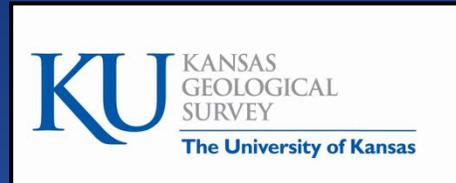


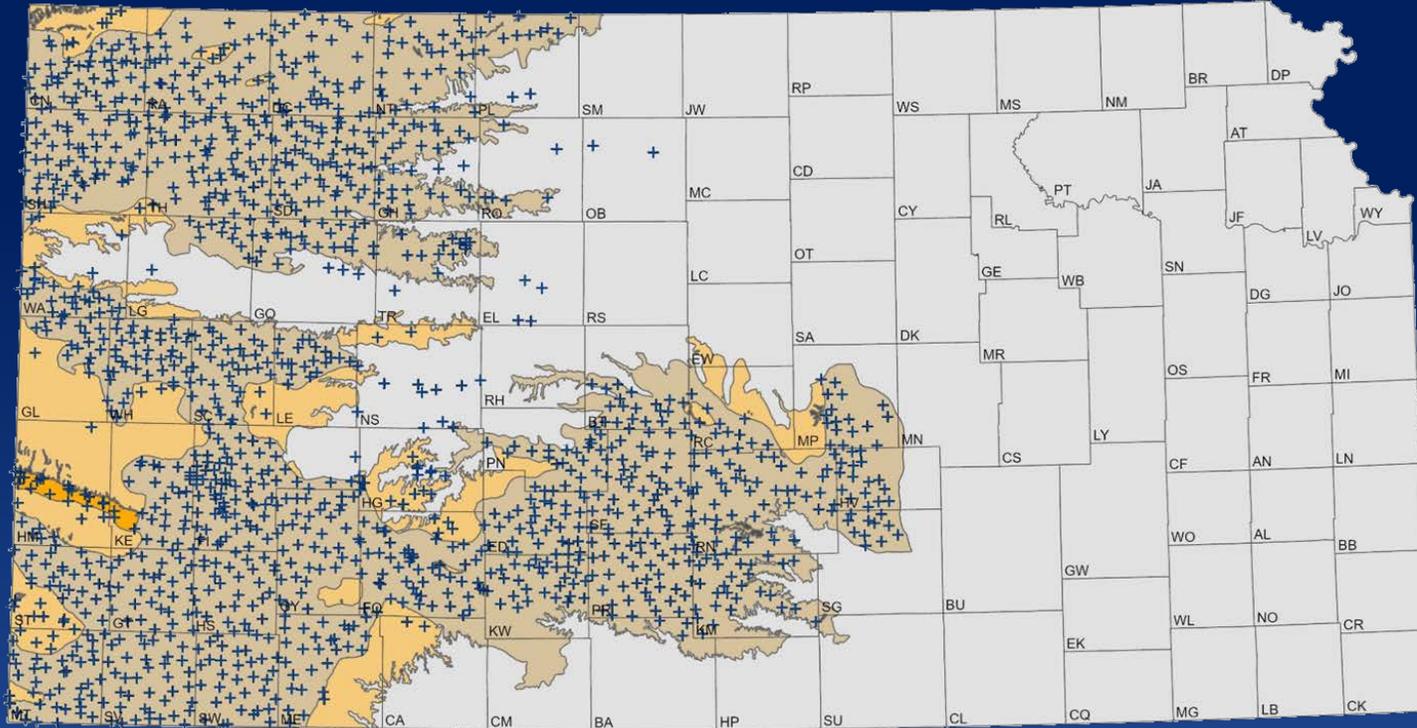
# Overview of written testimony submitted by Brownie Wilson, Kansas Geological Survey

