

MANAGEMENT PLAN

For the Designation of a Water Conservation Area (WCA)

Bartlett Farms WCA; Ford County, KS

January 2018 through December 2022

In order to conserve and extend the productive life of the aquifer in our region and increase the value and viability of our water rights and water resources for future generations we, the undersigned water right owners propose the following management plan, pursuant to K.S.A. 82a-745 (WCA Law), to form the basis of a Consent Agreement and Order Designating a Water Conservation Area (WCA).

Expression of Conservation Goals

The goals of this WCA are to maintain production while enhancing profitability per acre-foot of water pumped, to examine and change current conservation practices as necessary, and to reduce water use over the term of the WCA from long-term averages. We, the water right owners, enrolling in a consent agreement under the terms and conditions of this WCA management plan will work towards these goals by exercising more flexible and efficient use of the water resource.

Water Rights Enrolled and Geographic Boundaries

This WCA shall include the water rights listed in the attached document. This list includes details of all points of diversion associated with those water rights; as well as legal descriptions of the locations of the points of diversion and/or identification numbers.

The current total appropriations authorized for all water rights included in this WCA are 601 acre-feet (AF) per year, with an average annual use during the period 2011-2017 of 443.433 AF. With a 8.667% reduction from the historical annual average use, the 5-year WCA allocation is 2,025 AF.

The geographic boundary for this WCA is shown on the attached map(s) and attached table defined by legal locations. This table includes total acres and legal definitions by section, township, and range of the WCA boundary.

Findings Regarding Groundwater Conditions

We understand that the WCA Law requires a finding that one of the following circumstances be present within the area geographic boundaries of this WCA; specified in K.S.A. 82a-1036 (a) through (d):

- a) Groundwater levels in the area in question are declining or have declined excessively;
- b) The rate of withdrawal of groundwater in the area equals or exceeds the rate of recharge within such area;
- c) Preventable waste of water is occurring or may occur within the area in questions; or
- d) Unreasonable deterioration of the quality of water is occurring or may occur within the area in question

and amendments thereto, exist, or include a finding or findings that the area within the geographic boundaries described in paragraph (1) has been closed to new appropriations by rule, regulation or order of the Chief Engineer.

We have been informed that the following conditions exist:

- Groundwater levels in the area in question are declining or have declined excessively;
- The rate of withdrawal of groundwater in the area equals or exceeds the rate of recharge within such area;

These conditions suggest the advisability of implementing this WCA.

See the attached maps and figures supporting these findings and observations. Such attached documents may include:

- Maps with WCA geographic boundaries defined- Attachment A & B
- Detailed table with description of WCA geographic boundaries- Attachment C
- Summary of water rights with description of legal locations- Attachment D
- KGS Observation well(s) data (if applicable) - Attachment E
- KDA-DWR Theis analysis report(s) (if applicable) - Attachment F

Per the Corrective Controls Provisions and Plan for Conservation Section under this WCA management plan it has been determined that the proposed provisions listed will not significantly affect nearby points of diversion. This has been determined by a Theis analysis conducted by the Kansas Department of Agriculture. The Theis report(s) for the water rights in question are included in the attached documents.

Due Consideration for Past Conservation

We acknowledge that as described in the law, a water conservation area (WCA) management plan shall give due consideration to water users who have previously implemented reductions in water use resulting from voluntary conservation measures. Bartlett Farms has already taken the following voluntary conservation measures:

- a. Water right, File No. 31,853 only pumps to the pivots on the south half of Section 35. Very rarely will both wells be pumped at the same time, but if they are, they are pumped simultaneously. This well is capable of pumping 1,000 GPM, but limited to and nozzled down to 680 GPM.
- b. Water right, File No. 19,971 only pumps to the pivot in the north half of Section 35 unless the south pivots are operating simultaneously.
- c. Southwest Quarter (SW¼) center pivot of Section 35 is used for growing cool season grass for grazing, one cutting of hay, and grazing cattle which results in less water use than row crops.
- d. Southeast Quarter (SE¼) quarter is rotated between corn and wheat along with summer fallow every 3 years.
- e. Re-nozzled all three circles for 550 (1 pivot) and 700 GPM (2 pivots).

