

**IN THE 24TH JUDICIAL DISTRICT
DISTRICT COURT OF EDWARDS COUNTY, KANSAS**

WATER PROTECTION ASSN. OF
CENTRAL KANSAS,

Plaintiff,

V.

DAVID BARFIELD, P.E., IN HIS
OFFICIAL CAPACITY AS CHIEF
ENGINEER, DIVISION OF WATER
RESOURCES, KANSAS DEPARTMENT
OF AGRICULTURE,

Defendant.

Pursuant to K.S.A. Chapter 77

PETITION FOR JUDICIAL REVIEW

COMES NOW, Plaintiff Water Protection Assn. of Central Kansas (“Water PACK”) and petitions this Court for judicial review of the Master Order Contingently Approving Change Applications Regarding R9 Water Rights dated March 27, 2019 (the “Master Order”) attached as Exhibit A. Unless otherwise noted below, capitalized terms used in this Petition have the meanings set forth in paragraphs 1-29 of the Master Order.

Jurisdiction and Venue

1. The Kansas Judicial Review Act (“KJRA”) provides that a district court shall conduct judicial review of agency actions, absent circumstances inapplicable here. *See* K.S.A. § 77-609(a).

2. Venue is proper in Edwards County because the Master Order is a final order effective in Edwards County. K.S.A. § 77-609(b).

Overview

3. Water PACK is a Kansas not-for-profit corporation registered at 306-A N. Main Street, Saint John, Kansas 67576.

4. The articles of incorporation of Water PACK identify the following purpose: “Any and all business connected with the use and conservation of water in the State of Kansas.”

5. Water PACK’s membership is comprised of agricultural producers and businesses, and was organized to promote, foster, and encourage the beneficial, economical, and sustainable use of quality water. Water PACK, as an organization comprised of land owners, water rights owners, and the general public, is adversely affected and aggrieved by the Master Order and, having exhausted all administrative remedies, is entitled to seek judicial review of the Master Order.

6. The Master Order involves change applications submitted by the City of Hays and the City of Russell seeking to change the place and type of use of water currently diverted for irrigation use at the R9 Ranch in Edwards County, Kansas. (Master Order at ¶ 17-18).

7. Water PACK members own agricultural land adjacent to the R9 Ranch, as well as appropriation rights that permit diversion of groundwater for irrigation adjacent to the R9 Ranch. (See Master Order at p. 41-42).

8. K.S.A. § 77-614 states that a petition for review under the KJRA must identify the persons or parties in any adjudicative proceedings that led to agency action.

9. Water PACK, Water PACK’s consultant Dr. Andy Keller, and Water PACK members participated in the proceedings that led to the Master Order and are specifically referenced therein. (See, e.g., Master Order at ¶¶ 29, 59, 60-63, 79, 131, 160-161).

10. Other persons involved in the Master Order proceedings include the Cities, DWR’s Stafford and Stockton Field Offices, GMD5, and GMD5’s consultant, and the general public in Edwards County, Kansas, including the constituent members of Water PACK. (See Master Order at p. 53).

11. The Defendant, David W. Barfield, P.E. (the “Chief Engineer”), is the Chief Engineer of the Division of Water Resources (“DWR”) of the Kansas Department of Agriculture (“KDA”). He may be served at 1320 Research Park Drive, Manhattan, Riley County, Kansas 66502.

Summary of Applicable Kansas Water Law

12. The following is taken from the Second Amended Petition for Judicial Review submitted by counsel to the Cities in *Friesen v. Barfield*, 2018-CV-000010 (Gove County District Court, Kansas, Nov. 19, 2018):

82. The Chief Engineer is required to enforce and administer the laws of this state pertaining to the beneficial use of water and to control, conserve, regulate, allot, and aid in the distribution of the water resources of the state for the benefit and beneficial uses of all of its inhabitants in accordance with the rights of priority of appropriation. K.S.A. 82a-706.

...

85. Kansas public policy, unchanged since 1945, mandates the use of the prior appropriation doctrine when there is insufficient water available for all appropriators.

86. The prior appropriation doctrine permeates the Kansas Water Appropriation Act, K.S.A. 82a-701, *et seq.*, and is fundamental Kansas public policy that is binding on all water users and government agencies, including the Chief Engineer and GMD4. *See, e.g.*, K.S.A. 82a-703b(b); 82a-706; 82a-706b; 82a-706e; 82a-707(b), (c), and (d); 82a-708b; 82a-710; 82a-711(b)(3); 82a-711a; 82a-712; 82a-716; 82a-717a; 82a-742; 82a-745; 82a-1020; 82a-1028(n) and (o); 82a-1029; 82a-1039; and the April 13, 2018, Order, pp. 4- 5,

¶ 4.

...

88. The importance of stability in property law has been recognized by our Courts. “The need of stability in the water laws of Kansas cannot be overstressed.” *F. Arthur Stone & Sons v. Gibson*, 230 Kan. 224, 232, 630 P.2d 1164 (1981) (quoting *Williams v. The City of Wichita*, 190 Kan. 317 at 319, 374 P.2d 578 (1962)).

89. Quoting from *Stone*, 230 Kan. at 233, 630 P.2d 1164, the Clawson Court went on to say:

The doctrine has provided stability for landowners, water right holders, and the public. The importance of stability in property law has been recognized by our Supreme Court: “In a well-ordered society it is important that people know what their legal rights are, not only under constitutions and legislative enactments, but also as defined by judicial precedent, and having conducted their affairs in reliance thereon, ought not to have their rights swept away by judicial decree. And this is especially so where rights of property are involved.... And it should be left to the legislature to make any change in the law, except perhaps in a most unusual exigency.” *Stone* 230 Kan. at 233, 630 P.2d 1164 (quoting *Freeman v. Stewart*, 2 Utah 2d 319, 322, 273 P.2d 174 [1954]).

Clawson, 49 Kan. App. 2d at 799.

...

101. Each Permit,¹ when issued, is an administrative Order, *Clawson*, supra, 49 Kan.App.2d at 801, and the time to challenge those Orders has long since passed.

102. Water rights are real property. K.S.A. 82a-701(g). While the Legislature can always amend or repeal its own laws it cannot unring a bell. “The past cannot be recalled by the most absolute power.” *United States v. Winstar*, 518 U.S. 839, 873 (1996) (quoting *Fletcher v. Peck*, 6 Cranch 87, 3 L.Ed. 162 (1810)).

13. A selection of other DWR statutes and regulations germane to the issues identified in this Petition, attached hereto as Exhibit B, includes the following:

- a. K.S.A. § 82a-708a (governing original applications)
 - i. K.A.R. 5-3-5 (governing original applications)
- b. K.S.A. § 82a-708b (the “Change Order Statute”)
 - i. K.S.A. § 82a-708b (a)(2) (the “No Injury Rule”)

¹ This term refers to water appropriation permits.

- c. K.A.R. 5-5-1, *et seq.* (the “Change Order Regulations”)
 - i. K.A.R. 5-5-8 (the “No Injury Regulation”)
 - ii. K.A.R. 5-5-9 (1994) (the “Consumptive Use Regulations”)
- d. K.S.A. § 82a-1501 *et seq.*(the “Water Transfer Act”)
 - i. K.A.R. 5-50-1, *et seq.* (the “Water Transfer Regulations”)

14. The Change Order Statute permits a change in the point of diversion or type of use of water rights upon satisfaction of certain conditions, including compliance with the No Injury Rule, which requires a demonstration to the Chief Engineer that “any proposed change is reasonable and will not impair existing rights[.]” (Emphasis supplied).

15. In *Garetson Bros. v. Am. Warrior Inc.*, construing § 82a-717a of the Kansas Water Appropriation Act, the Kansas Court of Appeals defined the term “impair” to mean “to weaken, to make worse, to lessen in power, diminish, or relax or otherwise affect in an injurious manner.” 347 P.3d 687, 698 (Kan. App. 2015).

16. Referencing the No Injury Rule, the No Injury Regulation promulgated prior to *Garetson Bros.* states that “[e]ach application for a change in the place of use or the use made of water which will materially injure or adversely affect water rights or permits to appropriate water with priorities senior to the date the application for change is filed shall not be approved by the chief engineer.” (Emphasis supplied).

17. Also referencing the No Injury Rule, the Consumptive Use Regulations prohibit approval of any change application that causes “the net consumptive use from the local source of water supply to be greater than the net consumptive use from the same local source of water supply by the original irrigation use” based on criteria and calculations set forth therein. Consumptive Use Regulations at (a). The criteria used to calculate net consumptive use include “the maximum

acreage legally irrigated in any one calendar year during the perfection period.” *Id.* at (a)(2)(A) and (B). If the generalized calculation methods set forth in K.A.R. 5-5-9(a) yield a number “which appears to be unrealistic and could result in impairment of other water rights,” the Chief Engineer must undertake a site-specific net consumptive use analysis to determine the quantity of water which was actually beneficially consumed under the water right. *Id.* at (c).²

18. Upon satisfaction of the No Injury Rule and other conditions in the Change Order Statute, the Chief Engineer “shall approve or reject the application for change in accordance with the provisions and procedures prescribed for processing original applications for permission to appropriate water.” Change Order Statute, *supra*.

19. Under the Kansas Water Appropriation Act, K.S.A. § 82a-706a, statutes and regulations for processing original applications to appropriate water or changes in water rights allow the Chief Engineer to impose conditions on applications to appropriate or change water appropriations, but do not provide for contingent approval of an original application or a change application. *Compare* the Change Order Statute, *with* K.S.A. § 82a-708a, K.A.R. 5-3-5, *and* the Change Order Regulations.

Defects in the Master Order and Its Proceedings

20. Though the Master Order purports to condition effectiveness of the Change Approvals upon issuance of a subsequent Transfer Order to be issued under the Water Transfer Act and the Water Transfer Regulations (Master Order at ¶ 46), the Change Order Statute and the Change Order Regulations do not provide for contingent approvals. Further, the Water Transfer Act by its own terms does not purport to amend the Kansas Water Appropriation Act and indeed

² See also K.A.R. 5-5-8(c) (defining “consumptive use”).

does not “exempt the applicant from first complying with the provisions of...the Kansas water appropriation act[.]” *See* K.S.A. § 82a-1507(b).

21. The Kansas Administrative Procedure Act (“KAPA”) and the Kansas Water Appropriation Act permit the Chief Engineer and DWR to promulgate rules, regulations, and standards to effectuate the purposes of the Change Order Statute. *Compare* K.S.A. § 77-421 with K.S.A. § 82a-706a. The Chief Engineer has not promulgated changes to the Change Order Regulations in compliance with KAPA that provide for contingent approval of a change application.

22. The Master Order explicitly references the No Injury Regulation only once in paragraph 13, but includes no specific findings with respect to material injury or adverse effects on those holding water rights with priorities junior to the R9 Water Rights but senior to the June 26, 2016 dates of the Change Applications. *See Wheatland Elec. Coop., Inc. v. Polansky*, 46 Kan. App. 2d 746, 757-58 (2011).

23. The Master Order notes that the Change Applications may not be approved if they will cause the extent of consumptive use associated with the R9 Water Rights to increase substantially (*See, e.g.*, Master Order ¶¶ 35-37), and finds that the conversion of the use of the R9 Water Rights from irrigation to municipal uses “will not impair existing rights” despite contrary evidence. (*See id.* at ¶ 70; *see also Id.* ¶ 88, 92).

24. A 2018 report commissioned by the Cities and attached hereto as Exhibit C (the “BMcD Report”) modeling impact of the Change Applications (if approved) shows the effect of pumping an average of 4,800 acre-feet per year for municipal use in the manner contemplated by the Master Order relative to historic irrigation uses at the R9 Ranch. (*Compare* BMcD Report at

Scenarios 2 and 4 *with* Scenarios 1 and 3). Negative contours in Figure 6³ and Figure 9 of the BMcD Report show that pumping 4,800 acre-feet per year from the R9 Ranch will weaken, make worse, lessen in power, diminish, relax, or otherwise affect in an injurious manner wells adjacent to the R9 Ranch.⁴ What's more, the model referenced in the BMcD Report holds constant the aquifer recharge from precipitation regardless of the land use (irrigated or dry land), while recharge from the Arkansas River (called stream leakage in the modeling report) assumes river flow in the first 16 years of the modeling, dominating the short-term modeling results and influencing long-term results.. (BMcD Report at Table 2, Scenarios 3, 4, and 5).⁵ A 1994 report prepared by a prior consultant to the Cities, by contrast, concluded that the R9 Ranch could support removal of 5500 acre-feet per year with recharge from the Arkansas River, but that the area could only naturally support the removal of between 3200 and 3800 acre-feet of water depending upon average recharge of between one or two inches.⁶

25. When applying the Consumptive Use Regulations in the Master Order, notwithstanding the No Injury Rule and the No Injury Regulation, the Chief Engineer ignores the effects of conversions of the R9 Water Rights from irrigation to dryland/grassland proposed by the Cities, as well the effect of assuming aquifer recharge from stream leakage in the face of declining Arkansas River flows. (*See* Master Order at ¶¶ 80, 151, 157). As noted in hydrologic model relied upon by the Cities and the Chief Engineer,⁷ the non-irrigated crops and natural vegetation planned

³ BMcD Report, fig. 6 (showing hydraulic boundary effect resulting from assumed flow in the Arkansas River.).

⁴ *See* BMcD Report at Tables 1, 2, and 3 (average maximum pumping of 4,800 AFY is approximately the same as assumed average annual recharge).

⁵ BMcD Report, all tables, footnotes (explaining that negative values show flows out of the R9 Ranch; 2nd. footnote for Tables 2 and 3 states that the assumed flow in the Arkansas River after year 16 is zero).

⁶ *See* [Exhibit D](#).

⁷ *See* BALLEAU GROUNDWATER, INC., HYDROLOGIC MODEL OF [GMD5], at 57 (June 2010) (“Irrigation return flow (deep percolation) adds soil moisture above the water table that enhances recharge from precipitation events.”), available at http://archive.gmd5.org/District_Model/GMD5_Model_Final_Report.pdf; *Id.* at 20 (“Potential recharge tends to be larger for cropland than for natural vegetation[.]”).

for the R9 Ranch consume more precipitation than irrigated crops historically grown at the R9 Ranch, while 4,800 acre-feet of water planned for municipal use will not be used to irrigate the R9 Ranch, thus lowering return flows and impairing adjacent water users more extensively than in the manner depicted by the BMcD Report;⁸ similarly, one should not assume aquifer recharge from stream leakage in the face of nonexistent river flows.⁹ Taken together, such factors show that the approval of change in use will yield a net consumptive use in excess of the original irrigation use.

26. The Chief Engineer did not validate DWR's records with respect to consumptive use at the R9 Ranch during the year of perfection, despite evidence suggesting flaws in such records. Richard Wenstrom, P.E., noted the following in his petition seeking administrative review of the Master Order, which was incorporated by reference in the petition submitted to the KDA Secretary seeking review of the Master Order pursuant to K.S.A § 77-527 and attached hereto as Exhibit E (the "Review Request"):

If they had gained access to FSA records they would have found an entirely different cropping pattern. A few local producers and citizens contacted the tenants that were in place during the year of record, and these two tenants agreed to go to the FSA-USDA in Edwards County to see what the reported cropping for that year actually was. The former tenants obtained the cropping data, and graciously agreed to give us access to the data. What we learned is that, instead of the 2,901 acres of alfalfa and 2,247 acres of corn reported by the Chief Engineer, the FSA records show: 2,387 acres alfalfa, 488 acres corn, 176 acres milo, 1,670 acres wheat, 293 acres of circles not farmed or crop destroyed. This also explains why the satellite photos of the R9 Ranch for the year of record generated for Water PACK by Dr. Andy Keller, Keller-Bliesner Engineering, show so many circles that were obviously not corn or alfalfa some actually look like they were not even farmed, but now we know that was wheat stubble.

27. The foregoing errors resulted in a calculated authorized annual quantity of water under the Consumptive Use Regulations "which appears to be unrealistic and could result in

⁸ See BMcD Report at Figure 7 (aqua-colored showing the annual recharge used in the modeling, which is the same for irrigation and dryland (municipal) scenarios.)

⁹ See Exhibit D.

impairment of other water rights,” yet the Master Order does not undertake a site-specific net consumptive use analysis in the manner required by those same Consumptive Use Regulations or as suggested by GMD5. (Consumptive Use Regulations at (c)).

28. In response, the Master Order references submissions by the Cities regarding interpretations that would be “unfair” to them, as well as a supposed lack of evidence regarding impairment of water rights only senior to the R9 Water Rights, to find that a contingently authorized transfer of a maximum of 6,756.8 acre-feet of water will not “impair existing rights.” (Master Order ¶¶ 83, 85). The No Injury Rule does not however reference “fairness”, and both the No Injury Regulations and the Consumptive Use Regulations require safeguarding return flows for users with water rights senior to the filing date of the Change Applications.

29. The Master Order instead asserts the following: “While the Cities’ modeling of their proposed operations shows that area water levels will continue to decline at varying but reasonable rates as noted above, like their neighbors who are also depleting the local aquifer, the Cities are entitled to make reasonable beneficial use of their R9 Water Rights.” (See Master Order at ¶ 162).

30. The Master Order thus ignores or discounts evidence, analysis, or recommendations submitted by KBE on behalf of Water PACK, GMD5, BGW on behalf of GMD5, or Water PACK’s members regarding defects in the Limitations, the TYRA Limitation, and in the Master Order’s overall analysis. (See Master Order at ¶¶ 61-63, 68, 80-85).

Prior Agency Proceedings

31. The Chief Engineer executed the Master Order and the Change Approvals on March 27, 2019. (Master Order at pp. 52, 84-238). A KDA staff member notarized the Chief

Engineer's signatures to the Master Order on March 27, 2019 and mailed the same to the parties referenced in the certificates of service on March 28, 2019. (Master Order at pp. 53, 84-238).

32. The Master Order states that, "This Master Order and its incorporated Change Approvals will become final orders, without further notice, unless a petition for administrative review by the Secretary pursuant to K.S.A. 82a-708b, K.S.A. 2016 Supp. 82a-1901, and K.S.A. 77-527 is filed within 15 days after the date of service shown on the Certificate of Service." (Master Order at ¶ 257).

33. Between April 4, 2019 and April 9, 2019, Water PACK and certain of its members timely petitioned the KDA Secretary to review the Master Order pursuant to K.S.A § 77-527.

34. Between April 24, 2019 and April 29, 2019, the Secretary declined the Review Request and other petitions submitted by Water PACK members. The order declining the Water PACK Review Request is attached hereto as Exhibit F (the "Declination").

Relief Requested

The Plaintiff asks the Court to aside or modify the Master Order based upon the reasons set forth herein, as well as in the Review Request. The Plaintiff further requests that the Court enter declaratory judgment interpreting the Kansas Water Appropriation Act, in particular the Change Order Statute and the Change Order Regulations, as well as the Water Transfer Act and the Water Transfer Regulations, holding:

- a. the Chief Engineer acted beyond the jurisdiction conferred by any provision of law;
- b. the Chief Engineer erroneously interpreted and applied the law;
- c. the Chief Engineer engaged in an unlawful procedure or failed to follow prescribed procedure;

- d. the Master Order and the Change Approvals are based on determinations of fact, made or implied by the Chief Engineer, that are not supported to the appropriate standard of proof by evidence that was substantial when viewed in light of the record as a whole, which includes the agency record for judicial review, supplemented by any additional evidence received by the Court in accordance with the KJRA;
- e. that the Chief Engineer and DWR failed to adequately consider, or to consider at all, evidence contrary to, contradicting, and detracting from their own findings and rulings set forth in the Master Order; and that, in light of contradicting evidence, the findings and rulings in the Master Order have been so undermined by such evidence that the evidence in the record is insufficient to support the conclusions of the Chief Engineer and the DWR;
- f. the Master Order and the Change Approvals are otherwise unreasonable, arbitrary, or capricious;¹⁰ and
- g. for such other relief as the Court, in its discretion, deems appropriate, just, and equitable.

K.S.A. § 77-622.

Respectfully submitted,

/s/Micah Schwalb

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Counsel to Water PACK

¹⁰ See K.S.A. § 77-621(c)(2), (4), (5), (7), and (8).

CERTIFICATE OF SERVICE

I hereby certify that, on the date that this original PETITION FOR JUDICIAL REVIEW was electronically filed with the clerk of the above-referenced district court, the same was mailed by U.S. certified mail to:

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With copies to counsel for the Cities identified in the certificate of service of the Master Order

By: /s/ Micah Schwalb
Micah Schwalb, #26501

ELECTRONICALLY FILED
2019 May 29 AM 8:02
CLERK OF THE EDWARDS COUNTY DISTRICT COURT
CASE NUMBER: 2019-CV-000005

EXHIBIT A
MASTER ORDER

**In the Matter of the City of Hays’ and the City of Russell’s
Applications for Approval to Change the Place of Use, the Point of Diversion and the
Use Made of the Water Under an Existing Water Right,
regarding the following existing water rights:**

FILE NOS.

21,729-D1; 21,729-D2; 21,730; 21,731; 21,732-D1; 21,732-D2; 21,733; 21,734; 21,841; 21,842;
22,325; 22,326; 22,327; 22,329; 22,330; 22,331; 22,332; 22,333; 22,334; 22,335; 22,338; 22,339;
22,340; 22,341; 22,342; 22,343; 22,345; 22,346; 27,760; 29,816; 30,083; and 30,084.

**MASTER ORDER CONTINGENTLY APPROVING
CHANGE APPLICATIONS REGARDING R9 WATER RIGHTS**

The Chief Engineer of the Division of Water Resources, Kansas Department of Agriculture, after giving careful consideration to the Change Applications submitted by the Cities in the above matter, makes the following factual findings, legal conclusions, and order, which are contingent on the approval of the Cities’ Water Transfer Application and on other conditions, as explained herein.

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DEFINITIONS

The following terms, as used in this Master Order and in the Change Approvals, are defined as follows:

1. **“BGW”** means Balleau Groundwater, Inc., modeling consultants hired by GMD5 to study issues concerning the Project and the Change Applications.
2. **“BMcD”** means Burns & McDonnell, engineering and modeling consultants hired by the Cities to assist with issues concerning the Project and the Change Applications.

3. **“Cities”** mean, collectively, the City of Hays, Kansas, the City of Russell, Kansas, and the respective successors and assigns of any of such Cities’ ownership interests in the R9 Water Rights. **“City”** means either the City of Hays, Kansas, or the City of Russell, Kansas, as the case may be, along with such City’s successors and assigns of any of such City’s ownership interest in the R9 Water Rights.

4. **“Change Applications”** means the applications that the Cities originally submitted to the Chief Engineer on June 26, 2015, as later amended by various amendments, which applications request contingent approval to change the use made of the water, the places of use, and the points of diversion under the R9 Water Rights.

5. **“Change Approvals”** means the individual contingent approvals of the Change Applications, which approvals concern the various individual R9 Water Rights, are signed and issued by the Chief Engineer, and are attached to this Master Order as **Exhibits 1–32** and incorporated herein.

6. **“DWR”** means the Division of Water Resources of the Kansas Department of Agriculture.

7. **“DWR Review”** means the document dated March 26, 2019 and entitled *DWR Staff Review of R9 Ranch Pumping and Water Levels*, which is posted on DWR’s website for this matter and archived with DWR’s files for this matter.

8. **“GMD5”** means the Big Bend Groundwater Management District No. 5.

9. **“Hays”** means the City of Hays, Kansas.

10. **“KAPA”** means the Kansas Administrative Procedure Act, K.S.A. 77-501, *et seq.*

11. **“KBE”** means Keller-Bliesner Engineering, LLC, the water consulting firm headed by Dr. Andrew Keller of Logan, Utah, and whom Water PACK hired to study issues concerning the Project and the Change Applications.

12. **“KJRA”** means the Kansas Judicial Review Act, K.S.A. 77-601, *et seq.*

13. **“Limitation”** means a term or condition imposed by the Chief Engineer on a water right pursuant to K.S.A. 82a-707(e), K.S.A. 82a-708b, K.A.R. 5-5-8, and/or K.A.R. 5-5-9 (1994 version), that, depending on the particular circumstances, limits the authorized rate(s) of diversion and/or the authorized annual quantity(ies) of water when a junior water right(s) is combined with a senior water right(s), to a rate of diversion or annual quantity of water that is less than the sum of the combined water rights’ individual authorized rates of diversion or annual quantities of water. Depending on the particular circumstances, Limitations might be added, removed, or modified in an approval of an application to change the characteristics of a water right. Limitations are binding conditions unless and until they are removed or modified in a

subsequent final order issued by the Chief Engineer. Specific Limitations are further defined herein (see the Reasonable-Needs Limitations and the TYRA Limitation).

14. **“Master Order”** means this document signed and issued by the Chief Engineer, including its **Appendices A–I**, and **Exhibits 1–34**, all of which are incorporated into this Master Order.

15. **“Project”** means the diversion and transportation infrastructure planned by the Cities, including any future infrastructure expansions, to divert water from the R9 Water Rights and to transport it for municipal use in such places that are described on **Appendix F**, in addition to such other places that may be approved by DWR in the future. The Project’s transportation infrastructure, to the extent that it delivers water for municipal use in the aforementioned specific places, and to other places and users upon approval of any future change applications, is a “common distribution system” as that term is used in K.A.R. 5-1-1(vv).

16. **“Public Meeting”** means the informational public meeting that the Chief Engineer held in Greensburg, Kiowa County, Kansas, on June 21, 2018, to explain the issues being considered regarding the Change Applications and to receive comments from the public.

17. **“R9 Ranch”** means that ranch historically known as such and comprised of various parcels of land located in Edwards County, Kansas, as visually depicted on the map attached as **Exhibit 33** and as more specifically described in the legal description attached as **Appendix A**.

18. **“R9 Water Rights”** means the existing, certified water appropriation rights with points of diversion on the R9 Ranch and assigned file numbers 21,729-D1; 21,729-D2; 21,730; 21,731; 21,732-D1; 21,732-D2; 21,733; 21,734; 21,841; 21,842; 22,325; 22,326; 22,327; 22,329; 22,330; 22,331; 22,332; 22,333; 22,334; 22,335; 22,338; 22,339; 22,340; 22,341; 22,342; 22,343; 22,345; 22,346; 27,760; 29,816; 30,083; and 30,084.

19. **“Reasonable-Need Limitations”** means those certain Limitations explained herein in Subsection IV.B. and ordered herein in Subsection XIII.B.

20. **“Region Five”** means Phillips, Rooks, Ellis, Rush, Pawnee, Edwards, Kiowa, and Comanche Counties in Kansas.

21. **“Region Six”** means Smith, Jewell, Osborne, Mitchell, Russell, Lincoln, Ellsworth, Barton, Rice, Stafford, Reno, Pratt, Kingman, Barber, and Harper Counties in Kansas.

22. **“Russell”** means the City of Russell, Kansas.

23. **“Secretary”** means the Secretary of the Kansas Department of Agriculture.

24. **“TYRA Limitation”** means the Ten-Year Rolling Aggregate Limitation, that certain Limitation explained herein in Subsection IV.A. and ordered herein in Subsection XIII.A.

25. **“Transfer Application”** means the Cities’ application, as amended, to transfer water for the Project, which application originally was filed on January 6, 2016.

26. **“Transfer Order”** means an order issued by the water transfer hearing panel pursuant to the Kansas Water Transfer Act, K.S.A. 82a-1501, *et seq.*

27. **“Treatment Losses”** means the quantity of the waste stream from the treatment of the water from the R9 Water Rights (whether treatment takes place on the R9 Ranch or before or after delivery to any water user) in order to meet regulatory standards and aesthetic concerns.

28. **“USGS”** means the United States Geological Survey.

29. **“Water PACK”** means the Water Protection Association of Central Kansas.

GENERAL APPLICABLE LAW

30. The Chief Engineer is charged with the responsibility “to control, conserve, regulate, allot and aid in the distribution of the water resources of the state for the benefits and beneficial uses of all of its inhabitants in accordance with the rights of priority of appropriation.” K.S.A. 82a-706.

31. The Chief Engineer is permitted to adopt, amend, and enforce reasonable rules, regulations, and standards to achieve the purposes of the Kansas Water Appropriation Act. K.S.A. 82a-706a.

32. In approving a new application or change application, the Chief Engineer may approve an application for a smaller amount of water than requested and may approve an application “upon such terms, conditions, and limitations as he or she may deem necessary for the protection of the public interest.” K.S.A. 82a-712; *see also* K.S.A. 82a-708b.

33. The Kansas Water Appropriation Act permits owners of water appropriation rights to apply for permission to change the place of use, the point of diversion, or the use made of the water without losing priority of right. K.S.A. 82a-708b(a).

34. In order to change these characteristics, an applicant must demonstrate that the change is reasonable, that it will not impair existing rights, and that water will be diverted from the same local source of supply. *Id.*

35. Applicable DWR regulations govern the quantities addressed in this Master Order, including prohibiting an increase in consumptive use as a result of the change in use, *see, e.g.*, K.A.R. 5-5-9(a) (1994 version); prohibiting the authorized quantity for the new use from exceeding the maximum annual quantity for the original use that was authorized by the particular water right, K.A.R. 5-5-9(a)(4) (1994 version); and imposing a reduction or placing a Limitation on the quantity reasonably needed for the new use, K.A.R. 5-5-9(a)(6) (1994 version).

36. Approval of a change application is not permitted if a proposed change will cause the extent of consumptive use to increase substantially. K.A.R. 5-5-3.

37. Approval of a change from irrigation to another type of beneficial use is not permitted if the change will cause the net consumptive use from the local source of water supply to be greater than the net consumptive use from the local source of water supply by the original irrigation use. K.A.R. 5-5-9(a) (1994 version).

38. Appropriation rights in excess of the reasonable needs of the appropriator are not allowed. K.S.A. 82a-707(e).

39. For perfected (certified) water rights being changed to a new use, no statute or regulation specifically defines the time period that the Chief Engineer must consider when determining the appropriator's reasonable needs.

40. Approvals of applications to change a point of diversion generally require that new wells be "completed substantially as shown on aerial photograph, topographic map, or plat" as defined at K.A.R. 5-1-1(q).

41. A well with a source of supply in an alluvium that is in a basin that is fully appropriated or is in an area closed to new appropriations may not be moved more than 10 percent closer to the centerline of the stream. K.A.R. 5-5-13.

42. Regulations recommended by GMD5, adopted by the Chief Engineer, and applicable within GMD5 and to the Cities' R9 Water Rights include several well-location requirements:

a. Municipal wells may not be moved more than 2,640 feet from the currently authorized points of diversion. *See* K.A.R. 5-25-2a(a).

b. All municipal wells must be completed in the aquifer or aquifers in which the currently authorized wells were authorized to be completed. *See* K.A.R. 5-25-2a(d).

c. All municipal wells must be more than 1,320 feet from wells that carry an earlier priority except those wells owned by the Cities. *See* K.A.R. 5-25-2(a).

d. All municipal wells must be more than 660 feet from all existing domestic wells, except those domestic wells owned by the Cities. *See id.*

MIXED FINDINGS OF FACT AND CONCLUSIONS OF LAW

43. After careful review and consideration of the documents and information referenced herein, the Chief Engineer finds that the Change Applications should be contingently approved for the reasons and on the terms and conditions set out in this Master Order, which includes the various Change Approvals attached as Exhibits 1–32 that are incorporated herein.

I. Background

A. General Background

44. The Cities have determined that they need access to an additional source of water to meet their future, long-term needs, due to existing water shortages, projected population increases, and other regional water needs. To help meet these increased water needs, the Cities purchased the R9 Ranch and the R9 Water Rights and conceived of the Project. The R9 Ranch is within the boundaries of GMD5.

45. Before the Project can be lawfully realized, changes to the use made of the water, the places of use, and the points of diversion for the R9 Water Rights must be contingently approved by the Chief Engineer. *See* K.A.R. 5-50-2(x)(2)(A)–(C); K.A.R. 5-50-7(b)(1)–(3). Then, the actual intended transfer of the water from the R9 Ranch to the Cities and otherwise in accordance with the Project must be approved by the water transfer hearing panel in accordance with the Water Transfer Act, K.S.A. 82a-1501, *et seq.*

46. The approvals made by the Chief Engineer in this Master Order are contingent and conditioned upon certain factors as provided herein, including the Cities later receiving a Transfer Order as provided herein.

B. The Change Applications

47. On June 26, 2015, the Cities submitted the original Change Applications, which applications, as amended, seek contingent approval of changes of the use made of water, the places of use, and the points of diversion under the R9 Water Rights.

48. The Change Applications were filed in anticipation of the Cities' desired transfer, in accordance with the Project and pursuant to the Water Transfer Act, of more than 2,000 acre-feet of water per year from the R9 Ranch to Schoenchen, Kansas, and then on to Hays and to Russell.

49. On January 6, 2016, the Cities filed the Transfer Application, which application necessarily was incomplete when filed because the Change Applications had not yet been contingently approved by the Chief Engineer as required by K.A.R. 5-50-2(x)(2)(A)–(C) and K.A.R. 5-50-7(b)(1)–(3).

50. The original Change Applications sought the Chief Engineer’s contingent approval to convert 7,625.7 acre-feet of water per calendar year from irrigation to municipal use. The Change Applications were specifically conditioned upon (1) the entry of this Master Order as a final, non-appealable order; and (2) a final, non-appealable order approving the Transfer Application for a quantity of at least 7,625.7 acre-feet of water per calendar year.

51. After extensive discussion between the Cities and the Chief Engineer, the Cities agreed with nearly all of the terms set out in this Master Order and amended the Change Applications accordingly, including amendments reducing the total quantity from 7,625.7 acre-feet of water per calendar year to 6,756.8 acre-feet of water per calendar year for municipal use, as long as this Master Order and its incorporated Change Approvals are issued and become final orders on the exact terms as originally issued on March 27, 2019, or on amended terms that are acceptable to the Cities.

52. The Change Applications seek to make the following changes to the R9 Water Rights:

- a. Change the use made of water under each of the R9 Water Rights from irrigation to municipal use.
- b. Change the places of use for the R9 Water Rights, from only the R9 Ranch to:
 - i. the R9 Ranch;
 - ii. the City of Hays, Kansas, and its immediate vicinity as well as related areas in the Northeast Quarter (NE/4) of Section 19 and the Northwest Quarter (NW/4) of Section 36, Township 13 South, Range 18 West, Ellis County, Kansas; and
 - iii. the City of Russell, Kansas, and its immediate vicinity.
- c. Change the points of diversion for each of the R9 Water Rights as authorized in their respective certificates of appropriation and approved changes, if any, that predate this Master Order, and as set out in Table 1 attached as **Appendix B**. The approximate locations of the proposed municipal wells are shown on the map attached as **Exhibit 33** and are more specifically described in each of the Change Applications and the maps attached thereto.

53. The Change Applications originally were filed before K.A.R. 5-5-9 was amended by changes effective September 22, 2017. Accordingly, the Cities based the Change Applications on the 1994, pre-amended version of K.A.R. 5-5-9.

54. Given the timing of when the Change Applications originally were filed, the Chief Engineer finds that K.A.R. 5-5-9, as it existed in 1994 on the date when the Change Applications originally were filed, should be and is applied to the changes in use requested by the Cities. *See Appendix C.*

C. Review of the Change Applications

55. The Chief Engineer and DWR staff have carefully reviewed the original Change Applications and all of their amendments and attachments, the BMcD modeling report and the related modeling files discussed below, the documents in DWR's files for each of the R9 Water Rights, the public comments received at or related to the Public Meeting, and such other documents and sources of information normally consulted when considering similar change applications, all in light of the applicable statutory and regulatory requirements of K.S.A 82a-708b and K.A.R. 5-5-1 through K.A.R. 5-5-16.

a. Draft Proposed Master Order

56. In the course of such review, the Chief Engineer and DWR met with the Cities, their attorneys and engineers, and otherwise gave careful consideration to the merits of the Cities' requested changes. These discussions resulted in a draft, proposed Master Order and related draft Change Approvals, to better narrow the issues for the public's information and the Chief Engineer's consideration.

57. Such draft, proposed documents included the following key features:

- The proposed amount of water to be converted to municipal use, based on not increasing consumptive use, totaled 6,756.8 acre-feet.
- The Cities' plans to consolidate the 56 existing irrigation wells on the R9 Ranch to 14 municipal wells.
- Water withdrawals under the R9 Water Rights would be limited by a TYRA Limitation of 48,000 acre-feet of water (an average of 4,800 acre-feet per year), based on the reasonable long-term yield of the R9 Ranch as determined from a series of model runs using the GMD5 Model. The long-term yield analysis was requested by the Chief Engineer and completed by BMcD for the Cities.
- Such TYRA Limitation could be relaxed in the future, based on improved science, and potentially could be removed entirely if the basin is opened to

new appropriations or the restrictions of the Arkansas River IGUCA are relaxed.

- The initial Reasonable-Need Limitations for the Cities, i.e., the respective Limitations imposed on each City's municipal use of water under the R9 Water Rights, when combined with that City's use of water from all other municipal water rights, would be 5,670.23 acre-feet per year for Hays and 1,841.3 acre-feet per year for Russell, with the ability to increase the Reasonable-Need Limitations in the future based on documented, reasonable increased municipal need of a City.
- Various reductions and Limitations regarding the rates of diversion for many wells.
- Prescribed reporting requirements, including a monitoring plan.

58. DWR provided the Change Applications, the BMcD modeling report and the related modeling files, and proposed drafts of this Master Order and the Change Approvals to GMD5 for its review under K.A.R. 5-25-1 through K.A.R. 5-25-21. These documents were also made available to the public via DWR's website.

b. Public Meeting and Comments

59. Further, the Chief Engineer held the informational Public Meeting in Kiowa County on June 21, 2018, to explain the issues being considered regarding the Change Applications and to receive comments from the public. In addition, to allow for a fuller record, the Chief Engineer provided an extended public comment process and timeline and accepted public comments through September 2018, which included the opportunity for consultants to review and comment on one another's work. At the Public Meeting, oral public comments were received from the following: Richard Wenstrom, Kent Wetzel, Pat Wetzel, John Janssen, Pat Janssen, George Hetzel, and Kim Gamble.

60. Recommendations were received from GMD5 on August 29, 2018 and supplemented on September 14, 2018. In addition, GMD5 provided a PowerPoint presentation that summarized BGW's review of the Cities' groundwater modeling as well as BGW's August 30, 2018, in-line comments in response to the work of Water PACK's consultant, KBE.

61. Water PACK and its consultant, KBE, provided comments and analyses at the Public Meeting, and subsequently in writing. At the Public Meeting, Dr. Keller of KBE provided a pre-recorded audio presentation and an accompanying PowerPoint presentation entitled *Water Level Trends & Consumptive Use on the R9 Ranch*. Subsequently, Water PACK provided KBE's technical report, entitled *R9 Ranch*

Consumptive Use Analysis, as corrected on November 12, 2017. In addition, Water PACK provided letters of comment dated July 10, 2018; July 25, 2018; and September 11, 2018. For the most part, these letters supported concerns articulated by Water PACK's consultant, KBE, which concerns are summarized below. KBE also provided its review of BMcD's modeling report dated August 21, 2018.

62. The Cities provided responses to comments and analyses by Water PACK and GMD5 and their respective consultants, on August 6, 2018, September 14, 2018, and September 18, 2018, as well as a revised Modeling Report dated September 25, 2018, and an e-mail exchange with the manager of GMD5 regarding their modeling.

63. In addition, written public comments were received from Jane Wenstrom, Jared Stegman, Barry Mayhew, William Burr, Lee Borck of Innovative Livestock Services, Inc., Quentin Hirsh, Leroy Wetzel, and Richard Wenstrom. Several of the public comments opposed allowing the Cities to take more water out of the basin than can be diverted without causing any present or future water level declines, or questioned whether DWR had done enough to ensure that the Cities' requested changes are reasonable. Other comments included the following questions, concerns, or requests:

- whether the Cities would be allowed to pump the wells in the southeast part of the R9 Ranch at their full authorized quantity year after year and whether this is what was modeled (DWR confirmed that the modeling assumed these wells would be pumped at approximately 90% of their annual authorized quantity, as explained herein);
- whether water quality monitoring would be required (a feature that has been required and ordered herein as a result of this public comment and recommendation of GMD5);
- what level of depletion (to the local aquifer) the Chief Engineer would find acceptable;
- how model uncertainties would be addressed;
- whether the Cities' model was the appropriate tool for a decision of this scale;
- whether the lack of recharge from the Arkansas River was properly considered;
- concern that a transfer of 6,756.8 acre-feet causes, or might cause, declines that some people may consider excessive and that could lead to impairment complaints both for and against the Cities;
- request that the TYRA Limitation be allowed to be decreased based on observed water levels declining at a rate greater than anticipated; and

- challenged DWR's determination of consumptive use available for converting the R9 Water Rights from irrigation to municipal use based on K.A.R. 5-5-9(c) (1994 version) (note: DWR's use of alternative crops is based on K.A.R. 5-5-9(b) (1994 version)).

64. As a result of the received public comments, the Chief Engineer identifies and addresses further herein the following significant issues raised by the public, in addition to such other issues relevant to the Cities' Change Applications: whether the consumptive use determined by DWR is appropriate, whether groundwater levels have declined or are expected to decline at an excessive rate, whether the groundwater modeling completed by the Cities is sufficient for evaluating the Change Applications, and whether the Limitations proposed to be placed on such requested changes, including the TYRA Limitation, are reasonable.

65. To assist in his review of the public comment received, the Chief Engineer directed DWR staff to assess select data provided via the process and to analyze local data and model outputs. Documentation of this work is summarized in the DWR Review. More specifically, the document: (1) summarizes the spatial distribution of the water data level evaluated by KBE in its letter of August 21, 2018, (2) provides an independent review of the available water level measurements and water level trends on the R9 Ranch and within the adjacent area, (3) provides an independent assessment of modeled water levels on the R9 Ranch and within the adjacent area, both in the historical simulation and two future simulations, and (4) compares modeled and measured water level data for the R9 Ranch as a whole, for three portions of the R9 Ranch (southwest, northeast, and southeast), and for two adjacent areas with nearby water rights to the south and northeast of the R9 Ranch.

66. The Chief Engineer carefully considered the public input received that was germane to the Chief Engineer's decisions regarding the Change Applications, specifically the decisions required by K.S.A. 82a-708b, i.e., whether the applicant has demonstrated that any proposed change is reasonable, will not impair existing rights, and relates to the same local source of supply as that to which the water right relates.

67. Public comments were also received that are related to issues to be considered in the subsequent water transfer proceeding. These comments were reviewed and considered to the extent appropriate for consideration of the Change Applications, but not beyond this.

68. GMD5's recommendations of August 29, 2018, included: (1) that the TYRA Limitation should be a lower figure of 40,000 acre-feet, (2) that certain modeling issues should be corrected, (3) that any issued master order approving the Change Applications should allow for a future change to the TYRA Limitation, either greater or lesser than the amount initially imposed, and that a hearing on such should be required

before any change is made, (4) that the “master order should be revised to include the current management program adopted by the District and approved by the Chief Engineer,” and (5) that the Cities’ monitoring plan for the R9 Ranch should be modified to include water quality monitoring. In its supplemental recommendation of September 14, 2018, GMD5 recommended that the Chief Engineer use K.A.R. 5-5-9(c) (1994 version) to determine the new consumptive use for the Change Applications based on site-specific data.

69. GMD5’s recommendations are discussed in the relevant subsections of these MIXED FINDINGS OF FACT AND CONCLUSIONS OF LAW and implemented in the ORDER section as appropriate, except the following recommendations are addressed here: (a) the Cities fixed the model errors cited by GMD5’s consultant as noted in the Cities’ revised model report dated September 24, 2018 and (b) the Cities have provided a revised monitoring plan with a water quality component, attached as **Exhibit 34**.

II. Change in Beneficial Use

70. After careful review of the documents and information referenced herein, the Chief Engineer finds that conversion of the R9 Water Rights from irrigation to municipal use under the terms and conditions set out in this Master Order is reasonable, will not impair existing rights, and relates to the same local source of supply as that to which the R9 Water Rights relate. *See* K.S.A. 82a-708b(a). Accordingly, the conversion of the R9 Water Rights from irrigation to municipal use should be contingently approved on the terms and conditions set out in this Master Order.

III. Quantities for Municipal Use (consumptive use determination)

A. Applicable Law

71. Because approving a change in the authorized beneficial use of a water right may, under K.A.R. 5-5-9 (1994 version) and its concept of consumptive use, effectively result in a reduction in the authorized quantity for the water right for its new use, the Chief Engineer must apply that regulation here in the course of contingently approving the changes in use requested by the Cities.

72. Changing the use made of water from irrigation use to municipal use may be approved if the change does not cause the net consumptive use from the local source of water supply for the new use to exceed the net consumptive use from the same local source of water supply by the original irrigation use. K.A.R. 5-5-9(a) (1994 version).

73. The maximum annual quantity of water allowed to be changed from irrigation to municipal use is the net irrigation requirement (“NIR”) for the 50% chance rainfall for the county of origin, multiplied by the maximum acreage legally irrigated

under the authority of the water right in any one calendar year during the perfection period. K.A.R. 5-5-9(a)(1) (1994 version).

74. The applicant, however, may attempt to demonstrate to the Chief Engineer a more accurate estimate of the historic net consumptive use than the net consumptive use calculated under the methodology set forth in K.A.R. 5-5-9(a)(1). K.A.R. 5-5-9(b) (1994 version).

75. The NIR for the 50% chance rainfall for Edwards County, Kansas, is 13.0 inches for corn and 20.9 inches for alfalfa.

B. Review and Discussion of Consumptive Use Determination

76. A review of the information in DWR files, as supplemented by information provided by the Cities, shows that the R9 Ranch was principally an alfalfa operation during the perfection periods for the R9 Water Rights.

77. Accordingly, pursuant to K.A.R. 5-5-9(b) (1994 version) attached as **Appendix C**, and as set out in Table 1 attached as **Appendix B**, the NIR for alfalfa was used for the R9 Ranch irrigation circles that were planted to alfalfa during the perfection periods for each of the R9 Water Rights and, pursuant to K.A.R. 5-5-9(a) (1994 version), the NIR for corn was used for the remaining acreage of the R9 Ranch. Pursuant to K.A.R. 5-5-9(a)(4) (1994 version), however, no resulting quantity for a particular R9 Water Right was allowed to exceed the maximum certified annual quantity.

78. Using this procedure under K.A.R. 5-5-9 (1994 version), the approval of the Change Applications would permit the diversion of a total of up to 6,756.8 acre-feet of water per calendar year from all of the R9 Water Rights combined.

79. With respect to KBE's consumptive use analysis, Dr. Keller's presentation at the Public Meeting provided an overview of KBE's technical report, entitled *R9 Ranch Consumptive Use Analysis*. KBE's work cites K.A.R. 5-5-9(c) (1994 version) that allows for site-specific consumptive use determinations where the default determinative methods listed in the regulation appear to be unrealistic and could result in the impairment of other water rights. Water PACK commissioned KBE to complete a site-specific analysis. The KBE report details its methods and estimates of average consumptive use by alfalfa and corn for the period 1980–2009 using American Society of Civil Engineers' methods applied to climate conditions for the period and adjusted for the stress factor found from a METRIC ("Mapping EvapoTranspiration at high Resolution with Internalized Calibration") analysis of 1984 and 1985. In the end, KBE estimates a site-specific average consumptive use by corn to be 13.6 inches and by alfalfa to be 20.6 inches. These values are close to the values used by DWR.

80. To determine the appropriate amount of water to be transferred, KBE states the following on page 3 of its report, regarding their study methodology: "Because the effective rainfall is greater under post-transfer dryland/natural grassland conditions than under pre-transfer irrigated conditions (i.e. more rainfall is consumed by dryland/natural grasslands than irrigated land), the effective rainfall used in the net consumptive irrigation use calculation for transferable water should be equivalent to the consumptive use under dryland conditions." As applied, on the bottom of page 5, the report states: "In other words, we estimate the annual average effective precipitation under water transfer conditions on the R9 Ranch will be 21.1 inches, as opposed to the 15.4 inches for irrigated alfalfa and 12.2 inches for irrigated corn (Table 1)." On page 7, the report concludes: "These yield transferable quantities of 12.0 inches (1.00 ac-ft/ac) for alfalfa circles and 4.7 inches (0.40 ac-ft/ac) for corn circles. Accordingly, and based on the Chief Engineer's Office preliminary findings of 2,901 acres of irrigated alfalfa and 2,246.7 acres of irrigated corn water rights, the total transferable water from the R9 Ranch would be 3,790 ac-ft per year."

81. GMD5 initially found that DWR's application of K.A.R. 5-5-9 (1994 version) was done correctly. After reconsidering the matter, however, GMD5 recommended, without providing specific justification or method, that the Chief Engineer rely on site-specific data per K.A.R. 5-5-9(c) (1994 version) to determine how much water should be allowed to be converted from irrigation use to municipal use.

82. In BGW's PowerPoint presentation entitled *Technical Assessment of City of Hays Water Transfer/R9 Ranch Development Scenarios and Commentary on WaterPACK Analysis*, BGW commented on KBE's consumptive use analysis which proposed reducing the transferable amount of water by post-transfer consumption on the R9 Ranch, stating that BGW had not reviewed the details but, as a general approach, such consideration of post-transfer water consumption maintains a hydrologic balance compared to baseline agricultural use.

83. The Cities provided a response to KBE's consumptive use analysis on August 8, 2018, with attached comments by BMcD, as well as in the Cities' letter of September 18, 2018. In the Cities' August 8 letter, they state that the use of the alternate consumptive use calculation under K.A.R 5-5-9(c) (1994 version) requires that the default method in the regulation produce a quantity of water available to change to a different type of beneficial use that both: (1) appears to be unrealistic and (2) possibly results in impairment of other water rights. Because there has been no showing of potential impairment, the Cities contend that the regulation should not be applied. Second, the Cities point out that calculating the amount of water available to change to a different type of beneficial use and then deducting the future use of the R9 Ranch as grassland is "not only unfair to the Cities on its face, it is also speculative, inadequately

explained and documented, contradicts the longstanding approach required by Kansas law and adopted by DWR for every other water user, and violates the plain text of K.A.R. 5-5-9.” The Cities further argue that the DWR regulations in place when the original Change Applications were submitted (and which regulations are found to apply in this Master Order) also required that the “consumptive use must be based on the original irrigation use made of water during the year of record, evaluated (as DWR always has) on a water-right-by-water-right basis.” The Cities argue in their August 8 letter that consumptive use under both K.A.R. 5-5-9(a) and (c) (1994 version) looks to the actual net consumptive use during the perfection period, whereas KBE’s analysis with its reduction is “based on an estimation of the dramatically greater consumptive use he [Keller] argues will exist under the post-transfer dryland/natural grassland conditions, which is unfair to the Cities.”

