

Water Transfer Hearing Panel
C/O Chief Engineer – Division of Water Resources
Kansas Department of Agriculture
1320 Research Park Drive
Manhattan, Kansas 66502

June 10, 2023

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Water Transfer Hearing Panel Members:

My name is Richard J. Wenstrom, and I am writing these comments on behalf of myself and my wife and business partner Jane M. Wenstrom about negative impacts that we are expecting if the water transfer is approved at expected levels (4,800 Acre-Feet/Year up to a maximum of 6,700 Acre Feet/Year). Our farm consists of 2,960 mostly contiguous acres of center pivot irrigation (including 320 acres of dryland) that extend from the NE ¼ Section 8, 26-19 South & Southeast to the SE ¼ of Section 19, 26-18 in Edwards County including 320 irrigated acres in the northern tier of Kiowa County.

But before I make these comments, please allow me to tell you who I am, where our farm is located, and our personal and business history here in this location. Conservation was already a legacy when Jane and I arrived. Jane's father, Clarence Michaelis, a second generation owner of our farm, served on the Edwards County Soil Conservation Board for over 50 years, where he was a pioneer in soil and water conservation. Jane and I took over this operation when her parents retired in 1976, and we farmed continuously until our retirement in 2007. Our farm is located, for the most part, in South Brown Township, Edwards County, Kansas.

I hold a BS degree in Agricultural Engineering from North Dakota State University and a MS degree in Irrigation Engineering from Colorado State University. I am a licensed Professional Engineer in California (retired), Colorado (retired) and Kansas. Jane holds a BS degree in Horticulture from California Polytechnic University. Because of this strong interest in irrigation, I early on worked on irrigation pumping plant and well efficiency here on our farm, following the testing and analysis procedures pioneered by the University of Nebraska Ag Engineering Department. This led to many improvements on our farm to save irrigation water and energy. Once our pumping plants were improved, we concentrated on computer-based center pivot control & monitoring and irrigation scheduling in order to apply only the amount of water each irrigated crop required during the growing season. For over 15 years, our farm was a cooperator with the USDA-ARS Water Management Unit, Fort Collins, Colorado, performing climate-based irrigation scheduling by computer using software created for that purpose by the USDA-ARS personnel. Using these techniques, our farm was able to save irrigation water on each center pivot location by up to 10 days of pumping per season.

Recognitions followed for our farm:

- 1987 – Kansas Bankers Association Soil Conservation Award
- 1996 – US Dept of Interior, Bureau of Reclamation Water Conservation Award
- 2007 – Kansas Bankers Association Water Conservation Award
- 2014 - Climate + Energy Project Model of Innovation Award, Water & Energy
- 2015 - Be the Vision Award from the Kansas Water Office
- Kansas Farm Bureau Century Farm

In 1983, in an effort to earn extra income, and to capitalize on the knowledge we had gained on our own farm and my PE license, I formed a company named Pumping Plant Testing, whose purpose was to conduct pumping plant performance tests, conduct water right certification tests required by the

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Division of Water Resources, conduct pivot re-nozzling tests, and conduct custom irrigation scheduling.....all for clients located in the area covered by Water PACK and GMD # 5. In the succeeding 10 years, Pumping Plant Testing conducted hundreds of these various tests. One of our early employees was Greg Ebert, a very competent agricultural engineer and now local farm owner & farm manager. Ebert, since 2007 when we retired from active farming, has been the tenant who farms our land.

During this period, Pumping Plant Testing conducted water right certification tests for the Circle K Ranch, in western Edwards County (now the R9 Ranch owned by the cities of Hays & Russell) under contract for the Division of Water Resources, Kansas Department of Agriculture.

Since our farm is located in the area just south and southeast of the R9 Ranch owned by the cities of Hays and Russell, we have been concerned about the future effects on our local groundwater source of supply when and if the cities are successful in transferring water according to the current Master Order by the Chief Engineer. Now those concerns are heightened when we learned of the work performed by consultant Steve Larson, S.S. Papadopulos & Associates, Inc. on behalf of Water PACK, our local private organization dedicated to preserving and protecting local groundwater sources to supply water for beneficial agricultural and local use. Mr. Larson has detailed areas of future impairment on our farm if the cities of Hays and Russell are successful in transferring 4,800 Acre-Feet of water per year up to a maximum of 6,700 Acre Feet per year from the R9 Ranch. The impairment is the most in our circles closest to the R9 Ranch, but it appears that just about every water right on our farm would be adversely affected. Below is a listing of those water rights by number:

Water Right Number	Legal Description of Land Irrigated
19522	NE ¼ Sec 8, 26-19, S. Brown Township, Edwards County, Kansas
19522	SE ¼ Sec 8, 26-19, S Brown Township, Edwards County, Kansas
12067	NW ¼ Sec 16, 26-19, S. Brown Township, Edwards County, Kansas
9812	SW ¼ Sec 16, 26-19, S. Brown Township, Edwards County, Kansas
28457	NW ¼ Sec 22, 26-19, S. Brown Township, Edwards County, Kansas
25512	NW ¼ Sec 15, 26-19, S. Brown Township, Edwards County, Kansas
25512	SW ¼ Sec 15, 26-19, S. Brown Township, Edwards County, Kansas
33288	SW ¼ Sec 14, 26-19, S. Brown Township, Edwards County, Kansas
24524	NW ¼ Sec 23, 26-19, S. Brown Township, Edwards County, Kansas
24524	SW ¼ Sec 23, 26-19, S. Brown Township, Edwards County, Kansas
7579, 29119	SE ¼ Sec 14, 26-19, S. Brown Township, Edwards County, Kansas
33287	SW ¼ Sec 13, 26-19, S. Brown Township, Edwards County, Kansas
28456	NW ¼ Sec 24, 26-19, S. Brown Township, Edwards County, Kansas
22125	SW ¼ Sec 24, 26-19, S. Brown Township, Edwards County, Kansas
25290	SE ¼ Sec 19, 26-18, S. Brown Township, Edwards County, Kansas
24030	NW ¼ Sec 1, 27-19, Butler Township, Kiowa County, Kansas
24030	NE ¼ Sec 1, 27-19, Butler Township, Kiowa County, Kansas

Static water levels recent history in the wells closest to the R9 Ranch are presented next. Please refer to Figure 1 on the next page. The numbers indicate feet below the land surface datum.....the larger the number, the lower the water is in the well. Water levels were measured in January of the succeeding year in each instance. These data are from the Wenstrom farm files, and show static water levels from the year 1989 when we purchased these circles up to the end of 2022. The actual static water levels are shown at the top, and below is a plot showing how the water levels changed over time.

Static Water Level History for Selected Wells - Wenstrom Farm
 Key: Water levels are shown as feet below land surface datum

Legal	Circle #	1989	1994	1995	2004	2005	2007	2008	2009	2010	2011	2012	2014	2015	2016	2017	2018	2019	2020	2021	2022
NE 1/4 Sec 8	15	52	52	54	59	54	54	54	54	54	56	59	60	59	58	58	58	56	56	56	57
SE 1/4 Sec 8	16	39	39	45	45	43	42	43	43	44	44	46	49	49	49	48	47	46	45	46	47
NW 1/4 Sec 16	17	40	42	44	44	45	44	45	45	45	47	49	50	50	50	50	49	48	47	48	49
SW 1/4 Sec 16	18	49	51	47	51	50	47	50	50	50	53	54	56	56	56	55	55	54	53	54	55

