

Cotton Bayou Watershed Annual Meeting

Tuesday, August 4th, 2026
4:00 p.m. – 6:00 p.m.

In Attendance:

Organizers:

Houston-Galveston Area Council (H-GAC)

Cornell Evans, Jr., Presenter, H-GAC Project Manager

Steven Johnston, H-GAC Principal Planner

Texas Commission on Environmental Quality (TCEQ)

Jazmyn Milford, TCEQ Project Manager

Samantha Gonzalez, TCEQ Project Manager

In-Person Attendees:

Natalie Lopez, City of Mont Belvieu

Sam Hill, Texas A&M Forest Service

James Weaver, Trinity Bay Soil & Water Conservation District

Brian Koch, Texas State Soil & Water Conservation Board

Elena Matthews, Baytown Sun

Claudia Sandoval, Chambers-Liberty Counties Navigation District

Mark Dolecki, Interested Resident

Kelly Norrid, Texas Parks & Wildlife Department

Kevin Muraira, Texas Parks & Wildlife Department

Chuck Davis, Interested Resident

Virtual Attendees:

Alexander Neal, Texas Water Resources Institute

Debbye Waller, Interested Resident

Evelyn Barrera, Interested Resident

Heather Firn, Trinity River Authority of Texas

Natasha Zarnstorff, Galveston Bay Foundation

Jen Irving, Houston Advanced Research Center

Patrick Shevlin, P&G Interests, LLC

Meeting Notes:

Welcome and Introductions

- Cornell Evans (H-GAC) commenced the meeting at 4:00 p.m. by welcoming the attendees. He then invited attendees to introduce themselves.

Project Overview, TMDL Process, Water Quality Data Updates

- Mr. Evans provided an overview of the original Cotton Bayou Total Maximum Daily Load (TMDL) funded by the Texas Commission on Environmental Quality (TCEQ) and facilitated by H-GAC:
 - Levels of the fecal indicator bacteria *Enterococcus* in exceedance of the state water quality standard observed in Cotton Bayou originally did not support contact recreation use as described in the 2022 Integrated Report of Surface Water Quality produced by TCEQ. H-GAC prepared the original TMDL to address the *Enterococci* impairment in the watershed.
 - The Commission adopted this TMDL on May 22, 2024. EPA approved it on July 26, 2024, at which time it became an update to the state's Water Quality Management Plan.
 - Collecting data over time in the watershed determined that the Above Tidal portion of the watershed was impaired for *E. coli*, at which time TCEQ asked H-GAC to prepare an Addendum TMDL for the Above Tidal assessment unit (AU) due to its impairment documented from the 2024 Texas Integrated Report of Surface Water Quality for Clean Water Act Sections 305(b) and 303(d).
 - Mr. Evans provided the latest summary of the seven-year geometric mean for fecal indicator bacteria (FIB) samples taken for the Cotton Bayou watershed via the Draft 2026 Texas Integrated Report. He explained to the audience the current water quality status for the watershed as impaired for contact recreation use.
 - Mr. Evans then gave a brief overview of the potential sources of bacteria that may affect a watershed. They include wastewater discharge, failing onsite sewage facilities, domestic and wildlife animal waste, and waste from invasive species such as feral hogs.
 - The TMDL process was defined as the following: the maximum amount of a pollutant that a waterbody can receive in a single day without exceeding water quality standards. Mr. Evans then proceeded to explain how this amount is calculated, the process for each component, and the calculated TMDL for Cotton Bayou Above Tidal and Cotton Bayou Tidal.

