportation (TxDOT)

The speaker reviewed the causeway's history connecting Galveston Island to Pelican Island and plans for the new bridge. The proposed new bridge/causeway alignment by TxDOT was designed based on input from stakeholder meetings. The alignment would reroute the road to wrap around the back of a dormitory at Texas A&M Galveston (TAMUG) to avoid the center of campus and a future turtle research facility. The estimated total project cost is \$115 million, but since the bridge is off system, TxDOT has limited funds for the project. TxDOT has agreed to cover design costs and construction management for approximately \$14 million. There was a discussion at the end of the presentation regarding mitigation opportunities. A suggestion was made to install a breakwater structure at TAMUG to protect the shoreline, which may present a good opportunity to reuse suitable material from the demolition.

A PDF of the [Pelican Island Causeway Update](#) presentation is available on GBEP's website.

Presentation: *Galveston Bay Intertidal Oyster Reef Mapping and Analysis* - Marc Hanke, Ph.D., University of Houston (UH) and Amanda Hackney, Black Cat GIS and Biological Services

This presentation summarized the results of the Galveston Bay Intertidal Oyster Reef Mapping and Analysis project, which used aerial photos and GIS software to map potential intertidal oyster reefs in West Galveston Bay. A subset of the potential intertidal oyster reefs were ground-truthed to determine reef characteristics, oyster population demographics, associated benthic macrofauna community composition, and avian utilization. 14.8 acres of intertidal oyster reef were confirmed by ground-truthing, and there were an additional 187 acres of presumed intertidal reef. Reefs were mainly concentrated in the far northern extreme of West Bay, in Bastrop Bay, and in southern Christmas Bay into Drum Bay. The associated benthic macrofaunal community had low richness and diversity. Avian use of the habitat appeared to be mainly self-maintenance, with little foraging observed. An overview of the project's ArcGIS storymap was given (<https://arcg.is/1XHKGSO>, only loads in some web browsers).

A PDF of the [Galveston Bay Intertidal Oyster Reef Mapping and Analysis](#) presentation is available on GBEP's website.

Presentation: *Diamondback Terrapin: A Gem in Galveston Bay's Marshes* – George Guillen, Ph.D., Environmental Institute of Houston (EIH), University of Houston, Clear Lake (UHCL)

The presentation reviewed the Texas Diamond-backed Terrapin's (*Malaclemys terrapin littoralis*) life history and research along the north and central Texas Gulf Coast. Terrapins are the only turtles that live exclusively in the brackish waters of estuaries. Various subspecies can be found along the coast from Massachusetts to Texas. EIH with UHCL has been researching the Texas subspecies for many years. Some of their research projects include critical life-history parameters, crab trap bycatch, population status, distribution and demographics, and terrapin ecology. EIH also has an "[Adopt a Terrapin](#)" program to help raise funds for student research.

Subcommittee Updates

1. *Monitoring and Research (M&R):* The M&R subcommittee has been holding meetings virtually via Microsoft Teams on a quarterly basis throughout the pandemic. Since the projects are generally multi-year projects, there are currently seven projects either in progress or about to be in progress this fiscal year.

A major project planning priority for the past several years has been contaminant fate and transport and the effects of contaminants on species populations. There are currently several M&R projects that are researching this general topic, including projects at UH on heavy metals in sediment and oysters and on polychlorinated biphenyls (PCBs) and dioxins in water, sediment, fish, and blue crabs; a project at Texas A&M University studying per- and polyfluoroalkylated substances (PFAS) and pharmaceutical and personal care products (PPCPs) in water and sediment; and projects at TAMUG looking at microplastics in oysters and in filter-feeding fish. In fiscal year 2022, GBEP will also be initiating a project at TAMUG to study the fate of PFAS in fish and shellfish and the effects of PFAS exposure on the health of these organisms.

Another subcommittee-identified information gap and project planning priority is research on physical stressors such as coastal erosion and changes to freshwater inflows. One project with the United State Geological Survey (USGS) that will be closing this spring has installed an index-velocity meter on the lower San Jacinto River to measure discharge at various flow conditions and is also collecting data to better understand the variability of nutrient and sediment concentrations in freshwater inflows from the river into the bay. Another project addressing this information gap will be initiated in fiscal year 2022 at TAMUG will look at the effects of erosion control structures, or breakwaters and sills, on shoreline marsh species populations.

Other information gaps and priorities the subcommittee hopes to fill in upcoming project funding cycles include research on larval transport, the estimation of spatial and temporal trends in point and/or nonpoint source loading and compliance with effluent standards, and research on the success of green infrastructure projects at improving water quality and managing water quantity.

2. *Natural Resource Uses (NRU)*: The NRU subcommittee held their quarterly meeting on January 8, 2021, in which they had a presentation from the Houston Advanced Research Center (HARC) on the new State of the Bay website and an open member roundtable to discuss partner projects and get feedback from members. The Oyster Restoration and Invasive Species Work Groups will be planning meetings over the next few months. A Conservation Assistance Program (CAP) Work Group meeting was held in November 2020, and one CAP property closed, the Dollar Bay Acquisition. Over 100 acres in Texas City was permanently conserved through a partnership with Galveston Bay Foundation and the City of Texas City. Several other CAP projects should close within the next calendar year.

In addition, the Kemah Living Shoreline Project was completed this fall/winter, protecting 900 feet of vulnerable shoreline on Galveston Bay with the potential to provide education and outreach opportunities in the future.