84. BMcD notes that “after calculating evapotranspiration rates, KBE switches to an elementary daily soil balance model based on numerous assumptions to propose that an additional quantity should be subtracted from historical consumptive use of applied irrigation. KBE proposes consideration of a future increase in the effective precipitation under restored grassland conditions. In addition, KBE incorrectly compares changes to effective precipitation and subsequent aquifer recharge by equating a theoretical daily soil-water balance budget for switchgrass to the calculated annual 50-percent probable effective precipitation under corn and alfalfa.”

85. In the Cities’ September 18 letter, they add that “Keller and the GMD ignore the fact that K.S.A. 82a-708b allows changes without losing priority of right. There is no evidence that the proposed changes would impair water rights that are senior to the water rights on the R9 Ranch—nor do Keller or the GMD even suggest that approving the Change Applications could potentially cause impairment. Moreover, direct impairment is very unlikely because the changes will result in fewer well locations, adequate well spacing, and reduced pumping rates.”

C. Conclusions on Consumptive Use

86. The Chief Engineer finds that the consumptive use determined by DWR was done in conformity with applicable DWR regulations. DWR properly applied K.A.R. 5-5-9(b) (1994 version) at the request of the applicant Cities to consider the use of alternate crops such as alfalfa. Furthermore, no compelling evidence has been offered to substantiate concerns of impairment and therefore K.A.R. 5-5-9(c) (1994 version) is not applicable in this instance.

87. The TYRA Limitation of 48,000 acre-feet limits the long-term supply that can be taken from the R9 Ranch. The TYRA Limitation is over and above the reduction required by the consumptive use determination. Imposing the TYRA Limitation on the consumptive use determination allows the Cities to meet their future peak demands but

limits the Cities to using only about 70% of the annual allowable diversion from the R9 Ranch, over the long-term.

88. Considering the reduced pumping rates, the distances between the Cities' wells and the wells of nearby water rights, the groundwater modeling results provided by the Cities, and the TYRA Limitation on diversions from the R9 Water Rights, the Chief Engineer finds, pursuant to K.S.A. 82a-708b(a)(2), that for each of the wells for which the Cities have applied to change from irrigation use to municipal use as requested in the Change Applications and explained herein, the Cities have demonstrated in each case that the proposed quantities for municipal use as requested in the Change Applications and explained herein are reasonable and will not impair existing rights.

89. The Chief Engineer finds that approval of the Change Applications, which will permit the diversion of a total of up to 6,756.8 acre-feet of water per calendar year from all of the R9 Water Rights combined, will not cause the net consumptive use from the local source of water supply for the new municipal use to exceed the net consumptive use from the same local source of water supply by the original irrigation use.

90. The resulting total authorized quantity for municipal use for each R9 Water Right, after the changes contingently approved herein, must be the lesser of the net consumptive use or the maximum annual quantity authorized (i.e., certified, in the case of each of these R9 Water Rights) for irrigation use for each such R9 Water Right. K.A.R. 5-5-9(a)(4) (1994 version).

91. Accordingly, the Chief Engineer finds that because of the changes contingently approved herein, and subject to the Limitations and conditions provided herein, the total authorized quantities that may be diverted for municipal use for each R9 Water Right are the amounts listed in Table 1 attached as **Appendix B**, which listed amounts are the lesser of the net consumptive use or the maximum annual quantity authorized (certified) for irrigation use for each R9 Water Right. For all R9 Water Rights combined, this contingently authorized total quantity for municipal use is 6,756.8 acre-feet of water per calendar year (subject to the Limitations and conditions as further provided herein).

IV. Limitations on Quantities for Municipal Use

A. TYRA Limitation

a. Basis of TYRA Limitation

92. The Kansas Water Appropriation Act provides that any owner of a water right may change the place of use, the point of diversion, or the use made of the water

without losing priority of right, provided such owner demonstrates to the Chief Engineer that any proposed change is reasonable and will not impair existing rights. K.S.A. 82a-708b.

93. Furthermore, the Kansas Water Appropriation Act provides the Chief Engineer with authority to control, conserve, regulate, allot, and aid in the distribution of the water resources of this state for the benefits and beneficial uses of all of its inhabitants in accordance with the rights of priority of appropriation. K.S.A. 82a-706.

94. The Chief Engineer finds that the aforementioned considerations and authority of K.S.A. 82a-706 and 82a-708b, along with the unique aspects of the Project, including but not limited to (a) its being subject to the Water Transfer Act, (b) the need to make as clear as possible the expected nature of impacts into the long-term future, and (c) the Cities' request for a procedure to allow the reasonable quantity for municipal use to inflate over an indefinite time, necessitate a realistic assessment of the long-term impacts of the Project on the R9 Ranch wellfield and the surrounding area and a finding that the long-term withdrawals for municipal use allowed pursuant to this Master Order are consistent with the quantity of water that reasonably can be diverted from the water resources on the R9 Ranch wellfield over the long-term without unreasonable effects to the area.

95. Thus the Chief Engineer finds that it is appropriate to allow the Cities to divert in any calendar year, or a series of calendar years, the full amount of 6,756.8 acre-feet of water for municipal use from all R9 Water Rights combined, as determined herein and consistent with the R9 Ranch's historic consumptive use, while imposing the TYRA Limitation, to wit: a Limitation on the quantity of water that can be diverted from the combined R9 Water Rights for municipal use during any rolling 10-year period, based on an estimate of the quantity that can be reasonably diverted from the water resources on the R9 Ranch wellfield over the long-term without unreasonable effects to the area.

96. To establish the TYRA Limitation, the Chief Engineer required the Cities to develop modeling work to form the basis of such Limitation and to assess the impact of this pumping of the R9 Water Rights on the surrounding area. The Cities' model results explained below in Subsection IV.A.b. suggest that 48,000 acre-feet of water during any, each, and every ten consecutive calendar years (i.e., a ten-year rolling aggregate of 48,000 acre-feet, or an average of 4,800 acre-feet per calendar year) is a reasonable Limitation to impose on the long-term yield from all of the R9 Water Rights combined. In other words, the quantity diverted during a calendar year from all of the R9 Water Rights combined, plus the total of the quantities diverted from all of the R9 Water Rights combined during each of the 9 previous calendar years, should not exceed 48,000 acre-feet of water.

97. The Cities' model results suggest that if this TYRA Limitation is applied on such a rolling-aggregate basis, then the overall mass-balance of water extracted versus water entering the area demonstrates that the effects on the area of pumping from the R9 Water Rights will not be unreasonable.

b. Modeling Supporting the TYRA Limitation

98. The following model results obtained by the Cities and confirmed by the Chief Engineer support the imposition of the TYRA Limitation, as discussed above.

i. The GMD5 Model

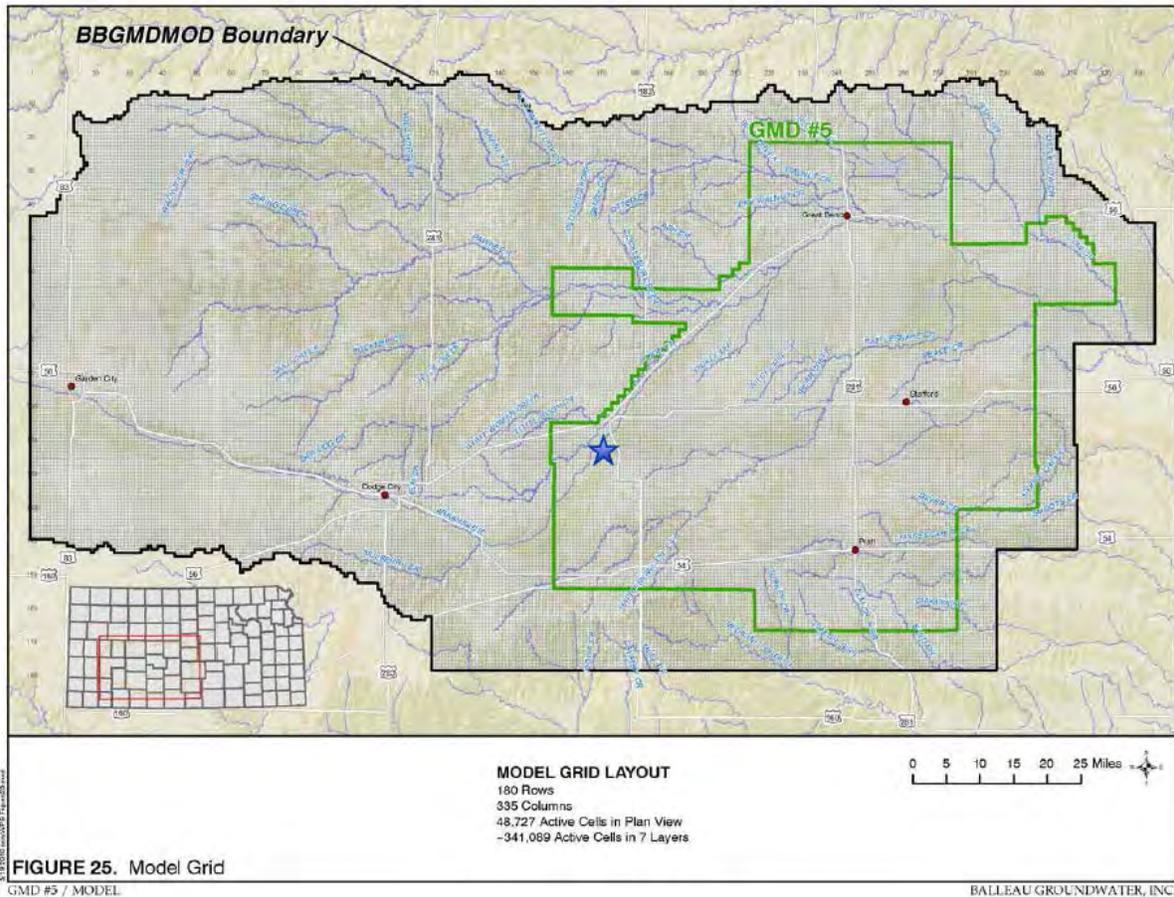
99. Quantifying and analyzing the effects of the 48,000 acre-feet of water figure (or 4,800 acre-feet of water per calendar year, on average), which figure the Chief Engineer has imposed as the TYRA Limitation, was accomplished by the Cities' modelers using a three-dimensional groundwater flow model developed by BGW for GMD5 (the "GMD5 Model").

100. A detailed report describing the construction and calibration of the GMD5 Model can be found in the BGW report titled *Hydrologic Model of Big Bend Groundwater Management District No. 5*, dated June 2010 (the "BGW Report").

101. The Cities' modelers, BMcD, acquired the BGW Report and model files from DWR through a Kansas Open Records Act request. The results of the BMcD modeling are discussed in their modeling report dated February 13, 2018, which report was submitted to the Chief Engineer that day. On or about February 16, 2018, the BMcD modeling report was posted on DWR's website for this matter and the related groundwater modeling files were made available to interested parties. As is noted elsewhere, as a result of the public review process, a relatively minor error was found in the modeling work done by BMcD. BMcD fixed the error, made new model runs, and provided a revised model report dated September 24, 2018.

102. As shown in the GMD5 Model Grid below, the GMD5 Model area encompasses the entirety of GMD5, a substantial area up-gradient of the district, and additional area down-gradient from the district.

GMD5 Model Grid



103. The GMD5 Model utilizes USGS' MODFLOW™2000 three-dimensional groundwater-flow modeling code. It includes the recharge, streamflow, pumping, and other pertinent data for the 68-year period from December 1939 through December 2007.

104. BMcD imported the model construction, hydrogeological parameters, and well-pumping data contained in the GMD5 root MODFLOW files into Groundwater Vistas Version 6.0 ("GWV"), pre- and post-processing software, to run the GMD5 Model. GWV provides a graphical user interface to streamline data entry and processing of model results.

105. BMcD completed an initial run to verify that the GMD5 Model was correctly imported and set up in GWV. BMcD did not make any changes to the data or hydrogeological parameters of the GMD5 Model during the verification process.

106. Verification was accomplished by direct comparison of the mass-balance results, drawdown values, and water-level contours to the values from the BGW Report and the model output files obtained from DWR.

107. The water-level, drawdown, and mass-balance results calculated during the evaluation run correlated very well with the values reported for the base case in the BGW Report and output files.

108. To evaluate the long-term yield from the water resources on the R9 Ranch, the internal Hydrostratigraphic Units (“HSU”) package in GWV was utilized for the computation of sub-regional water balances instead of the USGS ZONEBUDGET package.

109. These two packages perform the same function and provide equivalent results, essentially calculating the mass budget for a sub-region of the model.

110. The GMD5 Model was utilized to estimate the amount of water that flows into and out of the R9 Ranch HSU. Properties evaluated include recharge, evapotranspiration, well pumping, lateral groundwater flow into and out of the HSU from the surrounding aquifer, streamflow, and groundwater storage.

111. The GMD5 Model simulates a period of time from December 1939 through December 2007. As BGW points out in the BGW Report, DWR has metered records of the volumes pumped from individual wells after 1990. Since those metered quantities for 1991 to 2007 provide the highest quality data, BMcD utilized this time period to complete the initial evaluation of the aquifer.

ii. The Modeled Scenarios

112. BMcD completed multiple model runs using an iterative process to determine a maximum average quantity of water that could be diverted without adverse effects on the aquifer. The pumped quantities from the proposed municipal wells were increased and decreased in successive model runs and the effects of the changes on the model output parameters and water levels were evaluated. In consultation with DWR, it was determined that the aquifer could sustain an average of 4,800 acre-feet per year with reasonable changes in water levels.

113. “*Short-Term Baseline Irrigation Scenario*”: BMcD first developed a “baseline” 1991–2007 scenario within GWV (the “*Short-Term Baseline Irrigation Scenario*”), which included all of the existing irrigation and irrigation return wells on the R9 Ranch as in the GMD5 Model. (Irrigation return wells were utilized in the GMD5 Model development to simulate the volume of water that infiltrates back into the aquifer during irrigation operations. See the BGW Report for further description and explanation of how the return flows were calculated.)

114. *“Short-Term Maximum Average Scenario”*: A second 1991–2007 scenario was developed in which those irrigation and irrigation return wells were then removed from the GMD5 Model and replaced with the proposed municipal wells (the *“Short-Term Maximum Average Scenario”*). Pumping in the portion of the R9 Ranch HSU outside the R9 Ranch remained unchanged. The municipal wells were pumped at 4,800 acre-feet of water on a 24-hour per day, 365.25-day per year basis for the 17-year period. According to the model, at the end of the 17-year period, pumping 4,800 acre-feet of water per calendar year resulted in approximately 0.3 feet of additional drawdown at the R9 Ranch boundary.

115. To simulate the effects of long-term municipal pumping, BMcD used the data from the model runs for 1991–2007 to simulate a 51-year period.

116. The hydrologic data for the 17-year period from 1991 to 2007 was used for years 1 through 17, repeating the same data to simulate years 18 through 34, and repeating the data again for years 35 through 51.

117. All but two of the hydrogeologic parameters in the 51-year model remained unchanged.

a. The Arkansas River gage at the Dodge City and the former Kinsley gage reflect a significant decrease in flow after 2006. To recognize diminished flows in the Arkansas River, BMcD set the upstream flow contribution in the Arkansas River to zero after year 16 in the 51-year model.

b. In the GMD5 Model, the elevation of the Arkansas River declined linearly each year to account for erosion of the bottom of the channel. Since flow in the stream channel was removed, continued down-cutting of the riverbed elevation would not take place.

118. *“Long-Term Baseline Irrigation Scenario”*: As with the 17-year model, after setting up the 51-year model, BMcD ran the model with the irrigation and irrigation return wells on the R9 Ranch to arrive at the *“Long-Term Baseline Irrigation Scenario”*.

119. *“Long-Term Maximum Average Scenario”*: To demonstrate the long-term effects of withdrawing water available from the R9 Ranch under the TYRA Limitation, an additional 51-year scenario was developed by removing the irrigation and irrigation return wells on the R9 Ranch and inserting the proposed municipal wells (the *“Long-Term Maximum Average Scenario”*). Pumping in the portion of the R9 Ranch HSU outside the R9 Ranch remained unchanged. The model was then run pumping at 4,800 acre-feet of water, 24 hours per day on a 365.25-day per year basis for the 51-year period resulting in approximately 0.8 feet of additional drawdown at the R9 Ranch boundary after 51 years of pumping versus the *Long-Term Baseline Irrigation Scenario*.

120. *“Long-Term Projected Operations Scenario”*: To demonstrate the long-term effects of the Cities’ projected actual withdrawal of water from the R9 Ranch, an additional 51-year scenario was developed by assigning municipal wells pumping rates equal to the projected operation of the R9 Ranch as a municipal water supply (the *“Long-Term Projected Operations Scenario”*). The wells were installed in phases and pumping was cycled among the wells operating at the actual projected rates. Production was stepped up over time based on the projected increase in municipal demand. Pumping was also increased in June, July, and August of each year to reflect increased demand during the hot summer months.

121. The *Long-Term Projected Operations Scenario* produced higher water levels over most of the R9 Ranch and the surrounding area than the *Long-Term Baseline Irrigation Scenario*. When compared to the *Long-Term Baseline Irrigation Scenario*, there was a water level rise of approximately 0.5 feet at the R9 Ranch boundary to the north and east after 51 years of pumping.

122. *“Long-Term Projected Operations with 2% Drought Scenario”*: At DWR’s request, a 2% drought scenario (the *“Long-Term Projected Operations with 2% Drought Scenario”*) was inserted in the 51-year model. Data for the 1952 to 1957 historical period was extracted from the GMD5 Model and inserted as years 35 through 39 in the 51-year simulation. This placed the drought two-thirds of the way through the 51-year model and after water demand has increased.

123. BMcD ran the model using the assigned pumping rates equal to the projected operation of the R9 Ranch as a municipal water supply described above for the previous model run but with substantially increased pumping during the drought. After the drought, the pumping returned to the previous pattern.

124. The *Long-Term Projected Operations with 2% Drought Scenario* maximized the quantity pumped from the R9 Ranch during the drought without exceeding the TYRA Limitation.

125. *“Long-Term Baseline Irrigation with 2% Drought Scenario”*: To evaluate the long-term effects of municipal pumping on the R9 Ranch in the event of a 2% drought, BMcD developed an additional long-term baseline irrigation scenario adjusted for the recharge parameters related to the drought sequence (the *“Long-Term Baseline Irrigation with 2% Drought Scenario”*).

126. The *Long-Term Projected Operations 2% Drought Scenario* resulted in higher water levels over most of the R9 Ranch and the surrounding area versus the *Long-Term Baseline Irrigation with 2% Drought Scenario*. When the *Long-Term Projected Operations with 2% Drought Scenario* was compared to the *Long-Term Baseline Irrigation with 2%*

Drought Scenario, there was a water level rise of approximately 0.4 feet at the R9 Ranch boundary to the north and east after 51 years of pumping.

c. Review and Discussion of the TYRA Limitation

127. The quantity of the TYRA Limitation was the subject of considerable public comment at the Public Meeting and thereafter.

128. It should be noted at the outset that the Cities contend that the Chief Engineer does not have the authority to impose the TYRA Limitation. The Chief Engineer acknowledges but does not agree with the Cities' contention.

129. GMD5 correctly acknowledged that DWR does not routinely impose Limitations of the type or magnitude of the TYRA Limitation on orders approving change applications.

130. GMD5 recommended lowering the TYRA Limitation to 40,000 acre-feet, on the grounds that (1) an average of 4,000 acre-feet per calendar year is the average pumping from the R9 Ranch in the baseline (historic) scenario, and (2) while an average of 4,800 acre-feet per calendar year is near equilibrium, GMD5's consultant believed that a more realistic equilibrium, and one that would have no effect in the basin, would be closer to an average of 4,000 acre-feet per calendar year.

131. Water PACK and its consultant expressed concern that the Cities' modeling work understates the water level declines near the R9 Ranch. One public comment asked what level of depletion to the aquifer would be allowed by the Chief Engineer. There were significant comments on the sufficiency of the modeling work done by the Cities as a basis for the TYRA Limitation. Water PACK and others opined that the TYRA Limitation should be based on an amount of water that could be diverted from the R9 Ranch without causing any present or future water level declines. These opinions may be based on the incorrect assumption that the Chief Engineer proposed the TYRA Limitation to prohibit all present or future declines.

132. Because of the unique nature of the Cities' Change Applications, the Chief Engineer had required the Cities to use the robust GMD5 model to determine the long-term yield from the R9 Water Rights if changed from irrigation to municipal use.

133. DWR was consulted during BMcD's adaptation of the GMD5 Model described in the revised Modeling Report dated September 25, 2018, and DWR's technical staff reviewed and commented on the modeling work as it was being developed.

134. After receiving public comment, DWR made an independent review of the model performance and water level changes on the R9 Ranch and immediate vicinity, including comparing historical data with the model results.

135. KBE agreed that the GMD5 Model could be an appropriate tool to evaluate regional water-management actions, provided that certain updates and calibrations are made.

136. The Chief Engineer finds that no such updates or calibrations are necessary to rely on the GMD5 Model for the purposes herein. The Chief Engineer understands that groundwater modeling is not a perfect science, but as discussed in detail below, the Chief Engineer has confidence in the modeling results based on the existing characteristics of the GMD5 Model. The GMD5 Model is the best tool available to evaluate the likely effect that approving the Change Applications will have on the area's water resources.

137. The Cities are entitled to make reasonable beneficial use of the R9 Water Rights. The GMD5 Model shows that the Cities' intended usage of the R9 Water Rights will cause the water levels of the R9 Ranch to continue to decline at varying but reasonable rates, while the neighboring water-right owners to the R9 Ranch will continue to deplete the aquifer as well but without being subject to such unique Limitations as the TYRA Limitation imposed on the Cities.

138. These arguments and the related evidence are further reviewed and discussed below.

i. Have groundwater levels declined or are they expected to decline at an excessive rate?

139. With respect to groundwater level trends, Dr. Keller's PowerPoint presentation at the public meeting showed trends at 10 monitoring wells in the general area from the Kansas Geological Survey's Wizard water level data set over the period 1995–2016. He argued that rates of water level decline shown warrant extra attention and should be considered in the determination of the amount that could be changed to municipal use and transferred out of the basin. Pertinent data are the two wells on the R9 Ranch (well #s 4 and 5) and nearby well #3, approximately one mile south of the southeast boundary of the R9 Ranch. His examination of the hydrographs on the R9 Ranch show an average decline rate of approximately 0.15 ft/year and well #3 south of the R9 Ranch declining at approximately 0.50 ft/year over the period noted. Dr. Keller also created a spatial analysis from the aforementioned Wizard water level data set for the period 2001–2016, determining rates of decline of approximately 0.33 ft/year on the north side of the R9 Ranch, up to 0.67 ft/year on the southeast part of the R9 Ranch. Dr. Keller reported a mean decline rate on the R9 Ranch of 0.53 ft/year for the 2001-2016 period.

140. In an August 6, 2018 letter by BMcD, the Cities provided a response to KBE's June 21, 2018 presentation on groundwater level trends at the Public Meeting.

BMcD states, “we evaluated the information presented using publicly available data from the Kansas State Weather Data Library, Office of the State Climatologist, the U.S. Drought Monitor, and the Kansas Geological Survey Water Well Level Database. In addition, we reviewed data from 15 water-level monitoring wells installed on the R9 Ranch to evaluate whether KBE’s conclusion that water levels are declining is consistent with observed water levels on and near the R9 Ranch.” BMcD concluded that KBE’s analysis is flawed in the following ways: (1) only two of the ten wells KBE analyzed are actually on the R9 Ranch; the remaining analyzed wells range from 1.25 miles away to 4.5 miles from the R9 Ranch boundary; (2) additional data was publicly available and not used; and (3) the period selected, 1995–2016, illustrates “a skewed and unrealistically negative picture” of water level trends by starting with a wet period and ending with a dry period. BMcD provided additional information showing how water levels fluctuate with precipitation on three long-term wells on the R9 Ranch and in other wells in the area. The letter also provided a summary of 2014–18 data collected by the Cities from the monitoring well network established on the R9 Ranch. BMcD concludes: “Each of the hydrographs presented above for sites on the R9 Ranch clearly fluctuate with precipitation and provide no evidence of a declining trend as KBE incorrectly concludes. In addition, the above results are consistent with monitoring wells installed across the R9 Ranch, which all have water levels that are stable or in slight incline over the past several years.”

141. DWR independently examined water levels on the R9 Ranch and in the immediate vicinity using historical observations, the water levels incorporated in the historical groundwater model simulations, and the GMD5 Model’s future simulated water levels. DWR found good correlation between the trends in observed water levels and modeled trends in the historical simulations (see Figures 3–6 of the DWR Staff Review), which provided confidence in the modeling.

142. In examining the model future simulations, DWR determined the average rates for groundwater declines on the R9 Ranch and vicinity, for both the base case and the 4,800 acre-feet per year future (see Table 2 of the DWR Staff Review, and Figures 9, 10, 13, and 14 therein), with the values for the base run and 4,800 acre-feet per year simulations being nearly identical. Total 51-year declines and rates of declines (in parentheses) for the 4,800 acre-feet per year simulation for the R9 Ranch were: R9 Ranch overall, 5.2 feet (0.10 feet/year); southwest R9 Ranch, 3.0 feet (0.06 feet/year); northeast R9 Ranch, 5.4 feet (0.11 ft/year); southeast R9 Ranch, 10.2 feet (0.20 ft/year). Immediately south of the R9 Ranch, the 51-year decline was 11.6 feet (0.23 feet/year) and just northwest of the R9 Ranch the 51-year decline was 1.6 feet (0.03 feet/year).

143. As is noted by BMcD's work and others, water levels on the R9 Ranch and in the vicinity do fluctuate over periods of wet and dry cycles as noted in the data and do exhibit a gradual downward trend.

144. The Chief Engineer finds that these trends, however, do not undermine confidence in the use of the GMD5 Model to simulate the effects of the Cities' planned operation of the wells on the Ranch, and that the low to moderate rates of water level decline evidenced in the record and anticipated in the future are not inconsistent with the long-term yields determined for the R9 Ranch by BMcD's modeling analysis and are acceptable for purposes of determining the Limitations discussed in this Section IV.

ii. Is the groundwater modeling completed by the Cities sufficient for evaluating the proposed changes?

145. GMD5 provided a PowerPoint presentation entitled *Technical Assessment of City of Hays Water Transfer/R9 Ranch Development Scenarios and Commentary on Water PACK Analysis*, prepared by its consultant, BGW. BGW's PowerPoint is a summary of their review of the modeling work done by BMcD on behalf of the Cities. With respect to the Cities' modeling, BGW identified an error in the model's stream routing but commented that the effect of the error might not be significant. While BGW stated that the Cities' modeling demonstrated little effect on nearby wells from the change from irrigation to municipal use under the scenarios presented, it believed the error reported above should be fixed and a drought scenario with higher pumping by area irrigators along with the Cities' increased use is needed to confirm this finding, again acknowledging that the differences might not be significant. With respect to BMcD's assessment of the long-term available supply with reasonable water level change, BGW believed 4,400 acre-feet/year is nearer the point of no declines.

146. As noted above, BGW identified a technical error in BMcD's modeling, specifically the operation of the Streamflow Routing Package, which was not correctly routing flow from cell to cell along the river flow paths. BGW also noted that simulated river stages had been adjusted. BMcD had modified streambed elevation along the Arkansas River to halt streambed downcutting beyond the first 17-year cycle as a consequence of low projected flows. BMcD corrected errors in both the routing and their adjustment of streambed elevations, and provided a revised model report dated September 24, 2018, along with revised model runs. According to the report, "The corrected model runs result in somewhat more water available to the Cities and further support the conservative approach taken by BMcD in the original model report. Nevertheless, the results of the corrected model runs do not change BMcD's overall conclusions contained the original model report. The water level changes and model

mass balance from the corrected model runs support the conclusion that 4,800 acre-feet per year is a sustainable pumping rate for the R9 Ranch.”

147. KBE provided their review of BMcD’s modeling report in a letter of August 21, 2018, expressing concerns with the modeling approach, results, and reporting. The introduction states: “We have not attempted to run the hydrogeological model...nor have we quantified the potential impact on model results and conclusions resulting from the concerns.” Further, the letter expresses “confidence in the BGW GMD#5 model as an appropriate tool...to evaluate regional water-management actions” and notes that such model could be “a good basis for modeling localized actions...provided it is updated and calibrated with measured data from the vicinity of the potentially impacted area rather than relying on the model-wide assumptions and calculations.” KBE lists five concerns with the BMcD modeling approach and assumptions. In addition, KBE provided a list of BMcD modeling results and reporting concerns. GMD5 provided BGW’s in-line comments, dated August 27, 2018, on the August 21, 2018 KBE letter. Finally, on behalf of the Cities, BMcD provided a September 13, 2018 letter responding to both KBE’s and BGW’s comments. Key concerns and responses are summarized below along with pertinent DWR findings.

148. First, KBE stated that the historical model simulation should have been updated and recalibrated to simulate conditions to the present to provide a more appropriate starting point for future scenarios instead of beginning with previous (1991) conditions. KBE cited its compilation of water level data indicating area water levels were, on average, 8 feet lower than the 1991 condition, and that current water levels are generally lower than the model says they will be in 2042, which is the end of the future baseline simulation. BGW said that using a different starting point for the analysis might not make much difference in the results, which examines the differences in two simulations, and that differences in projections and actual water levels can be affected by many factors. BMcD concurred with both points and cited its own water level analysis showing that water levels on the R9 Ranch varied from year to year but were stable over the long term. DWR reviewed the water level data compiled in KBE’s Table 1 and found most of the data used is from outside of the principal area of concern.

149. Second, to better capture climate variability in light of what it asserts as “climate change and the breakdown in stationarity,” KBE suggested that: (1) a longer historical climate record extended to the present should be used to develop future scenarios rather than repeating 1991–2007 three times, (2) additional scenarios should have been developed with other techniques, and (3) BMcD’s drought scenario is insufficient to capture long-term climate variability. BGW commented that BMcD’s 51-year simulations are longer than the 30-year record that climate scientists regard as normal but suggested an improved drought simulation should be considered as well as

additional model runs to determine if climate trends would affect the results. BMcD stated their view that climate change modeling is speculative and beyond the scope of their evaluation, that adding years to the climate record would not be expected to change the results, and that their evaluation used conservative assumptions, the modeled period being 5% drier than the 30-year norm, making the simulations reasonable and sufficiently conservative for the evaluation of future conditions.

150. Third, KBE stated that the Arkansas River should be treated as having no flow for all years and scenarios, not just after year 16 of the simulation. BGW agreed that BMcD's simulation overestimates streamflows for the first 16 years, but notes that had BMcD used historical flow records, the simulation would result in more evapotranspiration capture and additional depletion to the local aquifer near the stream on the order of a couple of feet or less. BMcD stated that this would have limited effect on water levels on the R9 Ranch and was not likely to change results significantly when comparing two model runs based on the same assumptions.

151. Fourth, KBE criticized the Cities' modeling assumption that recharge to the aquifer from precipitation is the same for the municipal pumping scenarios as the irrigation scenarios. KBE asserts that recharge under the municipal pumping scenarios "could be as much as 3,000 acre-feet/year less than under irrigation conditions" because "more of the precipitation will be consumed by the non-irrigated vegetation growing on the formerly irrigated fields." BGW supports considering "post-transfer consumption of precipitation at the R9 Ranch" as a potential new stress on the hydrologic system but stated "if the post-transfer consumption of precipitation is compared to unmanaged vegetation that existed prior to irrigation, then the change in the hydrologic balance with the transfer may be less." BMcD stated that "KBE did not provide sufficient documentation of the methodology used in their calculations to provide significant evidence supporting their conclusions" and noted that the long-term model runs were based on repeats of 1991–2007 hydrology with precipitation averaging approximately five percent less than normal.

152. Fifth, KBE states return flow calculations of the modeling should be validated for the specific conditions on the R9 Ranch and updated to current conditions, citing its consumptive use analysis for the R9 Ranch finding crop evapotranspiration to be 72% of optimal for the R9 Ranch, which compares favorably, but is lower than the model-wide adjustment of 80% assumed by BGW in the GMD5 Model. BGW suggested BMcD can resolve the question with model simulations that investigate the sensitivity of their results to variations in return flow. BMcD stated it is unlikely that an eight percent difference in return flows will significantly influence water levels on the R9 Ranch, that the GMD5 Model is the accepted best tool available for managing and evaluating the aquifer, and that its use is a reasonable approach. Figures 3–6 of the

DWR Staff Review evidence that the GMD5 Model is performing well at matching water level trends on the R9 Ranch.

153. The remainder of KBE's August 21, 2018 letter is dedicated to a series of "results and reporting" concerns, again with BGW responding via its in-line comments of August 27, 2018, and BMcD providing its responses on September 13, 2018. Most significant are the following:

a. KBE says BMcD should compile model outputs showing water level changes on the R9 Ranch over the entire simulation period rather than just showing the differences between the irrigation and municipal use model runs at the ends of those simulations. BGW cited one example of such it provided in its PowerPoint for GMD5 for a point near the southern boundary of the R9 Ranch (in an area of highest declines) with declines of 15–20 feet over the 51-year simulation. BMcD reported that simulated long-term declines over the R9 Ranch average approximately 4 feet and provided long-term hydrographs at three monitoring locations on the R9 Ranch showing these declines. Results of DWR's review summarized above in Subsection IV.A.c.i. show projected 51-year water level declines averaging 5.2 feet for the R9 Ranch overall and ranging from 1.6 to 11.6 feet for specific portions of the R9 Ranch analyzed.

b. Similarly, KBE opined that BMcD should provide a discussion on the cumulative decrease in storage under the future simulations. BMcD points to its table summarizing the water budget for the various model runs to provide estimates of change in storage.

c. KBE asserts that in BMcD's model simulation of municipal use, the 2% drought condition simulation should also be applied to the 4,800 acre-foot per year maximum average municipal pumping scenario. BMcD responded that such a scenario is unreasonable because it does not simulate what the Cities actually would do in a drought situation. The 4,800 acre-foot per year maximum average allows for greater pumping in drought years as long as the running 10-year total does not exceed 48,000 acre-feet.

d. KBE's final comments address the interpretation of BMcD's model report Figure 4 showing changes in water levels in comparison to pumping rates 1991–2007. KBE asserts that if the figure was expanded to show water level changes over the future simulation period it would be "incorrect to conclude 4,800 acre-feet of municipal pumping per year is sustainable". BGW noted that "determining what is sustainable relates to the hydrologic effects from that pumping that are deemed acceptable by area water users and administrators". BMcD responded that the issues of representing water level changes has been discussed earlier in KBE's comments.

154. While KBE, and to a lesser extent BGW, provided specific questions and concerns with BMcD's modeling approach, assumptions, and reporting discussed above, KBE noted qualified confidence in the GMD5 Model as an appropriate tool to evaluate regional water-management actions. BGW constructed the GMD5 Model and DWR provided peer review to BGW during the model's development.

155. Neither KBE nor BGW produced alternate model runs to substantiate their claims that the alternate methods they proposed would result in a significantly different value for the long-term yield of the R9 Ranch or that the impacts of the Project on the R9 Ranch or in the vicinity would be substantially different.

156. While the data set is limited, DWR found good correlation between observed and modeled water levels in the immediate vicinity, especially in groundwater level trends.

157. KBE asserts that the post-transfer condition would see less recharge from precipitation because of increased water usage by vegetation on the R9 Ranch. The Chief Engineer finds, however, that the analysis presented is insufficient to reasonably conclude the magnitude of potential reductions to recharge, the effect on the long-term yield, or to demonstrate that such reduced recharge would significantly affect pumping outside the R9 Ranch.

158. After careful review of the modeling work, the public concerns expressed, and the responses by the Cities, the Chief Engineer finds that the GMD5 Model is the best tool available to evaluate the Change Applications and the likely effect that approving them would have on the area's water resources, and that the revised modeling work done by the Cities is sufficient to determine the long-term yield of the R9 Ranch that serves as a basis for the TYRA Limitation that the Chief Engineer imposes herein.

d. Conclusions on the TYRA Limitation

159. As stated above, because of the unique nature of the Change Approvals, the Chief Engineer required the Cities to use the GMD5 Model to determine the long-term yield of the R9 Ranch (defined as the quantity of water that can be taken from the aquifer underlying the R9 Ranch over the long-term without unreasonably affecting the area), with the intent of constraining the Cities' long-term use to this amount. BMcD performed the modeling analysis on behalf of the Cities and found the long-term yield to average 4,800 acre-feet per year. This Master Order implements the long-term yield as the TYRA Limitation of 48,000 acre-feet to allow the Cities to respond to varying annual demands. The Cities are authorized to pump up to their total authorized quantity—6,756.8 acre-feet—in any given year but are limited to 48,000 acre-feet in any ten-year period.

160. As noted above, GMD5 recommended setting the TYRA Limitation to 40,000 acre-feet per 10 years based on historic average use. Water PACK and others have recommended tying the TYRA Limitation to a similar value based on KBE's consumptive use analysis or to the amount of water that can be taken from the R9 Ranch on a sustainable basis, defined by Water PACK as "the maximum amount of water that...does not contribute to present and future lowering of the water table in and around the R9 Ranch."

161. DWR, however, routinely approves changes to water rights in the Ogallala Aquifer and elsewhere that are not "sustainable" by Water PACK's above definition. Per the Kansas Water Appropriation Act, water right owners have the right to change their water rights if the change is reasonable, does not impair, and relates to the same local source of supply. *See* K.S.A. 82a-708b(a). The Chief Engineer finds, therefore, that the Cities' Change Applications, like any other change application, cannot be constrained under state law to recent historic use or the sustainable yield, either as defined by Water PACK or DWR regulations.

162. While the Cities' modeling of their proposed operations shows that area water levels will continue to decline at varying but reasonable rates as noted above, like their neighbors who are also depleting the local aquifer, the Cities are entitled to make reasonable beneficial use of their R9 Water Rights.

163. While there is a general concern about the rates of decline in the region, the Chief Engineer's decision must be based on the specific case of the R9 Ranch and its immediate vicinity. The Chief Engineer finds that the modeling supports the Cities' determination of long-term yield of 48,000 acre-feet per every 10 years because the model reasonably represents the groundwater system of the R9 Ranch and immediate vicinity with its distribution and spacing of the wells for the R9 Water Rights and for other nearby water rights, the expected recharge, the northeasterly gradient of the groundwater table, the capture of flows from the southwest, and the lack of water rights to the northeast, all of which demonstrate that use on the R9 Ranch at this level will have limited negative effects on the nearest neighboring wells. Further, the Chief Engineer finds that the Cities' modeling of their operations constrained by such long-term yield sufficiently demonstrates that the Cities' proposed operations will not increase the rate of water level decline from the status quo and therefore will not unreasonably interfere with neighboring water rights.

164. Accordingly, the Chief Engineer finds that the TYRA Limitation, i.e., 48,000 acre-feet of water during any, each, and every ten consecutive calendar years, is a reasonable Limitation to impose on the long-term yield from all of the R9 Water Rights combined. An annual quantity of water from the combined R9 Water Rights of 6,756.8 acre-feet per calendar year, limited to 48,000 acre-feet of water during any, each, and

every ten consecutive calendar years, is the demonstrated quantity that may be reasonably diverted over the long-term from the R9 Water Rights. If this quantity is applied on a rolling-aggregate basis, then based on the model results, the overall mass-balance of water extracted versus water entering the area demonstrates that the effects on the area of pumping from the R9 Water Rights will not be unreasonable. Accordingly, the TYRA Limitation should be imposed on the combined R9 Water Rights.

165. The TYRA Limitation should be imposed for the exclusive benefit of the public as a whole and not for the benefit of any other water right, person, or entity. The TYRA Limitation is not intended to benefit any other water right, person, or entity and does not confer any benefits or create any rights in any third party.

166. The TYRA Limitation should not impose a Limitation on, and thus should not restrict, the quantity of water that may be diverted by the Cities from additional sources outside the current boundaries of the R9 Ranch, which sources might be developed in the future via acquisition and conversion of other water rights, applications for new water appropriation rights, or some form of augmentation.

167. The imposition of the TYRA Limitation is based, in primary part, on the Chief Engineer's review and consideration of the results of groundwater modeling discussed above in Subsection IV.A.b. Such modeling represents the best science currently available, at a reasonable cost, to estimate the long-term water supply of the R9 Ranch and surrounding area. Based on DWR's participation in GMD5's robust model-development process, including review by DWR's groundwater modeling expert, Steve Larson of S.S. Papadopoulos and Associates, the Chief Engineer believes it is reasonable to rely on such modeling results to determine and impose the TYRA Limitation.

168. Additional, although secondary, bases for the TYRA Limitation are (1) the fact that the Arkansas-Pickerel Subbasin of the Upper Arkansas River Basin is closed to new appropriations, and (2) the underlying concerns and the restrictions of the Arkansas River IGUCA Order issued by the Chief Engineer on September 29, 1986, as amended on March 6, 1987, and again on October 14, 2013. Accordingly, the previous, draft proposed Master Order provided that if either of these additional bases were to be materially changed, then the TYRA Limitation would be automatically removed. GMD5, however, objected to any provisions that would automatically cause the TYRA Limitation to lapse, without any input from GMD5. The Chief Engineer finds GMD5's concern valid. Given the prominence of the TYRA Limitation within this Master Order, the unlikelihood that either of such additional bases will be materially changed in the future (and even if they were, the likelihood that the resulting impact on the long-term water supply of the R9 Ranch would be small), the Chief Engineer has declined to

include in this Master Order any provision that would automatically cause the TYRA Limitation to be removed.

169. The Chief Engineer finds that additional data collection, further refinement and/or calibration of the existing GMD5 Model discussed above in Subsection IV.A.b. (including upgrades to such model), or the creation of an entirely new model, could result in changes to the conclusions that form the primary basis for the TYRA Limitation, in which case it may be appropriate to increase the TYRA Limitation. For example, the long-term yield determined herein assumes an upstream flow contribution in the Arkansas River of zero after year 16 in the 51-year model. Additional data collection could demonstrate that this condition has changed and show that consistent flow upstream of the R9 Ranch is occurring and is likely to continue, such that the long-term yield has increased. Accordingly, this Master Order sets out below in Subsection XIII.A. the circumstances under which the TYRA Limitation may be increased.

170. GMD5 recommended that any master order approving the Change Applications should allow for a future change to the TYRA Limitation, either greater or lesser than the amount initially imposed, and that a public hearing on such should be required before any change is made. Although the Chief Engineer agrees that a public hearing should be required before any such increase (see Subsection XIII.A. below), the Chief Engineer does not agree that the TYRA Limitation should be subject to decrease, even if future conditions result in changes to the modeling that formed the primary basis for the TYRA Limitation. Like any other applicant for changes to water rights, the Cities are entitled to a firm determination now, based on the best science currently available, of the most limiting way in which the imposed Limitations will affect their R9 Water Rights. This is necessary to allow for reasonable planning, and it is even more appropriate given the significant investment that the Cities intend regarding the Project.

B. Reasonable-Need Limitations

171. The Project will provide a long-term supply of water to the Cities and to other communities in the region; the Project is expected to have a design life of at least 50 years and to be productive even longer.

172. The Kansas Water Appropriation Act limits appropriation rights to the reasonable needs of appropriators. K.S.A. 82a-707(e). An applicable DWR regulation requires that the approval for a change in the use made of water shall be subject to a Limitation to that quantity that is reasonable for the proposed new use. *See* K.A.R. 5-5-9(a)(6) (1994 version).

173. Accordingly, in making the contingent approvals provided herein, the Chief Engineer must impose a Reasonable-Need Limitation on each City's use of water

from all municipal water rights for which the City is the place of use, to an amount that represents the total reasonable municipal needs of that City. This means that a City's municipal use of water from the total authorized quantity for the R9 Water Rights as determined and found above by the Chief Engineer in Section III., when such use is combined with that City's use of water from all other municipal water rights for which the City is the place of use, must be an amount that is reasonable for municipal use by that City.

174. DWR's traditional method of determining the reasonable needs of municipal users, based on a 20 to 40 year timeframe, is appropriate for most growing municipal users, principally because most users are close to sufficient alternative sources to address their short-, medium-, and long-term needs.

175. Unlike most other Kansas cities, the Cities must look far afield to find reliable water sources.

176. The Cities state that they have considered numerous alternative sources, including Wilson Reservoir and the Smoky Hill River in eastern Russell County. The Cities assert that extensive hydrology and engineering studies have shown that these alternatives are unworkable or too expensive.

177. The Cities further assert that financing for the Project is likely to require amortization over the entire design life of the infrastructure, and that as a practical matter, the Cities cannot afford to build a pipeline from Edwards County if they must seek change-application approval, in stages, for increasing quantities of water for municipal use only as those quantities prove to be needed by the Cities. The Cities further assert that they cannot risk the multiple transfer proceedings that would be required for such incremental change-application approvals. The Cities believe that it is unlikely that they can obtain long-term financing for the Project if the full sustainable reasonable quantity of water for municipal use that is available from the R9 Ranch is not approved with an objective method for reasonable increases as municipal water needs increase.

178. Based on the above assertions and concerns of the Cities, which the Chief Engineer finds are reasonable, and having determined that no waivers of applicable regulations are required, the Chief Engineer finds that DWR's traditional method to determine the "reasonable needs" of municipal users is not appropriate in this case. Thus a longer planning horizon is a practical necessity in this case and is consistent with the overall purposes of Kansas water law and its underlying policies, as long as the longer planning horizon does not permit the Cities to use water in excess of their reasonable municipal needs. *See* K.A.R. 5-5-9(a)(6) (1994 version).

179. For these reasons and others, the Cities have requested contingent approval of the Change Applications, with objective standards to establish the reasonable quantities for municipal use for each of the Cities into the future, based on actual and projected population changes, the reasonable needs of additional users, and other measurable indices that allow approved quantities to increase as needs and demand change.

180. More specifically, for purposes of determining the reasonable quantities for municipal use for each of the Cities into the future, the Cities have requested the use of the method outlined below in Subsection XIII.B.b. (titled *Method to Establish Reasonable-Need Limitations*) of this Master Order.

181. Because of the Chief Engineer's findings in this Subsection IV.B. and because the Cities have purchased the R9 Water Rights (which are certified water appropriation rights) and seek to change them from irrigation to municipal use, the Chief Engineer finds that the Cities' proposed method to determine the Reasonable-Need Limitations is acceptable for use in this particular situation and should be approved.

182. The Chief Engineer finds that, based on the method outlined below in Subsection XIII.B.b., Hays' initial Reasonable-Need Limitation should be 5,670.23 acre-feet of water per calendar year, for all of the R9 Water Rights combined with all other municipal water rights for which Hays is the place of use. The calculation for such initial estimate is shown in **Appendix D**.

183. Similarly, the Chief Engineer finds that, based on the method outlined below in Subsection XIII.B.b., Russell's initial Reasonable-Need Limitation should be 1,841.3 acre-feet of water per calendar year, for all of the R9 Water Rights combined with all other municipal water rights for which Russell is the place of use. The calculation for such initial estimate is shown in **Appendix E**.

V. Treatment Losses

184. The Cities have not determined whether treatment, if any, of the water from the R9 Ranch should take place before or after delivery of water to any users.

185. Current treatment technologies consume a portion of the raw water and generate non-potable wastewater but new treatment technologies are likely to develop over the life of the Project.

186. The reasonable quantity of water that may be diverted from the R9 Ranch for municipal use should include a reasonable quantity of water for Treatment Losses.

187. All water from the R9 Water Rights should be metered at the wellhead, as it leaves the pump station, and as it is delivered to any user. In addition, all Treatment Losses should be accurately quantified and reported as required by K.S.A. 82a-732.

VI. Change in Places of Use

188. The authorized places of use for the R9 Water Rights, as contingently changed by this Master Order from irrigation to municipal use, should be such places that are described in **Appendix F**.

189. The Chief Engineer finds that this contingent change in places of use is reasonable, will not impair existing rights, and relates to the same local source of supply as that to which the R9 Water Rights relate. *See* K.S.A. 82a-708b(a).

VII. Rates of Diversion

A. Rates of Diversion for Consolidated Municipal Wells

190. Each of the R9 Water Rights was perfected and certified by individual wells, as reflected in the relevant certificates of appropriation.

191. The Change Applications propose to consolidate quantities from multiple R9 Water Rights and multiple wells into 14 proposed consolidated municipal wells (consolidated municipal wells A through N) as reflected in Table 1 attached as **Appendix B** and as shown on **Exhibit 33**, because it is more effective and efficient to divert the consolidated quantities from fewer wells.

192. Because of the contingent nature of the Change Approvals, the actual design of the proposed municipal wells has not yet been undertaken by the Cities.

193. The Change Applications propose that the rates of diversion for each of the new consolidated municipal wells be the greatest rate of the following:

- a. the rate required to divert the full annual quantity allowed for each new well during a 180-day period of continuous operation;
- b. the highest perfected rate of the irrigation wells being combined into a new municipal well;
- c. the estimated rate that the water resources on the R9 Ranch are likely to be capable of producing based on existing saturated thickness and transmissivity data and before any additional hydrologic testing; and
- d. a minimum rate of 700 gpm.

194. Such requested rates of diversion for each of the new consolidated municipal wells, as determined above, are summarized in Table 2 attached as **Appendix G**.

195. The Chief Engineer finds that the quantities from multiple R9 Water Rights and multiple wells, which quantities are available after conversion from irrigation to municipal use, should be contingently consolidated into 14 consolidated municipal wells (consolidated municipal wells A through N) as reflected in Table 1 attached as **Appendix B** and also in Table 3 attached as **Appendix H**, and as shown on **Exhibit 33**.

196. The Chief Engineer finds that the contingently consolidated rate for each of the 14 consolidated municipal wells (consolidated municipal wells A through N) is reasonable and should be the consolidated rates as reflected in Table 2 and Table 3.

B. Reductions of Rates of Diversion for R9 Water Rights

197. The Change Applications propose that each of the individual irrigation wells authorized by the R9 Water Rights be assigned to the new consolidated municipal well or wells, as set forth in Table 1 attached as **Appendix B**.

198. To result in a rate of diversion that is reasonable when each of the irrigation wells is assigned to one or more of the aforementioned consolidated wells, the individual rates of diversion for each of the R9 Water Rights either should be retained as the authorized rate of diversion set forth in the certificate of appropriation for such water right, or should be reduced to the rate or rates of diversion for the consolidated municipal well or wells as set out above in Table 2, whichever is less. The outcome of this comparison is shown in Table 3 attached as **Appendix H**.

199. Accordingly, the Chief Engineer finds that the individual rates of diversion for each of the R9 Water Rights either should be retained as the authorized rate of diversion set forth in the certificate of appropriation for such water right, or should be reduced to the rate or rates of diversion for the consolidated municipal well or wells as set out above in Table 2, whichever is less. The Chief Engineer finds that the outcome of this comparison is shown in Table 3, Column E, "Rate by Well and by Right (GPM)."

