



## Improving Water Quality in Oso Creek

# A TMDL Project to Protect Recreational Uses

Since 2002, water quality testing has found that concentrations of bacteria are sometimes elevated in Oso Creek (Segment 2485A). Bacteria from human and animal waste may indicate the presence of disease-causing microorganisms that pose a threat to people who swim or wade in the creek and bay—activities called “contact recreation” in the state’s standards for water quality.

In response to these conditions, the TCEQ will develop a total maximum daily load for Oso Creek. The goal of a TMDL is to determine the amount (or load) of a pollutant that a body of water can receive and still support its beneficial uses. The allowable load is then allocated among categories of sources within the watershed.

Stakeholders then develop a plan to implement the TMDL (I-Plan) with measures that reduce pollution. People who represent the various interests that have a stake in changes to the watershed develop the I-Plan with advice and support from the TCEQ.

The TMDL and I-Plan together are a road map for reducing bacteria loads and the risk to public health, and helping to maintain water in the future.

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/](http://www.tceq.texas.gov/goto/tmdl/).

### Oso Creek Watershed

The Oso Creek watershed is wholly contained within Nueces County in the Nueces-Rio Grande Coastal Basin. The creek is about 28 miles long. It flows southeasterly from near the western edge of Corpus Christi over flat to rolling terrain, emptying into Oso Bay. Oso Creek’s flow is dominated by permitted discharges.

Corpus Christi is the only major metropolitan area within the watershed’s boundaries. Robstown is about 3 miles northeast of the creek’s origin. Economic activities in the area include oil and gas refining and production, agriculture, manufacturing, and tourism.

### Project Development

The TCEQ began work on the Oso Creek bacteria TMDL in 2013. From 2004 to 2006, the TCEQ collected a great deal of data and information in conjunction with its TMDL project for Oso Bay. The TCEQ decided to develop a TMDL for the bay first, separately from the TMDL for the creek, with advice and consent from stakeholders in the area.



Since 2006, the Texas State Soil and Water Conservation Board and other agencies have completed several studies of bacteria sources and loading in the watershed. The results of these studies will be considered in developing the TMDLs. The TSSWCB is already working to decrease bacteria loads from agriculture by assisting landowners in developing and implementing water quality management plans for their operations.

The Texas Institute for Applied Environmental Research (TIAER) at Tarleton State University will complete several tasks in support of TMDL development. Their staff will conduct a comprehensive review of historical data along with other pertinent data and information, and identify any data gaps. They will also submit a final technical report to support TMDL development.

### Public Participation

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

Staff from the Center for Coastal Studies at Texas A&M University—Corpus Christi are working with stakeholders to develop a plan for watershed improvement.

## For More Information

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

<[www.tceq.texas.gov/waterquality/tmdl/67-osocreekbacteria](http://www.tceq.texas.gov/waterquality/tmdl/67-osocreekbacteria)>

### **TCEQ Project Manager**

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### **TSSWCB**

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## Oso Creek TMDL Development Status

**Start Date:** September 1, 2013

**TCEQ Adoption:**

**EPA Region 6 Approval:**

## I-Plan Development Status

**Projected Completion Date:**

**TCEQ Approval:**

## Highlights

- The Texas Institute for Applied Environmental Research at Tarleton State University is conducting a comprehensive review of historical bacteria and flow data, along with other pertinent data and information, to support TMDL development.
- In summer 2014, the Center for Coastal Studies at Texas A&M University–Corpus Christi began leading the stakeholder effort to develop an Implementation Plan for Oso Bay and Oso Creek.

Visit our website at: <[www.tceq.texas.gov/goto/tmdl/](http://www.tceq.texas.gov/goto/tmdl/)>