Proposed GMD1 Wichita County LEMA Hearing  
August 14, 2020



Kansas Geological Survey  
University of Kansas

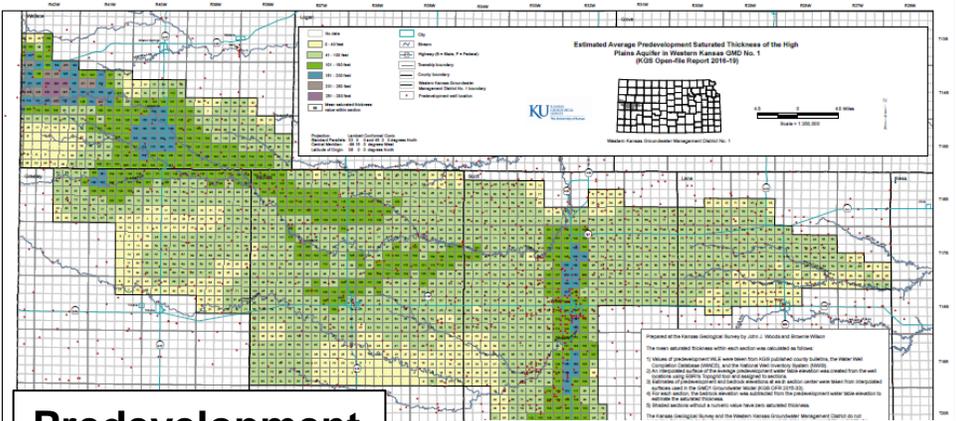
# Kansas Annual Cooperative Water Level Network



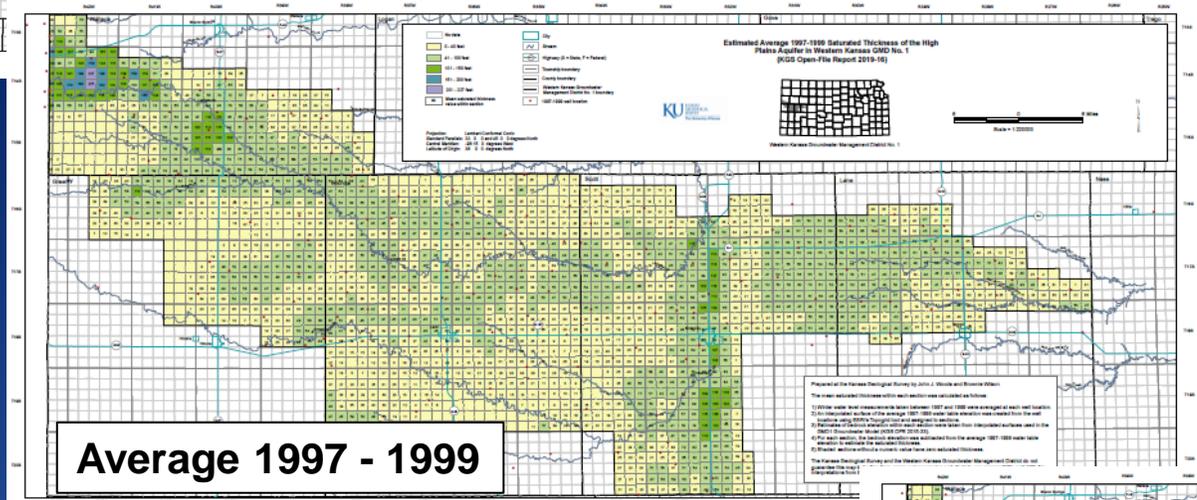
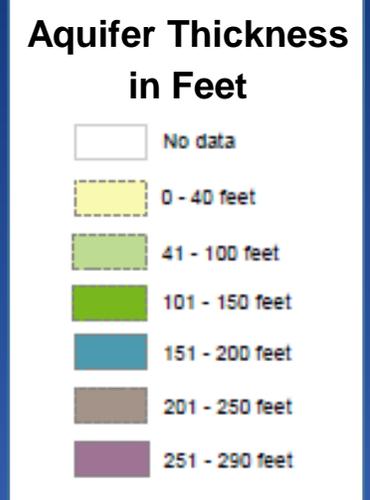
- ~1,400 wells measured annually by the KGS and KDA-DWR
- Data can be accessed from the Water Information Storage and Retrieval database (WIZARD)
- Provides regional characterizations of the aquifer at regional- and sub-county scales



