Implementation of the Double Bayou Watershed Protection Plan – Phase II

Dr. Ryan Bare, Research Scientist
Dr. Stephanie Glenn, VP of Water Research
Kirsten Vernin, Sr. Research Assistant

October 22nd, 2024

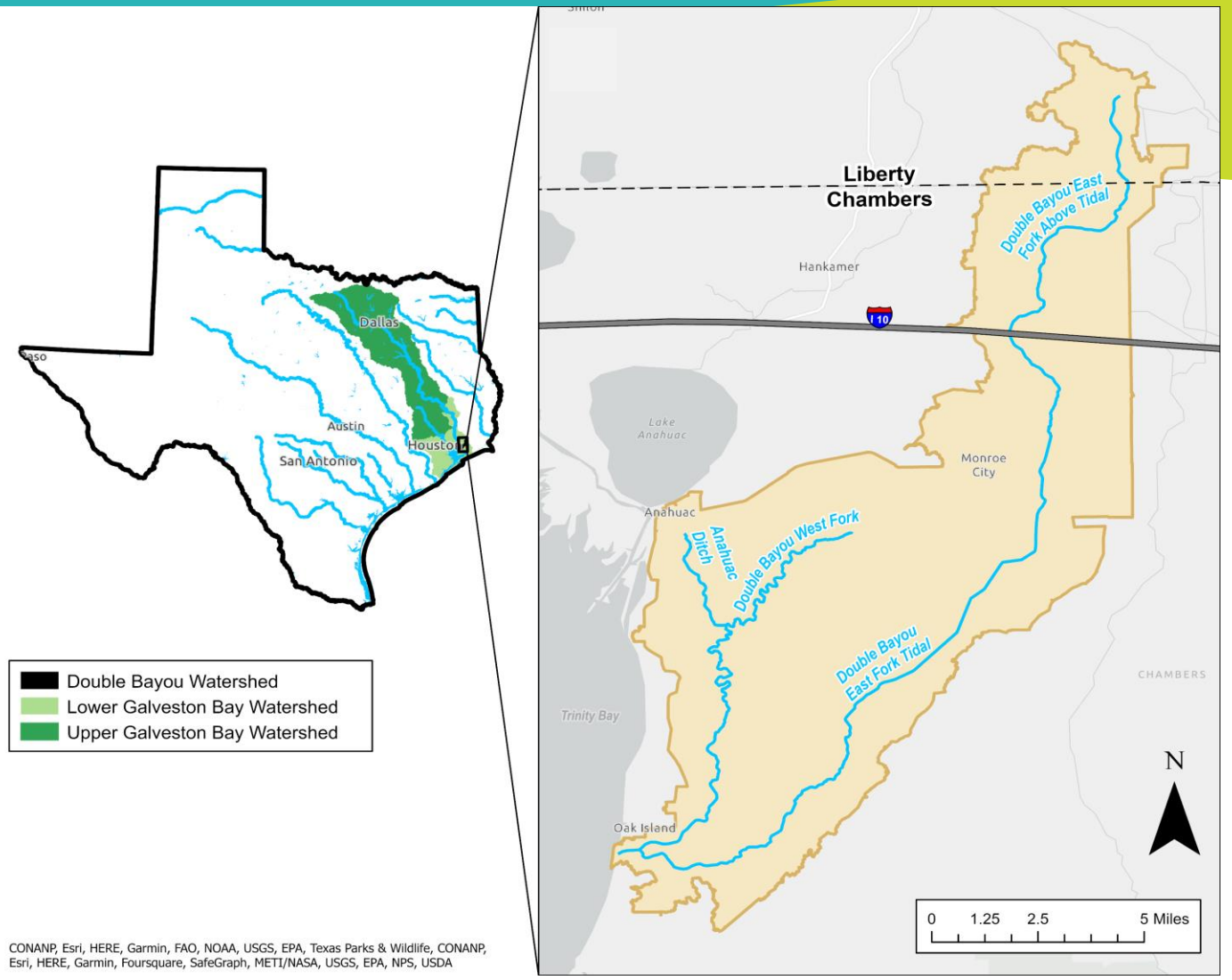
Funding for this effort was provided through a Clean Water Act Nonpoint Source Grant administered by the Texas State Soil and Water Conservation Board from the U.S. Environmental Protection Agency.

Double Bayou Fall 2024 Meeting

5:30	Welcome, Introductions, and Agenda
5:35	Bacterial Source Tracking in the Double Bayou Watershed – Dr. Terry Gentry
6:00	Double Bayou SWAT+ Green Infrastructure – Kirsten Vernin
6:30	An Introduction to Wildlife Habitat Federation – Schyler Rhea
6:45	Water Quality Management Plan Update - Brian Koch and Jimmy Weaver
7:00	Final Wrap-up, Adjourn

Double Bayou Watershed Protection Plan

- Goal is to improve water quality utilizing a voluntary, collaborative, and stakeholder-driven approach
- Stakeholder-approved Double Bayou Watershed Protection Plan accepted by the U.S. Environmental Protection Agency in 2016
- Management measures, practices that reduce nonpoint source pollution, suggested by stakeholders to address water quality issues
- Phase I implementation completed (September 2018 to May 2023)
- Phase II implementation is underway…



Strategic Implementation of Green Infrastructure BMPs in the Double Bayou Watershed

Kirsten Vernin, Sr. Research Assistant

October 22nd, 2024

Funding for this effort was provided through a grant from the Texas Commission on Environmental Quality administered by the Galveston Bay Estuary Program.

