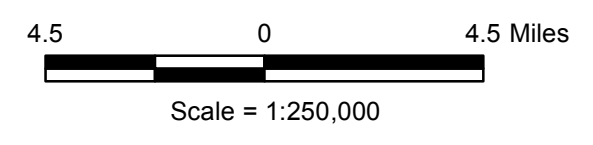
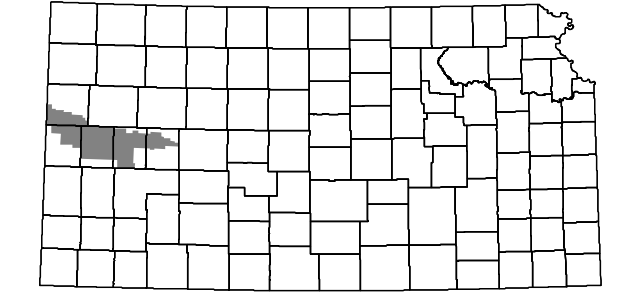
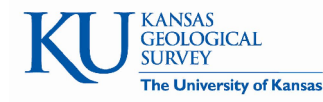


### Estimated Change in Saturated Thickness, Predevelopment to Average 2014-2016, of the High Plains Aquifer in Western Kansas GMD No. 1, (KGS Open-file Report 2016-19)

**Legend**

- No data
- Increase
- 0 - 25 feet decrease
- 26 - 50 feet decrease
- 51 - 75 feet decrease
- 76 - 100 feet decrease
- 101 - 128 feet decrease
- 50 Change in saturated thickness for section
- City
- Stream
- Highway (S = State, F = Federal)
- Township boundary
- County boundary
- Western Kansas Groundwater Management District No. 1 boundary
- 2014-2016 well location

Projection: Lambert Conformal Conic  
 Standard Parallels: 33 0 0 and 45 0 0 degrees North  
 Central Meridian: -98 15 0 degrees West  
 Latitude of Origin: 36 0 0 degrees North



Western Kansas Groundwater Management District No. 1

Prepared at the Kansas Geological Survey by John J. Woods and Brownie Wilson

The change in mean saturated thickness within each section was calculated as follows:

- 1) Winter water level measurements taken between 2014 and 2016 were averaged at each well location.
- 2) An Interpolated surface of the average 2014-2016 water table elevation was created from the well locations using ESRI's Topogrid tool and was assigned to sections.
- 3) Estimates of predevelopment and bedrock elevations within each section were taken from interpolated surfaces used in the GMD1 Groundwater Model (KGS OFR 2015-33).
- 4) For each section, the bedrock elevation was subtracted from the average 2014-2016 and predevelopment water table elevations to estimate the saturated thicknesses (ST).
- 5) The predevelopment ST was then subtracted from the average 2014-2016 ST to estimate the actual change.
- 6) Light yellow sections without a numeric value have zero computed change in saturated thickness.

The Kansas Geological Survey and the Western Kansas Groundwater Management District do not guarantee this map to be free from errors or inaccuracies and disclaim any responsibility or liability for interpretations from the map or decisions based thereon.