



## Improving Water Quality in Oso Bay and Oso Creek A TMDL Project for Bacteria

Water quality testing found that concentrations of bacteria are sometimes elevated in both Oso Bay and Oso Creek. 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; the term refers to all recreation in which people come in direct contact with the water.

In response to these conditions, the TCEQ initiated a project to develop two total maximum daily loads for Oso Bay and 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, and stakeholders work with the state to develop measures that reduce pollutant loads.

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/).

### The Bay and Creek Watersheds

The Oso Bay watershed drains an area of approximately 255 square miles and is located in the northern-most portion of the Nueces-Rio Grande Coastal Basin. The watershed is wholly contained within Nueces County. The bay is an enclosed, shallow body of water situated along the southern shore of Corpus Christi Bay, with a surface area of approximately seven square miles.

Oso Bay receives fresh water from Oso Creek, a stream whose flow is dominated by permitted discharges. Oso Bay exchanges saltwater with Corpus Christi Bay. Ecologically, Oso Bay provides habitat for many plants and animals, and plays an influential role in water purification and storm protection.

Corpus Christi is the only major metropolitan area that lies within the watershed’s boundaries. The only other large community within the watershed is Robstown. Economic activities in and around the bay include oil and gas refining and production, agriculture, manufacturing, and tourism.

### Project Development

The TCEQ initiated the project for Oso Bay and Oso Creek in September 2004. In March 2006, the TCEQ separated development of the TMDLs for the bay and



the creek, with the advice and consent of the stakeholder advisory group.

The TMDL for Oso Bay is completed and approved. The TMDL for Oso Creek will be developed after more studies of bacteria sources and loading in the Oso watershed.

### 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 formed a stakeholder group to advise them during development of the TMDLs for Oso Bay and Creek.

The group includes representatives from:

- state and federal agencies
- industries
- citizen groups
- local governments
- universities
- water districts
- agricultural interests
- environmental groups
- other water user groups

## For More Information

Contact the project manager, or visit the project website at:

<[www.tceq.texas.gov/implementation/water/tmdl/24-osobayoxygen.html](http://www.tceq.texas.gov/implementation/water/tmdl/24-osobayoxygen.html)>

### TCEQ Project Manager

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## Oso Bay TMDL Development Status

Start Date: September 1, 2004

Projected End Date: 2007

TCEQ Adoption: August 22, 2007

EPA Region 6 Approval: June 6, 2008

## Oso Creek Development Status

Start Date: September 1, 2004

Projected End Date: 2010

TCEQ Adoption:

Submitted to EPA Region 6:

EPA Region 6 Approval:

Bay TMDL: Percent Complete

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

Creek TMDL: Percent Complete

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

## Project Highlights

- Public advisory group meetings were held in January 2005, June 2005, August 2005, January 2006, May 2006, and February 2006, at the Texas A&M University–Corpus Christi campus.
- Following the sixth meeting, the Bay and Creek TMDLs were separated; the two reports were drafted and processed as separate but related documents.
- The draft Oso Bay TMDL was released for public review and comment from May 16 through June 15, 2007.
- The commission adopted the Oso Bay TMDL on August 22, 2007. The EPA approved it on June 6, 2008.
- The Texas State Soil and Water Conservation Board (TSSWCB) is conducting additional studies of bacteria sources and quantities in the Oso Creek watershed. TMDL development for the creek will proceed when those studies have provided sufficient information.

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