Texas BEACH WATCH .com

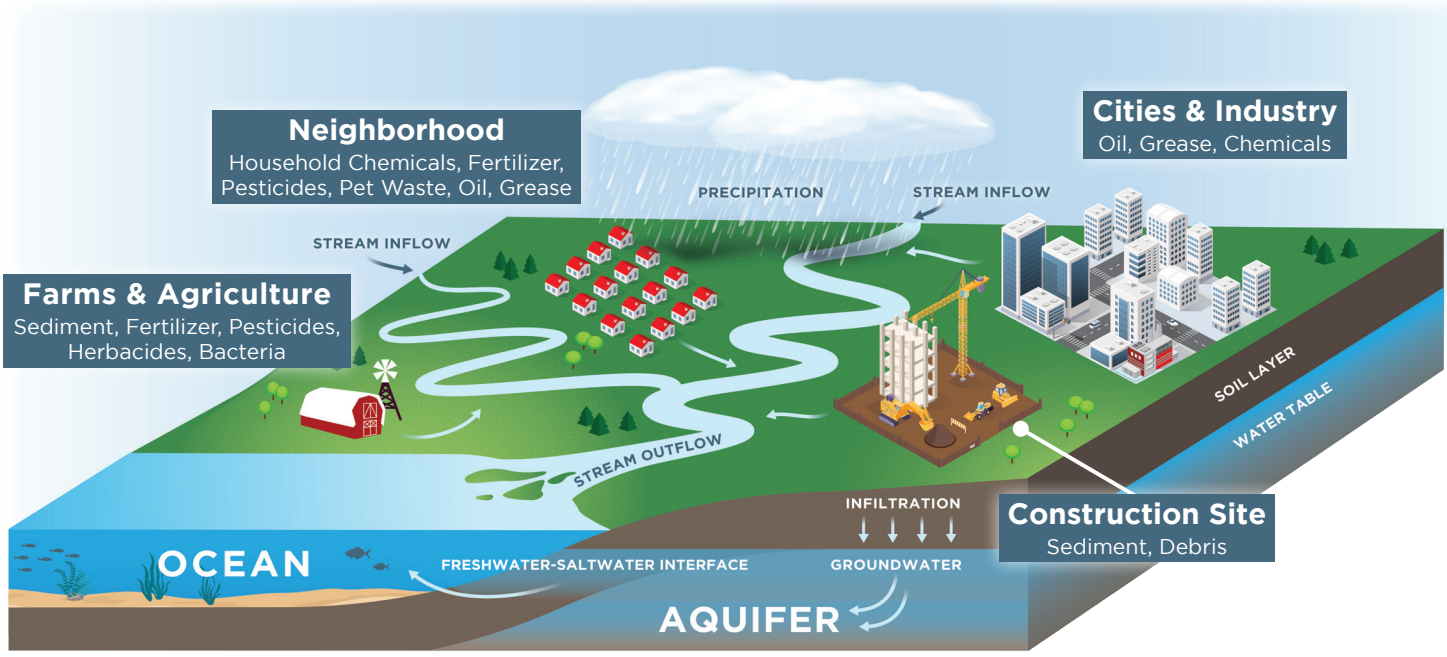
TEXAS GENERAL LAND OFFICE

Keeping Our Beaches Clean, One Sample At A Time

Texas coastal beaches are renowned for their wildlife, natural beauty, and, of course, great swimming! While they are wonderful places to enjoy summer days in the Lone Star state, potential health risks can occur when nonpoint source pollution and contaminated stormwater runoff enter Texas' beaches.

Rainfall that does not soak into the ground, but instead flows over the ground is known as stormwater runoff. When it rains, runoff will pick up pollutants as it travels downhill into the nearest receiving waterbody. Some common examples of nonpoint source pollutants include nutrients, oil and grease, heavy metals, chemicals as well as bacteria and other pathogens.

Bacteria are found almost everywhere on Earth and are a natural component of our ecosystem. While most bacteria are harmless to humans, certain types, like the pathogenic Norovirus, have the potential to cause disease in humans. Bacteria entering Texas coastal waters can originate from sources such as domestic animals and wildlife, malfunctioning wastewater treatment plants, malfunctioning on-site septic systems, and cattle or other related activities.



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When too many pathogens get into our coastal waterways, it can lead to beach closures, harm fish and wildlife populations, make people ill, and foul drinking water supplies. The most commonly identified pathogens associated with waterborne diseases are grouped into three categories: bacteria, protozoans, and viruses.

Microorganisms	Illnesses and Symptoms
Bacteria	Gastroenteritis (includes diarrhea and abdominal pain), salmonellosis (food poisoning), cholera.
Protozoa	Gastroenteritis, cryptosporidiosis and giardiasis (including diarrhea and abdominal cramps), dysentery.
Viruses	Fever, common colds, gastroenteritis, diarrhea, respiratory infections, hepatitis.

HOW DOES TEXAS BEACH WATCH MONITOR COASTAL WATER QUALITY?

Texas Beach Watch, a program operated by the Texas General Land Office (TGLO), monitors the quality of our state's coastal recreational waters for the presence of disease-causing pathogens to ensure that Texas' beaches remain safe and clean.

During peak beach season, May through September, water samples are collected weekly from 172 stations at recreational beaches along the Texas coast in Aransas, Brazoria, Cameron, Galveston, Harris, Jefferson, Matagorda, Nueces, and San Patricio counties. During the rest of the year, samples are collected every two weeks.

When bacteria levels in the water exceed the acceptable standards established by the U.S. Environmental Protection Agency, TGLO works with local governments to issue advisories warning the public not to swim in affected waters.

WHAT ARE INDICATOR BACTERIA?

Indicator organisms, as the name implies, are used to "indicate" the presence of conditions or organisms in the water. Because it is difficult to directly detect the many different pathogens or parasites that may be present in surface waters, the presence of fecal bacteria has long been used as an indicator of the possible presence of disease-causing organisms.

The bacterial indicator used for the Texas Beach Watch Program and is *Enterococcus*, which indicates fecal contamination and the possible presence of disease-causing pathogens.

HOW DO I GET INFORMATION ABOUT MY BEACH?

The data collected by Texas Beach Watch is made available to the public through an interactive map found online at **www.texasbeachwatch.com** that shows real-time updates on water quality and bacteria levels along beaches. Using the interactive map tool, visitors to the site can check results from specific sampling locations; determine when samples were collected and whether an advisory has been recommended.

KEEP EXPLORING

Learn more about the Texas Beach Watch Program online at **www.texasbeachwatch.com**.