

HABITAT:
OYSTER REEFS

- Oysters filter silt and contaminants from Galveston Bay, improving water quality and clarity.
- Galveston Bay was once filled with oyster reefs, but only a fraction remains due to the overharvesting of oyster shells, damaging storms, drought, fishing pressure, and disease.
- The most recent oyster reef maps available are outdated (1994), and the current status of oysters cannot be evaluated, so the grade for oyster reefs is an I for Incomplete.

As generations of oysters grow on top of each other, they form reefs that provide habitat for many other animals. Oysters are capable of filtering as much as 50 gallons of water each in a single day, removing silt and contaminants from the water, and improving local water quality and clarity. Galveston Bay was once filled with oyster reefs, but we only have a fraction of them left because of the overharvesting oyster shells for construction material (a practice that is now prohibited), damaging storms, fishing pressure, and disease.



Photo by Chris Kuhlman

Galveston Bay oysters are also an important commercial fishery. Oysters are monitored closely for signs of stress because of changes in salinity (the salt content of the water). These changes occur due to fluctuations in the amount or timing of freshwater flowing from the Trinity and San Jacinto rivers, especially during times of drought. Prolonged periods of saltier water can cause predators and parasites to overwhelm oysters' natural defenses. The good news is that because of their biological and economic importance, a lot of work is being done to restore oyster reefs in Galveston Bay.

Overall Oyster Reefs Grade: I (Incomplete)

Historically, oyster reefs in Galveston Bay covered large areas, especially near Red Fish Bar (which once extended across the middle of the Bay, from Eagle Point to Smith Point), in East Bay, and in West Bay. Oyster reef area has decreased over the last decade due to three primary factors: coastal storm surges, drought, and fishing pressure.

Fishing pressure for oysters has increased along with oyster's popularity on restaurant menus. In an effort to keep oysters from being overharvested and disappearing from the Bay completely, the State of Texas stopped issuing new commercial oyster licenses in

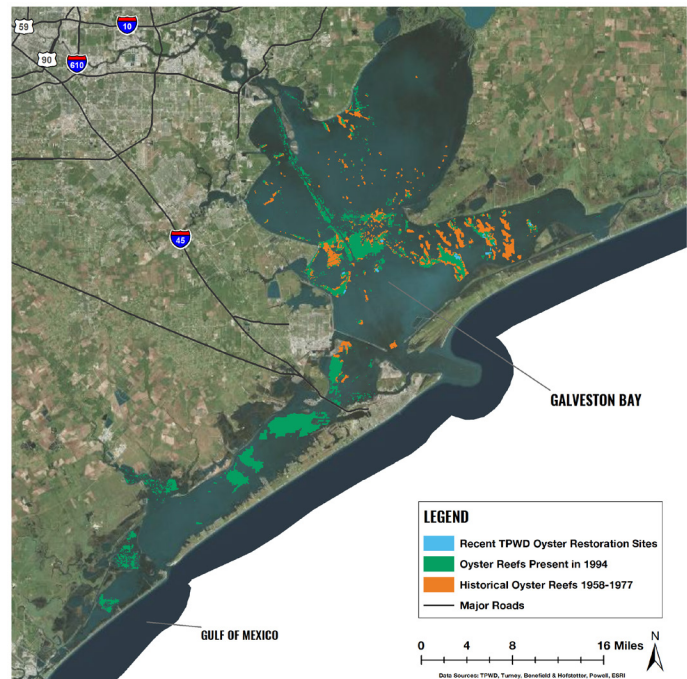
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2007, but that could not protect the oysters from the natural disasters ahead. The Texas Parks and Wildlife Department (TPWD) estimates that approximately 60 percent of oyster reefs in Galveston Bay were buried in sediment transported by the storm surge caused by Hurricane Ike in 2008. The drought of 2011-2012 took a further toll on Galveston Bay's oyster reefs. Freshwater inflows to Galveston Bay were severely limited and salinities became unusually high throughout the Bay.

The most recent oyster reef maps available are from 1994, yet significant loss since that time is irrefutable, especially since Hurricane Ike in 2008. We do have some data on recent oyster restoration projects led by the TPWD, but we cannot report accurately on the current coverage of oyster reefs in Galveston Bay.

See the Data

Map data describing the distribution of oyster reefs in Galveston Bay were created in 1994 and are therefore extremely out of date. However, the TPWD is in the process of finalizing new oyster reef mapping information. TPWD coastal fisheries monitoring data also indicate that oyster abundance has declined in Trinity Bay, East Bay, and Upper and Lower Galveston Bay, confirming preliminary oyster reef distribution data from the agency.



WHAT YOU CAN DO

Fight for the Filters

- Volunteer to rebuild oyster reefs, or help oyster populations through the [oyster gardening program for waterfront property owners](#).
- Speak with your favorite restaurant about shell recycling.
- Learn more about [oyster reef habitat](#) from the National Oceanic and Atmospheric Administration (NOAA).

You can help oysters in Galveston Bay by volunteering to restore oyster reefs, assisting with shell recycling from restaurants, or increasing oyster populations through the [oyster gardening program for waterfront property owners](#).

[Learn more about Galveston Bay's Eastern Oysters here.](#)