



Stafford County Farm Bureau Association

306 N. Main, Box 308, St. John, Kansas 67576 / (620) 549-3292

David W. Barfield, P.E.
Chief Engineer
Division of Water Resources
Kansas Department of Agriculture
1320 Research Park Drive
Manhattan, Ks. 66502

January 18, 2019

Dear Chief Engineer Barfield,

The Stafford County Farm Bureau board feels there are a lot of misconceptions out there about Quivira National wildlife refuge and Stafford County. We offer these statements.

Quivira National Wildlife Refuge

In the late 1920's or early 1930's a ditch was constructed to divert Rattlesnake creek water to the Little Salt Marsh (LSM). (CCP) pg.51

In 1954, 4266 acres of farm ground existed, and several farmsteads existed between the LSM and the Big Salt Marsh (BSM). (CCP) pg.36, 51 (NCRS maps)

In May 1955 the Migratory Bird Conservation Commission purchased Big Salt Marsh and Little Salt Marsh. (CCP) pg.13

In 1957, a water permit (#7571) was filed requesting 22,200 acre feet of water. (CCP) pg.14

In 1958 the name of the refuge became Quivira National Wildlife Refuge. (CCP) pg.13

Acquisitions continued through 1969 to bring the refuge to 21,820 acres. (CCP) pg.14 Some of these acquisitions were done through eminent domain proceedings. (Farmers names withheld)

Refuge infrastructure occurred over decades. During these years 25 miles of manmade drainage canals and 103 water control structures were constructed to move water around between the LSM and the BSM, to more than 30 natural and manmade water holding units. (CCP) pg.15, 29, 36, 37, 47, 64

In 1978, Notice of Proof of completion was filed. (6)

In 1982, Notice of Proof of completion was filed. (CCP) pg.14 (6)

RECEIVED

Jan 18 2019

Big Bend GMD #5

1987 was chosen as the perfection year. This is the year that set the record for Max daily discharge at the Zenith gauge. It was the eighth wettest year out of 100 years of data. (6) The amount of water available for perfection was 1.8 times greater than the maximum quantity authorized by the Permit to Appropriate Water. (11) The capability to use more water was not demonstrated in 1987. (CCP) pg.14

In 1991 and 1998 additional land was acquired bringing the total to 22,135 acres. (CCP) pg.14

In 1993, (Guy Ellis and Larry Sheets Hydrologist DWR) "It is quite probable that the natural flows of water to full extent of this water right will not be available most normal years. Management plans for the refuge area should be based on probable flows of Rattlesnake creek." (3) "In most years the available quantity will be considerable less." (7)

May 27, 1994 David Pope cautioned the service,

"Even under pristine conditions, most of the streams in Central and Western Kansas are not continuously dependable sources of supply. Particularly in the case of very large water rights, such as the Quivira Refuge right, the water holder should not expect to be able to fully exercise the right each and every year. I should also point out that a certificate states the maximum quantity of water that may be diverted in any year. Because certificates are based on the maximum year of record, no water right holder should expect to need or have available the maximum authorized quantity every year." (5) pg.4

On April 9th, 1996 Certificate of Appropriation for Beneficial Use of Water for Water Right no. 7571, with Priority date August 15, 1957 was issued. 3 points of diversion were noted with a combined maximum diversion rate of 300 cfs and quantity now to exceed 14,632 acre-feet. (CCP) pg.14 (4) This sentence was placed on the certificate. "The right of the appropriator shall relate to a specific quantity of water and such right must allow for a reasonable raising or lowering of the static water level and for reasonable increase or decrease of the stream flow at the appropriator's point of diversion." (4)

In 2000 KDA-DWR approved the Refuge conservation plan. (6) pg.8

June 2001 and January 2003 the Service requested that the Zenith gauge be used as a "means of measuring the volume of water entering the refuge." The difficulty designing and implementing an accurate metering system at Refuge diversions is acknowledged several times in the record. (6) pg.8

2011 survey of Quivira shows 10,819 acres of herbaceous wetland zones (48.6%), 3,005 acres open water (13.5%), 4,898 acres grassland (22.0%), 1,469 acres shrubland (6.6%) and 868 acres riparian and woodlands (3.9%). 2008 map shows 886 acres of farmland. (CCP) pg.37, 39

In 2012, according to Megan Estep USF&W Service, the biggest issue is timing of water availability for the refuge needs, specifically late summer/fall period. (14)

April 8th, 2013 the Service requested an impairment investigation (9)

May 2014, a Stafford field office visit finds meters that are not on the “approved flow meter list” and only one meter was actually installed. (12)

In 2015 Comprehensive Conservation Plan was adopted by the Service. This plan conflicts with the 2000 plan. (6) pg.9

Employment and visitor spending add approximately \$1.015 million dollars of added value to the 5 county area around Quivira. (CCP) pg.61

Quivira National Wildlife Refuge is not on the Stafford County tax roll. (10)

Stafford County Kansas

Conservation efforts that have evolved from the dust bowl days of the 1930’s have resulted in higher farm field residue levels, leading to less soil erosion and less runoff. Streamflow has been affected by conservation programs paid in part by state and federal programs.

