

Explanation



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Yegua-Jackson Aquifer

The TWDB has added the Yegua-Jackson as a Minor Aquifer. The TWDB has assigned a major and minor status to most of the State's aquifers on the basis of quantity of water supplied by each aquifer. Major aquifers tend to be large, regional aquifers that can produce large amounts of water (Figure 5-8). Minor aquifers tend to be smaller and produce less water (Figure 5-9).

On the basis of recent hydrogeologic studies and reviews of groundwater production data, the TWDB is designating the Yegua Formation and the Jackson Group as a minor aquifer, *the Yegua-Jackson aquifer*. The primary rationale for this designation is that water use from the Yegua-Jackson aquifer ranks in the upper half of annual water use for the minor aquifers, with more than 11,000 acre-feet of water produced in 1997. In addition, a review of the TWDB Groundwater Well Database indicates that there are currently more than 1,450 wells producing from the Yegua-Jackson aquifer. The Yegua-Jackson aquifer extends in a narrow band from the Rio Grande and Mexico across the State to the Sabine River and Louisiana (Figures 5-9, 5-10). Although the occurrence, quality, and quantity of water from this aquifer are erratic, domestic and livestock supplies are available from shallow wells over most of its extent. Locally water for municipal, industrial, and irrigation purposes is available. Yields of most wells are small, less than 50 gallons per minute, but in some areas, yields of adequately constructed wells may range to more than 500 gallons per minute.

The Yegua-Jackson aquifer consists of complex associations of sand, silt, and clay deposited during the Tertiary Period. Net freshwater sands are generally less than 200 feet deep at any location within the aquifer. Water quality varies greatly within the aquifer, and shallow occurrences of poor-quality water are not uncommon. In general, however, small to moderate amounts of usable quality water can be found within shallow sands (less than 300 feet deep) over much of the Yegua-Jackson aquifer.