C. Limitations on Rates of Diversion for R9 Water Rights When Sharing a Common Consolidated Municipal Well

200. To result in a combined rate of diversion that is reasonable for each consolidated municipal well, the Chief Engineer finds that, when multiple R9 Water Rights are authorized herein to divert water from a common consolidated municipal well, Limitations should be imposed such that the rate of diversion under the junior priority R9 Water Right(s) is limited to the rate of diversion for the consolidated municipal well as listed in Table 2, when combined with senior priority R9 Water Right(s); provided, however, and subject to priority of right during any water right

administration, each R9 Water Right that is combined into a common point of diversion will be deemed to operate simultaneously at up to the rates set out in Table 2.

201. The Limitations that the Chief Engineer finds should be imposed as stated above are shown in Table 3, Column G, “Rate Limitation by Well and by Right (GPM),” attached as **Appendix H**.

202. The Cities are concerned that for one or more of the consolidated wells, they might not be able to find a suitable location for a single well within the area designated on the maps attached to the Change Applications. In addition, the Cities are concerned that more than one well may be needed or desired in the future, for example, when an original municipal well is replaced or to supplement a municipal well.

203. The Chief Engineer finds that the Cities’ aforementioned concerns are reasonable. Accordingly, to (a) allow the Cities to file future applications requesting a change in the point of diversion for one or more of the 14 consolidated municipal wells A–N; (b) allow the Cities to divert each of the annual quantities of water set out in Table 2 from more than one consolidated municipal well; and (c) otherwise provide the Cities with operational flexibility to operate the consolidated wells singly or in combination; the Chief Engineer finds that a future approval of an application to change the point of diversion of an R9 Water Right should either remove or modify, as needed, the reasonable rate Limitation discussed above and as shown in Table 3, Column G, “Rate Limitation by Well and by Right (GPM),” depending on the new reasonable rate for the new consolidated municipal well(s). Provided, however, that an R9 Water Right’s rate of diversion that has been reduced as shown in Table 3, Column E, “Rate by Well and by Right (GPM),” should not be restored to the rate of diversion as set forth in the certificate of appropriation for such R9 Water Right (i.e., Table 3, Column B, “Authorized (Certified) Rate per Irrigation Well (GPM)”).

VIII. Change in Points of Diversion

A. Municipal Wells

204. The Cities have selected 14 preliminary well sites designated as municipal wells A–N. *See* Table 2 attached as **Appendix G**. Specific well locations are more particularly described in the Change Applications and the Change Approvals. All of the previously approved irrigation wells are consolidated into one or more of the new municipal wells as shown on the map attached as **Exhibit 33** and in Table 1 attached as **Appendix B**.

205. The Cities have reviewed the existing data to formulate a plan for the diversion and transportation of water from the R9 Ranch to the Cities. Because the transfer proceedings have not yet been completed and because of the advisability of

conducting hydrologic testing as part of the design process, the Cities have not selected precise well locations at this time.

206. The well-design process may reveal that optimum well locations are more than 300 feet from the preliminary well locations set out in the Change Approvals. For these and other reasons, the Cities have requested approval to place wells within 1,000 feet of the preliminary well locations.

207. The Chief Engineer finds that the Cities' request is reasonable as long as the following applicable well-location requirements and restrictions are met:

a. None of the municipal wells may be moved more than 2,640 feet from the points of diversion authorized in the certificates of appropriation or approved changes, if any, that predate this Master Order. *See* K.A.R. 5-25-2a(a).

b. All of the municipal wells must be completed in the same local source of supply in which the currently authorized wells were authorized to be completed. *See* K.S.A. 82a-708b(a)(3).

c. All municipal wells must be more than 1,320 feet from wells that carry an earlier priority except those wells owned by the Cities. *See* K.A.R. 5-25-2(a).

d. All municipal wells must be more than 660 feet from all existing domestic wells, except those domestic wells owned by the Cities. *Id.*

e. There are ten existing irrigation wells on the west side of the R9 Ranch that are completed in the Arkansas River alluvium based on the "Alluvial Aquifer" geographic information system layer from the Kansas Data Access & Support Center. Each of the proposed municipal wells is either (a) farther from the center line of the Arkansas River than each of the ten currently authorized irrigation wells completed in the River alluvium that are being consolidated with a proposed municipal well or (b) is less than 10% closer to the center line of the Arkansas River than each of the ten currently authorized irrigation wells completed in the River alluvium that are being consolidated with a proposed municipal well. *See* K.A.R. 5-5-13. Any future changes to a point of diversion of an R9 Water Right must comply with K.A.R. 5-5-13.

B. Proximity to Existing Irrigation Wells Outside the R9 Ranch

208. The Cities have proposed prohibiting the location of any new municipal well within one-half mile of any existing irrigation well outside of the boundaries of the R9 Ranch. The excluded areas are shown in gray on **Exhibit 33**. Specifically, no new or replacement municipal well may be located within 2,640 feet of the authorized location,

as of the date the Change Applications were filed, of any well authorized by DWR File Nos. ED30; 19,522; 24,992; 29,123; 32,661; or 33,028.

C. Summary of Findings Regarding Points of Diversion

209. The Change Applications comply with K.A.R. 5-5-13.

210. The Change Applications take into account the considerations and findings described in Subsections VIII.A. and B. above, and include maps showing:

- a. the authorized irrigation well locations;
- b. a one-half mile radius buffer around each of the authorized irrigation well locations;
- c. the preliminary municipal well locations;
- d. a 1,000-foot buffer around the preliminary municipal well locations;

and

- e. the proposed areal restrictions around the preliminary municipal well locations where such wells are authorized to be drilled without filing an application to change the point of diversion (which areal restrictions are shown separately in purple and in cross-hatching on the maps attached to the Change Applications).

211. The Chief Engineer finds that the preliminary municipal well locations set out in the Change Applications, including the areal restrictions around the preliminary municipal well locations as shown on the maps attached to the Change Applications, meet the foregoing considerations and findings, are reasonable, and should be contingently approved as provided herein.

212. The Chief Engineer finds that the requested changes in points of diversion are reasonable, will not impair existing rights, and relate to the same local source of supply as that to which the R9 Water Rights relate. *See* K.S.A. 82a-708b(a).

IX. Local Source of Supply

213. The Chief Engineer finds that the local sources of supply for each of the points of diversion listed in the R9 Water Rights' certificates of appropriation or approved changes, if any, that predate this Master Order, should be and are retained.

214. The Chief Engineer finds that regarding future applications that seek to increase the number of points of diversion for municipal use for one or more of the R9 Water Rights, any of such new points of diversion will relate to the same local source of supply as required by K.S.A. 82a-708b as long as they are within the local source of

supply for the points of diversion in the appropriate certificate of appropriation for such R9 Water Right.

215. The Chief Engineer finds that a new or replacement municipal well approved pursuant to a future application that seeks to increase the number of points of diversion for municipal use for one or more of the R9 Water Rights will not result in an “additional well” under K.A.R. 5-5-16; provided that the number of wells does not exceed the total number of wells in the relevant certificate of appropriation for such R9 Water Right, and that the proposed well or wells relate to the same local source of supply as to which the original R9 Water Right relates. *See Appendix H: Table 3, columns H and I, for potential future changes allowed.*

216. The aforementioned findings are intended to and will allow the Cities to file applications that, if otherwise approvable, will change a point of diversion to allow any of the 14 consolidated municipal wells to be divided into more than one point of diversion.

X. Monitoring and Reporting Requirements

217. For the future assessment and administration of the R9 Water Rights and to ensure compliance with this Master Order, the Chief Engineer finds that it is necessary to require additional annual water monitoring and reporting by the Cities regarding the R9 Water Rights, beyond what is normally required for annual water use reports under K.S.A. 82a-732.

218. Furthermore, the Chief Engineer finds that GMD5’s expressed concern for the Cities’ monitoring and reporting of water quality, in addition to water quantity, is a valid concern. In response to this concern, the Cities voluntarily amended their monitoring plan for the R9 Ranch to include an appropriate water-quality monitoring component. *See the Water Level & Water Quality Monitoring Plan for the R9 Ranch, February 2019, attached as Exhibit 34.* The Chief Engineer finds that such amended plan adequately addresses water quality monitoring concerns.

219. Accordingly, the Chief Engineer finds that the Cities should comply with the monitoring and reporting requirements ordered below in Section XX.

ORDER

220. The DEFINITIONS, the GENERAL APPLICABLE LAW, and the MIXED FINDINGS OF FACT AND CONCLUSIONS OF LAW are incorporated in this ORDER section by reference.

221. After careful review of the Change Applications filed by the Cities in anticipation of a water transfer, careful consideration of the comments received from GMD5 and the public as discussed above in Subsection I.C., and pursuant to K.S.A. 82a-708b, K.A.R. 5-5-9 (1994 version), K.A.R. 5-50-2(x), and K.A.R. 5-50-7, the Chief Engineer orders that the Change Applications are hereby contingently approved, as set forth in the various Change Approvals attached as **Exhibits 1–32**, for the reasons and on the terms and conditions set out therein and in this Master Order.

XI. Beneficial Use

222. The requested change of the R9 Water Rights from irrigation to municipal use is reasonable and the change is contingently approved as provided herein.

223. All water from the Project purchased by industrial users and diverted through the common distribution system will be deemed municipal use.

XII. Quantities for Municipal Use (consumptive use determination)

224. The Chief Engineer approves the Change Applications and thus approves a total of 6,756.8 acre-feet of water for municipal use per calendar year for the combined R9 Water Rights, in the individual yearly quantities set out in Table 1 attached as **Appendix B** and in the various Change Approvals attached as **Exhibits 1–32** and incorporated herein. As provided below and in the various Change Approvals, these authorized quantities are subject to the TYRA Limitation and the Reasonable-Need Limitations.

XIII. Limitations on Quantities for Municipal Use

A. TYRA Limitation

225. The authorized quantities of water for municipal use approved in Section XII. above are subject to the TYRA Limitation on the combined R9 Water Rights based on the factors considered in Subsection IV.A. above, including the model results that estimated the long-term yield from the R9 Water Rights.

226. Accordingly, the total quantity of water that may be diverted for municipal use from the combined R9 Water Rights may not exceed the TYRA Limitation of 48,000 acre-feet of water during any, each, and every ten consecutive calendar years.

227. The TYRA Limitation is imposed for the exclusive benefit of the public as a whole and not for the benefit of any other water right, person, or entity. Because the TYRA Limitation is not for the benefit of any other water right, person, or entity, it does not confer any benefits or create any rights in any third party.

228. The TYRA Limitation does not amount to a Limitation on the quantity of water that may be diverted for municipal use from additional sources that might be developed in the future via acquisition and conversion of other water rights, applications for new water appropriation rights, or some form of augmentation from sources outside the current boundaries of the R9 Ranch.

229. Pursuant to a City's request, the Chief Engineer may increase the quantity of water that can be diverted under the TYRA Limitation if such a request is in writing, with notice to both DWR and GMD5, and the City demonstrates to the Chief Engineer's reasonable satisfaction that the request (1) is based on a new estimate from a groundwater model, which estimate and model are supported by data and/or methods demonstrated to be comparable or superior to the methods used for the estimate in the model approved by the Chief Engineer in this Master Order; and (2) provides a new estimate of the yield that is larger than estimated in the model approved by the Chief Engineer in this Master Order.

230. Prior to deciding whether to approve any such requested increase of the TYRA Limitation, the Chief Engineer shall hold a public hearing or hearings on the specific question of whether the City has demonstrated the above requirements to the Chief Engineer's reasonable satisfaction.

B. Reasonable-Need Limitations

a. Imposition of Reasonable-Need Limitations

231. Pursuant to the method provided below in Subsection XIII.B.b., the Reasonable-Need Limitation initially imposed on Hays is as follows: the maximum reasonable annual quantity of water for municipal use by Hays, for all of the R9 Water Rights when combined with all other municipal water rights for which Hays or its immediate vicinity, as well as related areas in the Northeast Quarter (NE/4) of Section 19 and the Northwest Quarter (NW/4) of Section 36, in Township 13 South, Range 18 West, Ellis County, Kansas, is the place of use, is 5,670.23 acre-feet of water.

232. Pursuant to the method provided below in Subsection XIII.B.b., the Reasonable-Need Limitation initially imposed on Russell is as follows: the maximum reasonable annual quantity of water for municipal use by Russell, for all of the R9 Water Rights when combined with all other municipal water rights for which Russell or its immediate vicinity is the place of use, is 1,841.3 acre-feet of water.

233. The particular calculations for the aforementioned initial Reasonable-Need Limitations are shown on **Appendices D** and **E**, respectively. Per the calculation method set forth below, only municipalities with populations that exceed 500 people in the appropriate Region were considered and are depicted in such appendices.

234. Upon a City's providing the Chief Engineer with written notice along with the appropriate supporting documentation referenced below in Subsection XIII.B.b., the Reasonable-Need Limitation for that City will increase any time the method set out below in Subsection XIII.B.b. results in a greater quantity for such City.

235. The quantities allocated to the Cities by the Reasonable-Need Limitations can be increased but not decreased.

236. Each City is responsible for compliance with its own applicable Reasonable-Need Limitation.

b. Method to Establish Reasonable-Need Limitations

237. The Reasonable-Need Limitation for each City will be based on an assumed growth rate of 2% per year for ten years. This ten-year period begins on January 1 following the submission of the appropriate supporting documentation to the Chief Engineer.

238. The Reasonable-Need Limitation for each City will be determined as follows:

a. The product of:

i. the 5-year average daily per capita municipal use by municipalities with populations that exceed 500 people in the appropriate Region (Region Five for Hays and Region Six for Russell) using the most recently published USGS data (or if such data is no longer published by USGS, its substantially equivalent data from DWR) available when the Cities submit the appropriate supporting documentation to the Chief Engineer;

ii. 365.25 days;

iii. $(1 + 0.02)^{10}$; and

iv. the actual or estimated U.S. Census population for the City, as determined by the U.S. Census Bureau.

b. Plus each of the following, to the extent not otherwise included in the 5-year average daily per capita municipal use referred to above in subparagraph a.i., and as supported with appropriate documentation to the Chief Engineer's reasonable satisfaction:

i. water sold by the City to industrial, stock, and bulk customers;

ii. water sold by the City to other public water suppliers;

- iii. other metered water;
- iv. other unmetered water; and
- v. Treatment Losses.

XIV. Summary of Quantities for Municipal Use, and Limitations Thereon

239. Given the approvals made and the Limitations imposed in this Master Order, the total quantity of water that may be diverted during any one calendar year from all of the R9 Water Rights combined shall be, effectively, the lowest of:

- a. 6,756.8 acre-feet of water to be diverted for municipal use;
- b. the amount for that year that complies with the TYRA Limitation; and
- c. the combined Reasonable-Need Limitations as determined above in Subsection XIII.B.

XV. Treatment Losses

240. The reasonable quantity of water that may be diverted from the R9 Ranch for municipal use must include a reasonable quantity of water for Treatment Losses, if any.

241. All water from the R9 Water Rights must be metered at the wellhead, as it leaves the pump station, and as it is delivered to any user. In addition, all Treatment Losses, if any, must be accurately quantified and reported as required by K.S.A. 82a-732.

XVI. Places of Use

242. The authorized places of use for the R9 Water Rights, as contingently changed by this Master Order from irrigation to municipal use, are such places that are described in **Appendix F**.

XVII. Rates of Diversion

243. For the reasons discussed above in Sections VII. and VIII., the quantities from multiple R9 Water Rights and multiple wells, which quantities are available after conversion from irrigation to municipal use, are consolidated into 14 consolidated municipal wells (consolidated municipal wells A through N) with approved consolidated rates as set out in Table 3 attached as **Appendix H**.

244. Limitations are imposed on the rates of diversion for some of the R9 Water Rights such that when wells from multiple R9 Water Rights are consolidated, the rate of

diversion under the junior priority R9 Water Right(s) is limited when combined with a senior priority R9 Water Right(s), as shown in Table 3, Column G, “Rate Limitation by Well and by Right (GPM),” and as provided in each individual Change Approval; provided, however, and subject to priority of right during any water right administration, each R9 Water Right that is combined into a common point of diversion will be deemed to operate simultaneously at up to the rates set out in Table 2.

245. A future approval of an application to change the point of diversion of an R9 Water Right either will remove or modify, as needed, the reasonable rate Limitation discussed above and shown in Table 3, Column G, “Rate Limitation by Well and by Right (GPM),” and as provided in the particular individual Change Approval, depending on the new reasonable rate for the new consolidated municipal well(s). Provided, however, that an R9 Water Right’s rate of diversion that has been reduced as shown in Table 3, Column E, “Rate by Well and by Right (GPM),” should not be restored to the rate of diversion as set forth in the certificate of appropriation for such R9 Water Right (i.e., Table 3, Column B, “Authorized (Certified) Rate per Irrigation Well”).

XVIII. Points of Diversion

246. As more fully discussed above in Sections VII. and VIII., the 14 preliminary municipal well locations shown in **Exhibit 33**, in Table 1 attached as **Appendix B**, and in the Change Applications, including the areal restrictions (shown in purple and in cross-hatching) around the preliminary municipal well locations as shown on the maps attached to the Change Applications, are reasonable and are approved. The proposed municipal wells A–N are authorized to be drilled within those areas without filing an application to change the point of diversion.

247. The approved well locations comply with the following requirements:

- a. None of the municipal wells may be moved more than 2,640 feet from the currently authorized points of diversion. *See* K.A.R. 5-25-2a(a).
- b. All of the municipal wells must be completed in the same local source of supply in which the currently authorized wells were authorized to be completed, as provided below in Section XVII. *See* K.S.A. 82a-708b(a)(3).
- c. All municipal wells must be more than 1,320 feet from wells that carry an earlier priority except those wells owned by the Cities. *See* K.A.R. 5-25-2(a).
- d. All municipal wells must be more than 660 feet from all existing domestic wells, except those domestic wells owned by the Cities. *Id.*

e. There are ten existing irrigation wells on the west side of the R9 Ranch that are completed in the Arkansas River alluvium based on the “Alluvial Aquifer” geographic information system layer from the Kansas Data Access & Support Center. Each of the proposed municipal wells is either (a) farther from the center line of the Arkansas River than each of the ten currently authorized irrigation wells completed in the River alluvium that are being consolidated with a proposed municipal well or (b) is less than 10% closer to the center line of the Arkansas River than each of the ten currently authorized irrigation wells completed in the River alluvium that are being consolidated with a proposed municipal well. *See* K.A.R. 5-5-13. Any future changes to a point of diversion of an R9 Water Right must comply with K.A.R. 5-5-13.

XIX. Local Source of Supply

248. The local sources of supply for each of the points of diversion listed in the R9 Water Rights’ certificates of appropriation or approved changes, if any, that predate this Master Order, are retained so that any point of diversion approved in the future (pursuant to future applications that seek replacement wells, to increase the number of points of diversion for municipal use for one or more of the R9 Water Rights, or both) will be deemed to relate to the same local source of supply, as required by K.S.A. 82a-708b, provided that any such future approved point of diversion is within the same local source of supply as the point(s) of diversion in the appropriate R9 Water Right’s certificate of appropriation or approved changes, if any, that predate this Master Order.

249. Any new or replacement municipal well approved pursuant to a future application that seeks to increase the number of points of diversion for municipal use for one or more of the R9 Water Rights will not constitute an “additional well” under K.A.R. 5-5-16; provided that the number of wells does not exceed the total number of wells in the relevant certificate of appropriation for such R9 Water Right.

XX. Monitoring and Reporting Requirements

250. In addition to providing normal annual water use reports under K.S.A. 82a-732 for each R9 Water right, the Cities also shall submit, no later than March 1 following the end of each calendar year after this Master Order becomes effective as provided in Section XXI below:

- a. an annual municipal water use report dedicated solely to water use from the R9 Ranch, on the form attached hereto as **Appendix I**, which form DWR may amend from time to time; and
- b. an annual progress report regarding the R9 Water Rights that:

- i. provides the annual and total diversion amounts for each authorized R9 Water Right point of diversion for the previous 10 years; provides the total diversion amount from all R9 Water Rights for the previous 10 years; and otherwise demonstrates compliance with the TYRA Limitation; and
- ii. demonstrates compliance with the Water Level & Water Quality Monitoring Plan for the R9 Ranch, February 2019, attached as **Exhibit 34**, which plan may not be amended without prior written approval of the Chief Engineer.

251. Furthermore, each City shall submit, no later than March 1 following the end of each calendar year, unless extended in writing by the Chief Engineer, a report that demonstrates that City's own compliance with that City's Reasonable-Need Limitation.

252. Each City shall provide such other documentation that the Chief Engineer, with sufficient advance notice, may reasonably request of that City so that the Chief Engineer may determine that City's compliance with the conditions herein.

XXI. Effective Date and Expiration Date

253. The Cities filed the Change Applications in anticipation of a water transfer pursuant to K.S.A. 82a-1501, *et seq.*, and K.A.R. 5-50-1, *et seq.* Pursuant to K.A.R. 5-50-2(x) and K.A.R. 5-50-7, the terms and conditions of this Master Order (including its incorporated Change Approvals) remain contingent and conditioned upon, and will not become effective unless and until, such time as when both of the following may have occurred:

- a. the transfer panel issues a Transfer Order approving a transfer of water pursuant to the Kansas Water Transfer Act, K.S.A. 82a-1501, *et seq.*, and the Transfer Order becomes a final, non-appealable order under the KAPA and the KJRA; and

- b. DWR receives written notice from Hays that Hays has entered into a written construction contract to drill one or more of the 14 proposed municipal wells (excluding test drilling) for the Project, which notice, along with a copy of the contract, Hays must provide to DWR within thirty (30) business days after the contract is fully executed.

254. If by December 31, 2029, or any authorized extension thereof granted by the Chief Engineer in writing and for good cause shown, either of the following has occurred, then as of the date of such occurrence, this Master Order (including its incorporated Change Approvals) shall expire and be null and void and of no further

force or effect and the R9 Water Rights shall retain the characteristics set out in their respective certificates of appropriation and approved changes, if any, that predate the issuance of this Master Order:

- a. this Master Order has not become effective under the preceding paragraph; or
- b. the Cities have abandoned the Project by providing the Chief Engineer with a duly authorized Resolution by the Hays City Commission and a duly authorized Resolution by the Russell City Council.

XXII. Petition for Administrative Review

255. Any person who is aggrieved by this Master Order may file a petition for administrative review by the Secretary pursuant to K.S.A. 82a-708b, K.S.A. 2016 Supp. 82a-1901, and K.S.A. 77-527. K.S.A. 2016 Supp. 82a-1901 applies because the proceeding regarding this matter began before the 2017 amendments became effective.

256. A petition for administrative review by the Secretary must include a statement of its basis as provided in K.S.A. 77-527(c).

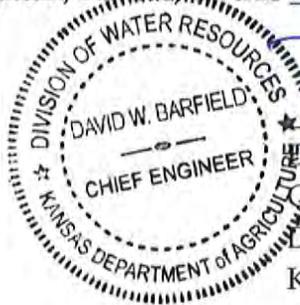
257. This Master Order and its incorporated Change Approvals will become final orders, without further notice, unless a petition for administrative review by the Secretary pursuant to K.S.A. 82a-708b, K.S.A. 2016 Supp. 82a-1901, and K.S.A. 77-527 is filed within 15 days after the date of service shown on the Certificate of Service.

258. Any request for administrative review by the Secretary must be in writing and submitted to the attention of:

Chief Legal Counsel,
Kansas Department of Agriculture,
1320 Research Park Drive,
Manhattan, Kansas 66502,
Fax: (785) 564-6777,

with copies to those shown in the Certificate of Service.

Dated at Manhattan, Kansas, on this 27 day of March, 2019.



David W Barfield
David W. Barfield, P.E.
Chief Engineer
Division of Water Resources
Kansas Department of Agriculture

ACKNOWLEDGMENT

State of Kansas)
) SS
County of Shawnee)

The foregoing MASTER ORDER CONTINGENTLY APPROVING CHANGE APPLICATIONS REGARDING R9 WATER RIGHTS was acknowledged before me on this 27 day of March, 2019, by David W. Barfield, P.E., Chief Engineer, Division of Water Resources, Kansas Department of Agriculture.



Karen Hunter
Notary Public

CERTIFICATE OF SERVICE

On this 28 day of March, 2019, I hereby certify that this MASTER ORDER CONTINGENTLY APPROVING CHANGE APPLICATIONS REGARDING R9 WATER RIGHTS was mailed postage prepaid, first class, U.S. mail to the following:

Toby Dougherty, City Manager
CITY OF HAYS
City Hall, 16th & Main
P.O. Box 490
Hays, KS 67601

Jon Quinday, City Manager
CITY OF RUSSELL
133 W. 8th Street
P.O. Box 112
Russell, KS 67665

David M. Traster
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1551 N. Waterfront Parkway, Suite 100
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9225 Indian Creek Parkway, Suite 600
Overland Park, Kansas 66210

John T. Bird
Todd Powell
GLASSMAN BIRD AND POWELL, LLP
Attn: Attorneys for the City of Hays, Kansas
200 West Thirteenth Street
Hays, KS 67601-0727

Kenneth L. Cole
WOELK & COLE
4 S. Kansas St.
P.O. Box 431
Russell, KS 67665-0431

Stafford Field Office
Stockton Field Office
Big Bend Groundwater Management District No. 5


KDA Staff

Appendix A: Legal Description of the R9 Ranch

(Note that the R9 Ranch is visually depicted on the map attached to the Master Order as **Exhibit 33.**)

PARCEL #1

Lots 5, 6 and 7, in Section 36, Township 25 South, Range 20 West of the Sixth Principal Meridian, Edwards County, Kansas, and lying east of the Arkansas River.

PARCEL #2

All of Section 15, Township 26 South, Range 20 West of the Sixth Principal Meridian, Edwards County, Kansas.

PARCEL #3

The Northwest Quarter of Section 14, Township 26 South, Range 20 West of the Sixth Principal Meridian, Edwards County, Kansas.

PARCEL #4

All of Section 11, Township 26 South, Range 20 West of the sixth Principal Meridian, Edwards County, Kansas.

PARCEL #5

Lots 4, 5, 6, and 7 and the Southeast Quarter of the Southwest Quarter and the Southeast Quarter of Section 10, Township 26 South, Range 20 West of the Sixth Principal Meridian, Edwards County, Kansas.

PARCEL #6

Lots 7, 8, 9, and 10 and the East Half of the Southeast Quarter, and the Southwest Quarter of the Southeast Quarter of Section 2, EXCEPT 20 ACRES, more or less, in Section 2 described as follows:

Commencing at the Southeast corner of Section 2, Township 26 South, Range 20 West of the Sixth Principal Meridian, Edwards County, Kansas; thence North 1,914.77 feet; thence West at right angles 2,539.63 feet; thence Northwesterly on an angle of 59 degrees 48'45" a distance of 63.6 feet for a place of beginning; thence in a Northeasterly direction at an angle of 65 degrees a distance of 2,314.63 feet; thence Westerly to the bank of the Arkansas River; thence Southwesterly along the bank of the Arkansas River to the place of beginning.

PARCEL #7

All of Section 1, Township 26 South, Range 20 West of the Sixth Principal Meridian, Edwards County, Kansas.

PARCEL #8

All of Section 32, Township 25 South, Range 19 West of the Sixth Principal Meridian, Edwards County, Kansas.

PARCEL #9

All of Section 31, Township 25 South, Range 19 West of the Sixth Principal Meridian, Edwards County, Kansas; except a 40-acre tract described as: Southwest Quarter of the Southeast Quarter (SW/4 SE/4) of Section 31, Township 25 South, Range 19 West.

PARCEL #10

That part of the West Half of Section 30, Township 25 South, Range 19 West of the Sixth Principal Meridian, Edwards County, Kansas, lying East of the Arkansas River.

PARCEL #11

All of Section 29, Township 25 South, Range 19 West of the Sixth Principal Meridian, Edwards County, Kansas.

PARCEL #12

All of Section 5, Township 26 South, Range 19 West of the Sixth Principal Meridian, Edwards County, Kansas.

PARCEL #13

Lots 1 and 2 and the South half of the North Half and the Southwest Quarter of Section 4, Township 26 South, Range 19 West of the Sixth Principal Meridian, Edwards County, Kansas.

PARCEL #14

The Southwest Quarter and the Southwest Quarter of the Southeast Quarter of Section 33, Township 25 South, Range 19 West of the Sixth Principal Meridian, Edwards County, Kansas.

**Appendix B:
Table 1**

Table 1 (comprising several pages)							
DWR File No.	Circle No.	Well Location	Section, Township & Range	Crop	Acre Feet Converted from Irrigation to Municipal Use by Water Right (authorized quantity after change)	Acre Feet Converted from Irrigation to Municipal Use By Well	New Well Location (see Exhibit 33)
21,729-D1	8	NC NW/4	Sec.29-T25S-R19W	Alfalfa		86.0	A
		NE/4 SW/4 NW/4	Sec.29-T25S-R19W			102.0	A
	9	NC NE/4	Sec.29-T25S-R19W	Alfalfa		188.0	A
21,729-D1 Totals					376.0		
21,729-D2	7	NC SW/4	Sec.29-T25S-R19W	Alfalfa		74.0	A
		NE/4 SW/4 SW/4	Sec.29-T25S-R19W			114.0	A
	10	NC SE/4	Sec.29-T25S-R19W	Alfalfa		188.0	A
21,729-D2 Totals					376.0		
21,730	1	NW/4 NE/4 SW/4	Sec.30-T25S-R19W	Alfalfa	176.0	176.0	G

**Table 1
(comprising several pages)**

DWR File No.	Circle No.	Well Location	Section, Township & Range	Crop	Acre Feet Converted from Irrigation to Municipal Use by Water Right (authorized quantity after change)	Acre Feet Converted from Irrigation to Municipal Use By Well	New Well Location (see Exhibit 33)
21,731	2	SW/4 SE/4 SW/4	Sec.30-T25S-R19W	Alfalfa		80.0	G
		NW/4 NE/4 NW/4	Sec.31-T25S-R19W			192.0	
	3	NW/4 NE/4 SW/4	Sec.31-T25S-R19W	Alfalfa		177.0	H
		NC W side NE/4 SW/4	Sec.31-T25S-R19W			126.0	
	4	SW/4 NW/4 SW/4	Sec.32-T25S-R19W	Alfalfa		87.0	H
		SE/4 NE/4 SE/4	Sec.31-T25S-R19W			56.0	
	5	NC NE/4	Sec.31-T25S-R19W	Alfalfa		162.0	H
21,731 Totals					800.0		
21,732-D1	6	NC NW/4	Sec.32-T25S-R19W	Alfalfa		188.0	B
	11	NC NE/4	Sec.32-T25S-R19W	Alfalfa		165.0	B
21,732-D1 Totals					353.0		
21,732-D2	12	NC S/2	Sec.32-T25S-R19W	Alfalfa	240.0	240.0	B
21,733	13	SW/4 NW/4 SW/4	Sec.33-T25S-R19W	Alfalfa	189.0	189.0	C

**Table 1
(comprising several pages)**

DWR File No.	Circle No.	Well Location	Section, Township & Range	Crop	Acre Feet Converted from Irrigation to Municipal Use by Water Right (authorized quantity after change)	Acre Feet Converted from Irrigation to Municipal Use By Well	New Well Location (see Exhibit 33)
21,734	14	Lot 3	Sec.5-T26S-R19W	Alfalfa		290.9	D
	15	NW/4 NE/4 SW/4	Sec.5-T26S-R19W	Corn		170.2	D
	16	NE/4 SW/4 SE/4	Sec.5-T26S-R19W	Corn		121.0	E
	17	Lot 2	Sec.5-T26S-R19W	Corn		130.2	D
	18	Lot 1	Sec.5-T26S-R19W	Alfalfa		176.8	C
21,734 Totals					889.1		
21,841	8A	NC Lots 1 & 2	Sec.4-T26S-R19W	Alfalfa	195.0	195.0	F
21,842	11A	NC SW/4	Sec.4-T26S-R19W	Alfalfa	195.0	195.0	E
22,325	19	Lot 1	Sec.1-T26S-R20W	Alfalfa	186.0	186.0	I
		Lot 2	Sec.1-T26S-R20W				
22,326	20	Lot 3 (Well A)	Sec.1-T26S-R20W	Corn	188	188	I
		Lot 3 (Well B)	Sec.1-T26S-R20W				
22,327	21	NC NE/4	Sec.1-T26S-R20W	Corn	145.8	145.8	I
		Lot 2	Sec.1-T26S-R20W				
22,329	24	NC SW/4	Sec.1-T26S-R20W	Corn	75.0	75.0	J
22,330	25	NC SE/4	Sec.1-T26S-R20W	Corn	75.0	75.0	J

**Table 1
(comprising several pages)**

DWR File No.	Circle No.	Well Location	Section, Township & Range	Crop	Acre Feet Converted from Irrigation to Municipal Use by Water Right (authorized quantity after change)	Acre Feet Converted from Irrigation to Municipal Use By Well	New Well Location (see Exhibit 33)
22,331	22	NC SW/4 NW/4	Sec.1-T26S-R20W	Alfalfa	180.0	180.0	J
		Lot 9	Sec.2-T26S-R20W				
22,332	23	NC SE/4	Sec.2-T26S-R20W	Corn	135.0	135.0	J
		NC E/2 SE/4	Sec.2-T26S-R20W				
22,333	39	SE/4 SE/4 SW/4	Sec.2-T26S-R20W	Alfalfa	50.0	50.0	K
22,334	27	NC NE/4	Sec.11-T26S-R20W	Corn	136.1	136.1	K
		NC N/2 NE/4	Sec.11-T26S-R20W				
22,335	26	NC NW/4	Sec. 11-T26S-R20W	Corn	142.6	142.6	K
		NC E/2 NW/4	Sec. 11-T26S-R19W				
22,338	28	Lot 7	Sec.10-T26S-R20W	Corn	116.6	116.6	L
		Lot 7	Sec.10-T26S-R20W				
22,339	29	Lot 5	Sec.10-T26S-R20W	Corn	118.8	118.8	L
22,340	31	NW/4 SE/4 SE/4	Sec.10-T26S-R20W	Corn	116.6	116.6	M
22,341	30	NW/4 NE/4 NW/4	Sec. 15-T26S-R20W	Alfalfa	188.0	188.0	M
22,342	36	NW/4 SW/4 NW/4	Sec. 14-T26S-R20W	Corn	75.0	75.0	M
22,343	35	NE/4 SW/4 NE/4	Sec. 15-T26S-R20W	Corn	122.0	122.0	N

Table 1
(comprising several pages)

DWR File No.	Circle No.	Well Location	Section, Township & Range	Crop	Acre Feet Converted from Irrigation to Municipal Use by Water Right (authorized quantity after change)	Acre Feet Converted from Irrigation to Municipal Use By Well	New Well Location (see Exhibit 33)
22,345	38	NC SE/4	Sec. 15-T26S-R20W	Alfalfa	159.0	159.0	N
22,346	37	SW/4 NE/4 SW/4	Sec. 15-T26S-R20W	Corn	140.4	140.4	N
27,760	32	NC SW/4	Sec. 11-T26S-R20W	Corn		142.5	L
	33	NC SE/4	Sec. 11-T26S-R20W	Corn		142.6	K
		NE/4 SW/4 SE/4	Sec. 11-T26S-R20W				
27,760 Totals					285.1		
29,816	9A	NC N/2 S/2 NE/4	Sec. 4-T26S-R19W	Alfalfa		90.0	F
	10A	NC S/2 NW/4	Sec. 4-T26S-R19W	Alfalfa		98.0	E
29,816 Totals					188.0		
30,083	36	NC E/2 W/2 NW/4	Sec. 14-T26S-R20W	Corn	69.7	69.7	M
30,084	24 & 25	NC S/2	Sec.1-T26S-R20W		75.0	75.0	J
DWR File No. Total					6,756.8		

Appendix C:
K.A.R. 5-5-9 (1994 version)

K.A.R. 5-5-9. Criteria for the approval of an application for a change in the use made of water from irrigation to any other type of beneficial use of water.

(a) The approval of a change in the use made of water from irrigation to any other type of beneficial use shall not be approved if it will cause the net consumptive use from the local source of water supply to be greater than the net consumptive use from the same local source of water supply by the original irrigation use based on the following criteria:

(1) The maximum annual quantity of water to be allowed by the change approval shall be the net irrigation requirement (NIR) for the 50% chance rainfall for the county of origin, as set forth in K.A.R. 5-5-12, multiplied by the maximum acreage legally irrigated under the authority of the water right in any one calendar year during the perfection period. For vested rights, the acreage used shall be the maximum acreage irrigated prior to June 28, 1945; or

(2) if the applicant establishes to the satisfaction of the chief engineer the need for more flexibility in the authorized annual quantity, the application may be approved subject to the following limits.

(A) The maximum annual quantity of water to be allowed by the change approval shall be the NIR for the 80% chance rainfall for the county of origin, as set forth in K.A.R. 5-5-12, multiplied by the maximum acreage legally irrigated in any one calendar year during the perfection period. For vested rights the acreage used shall be the maximum acreage irrigated prior to June 28, 1945.

(B) The new type of beneficial use shall be further limited by a five year fixed allocation of water in which the NIR for a 50% chance rainfall for the county of origin, as set forth in K.A.R. 5-5-12, is multiplied by five times the maximum acreage lawfully irrigated in any one calendar year during the perfection period. For vested rights, the acreage used shall be the maximum acreage irrigated prior to June 28, 1945.

(C) An application for a term permit which will circumvent the five year allocation of water limit shall not be approved by the chief engineer.

(3) In determining whether the net consumptive use of water will be increased by the proposed change in the use made of water, the applicant shall be given credit by the chief engineer for any return flows from the proposed type of beneficial use which will return to the same local source of supply as the return flows from the originally authorized type of beneficial use as substantiated by the applicant to the satisfaction of the chief engineer by an engineering report or similar type of hydrologic analysis.

(4) The authorized quantity to be changed to the new type of beneficial use shall never exceed the maximum annual quantity authorized by the water right.

(5) If a water right which overlaps the authorized place of use of one or more other water rights, either in whole or in part, is being changed to a different type of beneficial use, the total net consumptive use of all water rights after the change is approved shall not exceed the total net consumptive use of all of the rights before the change is approved.

(6) The approval for a change in the use made of water shall also be limited by that quantity reasonable for the use proposed by the change in the use made of water.

(b) Upon request of the applicant, the historic net consumptive use actually made during the perfection period, or prior to June 28, 1945 in the case of vested rights, under the water right proposed to be changed shall be considered by the chief engineer, but the burden shall be on the owner to document that historic net consumptive use with an engineering study, or an equivalent documentation and analysis, and demonstrate to the satisfaction of the chief engineer that the analysis submitted by the applicant is a more accurate estimate of the historic net consumptive use than the net consumptive use calculated using the methodology set forth in paragraph (a)(1).

(c) If the methods set forth in subsection (a) produce an authorized annual quantity of water which appears to be unrealistic and could result in impairment of other water rights, the chief engineer shall make a site-specific net consumptive use analysis to determine the quantity of water which was actually beneficially consumed under the water right. The quantity approved shall be limited to the quantity determined to be reasonable by the chief engineer's analysis. (Authorized by K.S.A. 82a-706a; implementing K.S.A. 1993 Supp. 82a-708b; effective Nov. 28, 1994.)

Appendix D: Calculation of Hays' Reasonable-Need Limitation

The following calculation illustrates the result of the formula in Master Order Subsection XIII.B.b., "Method to Establish Reasonable-Need Limitations," as applied to Hays.

Region 5 Hays, Kansas	2012-2021 Reasonable Need	2022-2031 Reasonable Need	2032-2041 Reasonable Need
Hays' 2016 U.S. Census Bureau Estimated Population (Used for the initial Reasonable-Need Limitation calculation only.)	21,027		
2% growth multiplier for 4 years (1.02 ⁴) (Used for the initial Reasonable-Need Limitation calculation only.)	1.0824322		
2% growth multiplier for 10 years (1.02 ¹⁰)		1.2189944	1.2189944
Hays' Assumed Population (Based on 2% growth over 10 years.)		22,760	27,744
Hays' Estimated End-of-Decade Population (Starting point for the Reasonable-Need Limitation calculation and the starting point for the End-of-Decade population for the next decade.)	22,760 (Based on 2% growth over 4 years for the initial Reasonable-Need Limitation calculation only.)	27,744 (Based on 2% growth over 10 years.)	33,820 (Based on 2% growth over 10 years.)
Region 5 Average per capita water use in gallons, 2011-2015, for Cities with populations above 500	149.57	149.57	149.57
Days per year	365.25	365.25	365.25
Gallons	1,243,417,192.6	1,515,718,619.5	1,847,652,539.5
Gallons per Acre-Foot	325,851.4	325,851.4	325,851.4
Acre-Feet	3,815.9	4,651.6	5,670.2

Water sold by the City to industrial, stock, and bulk customers	Quantities in these categories are only added to the extent not otherwise included in the 5-year average daily per capita municipal use. No additional quantities for Hays are included at this time.		
Water sold by the City to other public water suppliers			
Other metered water			
Other unmetered water			
Treatment losses			
Calculated Reasonable Need	3,815.90	4,651.56	5,670.23

Public Water Supplier	2010 Census	Region	2011 GPCD	2012 GPCD	2013 GPCD	2014 GPCD	2015 GPCD	AVG GPCD
Hays	20510	5	99	102	88	81	88	92
Larned	4054	5	225	218	179	171	167	192
Phillipsburg	2581	5	139	168	141	147	177	154
Ellis	2062	5	101	109	75	72	75	86
Plainville	1903	5	149	139	118	110	126	128
Kinsley	1457	5	126	127	123	125	117	124
La Crosse	1342	5	145	159	138	112	106	132
Stockton	1329	5	115	121	114	120	116	117
Victoria	1214	5	110	113	84	58	55	84
Coldwater	828	5	226	235	255	167	177	212
Greensburg	777	5	309	362	269	233	242	283
Haviland	701	5	174	189	134	136	127	152
Logan	589	5	174	197	144	115	144	155
Protection	514	5	196	192	176	164	187	183

Appendix E:
Calculation of Russell’s Reasonable-Need Limitation

The following calculation illustrates the result of the formula in Master Order Subsection XIII.B.b., “Method to Establish Reasonable-Need Limitations,” as applied to Russell. As of the issuance of this Master Order, however, Russell’s existing water rights with sources in the Smoky Hill River Basin are subject to a Limitation such that the total water used cannot exceed 1,841.3 acre-feet per calendar year. Accordingly, the Master Order provides that Russell’s Reasonable-Need Limitation is 1,841.3 acre-feet of water per calendar year instead of the lower value shown in the table below and that otherwise would apply.

Region 6, Russell, KS	2012-2021 Reasonable Need	2022-2031 Reasonable Need	2032-2041 Reasonable Need
Russell’s 2016 Estimated Population (Used for the initial Reasonable-Need Limitation calculation only.)	4,506		
2% growth multiplier for 4 years (1.02^4) (Used for the initial Reasonable-Need Limitation calculation only.)	1.0824322		
2% growth multiplier for 10 years (1.02^10)		1.2189944	1.2189944
Russell’s Assumed Population (Based on 2% growth over 10 years.)		4,877	5,945
Russell’s Estimated End-of-Decade Population (Starting point for the Reasonable-Need Limitation calculation and the starting point for the End-of-Decade population for the next decade.)	4,877 (Based on 2% growth over 4 years for the initial Reasonable-Need Limitation calculation only.)	5,945 (Based on 2% growth over 10 years.)	7,247 (Based on 2% growth over 10 years.)
Region 6 Average per capita water use in gallons, 2011-2015, for Cities with populations above 500	137.25	137.25	137.25

Days per year	365.25	365.25	365.25
Gallons	244,508,776	298,054,834	363,327,179
Gallons per Acre-Foot	325,851.4	325,851.4	325,851.4
Acre-Feet	750.4	914.7	1,115.0
Water sold by the City to industrial, stock, and bulk customers	700	700	700
Water sold by the City to other public water suppliers	Quantities in these categories are only added to the extent not otherwise included in the 5-year average daily per capita municipal use. Other than water sold to industrial, stock, and bulk customers listed above, no additional quantities for Russell are included at this time.		
Other metered water			
Other unmetered water			
Treatment losses			
Calculated Reasonable Need	1,450.37	1,614.70	1,815.01

Public Water Supplier	2010 Census	Region	2011 GPCD	2012 GPCD	2013 GPCD	2014 GPCD	2015 GPCD	AVG GPCD
Hutchinson	42,080	6ML	155	153	137	141	137	145
Great Bend	15,995	6ML	122	131	114	114	105	117
Pratt	6,835	6ML	210	224	186	219	228	213
Russell	4,506	6ML	146	149	101	135	137	134
Beloit	3,835	6ML	126	141	124	120	123	127
Lyons	3,739	6ML	253	231	183	159	165	198
Kingman	3,177	6ML	131	138	108	118	100	119
Ellsworth	3,120	6ML	117	128	107	119	125	119
Hoisington	2,706	6ML	113	103	100	89	86	98
South Hutchinson	2,457	6ML	173	165	142	140	152	154
Sterling	2,328	6ML	107	100	91	90	91	96
Anthony	2,269	6ML	139	143	142	121	111	131
Ellinwood	2,131	6ML	125	135	101	91	100	110
Medicine Lodge	2,009	6ML	180	159	152	135	244	174
Smith Center	1,665	6ML	168	181	156	167	134	161
Harper	1,473	6ML	165	147	140	137	121	142
Osborne	1,431	6ML	144	191	141	119	121	143
Buhler	1,327	6ML	143	157	121	122	121	133
Lincoln Center	1,297	6ML	114	113	96	101	94	104
St. John	1,295	6ML	166	150	132	137	115	140
Haven	1,237	6ML	140	124	95	100	102	112

Nickerson	1,070	6ML	84	85	75	71	78	79
Stafford	1,042	6ML	151	155	100	106	107	124
Kiowa	1,026	6ML	157	114	182	162	127	148
Downs	900	6ML	149	181	137	132	131	146
Mankato	869	6ML	184	206	170	183	172	183
Wilson	781	6ML	109	112	94	96	101	102
Pretty Prairie	680	6ML	142	126	92	96	97	111
Clafin	645	6ML	158	168	128	114	136	141
Attica	626	6ML	272	249	199	257	253	246
Little River	557	6ML	149	118	95	105	130	119
Macksville	549	6ML	135	137	119	110	112	123

Appendix F:
**Authorized Places of Use for the R9 Water Rights, as Contingently
Changed by this Master Order from Irrigation to Municipal Use**

1. the R9 Ranch as described by this Master Order
2. the City of Hays, Kansas, and its immediate vicinity as well as related areas in the Northeast Quarter (NE/4) of Section 19 and the Northwest Quarter (NW/4) of Section 36, Township 13 South, Range 18 West, Ellis County, Kansas
3. the City of Russell, Kansas, and its immediate vicinity

**Appendix G:
Table 2**

Table 2		
Consolidated Municipal Well (see Exhibit 33)	Consolidated Quantity (acre-feet)	Consolidated Rate (gallons per minute)
A	752.0	945
B	593.0	885
C	365.8	1360
D	591.3	1500
E	414.0	1270
F	285.0	1040
G	368.0	1040
H	608.0	765
I	519.8	805
J	540.0	700
K	471.3	700
L	377.9	950
M	449.3	950
N	421.4	1040
	6,756.8	

**Appendix H:
Table 3**

Table 3 (comprising several pages)								
A	B	C	D	E	F	G	H	I
FILE NO.	AUTHORIZED (CERTIFIED) RATE PER IRRIGATION WELL (GPM)	MUNICIPAL WELL (TABLE 2)	MUNICIPAL WELL RATE (TABLE 2) (GPM)	RATE BY WELL AND BY RIGHT (GPM)	NET RATE REDUCTION BY RIGHT (GPM)	RATE LIMITATION BY WELL AND BY RIGHT (GPM)	POTENTIAL FUTURE CHANGES BY WELL	POTENTIAL FUTURE CHANGES BY RIGHT
21,729 D1	615 325 275	A A A	945	945		NONE	UP TO 3 WELLS WITH A TOTAL COMBINED RATE OF 945 GPM	UP TO 3 WELLS WITH A TOTAL COMBINED RATE OF 945 GPM
TOTAL RATE	1,215			945	-270			
21,729 D2	720 360 635	A A A	945	945		945	UP TO 3 WELLS WITH A TOTAL COMBINED RATE OF 945 GPM	UP TO 3 WELLS WITH A TOTAL COMBINED RATE OF 945 GPM
TOTAL RATE	LIMIT TO 1,685			945	-740			
21,730	795	G	1,040	795		NONE	1 WELL AT 795 GPM	1 WELL AT 795 GPM
TOTAL RATE	795			795	0			

Table 3
(comprising several pages)

A	B	C	D	E	F	G	H	I
FILE NO.	AUTHORIZED (CERTIFIED) RATE PER IRRIGATION WELL (GPM)	MUNICIPAL WELL (TABLE 2)	MUNICIPAL WELL RATE (TABLE 2) (GPM)	RATE BY WELL AND BY RIGHT (GPM)	NET RATE REDUCTION BY RIGHT (GPM)	RATE LIMITATION BY WELL AND BY RIGHT (GPM)	POTENTIAL FUTURE CHANGES BY WELL	POTENTIAL FUTURE CHANGES BY RIGHT
21,731	380	H	765	765		NONE	UP TO 5 WELLS WITH A TOTAL COMBINED RATE OF 765 GPM	UP TO 7 WELLS WITH A TOTAL COMBINED RATE OF 1,805 GPM
	245	H						
	525	H						
	735	H						
	605	H						
	625	G	1,040	1,040		1,040	UP TO 2 WELLS WITH A TOTAL COMBINED RATE OF 1,040 GPM	
	450	G						
TOTAL RATE	3,565			1,805	-1,760			
21732 D1	780	B	885	885		NONE	UP TO 2 WELLS WITH A TOTAL COMBINED RATE OF 885 GPM	UP TO 2 WELLS WITH A TOTAL COMBINED RATE OF 885 GPM
	715	B						
TOTAL RATE	1,495			885	-610			
21,732 D2	885	B	885	885		885	1 WELL AT 885 GPM	1 WELL AT 885 GPM
TOTAL RATE	885			885	0			
21,733	915	C	1,360	915		NONE	1 WELL AT 915 GPM	1 WELL AT 915 GPM
TOTAL RATE	915			915	0			

Table 3
(comprising several pages)

