Kansas Water Resources Consulting



David Barfield, P.E. 1481 East 660 Road Lawrence, Kansas 66049

Neutral Testimony on HB 2678 related to Water Banking House Committee on Water, February 8, 2024

My name is David Barfield, and I am providing neutral testimony regarding HB 2678.

Qualifications - I am a professional civil engineer with over 40 years of water resources experience. I worked for the Kansas Dept. of Agriculture's Division of Water Resources (DWR) from 1984 until my retirement from the state during early 2020, which included 12 years as DWR's Chief Engineer. Since mid-2020, I have been a water resources consultant, assisting two GMDs in their LEMA development and implementation and a diverse set of cities, industry, and irrigators in water right matters. That said, **my comments provided herein are my own alone.**

My testimony will be limited due to the short notice provided of the bill and this hearing which makes meaningful review of the issues it raises difficult.

Statute requires Water Bank operations to be reviewed periodically. My testimony provides the committee with excerpts from the most recent five-year review of Kansas only water bank, the Central Kansas Water Bank (CKWB), as well as an excerpt from its latest annual report. The most recent review covered the years 2013-17.

From my knowledge dealing with the CKWB as Chief Engineer I have not identified any concerns with the Bank's basic operations a regular account deposit and leases.

However, I have concerns with the operation of safe deposit accounts as amended in 2016. Here is a quote from the latest review explain their basic operation and changes made in 2016 to make them much more attractive: "Safe deposit accounts are for a water right owner's own use, in which a portion of unused water in one year is saved to supplement a need in a future year. A water right owner is allowed to deposit up to 25% of the unused portion of the water right in a calendar year when the use was less than the authorized quantity. The Safe Deposit formula was changed after the previous Evaluation, and an additional conservation factor was removed by the May 5, 2016 Findings and Order of the Chief Engineer, which adopted the current Bank Charter."

I was the Chief Engineer that approved these provisions. I had a concern at that time but assumed the 5-review process would address any concerns as they were evidenced. Perhaps this will be the case in due course with the next review with the significant additional growth and use of safe deposit accounts.

kwrconsulting.com

Below are additional quotes about safe deposit accounts from the most recent five year review.

- The Kansas Water Banking **Act requires the operation of safe deposit accounts by the bank shall not result in an increase in the amount of net consumptive use of water** in any hydrologic unit, computed on a long-term rolling average compared to a representative past period. K.S.A. 82a763(c)(9).
- **SD Account usage has been rapidly increasing** since the past evaluation and **after changes to the Bank Charter** were completed, modifying the amount of water that can be deposited into SD Accounts and the Fee Structure.
- The total in accounts grew from 1002 AF in 2014 to 42,290 AF in 2018.
- Some water has been withdrawn from SD Accounts, with a maximum of 664 acre-feet being reported as withdrawn on the 2018 Annual Report.
- This comparison shows that **four of the nine hydrologic units have a higher net consumptive use** on average for the 2013-2017 Evaluation Period.
- This analysis was conducted and included within the Safe Deposit Accounts section of this report as well as mentioned earlier in these findings, highlighting that net consumptive use increased in 4 of 9 hydrologic units within the Bank boundary while showing only a very small increase when looked at for the Bank area as a whole. As safe deposit account balances continue to increase there remains an opportunity for net consumptive use to increase, particularly during periods of drought when safe deposit account balances are drawn upon by Bank participants. Potential remedies to this situation are included within the Recommendations section of this report.

Also attached is an excerpt from the latest Water Bank Report with the last page of Report's listing of savings account operations. It shows the total in savings accounts at the beginning of 2022 was 98,024 acre-feet and 26,090 acre-feet of savings account water used in 2022. This included significant withdrawals in the Rattlesnake Creek basin above Quivira.

I believe the next water bank review will demonstrate that the revisions to savings accounts of 2016 are in conflict with Statute's requirement to not increase the net consumptive use of water in any hydrologic unit. This is especially problematic in the Rattlesnake Creek Basin.

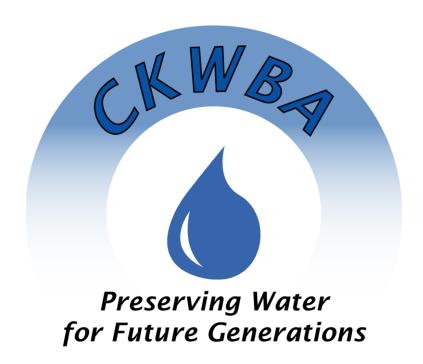
The bill adds an admittedly small increase in flexibility in the use of safety deposit accounts. However, I believe the Legislature should consider such changes very carefully.

I would be happy to stand for questions.

