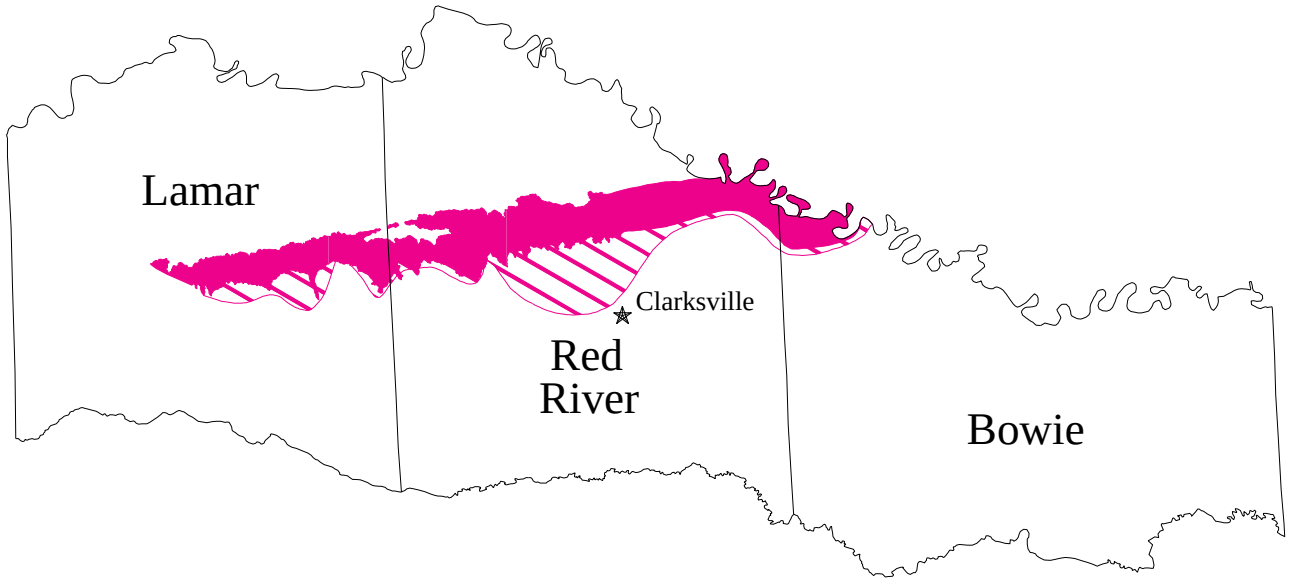
Blossom



Key

Outcrop

Downdip

Blossom Aquifer

The Blossom aquifer occupies a narrow east-west band in parts of Bowie, Red River, and Lamar counties in the northeast corner of Texas. The Blossom Sand Formation consists of alternating sequences of sand and clay deposited during the Cretaceous Period. In places, the formation attains a thickness of 400 feet, although no more than 29 percent of this thickness consists of water-bearing sand.

Ground water from the Blossom aquifer is generally soft, slightly alkaline, and, in some areas, high in sodium, bicarbonate, and iron. Water quality, although not acceptable for irrigation due to its high sodium adsorption ratio (SAR) and residual sodium carbonate (RSC) values, is generally acceptable for most nonindustrial uses.

The Blossom aquifer yields water in small to moderate amounts over a limited area on and south of the outcrop, with the largest well yields of 650 gal/min occurring in Red River County. Production decreases in the western half of the aquifer, where yields of 35 gal/min to 85 gal/min are more typical. Historically, Clarksville and the Red River Water Supply Corporation in Red River County have pumped the greatest amounts from the aquifer, which resulted in a water-level deline; however, in recent years, the rate of decline has slowed or even stabilized in some wells as a result of more surface-water use in the area.

References

McLaurin, C., 1988, Occurrence, availability, and chemical quality of ground water in the Blossom Sand aquifer: TWDB Rept. 307, 32 p.