

LAND SUBSIDENCE



The Lone Star Groundwater Conservation District was created in 2001 and manages the groundwater resources of Montgomery County. The groundwater source for Montgomery County is the Gulf Coast aquifer and the County uses about 4.5 billion gallons too much each year than is replenished to the aquifer. Half of Montgomery County residents don't know the source of their water and 83% of Montgomery County residents don't believe that subsidence is a problem in their area.

Earth fissuring due to severe groundwater depletion and overdraft can occur. Subsidence is a silent but dangerous result of pumping groundwater at a higher rate that is returned to the aquifer. Once the damage is done, it cannot be reversed.

Earth fissuring due to groundwater over pumping in an area prone to subsidence



USGS Photo

ADWR Photo

Consequences of Over Pumping the Gulf Coast Aquifer:

- Speeds up subsidence, which causes flooding and destroys land, roads, neighborhoods and ultimately the aquifer itself.
- Decreases pump efficiency which may lead to producing less water and higher costs
- Decreases water quality in the aquifer



The expectation is that pumping rates will exceed the Gulf Coast Aquifer's recharge rate by 20 percent by the year 2010 and 140 percent by the year 2040. Conservation now through reduced usage and pumping is the only way to meet our water needs for this and future generation living in Montgomery County.

The District is working to ensure a sustainable, adequate, high quality and cost efficient water supply.