



## Improving Water Quality in the Hillebrandt Bayou Watershed

# A Project to Protect Recreational Uses

In the upstream portion of Hillebrandt Bayou (Segment 0704), bacteria concentrations are sometimes higher than the criteria set to protect the safety of recreation. High concentrations of bacteria, which are found in both human and animal waste, may indicate a health risk to people who swim or wade in the water body—activities called “contact recreation” in the state’s standards for water quality.

Bacteria are commonly found in the intestines of warm-blooded organisms such as humans, livestock, poultry, cats, and dogs. Bacteria from human and animal waste often indicate the presence of disease-causing microorganisms, which can pose a health threat to people who engage in contact recreation.

To address these concerns, people who have a stake in the watershed are working with TCEQ to develop a total maximum daily load (TMDL) and a plan to implement it (I-Plan). A TMDL is like a budget—it determines the amount (or load) of bacteria that the bayou can receive and still support recreational safety. The allowable load is then allocated among categories of sources within the watershed. The I-Plan outlines the measures that will be used to reduce pollution.

Learn more about water quality standards, monitoring, and TMDLs by reading [Preserving and Improving Water Quality](#)<sup>1</sup>, available on our website or in print.

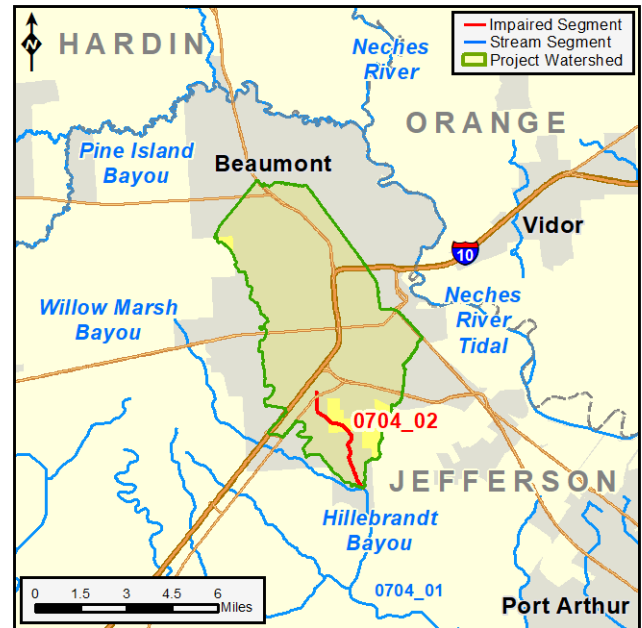
### The Hillebrandt Bayou Watershed

The watershed lies in the gulf coast region of east Texas in the Neches-Trinity Coastal Basin. Hillebrandt Bayou is a tributary of Taylor Bayou Above Tidal in Jefferson County.

Hillebrandt Bayou, Segment 0704, consists of two assessment units (AUs):

- **AU 0704\_01** – From the confluence with Taylor Bayou Above Tidal (0701) upstream to confluence with Willow Marsh Bayou (0704A).
- **AU 0704\_02** – From the confluence with Willow Marsh Bayou (0704A) upstream to a point 100 meters (110 yards) upstream of SH 124 in Jefferson County.

This project focuses on the watershed for the impaired portion of Hillebrandt Bayou, AU 0704\_02, from the



confluence with Willow Marsh Bayou. The project watershed is about 36 square miles. The dominant land cover includes developed (70%), hay/pasture (14%), and woody wetlands (8%). Beaumont, which had a population of 120,321 in 2018, encompasses nearly the entire watershed.

### Project Development

TCEQ began this project in 2018. The Texas Water Resources Institute (TWRI) is providing support for the technical aspects of the project. TWRI completed a technical report in 2020 that compiled and analyzed all available bacteria data and considered sources of the bacteria and their relative contributions. TCEQ completed a draft TMDL that was released for public comments in February and March 2021. The Commission adopted the TMDL at its Agenda meeting on August 11, 2021. TWRI and stakeholders have begun developing the I-Plan.

### Public Participation

In all its projects, TCEQ gathers opinions and information from people who represent government, permitted facilities, agriculture, business, environmental, and community and private interests in the watershed.

<sup>1</sup> <https://www.tceq.texas.gov/publications/gi/gi-351>

TCEQ solicits advice from the public at meetings and through print and electronic media notices.

TWRI is coordinating stakeholder participation. Stakeholders formed a Coordination Committee to guide development of the TMDL and have begun developing the I-Plan.

#### For More Information

Contact one of the people listed below, or visit the project webpage at:

[www.tceq.texas.gov/waterquality/tmdl/nav/118-hillebrandtbayou-bacteria](http://www.tceq.texas.gov/waterquality/tmdl/nav/118-hillebrandtbayou-bacteria)

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#### TMDL Development Status

**Start Date:** 2018

**TCEQ Adoption:** August 11, 2021

**EPA Region 6 Approval:**

#### I-Plan Development Status

**Start Date:** 2018

**TCEQ Approval:**

#### Project Highlights

- A workshop called “Managing Our Stormwater from Gutter to Stream” was held April 16, 2019 in Beaumont to discuss nature-based techniques to clean and conserve stormwater.
- Two stakeholder meetings were held on August 22, 2019 at the Cattail Marsh Wetlands Education Center in Beaumont. Identical information was presented at the 3:00 p.m. and 6:00 p.m. meetings.
- Stakeholders met virtually on April 9, 2020 to discuss progress on TMDL development and to begin I-Plan development.
- Stakeholders met online again on August 14 and August 19, 2020 to discuss the technical support document and the TMDL allocations for regulated stormwater and wastewater treatment plants.
- On February 10, 2021, the Commission authorized release of the TMDL for a public comment period of 30 days in February and March of 2021. TCEQ held an online public comment meeting on March 10, 2021 to hear oral comments on the TMDL.
- The I-Plan Coordination Committee met on May 17, 2021 to continue work on the I-Plan.
- The Commission adopted the TMDL at their Agenda meeting on August 11, 2021.

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