As enumerated below we, Bartlett Farms, request that its further conservation under this plan be considered in any LEMA proposed for the area or in a subsequent WCA under the terms herein.

Corrective Control Provisions and Plan for Conservation

We acknowledge that the following corrective controls will be in effect within this WCA during the term of the WCA period listed:

1. Water rights, at the discretion of the owners, may be pumped as directed by the owner, provided that:
 - a) The sum of water use under all water rights combined shall be limited to no more than 2,025 AF from 2018-2022.
 - b) All points of diversion are limited to their current authorized pumping rates.
 - c) The sum of water use under all water rights cannot exceed 601 in any calendar year.
 - i. Water Right, File No. 31,853 cannot exceed 320 AF in any calendar year.
 - ii. Water right, File No. 19,971 cannot exceed 338 AF in any calendar year.
 - d) All points of diversion may be used to irrigate the 333 acres described in the WCA Boundary attachments.

2. The corrective control provisions of this WCA cannot conflict with the rules and regulations of the local GMD that result in greater overall conservation of water resources. If a Local Enhanced Management Area (LEMA) plan or an Intensive Groundwater Use Control Area (IGUCA) is formed after the initiation of this WCA, and the WCA is partially or wholly within the LEMA or IGUCA, the corrective control provisions that result in the greater overall conservation of water resources based on inches per acre and not based on percent reduction of average historical use shall prevail. However, any LEMA or IGUCA must give due consideration to the conservation achieved by WCA participants pursuant to 82a-745(a)(6). The Chief Engineer is authorized to amend the provision of the WCA to conform to any rules, regulations, or requirements that result in greater conservation of the water resource subject to the foregoing due consideration for past and current conservation.

We, the water right owners enrolling in this WCA understand we may gain the following additional incentive(s) in consideration for our WCA participation.

3. Up to the annual WCA allocation (405 AF) may be carried over and added to a subsequent WCA period after 2022; if unused during the duration of this WCA period. In order for the carryover quantity to be included, all owners must enter into agreement to participate into a subsequent WCA by December 31st of the last year of this WCA period.

Compliance Monitoring and Enforcement

We, the owners, understand that the following compliance monitoring and enforcement provisions are proposed. This section also includes any specific provisions regarding measuring or reporting water usage.

There is one recognized observation well(s) within one (1) mile of this WCA boundary that has for many years been measured annually by the Kansas Geological Survey (KGS). See attached maps for locations. The well(s) will continue to be measured annually and the data collected will help in evaluating the effectiveness of the WCA. An onsite observation well may be necessary to monitor the local water level more accurately.

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We will submit an annual report no later than March 1st and maintain a spreadsheet detailing the following information for each well and all wells combined: beginning and ending meter readings, quantity of water diverted, acres irrigated, the inches per acre, and the quantity of water remaining for the WCA period listed. These records will be available to KDA-DWR upon request.

We will ensure backup measurements will be supported or an alternate measurement device will be available to be put into service in case the water flowmeter record for any given well is questionable or not reliable.

We acknowledge that water flowmeters within the WCA will be sealed to the measurement chamber by KDA-DWR during the duration of this management plan to ensure an accurate water use record.

We, water right owners within this WCA shall be responsible for ensuring the water flowmeters comply with state and local law(s). Any water right owner or authorized designee who finds a flow meter that is inoperable or inaccurate shall within 48 hours contact the KDA-DWR concerning the matter. Whenever an inoperable or inaccurate meter is repaired or replaced, the owner or authorized designee shall notify the KDA-DWR within seven (7) days on a form prescribed by the Chief Engineer of the water flowmeter installation and any water flowmeter repair or replacement event.

We acknowledge that failure to abide by the terms of this agreement may result in the termination of the WCA. Failure to abide by the terms, conditions, and limitations of the individual water rights will be subject to the civil penalties outlined in K.A.R. 5-14-10 and K.A.R. 5-14-12.

