

WATER AND SEDIMENT QUALITY SUBCOMMITTEE GALVESTON BAY COUNCIL

Meeting Minutes
Thursday, December 05, 2019
1:30PM – 3:30PM

Subcommittee Chair: Brian Koch, Texas State Soil and Water Conservation Board (TSSWCB)

Subcommittee Vice Chair: Justin Bower, Houston-Galveston Area Council (H-GAC)

GBEP Representative: Christian N. Rines

Call to Order, Introductions

Attendees: Rachel Windham (H-GAC), Brian Koch (TSSWCB), Justin Bower (H-GAC), Ryan Bare (HARC), Stacey Carr (TCEQ), Michael Lee (USGS), Zulimar Lucena (USGS), Denise Ehrlich (GCA), Theresa Morris (TIRN), Bryan Eastham (TPWD), Lisa Marshall (GBEP), Kristen McGovern (GBEP), Lindsey Lippert (GBEP), Patricia Thompson (GBEP), Mary Stiles (GBEP), Christian Rines (GBEP), Sarah Bernhardt (Bayou Preservation Association by phone), Gerrad Hofmans (TCEQ by phone), Stephanie DeVilleneuve (TWRI by phone).

Approval of September 11, 2019 minutes – approved with no changes.

Presentation & Discussion: Regional Monitoring Database (RMD) – Ryan Bare, HARC

Mr. Bare provided a recap and update on the RMD project. GBEP and HARC partnered to hold a workgroup meeting in August 2019. The goal of this meeting was to gather input and feedback from stakeholders. This ensures that users will get the most use out of the database and have it be applicable to whatever projects and efforts they may be working on. From this meeting, it was noted that most stakeholders wished to extend the focus area north. The database will now include the San Jacinto River Basin. Stakeholders also requested that the entire period of record be made available. The entire period of record will be available for download, with customizable features to select different time periods or certain geographical areas for download and export. It

was also recommended that some sort of subscription notification service be included, so that users will be notified when specific datasets are updated. A portal was also recommended so that users can submit feedback as to how the RMD can better suit their needs.

The RMD will be released in a phased approach over three years. Phase I will supply bulk datasets covering the entire period of data, where users will be able to download subsets. The bulk data will provide what is necessary for the interactive geospatial mapping and interactive analysis and graphing applications that will be subsequently rolled out in the later phases. Datasets will be cross integrated from multiple databases. Once deployed the database will be updated to include data through 2019 and possibly 2020. Bulk data will be available through something similar to a ShareFile FTP site.

Information on the RMD can be referenced on pg. 145 of the Galveston Bay Plan, 2nd Edition. The indicators list that is the driver for the datasets is located on pgs. 153-155. Any additional thoughts or comments on the database are welcomed.

Presentation: “Occurrence of Microplastics in Tributaries to Galveston Bay” Site Selection - Zulimar Lucena, USGS
**Map of selected sites is attached*

Presentation: “Microplastics in the Galveston Bay Watershed: The Big Impacts of Tiny Pollution” - Theresa Morris, TIRN

**Presentations, notes, and Q&A available upon request.*

Subcommittee Needs/Gaps Discussion:

- Ms. Rines welcomed a discussion on the direction of the subcommittee in the coming year (i.e.- types of presentations, collaborations, subcommittee needs and gaps).
- Ms. Bernhardt requested presentations on large scale post-Harvey flood projects and water and sediment quality impact components of those studies.
- Mr. Bower suggested looking for innovative examples of incorporating water and sediment quality into these large-scale flood projects.
- Mr. Bare mentioned the need for direct pathogen monitoring in the watershed. More quantifiable data and microbial risk assessment modeling could help evaluate the risk to public health. Additionally, there

is a need to monitor changes in microbial concentrations during high flow events.

- Mr. Koch requested that we push the need for soil health projects and encourage good soil health practices at the local level in the watershed.
- Mr. Guillen mentioned the need for microbial concentration risk assessments immediately following flooding events. He also encouraged subcommittee members to collaborate with other groups to build on funding sources for similar projects.
- Mr. Koch asked if there is a need for more watershed protection plans in the area. Mr. Bower answered with yes, but of course funding is always the driver. There are currently plans on the books that will need those sources of funding to help bridge the gap to the next phase of implementation.
- Ms. Marshall mentioned the need for green infrastructure water quality monitoring to determine the effectiveness of these structures in our watershed.
- Mr. Bower mentioned the need for more localized watershed protection in the Lake Houston and San Jacinto River Basin. H-GAC has discussed the need to focus in on problem areas within already covered areas, not necessarily doing new plans but prioritizing areas within those plans. In addition, more urban microbial risk projects are always helpful.