3. *Public Participation and Education (PPE)*: The PPE subcommittee met on January 14, 2021 and heard a presentation about program evaluations from Noelle Whyman Roth with Duke University. This discussion looked at what it means to evaluate a program and why it is important. Program evaluation is a process that starts in the initial planning phase to set goals and assessments and to help demonstrate a program's impact. Evaluations also help communicate experiences with stakeholders and partners and can provide support for evidence-based decision-making. A program evaluation is not meant to decide a program's worthiness, rather goals, outputs, and activities to help support the impact of the program. Members discussed developing a theory of change and logic models in program development, and some PPE members shared specific models that had been developed as examples. PPE members expressed a desire to have a workshop on program evaluation to explore this area further.

PPE continues to prioritize filling gaps in outreach and education for underrepresented and underserved communities. Two projects getting started in fiscal year 2021 are incorporating in-classroom, citizen science education for students in underserved communities: Texas Estuarine Resource Network (TERN) Program with Harris County Department of Education and Audubon Texas, and Microplastics in Galveston Bay: Big Impact of Tiny Pollution with UHCL's EIH and Turtle Island Restoration Network. These projects will train students on collecting and assessing data in the field and will demonstrate how they can make an impact in their community with science and communication.

The public perception assessment has been completed, and the report will be available in late spring.

4. *Water and Sediment Quality (WSQ)*: The WSQ subcommittee will meet next on March 10, 2021, to begin identifying the needs and gaps of the group. This will help steer the discussion in June when subcommittee priorities are selected. The implementation of the Double Bayou watershed protection plan with HARC has adapted well to the challenges of COVID-19. Water quality monitoring has continued, and virtual resources are available to stakeholders on the partnership website. The team is also working to create an online workshop for

on-site sewer facility owners in the watershed. The Targeted Bacteria Monitoring project with Houston Galveston Area Council (H-GAC) and Bayou Preservation Association continues. There was an issue with faulty sampling media in the fall, but the interns were still able to collect samples and develop outreach materials. Another group of interns will continue sampling later this year. The Occurrence of Microplastics in Tributaries to Galveston Bay project with the USGS continues to sample. The initial laboratory for sample processing was changed, so the team is awaiting an amendment to reflect that change before processing. A quality assurance project plan for the second phase of that project, the Baseline Assessment of Microplastics in Galveston Bay is currently under review. A coordinated meeting between WSQ and M&R subcommittees will be held Friday, January 29, 2021, from 9:00 a.m. -11:30 a.m. to select sampling sites for that project. Members were asked to put contact information in the chat if interested in attending the meeting. The fiscal year 2021 contract for the Outreach Implementation for Galveston Bay Water Quality Projects with H-GAC is close to execution. Fiscal year 2022 projects, Townwood Park Green Stormwater Infrastructure and Supporting the Use of Green Infrastructure in the Lower Galveston Bay Watershed are beginning the contract initiation process. Members were reminded, if they are interested in attending WSQ subcommittee meetings, email Christian or Lisa to be added to the email distribution list.

Council Members Roundtable: News and Announcements

Kerry Niemann (TCEQ WQPD) – Regarding the Total Maximum Daily Load (TMDL) Program:

- Two TMDLs for indicator bacteria in Caney Creek are scheduled to go to Agenda to release for public comment on January 27, 2021.
- One TMDL and one Implementation Plan for indicator bacteria in Arenosa Creek are scheduled to go to Agenda to release for public comment on January 27, 2021.
- One TMDL for indicator bacteria in Hillebrandt Bayou is scheduled to go to Agenda to release for public comment on February 10, 2021.

Regarding the Nonpoint Source Pollution Program: Joint development of the 2020 Nonpoint Source Annual Report is underway and scheduled to be submitted to the Environmental Protection Agency (EPA) for approval by the end of this month.

Regarding the 2020 Integrated Report: The EPA approved the report on May 12, 2020.

Regarding Water Quality Standards: The Surface Water Quality Standards Advisory Work Group held two half-day meetings on June 29 and June 30, 2020. The agenda and handouts are available on the TCEQ website.

Regarding the Clean Rivers Program: The calendar of Steering Committee Meeting dates may be accessed from the statewide Coordinated Monitoring Schedule. Meetings occur throughout the year and help to establish monitoring priorities.

Caimee Schoenbaechler (TWDB) – The Texas General Land Office (GLO), through their administration of the Community Development Block Grant Disaster Recovery

Program, has funded the Texas Water Development Board (TWDB) to serve as the lead agency to coordinate a project to decrease flood risk along with the USGS and US Army Corps of Engineers (USACE). The project involves developing guidelines and processes for a comprehensive, integrated framework to model, visualize, and plan for the risk of flooding from Hurricane Harvey and other similar compounding flood events in coastal counties. Ms. Schoenbaechler offered to give a presentation on the topic at a future council meeting.

Jeff Taebel (H-GAC) – A Clean Rivers Program Steering Committee Meeting is being held on January 28, 2021, from 1:30 p.m. – 2:30 p.m. to discuss the work plan and budget for the next biennial cycle (fiscal year 2022-2023). The meeting is open to anyone and you can register online. The next watershed planning effort is in Clear Creek. Mr. Taebel thanked the council and project partners for continued support.

Joshua Oyer (GLO) – Mr. Oyer is the proxy for Melissa Porter. The Coastal Management Program has made funding announcements for cycle 26. The Living Shorelines in Texas Guide is posted on GLO's website with materials and comprehensive guidance. The public comment period is closed for the Coastal Texas Study with USACE and GLO. The final report is expected in late spring/early summer.

Matthew Tilimon (USCG) – The next Central Texas Coastal Area Committee meeting will be held on February 4, 2021. It is a hybrid meeting with in-person and virtual attendance.

Public Comment: None

Adjourn: The meeting was adjourned at 12:17 p.m.

Upcoming Galveston Bay Council Meeting Dates: April 21, 2021; July 21, 2021; October 20, 2021; and January 19, 2022. Meetings are held on the third Wednesday of the quarter from 9:30 a.m.-12:30 p.m.