



Improving Water Quality in Jarbo Bayou A Project to Protect Recreational Uses

Since 2002, bacteria concentrations in Jarbo Bayou (Segment 2425B) have regularly been found at high levels. 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.

In response to these conditions, 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. A TMDL is like a budget—it determines the amount (or load) of bacteria that the bayou can receive and still support safe recreation. The allowable load is then allocated among categories of sources within the watershed. The implementation 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 www.tceq.texas.gov/goto/tmdl/.

The Jarbo Bayou Watershed

Jarbo Bayou is a tributary of Clear Lake, located in Galveston County. The bayou arises near Shore Boulevard in League City. It flows generally north-northeast to FM 2094, then west-northwest through Clear Lake Shores to Clear Lake. The bayou, about 2.7 miles long, widens considerably downstream of its crossing with Lawrence Road.

The watershed is primarily urban, though it does flow a short distance through an undeveloped area of Galveston County. The watershed includes parts of the towns of League City, Kemah, and Clear Lake Shores.

Project Development

By 2010, the TCEQ had enough information about bacteria concentrations in the bayou to determine that development of a TMDL was necessary. The TCEQ began this TMDL project in 2013. The University of Houston is doing technical work to support TMDL development.

The tasks of UH personnel include compiling and analyzing all available bacteria data and considering sources of the bacteria and their relative contributions. UH staff have completed a technical report of their investigations and a draft of the TMDL report. The



TCEQ plans to propose a draft TMDL report for public comment in early 2016.

After careful deliberation, the Coordination Committee petitioned to join the Bacteria Implementation Group (BIG), a well-established project in the region. The BIG voted to accept this petition in September 2015.

The BIG’s I-Plan, which covers an area directly adjacent to the Jarbo Bayou watershed, was approved by the TCEQ in January 2013. Rather than develop a separate plan, Jarbo Bayou and BIG stakeholders will add the Jarbo watershed into the scope of the BIG implementation plan, making sure to add components that address the specific needs of Jarbo Bayou.

Public Participation

In all its projects, the TMDL Program gathers opinion and information from people who represent government, permitted facilities, agriculture, business, environmental, and community and private interests in the watershed. The H-GAC has coordinated public participation in this project, which included multiple public meetings, forming a Coordination Committee to guide the decision-making process, and work group meetings to drive the technical aspects of the project.

For More Information

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

<www.tceq.texas.gov/waterquality/tmdl/106-jarbobacteria.html>

Or:

<www.h-gac.com/community/water/tmdl/studies/jarbo-bayou.aspx>

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TMDL Development Status

Start Date: 2013

Projected End Date: 2016

TCEQ Adoption:

EPA Region 6 Approval:

TMDL: Percent Complete

	10	20	30	40	50	60	70	80	90	100
Data Collection	█	█	█	█	█	█	█	█	█	█
Assessment	█	█	█	█	█	█	█	█	█	█
TMDL Development	█	█	█	█	█	█	█	█	█	█
Stakeholder Review	█	█	█	█	█	█	█	█	█	█
TCEQ Adoption	█	█	█	█	█					

Project Highlights

- UH staff have completed a technical report of their investigations and a draft of the TMDL report.
- After careful deliberation, the Coordination Committee decided to petition to join the Bacteria Implementation Group (a well-established project in the region) and is now taking steps toward incorporating work to address Jarbo Bayou into the scope of the BIG implementation plan.
- The TCEQ plans to propose a draft TMDL report for public comment in early 2016.