Project Updates:

Dickinson Bayou/ Highland Bayou WPP (TX A&M AgriLife)

- Dickinson - No update.
- Highland - The next stakeholder meeting will be held December 19th from 10:00 am to 12:00 pm. The draft WPP will be reviewed at the meeting.

GIFT (TX AgriLife)

- AgriLife is finalizing all data for the Sheldon Lake State Park freshwater restoration monitoring project and will be submitting the comparative study sometime this month.
- Phase II of the Exploration Green stormwater wetland has been completed and planted and Phase III is currently under construction.

Cypress Creek/Spring Creek Watershed Protection Plans (H-GAC)

- Cypress Creek - The project is finishing up work on source identification and modeling. It is taking a new approach in looking at base urban

wildlife. Stakeholders are very involved in the project as well as other partners. The partnership hopes to have a few projects on the ground before approval of the plan.

- Spring Creek – This project is just getting started and Ms. Windham will be the lead. Public involvement is anticipated to start in Spring 2020.

BIG I-Plan/Basins 11 and 13 (H-GAC)

- Cotton Bayou is in its early stages. Stakeholder contact will begin in Spring 2020. Work on the characterization report will start soon.
- H-GAC is continuing work on a TMDL for Big Creek in Ft. Bend County and working internally on Halls Bayou. The coordination committee meetings for Caney and Oyster will be on December 10th.

Double Bayou Watershed Protection Plan (GTRI)

- The QAPP has been approved. A meeting with USGS will be held very soon to finalize the sampling plan. The first digital newsletter was recently released through both the website and email. The next stakeholder meeting will be held spring 2020. The project is looking into working with AgriLife to develop a septic system training for stakeholders.

Bacteria Source Tracking (TWRI)

- The lab has finished fingerprinting and will now start IDing the isolates. Work on the final report will start once IDing is complete.

Targeted Bacteria Monitoring (BPA thru H-GAC)

- H-GAC has submitted the draft QAPP to GBEP for review. Project activities pending approval. No other updates.

Occurrence of Microplastics in Tributaries to Galveston Bay (USGS)

- Sampling sites were selected during a joint meeting of WSQ and M&R Subcommittee members. USGS is currently developing the draft QAPP. No other updates.

Announcements/Path Forward Items:

- Mr. Bower announced that H-GAC has been working with Texas Forest Service (TFS) for several years now on watershed management projects. Mac Martin is the new contact and is very interested in urban forestry and how it relates to water quality. Mr. Bower suggested reaching out to him if you haven't done so already to see where your work might overlap with that of TFS.
- Mr. Lee announced that USGS is actively seeking entry level hydrologists. In addition, they will be looking for year-round student interns.

GBEP, Council, and subcommittee updates:

- M&R Subcommittee Meeting: December 11, 2020, 9:00am - 11:30am
- PPE Subcommittee Meeting: December 12, 2020, 9:00am - 11:30am
- NRU Subcommittee Meeting: December 13, 2020, 9:30am - 11:30am
- B&P Subcommittee: TBD
- GBC Meeting: January 21, 2019, 5:00pm - 7:00pm at Moody Gardens Hotel Café in the Park in Galveston, Texas
- State of the Bay Symposium - January 22 - 23, 2020 at the Moody Gardens Hotel and Convention Center in Galveston, Texas *Early registration goes through December 13th. Posters are being accepted until January 3rd and additional exhibitors are welcome. All other Symposium information can be found on GBEP's website.
- Future WSQ Meetings:
 - Wednesday, March 4, 2020, 1:30PM - 3:30PM
 - Wednesday, June 10, 2020, 1:30PM - 3:30PM
 - Wednesday, September 9, 2020, 1:30PM - 3:30PM
 - Wednesday, December 9, 2020, 1:30PM - 3:30PM

Adjourn