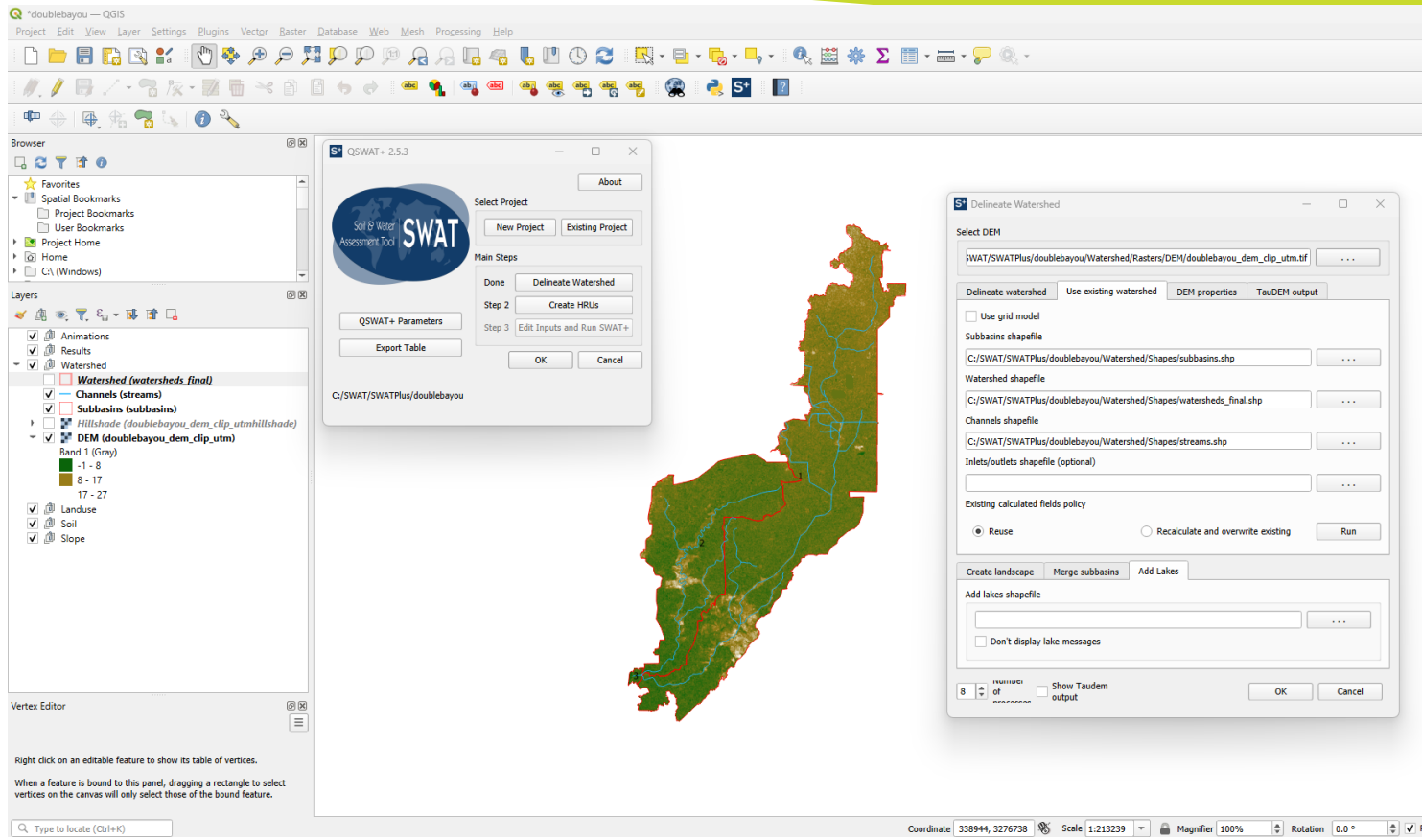
Introduction to QSWAT+

What is it?

A software program that creates a watershed-based model to simulate water quality using data, instructions, and assumptions.

Why are we using it?

Develop scenarios of different locations and sizes of green infrastructure, such as wetlands, throughout the watershed that could improve water quality and inform decisions about where to strategically implement these types of projects as part of the Watershed Protection Plan strategy.



Why we need your help

The Double Bayou Watershed is a unique, highly-modified agricultural watershed.

We need your help to understand its complex hydrology to develop a robust and practical watershed-based model.

Goal: To provide insight about how water is moving into and out of the main natural and agricultural canals.

