

GALVESTON BAY ESTUARY PROGRAM (GBEP)

Galveston Bay Council (GBC) Meeting Minutes – July 19, 2023

Attendees:

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

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

Galveston Bay Estuary Program (GBEP) Staff Lead: Lisa Marshall (GBEP)

The July 19, 2023, quarterly GBC meeting was held in a hybrid format with an in-person meeting at the Harris-Galveston Subsidence District and virtually on Microsoft Teams from 9:30 a.m. – 12:30 p.m.

Members Present: Glenn Clingenpeel (In-person), Scott Alford, Shane Bonnot (v), Winfred Colbert, Elizabeth Fazio-Hale (v), Jonathan Holley, Brian Koch, Kristin Lambrecht, Michael Lee, Grace Martinez, Garry McMahan (v), Kelly Mills, Helen Paige (v), Ana Partin (v), Pamela Plotkin (v), Dianna Ramirez, Hanadi Rifai (v), Todd Running* (v), Caimee Schoenbaechler, Ronnie Schultz, Rusty Senac, Linda Shead, Shane Simpson, Charrish Stevens (v), Huy Vu (v), Kirk Wiles (v), Tracy Woody, Sue Theiss (v)

(v=Member present online; not counted in the quorum)

Members Not Present/Delegates: Andrea Catanzaro, Jeff DallaRosa, Vance Darr, Juan Flores, Audrey Kuklenz, Julie Masters, Lindsey Savage*, Sharron Stewart, Bob Stokes*, Matthew Tilimon*, Maria Valdez, Scott Williams

(*=Member designated a proxy)

Proxies Present (GBC member absent/designated proxy): Todd Running/Rachel Windham, Lindsey Savage/Savannah Horton, Bob Stokes/Haille Leija (v), Matthew Tilimon/Zachary Edwards (v)

Current Vacancies: None

Other Attendees: Tom Douglas, Bryan Eastham, Bryan Gahn, George Guillen, Christopher Marshall, Gene Mueller, Madelyn Rupp, Michael Schramm, Nicole Sunstrum, Lori Traweek, David Villareal

Additional GBEP Staff Present: Matthew Abernathy, Ellen Creecy, Kari Howard, Lindsey Lippert, Christian Rines, Casey Taylor (v), Alejandra Trevino (v)

Call to Order and Confirm Quorum

Glenn Clingenpeel brought the meeting to order at 9:30 a.m.

A quorum was not met for this meeting.

Action Item: Approval of April 19, 2023 Meeting Minutes

This action item was postponed as a quorum was not present at the meeting.

Report of the Program

Lisa Marshall began the program report by introducing Kelly Mills and Gene Mueller, the new Deputy Director and Assistant Deputy Director for TCEQ's Water Quality Planning Division and read biographies for both gentlemen.

Next Ms. Marshall provided a background on the GBEP's recently completed Program Evaluation for the U.S Environmental Protection Agency (EPA). Dr. Huy Vu, EPA Region 6 National Estuary Program (NEP) Project Coordinator, provided a presentation on the Program Evaluation to the GBC.

Brian Koch and Glenn Clingenpeel both commented that they found it beneficial for the GBC members who attended to be able to meet with the Program Evaluation Committee and see, firsthand, the work that has been done by GBEP.

Ms. Marshall also announced that the call for abstracts will be sent out for the 12th State of the Bay Symposium and that additional information on the symposium will be sent out soon.

Report of the Chair

There were no updates from Mr. Clingenpeel.

Presentation: *State of Gulf Coast Protection District* - Nicole Sunstrum, Gulf Coast Protection District

Nicole Sunstrum, Executive Director of the Gulf Coast Protection District (GCPD), provided the GBC a background on the Coastal Texas Program and the Gulf Coast Protection District. This included information about the funding for the program and the current and upcoming projects for both the Sabine to Galveston projects and the Coastal Texas Program plan and projects.

Albert Gonzales inquired about a prior GCPD presentation by Ms. Sunstrum that referenced the potential of GCPD having taxing authority and being able to tax citizens to get funding for these projects. Ms. Sunstrum replied that while taxes and fees are a possibility for acquiring funds for these projects, it is not being considered at this time and that if establishing taxes to provide funding is being considered, that would be a measure that would have to be voted on and approved during an election. Mr. Gonzales questioned the total project cost and Ms. Sunstrum confirmed that the entirety of the project is expected to cost \$34 billion. Mr. Clingenpeel then reiterated that for taxation to become a reality, it would first have to be voted on and approved by the voters, which would allow residents the opportunity to weigh in on the situation.

Mr. Clingenpeel then asked about what coordination the GCPD is doing with regional flood planning groups. Ms. Sunstrum replied that GBCP has a flood planning group liaison that is working with local groups and is open to making additional connections in that area.

A complete recording of the presentation and discussion is available upon request.

