Double Bayou Watershed Partnership
Stakeholder Meeting

October 24, 2023
5:30 -7:30 PM
Oak Island Community Building

MEETING SUMMARY

Presenters: Stephanie Glenn (HARC), Ryan Bare (HARC), Kirsten Vernin (HARC), Jay Long (Texas A&M NRI), Brian Koch (TSSWCB), Jimmy Weaver (Trinity Bay SWCD)

Refreshments, Sign-In, Welcome, Introductions, and Agenda Review
Stephanie thanked everyone for attending and recognized elected officials in attendance. 17 stakeholders were present at the meeting, and one was an elected official (the Commissioner from Precinct 1). 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.

Overview of Phase II Implementation Project
Ryan provided an overview of the Phase II Implementation of the Double Bayou Watershed Protection Plan, as well as the status of water quality monitoring in the watershed. Phase II Implementation is being funded by the Texas State Soil and Water Conservation Board (TSSWCB) through September 2025. Ryan also described several management measures that are being pursued to protect and restore water quality in the East and West Forks of Double Bayou that include water quality monitoring at five locations, Bacterial Source Tracking, stakeholder meetings, workshops, outreach and education opportunities, and Water Quality Management Plans.

Kirsten provided a brief overview of two new feral hog fact sheets that are available on the Double Bayou website. The first is one that outlines the current knowledge of feral hog removals at the state level and within Chambers County, as well as a description of the research on how feral hogs impact water quality. The second fact sheet contains local resources for landowners wishing to manage feral hogs on their property.

Interactive Feral Hog Trapping Demonstration by Jay Long from Texas A&M Natural Resources Institute

Jay discussed the different types of legal feral hog removal methods in the state of Texas, as well as the efficacy of trapping. He then gave a demonstration of how smart traps function and answered questions from the audience.

New Project Announcements
Ryan announced two new projects in the watershed. The first is Bacterial Source Tracking, which was a stakeholder recommended management measure. The project is being funded by the TSSWCB. The study started August 2023. The United States Geological Survey (USGS) is collecting water samples from four locations on the East and West Forks of Double Bayou. The Soil and Aquatic Microbial Laboratory at Texas A&M University is analyzing the samples. Results are expected in Spring 2024 to support implementation activities. This project will help identify solutions to reduce bacteria which exceed health levels in the East and West Forks. Sources of bacteria will be identified as well as bacteria concentrations in the water.

Many stakeholders asked questions about the relationship between streamflow, salinity, and bacteria concentrations in the watershed. One person asked if bacteria levels are high because the bayou is silted in at the mouth and has low flow. This spurred a discussion of how the blockage of Double Bayou is preventing boats from entering the bayou from Trinity Bay,

which has impacted the watershed economically. It was brought up that a bait shop had to close as a result. Many stakeholders were interested in and had questions about dredging the bayou. One stakeholder stated that Peninsula Marine is willing to do the dredging but needs the permit and funding to do it. Another stakeholder brought up that Jefferson County has a lot of resources and is experienced in dedging. Brian stated that the dredging of the mouth of Double Bayou was a Tier 1 project under the Coastal Resiliency Plan. He also mentioned the beneficial reuse of dredge material for rookery islands. The partnership is following up by investigating the status of the Texas General Land Office Master Resilience Plan's project to dredge the bayou and beneficially reuse the material for habitat or shoreline restoration. We will provide updates in future meetings and newsletters, as well as on the website.

Another stakeholder asked if the bacteria concentrations in the bayou sediments might impact the safety of fish caught in the watershed.

Ryan then gave a summary of what is planned for the second new project on the strategic implementation of Green Infrastructure (GI) in the watershed. The primary benefits of these practices include soaking up, storing, and filtering rainwater. GI is compatible with conservation practices included in Water Quality Management Plans (WQMPs, such as soil and vegetation quality improvement, prescribed grazing, invasive brush management, grass planting. There are currently several local examples of GI in the watershed including a living shoreline at Job Beason Park, and native forest on the stream banks of Double Bayou, as well as wetlands. This project will determine what kinds of GI may work best and where it could be placed using a modeling software called the Soil & Water Assessment Tool (SWAT) and input from stakeholders to improve the model results. This project will start in the Fall of 2023 with funding from the Galveston Bay Estuary Program.

Several stakeholders were interested if the SWAT modelling might help answer some of the questions related to the relationship between streamflow in the bayou and the silting in of the mouth.

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 17-20 additional WQMPs created.

Stakeholder Activity

Stakeholders provided feedback on the types of tours, workshops, and educational opportunities that they were interested in. Two topics of interest were:

1. Water wells near East Fork, solar/wind powered.
2. Septic systems permitted near East Fork

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.