Attachments:

- 1) Title page and table of contents from latest Water Bank Review
- 2) Transmittal letter and end of savings account table from Water Bank Annual Report

Central Kansas Water Bank Association Five Year Review Evaluation Report



June 2021

Table of Contents

Evaluation Team Overview	1
Executive Summary	2
Evaluation Background	4
History of Water Banking in Kansas	5
Central Kansas Water Bank Association Operations	8
Water Deposits	8
Water Leases	
Safe Deposit Accounts	10
Evaluation of Bank's Performance	11
Deposits and Leases	11
Safe Deposit Accounts	14
Findings	17
Recommendations	20
References	22
Appendices	
A. Evaluation of Water Bank Safe Deposit Boxes	24
B. 2018 Annual Report Deposits and Leases	25
C. 2018 Annual Report Safe Deposit Account Totals	26
D. Supplemental Contextual Commentary	27

John Janssen - Public (Chair) Brandon Bortz - Private Andrew Vosburgh - Private Greg Ebert - Private Vernon Hirt - Private



Orrin Feril, Manager 125 South Main Street Stafford, Kansas 67578 ph: (620) 234-5352 fx: (620) 234-5718 ckwba@ckwba.org www.ckwba.org

April 12, 2023

Earl Lewis Division of Water Resources Kansas Department of Agriculture 1320 Research Park Drive Manhattan, KS 66502

RE: Central Kansas Water Bank Association 2023 Annual Report

Dear Mr. Lewis,

As per K.A.R. 5-17-11, enclosed is a spreadsheet outlining the activity for the Central Kansas Water Bank Association through the calendar year 2022. This letter and attachment will serve as the 2023 annual report of activity within the Central Kansas Water Bank Association.

If there are any questions with the annual report spreadsheet or information in this letter, please contact the Association office.

Sincerely,

Orrin Feril Manager

Enclosure

Central Kansas Water Bank Association 2023 Annual Report SAVINGS ACCOUNTS

4-6

YEARLY TOTALS										3			3												3			
IALS																											Number	Water Right
	072	071	070	069	068	067	066	065	064	063	062	061	060	059	058	057	056	055	054	053	052	051	050	049	048	047	Number	Savings Account
	12/1/2022	11/30/2022	11/30/2022	12/1/2022	12/1/2022	12/1/2022	12/1/2022	11/30/2022	11/30/2022	11/30/2022	11/30/2022	11/30/2022	11/30/2022	11/30/2022	11/30/2022	11/30/2022	11/30/2022	11/29/2022	11/29/2022	11/25/2022	11/25/2022	11/25/2022	11/25/2022	11/23/2022	11/22/2022	11/22/2022	Opened	Date
	Rattlesnake Creek	Cow Creek	Cow Creek	NF Ninnescah River	NF Ninnescah River	NF Ninnescah River	NF Ninnescah River	Cow Creek	Pawnee River	SF Ninnescah River	Rattlesnake Creek	SF Ninnescah River	NF Ninnescah River	SF Ninnescah River	NF Ninnescah River	Cow Creek	SF Ninnescah River	SF Ninnescah River	Unit	Hydrologic								
	316.00	195.00	170.00	186.00	195.00	174.00	198.00	169.00	198.00	195.00	98.00	187.00	195.00	224.00	240.00	105.00	57.00	198.00	216.00	207.00	198.00	197.00	231.00	105.00	253.00	233.00	AF	Auth.
98,024.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Balance	Beginning
4,735.02	0.00	0.85	9.11	0.00	0.00	0.00	0.00	0.32	4.47	7.91	4.94	0.34	8.15	22.30	11.88	0.91	4.71	9.03	0.00	0.34	0.48	0.99	0.53	26.25	0.73	1.99	Deposit	Annual
26,090.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Acct. Used	Savings
69,456.60	0.00	0.85	9.11	0.00	0.00	0.00	0.00	0.32	4.47	7.91	4.94	0.34	8.15	22.30	11.88	0.91	4.71	9.03	0.00	0.34	0.48	0.99	0.53	26.25	0.73	1.99	Balance	Current Account Type of
	IRR	IRR	IRR	IRR	IRR	IRR	IRR	IRR	IRR	IRR	IRR	IRR	IRR	IRR	IRR	IRR	IRR	IRR	IRR	IRR	IRR	IRR	IRR	IRR	IRR	IRR	Use	Type of
232,128.28	183.00	117.66	94.18	96.60	84.25	92.00	103.00	123.00	112.66	125.76	24.84	116.00	128.00	145.17	137.00	26.30	46.58	68.34	132.17	146.58	145.00	126.00	164.00	0.00	205.00	177.00	2020	quanti
268,117.43	190.00	101.69	105.47	123.39	59.92	115.00	99.00	101.00	121.81	142.84	53.74	134.00	153.00	156.42	110.75	65.59	9.33	124.27	133.50	160.08	185.00	160.00	192.00	0.00	166.00	224.00	2021	quantity diverted past 3 yrs
340,703.59	233.00	191.60	133.55	173.10	137.51	171.82	171.13	167.74	180.11	163.36	78.25	185.65	162.40	134.78	192.48	101.34	38.15	161.88	244.03	205.63	196.10	193.06	228.89	0.00	250.09	225.04	2022	3 yrs
227,379	130	130	130	120	125	120	130	130	130	130	65	130	130	149	130	46	160	125	120	130	130	130	155	N/A	165	130	2020	
229,461	130	130	130	120	125	120	130	130	130	130	65	130	130	149	130	70	148	125	122	130	130	130	155	N/A	165	155	2021	Acres Irr
229,731	130	130	130	120	125	120	130	130	130	130	65	130	130	149	130	70	145	125	120	130	130	130	155	N/A	165	155	2022	
	2	2	17	2	2	2	2	17	2	2	32	2	2	2	2	2	25	15	26	2	4	2	2	N/A	2	4	2020	Cro
	2	17	2	4	ω	4	ω	17	2	2	2	2	2 .	2 .	4	4	5	15	15 2	4		2	2	N/A N	4		2021 20	Crop Codes
	4	17	2	5	2	5	ω	2	2	2	2	2	15	17	2	2	ω	15	22	2	2	2	2	N/A	2	17	2022	