















acceptable and manageable to achieve the stated goal







density (over 275 acre feet per section) as found in data from Kansas Geological





work this way, they are completely voluntary, but a LEMA plan has the force of law once passed by the chief engineer, requiring compliance

p

inches in the future allows the limited amount of water available to be used most efficiently (Barfield). As cited in the Order of Designation, an economic study found that unregulated groundwater use severely reduces the future viability of the aquifer by reducing profits from \$5.3 million to \$4.0 million





#### **IV. Future Legal/Management Considerations**

1) The LEMA process is spreading to different areas.

GMD 1 is exploring the LEMA, but interest and recog





Overall, it seems as though the LEMA is forecasted to be a success in the financial sense. The more appropriately the water is being managed, the more water will stay in the aquifer for longer. This means that the potential for money to be made from irrigating to raise and harvest profitable crops for the market remains present. Without water, namely the Ogallala Aquifer, the economy in the area would have to change entirely. Farming would still be possible, but with crops that demand less water and will be most likely less profitable. It has been found that the same amount of corn can be produced with less water and the same is probably true of other crops as well. The



Ogallala Aquifer as a whole.

## 6. Works Cited

2007, 2005-2006, and 2006-2007. 2009. *Publications of the U.S. Geological  
Survey 12 112u*





**7. Appendix**

**A. Northwest Kansas Groundwater Management District 4**

**Figure 1.**

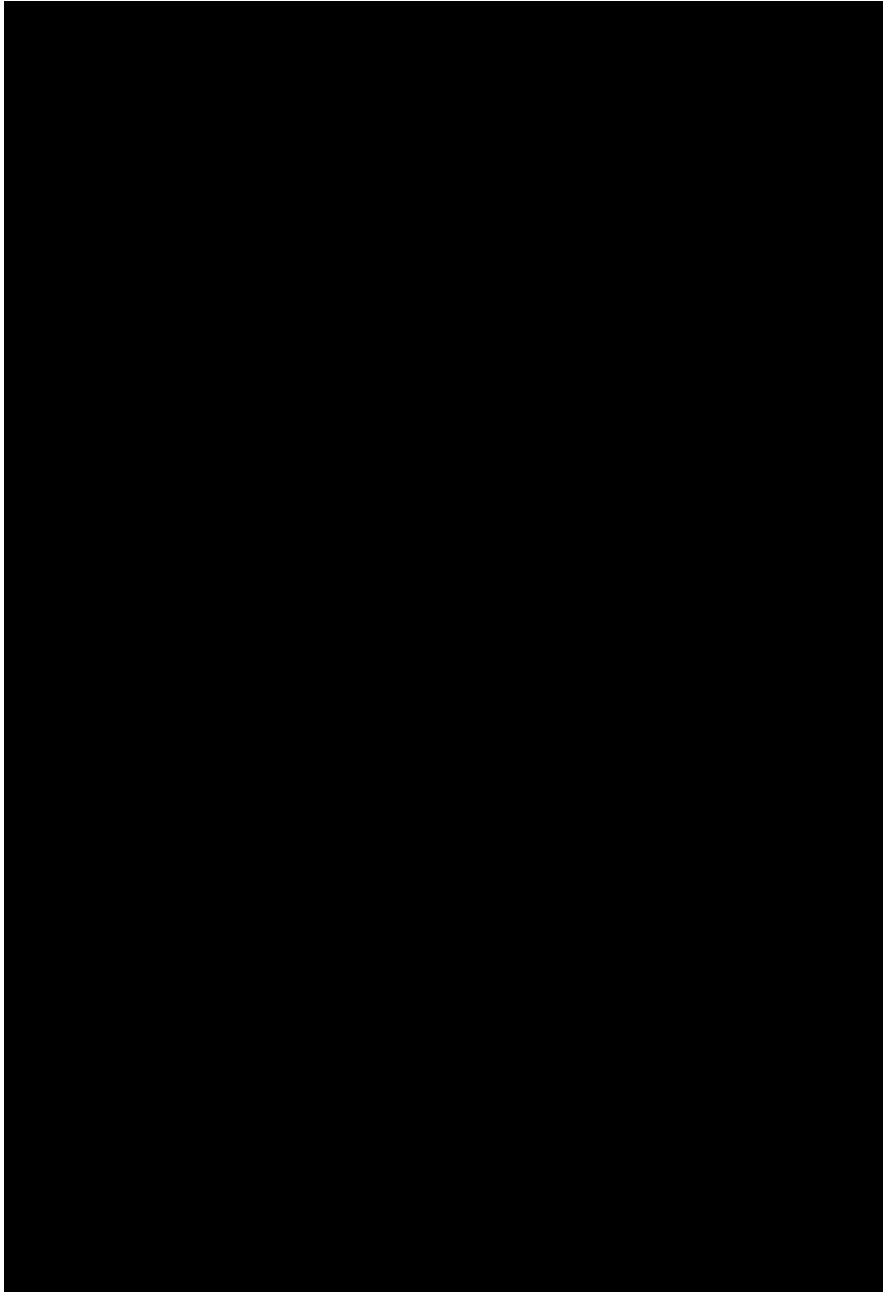








**F. Saturated Thickness**



**Figure 6.** This map shows a current level of saturation thickness across the whole Aquifer.









**J. 2011 Drought Monitor**

**Figure 10.**









