

The Gulf Coast Aquifer is a major aquifer that parallels the Gulf of Mexico coastline from the Louisiana border to the Mexican border. The aquifer consists of several individual aquifers, including the Jasper, Evangeline, and Chicot aquifers, which are composed of discontinuous sand, silt, clay, and gravel beds. The maximum total sand thickness for the Gulf Coast Aquifer ranges from 700 feet in the south to 1,300 feet in the north. Water quality varies with depth and locality, but is generally good in the central and northeast-ern parts of the aquifer and declines to the south where the productivity of the aquifer decreases. The aquifer is extensively used for municipal, industrial, and irrigation purposes. Water level declines of up to 350 feet in Harris, Galveston, Fort Bend, Jasper, and Wharton counties have led to land-surface subsidence. The planning groups recommend several water management strategies that use the Gulf Coast Aquifer, including the drilling of more wells, increased pumping from existing wells, overdrafts, construction of new or expanded treatment plants, brackish groundwater desalination, conjunctive use projects, and reallocation.

## Aquifer characteristics

- Area of aquifer: 41,879 square miles
- Availability: 1,825,976 acre-feet per year (2010) to 1,681,738 acre-feet per year (2060)
- Well yield: highly variable, less than 100 gallons per minute to over 3,000 gallons per minute
- Proportion of aquifer with groundwater conservation districts: 73 percent
- Number of counties containing the aquifer: 54

Groundwater supplies with implementation of water management strategies