Raw Data Only

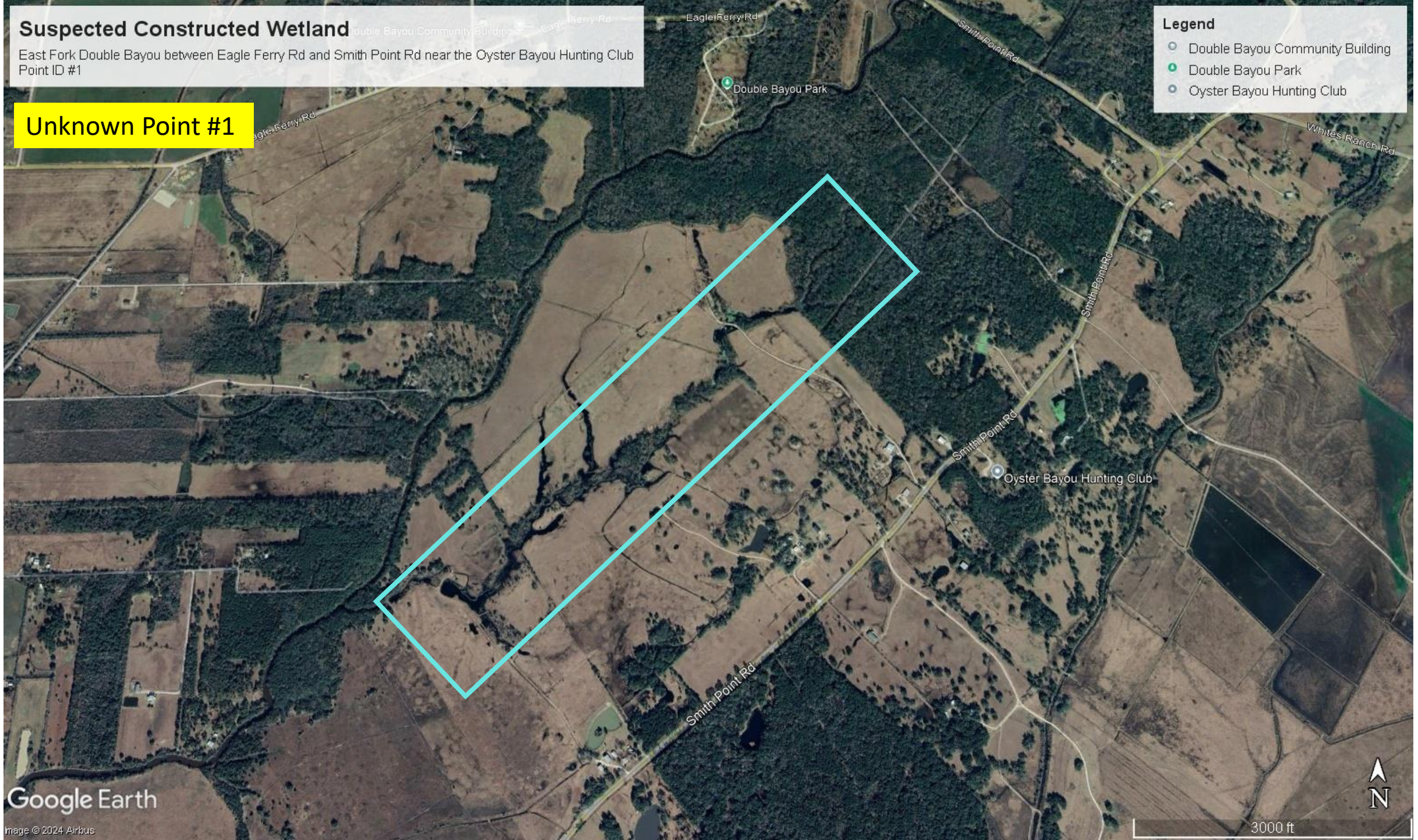
Using existing watershed boundary & canal network

Interactive Mapping Activity

Instructions: Identify structures that might influence water flow, as well as locations where water is flowing in/out of the main channels of the bayous (i.e., weirs, canals, diversions for rice/livestock, etc).

Weirs

Canals/Agricultural Diversions


Suspected Constructed Wetland
East Fork Double Bayou between Eagle Ferry Rd and Smith Point Rd near the Oyster Bayou Hunting Club
Point ID #1
Unknown Point #1
Legend
Double Bayou Community Building
Double Bayou Park
Oyster Bayou Hunting Club
Eagle Ferry Rd
Double Bayou Park
Smith Point Rd
Whites Ranch Rd
Oyster Bayou Hunting Club
Google Earth
Image © 2024 Airbus
N
3000 ft


Berm & Reservoir
East Fork Double Bayou just west of Jenkins Rd
Point ID #6
Unknown Point #8
Legend
Double Bayou East Fork
Jenkins Rd
Google Earth
Image © 2024 Airbus
1000 ft
N


Berm & Reservoirs
West Fork Double Bayou north of Belton Ln Ext
Point ID #10
Unknown Point #10
Legend
West Fork Double Bayou
West Fork Double Bayou
Belton Ln Ext
Belton Ln Ext
Belton Ln Ext
Google Earth
Image © 2024 Airbus
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300 ft

Thank you for coming!

www.DoubleBayou.org
Contact The Double Bayou Watershed Partnership at
doublebayouwpp@harcresearch.org
or
Ryan Bare at
Rbare@harcresearch.org

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