Review of Effectiveness

We acknowledge that a review of this WCA shall be completed prior to November 1st of the final year of the WCA period listed to ensure the above terms remain appropriate and are achieving the stated goals of this WCA. Should the Chief Engineer find that the terms are no longer appropriate or that no progress has been made towards the stated goal, the Chief Engineer may refuse to renew a WCA and may suggest new terms and goals. We understand that upon review, and a finding by the Chief Engineer that the WCA has achieved or made progress towards its goals and that the same terms be included in a subsequent WCA for another designated period. The terms of the WCA may be continued as long as this WCA is in good standing with its most recent WCA period and upon formal approval by the Chief Engineer. The Chief Engineer shall issue findings addressing the terms and goals of the existing management plan prior to any renewal of a subsequent WCA.

We acknowledge that unless terminated under the provisions below (e.g. due to the development of a LEMA), the WCA will be in effect for the listed period with an evaluation at the end of every WCA period. We understand that KDA-DWR will conduct this evaluation to ensure compliance and conservation. The evaluation will determine total water use during the WCA period.

We acknowledge that should an order of designation for a LEMA be implemented prior to end of this WCA period, an evaluation of this WCA will be conducted the year prior to the start of a LEMA. This evaluation may be used to determine an additional allocation amount of water to be carried over into a LEMA; should this be the case.

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Member addition, withdrawal, and removal

We acknowledge that the water right owners and their associated water right(s) and geographic boundaries may be added to the WCA upon written notification to the Chief Engineer by the owners of each enrolling water right with legal descriptions of the areas to be added. A member may withdraw from the WCA through written notification to the Chief Engineer signed by the owners of the participating water right or rights to be withdrawn from the WCA.

If the addition or withdrawal of water rights requires modification to the water allocation quantities, geographic boundaries, places of use, terms, or conditions of the original WCA, the management plan shall be revised to incorporate such changes and the associated consent agreement shall be reaffirmed by all parties, after opportunity for comment on the proposed revisions by the applicable GMD.

Termination

We acknowledge this WCA agreement may be terminated by written notification, signed by all then-existing members of the WCA, to the Chief Engineer of the intent to terminate.

We also acknowledge that the Chief Engineer may terminate this WCA upon findings that it is not being upheld to its terms. Such termination shall give notice and require a full evaluation of the WCA and water rights associated to ensure follow up actions.

State Law

We acknowledge that this WCA is subject to compliance with all other applicable state laws.

Notification to Nearby Owners

We acknowledge that, by statute, the Chief Engineer is required to provide written notification to all water right owners with a point of diversion within ½ of a mile, or farther if deemed necessary, by a rule and regulation of the Chief Engineer, of the geographic boundaries of this WCA.

Assurances

We acknowledge this WCA will not alter the terms, conditions, and limitations of the base water rights.

Review of Other Applicable Requirements

We acknowledge that upon review, this WCA management plan was found to effect equal or greater overall conservation than applicable GMD regulations, LEMA, and IGUCA requirements.

Participant's Agreement

By signing below, we, the water right owners, agree that this management plan is fair and equitable. This management plan, provided to the Chief Engineer and water right owners, is the expressed written intent of the parties and the whole agreement between the parties. We, the water right owners agree to be bound by all the terms contained in this management plan and understand that the provisions of this agreement shall be construed to give effect to the provisions listed. We, the water right owners also agree that this management plan is the basis for a consent agreement among the Chief Engineer and the undersigned water

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right owners, and therefore any order and consent agreement issued by the Chief Engineer, designating this WCA, shall be binding upon all parties as the necessary formal implementation of this management plan.

FOR THE PARTICIPANTS: All participating water right owner(s) signing below, affirm their approval of this WCA management plan and if approved by the Chief Engineer allow consent to the Chief Engineer to formally approve the designation of this Water Conservation Area, described herein, by means of a Consent Agreement and Order.