Presentation: *Investigating the Occurrence of Plastic in Historic Fishes from Galveston Bay Estuary: First-Ever Historic Body Burden Data* - Dr. Christopher Marshall and Bryan Gahn, Texas A&M University at Galveston

Dr. Christopher Marshall provided a brief introduction of Bryan Gahn, who is the M.S. student at Texas A&M University at Galveston that has been conducting the research

for this project. Mr. Gahn provided an overview of the project, including a background on microplastics and the process of analyzing fish tissue for the presence of microplastics. This involved taking muscle tissue samples from historical fish specimens that are held at Texas A&M University's Biodiversity Research and Teaching Collection in College Station, processing the samples, running them through a Pyrolysis gas chromatography mass spectrometer and analyzing the results.

Mr. Clingenpeel asked about the Environmental vs. Biological Abundance Results slide for clarification on the spatial vs. temporal averages used. Mr. Gahn clarified that the oyster data was from 2019 and the mullet samples were an average from samples taken from 2010 - 2019.

Grace Martinez asked about what is being done or could be done to alleviate or police dumping of plastics in the bay. Mr. Gahn commented that it is difficult to pinpoint the sources that produce these plastics, and this was also reiterated by Mr. Clingenpeel. Ms. Martinez then asked what the next steps are, and Mr. Gahn responded that testing and verifying the correlation between the size/age of the fish and the amount of plastics in the tissues.

Rusty Senac asked about the difference between the size of microplastics versus the size of a cell and Mr. Gahn responded that these plastic particles can be many times smaller than the size of a single cell.

Dr. George Guillen asked if there was a way to verify that these particles are suspended in the water versus dissolved. Mr. Gahn commented that these are all solid particles and that for them to dissolve the plastics would have to be broken down into its molecular components. Dr. Guillen then asked if this research was able to identify the differences between suspended vs. dissolved particles. Mr. Gahn replied that size differentiation is one of the next steps in this research to determine the various sizes of microplastics and microplastic components in the tissue.

Michael Lee asked about how long it takes to process a sample from start to finish and Mr. Gahn replied that it only takes a few days.

Mr. Senac asked for clarification that muscle tissue was being used, which it is.

Dianna Ramirez asked about the average size of the fish that were used and Mr. Gahn responded that roughly six inches in length would be a good average. Ms. Ramirez also asked if he knew the collection methods. Mr. Gahn responded that he looked into it but was not positive. Dr. Marshall commented that they were likely all collected through traditional museum collection methods and immediately placed into preservative.

Dr. Guillen asked if all specimens were preserved in formalin and Dr. Marshall and Mr. Gahn responded that these were museum specimens that were collected and placed in formalin and then transferred into a 70% ethanol solution.

Linda Shead complemented Mr. Gahn on the presentation and research and Caimee Schoenbaechler asked if this had been published. Mr. Gahn responded that it was not published yet but would be.

Ms. Traweck asked if they could get a copy of the presentation and Mr. Gahn agreed and it will be available on the GBEP website and shared with the GBC.

A complete recording of the presentation and discussion is available upon request.

Presentation: Presentation: *Total Maximum Daily Loads and Escherichia coli Trends in Texas Freshwater Streams* – Michael Schramm, Texas Water Resources Institute

Michael Schramm provided information from his research into the Total Maximum Daily Load (TMDL) development and implementation and whether the development of TMDLs has impacted the levels of *Escherichia coli* (*E. coli*) in the associated waterways. Mr. Schramm's presentation provided a background of TMDLs and *E. coli* as an indicator in water quality planning, then provided information on the research conducted.

Mr. Clingenpeel asked about the details of flow normalization that were used in the research and how that was interpreted, and Mr. Schramm responded that it was used as a best fit and viewed as a hypothetical situation from extrapolating stream flow data.

Tom Douglas commented that this paper was selected as Outstanding Paper of the Year in the journal that it was reviewed.

Mr. Clingenpeel stated that it is an admirable question to address, whether the regulatory mechanisms in place are achieving what they were intended to do. He then commented that *E. coli* is a terrible standard, but that the concept that is trying to be accomplished is admirable: is water contact and use safe? This led into an in-depth discussion between Mr. Schramm, Mr. Clingenpeel, and Ms. Shead about the issues of using *E. coli* as an indicator for water quality. Mr. Clingenpeel also asked about Mr. Schramm's thoughts on if flow assessment had been used as an indicator for contact recreation, would that have affected what water bodies were impaired? Mr. Schramm alluded to another paper that addressed that and that it is a worthy question. He also provided information on some of the benefits of using *E. coli* data for decision making and risk assessment. Ms. Shead also commented that *E. coli* does not cause gastrointestinal issues, but that it is caused by a virus and that *E. coli* does not tell you about the viral load of the water.

Dr. Guillen asked about the ascending and descending limbs of the flow and how that impacts the flow assessment. Mr. Schramm responded that it was not accounted for, but that they used the mean daily flows. Dr. Guillen then commented that just because the cause is not human driven, does not mean that the *E. coli* data is useless as there are other risk issues that can be caused from other *E. coli* sources.

