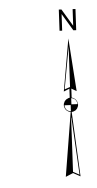
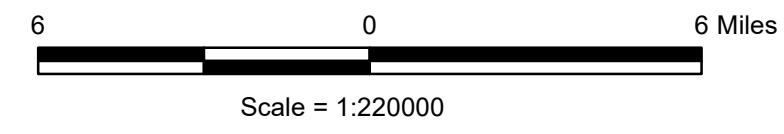
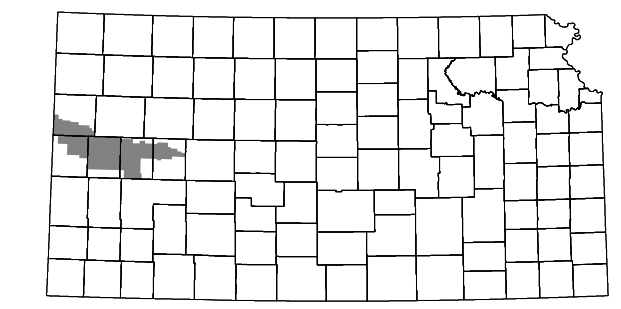


Estimated Percent Change in Saturated Thickness, Predevelopment to Average 2019-2021, of the High Plains Aquifer in Western Kansas GMD No. 1 (KGS Open-File Report 2021-2)



Legend

- No data
- Zero predevelopment saturated thickness
- Increase
- 0 -20% decrease
- 21 -40% decrease
- 41 -60% decrease
- 61 -80% decrease
- > 80% decrease
- Percent change in saturated thickness for section

Map Symbols

- City
- Stream
- Highway (S = State, F = Federal)
- Township boundary
- County boundary
- Western Kansas Groundwater Management District No. 1 boundary
- 2019-2021 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 2019 and 2021 were averaged at each well location.
- 2) An interpolated surface of the average 2019-2021 water table elevation was created from the well locations using ESR'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 2019-2021 and predevelopment water table elevations to estimate the saturated thicknesses (ST).
- 5) The predevelopment ST was then subtracted from the average 2019-2021 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.

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.