



TEXAS GENERAL LAND OFFICE

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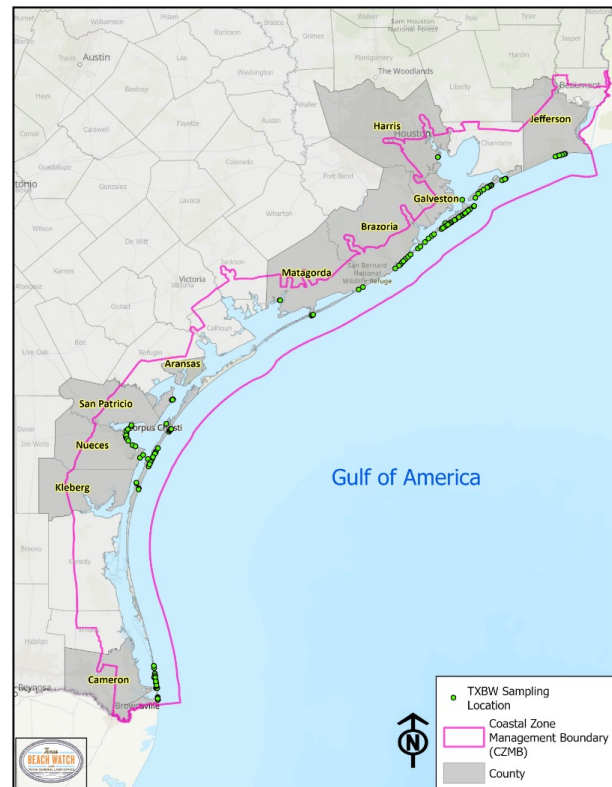
Strategies for Texas Beach Fecal Indicator Bacteria Reductions

The Texas General Land Office (GLO), in partnership with the University of Houston, has launched a comprehensive, three-year effort to address rising fecal indicator bacteria (FIB) levels at Texas beaches, which pose health risks to swimmers, harm local ecosystems, and threaten tourism-driven economies. This project focuses on ten Texas coastal counties and involves gathering and integrating data from multiple sources to understand FIB trends, pinpointing contamination pathways, and assessing the impacts of tidal fluctuations.

This study seeks to develop and deploy a modeling tool to pinpoint problematic and failing wastewater systems that need immediate repair or replacement.

Planning for Cleaner Texas Beaches

[The Texas Coastal Resiliency Master Plan](#) identified failing or aging wastewater systems in the Texas coastal zone as a high concern for sanitary sewer overflow and unauthorized discharge incidents occurring in wastewater collection, transmission, and treatment systems. This effort is to reduce the exposure of these systems from disasters and storm impacts, as well as reduce the exposure of fecal bacteria for coastal residents and visitors. Previous studies have identified some sources of contamination, such as wastewater discharges and sewer overflows, but unexplained spikes in bacteria during dry weather indicate more complex causes.



Learning from the Past, Planning for the Future

Strategies for Texas Beach Fecal Indicator Bacteria Reductions will compile historical and current water quality and environmental data, develop an advanced modeling framework and create user-friendly tools like Excel-based interfaces and GIS layers. These tools will allow decision-makers to test scenarios, evaluate control strategies, and forecast future conditions through 2050. The goal is to develop holistic strategies for reducing FIB loading for Texas coastal counties.

Stakeholder engagement will also be a central component of the project and bring together scientists, local governments and community leaders to ensure strategies are practical, region-specific, and grounded in the best available science.

Improving Beach Water Quality for Texas

The final outcome will be a set of adaptable strategies for reducing FIB loads and improving beach water quality across Texas. These strategies will guide infrastructure investments, inform public policy, and strengthen coastal resilience in the face of population growth and resource pressures.

By improving beachgoer safety and protecting public health, the project will also support vibrant coastal communities and sustainable tourism.

