

Double Bayou Watershed Partnership Stakeholder Meeting

October 22, 2024

5:30 -7:00 PM

Double Bayou Community Building

MEETING SUMMARY

Presenters: Ryan Bare (HARC), Terry Gentry (TAMU), Kirsten Vernin (HARC), Schyler Rhea (WHF), Brian Koch (TSSWCB), Jimmy Weaver (Trinity Bay SWCD)

Refreshments, Sign-In, Welcome, Introductions, and Agenda Review

Ryan thanked everyone for attending and recognized program funders (TSSWCB and GBEP). 25 stakeholders were present at the meeting. The Chambers-Liberty Counties Navigation District was thanked for the dinner and Chambers County was thanked for providing the meeting room. The logistics of the meeting were reviewed, and a recap of the Double Bayou Watershed Protection Plan (WPP) was given. The goal of the plan is to improve water quality utilizing a voluntary, collaborative, and stakeholder-driven approach. The WPP was accepted by the U.S. Environmental Protection Agency in 2016. Phase I Implementation of the plan was from September 2018 and ended May 2023. Agricultural, wastewater, and outreach management measures, including feral hog removals were completed during this phase of the plan. Bacteria has been the primary focus in the watershed. Many streams in Texas are impaired by bacteria. Phase II Implementation of the plan is currently in progress.

Overview of Bacterial Source Tracking in the Double Bayou Watershed

Terry provided an overview of the historical and most recent Bacterial Source Tracking projects in the watershed. Bacterial Source Tracking is used to determine the sources of fecal contamination based on the uniqueness of bacteria from individual sources such as wildlife, humans, and livestock using a variety of different methods. The first BST study for Double Bayou occurred between April 2018 and April 2019. Twelve water samples were collected from one sampling location. 52% of the sources were from wildlife, 4% from human, 19% from livestock and domesticated animals, and 25% of sources were unidentified. During the most recent BST study, twenty water samples were collected from four sites (two stations on the East Fork and two on the West Fork) between July 2023 and February 2024. 46% of the sources were from wildlife, 25% from domesticated animals, 2% from humans, and 27% were unidentified. Human source contributions were detected at some sites, but represented a limited portion of bacteria. The unidentified isolates at some sites were relatively high and indicates that these are representative of unique organisms not currently represented in the DNA library.

Strategic Implementation of GI BMPs in the Double Bayou Watershed – Current Project Status and Interactive Mapping Activity

Kirsten introduced the software program being used to develop a watershed-based model to simulate water quality for the Double Bayou Watershed. This model will be used to develop different scenarios relating to the placement, type, and size of green infrastructure practices throughout the watershed that could potentially reduce bacteria loads and inform decisions about where to strategically implement these types of projects as part of the WPP strategy. An interactive mapping activity was then completed to provide further insight about how water is moving into and out of the East and West Forks of Double Bayou. The information provided will be incorporated into the model. Model results will be presented at the next implementation meeting.

An Introduction to Wildlife Habitat Federation

Schyler provided an introduction to Wildlife Habitat Federation (WHF) and the technical services they provide related to site assessments, habitat management plan creation, and implementation of habitat restoration practices. Information was also provided about financial assistance available for landowners who are interested in implementing habitat conservation practices on their property.

WQMP Implementation Update

Brian gave an overview of WQMPs, and Jimmy gave an update of the different types of conservation practices that have been implemented in the watershed by landowners through the WQMPs. TSSWCB is the lead agency in Texas responsible for planning, implementing, and managing programs and practices for abating agricultural and silvicultural nonpoint source water pollution. WQMPs are site-specific plans for land improvement measures developed through the SWCD for agricultural lands that provide farmers and ranchers a voluntary opportunity to achieve a level of pollution prevention or abatement consistent with state water quality standards. These plans provide state-certified proof that you are implementing conservation practices and can resolve water quality complaints through a voluntary process with SWCD and TSSWCB. There were 21 WQMPs in the watershed when the Watershed Protection Planning process began. Since then, there have been 20-30 additional WQMPs created.



Funding for this effort was provided through a Clean Water Act Nonpoint Source Grant administered by the Texas State Soil and Water Conservation Board from the U.S. Environmental Protection Agency and a grant from the Texas Commission on Environmental Quality administered by the Galveston Bay Estuary Program.