Kansas Department of Agriculture Division of Water Resources

WORKSHEET

1. File No.: 50990	2. Status Change Date:	9/20/2024	4. Field Office: 03 - Stockton GMD:
3. Associated File No(s):			Structures File No.: Filing/Priority Date: March 9, 2023
5a. ⊠ Applicant ⊠ Owner ⊠ WU ☐ Address Change	C Person ID Add Seq#	5b. Owner	Person ID ss Change Add Seq#
UNIFIED SCHOOL DISTR PO BOX 289 LINCOLN, KS 67455-0289			
5c. Owner WUC Address Change	Person ID Add Seq#	5d. ☐ Owner ☐ Addres	™ WUC Person ID ss Change Add Seq#
	PU UMW Reasonable Q: n Date: 12/31/2029		7. Use of Water Surface Water UMW: IRR-Irrigation UMW: UMW:
8. Action Trail			
9. Special Conditions			
10. 5YR Allocation Type: Star Comment:	rt Year: 5YR Quar	ntity: Base <i>i</i>	Acres:
11. Sand & Gravel Proj ID:	☐ Active ☐ Dredge	☐ IND Evap	☐ Jr Evap ☐ Other Diversion ☐ Rpt on Sr
12. Waiver Rule ID: New D Applies: Rule No.: Rule Type: Rule SubType:	ate Requested:	Justification:	
Comments			Processed Entered CCB 9/17/2024 9/24/2024
			Reviewed KAK 9/20/2024

				County: L ofer Code:	113/3	30 MA		EM ALI	LUVIU				ER	Spec	cial Use	Area:							
Structures File No: 14. Points of Diversion, Rates & Quantitie PDIV Qualifier S MOD 74176 SW SW SE 3 15. Limitations NEW Type: Com NEW Type: 16. Metering Metering Requ 17. Place of Use PUSE S T R ID CHK 58854 31 11S 7W 1 18. Point of Diversion and Place of U* 46826 + #	antities										Otv	AF		Rate g	nm	St	orage Qt	, Δ F	Storage R	ate			
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MOD	74176	SW SW SE	31	118	7W	1	509	2315	5			•	7.6	5	7.65	90	0					*	
15.	Limitations			ined Rate Quantity:		-	Rate:				comb ned wit			no(s):	46826								
16.	Metering		Require	ed 🔲 /	Anti-Re	everse	Requir	ed [] Sea	al Requ	uired	Comp	liance	Date:	12/31/2	2025							
17. F	Place of Use	e																					
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MEMORANDUM TO FILE

Division of Water Resources, Water Appropriation Program

Date: September 16, 2024

From: Colin Barclay, Environmental Scientist

Re: New Application File No. 50,990 - United School District #298

Summary

United School District #298 has filed the above referenced application to appropriate an additional 7.65 acre-feet of groundwater at a rate of 90 gallons per minute for irrigation use on 4.5 acres of athletic fields located in the town of Lincoln in Lincoln County, Kansas. An existing well will be used with a complete point of diversion overlap and place of use overlap with File no. 46,826. The place of use is solely owned by the applicant, and they have signed the application form affirming legal access to the point of diversion. File no. 46,826 will not require a change application as the PD and PU are not changing. The applicant appears to have not requested enough water on their senior file and is attempting to correct the quantity with this new application.

Reasonable Rate and Quantity

As per K.A.R. 5-3-24 the maximum allowable quantity for 4.5 acres is 5.85 acre-feet at 1.3 acre-feet per acre for Lincoln County, Kansas. This was the quantity requested in the senior file; however, the applicant has indicated that they would be irrigating athletic fields which typically use various water intensive grasses such as Bermuda, Fescue, and Bluegrass. Typical water consumption for these types of grasses is estimated at 2-3 acrefeet per acre. 3 acre-feet per acre was determined to be reasonable. 13.5 acre-feet was determined to be the maximum reasonable quantity.

4.5 acres x 3 acre-feet per acre = 13.5 acre-feet

5.85 acre-feet from the senior file + 7.65 acre-feet from the above referenced pending application = 13.5 acre-feet.

The application requesting 7.65 acre-feet is considered reasonable. As the senior file is currently authorized for 5.85 acre-feet, no limitation in quantity is required as the combined quantity of both files will be 13.5 acre-feet. However, the above referenced application will be limited to a rate of 90 gallons per minute when combined with senior file 46,826.