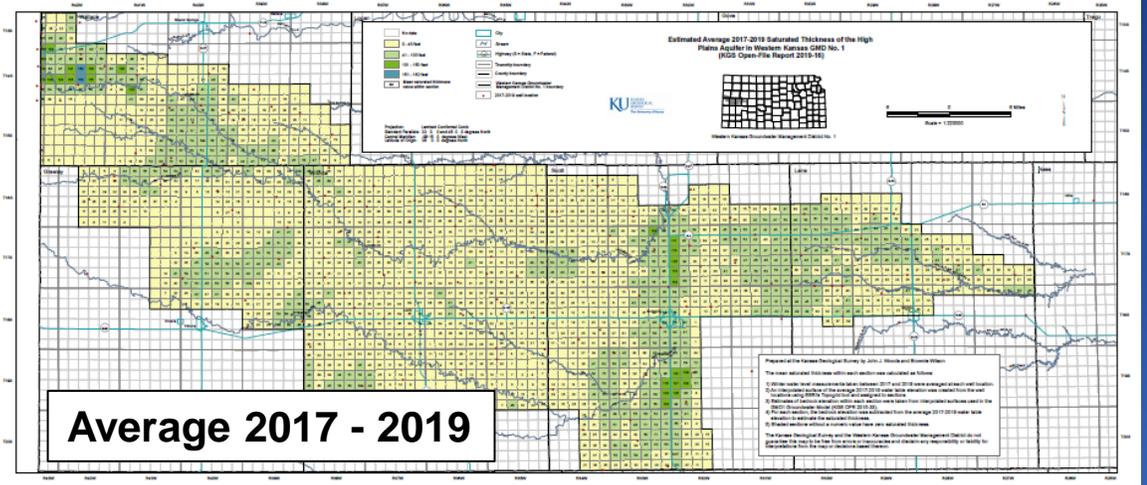
# KGS Open-File Report 2019-16



**Predevelopment**



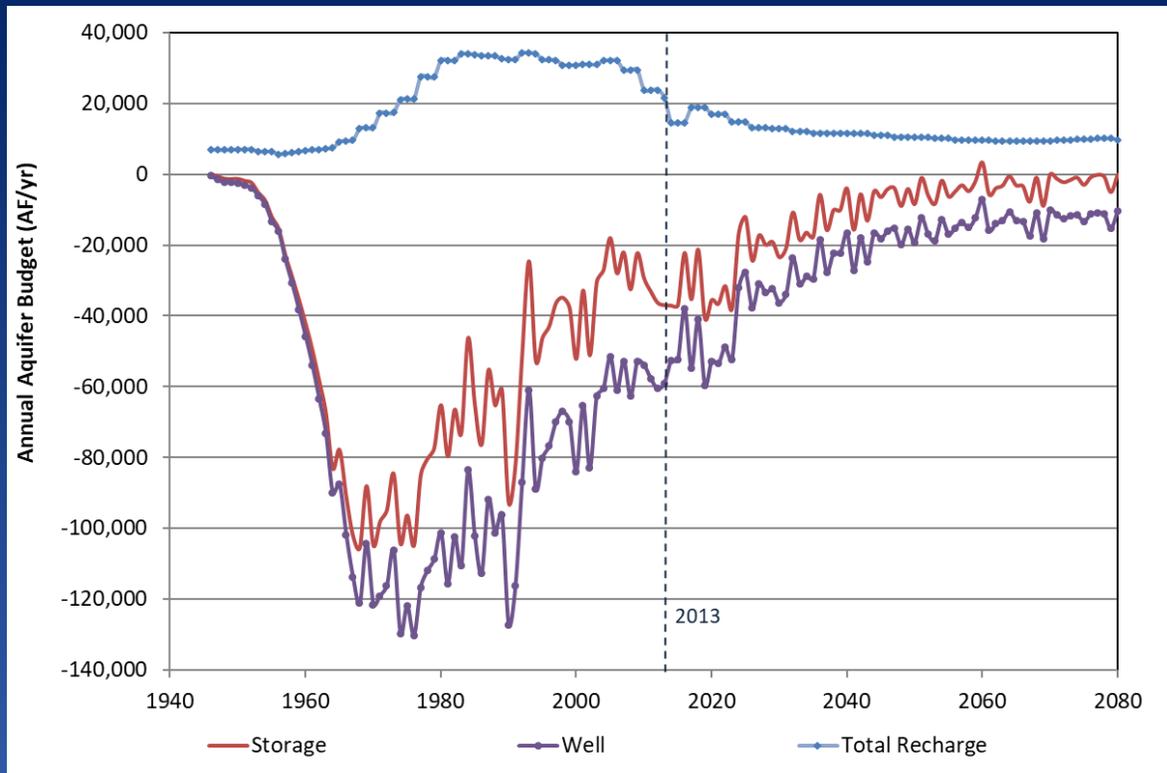
**Average 1997 - 1999**



