

# Improving Water Quality in the Hillebrandt Bayou Watershed A Project to Protect Contact Recreation 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.

To address these concerns, people who have a stake in the watershed are working with the 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*, available on our website at <<u>www.tceq.texas.gov/goto/tmdl/</u>>.

## 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 areas include developed (70%), hay/pasture (14%), and woody wetlands (8%). Beaumont encompasses nearly the entire watershed, with a population of 120,321 in 2018.



### **Project Development**

The TCEQ began this project in 2018. The Texas Water Resources Institute (TWRI) is providing support for the technical aspects of the project. TWRI is compiling and analyzing all available bacteria data and considering sources of the bacteria and their relative contributions, as well as coordinating stakeholder engagement.

### **Public Participation**

In all its projects, the TCEQ seeks to gather opinion and information from people who represent government, permitted facilities, agriculture, business, environmental, and community and private interests in the watershed. The TCEQ solicits advice from the public at meetings and through print and electronic media notices.

TWRI is coordinating stakeholder participation. Stakeholders will develop a Coordination Committee to guide development of the project.

#### For More Information

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

<<u>www.tceq.texas.gov/waterquality/tmdl/nav/118-hillebrandtbayou-bacteria</u>>

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## TWRI Project Manager

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TMDL Development Status Start Date: 2018 TCEQ Adoption: EPA Region 6 Approval:

I-Plan Development Status Start Date: 2018 TCEQ Approval:

### **Project Highlights**

- A *Managing Our Stormwater from Gutter to Stream* workshop was held April 16, 2019 in Beaumont to dis-cuss nature-based techniques to clean and conserve stormwater.
- Stakeholder meetings were held August 22, 2019, at the Cattail Marsh Wetlands Education Center, 4233 Babe Zaharias Drive, Beaumont, TX 77705. Identical meetings were held at 3:00 p.m. and 6:00 p.m.
- A virtual stakeholder meeting was held April 9, 2020, to discuss progress on TMDL development and to formally initiate I-Plan development. Meeting notes and presentations are on the project webpage.
- A virtual stakeholder meeting was held 14, 2020, to discuss the Hillebrandt Bayou Technical Support Document. Meeting notes and presentations are on the project webpage.
- A virtual stakeholder meeting was held August 19, 2020, to discuss the regulated stormwater and wastewater treatment plant TMDL allocations. Meeting notes and presentations are on the project webpage.

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