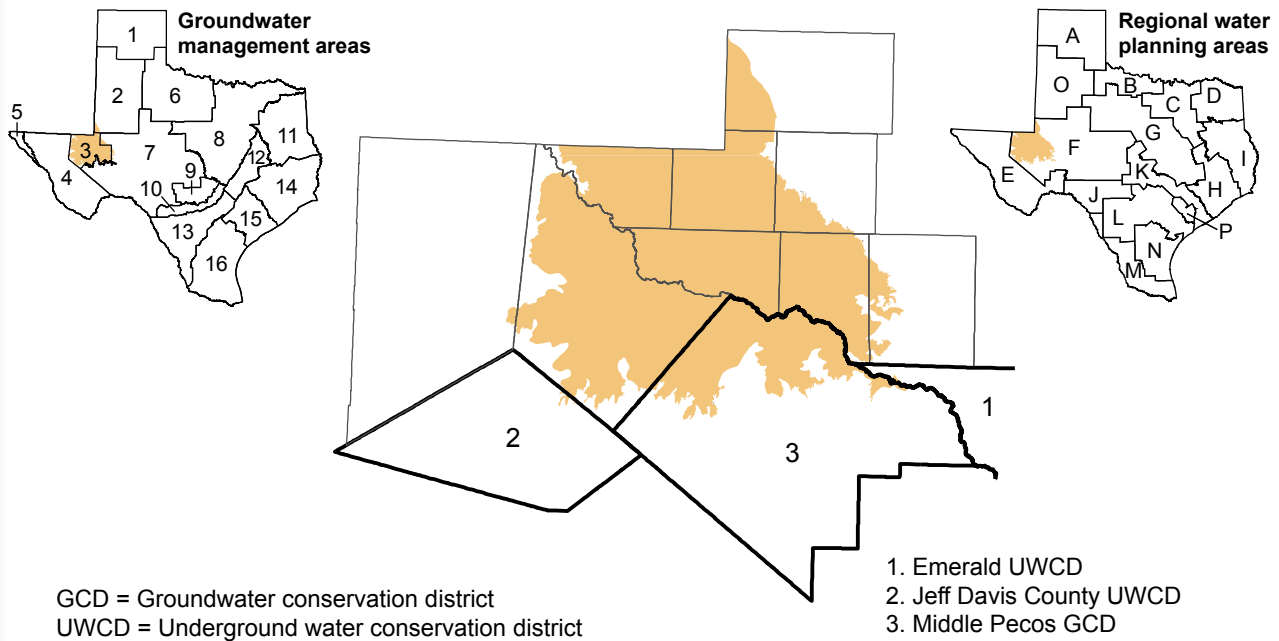


# Pecos Valley Aquifer



The Pecos Valley Aquifer is a major aquifer found in Far West Texas. Water bearing sediments include alluvial and windblown deposits in the Pecos River Valley. These sediments fill several structural basins, the largest of which are the Pecos Trough in the west and Monument Draw Trough in the east. Groundwater flow through the aquifer is influenced by the topography of the top of the underlying geologic units: the Edwards-Trinity units, the Rustler Formation, and the Dockum Group. The water quality is highly variable and typically hard. Water quality is generally better in the Monument Draw Trough than in the Pecos Trough. In addition to chloride and sulfate that are frequently found in excess of secondary drinking water standards, arsenic and radionuclides are also found in levels above their primary drinking water standards. All of these constituents are naturally occurring. More than 80 percent of groundwater pumped from the aquifer is used for irrigation, and the rest is withdrawn for municipal supplies, industrial use, and power generation. Localized water level declines in south-central Reeves and northwest Pecos counties have moderated in the late 1970s as irrigation pumping has decreased. There is ongoing water level decline in central Ward County due to increased municipal and industrial pumpage. The Region F Regional Water Planning Group recommends several water management strategies that use the Pecos Valley Aquifer, including new wells, the development of two well fields in Winkler and Loving counties, and reallocation.

## Aquifer characteristics

- Area of aquifer: 6,829 square miles
- Availability: 200,690 acre-feet per year (2010 to 2060)
- Well yield: moderate to large
- Proportion of aquifer with groundwater conservation districts: 16 percent
- Number of counties containing the aquifer: 12

## Groundwater supplies with implementation of water management strategies

