

FACTSHEET

What's the significance of Double Bayou Watershed?

The east and west forks 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.

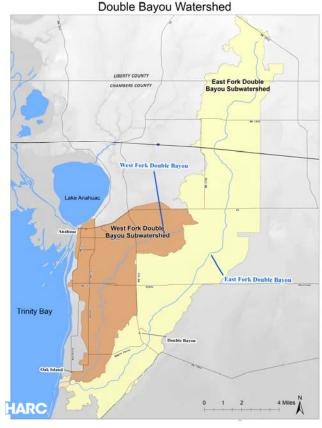
Today, the lands and waters that make up the Double Bayou watershed provide a snapshot of the much-prized rural Chambers County life: rice farming, cattle grazing, oil production, small town and country living, industry and commercial navigation, sailing, paddling, crabbing, recreational fishing, and 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." 1

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 60,723 acres (about 94 square miles). Of that total, 93% of the watershed is in Chambers County and 7% is in Liberty County.



How's the water in Double Bayou?

The short answer to the question, how's the water in Double Bayou, is: *It could be much worse.* But still, to be safe and healthy, *it also needs to be better.*

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 to provide for certain intended uses of the stream that depend on specific water quality for health or safety. The designated uses for Double Bayou's water quality are: Aquatic Life; Primary Recreation / Swimming; General; and Fish Consumption.

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

 $^{^{\}rm 1}$ Armand Bayou Watershed Partnership. 2004. Armand Bayou Watershed Plan. p. 6.

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 contact recreation activities, including swimming. In addition, the West Fork of Double Bayou is listed for low dissolved oxygen levels, which are stressful for fish and other aquatic life.

Some recent studies have also found bacteria and dissolved oxygen issues in the East Fork of Double Bayou as well. While the East Fork is not currently on the 303(d) list as impaired, it is currently listed for "concern" for dissolved oxygen and bacteria levels.

What's a Watershed Protection Plan?

A Watershed Protection Plan (WPP) is a stakeholder-drive, written plan to achieve water quality standards in a water body, through voluntary actions. It provides a framework that will restore and protect water quality in areas affected by nonpoint source pollution. A WPP is an alternative to a regulatory process. It also aims to manage the impacts of future growth on water quality, health risks, and ecological resources.

WPP actions are supported by sound science and appropriate technology. A WPP helps local governments and stakeholders incorporate appropriate, voluntary BMPs, ensuring that resources are not wasted on BMPs that will not work for their area.

A Watershed Protection Plan process is:

- Stakeholder-driven involving local citizens and entities from the beginning of planning and all the way through implementation
- Voluntary relying on stakeholders to identify and implement management actions to help clean the water
- Geographic focusing on a stream's drainage basin
- Comprehensive taking into account all the many activities that may occur across a landscape
- Flexible adjusting in scope and process as more is learned



Project Partners

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

Funding Agencies

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