**Average 2017 - 2019**

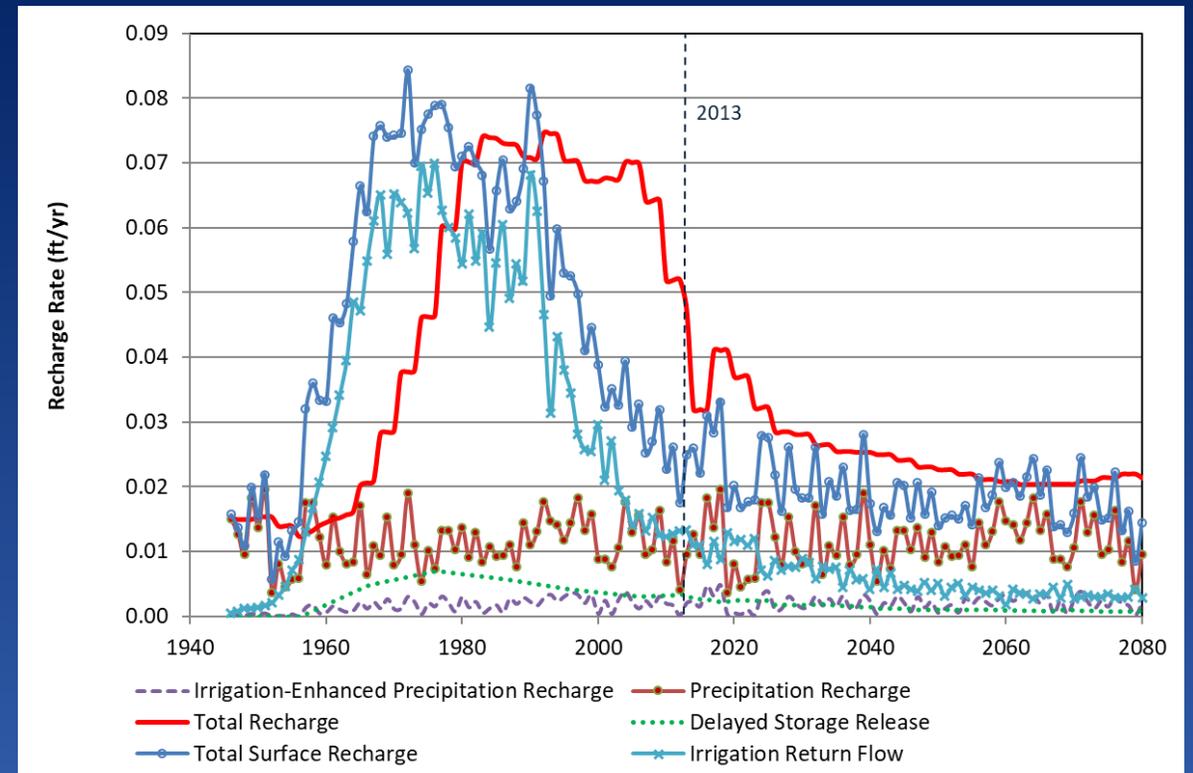
## Figure SA5.

Annual aquifer budget for Wichita County for the no change in future water use scenario.