Mike H Bartlett Date: 5-9-18

MIKE H BARTLETT Owner (Signature)

Water Right No(s). 19971 & 31853

12720 103 RD FOWLER, KS 67844-8702

Full Mailing Address

Email Address

Phone Number

ACKNOWLEDGMENT OF NOTARY

State of Kansas)

) SS

County of Clark)

Acknowledged before me on May 9, 2018

by KAROL LIES

Signature: Karol Lies

Notary Public

My commission expires: 3-18-2020

(Notary Seal)



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FOR THE PARTICIPANTS: All participating water right owner(s) signing below, affirm their approval of this WCA management plan and if approved by the Chief Engineer allow consent to the Chief Engineer to formally approve the designation of this Water Conservation Area, described herein, by means of a Consent Agreement and Order.

Carla Bartlett Date: 5-9-18
CARLA J BARTLETT Owner (Signature)
Water Right No(s). 19971 & 31853

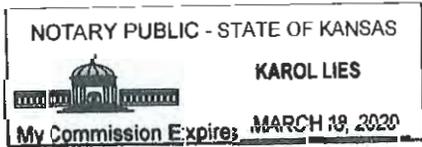
12720 103 RD FOWLER, KS 67844-8702
Full Mailing Address

Email Address Phone Number

ACKNOWLEDGMENT OF NOTARY

State of Kansas)
) SS
County of Clark)
Acknowledged before me on May 9, 2018
by KAROL LIES
Signature: Karol Lies
Notary Public

My commission expires: 3-18-2020
(Notary Seal)



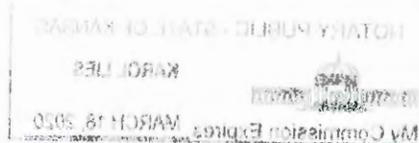
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CERTIFICATE OF SERVICE

I hereby certify that on this _____ day of _____, _____ copies of the foregoing were sent via first class, U.S. mail, to the following:

MIKE H & CARLA J BARTLETT
12720 103 RD
FOWLER KS, 67844-8702

Kansas Department of Agriculture
Staff Person

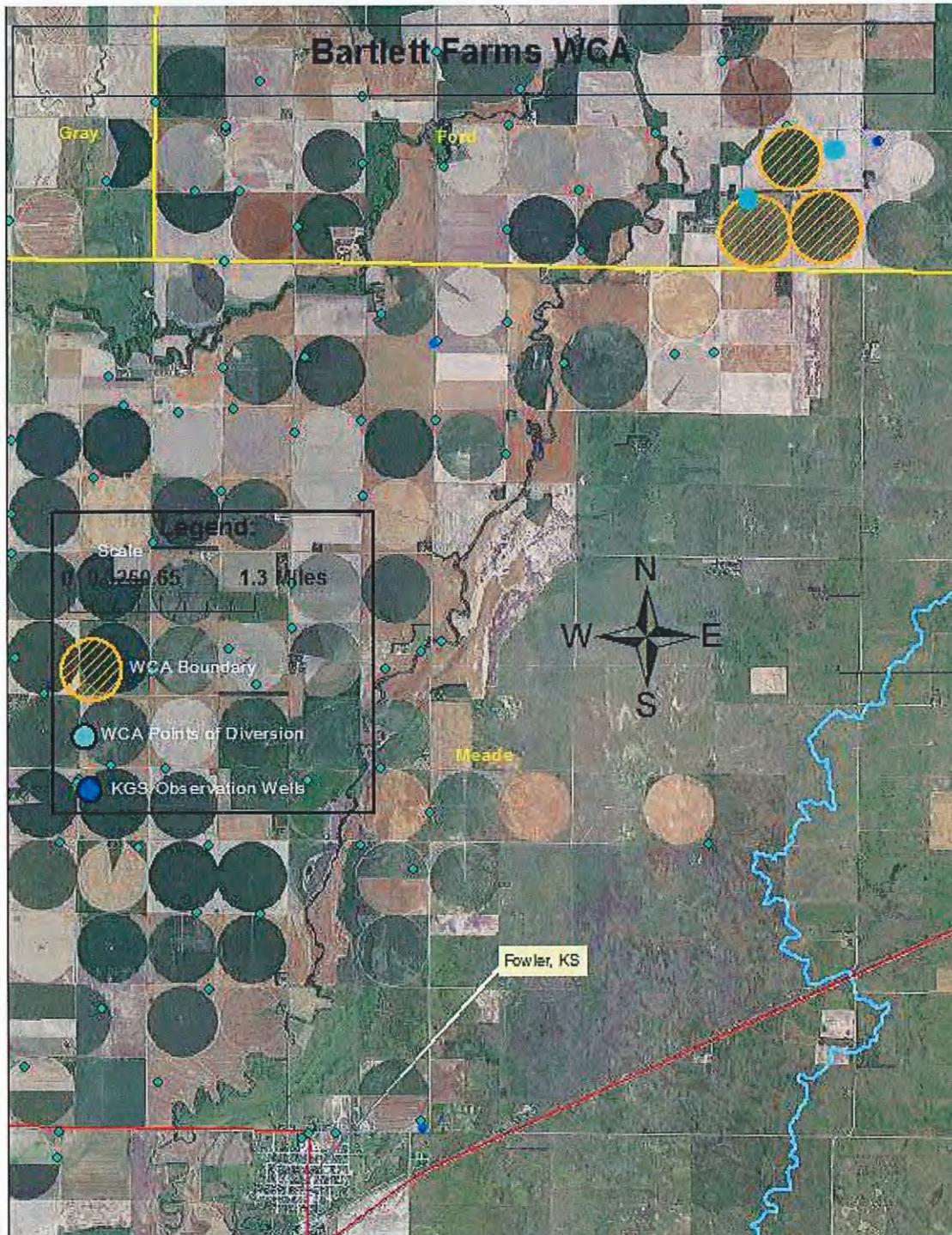


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Attachment A: Map with WCA geographic boundaries defined