Source of Supply and Safe Yield

The source of supply for the proposed point of diversion appears to be alluvium and the unconfined Dakota formation. There is impermeable Greenhorn limestone and Graneros shale located along the Northern portion of the two-mile safe yield evaluation circle and was excluded from the evaluation. Per the requirements in K.A.R. 5-3-11, safe yield is determined by the extent of the unconfined aquifer within a two-mile circle radius of the point of diversion, which establishes the area of consideration. Evaluation of the area of consideration included the extent of the unconfined aquifer, which provided an area of consideration of 6,800 acres. With a potential annual recharge of 2.3 inches, and 75% of recharge available for appropriation, safe yield was determined to be 977.44 acre-feet. Existing water rights have appropriated 306.6 acre-feet, providing a difference of 670.84 acre-feet available for appropriation, and the application requesting 7.65 acre-feet complies with safe yield.

Nearby Water Rights

The nearest known Water Right (LC-2) is located approximately 1,375 feet to the Southeast. The nearest known domestic well is located approximately 1,200 feet directly to the North. However, due to the proximity the existing well is in relation to the town of Lincoln, it was determined a public notice would be most effective at reaching any possible nearby groundwater wells located within ½ mile of the existing point of diversion. One nearby response was received during the notification period.

Craig and Mary Ann Stertz submitted a written letter in response to the public notice. In this letter, they show concern for the possible impact the above referenced application may have on the aquifer in the area. However, they indicate their groundwater well is located in Section 5, Township 12, Range 7 West, which is located approximately ½ mile East by Southeast from the existing point of diversion. Due to the low rate and quantity requested by the above reference application, impairment appears unlikely.

Per the requirements of K.A.R. 5-4-4 for all other aquifers, the minimum well spacing should be one-quarter (¼) mile to all other non-domestic wells and 660 feet to domestic wells.

Recommendations

The application was sent to Kelly Stewart, Water Commissioner of the Stockton Field Office and was recommended for approval in an e-mail dated September 16, 2024.

The application complies with all regulations concerning reasonable quantity, safe yield, and minimum spacing requirements. The proposed application is subject to minimum desirable streamflow requirements. Approval of the application will not impair senior water rights nor prejudicially or unreasonably affect the public interest. Therefore, it is recommended that the referenced application be approved.

Colin Barclay

Environmental Scientist

Colin Borday

Water Appropriation Program

RE: 50990 review and recommendation request

Stewart, Kelly [KDA] < Kelly. Stewart@ks.gov>

Mon 9/16/2024 3:35 PM

To:Barclay, Colin [KDA] <Colin.Barclay@ks.gov>;Billinger, Mark [KDA] <Mark.Billinger@ks.gov> Cc:Hageman, Nancy [KDA] <Nancy.Hageman@ks.gov>

Colin.

I have no objection to the approval of this application.

Kelly

From: Barclay, Colin [KDA] <Colin.Barclay@ks.gov> Sent: Monday, September 16, 2024 2:46 PM

To: Stewart, Kelly [KDA] <Kelly.Stewart@ks.gov>; Billinger, Mark [KDA] <Mark.Billinger@ks.gov>

Subject: 50990 review and recommendation request

Kelly and Mark,

I have attached my draft memo and safe yield report for pending new application 50,990 for your review and recommendation.

This application will have a complete point of diversion and place of use overlap with senior file 46,826, however they are not changing the point of diversion or place of use so no change application was required for the senior file. This new application is requesting to increase the quantity to 13.5 acre-feet for the irrigation of 4.5 acres of athletic fields. A public notice was required for this file as the existing well is located within the town of Lincoln. We only received one written response during the notification period that I have documented in my memo.

Please let me know if you have any questions.