A	B	C	D	E	F	G	H	I
FILE NO.	AUTHORIZED (CERTIFIED) RATE PER IRRIGATION WELL (GPM)	MUNICIPAL WELL (TABLE 2)	MUNICIPAL WELL RATE (TABLE 2) (GPM)	RATE BY WELL AND BY RIGHT (GPM)	NET RATE REDUCTION BY RIGHT (GPM)	RATE LIMITATION BY WELL AND BY RIGHT (GPM)	POTENTIAL FUTURE CHANGES BY WELL	POTENTIAL FUTURE CHANGES BY RIGHT
21,734	1,035	E	1,270	1,035		NONE	1 WELL AT 1,035 GPM	UP TO 5 WELLS WITH A TOTAL COMBINED RATE OF 3,470 GPM
	1,500	D	1,500	1,500		NONE	UP TO 3 WELLS WITH A TOTAL COMBINED RATE OF 1,500 GPM	
	1,050	D						
	1,250	D						
	935	C	1,360	935		1,360	1 WELL AT 935 GPM	
TOTAL RATE	LIMIT TO 4,800			3,470	-1,330			
21,841	890	F	1,040	890		NONE	1 WELL AT 890 GPM	1 WELL AT 890 GPM
TOTAL RATE	890			890	0			
21,842	900	E	1,270	900		1,270	1 WELL AT 900 GPM	1 WELL AT 900 GPM
TOTAL RATE	900			900	0			
22,325	805	I	805	805		NONE	UP TO 2 WELLS WITH A TOTAL COMBINED RATE OF 805 GPM	UP TO 2 WELLS WITH A TOTAL COMBINED RATE OF 805 GPM
	530	I						
TOTAL RATE	LIMIT TO 1,000			805	-195			
22,326	690	I	805	805		805	UP TO 2 WELLS WITH A TOTAL COMBINED RATE OF 805 GPM	UP TO 2 WELLS WITH A TOTAL COMBINED RATE OF 805 GPM
	565	I						
TOTAL RATE	LIMIT TO 1,000			805	-195			

Table 3
(comprising several pages)

A	B	C	D	E	F	G	H	I
FILE NO.	AUTHORIZED (CERTIFIED) RATE PER IRRIGATION WELL (GPM)	MUNICIPAL WELL (TABLE 2)	MUNICIPAL WELL RATE (TABLE 2) (GPM)	RATE BY WELL AND BY RIGHT (GPM)	NET RATE REDUCTION BY RIGHT (GPM)	RATE LIMITATION BY WELL AND BY RIGHT (GPM)	POTENTIAL FUTURE CHANGES BY WELL	POTENTIAL FUTURE CHANGES BY RIGHT
22,327	475	I	805	805		805	UP TO 2 WELLS WITH A TOTAL COMBINED RATE OF 805 GPM	UP TO 2 WELLS WITH A TOTAL COMBINED RATE OF 805 GPM
	490	I						
TOTAL RATE	LIMIT TO 950			805	-145			
22,329	570	J	700	570		NONE	1 WELL AT 570 GPM	1 WELL AT 570 GPM
TOTAL RATE	570			570	0			
22,330	620	J	700	620		700	1 WELL AT 620 GPM	1 WELL AT 620 GPM
TOTAL RATE	620			620	0			
22,331	640	J	700	700		700	UP TO 2 WELLS WITH AT COMBINED RATE OF 700 GPM	UP TO 2 WELLS WITH AT COMBINED RATE OF 700 GPM
	645	J						
TOTAL RATE	LIMIT TO 1,000			700	-300			
22,332	460	J	700	700		700	UP TO 2 WELLS WITH AT COMBINED RATE OF 700 GPM	UP TO 2 WELLS WITH AT COMBINED RATE OF 700 GPM
	655	J						
TOTAL RATE	LIMIT TO 980			700	-280			
22,333	520	K	700	520		NONE	1 WELL AT 520 GPM	1 WELL AT 520 GPM
TOTAL RATE	520			520	0			

Table 3
(comprising several pages)

A	B	C	D	E	F	G	H	I
FILE NO.	AUTHORIZED (CERTIFIED) RATE PER IRRIGATION WELL (GPM)	MUNICIPAL WELL (TABLE 2)	MUNICIPAL WELL RATE (TABLE 2) (GPM)	RATE BY WELL AND BY RIGHT (GPM)	NET RATE REDUCTION BY RIGHT (GPM)	RATE LIMITATION BY WELL AND BY RIGHT (GPM)	POTENTIAL FUTURE CHANGES BY WELL	POTENTIAL FUTURE CHANGES BY RIGHT
22,334	639	K	700	700		700	UP TO 2 WELLS WITH A COMBINED RATE OF 700 GPM	UP TO 2 WELLS WITH A COMBINED RATE OF 700 GPM
	630	K						
TOTAL RATE	LIMIT TO 890			700	-190			
22,335	680	K	700	700		700	UP TO 2 WELLS WITH A COMBINED RATE OF 700 GPM	UP TO 2 WELLS WITH A COMBINED RATE OF 700 GPM
	555	K						
TOTAL RATE	LIMIT TO 1,000			700	-300			
22,338	950	L	950	950		NONE	UP TO 2 WELLS WITH A COMBINED RATE OF 950 GPM	UP TO 2 WELLS WITH A COMBINED RATE OF 950 GPM
	785	L						
TOTAL RATE	LIMIT TO 950			950	0			
22,339	680	L	950	680		950	1 WELL AT 680 GPM	1 WELL AT 680 GPM
TOTAL RATE	680			680	0			
22,340	950	M	950	950		NONE	1 WELL AT 950 GPM	1 WELL AT 950 GPM
TOTAL RATE	950			950	0			
22,341	920	M	950	920		950	1 WELL AT 920 GPM	1 WELL AT 920 GPM
TOTAL RATE	920			920	0			

Table 3
(comprising several pages)

A	B	C	D	E	F	G	H	I
FILE NO.	AUTHORIZED (CERTIFIED) RATE PER IRRIGATION WELL (GPM)	MUNICIPAL WELL (TABLE 2)	MUNICIPAL WELL RATE (TABLE 2) (GPM)	RATE BY WELL AND BY RIGHT (GPM)	NET RATE REDUCTION BY RIGHT (GPM)	RATE LIMITATION BY WELL AND BY RIGHT (GPM)	POTENTIAL FUTURE CHANGES BY WELL	POTENTIAL FUTURE CHANGES BY RIGHT
22,342	630	M	950	630		950	1 WELL AT 630 GPM	1 WELL AT 630 GPM
TOTAL RATE	630			630	0			
22,343	810	N	1,040	810		NONE	1 WELL AT 810 GPM	1 WELL AT 810 GPM
TOTAL RATE	810			810	0			
22,345	820	N	1,040	820		1,040	1 WELL AT 820 GPM	1 WELL AT 820 GPM
TOTAL RATE	820			820	0			
22,346	600	N	1,040	600		1,040	1 WELL AT 600 GPM	1 WELL AT 600 GPM
TOTAL RATE	600			600	0			
27,760	670	K	700	670		700	1 WELL AT 670 GPM	UP TO 2 WELLS WITH A COMBINED RATE OF 1,470 GPM
	800	L	950	800		950	1 WELL AT 800 GPM	
TOTAL RATE	1,470			1,470	0			
29,816	750	F	1,040	750		1,040	1 WELL AT 750 GPM	UP TO 2 WELLS WITH A COMBINED RATE OF 1,550 GPM
	800	E	1,270	800		1,270	1 WELL AT 800 GPM	
TOTAL RATE	1,550			1,550	0			

Table 3
(comprising several pages)

A	B	C	D	E	F	G	H	I
FILE NO.	AUTHORIZED (CERTIFIED) RATE PER IRRIGATION WELL (GPM)	MUNICIPAL WELL (TABLE 2)	MUNICIPAL WELL RATE (TABLE 2) (GPM)	RATE BY WELL AND BY RIGHT (GPM)	NET RATE REDUCTION BY RIGHT (GPM)	RATE LIMITATION BY WELL AND BY RIGHT (GPM)	POTENTIAL FUTURE CHANGES BY WELL	POTENTIAL FUTURE CHANGES BY RIGHT
30,083	1,000	M	950	455		950	1 WELL AT 455 GPM	1 WELL AT 455 GPM
TOTAL RATE	LIMIT TO 1,085, 455 add to 22,342			-545				
30,084	795	J	700	700		700	1 WELL AT 700 GPM	1 WELL AT 700 GPM
TOTAL RATE	795			700	-95			

Appendix I - R9 Ranch Water Use Report

MUNICIPAL WATER USE REPORT (PUBLIC WATER SUPPLY)

IMPORTANT: YOU MUST REPORT ANNUAL USAGE OR THE REASON FOR NON-USAGE, IN ORDER TO PROTECT YOUR RIGHT TO USE WATER

This is the annual Water Use Report **required** to retain all Vested or Appropriation Rights. Please begin by reading the instructions for Part A on the reverse side of this page. Also present are instructions for name and address changes, **which include information needed if you have disposed of your interest in any one or more of the water right file numbers listed below.** If you have any questions on how to complete this form, please contact the Water Use Coordinator at (785) 564-6638. Please make a copy of the entire Water Use Report for your records, and return the original report to:

Water Use Coordinator
Kansas Department of Agriculture
Division of Water Resources
1320 Research Park Drive
Manhattan, Kansas 66502

PART A: POINTS OF DIVERSION

Water Right File Number	Legal Descriptions Point(s) of Diversion	Water Meter Data			U N I T	Hours	Pump Rate (gpm)	Well Data			
		Beginning Water Meter Reading	Ending Water Meter Reading	Metered Quantity Of Water				Well Depth	Depth to Water	Date	

____ Check here if you are purchasing from or selling water to other public water suppliers and report amounts on **PART B**, Columns 2 and 3, and **PART E**.

Date: _____ Telephone: (____) _____

Email: _____

I submit this report as the best information available. I understand that knowingly falsifying the report is a violation of state law.

YEAR PIN PERSON ID FO CO GMD

Name (Printed or Typed)

Name (Signature)

____ Owner

____ Tenant

____ Agent

Appendix I - R9 Ranch Water Use Report

WATER USE REPORT MUNICIPAL USE (PUBLIC WATER SUPPLY)

NOTE: If you hold water rights for uses other than municipal, the appropriate Water Use Report(s) will be mailed under separate cover.

INSTRUCTIONS AND DEFINITIONS FOR PART A:

- Water Right File Number:** The file number that was originally assigned by the Division of Water Resources to the application for permit to appropriate water for beneficial use or the file number that was originally assigned to the order determining and establishing a vested right to continue the beneficial use of water.
- Point of Diversion:** The point from which water is obtained, be it a well, dam or intake. **If no water was used from one or more points of diversion, then the reason for non-usage must be given for each of the points of diversion.**
- Legal Descriptions:** **If an error exists in a legal description, mark through the incorrect portion and enter the correct description immediately above it.** The location of each point of diversion is given by a qualifier followed by the section, township, and range. The qualifier is used to describe the specific location of the point of diversion within the section. For example, "NC S2 NW" reads "near the center of the South Half of the Northwest Quarter." The qualifiers may be the number of feet North and number of feet West of the Southeast corner of the section. In some cases, a portion is included on the next line following the term "aka" (also known as).
- Water Meter Data:** If the meter has malfunctioned during the year, please indicate in this space and provide hours pumped and pump rate.
- Beginning Meter Reading:** If a WATER METER is installed, report this year's BEGINNING METER READING (this is the same as last year's ending meter reading), APPLYING ANY MULTIPLICATION FACTOR SHOWN ON THE FACE OF THE METER.
- Ending Meter Reading:** If a WATER METER is installed report this year's ENDING METER READING, APPLYING ANY MULTIPLICATION FACTOR SHOWN ON THE FACE OF THE METER.
- Metered Quantity:** If a WATER METER is installed, subtract this year's beginning meter reading from this year's ending meter reading and report the difference, APPLYING ANY MULTIPLICATION FACTOR SHOWN ON THE FACE OF THE METER. Please have the water meter checked to verify its accuracy, if it has not been checked by a qualified person within the past three years.
- Meter Unit:** Indicate the unit of measure recorded by your water meter (enter "A" for acre-feet, "AI" for acre-inches or "G" for gallons).
- Hours Pumped:** Enter the number of hours the pump was operated during the calendar year.
- Est. Pump Rate:** Enter the average rate of pumping in gallons per minute.
- Well Data:** Well Depth: enter the depth to bottom of well in feet.
Depth to Water: enter the depth to water in feet.
Date Measured: enter the date of the last depth to water measurement.

INSTRUCTIONS FOR NAME, ADDRESS CHANGES:

1. Please check your name and address, which is printed on the reverse side of this page in the lower left corner. If it is incorrect or incomplete, make any necessary changes in the space provided below. If you are no longer the person responsible for completing this report for one or more of the water right file numbers listed on the reverse side of this page, please print or type the information requested below.

Check one: Address Correction New Correspondent New Owner

Water Right File Number(s): _____

Name of New Owner/Title: _____

Address: _____

Date of Change: Month _____ Year _____ Telephone: (____) _____

IF YOU HAVE ADDITIONAL INFORMATION REGARDING THIS WATER USE REPORT, PROVIDE BELOW OR ATTACH ANOTHER PAGE.

Appendix I - R9 Ranch Water Use Report

MUNICIPAL WATER USE REPORT (PUBLIC WATER SUPPLY)

PART B: MONTHLY WATER USE SUMMARY

NOTE: REPORT WATER PUMPED, PURCHASED, AND SOLD FOR THE MONTH OF ACTUAL USE. REPORT ALL AMOUNTS IN UNITS OF **1000 GALLONS**.

- Column 1: The amount of water diverted, by month, from all points of diversion (wells or intakes). If possible, raw water meters should be read at the same time of the month as customer meters. The total amount in this column should equal the total of the amounts reported in PART A.
- Column 2: The amount of water diverted to the City of Hays by month,
- Column 3: The amount of water diverted to the City of Russell by month.
- Column 4: The amount of water sold, by month, to all industrial, pasture, stockwater, feedlot, and bulk water service connections. For rural water districts, include the amount of water sold to farmsteads using at least 200,000 gallons of water per year. Also include metered power plant usage, even if this water is supplied free.
- Column 5: The amount of water sold, by month, to your residential, commercial and institutional customers (include hospitals, schools and prisons) from the supply line between the ranch and Hays and Russell.
- Column 6: The amount of water used, by month, that is metered at individual service connections and supplied free, such as for public service, treatment processes, and connections receiving free water. Please record metered power plant usage with industrial water use in Column 4.
- Column 7: The amount of unaccounted for water, by month. The gallons reported in this column are found by adding the numbers in Columns 1 and 2 and subtracting the numbers in Columns 3, 4, 5, and 6. If you do not sell water to your customers, this column simply represents the total amount of water that you diverted or purchased.

Month	Column 1 Raw Water Diverted Under Your Rights (1000 Gallons)	Column 2 Water Diverted to Hays (1000 Gallons)	Column 3 Water Diverted to Russell (1000 Gallons)	Column 4 Water Sold to Your Industrial, Stock, and Bulk Customers (1000 Gallons)	Column 5 Water Sold to Your Residential and Commercial Customers (1000 Gallons)	Column 6 Metered Water Provided Free (1000 Gallons)	Column 7 Unaccounted For Water (See Above Explanation) (1000 Gallons)
Jan.							
Feb.							
Mar.							
Apr.							
May							
June							
July							
Aug.							
Sept.							
Oct.							
Nov.							
Dec.							
Total							

PART C: POPULATION, SERVICE CONNECTIONS, AND WATER RATES

1. Population served: _____ Estimate the number of persons served directly by your distribution system (Columns 5, 6, and 7).
2. Number of **ACTIVE** water service connections as of December 31:
 - a. _____ Residential
 - b. _____ Commercial/Institutional
 - c. _____ Industrial
 - d. _____ Pasture/Stockwater/Feedlot
 - e. _____ Other (specify) _____
 - f. _____ **Total ACTIVE Service Connections**
3. If you are a city, how many of the active residential water service connections shown in 2a. are located outside of your city limits. _____

Appendix I - R9 Ranch Water Use Report

MUNICIPAL WATER USE REPORT (PUBLIC WATER SUPPLY)

PART D: WASTEWATER DISCHARGE

Check one:

- No wastewater treatment Pond or lagoon Wastewater treatment facility Other facility treats wastewater

If lagoon or treatment facility discharges to a stream, complete the following:

Amount of Discharge, in 1,000 gallons: _____

Does the above amount include rainwater: Yes No

Name of stream receiving discharge: _____

PART E: WATER SOLD TO OR PURCHASED FROM OTHER ENTITIES (Report all amounts in units of 1000 gallons)

Please provide the name of each ENTITY that water was sold to or purchased from during the year. Water purchased from the Kansas Water Office should also be recorded here. Report all quantities in units of 1000 gallons. Copy this form as needed to completely report sold and purchased water. The total amount of water purchased each month should be entered in Column 2 of PART B, and the total amount sold each month should be entered in Column 3 of Part B.

Name: _____
County: _____
_____ Sold To _____ Purchased From

Jan.	_____	_____
Feb.	_____	_____
Mar.	_____	_____
Apr.	_____	_____
May	_____	_____
June	_____	_____
July	_____	_____
Aug.	_____	_____
Sept.	_____	_____
Oct.	_____	_____
Nov.	_____	_____
Dec.	_____	_____
Total	_____	_____

Name: _____
County: _____
_____ Sold To _____ Purchased From

Jan.	_____	_____
Feb.	_____	_____
Mar.	_____	_____
Apr.	_____	_____
May	_____	_____
June	_____	_____
July	_____	_____
Aug.	_____	_____
Sept.	_____	_____
Oct.	_____	_____
Nov.	_____	_____
Dec.	_____	_____
Total	_____	_____

Name: _____
County: _____
_____ Sold To _____ Purchased From

Jan.	_____	_____
Feb.	_____	_____
Mar.	_____	_____
Apr.	_____	_____
May	_____	_____
June	_____	_____
July	_____	_____
Aug.	_____	_____
Sept.	_____	_____
Oct.	_____	_____
Nov.	_____	_____
Dec.	_____	_____
Total	_____	_____

Name: _____
County: _____
_____ Sold To _____ Purchased From

Jan.	_____	_____
Feb.	_____	_____
Mar.	_____	_____
Apr.	_____	_____
May	_____	_____
June	_____	_____
July	_____	_____
Aug.	_____	_____
Sept.	_____	_____
Oct.	_____	_____
Nov.	_____	_____
Dec.	_____	_____
Total	_____	_____

THE STATE  OF KANSAS

KANSAS DEPARTMENT OF AGRICULTURE
Mike Beam, Acting Secretary of Agriculture

DIVISION OF WATER RESOURCES
David W. Barfield, Chief Engineer

APPROVAL OF APPLICATION
TO CHANGE
THE PLACE OF USE, THE POINT OF DIVERSION AND THE USE MADE
OF THE WATER UNDER AN EXISTING WATER RIGHT

WATER RIGHT
FILE NO. 21,729-D1

The Chief Engineer, Division of Water Resources, Kansas Department of Agriculture, after due consideration of the written Application for Approval to Change the Place of Use, the Point of Diversion or the Use Made of the Water Under an Existing Water Right, submitted by Toby Dougherty, City Manager, on behalf of the City of Hays, 1507 Main Street, Hays, Kansas 67601, and by Jon Quinday, City Manager, on behalf of the City of Russell, 133 W. 8th Street, Russell, Kansas 67665, and received in this office on June 26, 2015, as amended (the "Change Application"), for approval of changes in the location of the place of use, the point of diversion, and the use made of water under the Certificate of Appropriation issued on June 5, 1987 (the "Certificate"), pursuant to the application for permit to appropriate water for beneficial use regarding the above-mentioned Water Right, File No. 21,729-D1 (the "Water Right"), as modified and amended by the Order of the Chief Engineer dated January 17, 2018, dividing Water Right, File No. 21,729, into File Nos. 21,729-D1 and 21,729-D2 (the "Division Order"), finds that the changes requested in the Change Application are reasonable and will not impair existing rights, that such changes relate to the same local source of supply, and that the Change Application should be and is hereby approved pursuant to K.S.A. 82a-708b and as provided herein.

This approval order (the "Change Approval") is attached as an exhibit to, is incorporated in, and is subject to the terms of that certain Master Order Contingently Approving Change Applications Regarding R9 Water Rights (the "Master Order"), issued by the Chief Engineer concurrently with this Change Approval. The effective date of the changes approved herein for the Water Right shall be as provided in the Master Order. Upon effectiveness as provided in the Master Order:

1. The authorized use made of water for the Water Right shall be:

Municipal Use,

and the authorized locations of the places of use shall be those that are specifically described in **Appendix F** to the Master Order,

and the location of the point of diversion for the Water Right shall be authorized from one (1) well located as follows:

one (1) well (Well A) located in the Northeast Quarter of the Northeast Quarter of the Southwest Quarter (NE $\frac{1}{4}$ NE $\frac{1}{4}$ SW $\frac{1}{4}$) of Section 29, more particularly described as being near a point 2,259 feet North and 2,705 feet West of the Southeast corner of said section, Township 25 South, Range 19 West, Edwards County, Kansas, in a quantity not to exceed 122.520 million gallons (376 acre-feet) of groundwater per calendar year at a diversion rate not in excess of 945 gallons per minute (2.11 c.f.s.),

to be completed within the mapped boundaries as shown on the maps marked Exhibits T and U accompanying the Change Application, and pursuant to the Master Order.

2. Due to the aforementioned changes, the Water Right shall be reduced to a total authorized rate of diversion not to exceed 945 gallons per minute (2.11 c.f.s.).

3. The following additional conditions of this Change Approval also shall apply to this Water Right:

a. Installation of the works for diversion of water shall be completed on or before December 31, 2029, or within any authorized extension of time granted by the Chief Engineer for good cause shown. The Water Right owner shall notify the Chief Engineer when construction of the diversion works has been completed.

b. All wells with a diversion rate of 100 gallons per minute or more drilled under the authority of this Change Approval shall have a tube or other device installed in a manner acceptable to, and in accordance with, specifications adopted by the Chief Engineer. This tube or device shall be suitable for making water level measurements and shall be maintained in a condition satisfactory to the Chief Engineer.

c. The Water Right owner shall submit to the Chief Engineer a copy of the well log required by the Kansas Department of Health and Environment under the authority of K.S.A. 82a-1212, currently form WWC-5, within 30 days following the drilling of the well at the location authorized herein.

d. All diversion works 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.

e. Prior to the use of water, the Water Right owner shall properly install an acceptable water meter on the diversion works authorized for this Water Right, in strict accordance with K.A.R. 5-1-4 through 5-1-12. The Water Right owner shall notify the Chief Engineer when installation of the water meter has been completed. The Water Right owner shall maintain the water meter in an operating condition satisfactory to the Chief Engineer at all times during diversion of water and shall maintain records from which the total quantity of water diverted may be determined. The Water Right owner shall also annually report to the Chief Engineer the reading of said water meter and the total quantity of water diverted. Such records shall be furnished to the Chief Engineer by March 1 following the end of each calendar year.

4. Further, the following Limitations (as that term is defined in the Master Order) shall apply to this Water Right, for which Limitations the Chief Engineer specifically retains jurisdiction and authority to review and modify, as provided in the Master Order:

As provided in the Master Order, the authorized quantity of water for municipal use under this Water Right is subject to a Limitation such that when this Water Right is combined with Water Right, File Nos. 21,729-D2; 21,730; 21,731; 21,732-D1; 21,732-D2; 21,733; 21,734; 21,841; 21,842; 22,325; 22,326; 22,327; 22,329; 22,330; 22,331; 22,332; 22,333; 22,334; 22,335; 22,338; 22,339; 22,340; 22,341; 22,342; 22,343; 22,345; 22,346; 27,760; 29,816; 30,083; and 30,084 the water used shall not exceed a rolling ten-year aggregate Limitation of 15,640.848 million gallons (48,000 acre-feet) during any, each, and every ten (10) consecutive calendar years (the "Ten-Year Rolling Aggregate Limitation" as defined in the Master Order) at the places of use authorized herein.

As provided in the Master Order, the authorized quantity of water for municipal use under this Water Right is subject to a Limitation such that when this Water Right is combined with Vested Right, File No. RS 008; and Water Right, File Nos. 206; 1,267; 1,861; 17,586; and 17,587 the water used shall not exceed 600.000 million gallons (1,841.3 acre-feet) per calendar year (the "Reasonable-Need Limitation" for the City of Russell, as such term is defined and calculated in the Master Order).

5. In all other respects, the Certificate, as modified and amended by the aforementioned orders, including the Master Order, remains as issued.

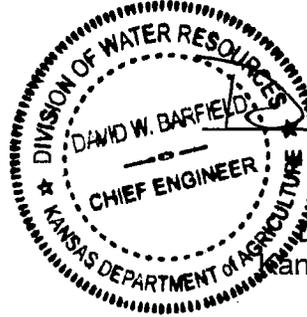
6. This Change Approval is contingent and conditioned upon the terms of the Master Order and will not become effective unless and until such time as the Master Order becomes effective.

7. Any person who is aggrieved by this Change Approval may file a petition for administrative review by the Secretary pursuant to K.S.A. 82a-708b, K.S.A. 2016 Supp. 82a-1901, and K.S.A. 77-527. K.S.A. 2016 Supp. 82a-1901 applies because the proceeding regarding this matter began before the 2017 amendments became effective. Any petition for administrative review by the Secretary must include a statement of its basis as provided in K.S.A. 77-527(c). This Change Approval will become a final order, without further notice, unless a petition for administrative review by the Secretary pursuant to K.S.A. 82a-708b, K.S.A. 2016 Supp. 82a-1901, and K.S.A. 77-527 is filed within 15 days after the date of service shown on the Certificate of Service. Any request for administrative review by the Secretary must be in writing and submitted to the attention of:

Chief Legal Counsel,
Kansas Department of Agriculture,
1320 Research Park Drive,
Manhattan, Kansas 66502,
Fax: (785) 564-6777,

with copies to those shown in the Certificate of Service.

Dated at Manhattan, Kansas, this 27th day of March , 2019.



David W. Barfield

David W. Barfield, P.E.
Chief Engineer
Division of Water Resources
Kansas Department of Agriculture

State of Kansas)
) SS
County of Riley)

The foregoing instrument was acknowledged before me this 27th day of March , 2019, by David W. Barfield, P.E., Chief Engineer, Division of Water Resources, Kansas Department of Agriculture.



Karen Hunter
Notary Public

CERTIFICATE OF SERVICE

On this 28th day of March, 2019, I hereby certify that the attached original Approval of Application to Change the Place of Use, the Point of Diversion and the Use Made of the Water Under an Existing Water Right, Water Right, File No. 21,729-D1, dated March 27, 2019, was mailed postage prepaid, first class, US mail to the following:

Toby Dougherty, City Manager
CITY OF HAYS
City Hall, 16th & Main
P.O. Box 490
Hays, KS 67601

With photocopies to:

Jon Quinday, City Manager
CITY OF RUSSELL
133 W. 8th Street
P.O. Box 112
Russell, KS 67665

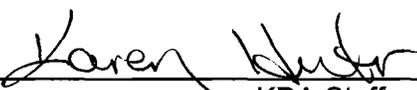
David M. Traster
FOULSTON SIEFKIN LLP
1551 N. Waterfront Parkway, Suite 100
Wichita, Kansas 67206-4466

Daniel J. Buller
FOULSTON SIEFKIN LLP
9225 Indian Creek Parkway, Suite 600
Overland Park, Kansas 66210

John T. Bird
Todd Powell
GLASSMAN BIRD AND POWELL, LLP
Attention: Attorneys for the City of Hays, Kansas
200 West Thirteenth Street
Hays, KS 67601-0727

Kenneth L. Cole
WOELK & COLE
4 S. Kansas St.
P.O. Box 431
Russell, KS 67665-0431

Stafford Field Office
Stockton Field Office
Big Bend Groundwater Management District No. 5



KDA Staff

THE STATE  OF KANSAS

KANSAS DEPARTMENT OF AGRICULTURE
Mike Beam, Acting Secretary of Agriculture

DIVISION OF WATER RESOURCES
David W. Barfield, Chief Engineer

APPROVAL OF APPLICATION
TO CHANGE
THE PLACE OF USE, THE POINT OF DIVERSION AND THE USE MADE
OF THE WATER UNDER AN EXISTING WATER RIGHT

WATER RIGHT
FILE NO. 21,729-D2

The Chief Engineer, Division of Water Resources, Kansas Department of Agriculture, after due consideration of the written Application for Approval to Change the Place of Use, the Point of Diversion or the Use Made of the Water Under an Existing Water Right, submitted by Toby Dougherty, City Manager, on behalf of the City of Hays, 1507 Main Street, Hays, Kansas 67601, and by Jon Quinday, City Manager, on behalf of the City of Russell, 133 W. 8th Street, Russell, Kansas 67665, and received in this office on April 27, 2018, (the "Change Application"), for approval of changes in the location of the place of use, the point of diversion, and the use made of water under the Certificate of Appropriation issued on June 5, 1987 (the "Certificate"), pursuant to the application for permit to appropriate water for beneficial use regarding the above-mentioned Water Right, File No. 21,729-D2 (the "Water Right"), as modified and amended by the Order of the Chief Engineer dated January 17, 2018, dividing Water Right, File No. 21,729, into File Nos. 21,729-D1 and 21,729-D2 (the "Division Order"), finds that the changes requested in the Change Application are reasonable and will not impair existing rights, that such changes relate to the same local source of supply, and that the Change Application should be and is hereby approved pursuant to K.S.A. 82a-708b and as provided herein.

This approval order (the "Change Approval") is attached as an exhibit to, is incorporated in, and is subject to the terms of that certain Master Order Contingently Approving Change Applications Regarding R9 Water Rights (the "Master Order"), issued by the Chief Engineer concurrently with this Change Approval. The effective date of the changes approved herein for the Water Right shall be as provided in the Master Order. Upon effectiveness as provided in the Master Order:

1. The authorized use made of water for the Water Right shall be:

Municipal Use,

and the authorized locations of the places of use shall be those that are specifically described in **Appendix F** to the Master Order,

and the location of the point of diversion for the Water Right shall be authorized from one (1) well located as follows:

one (1) well (Well A) located in the Northeast Quarter of the Northeast Quarter of the Southwest Quarter (NE $\frac{1}{4}$ NE $\frac{1}{4}$ SW $\frac{1}{4}$) of Section 29, more particularly described as being near a point 2,259 feet North and 2,705 feet West of the Southeast corner of said section, Township 25 South, Range 19 West, Edwards County, Kansas, in a quantity not to exceed 122.520 million gallons (376 acre-feet) of groundwater per calendar year at a diversion rate not in excess of 945 gallons per minute (2.11 c.f.s.),

to be completed within the mapped boundaries as shown on the maps marked Exhibits M and N accompanying the Change Application, and pursuant to the Master Order.

2. Due to the aforementioned changes, the Water Right shall be reduced to a total authorized rate of diversion not to exceed 945 gallons per minute (2.11 c.f.s.).

3. Due to the aforementioned changes, this Change Approval removes the following Limitations (as that term is defined in the Master Order), on the rate of diversion for the Water Right, which Limitations are set forth in the Division Order as follows:

This appropriation right is further limited to a diversion rate which when the well (a.k.a. Well 7A) located near the center of the Southwest Quarter (SW $\frac{1}{4}$) of Section 29, more particularly described as being near a point 1,416 feet North and 4,000 feet West of the Southeast corner of said section, is further limited to that which when combined with the well (a.k.a. Well 7B) located in the Northeast Quarter of the Southwest Quarter of the Southwest Quarter (NE $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$) of Section 29, more particularly described as being near a point 1,043 feet North and 4,370 feet West of the Southeast corner of said section, both in Township 25 South, Range 19 West, Edwards County, Kansas, will provide a diversion rate not in excess of 700 gallons per minute (1.56 c.f.s.) when the wells operate simultaneously, and

That this appropriation is further limited to a diversion rate which when all wells operate simultaneously will provide a diversion rate not in excess of 1,685 gallons per minute (3.75 c.f.s.) for irrigation use on the property described herein.

4. The following additional conditions of this Change Approval also shall apply to this Water Right:

a. Installation of the works for diversion of water shall be completed on or before December 31, 2029, or within any authorized extension of time granted by the Chief Engineer for good cause shown. The Water Right owner shall notify the Chief Engineer when construction of the diversion works has been completed.

b. All wells with a diversion rate of 100 gallons per minute or more drilled under the authority of this Change Approval shall have a tube or other device installed in a manner acceptable to, and in accordance with, specifications adopted by the Chief Engineer. This tube or device shall be suitable for making water level measurements and shall be maintained in a condition satisfactory to the Chief Engineer.

c. The Water Right owner shall submit to the Chief Engineer a copy of the well log required by the Kansas Department of Health and Environment under the authority of K.S.A. 82a-1212, currently form WWC-5, within 30 days following the drilling of the well at the location authorized herein.

d. All diversion works 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.

e. Prior to the use of water, the Water Right owner shall properly install an acceptable water meter on the diversion works authorized for this Water Right, in strict accordance with K.A.R. 5-1-4 through 5-1-12. The Water Right owner shall notify the Chief Engineer when installation of the water meter has been completed. The Water Right owner shall maintain the water meter in an operating condition satisfactory to the Chief Engineer at all times during diversion of water and shall maintain records from which the total quantity of water diverted may be determined. The Water Right owner shall also annually report to the Chief Engineer the reading of said water meter and the total quantity of water diverted. Such records shall be furnished to the Chief Engineer by March 1 following the end of each calendar year.

5. Further, the following Limitations shall apply to this Water Right, for which Limitations the Chief Engineer specifically retains jurisdiction and authority to review and modify, as provided in the Master Order:

As provided in the Master Order, this Water Right is subject to a Limitation such that when this Water Right is combined with Water Right, File No. 21,729-D1, the total rate of diversion shall not exceed 945 gallons per minute (2.11 c.f.s.) for municipal use from the point of diversion authorized herein.

As provided in the Master Order, the authorized quantity of water for municipal use under this Water Right is subject to a Limitation such that when this Water Right is combined with Water Right, File Nos. 21,729-D1; 21,730; 21,731; 21,732-D1; 21,732-D2; 21,733; 21,734; 21,841; 21,842; 22,325; 22,326; 22,327; 22,329; 22,330; 22,331; 22,332; 22,333; 22,334; 22,335; 22,338; 22,339; 22,340; 22,341; 22,342; 22,343; 22,345; 22,346; 27,760; 29,816; 30,083; and 30,084 the water used shall not exceed a rolling ten-year aggregate Limitation of 15,640.848 million gallons (48,000 acre-feet) during any, each, and every ten (10) consecutive calendar years (the "Ten-Year Rolling Aggregate Limitation" as defined in the Master Order) at the places of use authorized herein.

As provided in the Master Order, the authorized quantity of water for municipal use under this Water Right is subject to a Limitation such that when this Water Right is combined with Vested Right, File No. RS 008; and Water Right, File Nos. 206; 1,267; 1,861; 17,586; 17,587; and 21,729-D1 the water used shall not exceed 600.000 million gallons (1,841.3 acre-feet) per calendar year (the "Reasonable-Need Limitation" for the City of Russell, as such term is defined and calculated in the Master Order).

6. In all other respects, the Certificate, as modified and amended by the aforementioned orders, including the Master Order, remains as issued.

7. This Change Approval is contingent and conditioned upon the terms of the Master Order and will not become effective unless and until such time as the Master Order becomes effective.

8. Any person who is aggrieved by this Change Approval may file a petition for administrative review by the Secretary pursuant to K.S.A. 82a-708b, K.S.A. 2016 Supp. 82a-1901, and K.S.A. 77-527. K.S.A. 2016 Supp. 82a-1901 applies because the proceeding regarding this matter began before the 2017 amendments became effective. Any petition for administrative review by the Secretary must include a statement of its basis as provided in K.S.A. 77-527(c). This Change Approval will become a final order, without further notice, unless a petition for administrative review by the Secretary pursuant to K.S.A. 82a-708b, K.S.A. 2016 Supp. 82a-1901, and K.S.A. 77-527 is filed within 15 days after the date of service shown on the Certificate of Service. Any request for administrative review by the Secretary must be in writing and submitted to the attention of:

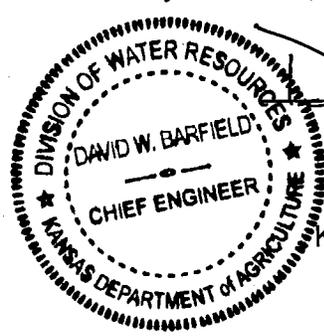
Chief Legal Counsel,
Kansas Department of Agriculture,
1320 Research Park Drive,
Manhattan, Kansas 66502,
Fax: (785) 564-6777,

with copies to those shown in the Certificate of Service.

Dated at Manhattan, Kansas, this 27th day of March, 2019



David W. Barfield, P.E.
Chief Engineer
Division of Water Resources
Kansas Department of Agriculture



State of Kansas)
) SS
County of Riley)

The foregoing instrument was acknowledged before me this 27th day of March, 2019, by David W. Barfield, P.E., Chief Engineer, Division of Water Resources, Kansas Department of Agriculture.



KAREN HUNTER
My Appointment Expires
October 24, 2022

Notary Public



CERTIFICATE OF SERVICE

On this *28* day of *March*, 2019, I hereby certify that the attached original Approval of Application to Change the Place of Use, the Point of Diversion and the Use Made of the Water Under an Existing Water Right, Water Right, File No. 21,729-D2, dated *March 27* 2019, was mailed postage prepaid, first class, US mail to the following:

Toby Dougherty, City Manager
CITY OF HAYS
City Hall, 16th & Main
P.O. Box 490
Hays, KS 67601

With photocopies to:

Jon Quinday, City Manager
CITY OF RUSSELL
133 W. 8th Street
P.O. Box 112
Russell, KS 67665

David M. Traster
FOULSTON SIEFKIN LLP
1551 N. Waterfront Parkway, Suite 100
Wichita, Kansas 67206-4466

Daniel J. Buller
FOULSTON SIEFKIN LLP
9225 Indian Creek Parkway, Suite 600
Overland Park, Kansas 66210

John T. Bird
Todd Powell
GLASSMAN BIRD AND POWELL, LLP
Attention: Attorneys for the City of Hays, Kansas
200 West Thirteenth Street
Hays, KS 67601-0727

Kenneth L. Cole
WOELK & COLE
4 S. Kansas St.
P.O. Box 431
Russell, KS 67665-0431

Stafford Field Office
Stockton Field Office
Big Bend Groundwater Management District No. 5



KDA Staff

THE STATE OF KANSAS



KANSAS DEPARTMENT OF AGRICULTURE
Mike Beam, Acting Secretary of Agriculture

DIVISION OF WATER RESOURCES
David W. Barfield, Chief Engineer

APPROVAL OF APPLICATION
TO CHANGE
THE PLACE OF USE, THE POINT OF DIVERSION AND THE USE MADE
OF THE WATER UNDER AN EXISTING WATER RIGHT

WATER RIGHT
FILE NO. 21,730

The Chief Engineer, Division of Water Resources, Kansas Department of Agriculture, after due consideration of the written Application for Approval to Change the Place of Use, the Point of Diversion or the Use Made of the Water Under an Existing Water Right, submitted by Toby Dougherty, City Manager, on behalf of the City of Hays, 1507 Main Street, Hays, Kansas 67601, and by Jon Quinday, City Manager, on behalf of the City of Russell, 133 W. 8th Street, Russell, Kansas 67665, and received in this office on June 26, 2015, as amended (the "Change Application"), for approval of changes in the location of the place of use, the point of diversion, and the use made of water under the Certificate of Appropriation issued on August 31, 1987 (the "Certificate"), pursuant to the application for permit to appropriate water for beneficial use regarding the above-mentioned Water Right, File No. 21,730 (the "Water Right"), finds that the changes requested in the Change Application are reasonable and will not impair existing rights, that such changes relate to the same local source of supply, and that the Change Application should be and is hereby approved pursuant to K.S.A. 82a-708b and as provided herein.

This approval order (the "Change Approval") is attached as an exhibit to, is incorporated in, and is subject to the terms of that certain Master Order Contingently Approving Change Applications Regarding R9 Water Rights (the "Master Order"), issued by the Chief Engineer concurrently with this Change Approval. The effective date of the changes approved herein for the Water Right shall be as provided in the Master Order. Upon effectiveness as provided in the Master Order:

1. The authorized use made of water for the Water Right shall be:

Municipal Use,

and the authorized locations of the places of use shall be those that are specifically described in **Appendix F** to the Master Order,

and the location of the point of diversion for the Water Right shall be authorized from one (1) well located as follows:

one (1) well (Well G) located in the Northwest Quarter of the Northeast Quarter of the Southwest Quarter (NW $\frac{1}{4}$ NE $\frac{1}{4}$ SW $\frac{1}{4}$) of Section 30, more particularly described as being near a point 2,282 feet North and 3,870 feet West of the Southeast corner of said section, in a quantity not to exceed 57.350 million gallons (176 acre-feet) of groundwater per calendar year at a diversion rate not in excess of 795 gallons per minute (1.77 c.f.s.), Township 25 South, Range 19 West, Edwards County, Kansas,

to be completed within the mapped boundaries as shown on the maps marked Exhibits P, and Q accompanying the Change Application, and pursuant to the Master Order.

2. The following additional conditions of this Change Approval also shall apply to this Water Right:

a. Installation of the works for diversion of water shall be completed on or before December 31, 2029, or within any authorized extension of time granted by the Chief Engineer for good cause shown. The Water Right owner shall notify the Chief Engineer when construction of the diversion works has been completed.

b. All wells with a diversion rate of 100 gallons per minute or more drilled under the authority of this Change Approval shall have a tube or other device installed in a manner acceptable to, and in accordance with, specifications adopted by the Chief Engineer. This tube or device shall be suitable for making water level measurements and shall be maintained in a condition satisfactory to the Chief Engineer.

c. The Water Right owner shall submit to the Chief Engineer a copy of the well log required by the Kansas Department of Health and Environment under the authority of K.S.A. 82a-1212, currently form WWC-5, within 30 days following the drilling of the well at the location authorized herein.

d. All diversion works 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.

e. Prior to the use of water, the Water Right owner shall properly install an acceptable water meter on the diversion works authorized for this Water Right, in strict accordance with K.A.R. 5-1-4 through 5-1-12. The Water Right owner shall notify the Chief Engineer when installation of the water meter has been completed. The Water Right owner shall maintain the water meter in an operating condition satisfactory to the Chief Engineer at all times during diversion of water and shall maintain records from which the total quantity of water diverted may be determined. The Water Right owner shall also annually report to the Chief Engineer the reading of said water meter and the total quantity of water diverted. Such records shall be furnished to the Chief Engineer by March 1 following the end of each calendar year.

3. Further, the following Limitations (as that term is defined in the Master Order) shall apply to this Water Right, for which Limitations the Chief Engineer specifically retains jurisdiction and authority to review and modify, as provided in the Master Order:

As provided in the Master Order, the authorized quantity of water for municipal use under this Water Right is subject to a Limitation such that when this Water Right is combined with Water Right, File Nos.: 21,729-D1; 21,729-D2; 21,731; 21,732-D1; 21,732-D2; 21,733; 21,734; 21,841; 21,842; 22,325; 22,326; 22,327; 22,329; 22,330; 22,331; 22,332; 22,333; 22,334; 22,335; 22,338; 22,339; 22,340; 22,341; 22,342; 22,343; 22,345; 22,346; 27,760; 29,816; 30,083; and 30,084 the water used shall not exceed a rolling ten-year aggregate Limitation of 15,640.848 million gallons (48,000 acre-feet) during any, each, and every ten (10) consecutive calendar years (the "Ten-Year Rolling Aggregate Limitation" as defined in the Master Order) at the places of use authorized herein.

CERTIFICATE OF SERVICE

On this 28 day of March, 2019, I hereby certify that the attached original Approval of Application to Change the Place of Use, the Point of Diversion and the Use Made of the Water Under an Existing Water Right, Water Right, File No. 21,730, dated March 27, 2019, was mailed postage prepaid, first class, US mail to the following:

Toby Dougherty, City Manager
CITY OF HAYS
City Hall, 16th & Main
P.O. Box 490
Hays, KS 67601

With photocopies to:

Jon Quinday, City Manager
CITY OF RUSSELL
133 W. 8th Street
P.O. Box 112
Russell, KS 67665

David M. Traster
FOULSTON SIEFKIN LLP
1551 N. Waterfront Parkway, Suite 100
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Daniel J. Buller
FOULSTON SIEFKIN LLP
9225 Indian Creek Parkway, Suite 600
Overland Park, Kansas 66210

John T. Bird
Todd Powell
GLASSMAN BIRD AND POWELL, LLP
Attention: Attorneys for the City of Hays, Kansas
200 West Thirteenth Street
Hays, KS 67601-0727

Kenneth L. Cole
WOELK & COLE
4 S. Kansas St.
P.O. Box 431
Russell, KS 67665-0431

Stafford Field Office
Stockton Field Office
Big Bend Groundwater Management District No. 5



Karen Wilson

KDA Staff

THE STATE OF KANSAS



KANSAS DEPARTMENT OF AGRICULTURE
Mike Beam, Acting Secretary of Agriculture

DIVISION OF WATER RESOURCES
David W. Barfield, Chief Engineer

**APPROVAL OF APPLICATION
TO CHANGE
THE PLACE OF USE, THE POINT OF DIVERSION AND THE USE MADE
OF THE WATER UNDER AN EXISTING WATER RIGHT**

**WATER RIGHT
FILE NO. 21,731**

The Chief Engineer, Division of Water Resources, Kansas Department of Agriculture, after due consideration of the written Application for Approval to Change the Place of Use, the Point of Diversion or the Use Made of the Water Under an Existing Water Right, submitted by Toby Dougherty, City Manager, on behalf of the City of Hays, 1507 Main Street, Hays, Kansas 67601, and by Jon Quinday, City Manager, on behalf of the City of Russell, 133 W. 8th Street, Russell, Kansas 67665, and received in this office on June 26, 2015, as amended (the "Change Application"), for approval of changes in the location of the place of use, the point of diversion, and the use made of water under the Certificate of Appropriation issued on July 25, 1995 (the "Certificate"), pursuant to the application for permit to appropriate water for beneficial use regarding the above-mentioned Water Right, File No. 21,731 (the "Water Right"), as modified and amended by the Order of the Chief Engineer dated November 22, 1996, approving the application to change the authorized place of use, the Order of the Chief Engineer dated August 19, 1998, approving the application to change the authorized point of diversion, and the Order of the Chief Engineer dated September 8, 1998, correcting the location of the points of diversion, finds that the changes requested in the Change Application are reasonable and will not impair existing rights, that such changes relate to the same local source of supply, and that the Change Application should be and is hereby approved pursuant to K.S.A. 82a-708b and as provided herein.

This approval order (the "Change Approval") is attached as an exhibit to, is incorporated in, and is subject to the terms of that certain Master Order Contingently Approving Change Applications Regarding R9 Water Rights (the "Master Order"), issued by the Chief Engineer concurrently with this Change Approval. The effective date of the changes approved herein for the Water Right shall be as provided in the Master Order. Upon effectiveness as provided in the Master Order:

1. The authorized use made of water for the Water Right shall be:

Municipal Use,

the authorized locations of the places of use for the Water Right shall be:

and the authorized locations of the places of use shall be those that are specifically described in **Appendix F** to the Master Order,

and the location of the point of diversion for the Water Right shall be authorized from two (2) wells located as follows:

one (1) well (Well G) located in the Northwest Quarter of the Northeast Quarter of the Southwest Quarter (NW $\frac{1}{4}$ NE $\frac{1}{4}$ SW $\frac{1}{4}$) of Section 30, more particularly described as being near a point 2,282 feet North and 3,870 feet West of the Southeast corner of said section, in a quantity not to exceed 62.563 million gallons (192 acre-feet) of groundwater per calendar year at a diversion rate not in excess of 1,040 gallons per minute (2.32 c.f.s.), and

one (1) well (Well H) located in the Southwest Quarter of the Southwest Quarter of the Northeast Quarter (SW $\frac{1}{4}$ SW $\frac{1}{4}$ NE $\frac{1}{4}$) of Section 31, more particularly described as being near a point 3,142 feet North and 2,099 feet West of the Southeast corner of said section, in a quantity not to exceed 198.117 million gallons (608 acre-feet) of groundwater per calendar year at a diversion rate not in excess of 765 gallons per minute (1.70 c.f.s.),

both in Township 25 South, Range 19 West, Edwards County, Kansas,

to be completed within the mapped boundaries as shown on the maps marked Exhibits Y, Z, AA, and BB accompanying the Change Application, and pursuant to the Master Order.

2. Due to the aforementioned changes, the Water Right shall be reduced to a total authorized rate of diversion not to exceed 1,805 gallons per minute (4.02 c.f.s.).

3. Due to the aforementioned changes, this Change Approval removes the following Limitation, (as that term is defined in the Master Order), on the quantity of water for the Water Right, which Limitation is set forth as follows in the Certificate:

The quantity for the two (2) wells, one (1) well located in the Southwest Quarter of the Southeast Quarter of the Southwest Quarter (SW $\frac{1}{4}$ SE $\frac{1}{4}$ SW $\frac{1}{4}$) of Section 30, more particularly described as being near a point 380 feet North and 3,785 feet West of the Southeast corner of said section, and one (1) well located in the Northwest Quarter of the Northeast Quarter of the Northwest Quarter (NW $\frac{1}{4}$ NE $\frac{1}{4}$ NW $\frac{1}{4}$) of Section 31, more particularly described as being near a point 5,125 feet North and 3,920 feet West of the Southeast corner of said section is further limited to 192 acre-feet of water per calendar year when the wells are operated simultaneously.

4. The following additional conditions of this Change Approval also shall apply to this Water Right:

a. Installation of the works for diversion of water shall be completed on or before December 31, 2029, or within any authorized extension of time granted by the Chief Engineer for good cause shown. The Water Right owner shall notify the Chief Engineer when construction of the diversion works has been completed.

b. All wells with a diversion rate of 100 gallons per minute or more drilled under the authority of this Change Approval shall have a tube or other device installed in a manner acceptable to, and in accordance with, specifications adopted by the Chief Engineer. This tube or device shall be suitable for making water level measurements and shall be maintained in a condition satisfactory to the Chief Engineer.

c. The Water Right owner shall submit to the Chief Engineer a copy of the well log required by the Kansas Department of Health and Environment under the authority of K.S.A. 82a-1212, currently form WWC-5, within 30 days following the drilling of the well at the location authorized herein.

d. All diversion works 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.

e. Prior to the use of water, the Water Right owner shall properly install an acceptable water meter on the diversion works authorized for this Water Right, in strict accordance with K.A.R. 5-1-4 through 5-1-12. The Water Right owner shall notify the Chief Engineer when installation of the water meter has been completed. The Water Right owner shall maintain the water meter in an operating condition satisfactory to the Chief Engineer at all times during diversion of water and shall maintain records from which the total quantity of water diverted may be determined. The Water Right owner shall also annually report to the Chief Engineer the reading of said water meter and the total quantity of water diverted. Such records shall be furnished to the Chief Engineer by March 1 following the end of each calendar year.

5. Further, the following Limitations shall apply to this Water Right, for which Limitations the Chief Engineer specifically retains jurisdiction and authority to review and modify, as provided in the Master Order:

As provided in the Master Order, this Water Right's rate of diversion from the well described as (Well G): located in the Northwest Quarter of the Northeast Quarter of the Southwest Quarter (NW $\frac{1}{4}$ NE $\frac{1}{4}$ SW $\frac{1}{4}$) of Section 30, more particularly described as being near a point 2,282 feet North and 3,870 feet West of the Southeast corner of said section, Township 25 South, Range 19 West, Edwards County, Kansas, is subject to a Limitation such that the rate of diversion shall not exceed 1,040 gallons per minute (2.32 c.f.s.), when this Water Right is combined with Water Right, File No. 21,730, for municipal use.