Brian Koch commented that there has been a lot of discussion about the issues with using *E. coli* as a contact recreation indicator, but that it is an uphill battle. With that said, there are still success stories from the use of Best Management Practices, and it is correlated to stakeholder and volunteer engagement and involvement.

Subcommittee Presentation of Fiscal Year 25 Priorities

- Casey Taylor, Monitoring and Research (M&R) Coordinator provided the fiscal year 25 M&R priorities to the GBC:
 - 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: Results translated to plain language/practical knowledge

- Lindsey Lippert, Natural Resource Uses (NRU) Coordinator, provided the fiscal year 25 NRU priorities to the GBC:
 - Habitat Acquisition
 - Enhancement of Existing or Ongoing Restoration/Conservation Efforts
 - Special emphasis on projects addressing geotubes failing across West Bay through design and/or construction
 - Benefit to Native Fish and Wildlife, including Federal and State Listed Species, Species of Greatest Conservation Need, or Nongame Wildlife
 - Special emphasis on projects addressing seagrasses, intertidal reef/shell hash, and benthics
 - Brings Funding, Work Leverage, or Multiple Goal Benefits to the Subcommittee
 - Project Urgency: Project must be completed in next 24 months or opportunity is lost
- Kari Howard, Public Participation and Education (PPE) Coordinator provided the fiscal year 25 PPE priorities to the GBC:
 - Place based and immersive programing (K-12)
 - Conservation and environmental workforce training
 - Continuation or expansion of established education, outreach, or engagement programs
 - Adult engagement in science literacy focused on the Galveston Bay estuary and watershed
- Christian Rines, Water and Sediment Quality (WSQ) Coordinator, provided the fiscal year 25 WSQ priorities to the GBC:
 - Supporting management measures and watershed-based plans
 - Monitoring and research that evaluates green infrastructure effectiveness in water quality and soil health
 - Targeted/Direct Monitoring

Fiscal Year 25 funding information and subcommittee priorities are available on the [GBEP website](https://gbep.texas.gov/funding/#:~:text=Funding%20for%20Fiscal,and%20State%20Funding).¹

GBC Members Roundtable: News and Announcements

Dianna Ramirez (GLO): For those that are unaware, Melissa Porter has retired; Angela Sunley is the new Deputy Director of Coastal Resources at the Texas General Land Office. The Sediment Management Workgroup is looking for offshore sediment sources for critical beach and dune renourishment projects.

¹ <https://gbep.texas.gov/funding/#:~:text=Funding%20for%20Fiscal,and%20State%20Funding>

The Natural Resource Damage Assessment group has worked with the U.S Army Corps of Engineers on an agreement for beneficial use of dredge material placement in Pierce Marsh.

The Coastal Erosion Planning and Response Act (CEPRA) Programs Babe's Beach project kickoff is scheduled for August, and the CEPRA Program is finalizing the cycle 13 award list.

Michael Lee (USGS): Integrated Water Science Basin 5 selected with the Trinity and San Jacinto watershed which provides funding for 10 years to advance the science of the watersheds. USGS is currently developing the scope of work for this project.

USGS will be hiring at least four positions in the next year in this area.

Brian Koch (TSSWCB): TSSWCB is planning a mid-August announcement for the Clean Water Act Section 319 request for proposals.

Glenn Clingenpeel (TRA): The regional flood plans have been completed and the Texas Water Development Board (TWDB) is meeting to consider the adoption of the plans.

Grace Martinez (League of Women Voters): Working with the League of Women Voters at the Chimney Rock Courthouse to register voters in Houston.

Savannah Horton (TPWD): The restoration team is now fully staffed but there is an entry level tech position open with the ecosystem services team.

Rachel Windham (HGAC): Regional Flood Management meeting is July 19, 2023.

The Natural Resources Advisory Committee meeting is August 3, 2023.

There will be a few watershed planning meetings in July and August and information is on the HGAC website.

There is a Clean Waters workshop on August 16, 2023.

The Parks and Natural Areas awards nominations open on September 1, 2023.

Caimee Schoenbaechler (TWDB): The Estuary Science Exchange will be held virtually at 2:00 p.m. on July 21, 2023. The Meadows Center for Water and the Environment will host a brown bag lunch presentation at 12:00 p.m. on July 20, 2023 that will be the first in a series on Integrated Flood Modeling.

Kelly Mills (TCEQ): TCEQ is working to fill numerous vacancies.

Cotton Bayou TMDL and Chocolate Bayou TMDL both will be released for public comment in October.

The SWQM team is assessing the 2024 Integrated Report data which will include a new impairment category, 5R, which indicates impairments addressed by a WPP.

TCEQ will make additional efforts to comply with Title VI and provide equal access to materials in appropriate languages.

Public Comment: None

Other Business: N/A

Adjourn: The meeting was adjourned at 12:25 p.m.

Upcoming Galveston Bay Council Meeting Dates: October 18, 2023, January 17, 2024, April 17, 2024, and July 17, 2024. Meetings are held on the third Wednesday of the

quarter from 9:30 a.m. - 12:30 p.m. If there are known conflicts, Council members are welcome to propose alternate dates to the Council.