Thanks,

Colin Barclay

Environmental Scientist

Division of Water Resources

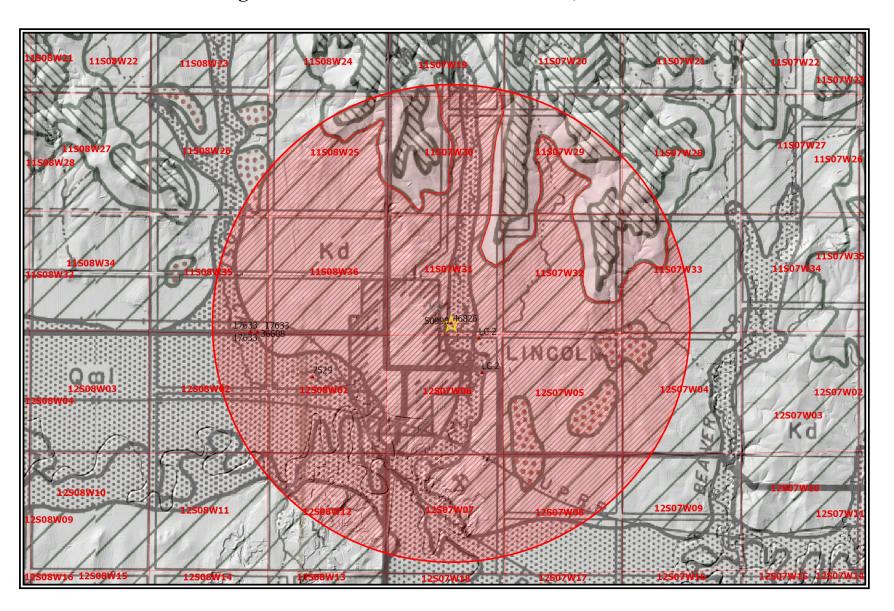
Kansas Department of Agriculture

Phone: (785) 564-6628

Colin.Barclay@ks.gov

Safe Yield Report Sheet Water Right- A5099000 Point of Diversion in 31-11S-07W

Footages from SE corner- 509 feet North 2,315 feet West



Analysis Results

The selected PD is in an area OPEN to new appropriations.

The safe yield based on the variables listed below is 977.44 AF.

Total prior appropriations in the circle is 314.25 AF. 306.6 AF

Total quantity of water available for appropriation is 663.19 AF. 670.84 AF Application 50990 requesting an additional 7.65 AF complies with safe yield.

Safe Yield Variables

The area used for the analysis is set at 6,800 acres.

The potential annual recharge at the circle center is estimated to be 2.3 inches.

The percent of recharge available for appropriation is 75%.

Authorized Quantity values are as of 04-JUN-2024 and are based on Appropriated and Vested ground water right and possible stream nodes for GMD #2. Domestic, Term and Temporary water rights have been excluded.

There are 7 water rights and 7 points of diversion within the circle.

File Number	Use ST SR	Q4 Q3 Q2 Q1	FeetN	FeetW	Sec	Twp Rng	ID	Qind	Auth Quant	Add Quant	,	Tot Acres	Net Acres
A 7529 00	MUN NK G	NW SE NW	3880	3780	01	12 08W	1	WR	39.90	39.90			
A 17633 00	MUN NK G	SE SE SE	102	184	35	11 08W	1	PD	0.00	0.00			
Same	MUN NK G	CS SE SE	113	517	35	11 08W	2	PD	89.00	89.00			
Same	MUN NK G	SW SE SE	50	844	35	11 08W	3	PD	64.45	64.45			
A 36608 00	MUN NK G	CS SE SE	113	517	35	11 08W	2	WR	35.18	0.00			
A 36609 00	MUN NK G	SW SE SE	50	844	35	11 08W	3	WR	34.89	0.00			
V LC 2 00	MUN AA G	NW SE NE	0	0	06	12 07W	2	WR	107.41	107.41			
Same	MUN AA G	NW NE NE	0	0	06	12 07W	1	WR					
A 46826 00	IRR NK G	SW SW SE	509	2315	31	11 07W	1	WR	5.85	5.85		4.50	4.50
A 50990 00	IRR AY G	SW SW SE	509	2315	31	11 07W	1	WR	7.65	7.65	-7.65	4.50	0.00

Limitations

File Number	Seq Num Limitations
A 17633 00	1 STANDBY WELL
A 36608 00	1 250GPM @ 98MGY COM/W #17,633
A 36609 00	1 200GPM COM/W #17633
Same	2 98MGY COM/W #LC 002, 7529, 17633, 36608 (PER CERT 3/23/98)

KANSAS DEPARTMENT OF AGRICULTURE Mike Beam, Secretary of Agriculture

DIVISION OF WATER RESOURCESEarl D. Lewis Jr., Chief Engineer

APPROVAL OF APPLICATION and PERMIT TO PROCEED

(This Is Not a Certificate of Appropriation)

This is to certify that I have examined Application, File No. 50,990 of the applicant

UNIFIED SCHOOL DISTRICT NO 298 PO BOX 289 LINCOLN KS 67455-0289

for a permit to appropriate water for beneficial use, together with the maps, plans and other submitted data, and that the application is hereby approved and the applicant is hereby authorized, subject to vested rights and prior appropriations, to proceed with the construction of the proposed diversion works (except those dams and stream obstructions regulated by K.S.A. 82a-301 through 305a, as amended), and to proceed with all steps necessary for the application of the water to the approved and proposed beneficial use and otherwise perfect the proposed appropriation subject to the following terms, conditions and limitations:

- 1. That the priority date assigned to such application is **March 9, 2023**.
- 2. That the water sought to be appropriated shall be used for irrigation use on land described in the application, as follows:

