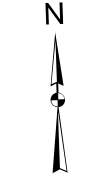
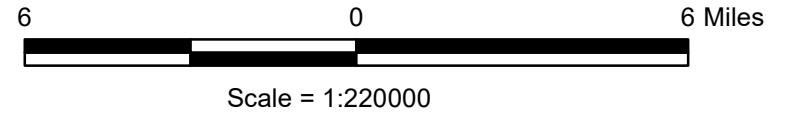
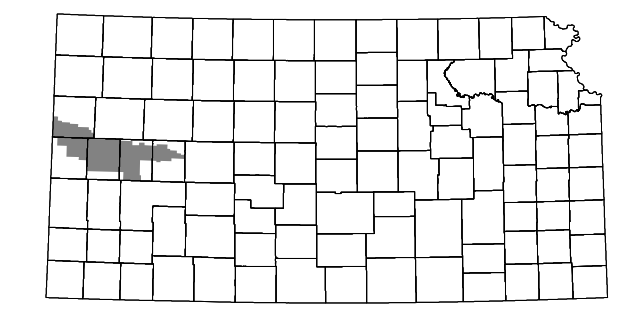


Estimated Change in Saturated Thickness, Predevelopment to Average 2019-2021, of the High Plains Aquifer in Western Kansas GMD No. 1 (KGS Open-File Report 2021-2)



Legend

- No data
- Increase
- 0 - 25 feet decrease
- 26 - 50 feet decrease
- 51 - 75 feet decrease
- 76 - 100 feet decrease
- 101 - 139 feet decrease
- 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
- 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

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 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 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 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.
- 6) Light yellow sections without a numeric value have zero computed change in saturated thickness.

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