- A graph showcasing the geometric mean bacteria trend analysis for all monitoring stations in the Cotton Bayou watershed was showcased. Bacteria levels increased and peaked to approximately twelve times the contact recreation standard during the 2010s, presumably in response to rapid development in the watershed. Since then, bacteria levels were shown to have improved, decreasing to approximately two times the contact recreation standard. Implementation efforts and voluntary actions taken by stakeholders will be integral to maintain and decrease the current trend.
- Mr. Evans provided a series of updates for the year 2025 for the following potential sources of fecal bacteria:
 - Sanitary Sewer Overflows (SSO):
 - Presented by causes, number, and volume, SSOs from 2020-2025 were showcased. Mr. Evans emphasized how even a single SSO event (such as the one highlighted in 2025) can have a large impact on the waterways if left unchecked.
 - Wastewater Facilities:
 - Mr. Evans explained that the data used to analyze the most recent permitted discharges from wastewater facilities was received from Discharge Monitoring Reports (DMR) submitted to TCEQ. From 2020-2025, out of 40 results that were reported, 6 exceedances were observed. When there is an exceedance, TCEQ evaluates the severity of the violation through DMRs or inspections and then follows a structured enforcement process.
 - It was also shared with the audience that starting in 2023, there was a decrease in grab sample percent compliance (the lowest being 78.6% in 2024). H-GAC is not sure why this occurred; however, percent compliance was shown to increase to 85% in 2025.
 - Onsite-Sewage Facilities (OSSF):
 - OSSFs or septic tanks, are an additional way to treat/manage wastewater. They're efficient and effective, however if the system is aging or improperly maintained, the unit runs the risk of failing. Mr. Evans provided an overview of how H-GAC estimates and tracks the total number of permitted and non-registered OSSFs within the H-GAC region, and from there provided the total numbers for both Cotton Bayou Above Tidal and Cotton Bayou Tidal.

Implementation Plan Updates

- Mr. Evans provided an update on the submitted I-Plan and stated that it was approved by TCEQ Commission on July 9th, 2025. The Technical Support Document for the Cotton Bayou Above Tidal addendum went through public comment response, which ended on June 9th, 2026. Mr. Evans then gave an overview of the components of an I-Plan including:
 - Strategies - actionable items to address bacteria reduction for specific management measures associated with specific priority areas and responsible parties.
 - Milestones - measurable goals to reflect progress of strategies.
 - Schedule – guide for which milestones should be accomplished in the next five years and at what point.
- Mr. Evans described the adaptive management methodology of I-Plans which allows for stakeholders to periodically assess plan measures for efficiency and effectiveness.
- The ranked management measures for the Cotton Bayou Implementation Plan are as follows:
 - 1) Reducing stormwater sources such as pet waste and illegal dumping
 - 2) Promoting safe OSSF use and maintenance
 - 3) Supporting land management initiatives
 - 4) Promoting feral hog management
 - 5) Maintaining and improving WWTF and collection system function
- Mr. Evans reviewed specific actions suggested for each management measure, highlighting the planned goals for the first year and beyond, including a riparian buffer/feral hog management workshop scheduled for August 24th from 8AM – 12:15PM. Anyone interested in attending may register here: [Cotton Bayou TMDL Project](#). He also shared an education and outreach opportunity related to the Wastewater Treatment management measure: the [TexasWaterCareers](#) website. Developed in collaboration with H-GAC, the Association of Water Board Directors, and other partners, this website provides career and training opportunities for prospective water and wastewater professionals.
- Mr. Johnston emphasized that while H-GAC acts as a facilitator for the Cotton Bayou TMDL Project, this is the stakeholders' implementation plan. The voluntary actions that they take will be integral for meeting the goals that were proposed when the plan was first developed. H-GAC can assist with certain measures such as the riparian buffer workshop, however, to meet these goals, the stakeholders must collaborate to go after funding sources in order to see implementation through.

Next Steps

- Prioritize implementation strategies for Year 1 and beyond. Gather implementation status updates from stakeholders
- Continue funding discussions with stakeholders
- Continue to build stakeholder contact list

Discussion

- Discussions throughout the presentation highlighted some of what's already being done within the watershed. Ms. Lopez (City of Mont Belvieu) provided an update on the City working with a nearby subdivision within City limits to convert residential properties' OSSFs to city sanitary sewer. The project will be sent out for bidding soon.
- Mr. Evans shared with attendees that he will be working on a document to begin capturing any implementation activities completed within the watershed, and will send that out to the stakeholder contact list for their review and feedback.

Meeting Adjourned at 5:00 p.m.

For more information about the meeting or the project, please contact:

Cornell Evans, Jr.
Phone: 713-499-6666
Email: cornell.evans@h-gac.com



This project is funded by the Texas Commission on Environmental Quality and is facilitated locally by the Houston-Galveston Area Council