Equus Beds Groundwater Management District No. 2 Testimony to the House Vision 2020 Committee

by Tim Boese, Manager March 9, 2015

On behalf of the Board of Directors of the Equus Beds Groundwater Management District No. 2, I wish to thank Chairman Sloan and members of the Committee for the opportunity to provide information about the Equus Beds Groundwater Management District No. 2.

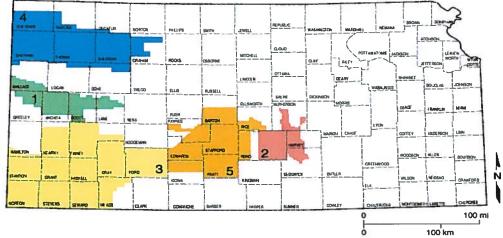
BACKGROUND INFORMATION:

The Equus Beds aquifer is the sole-source of fresh and usable groundwater for industrial, municipal, and irrigation uses throughout south-central Kansas. Over 2,000 permitted water wells and points of diversion withdraw an average of approximately 58 billion gallons of groundwater from the aquifer annually.

Over 550,000 people, or approximately 20 percent of the entire State's population, in Harvey, Sedgwick, McPherson and Reno counties rely on the aquifer for drinking water and other daily needs. Additionally, over 100,000 acres are irrigated using groundwater from the Equus Beds aquifer. The aquifer also supplies water for the area's livestock production, businesses, industries, and recreational activities. Certainly, the area's economy and way of life would be quite different without the aquifer's continued source of fresh and useable water.

To manage and protect this valuable water resource from depletion and contamination, the Equus Beds Groundwater Management District was created in 1975 by local people representing municipal, agricultural, industrial and domestic water users. An aquifer management program was developed and adopted by the Board of Directors, Equus Beds Groundwater Management District. The District limits new groundwater withdrawals or diversions to annual recharge and seeks to maintain the natural water quality of the aquifer through protection and remediation. The Equus Beds Groundwater Management District is the eastern most groundwater management district in the state and covers the eastern extent of the High Plains Aquifer in Kansas, as shown below.

Kansas Groundwater Management Districts



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Currently, with the exception of the McPherson Intensive Groundwater Use Control Area, the District is still open to new groundwater appropriations, subject to the rules and regulations of the District and the Division of Water Resources. Paramount in determining if a new water permit appropriation application can be approved is the evaluation of the application using the District's Safe-Yield Regulation K.A.R. 5-22-7 to determine if the area can support additional appropriation. Currently, the District's Safe-Yield Regulation uses a broad recharge rate of three inches in McPherson County and six inches in Harvey, Reno, and Sedgwick County. Recent evaluation of the recharge rate in a portion of Reno County revealed that six inches appeared to over-estimate the actual aquifer recharge rate in that area.

The District Board of Directors is in the process of discussing and determining what steps need to be taken to ensure that the District's Safe-Yield Regulation calculation is accurate and that the District is performing proper review of new groundwater appropriation applications to prevent groundwater declines and groundwater mining. One option is to expand the U.S. Geological Survey's Modflow groundwater model, which has been developed in cooperation with the City of Wichita and the District. The model, which has been paid for by the City of Wichita, does not cover the entire District. The U.S. Geological Survey estimates that the cost to expand the model to cover the entire District and use the model to, among other things, more accurately determine recharge rates throughout the District, would be \$300,000.

Additionally, A Long Term Vision for the Future of Water Supply in Kansas document recommends that the U.S. Geological Survey model be used to evaluate recharge values in the District and the Kansas Water Authority has recommended an additional \$250,000 FY2016 appropriation to expand the model. Should the District Board of Directors determine that the best course of action is to expand the U.S. Geological Survey model, any assistance in paying for the model expansion would be crucial.

The Equus Beds Groundwater Management District does not receive any state funds and is funded locally by a special assessment on water users and landowners in the District. The water assessment is capped by law at \$1.00 per acre-foot for in-district users and \$1.50 per acre-foot for out of district users. The land assessment is capped at \$0.05 per acre on 40 or more contiguous acres not located within a city. The District's FY2015 assessment rates are set at \$0.85 per acre-foot and \$0.05 per acre. These assessments will generate approximately \$326,000 to operate the District for FY2015.

In addition to funding the District through the special assessments, District members also assist in funding the State Water Plan through clean drinking water fees, municipal, industrial, and stock water fees, pesticide and fertilizer registration fees, and sand royalties.

Thank you Chairman Sloan and Committee members for the opportunity to present information concerning the Equus Beds Groundwater Management District.