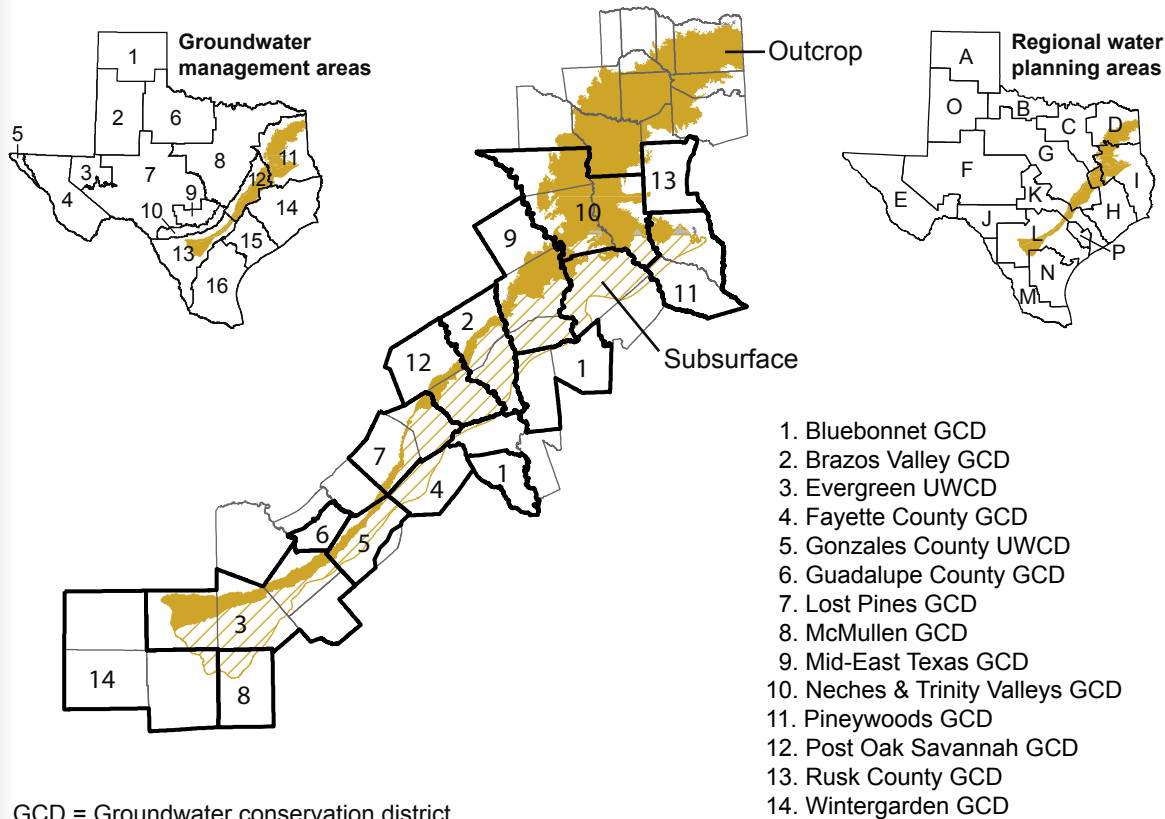


Queen City Aquifer



GCD = Groundwater conservation district
 UWCD = Underground water conservation district

The Queen City Aquifer is a minor aquifer that stretches across East Texas. Water is stored in the sand, loosely-cemented sandstone, and interbedded clay layers of the Queen City Formation. Water is generally fresh, with an average concentration of total dissolved solids of about 300 milligrams per liter in the recharge zone and about 750 milligrams per liter deeper in the aquifer. Salinity decreases from south to north, and areas of excessive iron concentration and high acidity occur in the northeast. The aquifer is used primarily for livestock and rural domestic purposes with significant municipal and industrial use in northeast Texas. Water levels have remained fairly stable over time in the northern part of the aquifer. Water level declines are more common in the central (10 to 70 feet) and southern (5 to 130 feet) parts of the aquifer. The planning groups recommend several water management strategies that use the Queen City Aquifer, including new and replacement wells, additional pumping of existing wells, and temporary overdrafts.

Aquifer characteristics

- Area of outcrop: 7,702 square miles
- Area in subsurface: 6,989 square miles
- Availability: 295,791 acre-feet per year (2010 to 2060)
- Well yield: typically less than 400 gallons per minute
- Proportion of aquifer with groundwater conservation districts: 67 percent
- Number of counties containing the aquifer: 42

Groundwater supplies with implementation of water management strategies

