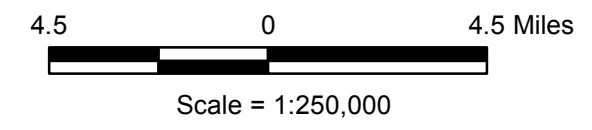
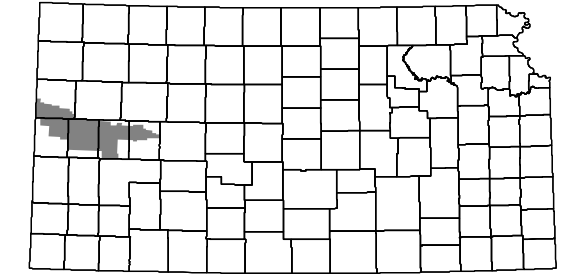


**Estimated Percent Change in Saturated Thickness, Predevelopment to Average 1994-1996, of the High Plains Aquifer in Western Kansas GMD No. 1, (KGS Open-file Report 2016-19)**

**Legend**

- No data
- Zero predevelopment saturated thickness
- Increase
- 0 -20% decrease
- 21 - 40% decrease
- 41 - 60% decrease
- 61 - 80% decrease
- > 80% decrease
- 50 Percent 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
- 1994-1996 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

Estimates of percent change in saturated thickness within sections were calculated as follows:

- 1) Winter water level measurements taken between 1994 and 1996 were averaged at each well location.
- 2) An interpolated surface of the average 1994-1996 water table elevation was created from the well locations using ESRI's Topogrid tool and assigned to sections.
- 3) Estimates of the mean 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 mean bedrock elevation was subtracted from the average 1994-1996 and predevelopment water table elevations to estimate the saturated thicknesses (ST).
- 5) The predevelopment ST was then subtracted from the average 1994-1996 ST to estimate the actual change. The percent change was computed by dividing the actual change by the predevelopment ST.
- 6) Green sections without a numeric value have zero computed percent change in saturated thickness.

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