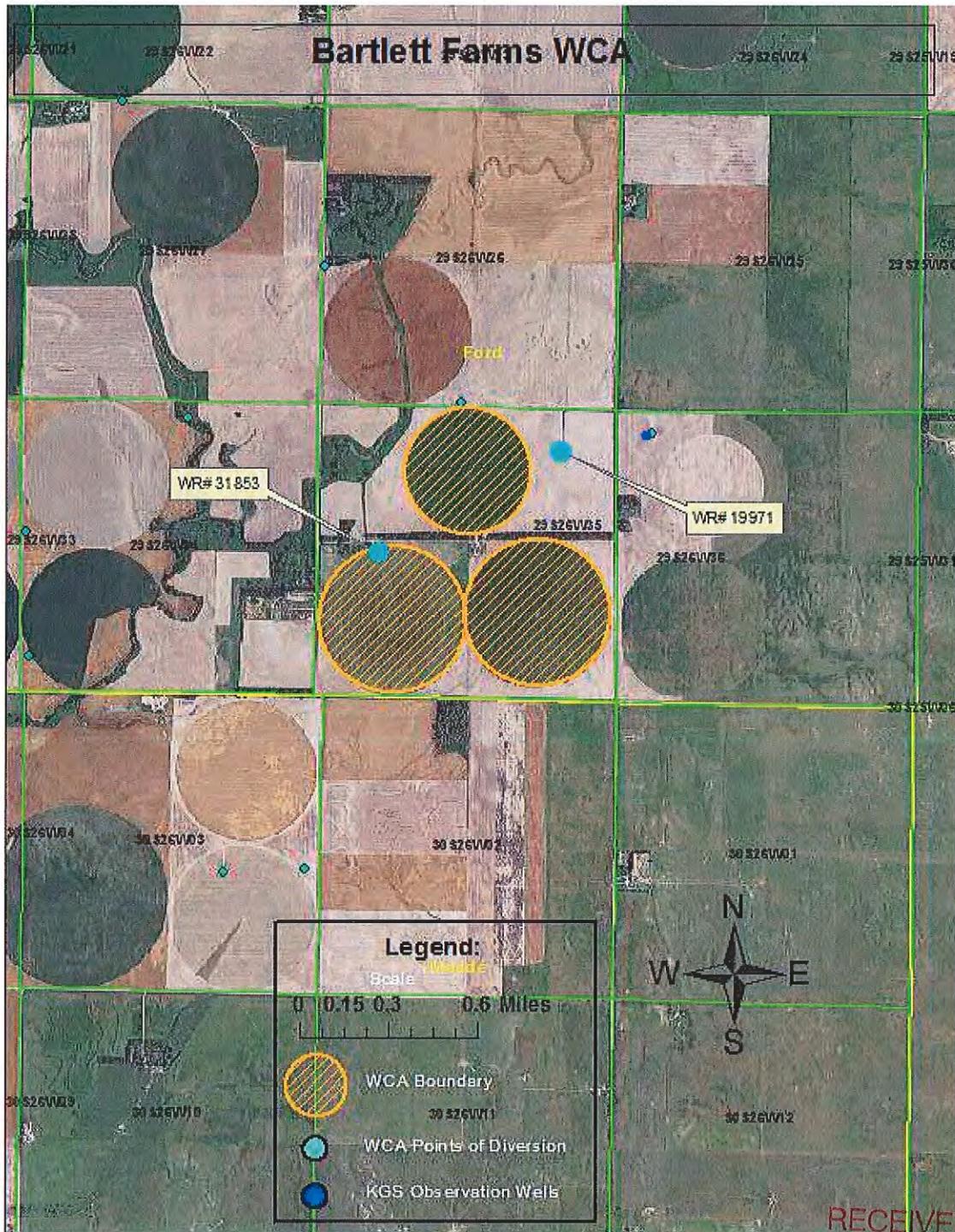


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Attachment B: Map with WCA geographic boundaries defined



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Attachment D: Summary of water rights with description of legal locations

Bartlett 11-17 WCA Summary

"Legal Ave Water Use"- A historical average calculated only using water use reports of equal or less than the annual authorized quantity.

WR #	ID#	PDIV#	Location (Sect, Twn, Range)	Historical Period (20XX-20XX)	2018 Annual Auth Qty (AF)	Legal Ave WU (AF)
19971	2	781	35-29S-26W	11-17	338.000	240.732
31853	3	7007	35-29S-26W	11-17	263.000	229.533
					Total	470.265

Additional Notes:

* The 2011-2017 historic period was used because Bartlett Farms purchased the land in 2015.

* The legal use was prorated to account for water that was used on legally irrigated acres only.

Historical Use Summary				
2018 Annual Auth Qty (AF)	Prorated Legal Ave WU (AF)	Ave Irr Acres	Actual AI/Acre	% Use of Authorized
601	443.433	333.00	16.62	74%

Recent Water Use Reports				
2015 Use	2016 Use	2017 Use	2017 Acres	
463.400	320.000	385.684	333.00	AF
77%	53%	64%	N/A	% of Auth

Average Annual WCA Allocation (8.667% Conservation)				
	Annual WCA Allocation	Reduction from Ave Use	% of Authorized	Est. Acre-Inch (WCA Acres)
Totals	405.000	38.433	67%	14.59

Attachment E: KGS Observation well(s) data

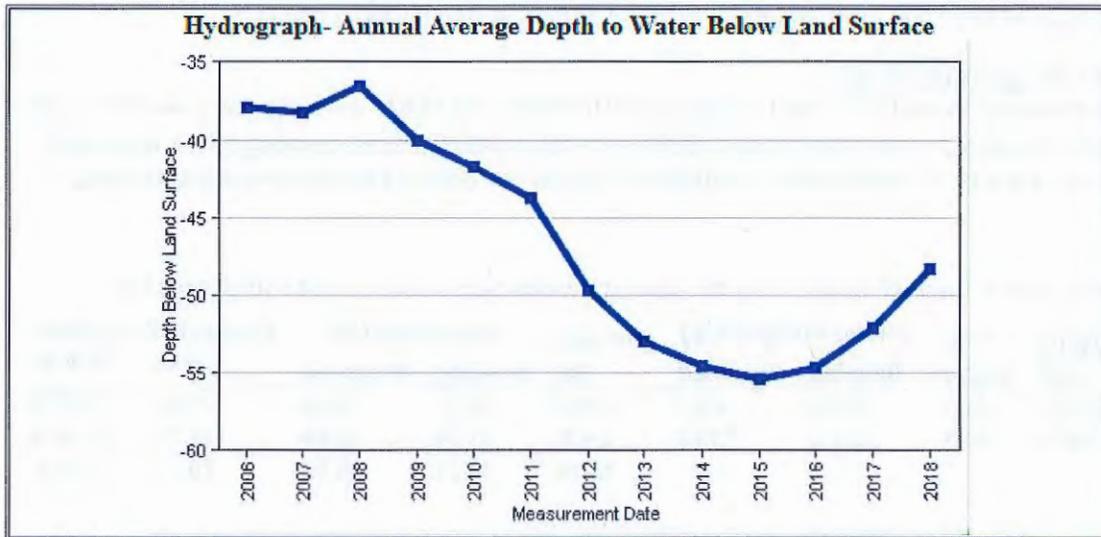
General Well Site Information ?