Wenstrom Farm Static Water Level
 Source: Wenstrom Files

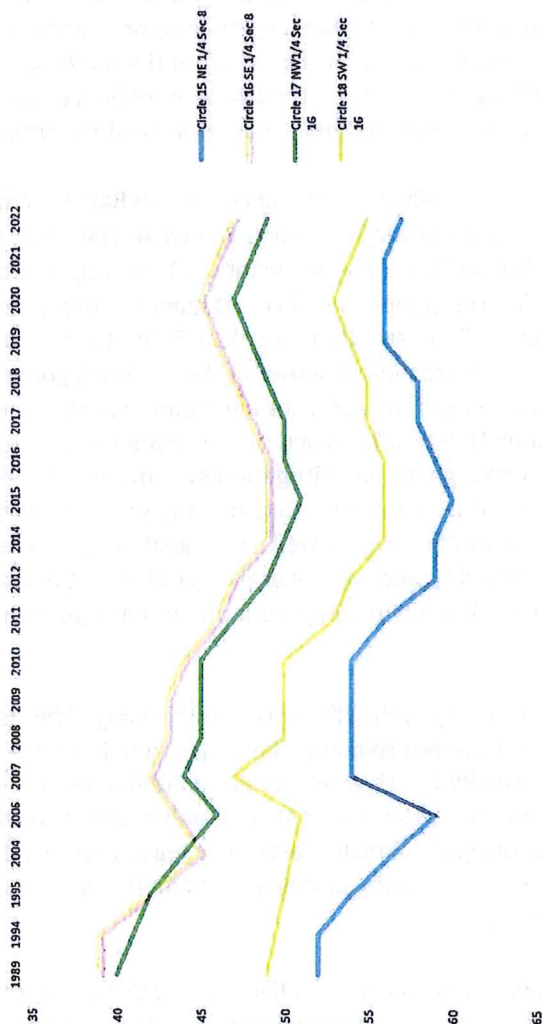


Figure 1. Static Water Level History – Wenstrom Circles 15-18

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Note that there was a steady downward trend in the static water levels until the year 2015. This was the year that the irrigation wells on the R9 Ranch were being taken out of service in anticipation of the water transfer. By the year 2017 all of the irrigation wells on the R9 Ranch had been taken out of service, and the entire ranch was planted to native grasses. There has been no irrigation pumping on the R9 Ranch since that time. **The plot on Figure 1 shows that the static water level since 2015 on our four irrigation wells has been steadily rising, which gives a direct indication of the negative effect the R9 Ranch has had on our adjacent irrigation wells.** This upward trend will undoubtedly change back to dropping static water levels when and if the cities start extracting the projected 4,800 Ac-Ft- 6,700 Ac-Ft per year. Keep in mind that the R9 Ranch will pump water from the aquifer and the output flows will be routed into their pipeline system; there will be little or no chance for recharge back into the aquifer, except for a miniscule amount when and if rainfall happens to occur in amounts that would saturate the native grass deep root systems all over the ranch. Another factor to consider is that the most likely R9 wells to be used for this water transfer diversion are those with the largest amount of water bearing strata. It is common knowledge that these wells are located in the SE corner of the R9 Ranch, closest to our farm property. Again, I refer to the Steve Larson analysis for the impairment figures for this geographical area in his report., which show that this impairment continues on into the distant future.

Water quality is a big concern also on our wells in the vicinity of the R9 Ranch. When we first acquired this land in 1989, the irrigation water was not very corrosive, and we occasionally would drink from the faucet on the discharge line in very hot weather. As time went on, however, we noticed more and more corrosion taking place on our irrigation components, and we no longer drank the water. Water sample history indicates high levels of nitrate, sulfate, and Total Dissolved Solids (TDS). I am not a water analysis expert, but our opinion is these increases are directly linked to the pumping going on within the R9 Ranch, pulling these contaminants away from the Arkansas River and moving them to our wells just south of the R9 Ranch. Stories abound from our farm and others about metal irrigation components corroding away.....in some cases bad enough for pivot irrigation systems to fail and fall to the ground. And the worst part of this story is what one cannot see; down in the well corroding well screens and pump components. This has cost us a lot of money in well and irrigation system replacements. We just redrilled a well in this area where the well screen was severely corroded.....the cost was \$ 37,000. Our concern is that this extreme corrosion will keep moving south on our farm once the cities resume their pumping.

The value of our irrigated land in the vicinity of the R9 Ranch is decreasing. This affects our balance sheet in a negative way. Although we have not sold any of our land and don't intend to, I would estimate that the land in the direct vicinity of the R9 Ranch would be discounted at least 40-50 % below what the rest of our farm would bring, especially once the cities begin pumping enormous quantities of water from the fragile alluvial aquifer underlying the Ranch. Part of the reason for this decrease in value is a decrease in crop production due to lower irrigation pumping rates on the very sandy land next to the R9 Ranch, which we are already experiencing.

On a personal level, some observations. I am a citizen of Kansas, and therefore, one of the owners of the groundwater resource owned by the people of Kansas collectively. We entrust our public servants to act legally and judiciously on our behalf in water issues, to follow the laws and regulations governing these issues. In this water transfer issue, a precedent setting first of its kind, it seems doubly important that the state of Kansas gets this right. All parties must receive accurate technical information; all parties need to know that the technical judgments, statutes and regulations are being followed by those public servants charged with interpreting and ruling on these issues. And when we see this process falling short, especially in this water transfer issue, what is our recourse? Either accept the flaws without a


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whimper, try to provide input to those public servants to assist them in their interpretation, or, if that does not work, the only option is go to the courts for relief.

I am so thankful for an organization that I have been a part of since it was founded in the mid 90's: the Water Protection Association of Central Kansas (Water PACK). We recognize that we have an incredible resource here in central Kansas that will last forever if we take care of it, the benefits will accrue to our children and grandchildren. This organization is made up of members who are some of the best agricultural producers in the world, let alone Kansas and the United States. I have served this organization now off and on for some 20 + years, many of these in the capacity of President of the Board of Directors or a Board Member. I have learned much from this organization, and my association with its members. We are in agreement with Water PACK in that we are not against water transfers, but we feel relevant statutes and regulations need to be followed, and that the conversion of water rights from agricultural to municipal and the resulting transfer must not create impairment of our wells. A look at water law history would reveal that Water PACK was one of the lobbying organizations for the Water Transfer Act in the Kansas Legislature.

In closing, I hope this has served to illuminate what it is like to be a producer facing whether or not a resource we have counted on for so long will be available in the future if the Water Transfer amounts contemplated in the Chief Engineer's Master Order are upheld. Farmers like us must navigate the shoals constantly, such as government regulation, the weather, fluctuating market prices, inflation with its rising prices of inputs, and the degradation of our currency. Yet we persist to provide food, fiber and protein to our communities, our state, our nation, and a whole host of hungry people in the world. The people of Kansas are watching and care about the conservation of their most precious resource: water. Richard & Jane Wenstrom are proud to have been a part of that conservation of water on our farm.


Richard J. Wenstrom


Jane M. Wenstrom