GMD#5 was the first to cut back water appropriations during development in the State of Kansas, and then closed the district to further appropriations in 1993. (9) This was a great vision that began long before anyone else in the state of Kansas acted.

The August 2011-July 2012 period was the warmest 12-month period of any 12-months on record for the contiguous U.S. since 1895. (15) 2012 has the distinction of the lowest 4-month cumulative rainfall deficit (2.7 Std deviations from the norm) in the 6 state central Great Plains area in 117 years eclipsing 1988, 1934 and 1936. (1) pg.271, 278

This was not the first time creeks and rivers dried up in Kansas. Stream gauging data recorded prior to 1956 (predevelopment) showed no streamflow at Garden City and Great Bend on the Arkansas river and only 6 cfs on the Arkansas river at Wichita. (2) pg.66 table 9

Stafford County, as evidenced by the water level measurements of GMD#5 over time and the Great Bend Prairie Regional Planning Area Usable Lifetime of the High Plains Aquifer map, is very close to equilibrium with regards to irrigation withdrawals and recharge rates in the county. (9)

Kansas Geological Survey report in March 2018, pumping needs to be reduced by about 2% for sustainability in GMD5 based on the last dozen years of water level and water use data. (8)

Stafford county aquifer is full, a reasonable raising or lowering of the static water level is occurring. There are irrigation wells that were established in the 60’s that in 2010 and 2019 were equal or exceeded the static water level of the day they were drilled. (9)

Since Stafford county aquifer is full and GMD5 is within 2% of sustainability, we ask the question could there be other forces affecting streamflow outside of GMD5? Could the lack of baseflow from the west of the Arkansas river, which contributes to the lack of streamflow in Arkansas river contribute to a lack of head pressure thereby limiting baseflow movement and streamflow in GMD5?

Irrigation increased agricultural land values in GMD5 by \$1.44 billion in 2015. The ability to irrigate provides a 73% premium to the land price average. Losing irrigation in GMD5 would annually decrease animal sales by \$236 million, cattle on feed by 213,000 head, fertilizer expenditures by \$22.6 million, chemical expenditures by \$10.7 million, and total farm expenditures by \$259.8 million. (13) pg.i

Solution

Quivira National Wildlife Refuge is a man made refuge that has only existed in its current condition since 1982. Water delivered directly to the ponds in the most efficient manner possible seems to be the most sensible solution to achieve and solve this issue while fulfilling the needs of Quivira National Wildlife Refuge and maintaining the livelihoods of all in GMD5.

One of the duties of the Chief engineer is to administer water law so that the use of the state's water is put to beneficial use. The current state of GMD5 district with a 2% cut in pumping reductions would lead to sustainability and the maximizing of putting the state's water to beneficial use in our area. Any cuts greater than this, would lead to a failure of the Chief engineer of his duties of putting the state's water to beneficial use.

The GMD5 board has a solution, funded locally that will maintain current water tables for years to come and provide water to Quivira National Wildlife Refuge in a manner that will furnish water when the refuge needs it. We ask that you support the people of Stafford county and GMD5 LEMA proposal.

Respectfully,

Marlyn Spare	Stafford County Farm Bureau President
Tyler Alpers	Stafford County Farm Bureau Vice-President
Cammie Vaupel	Stafford County Farm Bureau Secretary-Treasurer
Justin K. Vosburgh	Stafford County Farm Bureau board member
Brian Dunn	Stafford County Farm Bureau board member
Shon Meschberger	Stafford County Farm Bureau board member
Jessica Neeland	Stafford County Farm Bureau board member

cc: Mike Beam Secretary of Kansas Department of Agriculture
Richard Felts Kansas Farm Bureau President
Senator Pat Roberts
Senator Jerry Moran
Representative Ron Estes
Kansas Senator Mary Jo Taylor
Kansas Representative Greg Lewis
GMD#5
Waterpack
Stafford County Commissioners

References:

(CCP) Comprehensive Conservation Plan Quivira National Wildlife Refuge October 2013

- (1) Causes and Predictability of the 2012 Great Plains Drought
- (2) Drought of the 1950's
- (3) Letter from DWR to Cheryl Willis Fish and Wildlife Denver Co. August 18, 1993
- (4) Certificate of Appropriation For Beneficial Use of Water Water Right #7571
- (5) Letter from DWR to Ralph Morgenweck Fish and Wildlife Denver Co. May 27, 1994
- (6) GMD5 Impairment Response Letter May 12, 2016
- (7) Memorandum Larry M. Sheets Hydrologist May 11, 1993
- (8) Status of the High Plains Aquifer in Kansas March 2018
- (9) GMD5 records and maps
- (10) Stafford county treasurer
- (11) Letter from DWR to Terry Grosz Fish and Wildlife Denver Co. April 10, 1996
- (12) Quivira Water Right #7571 Page 33 Of 894
- (13) The Value of Water in GMD5 December 20, 2018
- (14) Email correspondence Meg Estep to Chris Beightel March 23, 2012
- (15) NOAA's National Climatic Data Center July 2012 Statewide ranks