As provided in the Master Order, the authorized quantity of water for municipal use under this Water Right is subject to a Limitation such that when this Water Right is combined with Water Right, File Nos.: 21,729-D1; 21,729-D2; 21,730; 21,732-D1; 21,732-D2; 21,733; 21,734; 21,841; 21,842; 22,325; 22,326; 22,327; 22,329; 22,330; 22,331; 22,332; 22,333; 22,334; 22,335; 22,338; 22,339; 22,340; 22,341; 22,342; 22,343; 22,345; 22,346; 27,760; 29,816; 30,083; and 30,084 the water used shall not exceed a rolling ten-year aggregate Limitation of 15,640.848 million gallons (48,000 acre-feet) during any, each, and every ten (10) consecutive calendar years (the "Ten-Year Rolling Aggregate Limitation" as defined in the Master Order) at the places of use authorized herein.

As provided in the Master Order, the authorized quantity of water for municipal use under this Water Right is subject to a Limitation such that when this Water Right is combined with Vested Right, File No. RS 008; and Water Right, File Nos. 206; 1,267; 1,861; 17,586; 17,587; 21,729-D1; 21,729-D2; and 21,730 the water used shall not exceed 600.000 million gallons (1,841.3 acre-feet) per calendar year (the "Reasonable-Need Limitation" for the City of Russell, as such term is defined and calculated in the Master Order).

6. In all other respects, the Certificate, as modified and amended by the aforementioned orders, including the Master Order, remains as issued.

7. This Change Approval is contingent and conditioned upon the terms of the Master Order and will not become effective unless and until such time as the Master Order becomes effective.

8. Any person who is aggrieved by this Change Approval may file a petition for administrative review by the Secretary pursuant to K.S.A. 82a-708b, K.S.A. 2016 Supp. 82a-1901, and K.S.A. 77-527. K.S.A. 2016 Supp. 82a-1901 applies because the proceeding regarding this matter began before the 2017 amendments became effective. Any petition for administrative review by the Secretary must include a statement of its basis as provided in K.S.A. 77-527(c). This Change Approval will become a final order, without further notice, unless a petition for administrative review by the Secretary pursuant to K.S.A. 82a-708b, K.S.A. 2016 Supp. 82a-1901, and K.S.A. 77-527 is filed within 15 days after the date of service shown on the Certificate of Service. Any request for administrative review by the Secretary must be in writing and submitted to the attention of:

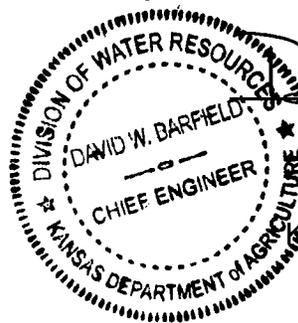
Chief Legal Counsel,
Kansas Department of Agriculture,
1320 Research Park Drive,
Manhattan, Kansas 66502,
Fax: (785) 564-6777,

with copies to those shown in the Certificate of Service.

Dated at Manhattan, Kansas, this 27th day of March, 2019.



David W. Barfield, P.E.
Chief Engineer
Division of Water Resources
Kansas Department of Agriculture



State of Kansas)
) SS
County of Riley)

The foregoing instrument was acknowledged before me this 27th day of March, 2019, by David W. Barfield, P.E., Chief Engineer, Division of Water Resources, Kansas Department of Agriculture.



Karen Hunter
Notary Public



CERTIFICATE OF SERVICE

On this *28th* day of *March*, 2019, I hereby certify that the attached original Approval of Application to Change the Place of Use, the Point of Diversion and the Use Made of the Water Under an Existing Water Right, Water Right, File No. 21,731, dated *March 27*, 2019, was mailed postage prepaid, first class, US mail to the following:

Toby Dougherty, City Manager
CITY OF HAYS
City Hall, 16th & Main
P.O. Box 490
Hays, KS 67601

With photocopies to:

Jon Quinday, City Manager
CITY OF RUSSELL
133 W. 8th Street
P.O. Box 112
Russell, KS 67665

David M. Traster
FOULSTON SIEFKIN LLP
1551 N. Waterfront Parkway, Suite 100
Wichita, Kansas 67206-4466

Daniel J. Buller
FOULSTON SIEFKIN LLP
9225 Indian Creek Parkway, Suite 600
Overland Park, Kansas 66210

John T. Bird
Todd Powell
GLASSMAN BIRD AND POWELL, LLP
Attention: Attorneys for the City of Hays, Kansas
200 West Thirteenth Street
Hays, KS 67601-0727

Kenneth L. Cole
WOELK & COLE
4 S. Kansas St.
P.O. Box 431
Russell, KS 67665-0431

Stafford Field Office
Stockton Field Office
Big Bend Groundwater Management District No. 5



KDA Staff

THE STATE OF KANSAS



KANSAS DEPARTMENT OF AGRICULTURE
Mike Beam, Acting Secretary of Agriculture

DIVISION OF WATER RESOURCES
David W. Barfield, Chief Engineer

**APPROVAL OF APPLICATION
TO CHANGE
THE PLACE OF USE, THE POINT OF DIVERSION AND THE USE MADE
OF THE WATER UNDER AN EXISTING WATER RIGHT**

**WATER RIGHT
FILE NO. 21,732-D1**

The Chief Engineer, Division of Water Resources, Kansas Department of Agriculture, after due consideration of the written Application for Approval to Change the Place of Use, the Point of Diversion or the Use Made of the Water Under an Existing Water Right, submitted by Toby Dougherty, City Manager, on behalf of the City of Hays, 1507 Main Street, Hays, Kansas 67601, and by Jon Quinday, City Manager, on behalf of the City of Russell, 133 W. 8th Street, Russell, Kansas 67665, and received in this office on June 26, 2015, as amended (the "Change Application"), for approval of changes in the location of the place of use, the point of diversion, and the use made of water under the Certificate of Appropriation issued on June 5, 1987 (the "Certificate"), pursuant to the application for permit to appropriate water for beneficial use regarding the above-mentioned Water Right, File No. 21,732 (the "Water Right"), as modified and amended by the Order of the Chief Engineer dated January 17, 2018, dividing Water Right, File No. 21,732, into File Nos. 21,732-D1 and 21,732-D2, finds that the changes requested in the Change Application are reasonable and will not impair existing rights, that such changes relate to the same local source of supply, and that the Change Application should be and is hereby approved pursuant to K.S.A. 82a-708b and as provided herein.

This approval order (the "Change Approval") is attached as an exhibit to, is incorporated in, and is subject to the terms of, that certain Master Order Contingently Approving Change Applications Regarding R9 Water Rights (the "Master Order"), issued by the Chief Engineer concurrently with this Change Approval. The effective date of the changes approved herein for the Water Right shall be as provided in the Master Order. Upon effectiveness as provided in the Master Order:

1. The authorized use made of water for the Water Right shall be:

Municipal Use,

and the authorized locations of the places of use shall be those that are specifically described in **Appendix F** to the Master Order,

and the location of the point of diversion for the Water Right shall be authorized from one (1) well located as follows:

one (1) well (Well B) located in the Southeast Quarter of the Southwest Quarter of the Northeast Quarter (SE $\frac{1}{4}$ SW $\frac{1}{4}$ NE $\frac{1}{4}$) of Section 32, more particularly described as being near a point 2,724 feet North and 1,916 feet West of the Southeast corner of said section, Township 25 South, Range 19 West, Edwards County, Kansas, in a quantity not to exceed 115.025 million gallons (353 acre-feet) of groundwater per calendar year at a diversion rate not in excess of 885 gallons per minute (1.97 c.f.s.),

to be completed within the mapped boundaries as shown on the maps marked Exhibits R and S accompanying the Change Application, and pursuant to the Master Order.

2. The following additional conditions of this Change Approval also shall apply to this Water Right:

a. Installation of the works for diversion of water shall be completed on or before December 31, 2029, or within any authorized extension of time granted by the Chief Engineer for good cause shown. The Water Right owner shall notify the Chief Engineer when construction of the diversion works has been completed.

b. All wells with a diversion rate of 100 gallons per minute or more drilled under the authority of this Change Approval shall have a tube or other device installed in a manner acceptable to, and in accordance with, specifications adopted by the Chief Engineer. This tube or device shall be suitable for making water level measurements and shall be maintained in a condition satisfactory to the Chief Engineer.

c. The Water Right owner shall submit to the Chief Engineer a copy of the well log required by the Kansas Department of Health and Environment under the authority of K.S.A. 82a-1212, currently form WWC-5, within 30 days following the drilling of the well at the location authorized herein.

d. All diversion works 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.

e. Prior to the use of water, the Water Right owner shall properly install an acceptable water meter on the diversion works authorized for this Water Right, in strict accordance with K.A.R. 5-1-4 through 5-1-12. The Water Right owner shall notify the Chief Engineer when installation of the water meter has been completed. The Water Right owner shall maintain the water meter in an operating condition satisfactory to the Chief Engineer at all times during diversion of water and shall maintain records from which the total quantity of water diverted may be determined. The Water Right owner shall also annually report to the Chief Engineer the reading of said water meter and the total quantity of water diverted. Such records shall be furnished to the Chief Engineer by March 1 following the end of each calendar year.

3. Further, the following Limitations (as that term is defined in the Master Order), shall apply to this Water Right, for which Limitations the Chief Engineer specifically retains jurisdiction and authority to review and modify, as provided in the Master Order:

As provided in the Master Order, the authorized quantity of water for municipal use under this Water Right is subject to a Limitation such that when this Water Right is combined with Water Right, File Nos. 21,729-D1; 21,729-D2; 21,730; 21,731; 21,732-D2; 21,733; 21,734; 21,841; 21,842; 22,325; 22,326; 22,327; 22,329; 22,330; 22,331; 22,332; 22,333; 22,334; 22,335; 22,338; 22,339; 22,340; 22,341; 22,342; 22,343; 22,345; 22,346; 27,760; 29,816, 30,083; and 30,084 the water used shall not exceed a rolling ten-year aggregate Limitation of 15,640.848 million gallons (48,000 acre-feet) during any, each, and every ten (10) consecutive calendar years (the "Ten-Year Rolling Aggregate Limitation" as defined in the Master Order) at the places of use authorized herein.

As provided in the Master Order, the authorized quantity of water for municipal use under this Water Right is subject to a Limitation such that when this Water Right is combined with Vested Right, File No. RS 008; and Water Right, File Nos. 206; 1,267; 1,861; 17,586; 17,587; 21,729-D1; 21,729-D2; 21,730; and 21,731 the water used shall not exceed 600.000 million gallons (1,841.3 acre-feet) per calendar year (the "Reasonable-Need Limitation" for the City of Russell, as such term is defined and periodically calculated as provided in the Master Order).

As provided in the Master Order, the authorized quantity of water for municipal use under this Water Right is subject to a Limitation such that when this Water Right is combined with Vested Right, File No. EL 002; and Water Right, File Nos. 1,248; 5,757; 18,857; 18,858; 21,729-D1; 21,729-D2; 21,730; and 21,731 the water used shall not exceed 1,847.650 million gallons (5,670.23 acre-feet) per calendar year (the "Reasonable-Need Limitation" for the City of Hays, as such term is defined and calculated in the Master Order).

4. In all other respects, the Certificate, as modified and amended by the aforementioned orders, including the Master Order, remains as issued.

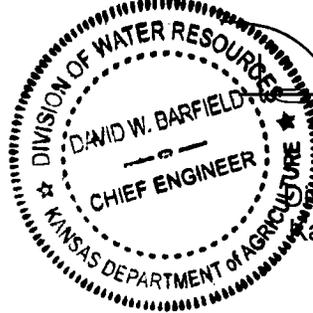
5. This Change Approval is contingent and conditioned upon the terms of the Master Order and will not become effective unless and until such time as the Master Order becomes effective.

6. Any person who is aggrieved by this Change Approval may file a petition for administrative review by the Secretary pursuant to K.S.A. 82a-708b, K.S.A. 2016 Supp. 82a-1901, and K.S.A. 77-527. K.S.A. 2016 Supp. 82a-1901 applies because the proceeding regarding this matter began before the 2017 amendments became effective. Any petition for administrative review by the Secretary must include a statement of its basis as provided in K.S.A. 77-527(c). This Change Approval will become a final order, without further notice, unless a petition for administrative review by the Secretary pursuant to K.S.A. 82a-708b, K.S.A. 2016 Supp. 82a-1901, and K.S.A. 77-527 is filed within 15 days after the date of service shown on the Certificate of Service. Any request for administrative review by the Secretary must be in writing and submitted to the attention of:

Chief Legal Counsel,
Kansas Department of Agriculture,
1320 Research Park Drive,
Manhattan, Kansas 66502,
Fax: (785) 564-6777,

with copies to those shown in the Certificate of Service.

Dated at Manhattan, Kansas, this 27th day of March, 2019.



David W. Barfield
 David W. Barfield, P.E.
 Chief Engineer
 Division of Water Resources
 Kansas Department of Agriculture

State of Kansas)
) SS
 County of Riley)

The foregoing instrument was acknowledged before me this 27th day of March, 2019, by David W. Barfield, P.E., Chief Engineer, Division of Water Resources, Kansas Department of Agriculture.



Karen Hunter
 Notary Public

CERTIFICATE OF SERVICE

On this *28* day of *March*, 2019, I hereby certify that the attached original Approval of Application to Change the Place of Use, the Point of Diversion or the Use Made of the Water Under an Existing Water Right, Water Right, File No. 21,732-D1, dated *March 27*, 2019, was mailed postage prepaid, first class, US mail to the following:

Toby Dougherty, City Manager
CITY OF HAYS
City Hall, 16th & Main
P.O. Box 490
Hays, KS 67601

With photocopies to:

Jon Quinday, City Manager
CITY OF RUSSELL
133 W. 8th Street
P.O. Box 112
Russell, KS 67665

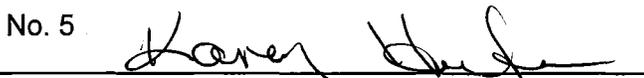
David M. Traster
FOULSTON SIEFKIN LLP
1551 N. Waterfront Parkway, Suite 100
Wichita, Kansas 67206-4466

Daniel J. Buller
FOULSTON SIEFKIN LLP
9225 Indian Creek Parkway, Suite 600
Overland Park, Kansas 66210

John T. Bird
Todd Powell
GLASSMAN BIRD AND POWELL, LLP
Attention: Attorneys for the City of Hays, Kansas
200 West Thirteenth Street
Hays, KS 67601-0727

Kenneth L. Cole
WOELK & COLE
4 S. Kansas St.
P.O. Box 431
Russell, KS 67665-0431

Stafford Field Office
Stockton Field Office
Big Bend Groundwater Management District No. 5


KDA Staff

THE STATE  OF KANSAS

KANSAS DEPARTMENT OF AGRICULTURE
Mike Beam, Acting Secretary of Agriculture

DIVISION OF WATER RESOURCES
David W. Barfield, Chief Engineer

**APPROVAL OF APPLICATION
TO CHANGE
THE PLACE OF USE, THE POINT OF DIVERSION AND THE USE MADE
OF THE WATER UNDER AN EXISTING WATER RIGHT**

**WATER RIGHT
FILE NO. 21,732-D2**

The Chief Engineer, Division of Water Resources, Kansas Department of Agriculture, after due consideration of the written Application for Approval to Change the Place of Use, the Point of Diversion or the Use Made of the Water Under an Existing Water Right, submitted by Toby Dougherty, City Manager, on behalf of the City of Hays, 1507 Main Street, Hays, Kansas 67601, and by Jon Quinday, City Manager, on behalf of the City of Russell, 133 W. 8th Street, Russell, Kansas 67665, and received in this office on April 27, 2018 (the "Change Application"), for approval of changes in the location of the place of use, the point of diversion, and the use made of water under the Certificate of Appropriation issued on June 5, 1987 (the "Certificate"), pursuant to the application for permit to appropriate water for beneficial use regarding the above-mentioned Water Right, File No. 21,732 (the "Water Right"), as modified and amended by the Order of the Chief Engineer dated January 17, 2018, dividing Water Right, File No. 21,732, into File Nos. 21,732-D1 and 21,732-D2, finds that the changes requested in the Change Application are reasonable and will not impair existing rights, that such changes relate to the same local source of supply, and that the Change Application should be and is hereby approved pursuant to K.S.A. 82a-708b and as provided herein.

This approval order (the "Change Approval") is attached as an exhibit to, is incorporated in, and is subject to the terms of, that certain Master Order Contingently Approving Change Applications Regarding R9 Water Rights (the "Master Order"), issued by the Chief Engineer concurrently with this Change Approval. The effective date of the changes approved herein for the Water Right shall be as provided in the Master Order. Upon effectiveness as provided in the Master Order:

1. The authorized use made of water for the Water Right shall be:

Municipal Use,

and the authorized locations of the places of use shall be those that are specifically described in **Appendix F** to the Master Order,

and the location of the point of diversion for the Water Right shall be authorized from one (1) well located as follows:

one (1) well (Well B) located in the Southeast Quarter of the Southwest Quarter of the Northeast Quarter (SE $\frac{1}{4}$ SW $\frac{1}{4}$ NE $\frac{1}{4}$) of Section 32, more particularly described as being near a point 2,724 feet North and 1,916 feet West of the Southeast corner of said section, Township 25 South, Range 19 West, Edwards County, Kansas, in a quantity not to exceed 78.204 million gallons (240 acre-feet) of groundwater per calendar year at a diversion rate not in excess of 885 gallons per minute (1.97 c.f.s.),

to be completed within the mapped boundaries as shown on the maps marked Exhibits L and M accompanying the Change Application, and pursuant to the Master Order.

2. The following additional conditions of this Change Approval also shall apply to this Water Right:

a. Installation of the works for diversion of water shall be completed on or before December 31, 2029, or within any authorized extension of time granted by the Chief Engineer for good cause shown. The Water Right owner shall notify the Chief Engineer when construction of the diversion works has been completed.

b. All wells with a diversion rate of 100 gallons per minute or more drilled under the authority of this Change Approval shall have a tube or other device installed in a manner acceptable to, and in accordance with, specifications adopted by the Chief Engineer. This tube or device shall be suitable for making water level measurements and shall be maintained in a condition satisfactory to the Chief Engineer.

c. The Water Right owner shall submit to the Chief Engineer a copy of the well log required by the Kansas Department of Health and Environment under the authority of K.S.A. 82a-1212, currently form WWC-5, within 30 days following the drilling of the well at the location authorized herein.

d. All diversion works 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.

e. Prior to the use of water, the Water Right owner shall properly install an acceptable water meter on the diversion works authorized for this Water Right, in strict accordance with K.A.R. 5-1-4 through 5-1-12. The Water Right owner shall notify the Chief Engineer when installation of the water meter has been completed. The Water Right owner shall maintain the water meter in an operating condition satisfactory to the Chief Engineer at all times during diversion of water and shall maintain records from which the total quantity of water diverted may be determined. The Water Right owner shall also annually report to the Chief Engineer the reading of said water meter and the total quantity of water diverted. Such records shall be furnished to the Chief Engineer by March 1 following the end of each calendar year.

3. Further, the following Limitations (as that term is defined in the Master Order), shall apply to this Water Right, for which Limitations the Chief Engineer specifically retains jurisdiction and authority to review and modify, as provided in the Master Order:

As provided in the Master Order, this Water Right is subject to a Limitation such that when this Water Right is combined with Water Right, File No. 21,732-D1, the total rate of diversion shall not exceed 885 gallons per minute (1.97 c.f.s.) for municipal use from the point of diversion authorized herein.

As provided in the Master Order, the authorized quantity of water for municipal use under this Water Right is subject to a Limitation such that when this Water Right is combined with Water Right, File Nos. 21,729-D1; 21,729-D2; 21,730; 21,731; 21,732-D1; 21,733; 21,734; 21,841; 21,842; 22,325; 22,326; 22,327; 22,329; 22,330; 22,331; 22,332; 22,333; 22,334; 22,335; 22,338; 22,339; 22,340; 22,341; 22,342; 22,343; 22,345; 22,346; 27,760; 29,816; 30,083; and 30,084 the water used shall not exceed a rolling ten-year aggregate Limitation of 15,640.848 million gallons (48,000 acre-feet) during any, each, and every ten (10) consecutive calendar years (the "Ten-Year Rolling Aggregate Limitation" as defined in the Master Order) at the places of use authorized herein.

As provided in the Master Order, the authorized quantity of water for municipal use under this Water Right is subject to a Limitation such that when this Water Right is combined with Vested Right, File No. RS 008; and Water Right, File Nos. 206; 1,267; 1,861; 17,586; 17,587; 21,729-D1; 21,729-D2; 21,730; 21,731; and 21,732-D1 the water used shall not exceed 600.000 million gallons (1,841.3 acre-feet) per calendar year (the "Reasonable-Need Limitation" for the City of Russell, as such term is defined and periodically calculated as provided in the Master Order).

As provided in the Master Order, the authorized quantity of water for municipal use under this Water Right is subject to a Limitation such that when this Water Right is combined with Vested Right, File No. EL 002 and Water Right, File Nos. 1,248; 5,757; 18,857; 18,858; 21,729-D1; 21,729-D2; 21,730; 21,731; and 21,732-D1 the water used shall not exceed 1,847.650 million gallons (5,670.23 acre-feet) per calendar year (the "Reasonable-Need Limitation" for the City of Hays, as such term is defined and calculated in the Master Order).

4. In all other respects, the Certificate, as modified and amended by the aforementioned orders, including the Master Order, remains as issued.

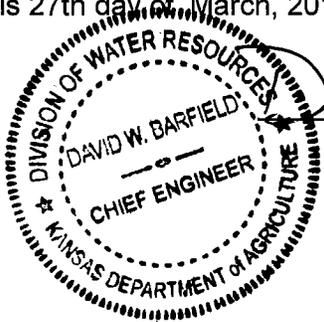
5. This Change Approval is contingent and conditioned upon the terms of the Master Order and will not become effective unless and until such time as the Master Order becomes effective.

6. Any person who is aggrieved by this Change Approval may file a petition for administrative review by the Secretary pursuant to K.S.A. 82a-708b, K.S.A. 2016 Supp. 82a-1901, and K.S.A. 77-527. K.S.A. 2016 Supp. 82a-1901 applies because the proceeding regarding this matter began before the 2017 amendments became effective. Any petition for administrative review by the Secretary must include a statement of its basis as provided in K.S.A. 77-527(c). This Change Approval will become a final order, without further notice, unless a petition for administrative review by the Secretary pursuant to K.S.A. 82a-708b, K.S.A. 2016 Supp. 82a-1901, and K.S.A. 77-527 is filed within 15 days after the date of service shown on the Certificate of Service. Any request for administrative review by the Secretary must be in writing and submitted to the attention of:

Chief Legal Counsel,
Kansas Department of Agriculture,
1320 Research Park Drive,
Manhattan, Kansas 66502,
Fax: (785) 564-6777,

with copies to those shown in the Certificate of Service.

Dated at Manhattan, Kansas, this 27th day of March, 2019.



David W. Barfield

 David W. Barfield, P.E.
 Chief Engineer
 Division of Water Resources
 Kansas Department of Agriculture

State of Kansas)
) SS
 County of Riley)

The foregoing instrument was acknowledged before me this 27th day of March, 2019, by David W. Barfield, P.E., Chief Engineer, Division of Water Resources, Kansas Department of Agriculture.



Karen Hunter

 Notary Public

CERTIFICATE OF SERVICE

On this 28 day of March, 2019, I hereby certify that the attached original Approval of Application to Change the Place of Use, the Point of Diversion and the Use Made of the Water Under an Existing Water Right, Water Right, File No. 21,732-D2, dated March 27, 2019, was mailed postage prepaid, first class, US mail to the following:

CITY OF HAYS
City Hall, 16th & Main
P.O. Box 490
Hays, KS 67601

With photocopies to:

Jon Quinday, City Manager
CITY OF RUSSELL
133 W. 8th Street
P.O. Box 112
Russell, KS 67665

David M. Traster
FOULSTON SIEFKIN LLP
1551 N. Waterfront Parkway, Suite 100
Wichita, Kansas 67206-4466

Daniel J. Buller
FOULSTON SIEFKIN LLP
9225 Indian Creek Parkway, Suite 600
Overland Park, Kansas 66210

John T. Bird
Todd Powell
GLASSMAN BIRD AND POWELL, LLP
Attention: Attorneys for the City of Hays, Kansas
200 West Thirteenth Street
Hays, KS 67601-0727

Kenneth L. Cole
WOELK & COLE
4 S. Kansas St.
P.O. Box 431
Russell, KS 67665

Stafford Field Office
Stockton Field Office
Big Bend Groundwater Management District No. 5



KDA Staff

THE STATE OF KANSAS



KANSAS DEPARTMENT OF AGRICULTURE
Mike Beam, Acting Secretary of Agriculture

DIVISION OF WATER RESOURCES
David W. Barfield, Chief Engineer

APPROVAL OF APPLICATION
TO CHANGE
THE PLACE OF USE, THE POINT OF DIVERSION AND THE USE MADE
OF THE WATER UNDER AN EXISTING WATER RIGHT

WATER RIGHT
FILE NO. 21,733

The Chief Engineer, Division of Water Resources, Kansas Department of Agriculture, after due consideration of the written Application for Approval to Change the Place of Use, the Point of Diversion or the Use Made of the Water Under an Existing Water Right, submitted by Toby Dougherty, City Manager, on behalf of the City of Hays, 1507 Main Street, Hays, Kansas 67601, and by Jon Quinday, City Manager, on behalf of the City of Russell, 133 W. 8th Street, Russell, Kansas 67665, and received in this office on June 26, 2015, as amended (the "Change Application"), for approval of changes in the location of the place of use, the point of diversion, and the use made of water under the Certificate of Appropriation issued on November 30, 1987 (the "Certificate"), pursuant to the application for permit to appropriate water for beneficial use regarding the above-mentioned Water Right, File No. 21,733 (the "Water Right"), finds that the changes requested in the Change Application are reasonable and will not impair existing rights, that such changes relate to the same local source of supply, and that the Change Application should be and is hereby approved pursuant to K.S.A. 82a-708b and as provided herein.

This approval order (the "Change Approval") is attached as an exhibit to, is incorporated in, and is subject to the terms of that certain Master Order Contingently Approving Change Applications Regarding R9 Water Rights (the "Master Order"), issued by the Chief Engineer concurrently with this Change Approval. The effective date of the changes approved herein for the Water Right shall be as provided in the Master Order. Upon effectiveness as provided in the Master Order:

1. The authorized use made of water for the Water Right shall be:

Municipal Use,

and the authorized locations of the places of use shall be those that are specifically described in **Appendix F** to the Master Order,

and the location of the point of diversion for the Water Right shall be authorized from one (1) well located as follows:

one (1) well (Well C) located in the Northeast Quarter of the Southeast Quarter of the Southwest Quarter (NE $\frac{1}{4}$ SE $\frac{1}{4}$ SW $\frac{1}{4}$) of Section 33, more particularly described as being near a point 824 feet North and 3,036 feet West of the Southeast corner of said section, in a quantity not to exceed 61.586 million gallons (189 acre-feet) of groundwater per calendar year at a diversion rate not in excess of 915 gallons per minute (2.04 c.f.s.), Township 25 South, Range 19 West, Edwards County, Kansas,

to be completed within the mapped boundaries as shown on the maps marked Exhibits P, and Q accompanying the Change Application, and pursuant to the Master Order.

2. The following additional conditions of this Change Approval also shall apply to this Water Right:

a. Installation of the works for diversion of water shall be completed on or before December 31, 2029, or within any authorized extension of time granted by the Chief Engineer for good cause shown. The Water Right owner shall notify the Chief Engineer when construction of the diversion works has been completed.

b. All wells with a diversion rate of 100 gallons per minute or more drilled under the authority of this Change Approval shall have a tube or other device installed in a manner acceptable to, and in accordance with, specifications adopted by the Chief Engineer. This tube or device shall be suitable for making water level measurements and shall be maintained in a condition satisfactory to the Chief Engineer.

c. The Water Right owner shall submit to the Chief Engineer a copy of the well log required by the Kansas Department of Health and Environment under the authority of K.S.A. 82a-1212, currently form WWC-5, within 30 days following the drilling of the well at the location authorized herein.

d. All diversion works 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.

e. Prior to the use of water, the Water Right owner shall properly install an acceptable water meter on the diversion works authorized for this Water Right, in strict accordance with K.A.R. 5-1-4 through 5-1-12. The Water Right owner shall notify the Chief Engineer when installation of the water meter has been completed. The Water Right owner shall maintain the water meter in an operating condition satisfactory to the Chief Engineer at all times during diversion of water and shall maintain records from which the total quantity of water diverted may be determined. The Water Right owner shall also annually report to the Chief Engineer the reading of said water meter and the total quantity of water diverted. Such records shall be furnished to the Chief Engineer by March 1 following the end of each calendar year.

3. Further, the following Limitations shall apply to this Water Right, for which Limitations the Chief Engineer specifically retains jurisdiction and authority to review and modify, as provided in the Master Order:

As provided in the Master Order, the authorized quantity of water for municipal use under this Water Right is subject to a Limitation such that when this Water Right is combined with Water Right, File Nos.: 21,729-D1; 21,729-D2; 21,730; 21,731; 21,732-D1; 21,732-D2; 21,734; 21,841; 21,842; 22,325; 22,326; 22,327; 22,329; 22,330; 22,331; 22,332; 22,333; 22,334; 22,335; 22,338; 22,339; 22,340; 22,341; 22,342; 22,343; 22,345; 22,346; 27,760; 29,816; 30,083; and 30,084 the water used shall not exceed a rolling ten-year aggregate Limitation of 15,640.848 million gallons (48,000 acre-feet) during any, each, and every ten (10) consecutive calendar years (the "Ten-Year Rolling Aggregate Limitation" as defined in the Master Order) at the places of use authorized herein.

As provided in the Master Order, the authorized quantity of water for municipal use under this Water Right is subject to a Limitation such that when this Water Right is combined with Vested Right, File No. RS 008; and Water Right, File Nos. 206; 1,267; 1,861; 17,586; 17,587; 21,729-D1; 21,729-D2; 21,730; 21,731; 21,732-D1; and 21,732-D2 the water used shall not exceed 600.000 million gallons (1,841.3 acre-feet) per calendar year (the "Reasonable-Need Limitation" for the City of Russell, as such term is defined and calculated in the Master Order).

As provided in the Master Order, the authorized quantity of water for municipal use under this Water Right is subject to a Limitation such that when this Water Right is combined with Vested Right, File No. EL 002 and Water Right, File Nos. 1,248; 5,757; 18,857; 18,858; 21,729-D1; 21,729-D2; 21,730; 21,731; 21,732-D1 and 21,732-D2 the water used shall not exceed 1,847.650 million gallons (5,670.23 acre-feet) per calendar year (the "Reasonable-Need Limitation" for the City of Hays, as such term is defined and calculated in the Master Order).

4. In all other respects, the Certificate, as modified and amended by the aforementioned orders, including the Master Order, remains as issued.

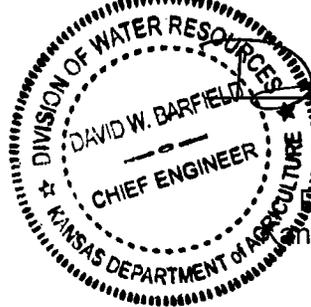
5. This Change Approval is contingent and conditioned upon the terms of the Master Order and will not become effective unless and until such time as the Master Order becomes effective.

6. Any person who is aggrieved by this Change Approval may file a petition for administrative review by the Secretary pursuant to K.S.A. 82a-708b, K.S.A. 2016 Supp. 82a-1901, and K.S.A. 77-527. K.S.A. 2016 Supp. 82a-1901 applies because the proceeding regarding this matter began before the 2017 amendments became effective. Any petition for administrative review by the Secretary must include a statement of its basis as provided in K.S.A. 77-527(c). This Change Approval will become a final order, without further notice, unless a petition for administrative review by the Secretary pursuant to K.S.A. 82a-708b, K.S.A. 2016 Supp. 82a-1901, and K.S.A. 77-527 is filed within 15 days after the date of service shown on the Certificate of Service. Any request for administrative review by the Secretary must be in writing and submitted to the attention of:

Chief Legal Counsel,
Kansas Department of Agriculture,
1320 Research Park Drive,
Manhattan, Kansas 66502,
Fax: (785) 564-6777,

with copies to those shown in the Certificate of Service.

Dated at Manhattan, Kansas, this 27th day of March, 2019.



David W. Barfield

David W. Barfield, P.E.
Chief Engineer
Division of Water Resources
Kansas Department of Agriculture

State of Kansas)
) SS
County of Riley)

The foregoing instrument was acknowledged before me this 27th day of March, 2019, by David W. Barfield, P.E., Chief Engineer, Division of Water Resources, Kansas Department of Agriculture.



Karen Hunter
Notary Public

CERTIFICATE OF SERVICE

On this 28 day of March, 2019, I hereby certify that the attached original Approval of Application to Change the Place of Use, the Point of Diversion and the Use Made of the Water Under an Existing Water Right, Water Right, File No. 21,733, dated March 27, 2019, was mailed postage prepaid, first class, US mail to the following:

Toby Dougherty, City Manager
CITY OF HAYS
City Hall, 16th & Main
P.O. Box 490
Hays, KS 67601

With photocopies to:

Jon Quinday, City Manager
CITY OF RUSSELL
133 W. 8th Street
P.O. Box 112
Russell, KS 67665

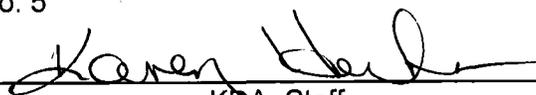
David M. Traster
FOULSTON SIEFKIN LLP
1551 N. Waterfront Parkway, Suite 100
Wichita, Kansas 67206-4466

Daniel J. Buller
FOULSTON SIEFKIN LLP
9225 Indian Creek Parkway, Suite 600
Overland Park, Kansas 66210

John T. Bird
Todd Powell
GLASSMAN BIRD AND POWELL, LLP
Attention: Attorneys for the City of Hays, Kansas
200 West Thirteenth Street
Hays, KS 67601-0727

Kenneth L. Cole
WOELK & COLE
4 S. Kansas St.
P.O. Box 431
Russell, KS 67665-0431

Stafford Field Office
Stockton Field Office
Big Bend Groundwater Management District No. 5



KDA Staff

THE STATE OF KANSAS



KANSAS DEPARTMENT OF AGRICULTURE
Mike Beam, Acting Secretary of Agriculture

DIVISION OF WATER RESOURCES
David W. Barfield, Chief Engineer

APPROVAL OF APPLICATION TO CHANGE THE PLACE OF USE, THE POINT OF DIVERSION AND THE USE MADE OF THE WATER UNDER AN EXISTING WATER RIGHT

WATER RIGHT FILE NO. 21,734

The Chief Engineer, Division of Water Resources, Kansas Department of Agriculture, after due consideration of the written Application for Approval to Change the Place of Use, the Point of Diversion or the Use Made of the Water Under an Existing Water Right, submitted by Toby Dougherty, City Manager, on behalf of the City of Hays, 1507 Main Street, Hays, Kansas 67601, and by Jon Quinday, City Manager, on behalf of the City of Russell, 133 W. 8th Street, Russell, Kansas 67665, and received in this office on June 26, 2015, as amended (the "Change Application"), for approval of changes in the location of the place of use, the point of diversion, and the use made of water under the Certificate of Appropriation issued on January 19, 2006 (the "Certificate"), pursuant to the application for permit to appropriate water for beneficial use regarding the above-mentioned Water Right, File No. 21,734 (the "Water Right"), as modified and amended by the Order of the Chief Engineer dated September 4, 2008, approving the application to change the points of diversion, finds that the changes requested in the Change Application are reasonable and will not impair existing rights, that such changes relate to the same local source of supply, and that the Change Application should be and is hereby approved pursuant to K.S.A. 82a-708b and as provided herein.

This approval order (the "Change Approval") is attached as an exhibit to, is incorporated in, and is subject to the terms of that certain Master Order Contingently Approving Change Applications Regarding R9 Water Rights (the "Master Order"), issued by the Chief Engineer concurrently with this Change Approval. The effective date of the changes approved herein for the Water Right shall be as provided in the Master Order. Upon effectiveness as provided in the Master Order:

1. The authorized use made of water for the Water Right shall be:

Municipal Use,

and the authorized locations of the places of use shall be those that are specifically described in **Appendix F** to the Master Order.

and the location of the points of diversion for the Water Right shall be authorized from three (3) wells located as follows:

one (1) well (Well C) located in the Northeast Quarter of the Southeast Quarter of the Southwest Quarter (NE $\frac{1}{4}$ SE $\frac{1}{4}$ SW $\frac{1}{4}$) of Section 33, more particularly described as being near a point 824 feet North and 3,036 feet West of the Southeast corner of said section, in a quantity not to exceed 57.610 million gallons (176.8 acre-feet) of groundwater per calendar year at a diversion rate not in excess of 935 gallons per minute (2.08 c.f.s.), in Township 25 South, Range 19 West, and

one (1) well (Well D) located in Lot 3 of Section 5, more particularly described as being near a point 4,867 feet North and 3,107 feet West of the Southeast corner of said section, in a quantity not to exceed 192.676 million gallons (591.3 acre-feet) of groundwater per calendar year at a diversion rate not in excess of 1,500 gallons per minute (3.34 c.f.s.), in Township 26 South, Range 19 West, and

one (1) well (Well E) located in the Northwest Quarter of the Southeast Quarter of the Southeast Quarter (NW $\frac{1}{4}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$) of Section 5, more particularly described as being near a point 1,577 feet North and 901 feet West of the Southeast corner of said section, in a quantity not to exceed 39.428 million gallons (121 acre-feet) of groundwater per calendar year at a diversion rate not in excess of 1,035 gallons per minute (2.31 c.f.s.), in Township 26 South, Range 19 West,

all in Edwards County, Kansas,

to be completed within the mapped boundaries as shown on the maps marked Exhibits S, T, U, V, W, and X accompanying the Change Application, and pursuant to the Master Order.

2. Due to the aforementioned changes, the Water Right shall be reduced to a total authorized rate of diversion not to exceed 3,470 gallons per minute (7.73 c.f.s.).

3. Due to the aforementioned changes, the Water Right shall be reduced to a total authorized quantity of water not to exceed 289.714 million gallons (889.1 acre-feet) per calendar year.

4. Due to the aforementioned changes, this Change Approval removes the following Limitation, (as that term is defined in the Master Order), on the rate of diversion for the Water Right, which Limitation is set forth as follows in the Certificate:

This appropriation right is further limited to a diversion rate which when the wells operate simultaneously will provide a maximum diversion rate not in excess of 4,800 gallons per minute (10.7 c.f.s.) for irrigation use on the property described herein.

5. Due to the aforementioned changes, this Change Approval removes the following Limitation, (as that term is defined in the Master Order), on the quantity of water for the Water Right, which Limitation is set forth as follows in the Certificate:

This appropriation right is further limited to a total quantity of water not to exceed 1,040 acre-feet of water per calendar year for irrigation use on the land described herein

6. The following additional conditions of this Change Approval also shall apply to this Water Right:

a. Installation of the works for diversion of water shall be completed on or before December 31, 2029, or within any authorized extension of time granted by the Chief Engineer for good cause shown. The Water Right owner shall notify the Chief Engineer when construction of the diversion works has been completed.

b. All wells with a diversion rate of 100 gallons per minute or more drilled under the authority of this Change Approval shall have a tube or other device installed in a manner acceptable to, and in accordance with, specifications adopted by the Chief Engineer. This tube or device shall be suitable for making water level measurements and shall be maintained in a condition satisfactory to the Chief Engineer.

c. The Water Right owner shall submit to the Chief Engineer a copy of the well log required by the Kansas Department of Health and Environment under the authority of K.S.A. 82a-1212, currently form WWC-5, within 30 days following the drilling of the well at the location authorized herein.

d. All diversion works 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.

e. Prior to the use of water, the Water Right owner shall properly install an acceptable water meter on the diversion works authorized for this Water Right, in strict accordance with K.A.R. 5-1-4 through 5-1-12. The Water Right owner shall notify the Chief Engineer when installation of the water meter has been completed. The Water Right owner shall maintain the water meter in an operating condition satisfactory to the Chief Engineer at all times during diversion of water and shall maintain records from which the total quantity of water diverted may be determined. The Water Right owner shall also annually report to the Chief Engineer the reading of said water meter and the total quantity of water diverted. Such records shall be furnished to the Chief Engineer by March 1 following the end of each calendar year.

7. Further, the following Limitations shall apply to this Water Right, for which Limitations the Chief Engineer specifically retains jurisdiction and authority to review and modify, as provided in the Master Order:

As provided in the Master Order, this Water Right's rate of diversion from the well described as (Well C): located in the Northeast Quarter of the Southeast Quarter of the Southwest Quarter (NE $\frac{1}{4}$ SE $\frac{1}{4}$ SW $\frac{1}{4}$) of Section 33, more particularly described as being near a point 824 feet North and 3,036 feet West of the Southeast corner of said section, Township 25 South, Range 19 West, Edwards County, Kansas, is subject to a Limitation such that the rate of diversion shall not exceed 1,360 gallons per minute (3.03 c.f.s.), when this Water Right is combined with Water Right, File No. 21,733, for municipal use.

As provided in the Master Order, the authorized quantity of water for municipal use under this Water Right is subject to a Limitation such that when this Water Right is combined with Water Right, File Nos.: 21,729-D1; 21,729-D2; 21,730; 21,731; 21,732-D1; 21,732-D2; 21,733; 21,841; 21,842; 22,325; 22,326; 22,327; 22,329; 22,330; 22,331; 22,332; 22,333; 22,334; 22,335; 22,338; 22,339; 22,340; 22,341; 22,342; 22,343; 22,345; 22,346; 27,760; 29,816; 30,083; and 30,084 the water used shall not exceed a rolling ten-year aggregate Limitation of 15,640.848 million gallons (48,000 acre-feet) during any, each, and every ten (10) consecutive calendar years, (the "Ten-Year Rolling Aggregate Limitation" as defined in the Master Order) at the places of use authorized herein.

As provided in the Master Order, the authorized quantity of water for municipal use under this Water Right is subject to a Limitation such that when this Water Right is combined with Vested Right, File No. RS 008; and Water Right, File Nos. 206; 1,267; 1,861; 17,586; 17,587; 21,729-D1; 21,729-D2; 21,730; 21,731; 21,732-D1; 21,732-D2; and 21,733 the water used shall not exceed 600.000 million gallons (1,841.3 acre-feet) per calendar year (the "Reasonable-Need Limitation" for the City of Russell, as such term is defined and calculated in the Master Order).

As provided in the Master Order, the authorized quantity of water for municipal use under this Water Right is subject to a Limitation such that when this Water Right is combined with Vested Right, File No. EL 002 and Water Right, File Nos. 1,248; 5,757; 18,857; 18,858; 21,729-D1; 21,729-D2; 21,730; 21,731; 21,732-D1; 21,732-D2; and 21,733 the water used shall not exceed 1,847.650 million gallons (5,670.23 acre-feet) per calendar year (the "Reasonable-Need Limitation" for the City of Hays, as such term is defined and calculated in the Master Order).

8. In all other respects, the Certificate, as modified and amended by the aforementioned orders, including the Master Order, remains as issued.

9. This Change Approval is contingent and conditioned upon the terms of the Master Order and will not become effective unless and until such time as the Master Order becomes effective.

10. Any person who is aggrieved by this Change Approval may file a petition for administrative review by the Secretary pursuant to K.S.A. 82a-708b, K.S.A. 2016 Supp. 82a-1901, and K.S.A. 77-527. K.S.A. 2016 Supp. 82a-1901 applies because the proceeding regarding this matter began before the 2017 amendments became effective. Any petition for administrative review by the Secretary must include a statement of its basis as provided in K.S.A. 77-527(c). This Change Approval will become a final order, without further notice, unless a petition for administrative review by the Secretary pursuant to K.S.A. 82a-708b, K.S.A. 2016 Supp. 82a-1901, and K.S.A. 77-527 is filed within 15 days after the date of service shown on the Certificate of Service. Any request for administrative review by the Secretary must be in writing and submitted to the attention of:

Chief Legal Counsel,
Kansas Department of Agriculture,
1320 Research Park Drive,
Manhattan, Kansas 66502,
Fax: (785) 564-6777,

with copies to those shown in the Certificate of Service.

Dated at Manhattan, Kansas, this 27th day of March , 2019.

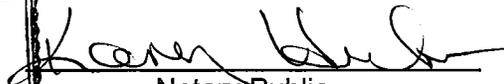


David W. Barfield, P.E.
Chief Engineer
Division of Water Resources
Kansas Department of Agriculture

State of Kansas)
) SS
County of Riley)

The foregoing instrument was acknowledged before me this 27th day of March , 2019, by David W. Barfield, P.E., Chief Engineer, Division of Water Resources, Kansas Department of Agriculture.


KAREN HUNTER
My Appointment Expires
October 24, 2022



Notary Public

CERTIFICATE OF SERVICE

On this 28 day of March, 2019, I hereby certify that the attached original Approval of Application to Change the Place of Use, the Point of Diversion and the Use Made of the Water Under an Existing Water Right, Water Right, File No. 21,734, dated March 27, was mailed postage prepaid, first class, US mail to the following:

Toby Dougherty, City Manager
CITY OF HAYS
City Hall, 16th & Main
P.O. Box 490
Hays, KS 67601

With photocopies to:

Jon Quinday, City Manager
CITY OF RUSSELL
133 W. 8th Street
P.O. Box 112
Russell, KS 67665

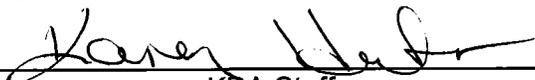
David M. Traster
FOULSTON SIEFKIN LLP
1551 N. Waterfront Parkway, Suite 100
Wichita, Kansas 67206-4466

Daniel J. Buller
FOULSTON SIEFKIN LLP
9225 Indian Creek Parkway, Suite 600
Overland Park, Kansas 66210

John T. Bird
Todd Powell
GLASSMAN BIRD AND POWELL, LLP
Attention: Attorneys for the City of Hays, Kansas
200 West Thirteenth Street
Hays, KS 67601-0727

Kenneth L. Cole
WOELK & COLE
4 S. Kansas St.
P.O. Box 431
Russell, KS 67665-0431

Stafford Field Office
Stockton Field Office
Big Bend Groundwater Management District No. 5



KDA Staff

THE STATE OF KANSAS



KANSAS DEPARTMENT OF AGRICULTURE
Mike Beam, Acting Secretary of Agriculture

DIVISION OF WATER RESOURCES
David W. Barfield, Chief Engineer

APPROVAL OF APPLICATION
TO CHANGE
THE PLACE OF USE, THE POINT OF DIVERSION AND THE USE MADE
OF THE WATER UNDER AN EXISTING WATER RIGHT

WATER RIGHT
FILE NO. 21,841

The Chief Engineer, Division of Water Resources, Kansas Department of Agriculture, after due consideration of the written Application for Approval to Change the Place of Use, the Point of Diversion or the Use Made of the Water Under an Existing Water Right, submitted by Toby Dougherty, City Manager, on behalf of the City of Hays, 1507 Main Street, Hays, Kansas 67601, and by Jon Quinday, City Manager, on behalf of the City of Russell, 133 W. 8th Street, Russell, Kansas 67665, and received in this office on June 26, 2015, as amended (the "Change Application"), for approval of changes in the location of the place of use, the point of diversion, and the use made of water under the Certificate of Appropriation issued on May 10, 1988 (the "Certificate"), pursuant to the application for permit to appropriate water for beneficial use regarding the above-mentioned Water Right, File No. 21,841 (the "Water Right"), finds that the changes requested in the Change Application are reasonable and will not impair existing rights, that such changes relate to the same local source of supply, and that the Change Application should be and is hereby approved pursuant to K.S.A. 82a-708b and as provided herein.

This approval order (the "Change Approval") is attached as an exhibit to, is incorporated in, and is subject to the terms of that certain Master Order Contingently Approving Change Applications Regarding R9 Water Rights (the "Master Order"), issued by the Chief Engineer concurrently with this Change Approval. The effective date of the changes approved herein for the Water Right shall be as provided in the Master Order. Upon effectiveness as provided in the Master Order:

1. The authorized use made of water for the Water Right shall be:

Municipal Use,

and the authorized locations of the places of use shall be those that are specifically described in **Appendix F** to the Master Order,

and the location of the point of diversion for the Water Right shall be authorized from one (1) well located as follows:

one (1) well (Well F) located in the Northwest Quarter of the Southeast Quarter of the Northeast Quarter (NW $\frac{1}{4}$ SE $\frac{1}{4}$ NE $\frac{1}{4}$) of Section 4, more particularly described as being near a point 4,545 feet North and 1,311 feet West of the Southeast corner of said section, in a quantity not to exceed 63.541 million gallons (195 acre-feet) of groundwater per calendar year at a diversion rate not in excess of 890 gallons per minute (1.98 c.f.s.), Township 26 South, Range 19 West, Edwards County, Kansas,

to be completed within the mapped boundaries as shown on the maps marked Exhibits N and O accompanying the Change Application, and pursuant to the Master Order.

2. The following additional conditions of this Change Approval also shall apply to this Water Right:

a. Installation of the works for diversion of water shall be completed on or before December 31, 2029, or within any authorized extension of time granted by the Chief Engineer for good cause shown. The Water Right owner shall notify the Chief Engineer when construction of the diversion works has been completed.

b. All wells with a diversion rate of 100 gallons per minute or more drilled under the authority of this Change Approval shall have a tube or other device installed in a manner acceptable to, and in accordance with, specifications adopted by the Chief Engineer. This tube or device shall be suitable for making water level measurements and shall be maintained in a condition satisfactory to the Chief Engineer.

c. The Water Right owner shall submit to the Chief Engineer a copy of the well log required by the Kansas Department of Health and Environment under the authority of K.S.A. 82a-1212, currently form WWC-5, within 30 days following the drilling of the well at the location authorized herein.

d. All diversion works 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.

e. Prior to the use of water, the Water Right owner shall properly install an acceptable water meter on the diversion works authorized for this Water Right, in strict accordance with K.A.R. 5-1-4 through 5-1-12. The Water Right owner shall notify the Chief Engineer when installation of the water meter has been completed. The Water Right owner shall maintain the water meter in an operating condition satisfactory to the Chief Engineer at all times during diversion of water and shall maintain records from which the total quantity of water diverted may be determined. The Water Right owner shall also annually report to the Chief Engineer the reading of said water meter and the total quantity of water diverted. Such records shall be furnished to the Chief Engineer by March 1 following the end of each calendar year.