Sec. Twp. Range	NE1/4				NW1/4					SW	11/4	s. [SE1/4				
	NE1/4	NW1/4	SW1/4	SE1/4	TOTAL												
31 - 11S - 7W															4.5		4.5

- 3. That the authorized source from which the appropriation shall be made is groundwater, to be withdrawn by means of one (1) well located in the Southwest Quarter of the Southwest Quarter of the Southeast Quarter (SW¼ SW¼ SE¼) of Section 31, more particularly described as being near a point 509 feet North and 2,315 feet West of the Southeast corner of said section, in Township 11 South, Range 7 West, Lincoln County, Kansas, located substantially as shown on the topographic map accompanying the application.
- 4. That the appropriation sought shall be limited to a maximum diversion rate not in excess of 90 gallons per minute (0.2 c.f.s.) and to a quantity not to exceed 7.65 acre-feet of water for any calendar year.
- 5. That the rate of diversion of water approved under this permit is further limited to the rate which combined with Water Right, File No. 46,826, will provide a total not to exceed **90 gallons per minute (0.2 c.f.s.)** from the well authorized herein.

File No. 50,990 Page 2 of 3

6. That installation of works for diversion of water shall be completed on or before <u>December 31, 2025</u>, or within any authorized extension thereof. The applicant shall notify the Chief Engineer and pay the statutorily required field inspection fee of \$400.00 when construction of the works has been completed. Failure to timely submit the notice and the fee will result in revocation of the permit. Any request for an extension of time shall be submitted prior to the expiration of the deadline and shall be accompanied by the required statutory fee of \$100.00.

- 7. That the proposed appropriation shall be perfected by the actual application of water to the proposed beneficial use on or before <u>December 31, 2029</u>, or any authorized extension thereof. Any request for an extension of time shall be submitted prior to the expiration of the deadline and shall be accompanied by the required statutory fee of \$100.00.
- 8. That the applicant shall not be deemed to have acquired a water appropriation for a quantity in excess of the amount approved herein nor in excess of the amount found by the Chief Engineer to have been actually used for the approved purpose during one calendar year subsequent to approval of the application and within the time specified for perfection or any authorized extension thereof.
- 9. That the use of water herein authorized shall not be made so as to impair any use under existing water rights nor prejudicially and unreasonably affect the public interest.
- 10. That 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 the reasonable increase or decrease of the streamflow at the appropriator's point of diversion.
- 11. That this permit does not constitute authority under K.S.A. 82a-301 through 305a to construct any dam or other obstruction; nor does it grant any right-of-way, or authorize entry upon or injury to, public or private property.
- 12. That all diversion works constructed under the authority of this permit into which any type of chemical or other foreign substance will be injected into the water pumped from the diversion works shall be equipped with an in-line, automatic quick-closing, check valve capable of preventing pollution of the source of the water supply. The type of valve installed shall meet specifications adopted by the Chief Engineer and shall be maintained in an operating condition satisfactory to the Chief Engineer.
- 13. That an acceptable water flow meter shall be installed and maintained on the diversion works authorized by this permit in accordance with Kansas Administrative Regulations 5-1-4 through 5-1-12 adopted by the Chief Engineer. The required water flow meter shall be used to provide an accurate quantity of water diverted as required for the annual water use report (including the meter reading at the beginning and end of the report year).
- 14. That the applicant shall maintain accurate and complete records from which the quantity of water diverted during each calendar year may be readily determined and the applicant shall file an annual water use report with the Chief Engineer by March 1 following the end of each calendar year. Failure to file the annual water use report by the due date shall cause the applicant to be subject to a civil penalty.
- 15. That no water user shall engage in nor allow the waste of any water diverted under the authority of this permit.

- 16. That the right to appropriate water under authority of this permit is subject to any minimum desirable streamflow requirements identified and established pursuant to K.S.A. 82a-703c for the source of supply to which this water right applies.
- 17. That failure without cause to comply with the provisions of this permit and its terms, conditions and limitations will result in the forfeiture of the priority date, revocation of the permit and dismissal of the application.

Ordered this 20 day of September, 2024, in Manhattan, Riley County, Kansas.

EARLD. LEWIS, JR., P.E.
CHIEF ENGINEER

Chief Engineer
Division of Water Resources

Ansas Department of Agriculture

State of Kansas)) SS

County of Riley

The foregoing instrument was acknowledged before me this 20th day of Earl D. Lewis Jr., P.E., Chief Engineer, Division of Water Resources, Kansas Department of Agriculture.

Notary Public

SHAWNA NOVAK
My Appointment Expires
August 23, 2028