



## Improving Water Quality in Carancahua Bay A Project to Protect Recreational Uses

Since 2006, high levels of bacteria have been found in the upper half of Carancahua Bay (Segment 2456). 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 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 creek can receive and still support safe recreation. The allowable load is then allocated among categories of sources within the watershed. The implementation plan (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 and in print.

### Project Watershed

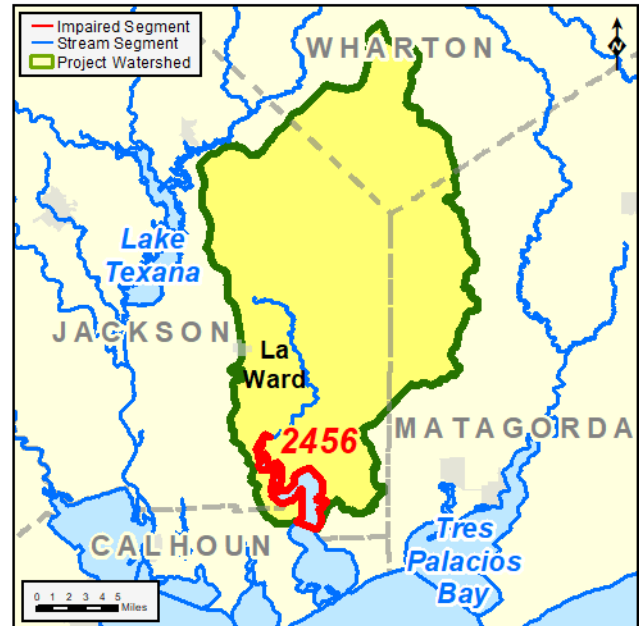
Carancahua Bay (Segment 2456) is located along the Texas Gulf Coast midway between the cities of Palacios and Port Lavaca. The bay is adjacent to the northern part of Matagorda Bay and includes parts of Calhoun and Jackson counties. Carancahua Bay drains 319 square miles; its watershed includes parts of Calhoun, Jackson, Matagorda, and Wharton counties.

Carancahua Bay has two assessment units (AUs). AU 2456\_1 is the lower half of the bay, and AU 2456\_02 is the upper half of the bay. Only AU 2456\_02 is impaired due to bacteria.

### Project Development

TCEQ began this project in 2016. The Texas Water Resources Institute (TWRI) has been providing support for the technical work as well as stakeholder engagement.

The tasks of TWRI personnel include compiling and analyzing all available bacteria data and considering sources of the bacteria and their relative contributions, along with stakeholder outreach and development. TWRI staff (with the help of the Texas Institute for Applied Environmental Research (TIAER)) completed a



technical report of their investigations, as well as a draft TMDL document. Stakeholders have completed a draft I-Plan. Both the TMDL and the I-Plan were submitted to the public for comments from April 24 through May 26, 2020. A public teleconference meeting was held on May 14, 2020, to receive oral comments. On August 26, 2020, the commission adopted the final TMDL and approved the stakeholders’ I-Plan.

### Public Participation

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

TWRI coordinated public participation in this project, holding the first public meeting on August 17, 2017. TWRI formed a representative stakeholder group to guide the decision-making process for the project. The stakeholders’ Coordination Committee met four more times to provide feedback on the TMDL and develop their I-Plan.

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

### For More Information

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

[www.tceq.texas.gov/waterquality/tmdl/nav/caranca-hua-bay/108-carancahua-bacteria](http://www.tceq.texas.gov/waterquality/tmdl/nav/caranca-hua-bay/108-carancahua-bacteria)

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### TMDL Development Status

**Start Date:** 2016

**TCEQ Adoption:** August 26, 2020

**EPA Region 6 Approval:** October 9, 2020

### I-Plan Development Status

**Start Date:** 2018

**TCEQ Approval:** August 26, 2020

### Project Highlights

- Public meetings began in 2017.
- TWRI completed its technical report of their investigations, as well as a draft TMDL.
- TWRI and the stakeholder Coordination Committee developed a draft I-Plan for the bay.
- The TMDL and I-Plan were submitted to the public for comments from April 24 through May 26. A public tele-conference meeting was held on May 14, 2020 to receive oral comments.
- On August 26, 2020, the commission adopted the final TMDL and approved the stakeholders' I-Plan.

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