



Improving Water Quality at Cole Park and Ropes Park Beaches A Project to Protect Recreational Use

High concentrations of bacteria such as *E. coli* and *Enterococcus* may indicate a health risk to people who swim or wade in natural waters—activities called “contact recreation” in the state’s standards for water quality.

Several public beach parks along Corpus Christi Bay are monitored as part of the Texas Beach Watch Program. When bacteria counts are greater than the criteria, Texas Beach Watch recommends that people be advised not to swim in the area.

In 2010, the Beach Watch program indicated bacteria concentrations were higher than the criteria for protecting the contact recreation use at Cole Park and Ropes Park beaches. These beaches correspond to assessment units 2481CB_03 and 2481CB_04 of the Texas bays and estuaries basin.

Bacteria are commonly found in the intestines of warm-blooded organisms such as humans, livestock, poultry, cats, and dogs. Bacteria from human and animal waste often indicate the presence of disease-causing microorganisms, which can pose a health threat to people who engage in contact recreation.

To address these concerns, TCEQ is developing a total maximum daily load (TMDL) for Cole and Ropes Parks beaches. 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 assigned uses. The allowable load is then allocated among categories of sources within the watershed.

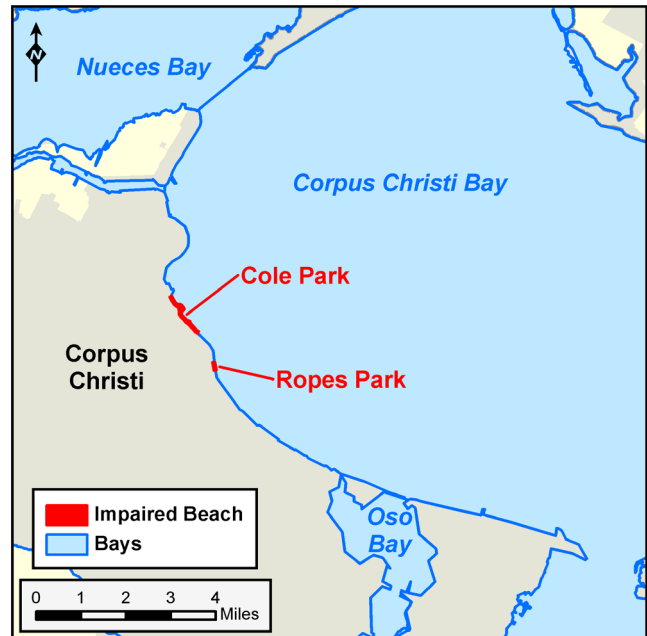
Stakeholders develop the plan to implement the TMDLs (I-Plan), with measures that reduce pollution. The goal of this project is to reduce bacteria concentrations to within acceptable risk levels for contact recreation.

Learn more about water quality standards, monitoring, and TMDLs by reading [Preserving and Improving Water Quality](https://www.tceq.texas.gov/publications/gi/gi-351)¹, available on our website and in print.

Project Watersheds

The beaches being assessed for this TMDL project are in Nueces County, in the City of Corpus Christi, adjacent to Ocean Drive.

Corpus Christi’s bays and estuaries are nursery grounds for fish and shellfish, and provide essential



food and habitat for birds, fish, and other plants and animals. They are also home to ports, marinas, and commercial shipping activities. Corpus Christi’s beaches and estuaries are popular destinations for fishing, boating, swimming, sandcastle building, and bird watching.

Project Development

In October 2010, TCEQ contracted with Texas A&M University at Corpus Christi (TAMU-CC) to initiate a multi-year bacteria sampling project along Corpus Christi Bay.

In August 2011, the Center for Coastal Studies at TAMU-CC published a report that characterizes the Corpus Christi Bay watershed and summarizes data collected in the past. The report also describes the monitoring plan for collecting data to support development of the TMDLs for the two beaches.

In 2014, project staff completed the collection of samples throughout the environment of the beaches, including beach sands and water. Samples were collected under ambient conditions as well as after rain events.

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

TAMU-CC developed a technical support document in 2015 and an initial draft of the TMDLs in 2016. TCEQ began a separate, related project in 2015 to address a bacteria impairment at Poenisch Park Beach (AU 2481CB_01). Stakeholders are working on the final draft of the I-Plan, which will incorporate Poenisch Park Beach, as well Cole Park and Ropes Park beaches.

In August 2020, the Commissioners approved release of the TMDLs for public comment from September 4 through October 6, 2020. TCEQ accepted both written and oral comments on the draft TMDLs. TCEQ held an online public meeting on September 17, 2020 to give stakeholders the opportunity to provide oral comments and ask TCEQ questions of project staff. TCEQ will complete a final TMDL report considering comments provided by the public and plans to submit it to the Commissioners for final adoption in summer 2021.

Public Participation

In all its projects, TCEQ seeks to gather opinion and information from people who represent government, permitted facilities, agriculture, business, environmental, and community and private interests.

The Center for Coastal Studies at TAMU-CC is promoting and coordinating public involvement in this project. The stakeholder's coordination committee held

regular meetings to guide development of the I-Plan. This diverse group was chosen to represent the community during early public meetings about the project.

Throughout the project, the City of Corpus Christi, the Coastal Bend Bays and Estuaries Program, and other stakeholders and communities that use and affect these public beaches are being engaged in developing a strategy to improve water quality.

For More Information

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

www.tceq.texas.gov/waterquality/tmdl/97-corpusbeachesbacteria.html

or

ccs.tamucc.edu/programs-2/tmdl-cc-beaches/

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TMDL Status

Start Date: October 2010

Projected End Date: 2021

TCEQ Adoption: Summer 2021

EPA Region 6 Approval:

I-Plan Status

Projected TCEQ Approval: 2023

Project Highlights

- TCEQ began collecting data for this project in October 2010 through a contract with Texas A&M University at Corpus Christi (TAMU-CC).
- In August 2011, the Center for Coastal Studies completed a review of historical data and a site assessment for the beaches.
- From 2011 through 2014, project staff collected bacteria samples at the beaches under various conditions and depths.
- The City of Corpus Christi and many other interest groups are developing the I-Plan to reduce bacteria concentrations at the beaches.
- The draft final TMDLs were published for public comment from September 4 through October 6, 2020. TCEQ is preparing the final TMDLs for adoption considering comments received from the public.
- The stakeholders' Coordination Committee expects to complete a final draft of the I-Plan in 2022.

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