3. Further, the following Limitations (as that term is defined in the Master Order) shall apply to this Water Right, for which Limitations the Chief Engineer specifically retains jurisdiction and authority to review and modify, as provided in the Master Order:

As provided in the Master Order, the authorized quantity of water for municipal use under this Water Right is subject to a Limitation such that when this Water Right is combined with Water Right, File Nos.: 21,729-D1; 21,729-D2; 21,730; 21,731; 21,732-D1; 21,732-D2; 21,733; 21,734; 21,842; 22,325; 22,326; 22,327; 22,329; 22,330; 22,331; 22,332; 22,333; 22,334; 22,335; 22,338; 22,339; 22,340; 22,341; 22,342; 22,343; 22,345; 22,346; 27,760; 29,816; 30,083; and 30,084 the water used shall not exceed a rolling ten-year aggregate Limitation of 15,640.848 million gallons (48,000 acre-feet) during any, each, and every ten (10) consecutive calendar years (the "Ten-Year Rolling Aggregate Limitation" as defined in the Master Order) at the places of use authorized herein.

As provided in the Master Order, the authorized quantity of water for municipal use under this Water Right is subject to a Limitation such that when this Water Right is combined with Vested Right, File No. RS 008; and Water Right, File Nos. 206; 1,267; 1,861; 17,586; 17,587; 21,729-D1; 21,729-D2; 21,730; 21,731; 21,732-D1; 21,732-D2; 21,733; and 21,734 the water used shall not exceed 600,000 million gallons (1,841.3 acre-feet) per calendar year (the "Reasonable-Need Limitation" for the City of Russell, as such term is defined and calculated in the Master Order).

As provided in the Master Order, the authorized quantity of water for municipal use under this Water Right is subject to a Limitation such that when this Water Right is combined with Vested Right, File No. EL 002 and Water Right, File Nos. 1,248; 5,757; 18,857; 18,858; 21,729-D1; 21,729-D2; 21,730; 21,731; 21,732-D1; 21,732-D2; 21,733 and 21,734 the water used shall not exceed 1,847.650 million gallons (5,670.23 acre-feet) per calendar year (the "Reasonable-Need Limitation" for the City of Hays, as such term is defined and calculated in the Master Order).

4. In all other respects, the Certificate, as modified and amended by the aforementioned orders, including the Master Order, remains as issued.

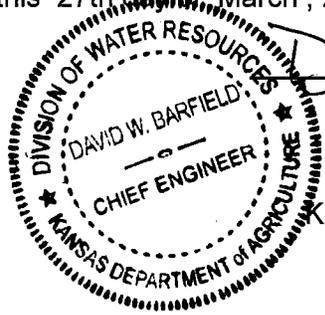
5. This Change Approval is contingent and conditioned upon the terms of the Master Order and will not become effective unless and until such time as the Master Order becomes effective.

6. Any person who is aggrieved by this Change Approval may file a petition for administrative review by the Secretary pursuant to K.S.A. 82a-708b, K.S.A. 2016 Supp. 82a-1901, and K.S.A. 77-527. K.S.A. 2016 Supp. 82a-1901 applies because the proceeding regarding this matter began before the 2017 amendments became effective. Any petition for administrative review by the Secretary must include a statement of its basis as provided in K.S.A. 77-527(c). This Change Approval will become a final order, without further notice, unless a petition for administrative review by the Secretary pursuant to K.S.A. 82a-708b, K.S.A. 2016 Supp. 82a-1901, and K.S.A. 77-527 is filed within 15 days after the date of service shown on the Certificate of Service. Any request for administrative review by the Secretary must be in writing and submitted to the attention of:

Chief Legal Counsel,
Kansas Department of Agriculture,
1320 Research Park Drive,
Manhattan, Kansas 66502,
Fax: (785) 564-6777,

with copies to those shown in the Certificate of Service.

Dated at Manhattan, Kansas, this 27th day of March, 2019.



David W. Barfield

 David W. Barfield, P.E.
 Chief Engineer
 Division of Water Resources
 Kansas Department of Agriculture

State of Kansas)
) SS
 County of Riley)

The foregoing instrument was acknowledged before me this 27th day of March, 2019, by David W. Barfield, P.E., Chief Engineer, Division of Water Resources, Kansas Department of Agriculture.



Karen Hunter

 Notary Public

CERTIFICATE OF SERVICE

On this 20 day of March, 2019, I hereby certify that the attached original Approval of Application to Change the Place of Use, the Point of Diversion and the Use Made of the Water Under an Existing Water Right, Water Right, File No. 21,7841, dated March 27, 2019, was mailed postage prepaid, first class, US mail to the following:

CITY OF HAYS
City Hall, 16th & Main
P.O. Box 490
Hays, KS 67601

With photocopies to:

Jon Quinday, City Manager
CITY OF RUSSELL
133 W. 8th Street
P.O. Box 112
Russell, KS 67665

David M. Traster
FOULSTON SIEFKIN LLP
1551 N. Waterfront Parkway, Suite 100
Wichita, Kansas 67206-4466

Daniel J. Buller
FOULSTON SIEFKIN LLP
9225 Indian Creek Parkway, Suite 600
Overland Park, Kansas 66210

John T. Bird
Todd Powell
GLASSMAN BIRD AND POWELL, LLP
Attention: Attorneys for the City of Hays, Kansas
200 West Thirteenth Street
Hays, KS 67601-0727

Kenneth L. Cole
WOELK & COLE
4 S. Kansas St.
P.O. Box 431
Russell, KS 67665-0431

Stafford Field Office
Stockton Field Office
Big Bend Groundwater Management District No. 5


KDA Staff

THE STATE OF KANSAS



KANSAS DEPARTMENT OF AGRICULTURE
Mike Beam, Acting Secretary of Agriculture

DIVISION OF WATER RESOURCES
David W. Barfield, Chief Engineer

APPROVAL OF APPLICATION
TO CHANGE
THE PLACE OF USE, THE POINT OF DIVERSION AND THE USE MADE
OF THE WATER UNDER AN EXISTING WATER RIGHT

WATER RIGHT
FILE NO. 21,842

The Chief Engineer, Division of Water Resources, Kansas Department of Agriculture, after due consideration of the written Application for Approval to Change the Place of Use, the Point of Diversion or the Use Made of the Water Under an Existing Water Right, submitted by Toby Dougherty, City Manager, on behalf of the City of Hays, 1507 Main Street, Hays, Kansas 67601, and by Jon Quinday, City Manager, on behalf of the City of Russell, 133 W. 8th Street, Russell, Kansas 67665, and received in this office on June 26, 2015, as amended (the "Change Application"), for approval of changes in the location of the place of use, the point of diversion, and the use made of water under the Certificate of Appropriation issued on May 10, 1988 (the "Certificate"), pursuant to the application for permit to appropriate water for beneficial use regarding the above-mentioned Water Right, File No. 21,842 (the "Water Right"), finds that the changes requested in the Change Application are reasonable and will not impair existing rights, that such changes relate to the same local source of supply, and that the Change Application should be and is hereby approved pursuant to K.S.A. 82a-708b and as provided herein.

This approval order (the "Change Approval") is attached as an exhibit to, is incorporated in, and is subject to the terms of that certain Master Order Contingently Approving Change Applications Regarding R9 Water Rights (the "Master Order"), issued by the Chief Engineer concurrently with this Change Approval. The effective date of the changes approved herein for the Water Right shall be as provided in the Master Order. Upon effectiveness as provided in the Master Order:

1. The authorized use made of water for the Water Right shall be:

Municipal Use,

and the authorized locations of the places of use shall be those that are specifically described in **Appendix F** to the Master Order,

and the location of the point of diversion for the Water Right shall be authorized from one (1) well located as follows:

one (1) well (Well E) located in the Northwest Quarter of the Southeast Quarter of the Southeast Quarter (NW $\frac{1}{4}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$) of Section 5, more particularly described as being near a point 1,577 feet North and 901 feet West of the Southeast corner of said section, in a quantity not to exceed 63.541 million gallons (195 acre-feet) of groundwater per calendar year at a diversion rate not in excess of 900 gallons per minute (2.01 c.f.s.), Township 26 South, Range 19 West, Edwards County, Kansas,

to be completed within the mapped boundaries as shown on the maps marked Exhibits M and N accompanying the Change Application, and pursuant to the Master Order.

2. The following additional conditions of this Change Approval also shall apply to this Water Right:

a. Installation of the works for diversion of water shall be completed on or before December 31, 2029, or within any authorized extension of time granted by the Chief Engineer for good cause shown. The Water Right owner shall notify the Chief Engineer when construction of the diversion works has been completed.

b. All wells with a diversion rate of 100 gallons per minute or more drilled under the authority of this Change Approval shall have a tube or other device installed in a manner acceptable to, and in accordance with, specifications adopted by the Chief Engineer. This tube or device shall be suitable for making water level measurements and shall be maintained in a condition satisfactory to the Chief Engineer.

c. The Water Right owner shall submit to the Chief Engineer a copy of the well log required by the Kansas Department of Health and Environment under the authority of K.S.A. 82a-1212, currently form WWC-5, within 30 days following the drilling of the well at the location authorized herein.

d. All diversion works 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.

e. Prior to the use of water, the Water Right owner shall properly install an acceptable water meter on the diversion works authorized for this Water Right, in strict accordance with K.A.R. 5-1-4 through 5-1-12. The Water Right owner shall notify the Chief Engineer when installation of the water meter has been completed. The Water Right owner shall maintain the water meter in an operating condition satisfactory to the Chief Engineer at all times during diversion of water and shall maintain records from which the total quantity of water diverted may be determined. The Water Right owner shall also annually report to the Chief Engineer the reading of said water meter and the total quantity of water diverted. Such records shall be furnished to the Chief Engineer by March 1 following the end of each calendar year.

3. Further, the following Limitations (as that term is defined in the Master Order) shall apply to this Water Right, for which Limitations the Chief Engineer specifically retains jurisdiction and authority to review and modify, as provided in the Master Order:

As provided in the Master Order, this Water Right's rate of diversion from the well described as (Well E) located in the Northwest Quarter of the Southeast Quarter of the Southeast Quarter (NW $\frac{1}{4}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$) of Section 5, more particularly described as being near a point 1,577 feet North and 901 feet West of the Southeast corner of said section Township 26 South, Range 19 West, Edwards County, Kansas, is subject to a Limitation such that the rate of diversion shall not exceed 1,270 gallons per minute (2.83 c.f.s.), when this Water Right is combined with Water Right, File No. 21,734, for municipal use.

As provided in the Master Order, the authorized quantity of water for municipal use under this Water Right is subject to a Limitation such that when this Water Right is combined with Water Right, File Nos.: 21,729-D1; 21,729-D2; 21,730; 21,731; 21,732-D1; 21,732-D2; 21,733; 21,734; 21,841; 22,325; 22,326; 22,327; 22,329; 22,330; 22,331; 22,332; 22,333; 22,334; 22,335; 22,338; 22,339; 22,340; 22,341; 22,342; 22,343; 22,345; 22,346; 27,760; 29,816; 30,083; and 30,084 the water used shall not exceed a rolling ten-year aggregate Limitation of 15,640.848 million gallons (48,000 acre-feet) during any, each, and every ten (10) consecutive, calendar years (the "Ten-Year Rolling Aggregate Limitation" as defined in the Master Order) at the places of use authorized herein.

As provided in the Master Order, the authorized quantity of water for municipal use under this Water Right is subject to a Limitation such that when this Water Right is combined with Vested Right, File No. RS 008; and Water Right, File Nos. 206; 1,267; 1,861; 17,586; 17,587; 21,729-D1; 21,729-D2; 21,730; 21,731; 21,732-D1; 21,732-D2; 21,733; 21,734; and 21,841 the water used shall not exceed 600.000 million gallons (1,841.3 acre-feet) per calendar year (the "Reasonable-Need Limitation" for the City of Russell, as such term is defined and calculated in the Master Order).

As provided in the Master Order, the authorized quantity of water for municipal use under this Water Right is subject to a Limitation such that when this Water Right is combined with Vested Right, File No. EL 002 and Water Right, File Nos. 1,248; 5,757; 18,857; 18,858; 21,729-D1; 21,729-D2; 21,730; 21,731; 21,732-D1; 21,732-D2; 21,733; 21,734; and 21,841 the water used shall not exceed 1,847.650 million gallons (5,670.23 acre-feet) per calendar year (the "Reasonable-Need Limitation" for the City of Hays, as such term is defined and calculated in the Master Order).

4. In all other respects, the Certificate, as modified and amended by the aforementioned orders, including the Master Order, remains as issued.

5. This Change Approval is contingent and conditioned upon the terms of the Master Order and will not become effective unless and until such time as the Master Order becomes effective.

6. Any person who is aggrieved by this Change Approval may file a petition for administrative review by the Secretary pursuant to K.S.A. 82a-708b, K.S.A. 2016 Supp. 82a-1901, and K.S.A. 77-527. K.S.A. 2016 Supp. 82a-1901 applies because the proceeding regarding this matter began before the 2017 amendments became effective. Any petition for administrative review by the Secretary must include a statement of its basis as provided in K.S.A. 77-527(c). This Change Approval will become a final order, without further notice, unless a petition for administrative review by the Secretary pursuant to K.S.A. 82a-708b, K.S.A. 2016 Supp. 82a-1901, and K.S.A. 77-527 is filed within 15 days after the date of service shown on the Certificate of Service. Any request for administrative review by the Secretary must be in writing and submitted to the attention of:

Chief Legal Counsel,
Kansas Department of Agriculture,
1320 Research Park Drive,
Manhattan, Kansas 66502,
Fax: (785) 564-6777,

with copies to those shown in the Certificate of Service.

CERTIFICATE OF SERVICE

On this 28 day of March, 2019, I hereby certify that the attached original Approval of Application to Change the Place of Use, the Point of Diversion and the Use Made of the Water Under an Existing Water Right, Water Right, File No. 21,842, dated March 27, 2019, was mailed postage prepaid, first class, US mail to the following:

Toby Dougherty, City Manager
CITY OF HAYS
City Hall, 16th & Main
P.O. Box 490
Hays, KS 67601

With photocopies to:

Jon Quinday, City Manager
CITY OF RUSSELL
133 W. 8th Street
P.O. Box 112
Russell, KS 67665

David M. Traster
FOULSTON SIEFKIN LLP
1551 N. Waterfront Parkway, Suite 100
Wichita, Kansas 67206-4466

Daniel J. Buller
FOULSTON SIEFKIN LLP
9225 Indian Creek Parkway, Suite 600
Overland Park, Kansas 66210

John T. Bird
Todd Powell
GLASSMAN BIRD AND POWELL, LLP
Attention: Attorneys for the City of Hays, Kansas
200 West Thirteenth Street
Hays, KS 67601-0727

Kenneth L. Cole
WOELK & COLE
4 S. Kansas St.
P.O. Box 431
Russell, KS 67665-0431

Stafford Field Office
Stockton Field Office
Big Bend Groundwater Management District No. 5



KDA Staff

THE STATE OF KANSAS



KANSAS DEPARTMENT OF AGRICULTURE
Mike Beam, Acting Secretary of Agriculture

DIVISION OF WATER RESOURCES
David W. Barfield, Chief Engineer

APPROVAL OF APPLICATION
TO CHANGE
THE PLACE OF USE, THE POINT OF DIVERSION AND THE USE MADE
OF THE WATER UNDER AN EXISTING WATER RIGHT

WATER RIGHT
FILE NO. 22,325

The Chief Engineer, Division of Water Resources, Kansas Department of Agriculture, after due consideration of the written Application for Approval to Change the Place of Use, the Point of Diversion or the Use Made of the Water Under an Existing Water Right, submitted by Toby Dougherty, City Manager, on behalf of the City of Hays, 1507 Main Street, Hays, Kansas 67601, and by Jon Quinday, City Manager, on behalf of the City of Russell, 133 W. 8th Street, Russell, Kansas 67665, and received in this office on June 26, 2015, as amended (the "Change Application"), for approval of changes in the location of the place of use, the point of diversion, and the use made of water under the Certificate of Appropriation issued on June 11, 1987 (the "Certificate"), pursuant to the application for permit to appropriate water for beneficial use regarding the above-mentioned Water Right, File No. 22,325 (the "Water Right"), as modified and amended by the order of the Chief Engineer dated March 9, 1988, approving the application to change the place of use, the order of the Chief Engineer dated February 2, 1990, approving the application to change the location of the point of diversion and the order of the Chief Engineer in the matter of the authorized points of diversion, finds that the changes requested in the Change Application are reasonable and will not impair existing rights, that such changes relate to the same local source of supply, and that the Change Application should be and is hereby approved pursuant to K.S.A. 82a-708b and as provided herein.

This approval order (the "Change Approval") is attached as an exhibit to, is incorporated in, and is subject to the terms of that certain Master Order Contingently Approving Change Applications Regarding R9 Water Rights (the "Master Order"), issued by the Chief Engineer concurrently with this Change Approval. The effective date of the changes approved herein for the Water Right shall be as provided in the Master Order. Upon effectiveness as provided in the Master Order:

1. The authorized use made of water for the Water Right shall be:

Municipal Use,

and the authorized locations of the places of use shall be those that are specifically described in **Appendix F** to the Master Order,

and the location of the point of diversion for the Water Right shall be authorized from one (1) well located as follows:

one (1) well (Well I) located in the Southeast Quarter of the Northeast Quarter of the Northwest Quarter (SE $\frac{1}{4}$ NE $\frac{1}{4}$ NW $\frac{1}{4}$) of Section 1, more particularly described as being near a point 5,034 feet North and 2,790 feet West of the Southeast corner of said section, in a quantity not to exceed 60.608 million gallons (186 acre-feet) of groundwater per calendar year at a diversion rate not in excess of 805 gallons per minute (1.79 c.f.s.), Township 26 South, Range 20 West, Edwards County, Kansas,

to be completed within the mapped boundaries as shown on the maps marked Exhibits Q and R accompanying the Change Application, and pursuant to the Master Order.

2. Due to the aforementioned changes, the Water Right shall be reduced to a total authorized rate of diversion not to exceed 805 gallons per minute (1.79 c.f.s.).

3. Due to the aforementioned changes, this Change Approval removes the following Limitation, (as that term is defined in the Master Order), on the rate of diversion for the Water Right, which Limitation is set forth as follows in the Certificate:

This appropriation right is further limited to a diversion rate which when the wells operate simultaneously will provide a diversion rate not in excess of 1,000 gallons per minute (2.23 c.f.s.) for irrigation use on the property described herein.

4. The following additional conditions of this Change Approval also shall apply to this Water Right:

a. Installation of the works for diversion of water shall be completed on or before December 31, 2029, or within any authorized extension of time granted by the Chief Engineer for good cause shown. The Water Right owner shall notify the Chief Engineer when construction of the diversion works has been completed.

b. All wells with a diversion rate of 100 gallons per minute or more drilled under the authority of this Change Approval shall have a tube or other device installed in a manner acceptable to, and in accordance with, specifications adopted by the Chief Engineer. This tube or device shall be suitable for making water level measurements and shall be maintained in a condition satisfactory to the Chief Engineer.

c. The Water Right owner shall submit to the Chief Engineer a copy of the well log required by the Kansas Department of Health and Environment under the authority of K.S.A. 82a-1212, currently form WWC-5, within 30 days following the drilling of the well at the location authorized herein.

d. All diversion works 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.

e. Prior to the use of water, the Water Right owner shall properly install an acceptable water meter on the diversion works authorized for this Water Right, in strict accordance with K.A.R. 5-1-4 through 5-1-12. The Water Right owner shall notify the Chief Engineer when installation of the water meter has been completed. The Water Right owner shall maintain the water meter in an operating condition satisfactory to the Chief Engineer at all times during diversion of water and shall maintain records from which the total quantity of water diverted may be determined. The Water Right owner shall also annually report to the Chief Engineer the reading of said water meter and the total quantity of water diverted. Such records shall be furnished to the Chief Engineer by March 1 following the end of each calendar year.

5. Further, the following Limitations shall apply to this Water Right, for which Limitations the Chief Engineer specifically retains jurisdiction and authority to review and modify, as provided in the Master Order:

As provided in the Master Order, the authorized quantity of water for municipal use under this Water Right is subject to a Limitation such that when this Water Right is combined with Water Right, File Nos.: 21,729-D1; 21,729-D2; 21,730; 21,731; 21,732-D1; 21,732-D2; 21,733; 21,734; 21,841; 21,842; 22,326; 22,327; 22,329; 22,330; 22,331; 22,332; 22,333; 22,334; 22,335; 22,338; 22,339; 22,340; 22,341; 22,342; 22,343; 22,345; 22,346; 27,760; 29,816; 30,083; and 30,084 the water used shall not exceed a rolling ten-year aggregate Limitation of 15,640.848 million gallons (48,000 acre-feet) during any, each, and every ten (10) consecutive calendar years (the "Ten-Year Rolling Aggregate Limitation" as defined in the Master Order) at the places of use authorized herein.

As provided in the Master Order, the authorized quantity of water for municipal use under this Water Right is subject to a Limitation such that when this Water Right is combined with Vested Right, File No. RS 008; and Water Right, File Nos. 206; 1,267; 1,861; 17,586; 17,587; 21,729-D1; 21,729-D2; 21,730; 21,731; 21,732-D1; 21,732-D2; 21,733; 21,734; 21,841; and 21,842 the water used shall not exceed 600.000 million gallons (1,841.3 acre-feet) per calendar year (the "Reasonable-Need Limitation" for the City of Russell, as such term is defined and calculated in the Master Order).

As provided in the Master Order, the authorized quantity of water for municipal use under this Water Right is subject to a Limitation such that when this Water Right is combined with Vested Right, File No. EL 002 and Water Right, File Nos. 1,248; 5,757; 18,857; 18,858; 21,729-D1; 21,729-D2; 21,730; 21,731; 21,732-D1; 21,732-D2; 21,733; 21,734; 21,841; and 21,842 the water used shall not exceed 1,847.650 million gallons (5,670.23 acre-feet) per calendar year (the "Reasonable-Need Limitation" for the City of Hays, as such term is defined and calculated in the Master Order).

6. In all other respects, the Certificate, as modified and amended by the aforementioned orders, including the Master Order, remains as issued.

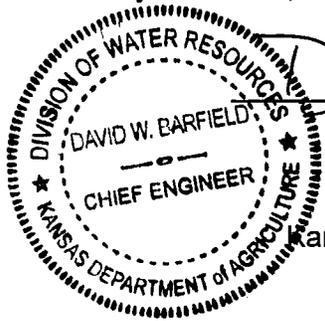
7. This Change Approval is contingent and conditioned upon the terms of the Master Order and will not become effective unless and until such time as the Master Order becomes effective.

8. Any person who is aggrieved by this Change Approval may file a petition for administrative review by the Secretary pursuant to K.S.A. 82a-708b, K.S.A. 2016 Supp. 82a-1901, and K.S.A. 77-527. K.S.A. 2016 Supp. 82a-1901 applies because the proceeding regarding this matter began before the 2017 amendments became effective. Any petition for administrative review by the Secretary must include a statement of its basis as provided in K.S.A. 77-527(c). This Change Approval will become a final order, without further notice, unless a petition for administrative review by the Secretary pursuant to K.S.A. 82a-708b, K.S.A. 2016 Supp. 82a-1901, and K.S.A. 77-527 is filed within 15 days after the date of service shown on the Certificate of Service. Any request for administrative review by the Secretary must be in writing and submitted to the attention of:

Chief Legal Counsel,
Kansas Department of Agriculture,
1320 Research Park Drive,
Manhattan, Kansas 66502,
Fax: (785) 564-6777,

with copies to those shown in the Certificate of Service

Dated at Manhattan, Kansas, this 27th day of March , 2019.



David W. Barfield

 David W. Barfield, P.E.
 Chief Engineer
 Division of Water Resources
 Kansas Department of Agriculture

State of Kansas)
) SS
 County of Riley)

The foregoing instrument was acknowledged before me this 27th day of March , 2019, by David W. Barfield, P.E., Chief Engineer, Division of Water Resources, Kansas Department of Agriculture.



Karen Hunter

 Notary Public

CERTIFICATE OF SERVICE

On this 28 day of March 2019, I hereby certify that the attached original Approval of Application to Change the Place of Use, the Point of Diversion and the Use Made of the Water Under an Existing Water Right, Water Right, File No. 22,325, dated March 27, 2019, was mailed postage prepaid, first class, US mail to the following:

Toby Dougherty, City Manager
CITY OF HAYS
City Hall, 16th & Main
P.O. Box 490
Hays, KS 67601

With photocopies to:

Jon Quinday, City Manager
CITY OF RUSSELL
133 W. 8th Street
P.O. Box 112
Russell, KS 67665

David M. Traster
FOULSTON SIEFKIN LLP
1551 N. Waterfront Parkway, Suite 100
Wichita, Kansas 67206-4466

Daniel J. Buller
FOULSTON SIEFKIN LLP
9225 Indian Creek Parkway, Suite 600
Overland Park, Kansas 66210

John T. Bird
Todd Powell
GLASSMAN BIRD AND POWELL, LLP
Attention: Attorneys for the City of Hays, Kansas
200 West Thirteenth Street
Hays, KS 67601-0727

Stafford Field Office
Stockton Field Office
Big Bend Groundwater Management District No. 5


KDA Staff

THE STATE OF KANSAS



KANSAS DEPARTMENT OF AGRICULTURE
Mike Beam, Acting Secretary of Agriculture

DIVISION OF WATER RESOURCES
David W. Barfield, Chief Engineer

APPROVAL OF APPLICATION TO CHANGE THE PLACE OF USE, THE POINT OF DIVERSION OR THE USE MADE OF THE WATER UNDER AN EXISTING WATER RIGHT

WATER RIGHT FILE NO. 22,326

The Chief Engineer, Division of Water Resources, Kansas Department of Agriculture, after due consideration of the written Application for Approval to Change the Place of Use, the Point of Diversion or the Use Made of the Water Under an Existing Water Right, submitted by Toby Dougherty, City Manager, on behalf of the City of Hays, 1507 Main Street, Hays, Kansas 67601, and by Jon Quinday, City Manager, on behalf of the City of Russell, 133 W. 8th Street, Russell, Kansas 67665, and received in this office on June 26, 2015, as amended (the "Change Application"), for approval of changes in the location of the place of use, the point of diversion, and the use made of water under the Certificate of Appropriation issued on June 11, 1987 (the "Certificate"), pursuant to the application for permit to appropriate water for beneficial use regarding the above-mentioned Water Right, File No. 22,326 (the "Water Right"), finds that the changes requested in the Change Application are reasonable and will not impair existing rights, that such changes relate to the same local source of supply, and that the Change Application should be and is hereby approved pursuant to K.S.A. 82a-708b and as provided herein.

This approval order (the "Change Approval") is attached as an exhibit to, is incorporated in, and is subject to the terms of that certain Master Order Contingently Approving Change Applications Regarding R9 Water Rights (the "Master Order"), issued by the Chief Engineer concurrently with this Change Approval. The effective date of the changes approved herein for the Water Right shall be as provided in the Master Order. Upon effectiveness as provided in the Master Order:

1. The authorized use made of water for the Water Right shall be:

Municipal Use,

the authorized locations of the places of use for the Water Right shall be:

and the authorized locations of the places of use shall be those that are specifically described in **Appendix F** to the Master Order,

and the location of the point of diversion for the Water Right shall be authorized from one (1) well located as follows:

one (1) well (Well I) located in the Southeast Quarter of the Northeast Quarter of the Northwest Quarter (SE $\frac{1}{4}$ NE $\frac{1}{4}$ NW $\frac{1}{4}$) of Section 1, more particularly described as being near a point 5,034 feet North and 2,790 feet West of the Southeast corner of said section, in a quantity not to exceed 61.260 million gallons (188 acre-feet) of groundwater per calendar year at a diversion rate not in excess of 805 gallons per minute (1.79 c.f.s.), Township 26 South, Range 20 West, Edwards County, Kansas,

to be completed within the mapped boundaries as shown on the maps marked Exhibits Q and R accompanying the Change Application, and pursuant to the Master Order.

2. Due to the aforementioned changes, the Water Right shall be reduced to a total authorized rate of diversion not to exceed 805 gallons per minute (1.79 c.f.s.).

3. Due to the aforementioned changes, this Change Approval removes the following Limitation, (as that term is defined in the Master Order), on the rate of diversion for the Water Right, which Limitation is set forth as follows in the Certificate:

This appropriation right is further limited to a diversion rate which when the wells operate simultaneously will provide a diversion rate not in excess of 1,000 gallons per minute (2.23 c.f.s.) for irrigation use on the property described herein.

4. The following additional conditions of this Change Approval also shall apply to this Water Right:

a. Installation of the works for diversion of water shall be completed on or before December 31, 2029, or within any authorized extension of time granted by the Chief Engineer for good cause shown. The Water Right owner shall notify the Chief Engineer when construction of the diversion works has been completed.

b. All wells with a diversion rate of 100 gallons per minute or more drilled under the authority of this Change Approval shall have a tube or other device installed in a manner acceptable to, and in accordance with, specifications adopted by the Chief Engineer. This tube or device shall be suitable for making water level measurements and shall be maintained in a condition satisfactory to the Chief Engineer.

c. The Water Right owner shall submit to the Chief Engineer a copy of the well log required by the Kansas Department of Health and Environment under the authority of K.S.A. 82a-1212, currently form WWC-5, within 30 days following the drilling of the well at the location authorized herein.

d. All diversion works 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.

e. Prior to the use of water, the Water Right owner shall properly install an acceptable water meter on the diversion works authorized for this Water Right, in strict accordance with K.A.R. 5-1-4 through 5-1-12. The Water Right owner shall notify the Chief Engineer when installation of the water meter has been completed. The Water Right owner shall maintain the water meter in an operating condition satisfactory to the Chief Engineer at all times during diversion of water and shall maintain records from which the total quantity of water diverted may be determined. The Water Right owner shall also annually report to the Chief Engineer the reading of said water meter and the total quantity of water diverted. Such records shall be furnished to the Chief Engineer by March 1 following the end of each calendar year.

5. Further, the following Limitations shall apply to this Water Right, for which Limitations the Chief Engineer specifically retains jurisdiction and authority to review and modify, as provided in the Master Order:

As provided in the Master Order, this Water Right is subject to a Limitation such that when this Water Right is combined with Water Right, File No. 22,325, the total rate of diversion shall not exceed 805 gallons per minute (1.79 c.f.s.) for municipal use from the point of diversion authorized herein.

As provided in the Master Order, the authorized quantity of water for municipal use under this Water Right is subject to a Limitation such that when this Water Right is combined with Water Right, File Nos.: 21,729-D1; 21,729-D2; 21,730; 21,731; 21,732-D1; 21,732-D2; 21,733; 21,734; 21,841; 21,842; 22,325; 22,327; 22,329; 22,330; 22,331; 22,332; 22,333; 22,334; 22,335; 22,338; 22,339; 22,340; 22,341; 22,342; 22,343; 22,345; 22,346; 27,760; 29,816; 30,083; and 30,084 the water used shall not exceed a rolling ten-year aggregate Limitation of 15,640.848 million gallons (48,000 acre-feet) during any, each, and every ten (10) consecutive calendar years (the "Ten-Year Rolling Aggregate Limitation" as defined in the Master Order) at the places of use authorized herein.

As provided in the Master Order, the authorized quantity of water for municipal use under this Water Right is subject to a Limitation such that when this Water Right is combined with Vested Right, File No. RS 008; and Water Right, File Nos. 206; 1,267; 1,861; 17,586; 17,587; 21,729-D1; 21,729-D2; 21,730; 21,731; 21,732-D1; 21,732-D2; 21,733; 21,734; 21,841; 21,842; and 22,325 the water used shall not exceed 600.000 million gallons (1,841.3 acre-feet) per calendar year (the "Reasonable-Need Limitation" for the City of Russell, as such term is defined and calculated in the Master Order).

As provided in the Master Order, the authorized quantity of water for municipal use under this Water Right is subject to a Limitation such that when this Water Right is combined with Vested Right, File No. EL 002 and Water Right, File Nos. 1,248; 5,757; 18,857; 18,858; 21,729-D1; 21,729-D2; 21,730; 21,731; 21,732-D1; 21,732-D2; 21,733; 21,734; 21,841; 21,842; and 22,325 the water used shall not exceed 1,847.650 million gallons (5,670.23 acre-feet) per calendar year (the "Reasonable-Need Limitation" for the City of Hays, as such term is defined and calculated in the Master Order).

6. In all other respects, the Certificate, as modified and amended by the aforementioned orders, including the Master Order, remains as issued.

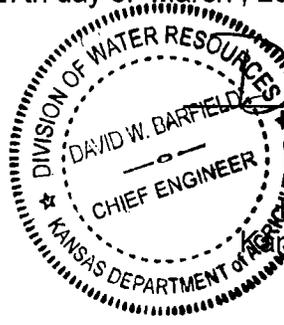
7. This Change Approval is contingent and conditioned upon the terms of the Master Order and will not become effective unless and until such time as the Master Order becomes effective.

8. Any person who is aggrieved by this Change Approval may file a petition for administrative review by the Secretary pursuant to K.S.A. 82a-708b, K.S.A. 2016 Supp. 82a-1901, and K.S.A. 77-527. K.S.A. 2016 Supp. 82a-1901 applies because the proceeding regarding this matter began before the 2017 amendments became effective. Any petition for administrative review by the Secretary must include a statement of its basis as provided in K.S.A. 77-527(c). This Change Approval will become a final order, without further notice, unless a petition for administrative review by the Secretary pursuant to K.S.A. 82a-708b, K.S.A. 2016 Supp. 82a-1901, and K.S.A. 77-527 is filed within 15 days after the date of service shown on the Certificate of Service. Any request for administrative review by the Secretary must be in writing and submitted to the attention of:

Chief Legal Counsel,
Kansas Department of Agriculture,
1320 Research Park Drive,
Manhattan, Kansas 66502,
Fax: (785) 564-6777,

with copies to those shown in the Certificate of Service.

Dated at Manhattan, Kansas, this 27th day of March , 2019.



David W Barfield

David W. Barfield, P.E.
Chief Engineer
Division of Water Resources
Kansas Department of Agriculture

State of Kansas)
) SS
County of Riley)

The foregoing instrument was acknowledged before me this 27th day of March , 2019, by David W. Barfield, P.E., Chief Engineer, Division of Water Resources, Kansas Department of Agriculture.



Karen Hunter
Notary Public

CERTIFICATE OF SERVICE

On this 28 day of March, 2019, I hereby certify that the attached original Approval of Application to Change the Place of Use, the Point of Diversion and the Use Made of the Water Under an Existing Water Right, Water Right, File No. 22,326, dated March 27, 2019, was mailed postage prepaid, first class, US mail to the following:

Toby Dougherty, City Manager
CITY OF HAYS
City Hall, 16th & Main
P.O. Box 490
Hays, KS 67601

With photocopies to:

Jon Quinday, City Manager
CITY OF RUSSELL
133 W. 8th Street
P.O. Box 112
Russell, KS 67665

David M. Traster
FOULSTON SIEFKIN LLP
1551 N. Waterfront Parkway, Suite 100
Wichita, Kansas 67206-4466

Daniel J. Buller
FOULSTON SIEFKIN LLP
9225 Indian Creek Parkway, Suite 600
Overland Park, Kansas 66210

John T. Bird
Todd Powell
GLASSMAN BIRD AND POWELL, LLP
Attention: Attorneys for the City of Hays, Kansas
200 West Thirteenth Street
Hays, KS 67601-0727

Kenneth L. Cole
WOELK & COLE
4 S. Kansas St.
P.O. Box 431
Russell, KS 67665-0431

Stafford Field Office
Stockton Field Office
Big Bend Groundwater Management District No. 5


KDA Staff

THE STATE  OF KANSAS

KANSAS DEPARTMENT OF AGRICULTURE
Mike Beam, Acting Secretary of Agriculture

DIVISION OF WATER RESOURCES
David W. Barfield, Chief Engineer

APPROVAL OF APPLICATION
TO CHANGE
THE PLACE OF USE, THE POINT OF DIVERSION AND THE USE MADE
OF THE WATER UNDER AN EXISTING WATER RIGHT

WATER RIGHT
FILE NO. 22,327

The Chief Engineer, Division of Water Resources, Kansas Department of Agriculture, after due consideration of the written Application for Approval to Change the Place of Use, the Point of Diversion or the Use Made of the Water Under an Existing Water Right, submitted by Toby Dougherty, City Manager, on behalf of the City of Hays, 1507 Main Street, Hays, Kansas 67601, and by Jon Quinday, City Manager, on behalf of the City of Russell, 133 W. 8th Street, Russell, Kansas 67665, and received in this office on June 26, 2015, as amended (the "Change Application"), for approval of changes in the location of the place of use, the point of diversion, and the use made of water under the Certificate of Appropriation issued on June 17, 1987 (the "Certificate"), pursuant to the application for permit to appropriate water for beneficial use regarding the above-mentioned Water Right, File No. 22,327 (the "Water Right"), finds that the changes requested in the Change Application are reasonable and will not impair existing rights, that such changes relate to the same local source of supply, and that the Change Application should be and is hereby approved pursuant to K.S.A. 82a-708b and as provided herein.

This approval order (the "Change Approval") is attached as an exhibit to, is incorporated in, and is subject to the terms of that certain Master Order Contingently Approving Change Applications Regarding R9 Water Rights (the "Master Order"), issued by the Chief Engineer concurrently with this Change Approval. The effective date of the changes approved herein for the Water Right shall be as provided in the Master Order. Upon effectiveness as provided in the Master Order:

1. The authorized use made of water for the Water Right shall be:

Municipal Use,

and the authorized locations of the places of use shall be those that are specifically described in **Appendix F** to the Master Order,

and the location of the point of diversion for the Water Right shall be authorized from one (1) well located as follows:

one (1) well (Well I) located in the Southeast Quarter of the Northeast Quarter of the Northwest Quarter (SE $\frac{1}{4}$ NE $\frac{1}{4}$ NW $\frac{1}{4}$) of Section 1, more particularly described as being near a point 5,034 feet North and 2,790 feet West of the Southeast corner of said section, in a quantity not to exceed 47.509 million gallons (145.8 acre-feet) of groundwater per calendar year at a diversion rate not in excess of 805 gallons per minute (1.79 c.f.s.), Township 26 South, Range 20 West, Edwards County, Kansas,

to be completed within the mapped boundaries as shown on the maps marked Exhibits Q and R accompanying the Change Application, and pursuant to the Master Order.

2. Due to the aforementioned changes, the Water Right shall be reduced to a total authorized rate of diversion not to exceed 805 gallons per minute (1.79 c.f.s.).

3. Due to the aforementioned changes, this Change Approval removes the following Limitation, (as that term is defined in the Master Order), on the rate of diversion for the Water Right, which Limitation is set forth as follows in the Certificate:

This appropriation right is further limited to a diversion rate which when the wells operate simultaneously will provide a diversion rate not in excess of 950 gallons per minute (2.12 c.f.s.) for irrigation use on the property described herein.

4. The following additional conditions of this Change Approval also shall apply to this Water Right:

a. Installation of the works for diversion of water shall be completed on or before December 31, 2029, or within any authorized extension of time granted by the Chief Engineer for good cause shown. The Water Right owner shall notify the Chief Engineer when construction of the diversion works has been completed.

b. All wells with a diversion rate of 100 gallons per minute or more drilled under the authority of this Change Approval shall have a tube or other device installed in a manner acceptable to, and in accordance with, specifications adopted by the Chief Engineer. This tube or device shall be suitable for making water level measurements and shall be maintained in a condition satisfactory to the Chief Engineer.

c. The Water Right owner shall submit to the Chief Engineer a copy of the well log required by the Kansas Department of Health and Environment under the authority of K.S.A. 82a-1212, currently form WWC-5, within 30 days following the drilling of the well at the location authorized herein.

d. All diversion works 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.

e. Prior to the use of water, the Water Right owner shall properly install an acceptable water meter on the diversion works authorized for this Water Right, in strict accordance with K.A.R. 5-1-4 through 5-1-12. The Water Right owner shall notify the Chief Engineer when installation of the water meter has been completed. The Water Right owner shall maintain the water meter in an operating condition satisfactory to the Chief Engineer at all times during diversion of water and shall maintain records from which the total quantity of water diverted may be determined. The Water Right owner shall also annually report to the Chief Engineer the reading of said water meter and the total quantity of water diverted. Such records shall be furnished to the Chief Engineer by March 1 following the end of each calendar year.

5. Further, the following Limitations shall apply to this Water Right, for which Limitations the Chief Engineer specifically retains jurisdiction and authority to review and modify, as provided in the Master Order:

As provided in the Master Order, this Water Right is subject to a Limitation such that when this Water Right is combined with Water Right, File Nos. 22,325 and 22,326, the total rate of diversion shall not exceed 805 gallons per minute (1.79 c.f.s.) for municipal use from the point of diversion authorized herein.

As provided in the Master Order, the authorized quantity of water for municipal use under this Water Right is subject to a Limitation such that when this Water Right is combined with Water Right, File Nos.: 21,729-D1; 21,729-D2; 21,730; 21,731; 21,732-D1; 21,732-D2; 21,733; 21,734; 21,841; 21,842; 22,325; 22,326; 22,329; 22,330; 22,331; 22,332; 22,333; 22,334; 22,335; 22,338; 22,339; 22,340; 22,341; 22,342; 22,343; 22,345; 22,346; 27,760; 29,816; 30,083; and 30,084 the water used shall not exceed a rolling ten-year aggregate Limitation of 15,640.848 million gallons (48,000 acre-feet) during any, each, and every ten (10) consecutive calendar years (the "Ten-Year Rolling Aggregate Limitation" as defined in the Master Order) at the places of use authorized herein.

As provided in the Master Order, the authorized quantity of water for municipal use under this Water Right is subject to a Limitation such that when this Water Right is combined with Vested Right, File No. RS 008; and Water Right, File Nos. 206; 1,267; 1,861; 17,586; 17,587; 21,729-D1; 21,729-D2; 21,730; 21,731; 21,732-D1; 21,732-D2; 21,733; 21,734; 21,841; 21,842; 22,325; and 22,326 the water used shall not exceed 600.000 million gallons (1,841.3 acre-feet) per calendar year (the "Reasonable-Need Limitation" for the City of Russell, as such term is defined and calculated in the Master Order).

As provided in the Master Order, the authorized quantity of water for municipal use under this Water Right is subject to a Limitation such that when this Water Right is combined with Vested Right, File No. EL 002 and Water Right, File Nos. 1,248; 5,757; 18,857; 18,858; 21,729-D1; 21,729-D2; 21,730; 21,731; 21,732-D1; 21,732-D2; 21,733; 21,734; 21,841; 21,842; 22,325; and 22,326 the water used shall not exceed 1,847.650 million gallons (5,670.23 acre-feet) per calendar year (the "Reasonable-Need Limitation" for the City of Hays, as such term is defined and calculated in the Master Order).

6. In all other respects, the Certificate, as modified and amended by the aforementioned orders, including the Master Order, remains as issued.

7. This Change Approval is contingent and conditioned upon the terms of the Master Order and will not become effective unless and until such time as the Master Order becomes effective.

8. Any person who is aggrieved by this Change Approval may file a petition for administrative review by the Secretary pursuant to K.S.A. 82a-708b, K.S.A. 2016 Supp. 82a-1901, and K.S.A. 77-527. K.S.A. 2016 Supp. 82a-1901 applies because the proceeding regarding this matter began before the 2017 amendments became effective. Any petition for administrative review by the Secretary must include a statement of its basis as provided in K.S.A. 77-527(c). This Change Approval will become a final order, without further notice, unless a petition for administrative review by the Secretary pursuant to K.S.A. 82a-708b, K.S.A. 2016 Supp. 82a-1901, and K.S.A. 77-527 is filed within 15 days after the date of service shown on the Certificate of Service. Any request for administrative review by the Secretary must be in writing and submitted to the attention of:

Chief Legal Counsel,
Kansas Department of Agriculture,
1320 Research Park Drive,
Manhattan, Kansas 66502,
Fax: (785) 564-6777,

with copies to those shown in the Certificate of Service.

CERTIFICATE OF SERVICE

On this 28 day of March, 2019, I hereby certify that the attached original Approval of Application to Change the Place of Use, the Point of Diversion and the Use Made of the Water Under an Existing Water Right, Water Right, File No. 22,327, dated March 27, 2019, was mailed postage prepaid, first class, US mail to the following:

Toby Dougherty, City Manager
CITY OF HAYS
City Hall, 16th & Main
P.O. Box 490
Hays, KS 67601

With photocopies to:

Jon Quinday, City Manager
CITY OF RUSSELL
133 W. 8th Street
P.O. Box 112
Russell, KS 67665

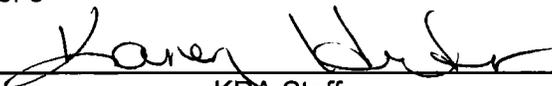
David M. Traster
FOULSTON SIEFKIN LLP
1551 N. Waterfront Parkway, Suite 100
Wichita, Kansas 67206-4466

Daniel J. Buller
FOULSTON SIEFKIN LLP
9225 Indian Creek Parkway, Suite 600
Overland Park, Kansas 66210

John T. Bird
Todd Powell
GLASSMAN BIRD AND POWELL, LLP
Attention: Attorneys for the City of Hays, Kansas
200 West Thirteenth Street
Hays, KS 67601-0727

Kenneth L. Cole
WOELK & COLE
4 S. Kansas St.
P.O. Box 431
Russell, KS 67665-0431

Stafford Field Office
Stockton Field Office
Big Bend Groundwater Management District No. 5



KDA Staff

THE STATE OF KANSAS



KANSAS DEPARTMENT OF AGRICULTURE
Mike Beam, Acting Secretary of Agriculture

DIVISION OF WATER RESOURCES
David W. Barfield, Chief Engineer

APPROVAL OF APPLICATION
TO CHANGE
THE PLACE OF USE, THE POINT OF DIVERSION AND THE USE MADE
OF THE WATER UNDER AN EXISTING WATER RIGHT

WATER RIGHT
FILE NO. 22,329

The Chief Engineer, Division of Water Resources, Kansas Department of Agriculture, after due consideration of the written Application for Approval to Change the Place of Use, the Point of Diversion or the Use Made of the Water Under an Existing Water Right, submitted by Toby Dougherty, City Manager, on behalf of the City of Hays, 1507 Main Street, Hays, Kansas 67601, and by Jon Quinday, City Manager, on behalf of the City of Russell, 133 W. 8th Street, Russell, Kansas 67665, and received in this office on June 26, 2015, as amended (the "Change Application"), for approval of changes in the location of the place of use, the point of diversion, and the use made of water under the Certificate of Appropriation issued on June 11, 1987 (the "Certificate"), pursuant to the application for permit to appropriate water for beneficial use regarding the above-mentioned Water Right, File No. 22,329 (the "Water Right"), finds that the changes requested in the Change Application are reasonable and will not impair existing rights, that such changes relate to the same local source of supply, and that the Change Application should be and is hereby approved pursuant to K.S.A. 82a-708b and as provided herein.

This approval order (the "Change Approval") is attached as an exhibit to, is incorporated in, and is subject to the terms of that certain Master Order Contingently Approving Change Applications Regarding R9 Water Rights (the "Master Order"), issued by the Chief Engineer concurrently with this Change Approval. The effective date of the changes approved herein for the Water Right shall be as provided in the Master Order. Upon effectiveness as provided in the Master Order:

1. The authorized use made of water for the Water Right shall be:

Municipal Use,

and the authorized locations of the places of use shall be those that are specifically described in **Appendix F** to the Master Order,

and the location of the point of diversion for the Water Right shall be authorized from one (1) well located as follows:

one (1) well (Well J) located in the Northeast Quarter of the Southwest Quarter of the Southwest Quarter (NE $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$) of Section 1, more particularly described as being near a point 1,634 feet North and 4,078 feet West of the Southeast corner of said section, in a quantity not to exceed 24.439 million gallons (75 acre-feet) of groundwater per calendar year at a diversion rate not in excess of 570 gallons per minute (1.27 c.f.s.), Township 26 South, Range 20 West, Edwards County, Kansas,

to be completed within the mapped boundaries as shown on the maps marked Exhibits O, and P accompanying the Change Application, and pursuant to the Master Order.

2. Due to the aforementioned changes, the Water Right shall be reduced to a total authorized quantity of water not to exceed 24.439 million gallons (75 acre-feet) per calendar year.

3. The following additional conditions of this Change Approval also shall apply to this Water Right:

a. Installation of the works for diversion of water shall be completed on or before December 31, 2029, or within any authorized extension of time granted by the Chief Engineer for good cause shown. The Water Right owner shall notify the Chief Engineer when construction of the diversion works has been completed.

b. All wells with a diversion rate of 100 gallons per minute or more drilled under the authority of this Change Approval shall have a tube or other device installed in a manner acceptable to, and in accordance with, specifications adopted by the Chief Engineer. This tube or device shall be suitable for making water level measurements and shall be maintained in a condition satisfactory to the Chief Engineer.

c. The Water Right owner shall submit to the Chief Engineer a copy of the well log required by the Kansas Department of Health and Environment under the authority of K.S.A. 82a-1212, currently form WWC-5, within 30 days following the drilling of the well at the location authorized herein.

d. All diversion works 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.

e. Prior to the use of water, the Water Right owner shall properly install an acceptable water meter on the diversion works authorized for this Water Right, in strict accordance with K.A.R. 5-1-4 through 5-1-12. The Water Right owner shall notify the Chief Engineer when installation of the water meter has been completed. The Water Right owner shall maintain the water meter in an operating condition satisfactory to the Chief Engineer at all times during diversion of water and shall maintain records from which the total quantity of water diverted may be determined. The Water Right owner shall also annually report to the Chief Engineer the reading of said water meter and the total quantity of water diverted. Such records shall be furnished to the Chief Engineer by March 1 following the end of each calendar year.

4. Further, the following Limitations shall apply to this Water Right, for which Limitations the Chief Engineer specifically retains jurisdiction and authority to review and modify, as provided in the Master Order:

As provided in the Master Order, the authorized quantity of water for municipal use under this Water Right is subject to a Limitation such that when this Water Right is combined with Water Right, File Nos.: 21,729-D1; 21,729-D2; 21,730; 21,731; 21,732-D1; 21,732-D2; 21,733; 21,734; 21,841; 21,842; 22,325; 22,326; 22,327; 22,330; 22,331; 22,332; 22,333; 22,334; 22,335; 22,338; 22,339; 22,340; 22,341; 22,342; 22,343; 22,345; 22,346; 27,760; 29,816; 30,083; and 30,084 the water used shall not exceed a rolling ten-year aggregate Limitation of 15,640.848 million gallons (48,000 acre-feet) during any, each, and every ten (10) consecutive calendar years (the "Ten-Year Rolling Aggregate Limitation" as defined in the Master Order) at the places of use authorized herein.

As provided in the Master Order, the authorized quantity of water for municipal use under this Water Right is subject to a Limitation such that when this Water Right is combined with Vested Right, File No. RS 008; and Water Right, File Nos. 206; 1,267; 1,861; 17,586; 17,587; 21,729-D1; 21,729-D2; 21,730; 21,731; 21,732-D1; 21,732-D2; 21,733; 21,734; 21,841; 21,842; 22,325; 22,326; and 22,327 the water used shall not exceed 600.000 million gallons (1,841.3 acre-feet) per calendar year (the "Reasonable-Need Limitation" for the City of Russell, as such term is defined and calculated in the Master Order).

