

FACTSHEET

What's the significance of Double Bayou Watershed?

The East Fork and West Fork of Double Bayou run through the heart of mid Chambers County and have served witness to some key developments in Texas history, including the founding in 1847 of what became the 26,000-acre JHK Ranch along the East Fork; the birth of a future Texas governor in 1875 along the West Fork; the move of the Chambers County seat to Anahuac in 1907; and the development of the Anahuac oil field in the 1930s.

Today, the lands and waters that make up the Double Bayou watershed provide a snapshot of the much-prized rural Chambers County life: rice farming, cattle grazing, oil production, small town and country living, industry and commercial navigation, sailing, paddling, crabbing, recreational fishing, and wildlife watching. In addition, the waters of Double Bayou drain into Trinity Bay, just up-current from the largest oyster harvesting operation in Texas.

What's a watershed and where's the Double Bayou watershed?

"A watershed is the area of land that catches rain and drains into a marsh, bayou, creek, river, lake, or bay. It functions similar to a bowl: Water dropped inside the bowl works its way to the bottom of the basin - draining to a common outlet."ⁱ

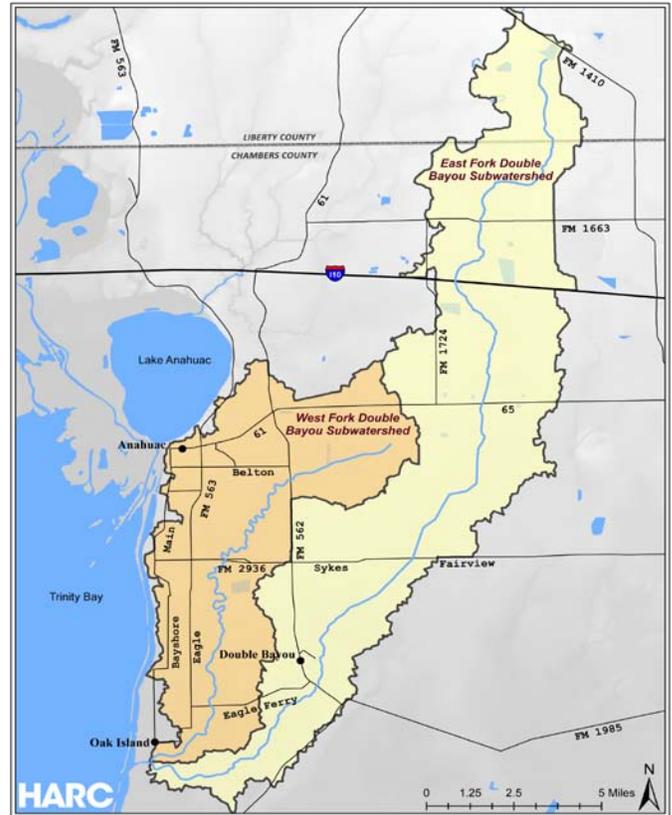
The Double Bayou watershed starts in southern Liberty County and drains to the East and West forks of Double Bayou, which join at the southern part of the watershed and discharge into Trinity Bay at Oak Island.

The total Watershed area is 61,445 acres (about 98 square miles), which is approximately 5% of the combined area of Liberty and Chambers counties.

How's the water in Double Bayou?

The short answer is: *It could be much worse.* But still, to be safe and healthy, *it also needs to be better.*

Double Bayou Watershed



What's the basis for defining water quality?

In 1972, the Clean Water Act required that *water quality standards* be set to meet *designated uses* of stream segments. This means that the standards are set based upon what the intended uses of the stream are, like fishing, swimming, or drinking. The designated uses for Double Bayou are:

- Aquatic Life
- Primary Recreation/Swimming
- General
- Fish Consumption

Streams that do not meet the standards for their uses are placed on an impaired waters list (also called the "303(d) list," for the section of the Act that describes it).

Is Double Bayou on the Impaired Waters list, and, if so, for what?

Due to high bacteria levels, portions of the West Fork of Double Bayou have been designated unsuitable for recreational activities, such as swimming. In addition, the West Fork of Double Bayou is listed for low dissolved oxygen levels which can negatively affect fish and other aquatic life.

Some recent studies have also found bacteria and dissolved oxygen issues in the East Fork of Double Bayou, but the East Fork is not currently on the 303(d) list.

What's a Watershed Protection Plan?

A Watershed Protection Plan (WPP) is a written plan to achieve water quality standards in a waterbody, while providing a framework to restore and protect water quality in areas affected by run-off pollution. The plan outlines best management practices (BMPs) that address issues in the watershed and offers a guide for local stakeholders to manage the impacts of future growth on water quality, health risks and ecological resources.

A Watershed Protection Plan process is:

- *Comprehensive* – taking into account the many activities that may occur across a landscape
- *Flexible* – adjusting in scope and process as more is learned
- *Geographic* – focusing on a stream's drainage basin
- *Collaborative* – involving stakeholders from the beginning of planning and all the way through implementation
- *Integrated* – leveraging water resource management activities being conducted by multiple entities

Why a watershed approach to protect and restore Double Bayou?

A watershed approach to managing water resources allows for a flexible framework that *incorporates stakeholder involvement in developing management actions*, actions that are supported by sound science and appropriate technology.ⁱⁱ It helps local stakeholders incorporate appropriate BMPs, ensuring that resources are not wasted on BMPs that will not work for their area.



Project Partners

- The Houston Advanced Research Center (HARC)
- United States Geological Survey (USGS)
- Shead Conservation Solutions

Funding Agencies

- U.S. EPA
- Texas State Soil and Water Conservation Board



ⁱ Armand Bayou Watershed Partnership. 2004. *Armand Bayou Watershed Plan*. p. 6.

ⁱⁱ U.S. Environmental Protection Agency. 2008. *Handbook for Developing Watershed Plans to Restore and Protect Our Waters*. p. 2-2.

For more information about the Double Bayou watershed and to learn how you can help restore it, visit www.doublebayou.org