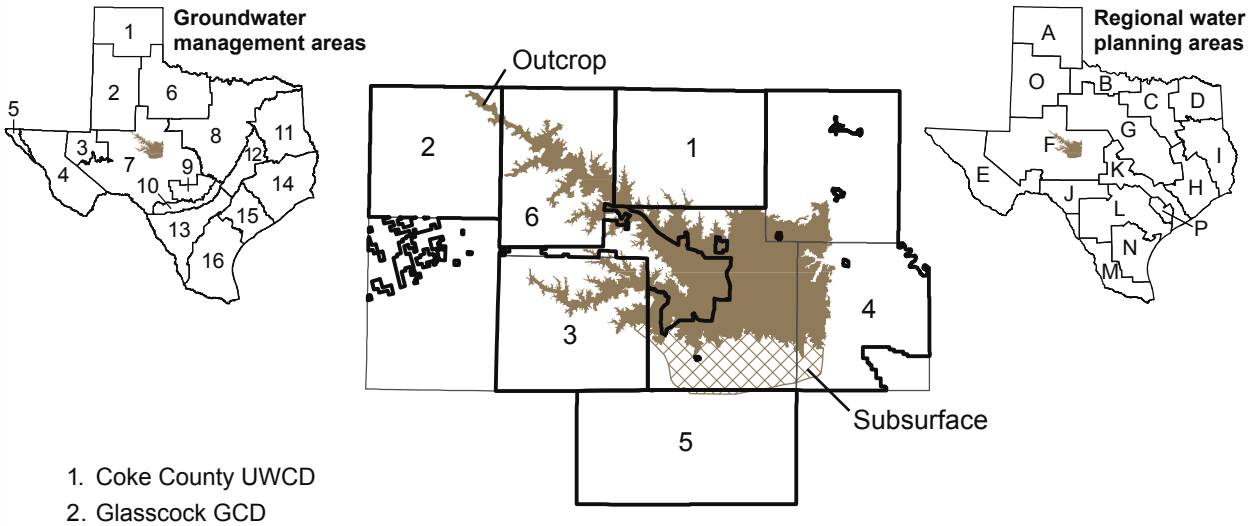
Lipan Aquifer



1. Coke County UWCD
2. Glasscock GCD
3. Irion County WCD
4. Lipan-Kickapoo WCD
5. Plateau UWC and Supply District
6. Sterling County UWCD

GCD = Groundwater conservation district
UWCD = Underground water conservation district
UWC = Underground water conservation
WCD = Water conservation district

The Lipan Aquifer is a minor aquifer found in parts of Coke, Concho, Glasscock, Irion, Runnels, Schleicher, Sterling, and Tom Green counties in west-central Texas. The aquifer includes water-bearing alluvium and older underlying strata. The alluvium includes up to 125 feet of saturated sediments of the Leona Formation. The underlying strata include the San Angelo Sandstone of the Pease River Group and the Choza Formation, Bullwagon Dolomite, Vale Formation, Standpipe Limestone, and Arroyo Formation of the Clear Fork Group. Groundwater in the alluvial deposits and the upper parts of the older rocks is hydraulically connected; therefore, most wells in the area are completed in both units. Groundwater in the alluvium ranges from fresh to slightly saline and is very hard. Water in the underlying parts of the Choza Formation and Bullwagon Dolomite tends to be slightly saline. The aquifer provides water to support irrigated farming as well as a small amount of groundwater that is used for livestock, municipal, rural domestic supply, and manufacturing. Due to drought and heavy irrigation pumping in the late 1990s, water levels decreased significantly in some areas, and the aquifer could not be pumped through the entire irrigation season. The aquifer could be pumped in other areas, but at a reduced rate. The planning groups did not recommend any water management strategies using the Lipan Aquifer.

Aquifer characteristics

- Area of outcrop: 1,565 square miles
- Area of subsurface: 422 square miles
- Availability: 48,535 acre-feet per year (2010 to 2060)
- Well yield: about 10 to 500 gallons per minute
- Proportion of aquifer with groundwater conservation districts: 85 percent
- Number of counties containing the aquifer: 8

Groundwater supplies with implementation of water management strategies