

Why Monitor Groundwater Levels ?

For Texas, groundwater is a vast resource, the importance of which cannot be overstated. There are thirty major and minor aquifers in the state that range from shallow, unconsolidated sand and gravel deposits underlying river valleys to deep rock aquifers that cover large parts of the state. Of the 16.1 million acre-feet of water used in Texas in 2008, groundwater contributed 9.7 million acre-feet, or about 60 percent, with surface water supplying the rest. Because of the importance of Texas' groundwater supplies, the Texas Water Development Board (TWDB) and local Groundwater Conservation Districts (GCDs) monitor water levels statewide to detect changes. Water level information is important for managing groundwater resources, developing groundwater availability models, and planning to meet future demands for water. The TWDB and their cooperators maintain a statewide water level monitoring network consisting of approximately 8,000 wells. Once a year, field technicians measure the depth to water in most of these wells.

Monitoring groundwater levels in wells serve much the same purpose as periodically checking the oil-level dipstick on an automobile engine. If the engine developed a problem and started using oil, the dipstick oil mark would alert the driver before expensive repairs are needed. Similarly, the monitoring well network helps serve as an early warning system that can identify where groundwater use is occurring at a rate that the aquifers of Texas cannot sustain indefinitely.

For additional information on monitoring groundwater, see

- Texas Water Development Board (TWDB) at: <http://www.twdb.texas.gov/groundwater/data/>
- Texas Alliance of Groundwater Districts (TAGD) at: <http://www.texasgroundwater.org/>, and
- United States Geological Survey (USGS) at: <http://waterdata.usgs.gov/nwis/gw>.

For additional Frequently Asked Questions (FAQs) related to groundwater quantity, groundwater quality, septic systems, water wells, administrative entities, and publications, visit the Texas Groundwater Protection Committee's FAQ webpage at <http://tgpc.state.tx.us/frequently-asked-questions-faqs/>.