

## Groundwater Resources Program

### Publication Brief

# Water-Level and Storage changes in the High Plains Aquifer, Predevelopment to 2013 and 2011–13

The High Plains aquifer underlies 111.8 million acres (about 175,000 square miles) in parts of eight States—Colorado, Kansas, Nebraska, New Mexico, Oklahoma, South Dakota, Texas, and Wyoming. The USGS report “Water-Level Changes and Change in Water in Storage in the High Plains Aquifer, Predevelopment to 2013 and 2011–13” presents water-level changes in the High Plains aquifer from the time before substantial groundwater irrigation development began (generally before 1950) to 2013 and from 2011–13. The report’s findings are:

- Water-level changes from predevelopment to 2013, by well, ranged from a rise of 85 feet to a decline of 256 feet;
- Area-weighted, average water-level changes in the aquifer was a decline of 15.4 feet from predevelopment to 2013;
- Area-weighted, average water-level changes in the aquifer was a decline of 2.1 foot from 2011–13;
- Total water in storage in the aquifer in 2013 was about 2.92 billion acre-feet;
- Change in water in storage, predevelopment to 2013, was a decline of 266.7 million acre-feet; and
- Change in water in storage, 2011–13, was a decline of 36.0 million acre-feet.

### Acknowledgments

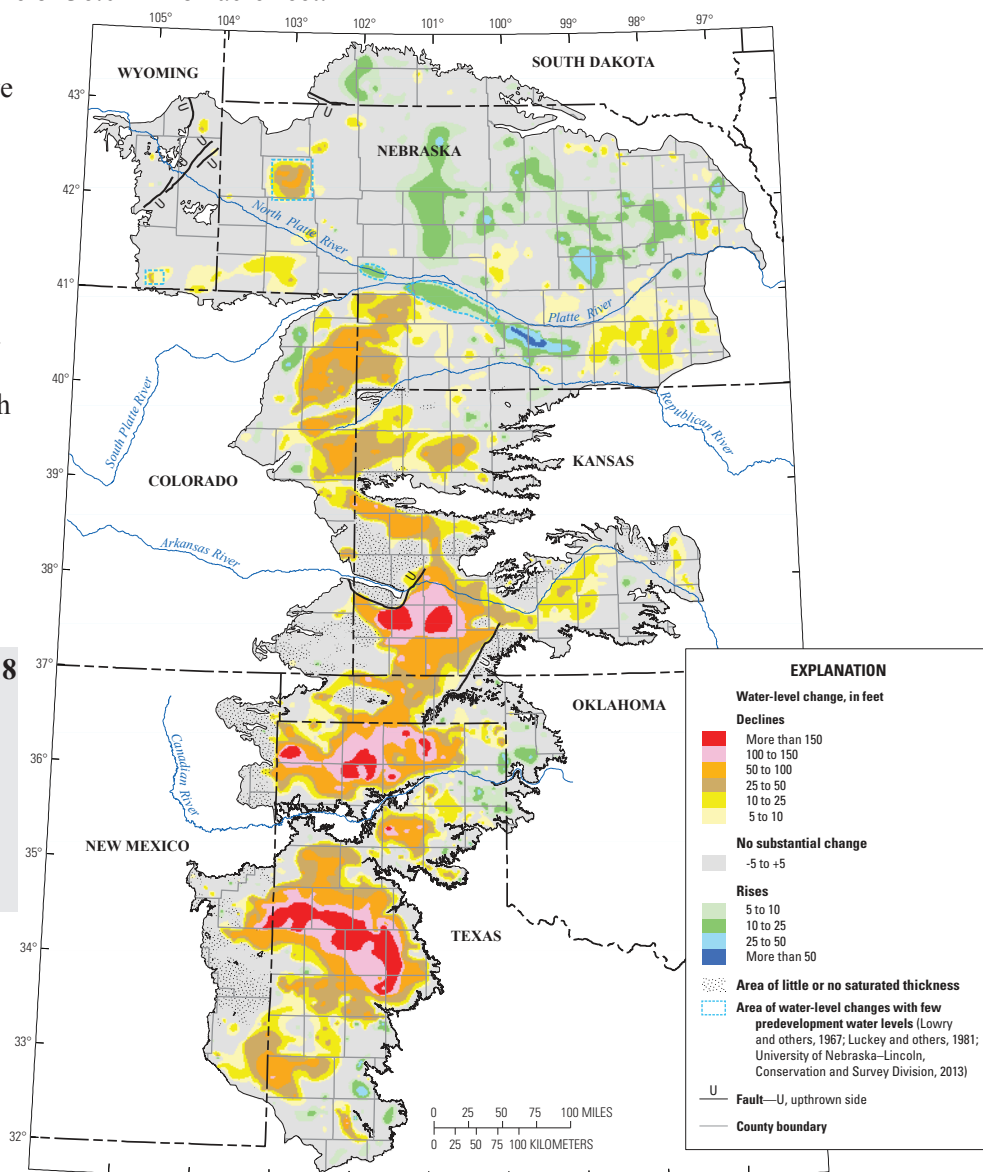
Most of the water-level data used in this report were provided by the following State, local, and Federal entities: Colorado Division of Water Resources; Kansas Department of Agriculture–Division of Water Resources; Kansas Geological Survey; Central Nebraska Public Power and Irrigation District; Nebraska Natural Resources Districts; University of Nebraska–Lincoln, Conservation and Survey Division; New Mexico Office of the State Engineer; Oklahoma Water Resources Board; South Dakota Department of Environment and Natural Resources; Texas Groundwater Conservation Districts; and Texas Water Development Board; Wyoming State Engineer’s Office; Bureau of Reclamation; and U.S. Fish and Wildlife Service.

### USGS Scientific Investigations Report 2014-5218

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