USGS ID:	372906100072002	KGS Local Well ID:	29S 26W 36BBB 02
County:	Ford	PLSS Description:	29S 26W 36 NWNWNW
HUC 8 Code:	11040007	GMD:	Southwest Kansas GMD #3
Longitude:	-100.123595	Lat/Long Source:	GPS (within 50 feet)
Latitude:	37.487889	Lat/Long Accuracy:	5 seconds
Surface Elevation (ft):	2533	Depth of Well (ft):	235
Geological Unit Codes:	QU TO	USGS Map Name:	Minneola

Water Level Measurements ?

372906100072002

Note that depth to water is feet below land surface and all measurements for the well are included.



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Attachment F: KDA-DWR This analysis report(s)

This analysis of proposed Bartlett WCA

A This analysis was performed to evaluate the effects of the proposed Bartlett WCA flexibilities. Under the proposal Water Right File 31,853 would be allowed to exceed its authorized quantities up to 320 acre-feet. The file would have a combined allocation with Water Right File 19,971 of 2,025 acre-feet over 5 years (average of 405 AF/year). The impacts were evaluated at nearby wells authorized by Water Right File 17,164 and a domestic well in Section 34 (Figure 1).

The drawdown under the proposed conditions was compared to a baseline condition. Average legal water use from 2003-2012 was used for the baseline scenario. Transmissivity (584.9 ft²/day) and saturated thickness (69.8 feet) are from the GMD No. 3 model projected for year 2066. Storage coefficients ranging from 0.0007 (.001% of saturated thickness) to 0.30 were evaluated to determine the worst-case scenario.

Domestic well in Section 34:

The domestic well in Section 34 is located approximately 5,100 feet from File 19,971 and 1,400 feet from File 31,853. The worst case occurs when the storage coefficient is 0.018 and the full 320 AF is diverted from File 31,853 and the remaining 85 acre-feet from File 19,971. This results in an increase in drawdown of 10.77 feet or 15.4% of the projected 2066 saturated thickness (Table 1).

File 17,164 26-29S-26W Id 2

The well authorized by File 17,164 is located 1,977 feet from File 19,971 and 3,059 feet from File 31,853. The worst case occurs when the storage coefficient is low (0.0007) and the pumping time is minimized (242.6 AF from 19,971 and 165 AF from 31,853). This scenario does not exceed currently authorized.

Table 1: This analysis of drawdown at the domestic well in Section 34. T = 584.9 ft²/d; S = 0.018

Pumping Well	Rate (gpm)	Volume Pumped (AF)		Distance (ft)	Drawdown (ft)		Change in Drawdown	
		Baseline	Proposed		Baseline	Proposed	Feet	% of ST
19,971	1,000	182.0	85.0	5,100	12.17	5.69	- 6.48	- 9.28 %
31,853	680	181.0	320.0	1,400	32.04	49.29	17.25	24.71 %
Total:					44.21	54.98	10.77	15.43 %

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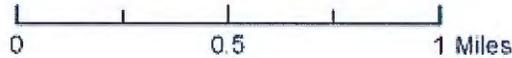
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Bartlett WCA and nearby wells



- WCA Well
- Nearby Well



Transmissivity (T, sqft/day) and saturated thickness (ST, feet) are from the GMD No. 3 model projected to year 2066.



Kansas Department of Agriculture
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 April 5, 2018

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