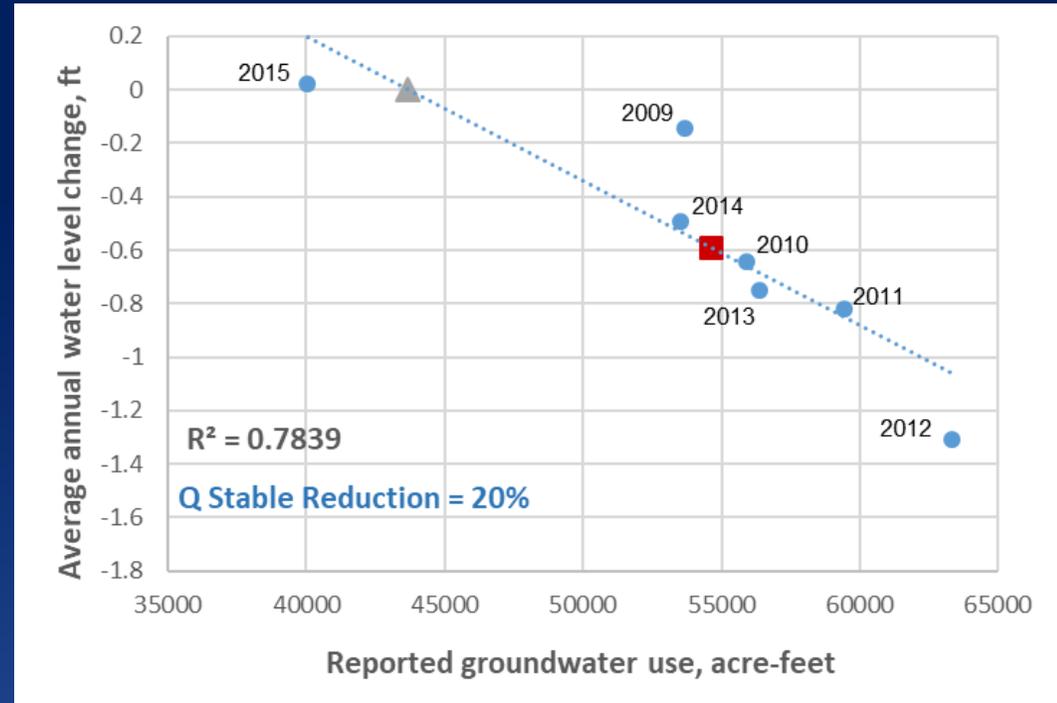
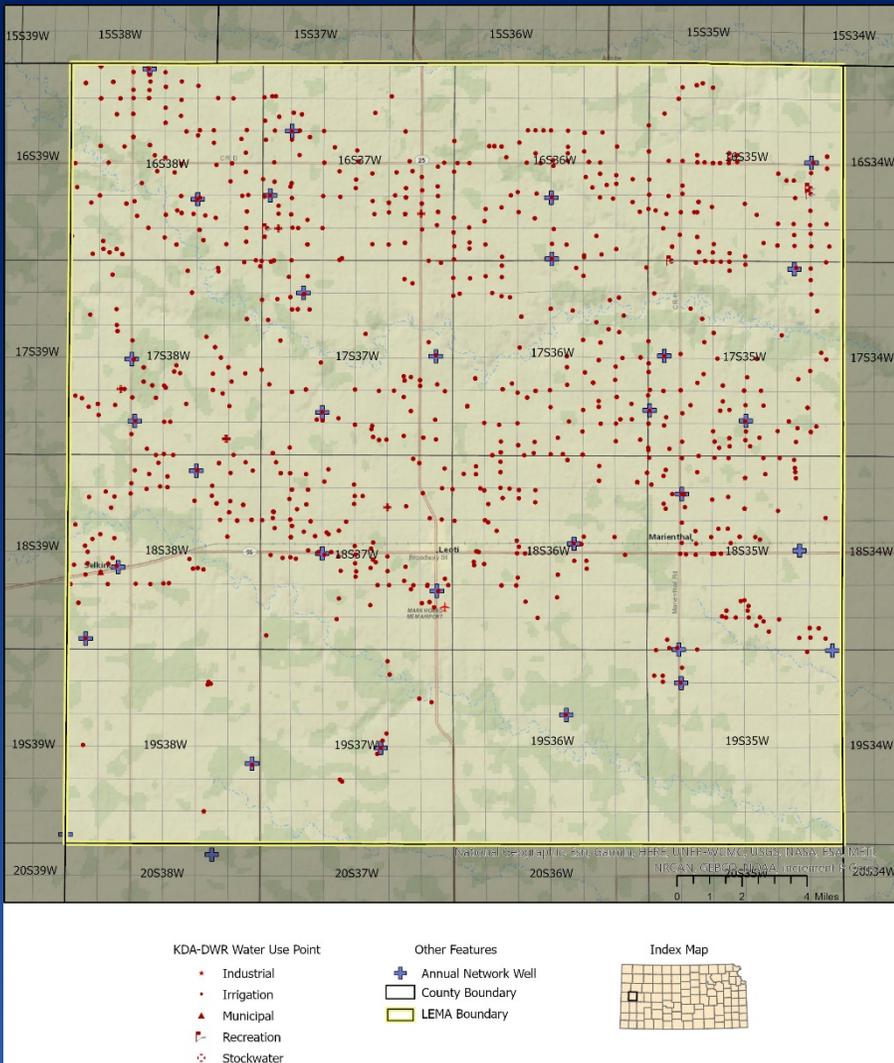


## Figure SA6.

Different recharge components for Wichita County for the no change in future water use scenario.



# Wichita County Groundwater Use vs Water-Level Change



**Figure 3.** Average annual water-level change versus annual water use from 2009 to 2015 for the proposed Wichita County LEMA. Dashed line is the best-fit straight line to the plot. Overall average conditions for both water use and water-level change is represented by the maroon square. Water use, under stable water-level conditions, is shown by the olive-colored triangle.