As provided in the Master Order, the authorized quantity of water for municipal use under this Water Right is subject to a Limitation such that when this Water Right is combined with Vested Right, File No. EL 002 and Water Right, File Nos. 1,248; 5,757; 18,857; 18,858; 21,729-D1; 21,729-D2; 21,730; 21,731; 21,732-D1; 21,732-D2; 21,733; 21,734; 21,841; 21,842; 22,325; 22,326; and 22,327 the water used shall not exceed 1,847.650 million gallons (5,670.23 acre-feet) per calendar year (the "Reasonable-Need Limitation" for the City of Hays, as such term is defined and calculated in the Master Order).

5. In all other respects, the Certificate, as modified and amended by the aforementioned orders, including the Master Order, remains as issued.

6. This Change Approval is contingent and conditioned upon the terms of the Master Order and will not become effective unless and until such time as the Master Order becomes effective.

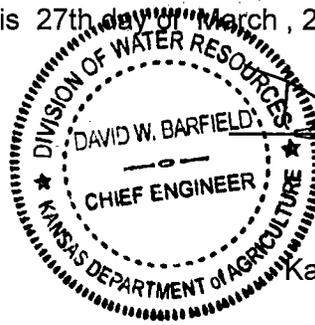
7. Any person who is aggrieved by this Change Approval may file a petition for administrative review by the Secretary pursuant to K.S.A. 82a-708b, K.S.A. 2016 Supp. 82a-1901, and K.S.A. 77-527. K.S.A. 2016 Supp. 82a-1901 applies because the proceeding regarding this matter began before the 2017 amendments became effective. Any petition for administrative review by the Secretary must include a statement of its basis as provided in K.S.A. 77-527(c). This Change Approval will become a final order, without further notice, unless a petition for administrative review by the Secretary pursuant to K.S.A. 82a-708b, K.S.A. 2016 Supp. 82a-1901, and K.S.A. 77-527 is filed within 15 days after the date of service shown on the Certificate of Service. Any request for administrative review by the Secretary must be in writing and submitted to the attention of:

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Kansas Department of Agriculture,
1320 Research Park Drive,
Manhattan, Kansas 66502,
Fax: (785) 564-6777,

with copies to those shown in the Certificate of Service.

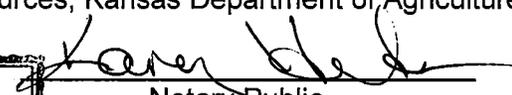
Dated at Manhattan, Kansas, this 27th day of March, 2019.




 David W. Barfield, P.E.
 Chief Engineer
 Division of Water Resources
 Kansas Department of Agriculture

State of Kansas)
) SS
 County of Riley)

The foregoing instrument was acknowledged before me this 27th day of March, 2019, by David W. Barfield, P.E., Chief Engineer, Division of Water Resources, Kansas Department of Agriculture.




 Karen Hunter
 Notary Public

CERTIFICATE OF SERVICE

On this 28 day of March, 2019, I hereby certify that the attached original Approval of Application to Change the Place of Use, the Point of Diversion or the Use Made of the Water Under an Existing Water Right, Water Right, File No. 22,329, dated March 27, 2019, was mailed postage prepaid, first class, US mail to the following:

Toby Dougherty, City Manager
CITY OF HAYS
City Hall, 16th & Main
P.O. Box 490
Hays, KS 67601

With photocopies to:

Jon Quinday, City Manager
CITY OF RUSSELL
133 W. 8th Street
P.O. Box 112
Russell, KS 67665

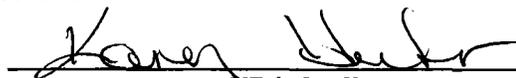
David M. Traster
FOULSTON SIEFKIN LLP
1551 N. Waterfront Parkway, Suite 100
Wichita, Kansas 67206-4466

Daniel J. Buller
FOULSTON SIEFKIN LLP
9225 Indian Creek Parkway, Suite 600
Overland Park, Kansas 66210

John T. Bird
Todd Powell
GLASSMAN BIRD AND POWELL, LLP
Attention: Attorneys for the City of Hays, Kansas
200 West Thirteenth Street
Hays, KS 67601-0727

Kenneth L. Cole
WOELK & COLE
4 S. Kansas St.
P.O. Box 431
Russell, KS 67665-0431

Stafford Field Office
Stockton Field Office
Big Bend Groundwater Management District No. 5



KDA Staff

THE STATE  OF KANSAS

KANSAS DEPARTMENT OF AGRICULTURE
Mike Beam, Acting Secretary of Agriculture

DIVISION OF WATER RESOURCES
David W. Barfield, Chief Engineer

**APPROVAL OF APPLICATION
TO CHANGE
THE PLACE OF USE, THE POINT OF DIVERSION AND THE USE MADE
OF THE WATER UNDER AN EXISTING WATER RIGHT**

**WATER RIGHT
FILE NO. 22,330**

The Chief Engineer, Division of Water Resources, Kansas Department of Agriculture, after due consideration of the written Application for Approval to Change the Place of Use, the Point of Diversion or the Use Made of the Water Under an Existing Water Right, submitted by Toby Dougherty, City Manager, on behalf of the City of Hays, 1507 Main Street, Hays, Kansas 67601, and by Jon Quinday, City Manager, on behalf of the City of Russell, 133 W. 8th Street, Russell, Kansas 67665, and received in this office on June 26, 2015, as amended (the "Change Application"), for approval of changes in the location of the place of use, the point of diversion, and the use made of water under the Certificate of Appropriation issued on June 11, 1987 (the "Certificate"), pursuant to the application for permit to appropriate water for beneficial use regarding the above-mentioned Water Right, File No. 22,330 (the "Water Right"), as modified and amended by the order of the Chief Engineer dated February 2, 1990 approving the application to change the point of diversion, finds that the changes requested in the Change Application are reasonable and will not impair existing rights, that such changes relate to the same local source of supply, and that the Change Application should be and is hereby approved pursuant to K.S.A. 82a-708b and as provided herein.

This approval order (the "Change Approval") is attached as an exhibit to, is incorporated in, and is subject to the terms of that certain Master Order Contingently Approving Change Applications Regarding R9 Water Rights (the "Master Order"), issued by the Chief Engineer concurrently with this Change Approval. The effective date of the changes approved herein for the Water Right shall be as provided in the Master Order. Upon effectiveness as provided in the Master Order:

1. The authorized use made of water for the Water Right shall be:

Municipal Use,

and the authorized locations of the places of use shall be those that are specifically described in **Appendix F** to the Master Order,

and the location of the point of diversion for the Water Right shall be authorized from one (1) well located as follows:

one (1) well (Well J) located in the Northeast Quarter of the Southwest Quarter of the Southwest Quarter (NE $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$) of Section 1, more particularly described as being near a point 1,634 feet North and 4,078 feet West of the Southeast corner of said section, in a quantity not to exceed 24.439 million gallons (75 acre-feet) of groundwater per calendar year at a diversion rate not in excess of 620 gallons per minute (1.38 c.f.s.), Township 26 South, Range 20 West, Edwards County, Kansas,

to be completed within the mapped boundaries as shown on the maps marked Exhibits O, and P accompanying the Change Application, and pursuant to the Master Order.

2. The following additional conditions of this Change Approval also shall apply to this Water Right:

a. Installation of the works for diversion of water shall be completed on or before December 31, 2029, or within any authorized extension of time granted by the Chief Engineer for good cause shown. The Water Right owner shall notify the Chief Engineer when construction of the diversion works has been completed.

b. All wells with a diversion rate of 100 gallons per minute or more drilled under the authority of this Change Approval shall have a tube or other device installed in a manner acceptable to, and in accordance with, specifications adopted by the Chief Engineer. This tube or device shall be suitable for making water level measurements and shall be maintained in a condition satisfactory to the Chief Engineer.

c. The Water Right owner shall submit to the Chief Engineer a copy of the well log required by the Kansas Department of Health and Environment under the authority of K.S.A. 82a-1212, currently form WWC-5, within 30 days following the drilling of the well at the location authorized herein.

d. All diversion works 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.

e. Prior to the use of water, the Water Right owner shall properly install an acceptable water meter on the diversion works authorized for this Water Right, in strict accordance with K.A.R. 5-1-4 through 5-1-12. The Water Right owner shall notify the Chief Engineer when installation of the water meter has been completed. The Water Right owner shall maintain the water meter in an operating condition satisfactory to the Chief Engineer at all times during diversion of water and shall maintain records from which the total quantity of water diverted may be determined. The Water Right owner shall also annually report to the Chief Engineer the reading of said water meter and the total quantity of water diverted. Such records shall be furnished to the Chief Engineer by March 1 following the end of each calendar year.

3. Further, the following Limitations shall apply to this Water Right, for which Limitations the Chief Engineer specifically retains jurisdiction and authority to review and modify, as provided in the Master Order:

As provided in the Master Order, this Water Right is subject to a Limitation such that when this Water Right is combined with Water Right, File No. 22,329, the total rate of diversion shall not exceed 700 gallons per minute (1.56 c.f.s.) for municipal use from the point of diversion authorized herein.

As provided in the Master Order, the authorized quantity of water for municipal use under this Water Right is subject to a Limitation such that when this Water Right is combined with Water Right, File Nos.: 21,729-D1; 21,729-D2; 21,730; 21,731; 21,732-D1; 21,732-D2; 21,733; 21,734; 21,841; 21,842; 22,325; 22,326; 22,327; 22,329; 22,331; 22,332; 22,333; 22,334; 22,335; 22,338; 22,339; 22,340; 22,341; 22,342; 22,343; 22,345; 22,346; 27,760; 29,816; 30,083; and 30,084 the water used shall not exceed a rolling ten-year aggregate Limitation of 15,640.848 million gallons (48,000 acre-feet) during any, each, and every ten (10) consecutive calendar years (the "Ten-Year Rolling Aggregate Limitation" as defined in the Master Order) at the places of use authorized herein.

As provided in the Master Order, the authorized quantity of water for municipal use under this Water Right is subject to a Limitation such that when this Water Right is combined with Vested Right, File No. RS 008; and Water Right, File Nos. 206; 1,267; 1,861; 17,586; 17,587; 21,729-D1; 21,729-D2; 21,730; 21,731; 21,732-D1; 21,732-D2; 21,733; 21,734; 21,841; 21,842; 22,325; 22,326; 22,327; and 22,329 the water used shall not exceed 600.000 million gallons (1,841.3 acre-feet) per calendar year (the "Reasonable-Need Limitation" for the City of Russell, as such term is defined and calculated in the Master Order).

As provided in the Master Order, the authorized quantity of water for municipal use under this Water Right is subject to a Limitation such that when this Water Right is combined with Vested Right, File No. EL 002 and Water Right, File Nos. 1,248; 5,757; 18,857; 18,858; 21,729-D1; 21,729-D2; 21,730; 21,731; 21,732-D1; 21,732-D2; 21,733; 21,734; 21,841; 21,842; 22,325; 22,326; 22,327; and 22,329 the water used shall not exceed 1,847.650 million gallons (5,670.23 acre-feet) per calendar year (the "Reasonable-Need Limitation" for the City of Hays, as such term is defined and calculated in the Master Order).

4. In all other respects, the Certificate, as modified and amended by the aforementioned orders, including the Master Order, remains as issued.

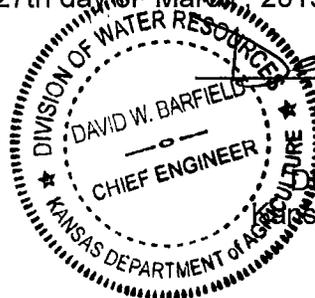
5. This Change Approval is contingent and conditioned upon the terms of the Master Order and will not become effective unless and until such time as the Master Order becomes effective.

6. Any person who is aggrieved by this Change Approval may file a petition for administrative review by the Secretary pursuant to K.S.A. 82a-708b, K.S.A. 2016 Supp. 82a-1901, and K.S.A. 77-527. K.S.A. 2016 Supp. 82a-1901 applies because the proceeding regarding this matter began before the 2017 amendments became effective. Any petition for administrative review by the Secretary must include a statement of its basis as provided in K.S.A. 77-527(c). This Change Approval will become a final order, without further notice, unless a petition for administrative review by the Secretary pursuant to K.S.A. 82a-708b, K.S.A. 2016 Supp. 82a-1901, and K.S.A. 77-527 is filed within 15 days after the date of service shown on the Certificate of Service. Any request for administrative review by the Secretary must be in writing and submitted to the attention of:

Chief Legal Counsel,
Kansas Department of Agriculture,
1320 Research Park Drive,
Manhattan, Kansas 66502,
Fax: (785) 564-6777,

with copies to those shown in the Certificate of Service.

Dated at Manhattan, Kansas, this 27th day of March, 2019.



David W. Barfield

David W. Barfield, P.E.
Chief Engineer
Division of Water Resources
Kansas Department of Agriculture

State of Kansas)
) SS
County of Riley)

The foregoing instrument was acknowledged before me this 27th day of March, 2019, by David W. Barfield, P.E., Chief Engineer, Division of Water Resources, Kansas Department of Agriculture.



Karen Hunter

Notary Public

CERTIFICATE OF SERVICE

On this ~~20~~ day of *March*, 2019, I hereby certify that the attached original Approval of Application to Change the Place of Use, the Point of Diversion or the Use Made of the Water Under an Existing Water Right, Water Right, File No. 22,330, dated *March 27*, 2019, was mailed postage prepaid, first class, US mail to the following:

Toby Dougherty, City Manager
CITY OF HAYS
City Hall, 16th & Main
P.O. Box 490
Hays, KS 67601

With photocopies to:

Jon Quinday, City Manager
CITY OF RUSSELL
133 W. 8th Street
P.O. Box 112
Russell, KS 67665

David M. Traster
FOULSTON SIEFKIN LLP
1551 N. Waterfront Parkway, Suite 100
Wichita, Kansas 67206-4466

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FOULSTON SIEFKIN LLP
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Attention: Attorneys for the City of Hays, Kansas
200 West Thirteenth Street
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Kenneth L. Cole
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Stafford Field Office
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Big Bend Groundwater Management District No. 5


KDA Staff

THE STATE OF KANSAS



KANSAS DEPARTMENT OF AGRICULTURE
Mike Beam, Acting Secretary of Agriculture

DIVISION OF WATER RESOURCES
David W. Barfield, Chief Engineer

APPROVAL OF APPLICATION
TO CHANGE
THE PLACE OF USE, THE POINT OF DIVERSION AND THE USE MADE
OF THE WATER UNDER AN EXISTING WATER RIGHT

WATER RIGHT
FILE NO. 22,331

The Chief Engineer, Division of Water Resources, Kansas Department of Agriculture, after due consideration of the written Application for Approval to Change the Place of Use, the Point of Diversion or the Use Made of the Water Under an Existing Water Right, submitted by Toby Dougherty, City Manager, on behalf of the City of Hays, 1507 Main Street, Hays, Kansas 67601, and by Jon Quinday, City Manager, on behalf of the City of Russell, 133 W. 8th Street, Russell, Kansas 67665, and received in this office on June 26, 2015, as amended (the "Change Application"), for approval of changes in the location of the place of use, the point of diversion, and the use made of water under the Certificate of Appropriation issued on December 7, 1994 (the "Certificate"), pursuant to the application for permit to appropriate water for beneficial use regarding the above-mentioned Water Right, File No. 22,331 (the "Water Right"), finds that the changes requested in the Change Application are reasonable and will not impair existing rights, that such changes relate to the same local source of supply, and that the Change Application should be and is hereby approved pursuant to K.S.A. 82a-708b and as provided herein.

This approval order (the "Change Approval") is attached as an exhibit to, is incorporated in, and is subject to the terms of that certain Master Order Contingently Approving Change Applications Regarding R9 Water Rights (the "Master Order"), issued by the Chief Engineer concurrently with this Change Approval. The effective date of the changes approved herein for the Water Right shall be as provided in the Master Order. Upon effectiveness as provided in the Master Order:

1. The authorized use made of water for the Water Right shall be:

Municipal Use,

and the authorized locations of the places of use shall be those that are specifically described in **Appendix F** to the Master Order,

and the location of the point of diversion for the Water Right shall be authorized from one (1) well located as follows:

one (1) well (Well J) located in the Northeast Quarter of the Southwest Quarter of the Southwest Quarter (NE $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$) of Section 1, more particularly described as being near a point 1,634 feet North and 4,078 feet West of the Southeast corner of said section, in a quantity not to exceed 58.653 million gallons (180 acre-feet) of groundwater per calendar year at a diversion rate not in excess of 700 gallons per minute (1.56 c.f.s.), Township 26 South, Range 20 West, Edwards County, Kansas,

to be completed within the mapped boundaries as shown on the maps marked Exhibits Q, and R accompanying the Change Application, and pursuant to the Master Order.

2. Due to the aforementioned changes, the Water Right shall be reduced to a total authorized rate of diversion not to exceed 700 gallons per minute (1.56 c.f.s.).

3. Due to the aforementioned changes, this Change Approval removes the following Limitation, (as that term is defined in the Master Order), on the rate of diversion for the Water Right, which Limitation is set forth as follows in the Certificate:

This appropriation right is further limited to a diversion rate which when the wells operate simultaneously will provide a diversion rate not in excess of 1,000 gallons per minute (2.23 c.f.s.) for irrigation use on the property described herein.

4. The following additional conditions of this Change Approval also shall apply to this Water Right:

a. Installation of the works for diversion of water shall be completed on or before December 31, 2029, or within any authorized extension of time granted by the Chief Engineer for good cause shown. The Water Right owner shall notify the Chief Engineer when construction of the diversion works has been completed.

b. All wells with a diversion rate of 100 gallons per minute or more drilled under the authority of this Change Approval shall have a tube or other device installed in a manner acceptable to, and in accordance with, specifications adopted by the Chief Engineer. This tube or device shall be suitable for making water level measurements and shall be maintained in a condition satisfactory to the Chief Engineer.

c. The Water Right owner shall submit to the Chief Engineer a copy of the well log required by the Kansas Department of Health and Environment under the authority of K.S.A. 82a-1212, currently form WWC-5, within 30 days following the drilling of the well at the location authorized herein.

d. All diversion works 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.

e. Prior to the use of water, the Water Right owner shall properly install an acceptable water meter on the diversion works authorized for this Water Right, in strict accordance with K.A.R. 5-1-4 through 5-1-12. The Water Right owner shall notify the Chief Engineer when installation of the water meter has been completed. The Water Right owner shall maintain the water meter in an operating condition satisfactory to the Chief Engineer at all times during diversion of water and shall maintain records from which the total quantity of water diverted may be determined. The Water Right owner shall also annually report to the Chief Engineer the reading of said water meter and the total quantity of water diverted. Such records shall be furnished to the Chief Engineer by March 1 following the end of each calendar year.

5. Further, the following Limitations shall apply to this Water Right, for which Limitations the Chief Engineer specifically retains jurisdiction and authority to review and modify, as provided in the Master Order:

As provided in the Master Order, this Water Right is subject to a Limitation such that when this Water Right is combined with Water Right, File Nos. 22,329 and 22,330, the total rate of diversion shall not exceed 700 gallons per minute (1.56 c.f.s.) for municipal use from the point of diversion authorized herein.

As provided in the Master Order, the authorized quantity of water for municipal use under this Water Right is subject to a Limitation such that when this Water Right is combined with Water Right, File Nos.: 21,729-D1; 21,729-D2; 21,730; 21,731; 21,732-D1; 21,732-D2; 21,733; 21,734; 21,841; 21,842; 22,325; 22,326; 22,327; 22,329; 22,330; 22,332; 22,333; 22,334; 22,335; 22,338; 22,339; 22,340; 22,341; 22,342; 22,343; 22,345; 22,346; 27,760; 29,816; 30,083; and 30,084, the water used shall not exceed a rolling ten-year aggregate Limitation of 15,640.848 million gallons (48,000 acre-feet) during any, each, and every ten (10) consecutive calendar years (the "Ten-Year Rolling Aggregate Limitation" as defined in the Master Order) at the places of use authorized herein.

As provided in the Master Order, the authorized quantity of water for municipal use under this Water Right is subject to a Limitation such that when this Water Right is combined with Vested Right, File No. RS 008; and Water Right, File Nos. 206; 1,267; 1,861; 17,586; 17,587; 21,729-D1; 21,729-D2; 21,730; 21,731; 21,732-D1; 21,732-D2; 21,733; 21,734; 21,841; 21,842; 22,325; 22,326; 22,327; 22,329; and 22,330 the water used shall not exceed 600.000 million gallons (1,841.3 acre-feet) per calendar year (the "Reasonable-Need Limitation" for the City of Russell, as such term is defined and calculated in the Master Order).

As provided in the Master Order, the authorized quantity of water for municipal use under this Water Right is subject to a Limitation such that when this Water Right is combined with Vested Right, File No. EL 002 and Water Right, File Nos. 1,248; 5,757; 18,857; 18,858; 21,729-D1; 21,729-D2; 21,730; 21,731; 21,732-D1; 21,732-D2; 21,733; 21,734; 21,841; 21,842; 22,325; 22,326; 22,327; 22,329; and 22,330 the water used shall not exceed 1,847.650 million gallons (5,670.23 acre-feet) per calendar year (the "Reasonable-Need Limitation" for the City of Hays, as such term is defined and calculated in the Master Order).

6. In all other respects, the Certificate, as modified and amended by the aforementioned orders, including the Master Order, remains as issued.

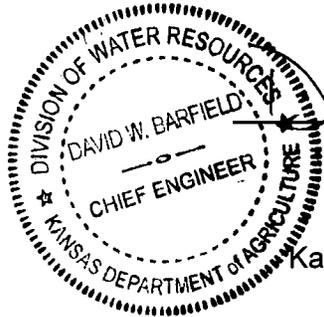
7. This Change Approval is contingent and conditioned upon the terms of the Master Order and will not become effective unless and until such time as the Master Order becomes effective.

8. Any person who is aggrieved by this Change Approval may file a petition for administrative review by the Secretary pursuant to K.S.A. 82a-708b, K.S.A. 2016 Supp. 82a-1901, and K.S.A. 77-527. K.S.A. 2016 Supp. 82a-1901 applies because the proceeding regarding this matter began before the 2017 amendments became effective. Any petition for administrative review by the Secretary must include a statement of its basis as provided in K.S.A. 77-527(c). This Change Approval will become a final order, without further notice, unless a petition for administrative review by the Secretary pursuant to K.S.A. 82a-708b, K.S.A. 2016 Supp. 82a-1901, and K.S.A. 77-527 is filed within 15 days after the date of service shown on the Certificate of Service. Any request for administrative review by the Secretary must be in writing and submitted to the attention of:

Chief Legal Counsel,
Kansas Department of Agriculture,
1320 Research Park Drive,
Manhattan, Kansas 66502,
Fax: (785) 564-6777,

with copies to those shown in the Certificate of Service.

Dated at Manhattan, Kansas, this 27th day of March , 2019.



David W. Barfield

David W. Barfield, P.E.
Chief Engineer
Division of Water Resources
Kansas Department of Agriculture

State of Kansas)
) SS
County of Riley)

The foregoing instrument was acknowledged before me this 27th day of March, 2019, by David W. Barfield, P.E., Chief Engineer, Division of Water Resources, Kansas Department of Agriculture.

Karen Hunter

Notary Public



CERTIFICATE OF SERVICE

On this 28 day of March, 2019, I hereby certify that the attached original Approval of Application to Change the Place of Use, the Point of Diversion and the Use Made of the Water Under an Existing Water Right, Water Right, File No. 22,331, dated March 27, 2019, was mailed postage prepaid, first class, US mail to the following:

Toby Dougherty, City Manager
CITY OF HAYS
City Hall, 16th & Main
P.O. Box 490
Hays, KS 67601

With photocopies to:

Jon Quinday, City Manager
CITY OF RUSSELL
133 W. 8th Street
P.O. Box 112
Russell, KS 67665

David M. Traster
FOULSTON SIEFKIN LLP
1551 N. Waterfront Parkway, Suite 100
Wichita, Kansas 67206-4466

Daniel J. Buller
FOULSTON SIEFKIN LLP
9225 Indian Creek Parkway, Suite 600
Overland Park, Kansas 66210

John T. Bird
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GLASSMAN BIRD AND POWELL, LLP
Attention: Attorneys for the City of Hays, Kansas
200 West Thirteenth Street
Hays, KS 67601-0727

Kenneth L. Cole
WOELK & COLE
4 S. Kansas St.
P.O. Box 431
Russell, KS 67665-0431

Stafford Field Office
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Big Bend Groundwater Management District No. 5



KDA Staff

THE STATE OF KANSAS



KANSAS DEPARTMENT OF AGRICULTURE
Mike Beam, Acting Secretary of Agriculture

DIVISION OF WATER RESOURCES
David W. Barfield, Chief Engineer

APPROVAL OF APPLICATION
TO CHANGE
THE PLACE OF USE, THE POINT OF DIVERSION AND THE USE MADE
OF THE WATER UNDER AN EXISTING WATER RIGHT

WATER RIGHT
FILE NO. 22,332

The Chief Engineer, Division of Water Resources, Kansas Department of Agriculture, after due consideration of the written Application for Approval to Change the Place of Use, the Point of Diversion or the Use Made of the Water Under an Existing Water Right, submitted by Toby Dougherty, City Manager, on behalf of the City of Hays, 1507 Main Street, Hays, Kansas 67601, and by Jon Quinday, City Manager, on behalf of the City of Russell, 133 W. 8th Street, Russell, Kansas 67665, and received in this office on June 26, 2015, as amended (the "Change Application"), for approval of changes in the location of the place of use, the point of diversion, and the use made of water under the Certificate of Appropriation issued on June 11, 1987 (the "Certificate"), pursuant to the application for permit to appropriate water for beneficial use regarding the above-mentioned Water Right, File No. 22,332 (the "Water Right"), finds that the changes requested in the Change Application are reasonable and will not impair existing rights, that such changes relate to the same local source of supply, and that the Change Application should be and is hereby approved pursuant to K.S.A. 82a-708b and as provided herein.

This approval order (the "Change Approval") is attached as an exhibit to, is incorporated in, and is subject to the terms of that certain Master Order Contingently Approving Change Applications Regarding R9 Water Rights (the "Master Order"), issued by the Chief Engineer concurrently with this Change Approval. The effective date of the changes approved herein for the Water Right shall be as provided in the Master Order. Upon effectiveness as provided in the Master Order:

1. The authorized use made of water for the Water Right shall be:

Municipal Use,

and the authorized locations of the places of use shall be those that are specifically described in **Appendix F** to the Master Order,

and the location of the point of diversion for the Water Right shall be authorized from one (1) well located as follows:

one (1) well (Well J) located in the Northeast Quarter of the Southwest Quarter of the Southwest Quarter (NE $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$) of Section 1, more particularly described as being near a point 1,634 feet North and 4,078 feet West of the Southeast corner of said section, in a quantity not to exceed 43.990 million gallons (135 acre-feet) of groundwater per calendar year at a diversion rate not in excess of 700 gallons per minute (1.56 c.f.s.), Township 26 South, Range 20 West, Edwards County, Kansas,

to be completed within the mapped boundaries as shown on the maps marked Exhibits P, and Q accompanying the Change Application, and pursuant to the Master Order.

[Type here]

2. Due to the aforementioned changes, the Water Right shall be reduced to a total authorized quantity not to exceed 43.990 million gallons (135 acre-feet) of water per calendar year.

3. Due to the aforementioned changes, the Water Right shall be reduced to a total authorized rate of diversion not to exceed 700 gallons per minute (1.56 c.f.s.).

4. Due to the aforementioned changes, this Change Approval removes the following Limitation, (as that term is defined in the Master Order), on the rate of diversion for the Water Right, which Limitation is set forth as follows in the Certificate:

This appropriation right is further limited to a diversion rate which when the wells operate simultaneously will provide a diversion rate not in excess of 980 gallons per minute (2.18 c.f.s.) for irrigation use on the property described herein.

5. The following additional conditions of this Change Approval also shall apply to this Water Right:

a. Installation of the works for diversion of water shall be completed on or before December 31, 2029, or within any authorized extension of time granted by the Chief Engineer for good cause shown. The Water Right owner shall notify the Chief Engineer when construction of the diversion works has been completed.

b. All wells with a diversion rate of 100 gallons per minute or more drilled under the authority of this Change Approval shall have a tube or other device installed in a manner acceptable to, and in accordance with, specifications adopted by the Chief Engineer. This tube or device shall be suitable for making water level measurements and shall be maintained in a condition satisfactory to the Chief Engineer.

c. The Water Right owner shall submit to the Chief Engineer a copy of the well log required by the Kansas Department of Health and Environment under the authority of K.S.A. 82a-1212, currently form WWC-5, within 30 days following the drilling of the well at the location authorized herein.

d. All diversion works 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.

e. Prior to the use of water, the Water Right owner shall properly install an acceptable water meter on the diversion works authorized for this Water Right, in strict accordance with K.A.R. 5-1-4 through 5-1-12. The Water Right owner shall notify the Chief Engineer when installation of the water meter has been completed. The Water Right owner shall maintain the water meter in an operating condition satisfactory to the Chief Engineer at all times during diversion of water and shall maintain records from which the total quantity of water diverted may be determined. The Water Right owner shall also annually report to the Chief Engineer the reading of said water meter and the total quantity of water diverted. Such records shall be furnished to the Chief Engineer by March 1 following the end of each calendar year.

6. Further, the following Limitations shall apply to this Water Right, for which Limitations the Chief Engineer specifically retains jurisdiction and authority to review and modify, as provided in the Master Order:

As provided in the Master Order, this Water Right is subject to a Limitation such that when this Water Right is combined with Water Right, File Nos. 22,329, 22,330 and 22,331, the total rate of diversion shall not exceed 700 gallons per minute (1.56 c.f.s.) for municipal use from the point of diversion authorized herein.

As provided in the Master Order, the authorized quantity of water for municipal use under this Water Right is subject to a Limitation such that when this Water Right is combined with Water Right, File Nos.: 21,729-D1; 21,729-D2; 21,730; 21,731; 21,732-D1; 21,732-D2; 21,733; 21,734; 21,841; 21,842; 22,325; 22,326; 22,327; 22,329; 22,330; 22,331; 22,333; 22,334; 22,335; 22,338; 22,339; 22,340; 22,341; 22,342; 22,343; 22,345; 22,346; 27,760; 29,816; 30,083; and 30,084, the water used shall not exceed a rolling ten-year aggregate Limitation of 15,640.848 million gallons (48,000 acre-feet) during any, each, and every ten (10) consecutive calendar years (the "Ten-Year Rolling Aggregate Limitation" as defined in the Master Order) at the places of use authorized herein.

As provided in the Master Order, the authorized quantity of water for municipal use under this Water Right is subject to a Limitation such that when this Water Right is combined with Vested Right, File No. RS 008, and Water Right, File Nos. 206; 1,267; 1,861; 17,586; 17,587; 21,729-D1; 21,729-D2; 21,730; 21,731; 21,732-D1; 21,732-D2; 21,733; 21,734; 21,841; 21,842; 22,325; 22,326; 22,327; 22,329; 22,330; and 22,331 the water used shall not exceed 600.000 million gallons (1,841.3 acre-feet) per calendar year (the "Reasonable-Need Limitation" for the City of Russell, as such term is defined and calculated in the Master Order).

As provided in the Master Order, the authorized quantity of water for municipal use under this Water Right is subject to a Limitation such that when this Water Right is combined with Vested Right, File No. EL 002 and Water Right, File Nos. 1,248; 5,757; 18,857; 18,858; 21,729-D1; 21,729-D2; 21,730; 21,731; 21,732-D1; 21,732-D2; 21,733; 21,734; 21,841; 21,842; 22,325; 22,326; 22,327; 22,329; 22,330; and 22,331 the water used shall not exceed 1,847.650 million gallons (5,670.23 acre-feet) per calendar year (the "Reasonable-Need Limitation" for the City of Hays, as such term is defined and calculated in the Master Order).

7. In all other respects, the Certificate, as modified and amended by the aforementioned orders, including the Master Order, remains as issued.

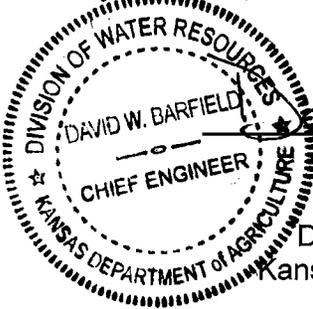
8. This Change Approval is contingent and conditioned upon the terms of the Master Order and will not become effective unless and until such time as the Master Order becomes effective.

9. Any person who is aggrieved by this Change Approval may file a petition for administrative review by the Secretary pursuant to K.S.A. 82a-708b, K.S.A. 2016 Supp. 82a-1901, and K.S.A. 77-527. K.S.A. 2016 Supp. 82a-1901 applies because the proceeding regarding this matter began before the 2017 amendments became effective. Any petition for administrative review by the Secretary must include a statement of its basis as provided in K.S.A. 77-527(c). This Change Approval will become a final order, without further notice, unless a petition for administrative review by the Secretary pursuant to K.S.A. 82a-708b, K.S.A. 2016 Supp. 82a-1901, and K.S.A. 77-527 is filed within 15 days after the date of service shown on the Certificate of Service. Any request for administrative review by the Secretary must be in writing and submitted to the attention of:

Chief Legal Counsel,
Kansas Department of Agriculture,
1320 Research Park Drive,
Manhattan, Kansas 66502,
Fax: (785) 564-6777,

with copies to those shown in the Certificate of Service.

Dated at Manhattan, Kansas, this 27th day of March, 2019.



David W. Barfield

 David W. Barfield, P.E.
 Chief Engineer
 Division of Water Resources
 Kansas Department of Agriculture

State of Kansas)
) SS
County of Riley)

The foregoing instrument was acknowledged before me this 27th day of March, 2019, by David W. Barfield, P.E., Chief Engineer, Division of Water Resources, Kansas Department of Agriculture.



Karen Hunter

 Notary Public

CERTIFICATE OF SERVICE

On this 28 day of March, 2019, I hereby certify that the attached original Approval of Application to Change the Place of Use, the Point of Diversion and the Use Made of the Water Under an Existing Water Right, Water Right, File No. 22,332, dated March 27, 2019, was mailed postage prepaid, first class, US mail to the following:

Toby Dougherty, City Manager
CITY OF HAYS
City Hall, 16th & Main
P.O. Box 490
Hays, KS 67601

With photocopies to:

Jon Quinday, City Manager
CITY OF RUSSELL
133 W. 8th Street
P.O. Box 112
Russell, KS 67665

David M. Traster
FOULSTON SIEFKIN LLP
1551 N. Waterfront Parkway, Suite 100
Wichita, Kansas 67206-4466

Daniel J. Buller
FOULSTON SIEFKIN LLP
9225 Indian Creek Parkway, Suite 600
Overland Park, Kansas 66210

John T. Bird
Todd Powell
GLASSMAN BIRD AND POWELL, LLP
Attention: Attorneys for the City of Hays, Kansas
200 West Thirteenth Street
Hays, KS 67601-0727

Kenneth L. Cole
WOELK & COLE
4 S. Kansas St.
P.O. Box 431
Russell, KS 67665-0431

Stafford Field Office
Stockton Field Office
Big Bend Groundwater Management District No. 5



KDA Staff

THE STATE OF KANSAS



KANSAS DEPARTMENT OF AGRICULTURE
Mike Beam, Acting Secretary of Agriculture

DIVISION OF WATER RESOURCES
David W. Barfield, Chief Engineer

APPROVAL OF APPLICATION TO CHANGE THE PLACE OF USE, THE POINT OF DIVERSION AND THE USE MADE OF THE WATER UNDER AN EXISTING WATER RIGHT

WATER RIGHT FILE NO. 22,333

The Chief Engineer, Division of Water Resources, Kansas Department of Agriculture, after due consideration of the written Application for Approval to Change the Place of Use, the Point of Diversion or the Use Made of the Water Under an Existing Water Right, submitted by Toby Dougherty, City Manager, on behalf of the City of Hays, 1507 Main Street, Hays, Kansas 67601, and by Jon Quinday, City Manager, on behalf of the City of Russell, 133 W. 8th Street, Russell, Kansas 67665, and received in this office on June 26, 2015, as amended (the "Change Application"), for approval of changes in the location of the place of use, the point of diversion, and the use made of water under the Certificate of Appropriation issued on May 7, 1987 (the "Certificate"), pursuant to the application for permit to appropriate water for beneficial use regarding the above-mentioned Water Right, File No. 22,333 (the "Water Right"), finds that the changes requested in the Change Application are reasonable and will not impair existing rights, that such changes relate to the same local source of supply, and that the Change Application should be and is hereby approved pursuant to K.S.A. 82a-708b and as provided herein.

This approval order (the "Change Approval") is attached as an exhibit to, is incorporated in, and is subject to the terms of that certain Master Order Contingently Approving Change Applications Regarding R9 Water Rights (the "Master Order"), issued by the Chief Engineer concurrently with this Change Approval. The effective date of the changes approved herein for the Water Right shall be as provided in the Master Order. Upon effectiveness as provided in the Master Order:

1. The authorized use made of water for the Water Right shall be:

Municipal Use,

and the authorized locations of the places of use shall be those that are specifically described in **Appendix F** to the Master Order,

and the location of the point of diversion for the Water Right shall be authorized from one (1) well located as follows:

one (1) well (Well K) located in the Northwest Quarter of the Southwest Quarter of the Northeast Quarter (NW $\frac{1}{4}$ SW $\frac{1}{4}$ NE $\frac{1}{4}$) of Section 11, more particularly described as being near a point 3,646 feet North and 2,143 feet West of the Southeast corner of said section, in a quantity not to exceed 16.293 million gallons (50 acre-feet) of groundwater per calendar year at a diversion rate not in excess of 520 gallons per minute (1.16 c.f.s.), Township 26 South, Range 20 West, Edwards County, Kansas,

to be completed within the mapped boundaries as shown on the maps marked Exhibits R, and S accompanying the Change Application, and pursuant to the Master Order.

2. The following additional conditions of this Change Approval also shall apply to this Water Right:

a. Installation of the works for diversion of water shall be completed on or before December 31, 2029, or within any authorized extension of time granted by the Chief Engineer for good cause shown. The Water Right owner shall notify the Chief Engineer when construction of the diversion works has been completed.

b. All wells with a diversion rate of 100 gallons per minute or more drilled under the authority of this Change Approval shall have a tube or other device installed in a manner acceptable to, and in accordance with, specifications adopted by the Chief Engineer. This tube or device shall be suitable for making water level measurements and shall be maintained in a condition satisfactory to the Chief Engineer.

c. The Water Right owner shall submit to the Chief Engineer a copy of the well log required by the Kansas Department of Health and Environment under the authority of K.S.A. 82a-1212, currently form WWC-5, within 30 days following the drilling of the well at the location authorized herein.

d. All diversion works 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.

e. Prior to the use of water, the Water Right owner shall properly install an acceptable water meter on the diversion works authorized for this Water Right, in strict accordance with K.A.R. 5-1-4 through 5-1-12. The Water Right owner shall notify the Chief Engineer when installation of the water meter has been completed. The Water Right owner shall maintain the water meter in an operating condition satisfactory to the Chief Engineer at all times during diversion of water and shall maintain records from which the total quantity of water diverted may be determined. The Water Right owner shall also annually report to the Chief Engineer the reading of said water meter and the total quantity of water diverted. Such records shall be furnished to the Chief Engineer by March 1 following the end of each calendar year.

3. Further, the following Limitations (as that term is defined in the Master Order) shall apply to this Water Right, for which Limitations the Chief Engineer specifically retains jurisdiction and authority to review and modify, as provided in the Master Order:

As provided in the Master Order, the authorized quantity of water for municipal use under this Water Right is subject to a Limitation such that when this Water Right is combined with Water Right, File Nos.: 21,729-D1; 21,729-D2; 21,730; 21,731; 21,732-D1; 21,732-D2; 21,733; 21,734; 21,841; 21,842; 22,325; 22,326; 22,327; 22,329; 22,330; 22,331; 22,332; 22,334; 22,335; 22,338; 22,339; 22,340; 22,341; 22,342; 22,343; 22,345; 22,346; 27,760; 29,816; 30,083; and 30,084 the water used shall not exceed a rolling ten-year aggregate Limitation of 15,640.848 million gallons (48,000 acre-feet) during any, each, and every ten (10) consecutive calendar years (the "Ten-Year Rolling Aggregate Limitation" as defined in the Master Order) at the places of use authorized herein.

As provided in the Master Order, the authorized quantity of water for municipal use under this Water Right is subject to a Limitation such that when this Water Right is combined with Vested Right, File No. RS 008; and Water Right, File Nos. 206; 1,267; 1,861; 17,586; 17,587; 21,729-D1; 21,729-D2; 21,730; 21,731; 21,732-D1; 21,732-D2; 21,733; 21,734; 21,841; 21,842; 22,325; 22,326; 22,327; 22,329; 22,330; 22,331; and 22,332 the water used shall not exceed 600,000 million gallons (1,841.3 acre-feet) per calendar year (the "Reasonable-Need Limitation" for the City of Russell, as such term is defined and calculated in the Master Order).

As provided in the Master Order, the authorized quantity of water for municipal use under this Water Right is subject to a Limitation such that when this Water Right is combined with Vested Right, File No. EL 002; and Water Right, File Nos. 1,248; 5,757; 18,857; 18,858; 21,729-D1; 21,729-D2; 21,730; 21,731; 21,732-D1; 21,732-D2; 21,733; 21,734; 21,841; 21,842; 22,325; 22,326; 22,327; 22,329; 22,330; 22,331; and 22,332 the water used shall not exceed 1,847.650 million gallons (5,670.23 acre-feet) per calendar year (the "Reasonable-Need Limitation" for the City of Hays, as such term is defined and calculated in the Master Order).

4. In all other respects, the Certificate, as modified and amended by the aforementioned orders, including the Master Order, remains as issued.

5. This Change Approval is contingent and conditioned upon the terms of the Master Order and will not become effective unless and until such time as the Master Order becomes effective.

6. Any person who is aggrieved by this Change Approval may file a petition for administrative review by the Secretary pursuant to K.S.A. 82a-708b, K.S.A. 2016 Supp. 82a-1901, and K.S.A. 77-527. K.S.A. 2016 Supp. 82a-1901 applies because the proceeding regarding this matter began before the 2017 amendments became effective. Any petition for administrative review by the Secretary must include a statement of its basis as provided in K.S.A. 77-527(c). This Change Approval will become a final order, without further notice, unless a petition for administrative review by the Secretary pursuant to K.S.A. 82a-708b, K.S.A. 2016 Supp. 82a-1901, and K.S.A. 77-527 is filed within 15 days after the date of service shown on the Certificate of Service. Any request for administrative review by the Secretary must be in writing and submitted to the attention of:

Chief Legal Counsel,
Kansas Department of Agriculture,
1320 Research Park Drive,
Manhattan, Kansas 66502,
Fax: (785) 564-6777,

with copies to those shown in the Certificate of Service.

CERTIFICATE OF SERVICE

On this 28 day of March, 2019, I hereby certify that the attached original Approval of Application to Change the Place of Use, the Point of Diversion and the Use Made of the Water Under an Existing Water Right, Water Right, File No. 22,333, dated March 27, 2019, was mailed postage prepaid, first class, US mail to the following:

Toby Dougherty, City Manager
CITY OF HAYS
City Hall, 16th & Main
P.O. Box 490
Hays, KS 67601

With photocopies to:

Jon Quinday, City Manager
CITY OF RUSSELL
133 W. 8th Street
P.O. Box 112
Russell, KS 67665

David M. Traster
FOULSTON SIEFKIN LLP
1551 N. Waterfront Parkway, Suite 100
Wichita, Kansas 67206-4466

Daniel J. Buller
FOULSTON SIEFKIN LLP
9225 Indian Creek Parkway, Suite 600
Overland Park, Kansas 66210

John T. Bird
Todd Powell
GLASSMAN BIRD AND POWELL, LLP
Attention: Attorneys for the City of Hays, Kansas
200 West Thirteenth Street
Hays, KS 67601-0727

Kenneth L. Cole
WOELK & COLE
4 S. Kansas St.
P.O. Box 431
Russell, KS 67665-0431

Stafford Field Office
Stockton Field Office
Big Bend Groundwater Management District No. 5



KDA Staff

THE STATE OF KANSAS



KANSAS DEPARTMENT OF AGRICULTURE
Mike Beam, Acting Secretary of Agriculture

DIVISION OF WATER RESOURCES
David W. Barfield, Chief Engineer

APPROVAL OF APPLICATION
TO CHANGE
THE PLACE OF USE, THE POINT OF DIVERSION AND THE USE MADE
OF THE WATER UNDER AN EXISTING WATER RIGHT

WATER RIGHT
FILE NO. 22,334

The Chief Engineer, Division of Water Resources, Kansas Department of Agriculture, after due consideration of the written Application for Approval to Change the Place of Use, the Point of Diversion or the Use Made of the Water Under an Existing Water Right, submitted by Toby Dougherty, City Manager, on behalf of the City of Hays, 1507 Main Street, Hays, Kansas 67601, and by Jon Quinday, City Manager, on behalf of the City of Russell, 133 W. 8th Street, Russell, Kansas 67665, and received in this office on June 26, 2015, as amended (the "Change Application"), for approval of changes in the location of the place of use, the point of diversion, and the use made of water under the Certificate of Appropriation issued on May 21, 1987 (the "Certificate"), pursuant to the application for permit to appropriate water for beneficial use regarding the above-mentioned Water Right, File No. 22,334 (the "Water Right"), finds that the changes requested in the Change Application are reasonable and will not impair existing rights, that such changes relate to the same local source of supply, and that the Change Application should be and is hereby approved pursuant to K.S.A. 82a-708b and as provided herein.

This approval order (the "Change Approval") is attached as an exhibit to, is incorporated in, and is subject to the terms of that certain Master Order Contingently Approving Change Applications Regarding R9 Water Rights (the "Master Order"), issued by the Chief Engineer concurrently with this Change Approval. The effective date of the changes approved herein for the Water Right shall be as provided in the Master Order. Upon effectiveness as provided in the Master Order:

1. The authorized use made of water for the Water Right shall be:

Municipal Use,

and the authorized locations of the places of use shall be those that are specifically described in **Appendix F** to the Master Order,

and the location of the point of diversion for the Water Right shall be authorized from one (1) well located as follows:

one (1) well (Well K) located in the Northwest Quarter of the Southwest Quarter of the Northeast Quarter (NW $\frac{1}{4}$ SW $\frac{1}{4}$ NE $\frac{1}{4}$) of Section 11, more particularly described as being near a point 3,646 feet North and 2,143 feet West of the Southeast corner of said section, in a quantity not to exceed 44.348 million gallons (136.1 acre-feet) of groundwater per calendar year at a diversion rate not in excess of 700 gallons per minute (1.56 c.f.s.), Township 26 South, Range 20 West, Edwards County, Kansas,

to be completed within the mapped boundaries as shown on the maps marked Exhibits Q, and R accompanying the Change Application, and pursuant to the Master Order.

2. Due to the aforementioned changes, the Water Right shall be reduced to a total authorized quantity not to exceed 44.348 million gallons (136.1 acre-feet) of water per calendar year.

3. Due to the aforementioned changes, the Water Right shall be reduced to a total authorized rate of diversion not to exceed 700 gallons per minute (1.56 c.f.s.).

4. Due to the aforementioned changes, this Change Approval removes the following Limitation, (as that term is defined in the Master Order), on the rate of diversion for the Water Right, which Limitation is set forth as follows in the Certificate:

This appropriation right is further limited to a diversion rate which when the wells operate simultaneously will provide a diversion rate not in excess of 890 gallons per minute (1.98 c.f.s.) for irrigation use on the property described herein.

5. The following additional conditions of this Change Approval also shall apply to this Water Right:

a. Installation of the works for diversion of water shall be completed on or before December 31, 2029, or within any authorized extension of time granted by the Chief Engineer for good cause shown. The Water Right owner shall notify the Chief Engineer when construction of the diversion works has been completed.

b. All wells with a diversion rate of 100 gallons per minute or more drilled under the authority of this Change Approval shall have a tube or other device installed in a manner acceptable to, and in accordance with, specifications adopted by the Chief Engineer. This tube or device shall be suitable for making water level measurements and shall be maintained in a condition satisfactory to the Chief Engineer.

c. The Water Right owner shall submit to the Chief Engineer a copy of the well log required by the Kansas Department of Health and Environment under the authority of K.S.A. 82a-1212, currently form WWC-5, within 30 days following the drilling of the well at the location authorized herein.

d. All diversion works 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.

e. Prior to the use of water, the Water Right owner shall properly install an acceptable water meter on the diversion works authorized for this Water Right, in strict accordance with K.A.R. 5-1-4 through 5-1-12. The Water Right owner shall notify the Chief Engineer when installation of the water meter has been completed. The Water Right owner shall maintain the water meter in an operating condition satisfactory to the Chief Engineer at all times during diversion of water and shall maintain records from which the total quantity of water diverted may be determined. The Water Right owner shall also annually report to the Chief Engineer the reading of said water meter and the total quantity of water diverted. Such records shall be furnished to the Chief Engineer by March 1 following the end of each calendar year.

6. Further, the following Limitations shall apply to this Water Right, for which Limitations the Chief Engineer specifically retains jurisdiction and authority to review and modify, as provided in the Master Order:

As provided in the Master Order, this Water Right is subject to a Limitation such that when this Water Right is combined with Water Right, File No. 22,333, the total rate of diversion shall not exceed 700 gallons per minute (1.56 c.f.s.) for municipal use from the point of diversion authorized herein.

As provided in the Master Order, the authorized quantity of water for municipal use under this Water Right is subject to a Limitation such that when this Water Right is combined with Water Right, File Nos.: 21,729-D1; 21,729-D2; 21,730; 21,731; 21,732-D1; 21,732-D2; 21,733; 21,734; 21,841; 21,842; 22,325; 22,326; 22,327; 22,329; 22,330; 22,331; 22,332; 22,333; 22,335; 22,338; 22,339; 22,340; 22,341; 22,342; 22,343; 22,345; 22,346; 27,760; 29,816; 30,083; and 30,084 the water used shall not exceed a rolling ten-year aggregate Limitation of 15,640.848 million gallons (48,000 acre-feet) during any, each, and every ten (10) consecutive calendar years (the "Ten-Year Rolling Aggregate Limitation" as defined in the Master Order) at the places of use authorized herein.

As provided in the Master Order, the authorized quantity of water for municipal use under this Water Right is subject to a Limitation such that when this Water Right is combined with Vested Right, File No. RS 008, and Water Right, File Nos. 206; 1,267; 1,861; 17,586; 17,587; 21,729-D1; 21,729-D2; 21,730; 21,731; 21,732-D1; 21,732-D2; 21,733; 21,734; 21,841; 21,842; 22,325; 22,326; 22,327; 22,329; 22,330; 22,331; 22,332; and 22,333 the water used shall not exceed 600.000 million gallons (1,841.3 acre-feet) per calendar year (the "Reasonable-Need Limitation" for the City of Russell, as such term is defined and calculated in the Master Order).

