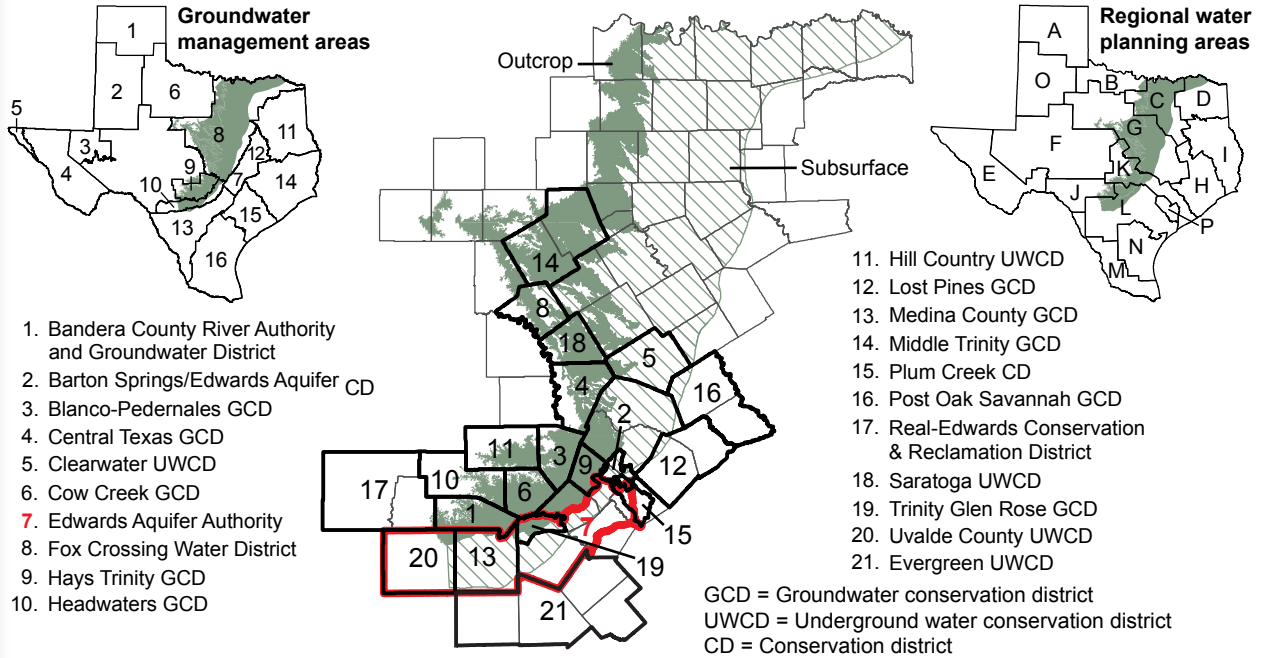


# Trinity Aquifer



The Trinity Aquifer is a major aquifer that extends across much of the central and northeastern part of the state. The aquifer is composed of several individual aquifers contained within the Trinity Group. These individual aquifers are referred to differently in different parts of the state, but include the Antlers, Glen Rose, Paluxy, Twin Mountains, Travis Peak, Hensell, and Hosston aquifers. These aquifers consist of limestones, sands, clays, gravels, and conglomerates. In general, groundwater is fresh but very hard in the outcrop of the aquifer. Total dissolved solids increase to the east and southeast as the depth to the aquifer increases. Sulfate and chloride concentrations also tend to increase with depth. The Trinity Aquifer discharges to a large number of springs, with most discharging less than 10 cubic feet per second. The aquifer is one of the most extensive and highly used groundwater resources in Texas. Its primary use is for municipalities, but it is also used for irrigation, livestock, and other rural domestic purposes. Some of the state's largest water level declines—ranging from 350 to more than 1,000 feet—have occurred in counties along the Interstate 35 corridor from McClennan County north to Grayson County. These declines are mainly attributed to municipal pumping and have lessened in the past decade as a result of increasing reliance on surface water. The planning groups recommend numerous water management strategies that use the Trinity Aquifer, including new wells and well field development, more pumping from existing wells, supplemental wells to maintain current supplies, overdrafts, and conjunctive use of surface water and groundwater supplies—including aquifer storage and recovery, reallocations.

## Aquifer characteristics

- Area of outcrop: 10,652 square miles
- Area in subsurface: 21,308 square miles
- Availability: 205,799 acre-feet per year (2010) to 202,603 acre-feet per year (2060)
- Well yield: extremely variable, and comparatively lower than other major aquifers
- Proportion of aquifer with groundwater conservation districts: 32 percent
- Number of counties containing the aquifer: 61

## Groundwater supplies with implementation of water management strategies

