

The U.S. Geological Survey has released a new report detailing changes of groundwater levels in the High Plains Aquifer. The report presents water-level change data in the aquifer in two separate periods: from 1950—the time prior to significant groundwater irrigation development—to 2011, and 2009 to 2011.

In 2011, the total water stored in the aquifer was about 2.96 billion acre-feet, an overall decline of about 246 million acre-feet (or 8 percent) since pre-development.

Change in water in storage from 2009 to 2011 was an overall decline of 2.8 million acre-feet. The overall average water-level decline in the aquifer was 14.2 feet from pre-development to 2011, and 0.1 foot from 2009 to 2011.

The study used water-level measurements from 3,322 wells for pre-development to 2011 and 7,376 wells for 2009 to 2011.

The High Plains Aquifer, also known as the Ogallala Aquifer, underlies about 112 million acres (175,000 square miles) in parts of eight states—Colorado, Kansas, Nebraska, New Mexico, Oklahoma, South Dakota, Texas and Wyoming.

The USGS, at the request of the U.S. Congress, has published reports on water-level changes in the High Plains Aquifer since 1988. Congress requested these reports in response to substantial water-level declines in large areas of the aquifer.

This multi-state, groundwater-level monitoring program has allowed water-level changes in all eight states to be tracked over time and has provided data critical to evaluating different options for groundwater management. This level of coordinated groundwater-level monitoring is unique among major, multi-state regional aquifers in the country.

The report “Water-Level and Storage Changes in the High Plains Aquifer, Predevelopment to 2011 and 2009–11 “ is available online at USGS.gov. Click on newsroom at top of the page.