As provided in the Master Order, the authorized quantity of water for municipal use under this Water Right is subject to a Limitation such that when this Water Right is combined with Vested Right, File No. EL 002 and Water Right, File Nos. 1,248; 5,757; 18,857; 18,858; 21,729-D1; 21,729-D2; 21,730; 21,731; 21,732-D1; 21,732-D2; 21,733; 21,734; 21,841; 21,842; 22,325; 22,326; 22,327; 22,329; 22,330; 22,331; 22,332; and 22,333 the water used shall not exceed 1,847.650 million gallons (5,670.23 acre-feet) per calendar year (the "Reasonable-Need Limitation" for the City of Hays, as such term is defined and calculated in the Master Order).

7. In all other respects, the Certificate, as modified and amended by the aforementioned orders, including the Master Order, remains as issued.

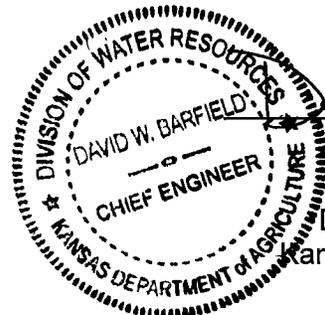
8. This Change Approval is contingent and conditioned upon the terms of the Master Order and will not become effective unless and until such time as the Master Order becomes effective.

9. Any person who is aggrieved by this Change Approval may file a petition for administrative review by the Secretary pursuant to K.S.A. 82a-708b, K.S.A. 2016 Supp. 82a-1901, and K.S.A. 77-527. K.S.A. 2016 Supp. 82a-1901 applies because the proceeding regarding this matter began before the 2017 amendments became effective. Any petition for administrative review by the Secretary must include a statement of its basis as provided in K.S.A. 77-527(c). This Change Approval will become a final order, without further notice, unless a petition for administrative review by the Secretary pursuant to K.S.A. 82a-708b, K.S.A. 2016 Supp. 82a-1901, and K.S.A. 77-527 is filed within 15 days after the date of service shown on the Certificate of Service. Any request for administrative review by the Secretary must be in writing and submitted to the attention of:

Chief Legal Counsel,
Kansas Department of Agriculture,
1320 Research Park Drive,
Manhattan, Kansas 66502,
Fax: (785) 564-6777,

with copies to those shown in the Certificate of Service.

Dated at Manhattan, Kansas, this 27th day of March , 2019.



David W. Barfield

David W. Barfield, P.E.
Chief Engineer
Division of Water Resources
Kansas Department of Agriculture

State of Kansas)
) SS
County of Riley)

The foregoing instrument was acknowledged before me this 27th day of March, 2019, by David W. Barfield, P.E., Chief Engineer, Division of Water Resources, Kansas Department of Agriculture.



Karen Hunter

Notary Public

CERTIFICATE OF SERVICE

On this 28 day of March, 2019, I hereby certify that the attached original Approval of Application to Change the Place of Use, the Point of Diversion or the Use Made of the Water Under an Existing Water Right, Water Right, File No. 22,334, dated March 27, 2019, was mailed postage prepaid, first class, US mail to the following:

Toby Dougherty, City Manager
CITY OF HAYS
City Hall, 16th & Main
P.O. Box 490
Hays, KS 67601

With photocopies to:

Jon Quinday, City Manager
CITY OF RUSSELL
133 W. 8th Street
P.O. Box 112
Russell, KS 67665

David M. Traster
FOULSTON SIEFKIN LLP
1551 N. Waterfront Parkway, Suite 100
Wichita, Kansas 67206-4466

Daniel J. Buller
FOULSTON SIEFKIN LLP
9225 Indian Creek Parkway, Suite 600
Overland Park, Kansas 66210

John T. Bird
Todd Powell
GLASSMAN BIRD AND POWELL, LLP
Attention: Attorneys for the City of Hays, Kansas
200 West Thirteenth Street
Hays, KS 67601-0727

Kenneth L. Cole
WOELK & COLE
4 S. Kansas St.
P.O. Box 431
Russell, KS 67665-0431

Stafford Field Office
Stockton Field Office
Big Bend Groundwater Management District No. 5



KDA Staff

THE STATE OF KANSAS



KANSAS DEPARTMENT OF AGRICULTURE
Mike Beam, Acting Secretary of Agriculture

DIVISION OF WATER RESOURCES
David W. Barfield, Chief Engineer

APPROVAL OF APPLICATION
TO CHANGE
THE PLACE OF USE, THE POINT OF DIVERSION AND THE USE MADE
OF THE WATER UNDER AN EXISTING WATER RIGHT

WATER RIGHT
FILE NO. 22,335

The Chief Engineer, Division of Water Resources, Kansas Department of Agriculture, after due consideration of the written Application for Approval to Change the Place of Use, the Point of Diversion or the Use Made of the Water Under an Existing Water Right, submitted by Toby Dougherty, City Manager, on behalf of the City of Hays, 1507 Main Street, Hays, Kansas 67601, and by Jon Quinday, City Manager, on behalf of the City of Russell, 133 W. 8th Street, Russell, Kansas 67665, and received in this office on June 26, 2015, as amended (the "Change Application"), for approval of changes in the location of the place of use, the point of diversion, and the use made of water under the Certificate of Appropriation issued on June 11, 1987 (the "Certificate"), pursuant to the application for permit to appropriate water for beneficial use regarding the above-mentioned Water Right, File No. 22,335 (the "Water Right"), finds that the changes requested in the Change Application are reasonable and will not impair existing rights, that such changes relate to the same local source of supply, and that the Change Application should be and is hereby approved pursuant to K.S.A. 82a-708b and as provided herein.

This approval order (the "Change Approval") is attached as an exhibit to, is incorporated in, and is subject to the terms of that certain Master Order Contingently Approving Change Applications Regarding R9 Water Rights (the "Master Order"), issued by the Chief Engineer concurrently with this Change Approval. The effective date of the changes approved herein for the Water Right shall be as provided in the Master Order. Upon effectiveness as provided in the Master Order:

1. The authorized use made of water for the Water Right shall be:

Municipal Use,

and the authorized locations of the places of use shall be those that are specifically described in **Appendix F** to the Master Order,

and the location of the point of diversion for the Water Right shall be authorized from one (1) well located as follows:

one (1) well (Well K) located in the Northwest Quarter of the Southwest Quarter of the Northeast Quarter (NW $\frac{1}{4}$ SW $\frac{1}{4}$ NE $\frac{1}{4}$) of Section 11, more particularly described as being near a point 3,646 feet North and 2,143 feet West of the Southeast corner of said section, in a quantity not to exceed 46.466 million gallons (142.6 acre-feet) of groundwater per calendar year at a diversion rate not in excess of 700 gallons per minute (1.56 c.f.s.), Township 26 South, Range 20 West, Edwards County, Kansas,

to be completed within the mapped boundaries as shown on the maps marked Exhibits P, and Q accompanying the Change Application, and pursuant to the Master Order.

2. Due to the aforementioned changes, the Water Right shall be reduced to a total authorized quantity not to exceed 46.466 million gallons (142.6 acre-feet) of water per calendar year.

3. Due to the aforementioned changes, the Water Right shall be reduced to a total authorized rate of diversion not to exceed 700 gallons per minute (1.56 c.f.s.).

4. Due to the aforementioned changes, this Change Approval removes the following Limitation, (as that term is defined in the Master Order), on the rate of diversion for the Water Right, which Limitation is set forth as follows in the Certificate:

This appropriation right is further limited to a diversion rate which when the wells operate simultaneously will provide a diversion rate not in excess of 1,000 gallons per minute (2.23 c.f.s.) for irrigation use on the property described herein.

5. The following additional conditions of this Change Approval also shall apply to this Water Right:

a. Installation of the works for diversion of water shall be completed on or before December 31, 2029, or within any authorized extension of time granted by the Chief Engineer for good cause shown. The Water Right owner shall notify the Chief Engineer when construction of the diversion works has been completed.

b. All wells with a diversion rate of 100 gallons per minute or more drilled under the authority of this Change Approval shall have a tube or other device installed in a manner acceptable to, and in accordance with, specifications adopted by the Chief Engineer. This tube or device shall be suitable for making water level measurements and shall be maintained in a condition satisfactory to the Chief Engineer.

c. The Water Right owner shall submit to the Chief Engineer a copy of the well log required by the Kansas Department of Health and Environment under the authority of K.S.A. 82a-1212, currently form WWC-5, within 30 days following the drilling of the well at the location authorized herein.

d. All diversion works 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.

e. Prior to the use of water, the Water Right owner shall properly install an acceptable water meter on the diversion works authorized for this Water Right, in strict accordance with K.A.R. 5-1-4 through 5-1-12. The Water Right owner shall notify the Chief Engineer when installation of the water meter has been completed. The Water Right owner shall maintain the water meter in an operating condition satisfactory to the Chief Engineer at all times during diversion of water and shall maintain records from which the total quantity of water diverted may be determined. The Water Right owner shall also annually report to the Chief Engineer the reading of said water meter and the total quantity of water diverted. Such records shall be furnished to the Chief Engineer by March 1 following the end of each calendar year.

6. Further, the following Limitations (as the terms is defined in the Master Order) shall apply to this Water Right, for which Limitations the Chief Engineer specifically retains jurisdiction and authority to review and modify, as provided in the Master Order:

As provided in the Master Order, this Water Right is subject to a Limitation such that when this Water Right is combined with Water Right, File Nos. 22,333 and 22,334, the total rate of diversion shall not exceed 700 gallons per minute (1.56 c.f.s.) for municipal use from the point of diversion authorized herein.

As provided in the Master Order, the authorized quantity of water for municipal use under this Water Right is subject to a Limitation such that when this Water Right is combined with Water Right, File Nos.: 21,729-D1; 21,729-D2; 21,730; 21,731; 21,732-D1; 21,732-D2; 21,733; 21,734; 21,841; 21,842; 22,325; 22,326; 22,327; 22,329; 22,330; 22,331; 22,332; 22,333; 22,334; 22,338; 22,339; 22,340; 22,341; 22,342; 22,343; 22,345; 22,346; 27,760; 29,816; 30,083; and 30,084 the water used shall not exceed a rolling ten-year aggregate Limitation of 15,640.848 million gallons (48,000 acre-feet) during any, each, and every ten (10) consecutive calendar years; (the "Ten-Year Rolling Aggregate Limitation" as defined in the Master Order), at the places of use authorized herein.

As provided in the Master Order, the authorized quantity of water for municipal use under this Water Right is subject to a Limitation such that when this Water Right is combined with Vested Right, File No. RS 008; and Water Right, File Nos. 206; 1,267; 1,861; 17,586; 17,587; 21,729-D1; 21,729-D2; 21,730; 21,731; 21,732-D1; 21,732-D2; 21,733; 21,734; 21,841; 21,842; 22,325; 22,326; 22,327; 22,329; 22,330; 22,331; 22,332; 22,333; and 22,334 the water used shall not exceed 600.000 million gallons (1,841.3 acre-feet) per calendar year (the "Reasonable-Need Limitation" for the City of Russell, as such term is defined and calculated in the Master Order).

As provided in the Master Order, the authorized quantity of water for municipal use under this Water Right is subject to a Limitation such that when this Water Right is combined with Vested Right, File No. EL 002 and Water Right, File Nos. 1,248; 5,757; 18,857; 18,858; 21,729-D1; 21,729-D2; 21,730; 21,731; 21,732-D1; 21,732-D2; 21,733; 21,734; 21,841; 21,842; 22,325; 22,326; 22,327; 22,329; 22,330; 22,331; 22,332; 22,333; and 22,334 the water used shall not exceed 1,847.650 million gallons (5,670.23 acre-feet) per calendar year (the "Reasonable-Need Limitation" for the City of Hays, as such term is defined and calculated in the Master Order).

7. In all other respects, the Certificate, as modified and amended by the aforementioned orders, including the Master Order, remains as issued.

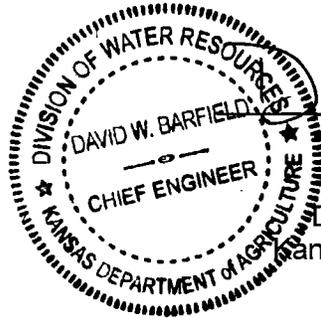
8. This Change Approval is contingent and conditioned upon the terms of the Master Order and will not become effective unless and until such time as the Master Order becomes effective.

9. Any person who is aggrieved by this Change Approval may file a petition for administrative review by the Secretary pursuant to K.S.A. 82a-708b, K.S.A. 2016 Supp. 82a-1901, and K.S.A. 77-527. K.S.A. 2016 Supp. 82a-1901 applies because the proceeding regarding this matter began before the 2017 amendments became effective. Any petition for administrative review by the Secretary must include a statement of its basis as provided in K.S.A. 77-527(c). This Change Approval will become a final order, without further notice, unless a petition for administrative review by the Secretary pursuant to K.S.A. 82a-708b, K.S.A. 2016 Supp. 82a-1901, and K.S.A. 77-527 is filed within 15 days after the date of service shown on the Certificate of Service. Any request for administrative review by the Secretary must be in writing and submitted to the attention of:

Chief Legal Counsel,
Kansas Department of Agriculture,
1320 Research Park Drive,
Manhattan, Kansas 66502,
Fax: (785) 564-6777,

with copies to those shown in the Certificate of Service.

Dated at Manhattan, Kansas, this 27th day of March , 2019.



David W. Barfield

David W. Barfield, P.E.
Chief Engineer
Division of Water Resources
Kansas Department of Agriculture

State of Kansas)
) SS
County of Riley)

The foregoing instrument was acknowledged before me this 27th day of March, 2019, by David W. Barfield, P.E., Chief Engineer, Division of Water Resources, Kansas Department of Agriculture.



Karen Hunter
Notary Public

CERTIFICATE OF SERVICE

On this 28 day of March, 2019, I hereby certify that the attached original Approval of Application to Change the Place of Use, the Point of Diversion and the Use Made of the Water Under an Existing Water Right, Water Right, File No. 22,335, dated March 27, 2019, was mailed postage prepaid, first class, US mail to the following:

Toby Dougherty, City Manager
CITY OF HAYS
City Hall, 16th & Main
P.O. Box 490
Hays, KS 67601

With photocopies to:

Jon Quinday, City Manager
CITY OF RUSSELL
133 W. 8th Street
P.O. Box 112
Russell, KS 67665

David M. Traster
FOULSTON SIEFKIN LLP
1551 N. Waterfront Parkway, Suite 100
Wichita, Kansas 67206-4466

Daniel J. Buller
FOULSTON SIEFKIN LLP
9225 Indian Creek Parkway, Suite 600
Overland Park, Kansas 66210

John T. Bird
Todd Powell
GLASSMAN BIRD AND POWELL, LLP
Attention: Attorneys for the City of Hays, Kansas
200 West Thirteenth Street
Hays, KS 67601-0727

Kenneth L. Cole
WOELK & COLE
4 S. Kansas St.
P.O. Box 431
Russell, KS 67665-0431

Stafford Field Office
Stockton Field Office
Big Bend Groundwater Management District No. 5


KDA Staff

THE STATE OF KANSAS



KANSAS DEPARTMENT OF AGRICULTURE
Mike Beam, Acting Secretary of Agriculture

DIVISION OF WATER RESOURCES
David W. Barfield, Chief Engineer

APPROVAL OF APPLICATION
TO CHANGE
THE PLACE OF USE, THE POINT OF DIVERSION AND THE USE MADE
OF THE WATER UNDER AN EXISTING WATER RIGHT

WATER RIGHT
FILE NO. 22,338

The Chief Engineer, Division of Water Resources, Kansas Department of Agriculture, after due consideration of the written Application for Approval to Change the Place of Use, the Point of Diversion or the Use Made of the Water Under an Existing Water Right, submitted by Toby Dougherty, City Manager, on behalf of the City of Hays, 1507 Main Street, Hays, Kansas 67601, and by Jon Quinday, City Manager, on behalf of the City of Russell, 133 W. 8th Street, Russell, Kansas 67665, and received in this office on June 26, 2015, as amended (the "Change Application"), for approval of changes in the location of the place of use, the point of diversion, and the use made of water under the Certificate of Appropriation issued on November 1, 1994 (the "Certificate"), pursuant to the application for permit to appropriate water for beneficial use regarding the above-mentioned Water Right, File No. 22,338 (the "Water Right"), finds that the changes requested in the Change Application are reasonable and will not impair existing rights, that such changes relate to the same local source of supply, and that the Change Application should be and is hereby approved pursuant to K.S.A. 82a-708b and as provided herein.

This approval order (the "Change Approval") is attached as an exhibit to, is incorporated in, and is subject to the terms of that certain Master Order Contingently Approving Change Applications Regarding R9 Water Rights (the "Master Order"), issued by the Chief Engineer concurrently with this Change Approval. The effective date of the changes approved herein for the Water Right shall be as provided in the Master Order. Upon effectiveness as provided in the Master Order:

1. The authorized use made of water for the Water Right shall be:

Municipal Use,

and the authorized locations of the places of use shall be those that are specifically described in **Appendix F** to the Master Order,

and the location of the point of diversion for the Water Right shall be authorized from one (1) well located as follows:

one (1) well (Well L) located in the Southwest Quarter of the Northeast Quarter of the Southeast Quarter (SW $\frac{1}{4}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$) of Section 10, more particularly described as being near a point 1,863 feet North and 883 feet West of the Southeast corner of said section, in a quantity not to exceed 37.994 million gallons (116.6 acre-feet) of groundwater per calendar year at a diversion rate not in excess of 950 gallons per minute (2.12 c.f.s.), Township 26 South, Range 20 West, Edwards County, Kansas,

to be completed within the mapped boundaries as shown on the maps marked Exhibits P, and Q accompanying the Change Application, and pursuant to the Master Order.

2. Due to the aforementioned changes, the Water Right shall be reduced to a total authorized quantity not to exceed 37.994 million gallons (116.6 acre-feet) of water per calendar year.

3. Due to the aforementioned changes, the Water Right shall be reduced to a total authorized rate of diversion not to exceed 950 gallons per minute (2.12 c.f.s.).

4. Due to the aforementioned changes, this Change Approval removes the following Limitation, (as that term is defined in the Master Order), on the rate of diversion for the Water Right, which Limitation is set forth as follows in the Certificate:

This appropriation right is further limited to a diversion rate which when the wells operate simultaneously will provide a diversion rate not in excess of 950 gallons per minute (2.12 c.f.s.), for irrigation use on the property described herein.

5. The following additional conditions of this Change Approval also shall apply to this Water Right:

a. Installation of the works for diversion of water shall be completed on or before December 31, 2029, or within any authorized extension of time granted by the Chief Engineer for good cause shown. The Water Right owner shall notify the Chief Engineer when construction of the diversion works has been completed.

b. All wells with a diversion rate of 100 gallons per minute or more drilled under the authority of this Change Approval shall have a tube or other device installed in a manner acceptable to, and in accordance with, specifications adopted by the Chief Engineer. This tube or device shall be suitable for making water level measurements and shall be maintained in a condition satisfactory to the Chief Engineer.

c. The Water Right owner shall submit to the Chief Engineer a copy of the well log required by the Kansas Department of Health and Environment under the authority of K.S.A. 82a-1212, currently form WWC-5, within 30 days following the drilling of the well at the location authorized herein.

d. All diversion works 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.

e. Prior to the use of water, the Water Right owner shall properly install an acceptable water meter on the diversion works authorized for this Water Right, in strict accordance with K.A.R. 5-1-4 through 5-1-12. The Water Right owner shall notify the Chief Engineer when installation of the water meter has been completed. The Water Right owner shall maintain the water meter in an operating condition satisfactory to the Chief Engineer at all times during diversion of water and shall maintain records from which the total quantity of water diverted may be determined. The Water Right owner shall also annually report to the Chief Engineer the reading of said water meter and the total quantity of water diverted. Such records shall be furnished to the Chief Engineer by March 1 following the end of each calendar year.

6. Further, the following Limitations shall apply to this Water Right, for which Limitations the Chief Engineer specifically retains jurisdiction and authority to review and modify, as provided in the Master Order:

As provided in the Master Order, the authorized quantity of water for municipal use under this Water Right is subject to a Limitation such that when this Water Right is combined with Water Right, File Nos.: 21,729-D1; 21,729-D2; 21,730; 21,731; 21,732-D1; 21,732-D2; 21,733; 21,734; 21,841; 21,842; 22,325; 22,326; 22,327; 22,329; 22,330; 22,331; 22,332; 22,333; 22,334; 22,335; 22,339; 22,340; 22,341; 22,342; 22,343; 22,345; 22,346; 27,760; 29,816; 30,083; and 30,084 the water used shall not exceed a rolling ten-year aggregate Limitation of 15,640.848 million gallons (48,000 acre-feet) during any, each, and every ten (10) consecutive calendar years (the "Ten-Year Rolling Aggregate Limitation" as defined in the Master Order) at the places of use authorized herein.

As provided in the Master Order, the authorized quantity of water for municipal use under this Water Right is subject to a Limitation such that when this Water Right is combined with Vested Right, File No. RS 008; and Water Right, File Nos. 206; 1,267; 1,861; 17,586; 17,587; 21,729-D1; 21,729-D2; 21,730; 21,731; 21,732-D1; 21,732-D2; 21,733; 21,734; 21,841; 21,842; 22,325; 22,326; 22,327; 22,329; 22,330; 22,331; 22,332; 22,333; 22,334; and 22,335 the water used shall not exceed 600.000 million gallons (1,841.3 acre-feet) per calendar year (the "Reasonable-Need Limitation" for the City of Russell, as such term is defined and calculated in the Master Order).

As provided in the Master Order, the authorized quantity of water for municipal use under this Water Right is subject to a Limitation such that when this Water Right is combined with Vested Right, File No. EL 002 and Water Right, File Nos. 1,248; 5,757; 18,857; 18,858; 21,729-D1; 21,729-D2; 21,730; 21,731; 21,732-D1; 21,732-D2; 21,733; 21,734; 21,841; 21,842; 22,325; 22,326; 22,327; 22,329; 22,330; 22,331; 22,332; 22,333; 22,334; and 22,335 the water used shall not exceed 1,847.650 million gallons (5,670.23 acre-feet) per calendar year (the "Reasonable-Need Limitation" for the City of Hays, as such term is defined and calculated in the Master Order).

7. In all other respects, the Certificate, as modified and amended by the aforementioned orders, including the Master Order, remains as issued.

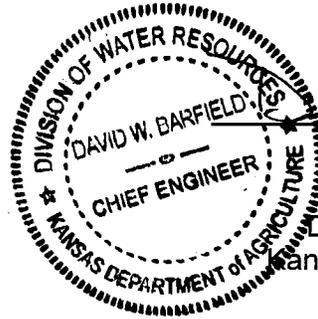
8. This Change Approval is contingent and conditioned upon the terms of the Master Order and will not become effective unless and until such time as the Master Order becomes effective.

9. Any person who is aggrieved by this Change Approval may file a petition for administrative review by the Secretary pursuant to K.S.A. 82a-708b, K.S.A. 2016 Supp. 82a-1901, and K.S.A. 77-527. K.S.A. 2016 Supp. 82a-1901 applies because the proceeding regarding this matter began before the 2017 amendments became effective. Any petition for administrative review by the Secretary must include a statement of its basis as provided in K.S.A. 77-527(c). This Change Approval will become a final order, without further notice, unless a petition for administrative review by the Secretary pursuant to K.S.A. 82a-708b, K.S.A. 2016 Supp. 82a-1901, and K.S.A. 77-527 is filed within 15 days after the date of service shown on the Certificate of Service. Any request for administrative review by the Secretary must be in writing and submitted to the attention of:

Chief Legal Counsel,
Kansas Department of Agriculture,
1320 Research Park Drive,
Manhattan, Kansas 66502,
Fax: (785) 564-6777,

with copies to those shown in the Certificate of Service.

Dated at Manhattan, Kansas, this 27th day of March, 2019.



David W. Barfield

David W. Barfield, P.E.
Chief Engineer
Division of Water Resources
Kansas Department of Agriculture

State of Kansas)
) SS
County of Riley)

The foregoing instrument was acknowledged before me this 27th day of March, 2019, by David W. Barfield, P.E., Chief Engineer, Division of Water Resources, Kansas Department of Agriculture.



Karen Hunter
Notary Public

CERTIFICATE OF SERVICE

On this 28 day of March 2019, I hereby certify that the attached original Approval of Application to Change the Place of Use, the Point of Diversion and the Use Made of the Water Under an Existing Water Right, Water Right, File No. 22,338, dated March 27, 2019, was mailed postage prepaid, first class, US mail to the following:

Toby Dougherty, City Manager
CITY OF HAYS
City Hall, 16th & Main
P.O. Box 490
Hays, KS 67601

With photocopies to:

Jon Quinday, City Manager
CITY OF RUSSELL
133 W. 8th Street
P.O. Box 112
Russell, KS 67665

David M. Traster
FOULSTON SIEFKIN LLP
1551 N. Waterfront Parkway, Suite 100
Wichita, Kansas 67206-4466

Daniel J. Buller
FOULSTON SIEFKIN LLP
9225 Indian Creek Parkway, Suite 600
Overland Park, Kansas 66210

John T. Bird
Todd Powell
GLASSMAN BIRD AND POWELL, LLP
Attention: Attorneys for the City of Hays, Kansas
200 West Thirteenth Street
Hays, KS 67601-0727

Kenneth L. Cole
WOELK & COLE
4 S. Kansas St.
P.O. Box 431
Russell, KS 67665-0431

Stafford Field Office
Stockton Field Office
Big Bend Groundwater Management District No. 5



KDA Staff

THE STATE OF KANSAS



KANSAS DEPARTMENT OF AGRICULTURE
Mike Beam, Acting Secretary of Agriculture

DIVISION OF WATER RESOURCES
David W. Barfield, Chief Engineer

APPROVAL OF APPLICATION TO CHANGE THE PLACE OF USE, THE POINT OF DIVERSION AND THE USE MADE OF THE WATER UNDER AN EXISTING WATER RIGHT

WATER RIGHT FILE NO. 22,339

The Chief Engineer, Division of Water Resources, Kansas Department of Agriculture, after due consideration of the written Application for Approval to Change the Place of Use, the Point of Diversion or the Use Made of the Water Under an Existing Water Right, submitted by Toby Dougherty, City Manager, on behalf of the City of Hays, 1507 Main Street, Hays, Kansas 67601, and by Jon Quinday, City Manager, on behalf of the City of Russell, 133 W. 8th Street, Russell, Kansas 67665, and received in this office on June 26, 2015, as amended (the "Change Application"), for approval of changes in the location of the place of use, the point of diversion, and the use made of water under the Certificate of Appropriation issued on May 21, 1987 (the "Certificate"), pursuant to the application for permit to appropriate water for beneficial use regarding the above-mentioned Water Right, File No. 22,339 (the "Water Right"), finds that the changes requested in the Change Application are reasonable and will not impair existing rights, that such changes relate to the same local source of supply, and that the Change Application should be and is hereby approved pursuant to K.S.A. 82a-708b and as provided herein.

This approval order (the "Change Approval") is attached as an exhibit to, is incorporated in, and is subject to the terms of that certain Master Order Contingently Approving Change Applications Regarding R9 Water Rights (the "Master Order"), issued by the Chief Engineer concurrently with this Change Approval. The effective date of the changes approved herein for the Water Right shall be as provided in the Master Order. Upon effectiveness as provided in the Master Order:

1. The authorized use made of water for the Water Right shall be:

Municipal Use,

and the authorized locations of the places of use shall be those that are specifically described in **Appendix F** to the Master Order,

and the location of the point of diversion for the Water Right shall be authorized from one (1) well located as follows:

one (1) well (Well L) located in the Southwest Quarter of the Northeast Quarter of the Southeast Quarter (SW $\frac{1}{4}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$) of Section 10, more particularly described as being near a point 1,863 feet North and 883 feet West of the Southeast corner of said section, in a quantity not to exceed 38.711 million gallons (118.8 acre-feet) of groundwater per calendar year at a diversion rate not in excess of 680 gallons per minute (1.52 c.f.s.), Township 26 South, Range 20 West, Edwards County, Kansas,

to be completed within the mapped boundaries as shown on the maps marked Exhibits O, and P accompanying the Change Application, and pursuant to the Master Order.

2. Due to the aforementioned changes, the Water Right shall be reduced to a total authorized quantity not to exceed 38.711 million gallons (118.8 acre-feet) of water per calendar year.

3. The following additional conditions of this Change Approval also shall apply to this Water Right:

a. Installation of the works for diversion of water shall be completed on or before December 31, 2029, or within any authorized extension of time granted by the Chief Engineer for good cause shown. The Water Right owner shall notify the Chief Engineer when construction of the diversion works has been completed.

b. All wells with a diversion rate of 100 gallons per minute or more drilled under the authority of this Change Approval shall have a tube or other device installed in a manner acceptable to, and in accordance with, specifications adopted by the Chief Engineer. This tube or device shall be suitable for making water level measurements and shall be maintained in a condition satisfactory to the Chief Engineer.

c. The Water Right owner shall submit to the Chief Engineer a copy of the well log required by the Kansas Department of Health and Environment under the authority of K.S.A. 82a-1212, currently form WWC-5, within 30 days following the drilling of the well at the location authorized herein.

d. All diversion works 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.

e. Prior to the use of water, the Water Right owner shall properly install an acceptable water meter on the diversion works authorized for this Water Right, in strict accordance with K.A.R. 5-1-4 through 5-1-12. The Water Right owner shall notify the Chief Engineer when installation of the water meter has been completed. The Water Right owner shall maintain the water meter in an operating condition satisfactory to the Chief Engineer at all times during diversion of water and shall maintain records from which the total quantity of water diverted may be determined. The Water Right owner shall also annually report to the Chief Engineer the reading of said water meter and the total quantity of water diverted. Such records shall be furnished to the Chief Engineer by March 1 following the end of each calendar year.

4. Further, the following Limitations (as that term is defined in the Master Order), shall apply to this Water Right, for which Limitations the Chief Engineer specifically retains jurisdiction and authority to review and modify, as provided in the Master Order:

As provided in the Master Order, this Water Right is subject to a Limitation such that when this Water Right is combined with Water Right, File No. 22,338, the total rate of diversion shall not exceed 950 gallons per minute (2.12 c.f.s.) for municipal use from the point of diversion authorized herein.

As provided in the Master Order, the authorized quantity of water for municipal use under this Water Right is subject to a Limitation such that when this Water Right is combined with Water Right, File Nos.: 21,729-D1; 21,729-D2; 21,730; 21,731; 21,732-D1; 21,732-D2; 21,733; 21,734; 21,841; 21,842; 22,325; 22,326; 22,327; 22,329; 22,330; 22,331; 22,332; 22,333; 22,334; 22,335; 22,338; 22,340; 22,341; 22,342; 22,343; 22,345; 22,346; 27,760; 29,816; 30,083; and 30,084 the water used shall not exceed a rolling ten-year aggregate Limitation of 15,640.848 million gallons (48,000 acre-feet) during any, each, and every ten (10) consecutive calendar years (the "Ten-Year Rolling Aggregate Limitation" as defined in the Master Order) at the places of use authorized herein.

As provided in the Master Order, the authorized quantity of water for municipal use under this Water Right is subject to a Limitation such that when this Water Right is combined with Vested Right, File No. RS 008; and Water Right, File Nos. 206; 1,267; 1,861; 17,586; 17,587; 21,729-D1; 21,729-D2; 21,730; 21,731; 21,732-D1; 21,732-D2; 21,733; 21,734; 21,841; 21,842; 22,325; 22,326; 22,327; 22,329; 22,330; 22,331; 22,332; 22,333; 22,334; 22,335 and 22,338 the water used shall not exceed 600.000 million gallons (1,841.3 acre-feet) per calendar year (the "Reasonable-Need Limitation" for the City of Russell, as such term is defined and calculated in the Master Order).

As provided in the Master Order, the authorized quantity of water for municipal use under this Water Right is subject to a Limitation such that when this Water Right is combined with Vested Right, File No. EL 002 and Water Right, File Nos. 1,248; 5,757; 18,857; 18,858; 21,729-D1; 21,729-D2; 21,730; 21,731; 21,732-D1; 21,732-D2; 21,733; 21,734; 21,841; 21,842; 22,325; 22,326; 22,327; 22,329; 22,330; 22,331; 22,332; 22,333; 22,334; 22,335; and 22,338 the water used shall not exceed 1,847.650 million gallons (5,670.23 acre-feet) per calendar year (the "Reasonable-Need Limitation" for the City of Hays, as such term is defined and calculated in the Master Order).

5. In all other respects, the Certificate, as modified and amended by the aforementioned orders, including the Master Order, remains as issued.

6. This Change Approval is contingent and conditioned upon the terms of the Master Order and will not become effective unless and until such time as the Master Order becomes effective.

7. Any person who is aggrieved by this Change Approval may file a petition for administrative review by the Secretary pursuant to K.S.A. 82a-708b, K.S.A. 2016 Supp. 82a-1901, and K.S.A. 77-527. K.S.A. 2016 Supp. 82a-1901 applies because the proceeding regarding this matter began before the 2017 amendments became effective. Any petition for administrative review by the Secretary must include a statement of its basis as provided in K.S.A. 77-527(c). This Change Approval will become a final order, without further notice, unless a petition for administrative review by the Secretary pursuant to K.S.A. 82a-708b, K.S.A. 2016 Supp. 82a-1901, and K.S.A. 77-527 is filed within 15 days after the date of service shown on the Certificate of Service. Any request for administrative review by the Secretary must be in writing and submitted to the attention of:

Chief Legal Counsel,
Kansas Department of Agriculture,
1320 Research Park Drive,
Manhattan, Kansas 66502,
Fax: (785) 564-6777,

with copies to those shown in the Certificate of Service.

CERTIFICATE OF SERVICE

On this 28 day of March, 2019, I hereby certify that the attached original Approval of Application to Change the Place of Use, the Point of Diversion and the Use Made of the Water Under an Existing Water Right, Water Right, File No. 22,339, dated March 27, 2019, was mailed postage prepaid, first class, US mail to the following:

Toby Dougherty, City Manager
CITY OF HAYS
City Hall, 16th & Main
P.O. Box 490
Hays, KS 67601

With photocopies to:

Jon Quinday, City Manager
CITY OF RUSSELL
133 W. 8th Street
P.O. Box 112
Russell, KS 67665

David M. Traster
FOULSTON SIEFKIN LLP
1551 N. Waterfront Parkway, Suite 100
Wichita, Kansas 67206-4466

Daniel J. Buller
FOULSTON SIEFKIN LLP
9225 Indian Creek Parkway, Suite 600
Overland Park, Kansas 66210

John T. Bird
Todd Powell
GLASSMAN BIRD AND POWELL, LLP
Attention: Attorneys for the City of Hays, Kansas
200 West Thirteenth Street
Hays, KS 67601-0727

Kenneth L. Cole
WOELK & COLE
4 S. Kansas St.
P.O. Box 431
Russell, KS 67665-0431

Stafford Field Office
Stockton Field Office
Big Bend Groundwater Management District No. 5


Staff

THE STATE OF KANSAS



KANSAS DEPARTMENT OF AGRICULTURE
Mike Beam, Acting Secretary of Agriculture

DIVISION OF WATER RESOURCES
David W. Barfield, Chief Engineer

APPROVAL OF APPLICATION
TO CHANGE
THE PLACE OF USE, THE POINT OF DIVERSION AND THE USE MADE
OF THE WATER UNDER AN EXISTING WATER RIGHT

WATER RIGHT
FILE NO. 22,340

The Chief Engineer, Division of Water Resources, Kansas Department of Agriculture, after due consideration of the written Application for Approval to Change the Place of Use, the Point of Diversion or the Use Made of the Water Under an Existing Water Right, submitted by Toby Dougherty, City Manager, on behalf of the City of Hays, 1507 Main Street, Hays, Kansas 67601, and by Jon Quinday, City Manager, on behalf of the City of Russell, 133 W. 8th Street, Russell, Kansas 67665, and received in this office on June 26, 2015, as amended (the "Change Application"), for approval of changes in the location of the place of use, the point of diversion, and the use made of water under the Certificate of Appropriation issued on May 21, 1987 (the "Certificate"), pursuant to the application for permit to appropriate water for beneficial use regarding the above-mentioned Water Right, File No. 22,340 (the "Water Right"), finds that the changes requested in the Change Application are reasonable and will not impair existing rights, that such changes relate to the same local source of supply, and that the Change Application should be and is hereby approved pursuant to K.S.A. 82a-708b and as provided herein.

This approval order (the "Change Approval") is attached as an exhibit to, is incorporated in, and is subject to the terms of that certain Master Order Contingently Approving Change Applications Regarding R9 Water Rights (the "Master Order"), issued by the Chief Engineer concurrently with this Change Approval. The effective date of the changes approved herein for the Water Right shall be as provided in the Master Order. Upon effectiveness as provided in the Master Order:

1. The authorized use made of water for the Water Right shall be:

Municipal Use,

and the authorized locations of the places of use shall be those that are specifically described in **Appendix F** to the Master Order,

and the location of the point of diversion for the Water Right shall be authorized from one (1) well located as follows:

one (1) well (Well M) located in the Southwest Quarter of the Northeast Quarter of the Northeast Quarter (SW $\frac{1}{4}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$) of Section 15, more particularly described as being near a point 4,367 feet North and 1,228 feet West of the Southeast corner of said section, in a quantity not to exceed 37.994 million gallons (116.6 acre-feet) of groundwater per calendar year at a diversion rate not in excess of 950 gallons per minute (2.12 c.f.s.), Township 26 South, Range 20 West, Edwards County, Kansas,

to be completed within the mapped boundaries as shown on the maps marked Exhibits O, and P accompanying the Change Application, and pursuant to the Master Order.

2. Due to the aforementioned changes, the Water Right shall be reduced to a total authorized quantity not to exceed 37.994 million gallons (116.6 acre-feet) of water per calendar year.

3. The following additional conditions of this Change Approval also shall apply to this Water Right:

a. Installation of the works for diversion of water shall be completed on or before December 31, 2029, or within any authorized extension of time granted by the Chief Engineer for good cause shown. The Water Right owner shall notify the Chief Engineer when construction of the diversion works has been completed.

b. All wells with a diversion rate of 100 gallons per minute or more drilled under the authority of this Change Approval shall have a tube or other device installed in a manner acceptable to, and in accordance with, specifications adopted by the Chief Engineer. This tube or device shall be suitable for making water level measurements and shall be maintained in a condition satisfactory to the Chief Engineer.

c. The Water Right owner shall submit to the Chief Engineer a copy of the well log required by the Kansas Department of Health and Environment under the authority of K.S.A. 82a-1212, currently form WWC-5, within 30 days following the drilling of the well at the location authorized herein.

d. All diversion works 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.

e. Prior to the use of water, the Water Right owner shall properly install an acceptable water meter on the diversion works authorized for this Water Right, in strict accordance with K.A.R. 5-1-4 through 5-1-12. The Water Right owner shall notify the Chief Engineer when installation of the water meter has been completed. The Water Right owner shall maintain the water meter in an operating condition satisfactory to the Chief Engineer at all times during diversion of water and shall maintain records from which the total quantity of water diverted may be determined. The Water Right owner shall also annually report to the Chief Engineer the reading of said water meter and the total quantity of water diverted. Such records shall be furnished to the Chief Engineer by March 1 following the end of each calendar year.

4. Further, the following Limitations (as that term is defined in the Master Order), shall apply to this Water Right, for which Limitations the Chief Engineer specifically retains jurisdiction and authority to review and modify, as provided in the Master Order:

As provided in the Master Order, the authorized quantity of water for municipal use under this Water Right is subject to a Limitation such that when this Water Right is combined with Water Right, File Nos.: 21,729-D1; 21,729-D2; 21,730; 21,731; 21,732-D1; 21,732-D2; 21,733; 21,734; 21,841; 21,842; 22,325; 22,326; 22,327; 22,329; 22,330; 22,331; 22,332; 22,333; 22,334; 22,335; 22,338; 22,339; 22,341; 22,342; 22,343; 22,345; 22,346; 27,760; 29,816; 30,083; and 30,084 the water used shall not exceed a rolling ten-year aggregate Limitation of 15,640,848 million gallons (48,000 acre-feet) during any, each, and every ten (10) consecutive calendar years (the "Ten-Year Rolling Aggregate Limitation" as defined in the Master Order) at the places of use authorized herein.

As provided in the Master Order, the authorized quantity of water for municipal use under this Water Right is subject to a Limitation such that when this Water Right is combined with Vested Right, File No. RS 008; and Water Right, File Nos. 206; 1,267; 1,861; 17,586; 17,587; 21,729-D1; 21,729-D2; 21,730; 21,731; 21,732-D1; 21,732-D2; 21,733; 21,734; 21,841; 21,842; 22,325; 22,326; 22,327; 22,329; 22,330; 22,331; 22,332; 22,333; 22,334; 22,335; 22,338; and 22,339 the water used shall not exceed 600,000 million gallons (1,841.3 acre-feet) per calendar year (the "Reasonable-Need Limitation" for the City of Russell, as such term is defined and calculated in the Master Order).

As provided in the Master Order, the authorized quantity of water for municipal use under this Water Right is subject to a Limitation such that when this Water Right is combined with Vested Right, File No. EL 002 and Water Right, File Nos. 1,248; 5,757; 18,857; 18,858; 21,729-D1; 21,729-D2; 21,730; 21,731; 21,732-D1; 21,732-D2; 21,733; 21,734; 21,841; 21,842; 22,325; 22,326; 22,327; 22,329; 22,330; 22,331; 22,332; 22,333; 22,334; 22,335; 22,338; and 22,339 the water used shall not exceed 1,847.650 million gallons (5,670.23 acre-feet) per calendar year (the "Reasonable-Need Limitation" for the City of Hays, as such term is defined and calculated in the Master Order).

5. In all other respects, the Certificate, as modified and amended by the aforementioned orders, including the Master Order, remains as issued.

6. This Change Approval is contingent and conditioned upon the terms of the Master Order and will not become effective unless and until such time as the Master Order becomes effective.

7. Any person who is aggrieved by this Change Approval may file a petition for administrative review by the Secretary pursuant to K.S.A. 82a-708b, K.S.A. 2016 Supp. 82a-1901, and K.S.A. 77-527. K.S.A. 2016 Supp. 82a-1901 applies because the proceeding regarding this matter began before the 2017 amendments became effective. Any petition for administrative review by the Secretary must include a statement of its basis as provided in K.S.A. 77-527(c). This Change Approval will become a final order, without further notice, unless a petition for administrative review by the Secretary pursuant to K.S.A. 82a-708b, K.S.A. 2016 Supp. 82a-1901, and K.S.A. 77-527 is filed within 15 days after the date of service shown on the Certificate of Service. Any request for administrative review by the Secretary must be in writing and submitted to the attention of:

Chief Legal Counsel,
Kansas Department of Agriculture,
1320 Research Park Drive,
Manhattan, Kansas 66502,
Fax: (785) 564-6777,

with copies to those shown in the Certificate of Service.

CERTIFICATE OF SERVICE

On this 28 day of March, 2019, I hereby certify that the attached original Approval of Application to Change the Place of Use, the Point of Diversion and the Use Made of the Water Under an Existing Water Right, Water Right, File No. 22,340, dated March 27, 2019, was mailed postage prepaid, first class, US mail to the following:

Toby Dougherty, City Manager
CITY OF HAYS
City Hall, 16th & Main
P.O. Box 490
Hays, KS 67601

With photocopies to:

Jon Quinday, City Manager
CITY OF RUSSELL
133 W. 8th Street
P.O. Box 112
Russell, KS 67665

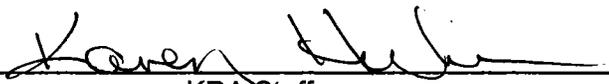
David M. Traster
FOULSTON SIEFKIN LLP
1551 N. Waterfront Parkway, Suite 100
Wichita, Kansas 67206-4466

Daniel J. Buller
FOULSTON SIEFKIN LLP
9225 Indian Creek Parkway, Suite 600
Overland Park, Kansas 66210

John T. Bird
Todd Powell
GLASSMAN BIRD AND POWELL, LLP
Attention: Attorneys for the City of Hays, Kansas
200 West Thirteenth Street
Hays, KS 67601-0727

Kenneth L. Cole
WOELK & COLE
4 S. Kansas St.
P.O. Box 431
Russell, KS 67665-0431

Stafford Field Office
Stockton Field Office
Big Bend Groundwater Management District No. 5


KDA Staff

THE STATE OF KANSAS



KANSAS DEPARTMENT OF AGRICULTURE
Mike Beam, Acting Secretary of Agriculture

DIVISION OF WATER RESOURCES
David W. Barfield, Chief Engineer

APPROVAL OF APPLICATION
TO CHANGE
THE PLACE OF USE, THE POINT OF DIVERSION AND THE USE MADE
OF THE WATER UNDER AN EXISTING WATER RIGHT

WATER RIGHT
FILE NO. 22,341

The Chief Engineer, Division of Water Resources, Kansas Department of Agriculture, after due consideration of the written Application for Approval to Change the Place of Use, the Point of Diversion or the Use Made of the Water Under an Existing Water Right, submitted by Toby Dougherty, City Manager, on behalf of the City of Hays, 1507 Main Street, Hays, Kansas 67601, and by Jon Quinday, City Manager, on behalf of the City of Russell, 133 W. 8th Street, Russell, Kansas 67665, and received in this office on June 26, 2015, as amended (the "Change Application"), for approval of changes in the location of the place of use, the point of diversion, and the use made of water under the Certificate of Appropriation issued on May 21, 1987 (the "Certificate"), pursuant to the application for permit to appropriate water for beneficial use regarding the above-mentioned Water Right, File No. 22,341 (the "Water Right"), finds that the changes requested in the Change Application are reasonable and will not impair existing rights, that such changes relate to the same local source of supply, and that the Change Application should be and is hereby approved pursuant to K.S.A. 82a-708b and as provided herein.

This approval order (the "Change Approval") is attached as an exhibit to, is incorporated in, and is subject to the terms of that certain Master Order Contingently Approving Change Applications Regarding R9 Water Rights (the "Master Order"), issued by the Chief Engineer concurrently with this Change Approval. The effective date of the changes approved herein for the Water Right shall be as provided in the Master Order. Upon effectiveness as provided in the Master Order:

1. The authorized use made of water for the Water Right shall be:

Municipal Use,

and the authorized locations of the places of use shall be those that are specifically described in **Appendix F** to the Master Order,

and the location of the point of diversion for the Water Right shall be authorized from one (1) well located as follows:

one (1) well (Well M) located in the Southwest Quarter of the Northeast Quarter of the Northeast Quarter (SW $\frac{1}{4}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$) of Section 15, more particularly described as being near a point 4,367 feet North and 1,228 feet West of the Southeast corner of said section, in a quantity not to exceed 61.260 million gallons (188 acre-feet) of groundwater per calendar year at a diversion rate not in excess of 920 gallons per minute (2.05 c.f.s.), Township 26 South, Range 20 West, Edwards County, Kansas,

to be completed within the mapped boundaries as shown on the maps marked Exhibits S, and T accompanying the Change Application, and pursuant to the Master Order.

2. The following additional conditions of this Change Approval also shall apply to this Water Right:

a. Installation of the works for diversion of water shall be completed on or before December 31, 2029, or within any authorized extension of time granted by the Chief Engineer for good cause shown. The Water Right owner shall notify the Chief Engineer when construction of the diversion works has been completed.

b. All wells with a diversion rate of 100 gallons per minute or more drilled under the authority of this Change Approval shall have a tube or other device installed in a manner acceptable to, and in accordance with, specifications adopted by the Chief Engineer. This tube or device shall be suitable for making water level measurements and shall be maintained in a condition satisfactory to the Chief Engineer.

c. The Water Right owner shall submit to the Chief Engineer a copy of the well log required by the Kansas Department of Health and Environment under the authority of K.S.A. 82a-1212, currently form WWC-5, within 30 days following the drilling of the well at the location authorized herein.

d. All diversion works 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.

e. Prior to the use of water, the Water Right owner shall properly install an acceptable water meter on the diversion works authorized for this Water Right, in strict accordance with K.A.R. 5-1-4 through 5-1-12. The Water Right owner shall notify the Chief Engineer when installation of the water meter has been completed. The Water Right owner shall maintain the water meter in an operating condition satisfactory to the Chief Engineer at all times during diversion of water and shall maintain records from which the total quantity of water diverted may be determined. The Water Right owner shall also annually report to the Chief Engineer the reading of said water meter and the total quantity of water diverted. Such records shall be furnished to the Chief Engineer by March 1 following the end of each calendar year.

3. Further, the following Limitations (as that term is defined in the Master Order), shall apply to this Water Right, for which Limitations the Chief Engineer specifically retains jurisdiction and authority to review and modify, as provided in the Master Order:

As provided in the Master Order, this Water Right is subject to a Limitation such that when this Water Right is combined with Water Right, File No. 22,340, the total rate of diversion shall not exceed 950 gallons per minute (2.12 c.f.s.) for municipal use from the point of diversion authorized herein.

As provided in the Master Order, the authorized quantity of water for municipal use under this Water Right is subject to a Limitation such that when this Water Right is combined with Water Right, File Nos.: 21,729-D1; 21,729-D2; 21,730; 21,731; 21,732-D1; 21,732-D2; 21,733; 21,734; 21,841; 21,842; 22,325; 22,326; 22,327; 22,329; 22,330; 22,331; 22,332; 22,333; 22,334; 22,335; 22,338; 22,339; 22,340; 22,342; 22,343; 22,345; 22,346; 27,760; 29,816; 30,083; and 30,084 the water used shall not exceed a rolling ten-year aggregate Limitation of 15,640.848 million gallons (48,000 acre-feet) during any, each, and every ten (10) consecutive calendar years (the "Ten-Year Rolling Aggregate Limitation" as defined in the Master Order) at the places of use authorized herein.

As provided in the Master Order, the authorized quantity of water for municipal use under this Water Right is subject to a Limitation such that when this Water Right is combined with Vested Right, File No. RS 008; and Water Right, File Nos. 206; 1,267; 1,861; 17,586; 17,587; 21,729-D1; 21,729-D2; 21,730; 21,731; 21,732-D1; 21,732-D2; 21,733; 21,734; 21,841; 21,842; 22,325; 22,326; 22,327; 22,329; 22,330; 22,331; 22,332; 22,333; 22,334; 22,335; 22,338; 22,339; and 22,340 the water used shall not exceed 600.000 million gallons (1,841.3 acre-feet) per calendar year (the "Reasonable-Need Limitation" for the City of Russell, as such term is defined and calculated in the Master Order).

As provided in the Master Order, the authorized quantity of water for municipal use under this Water Right is subject to a Limitation such that when this Water Right is combined with Vested Right, File No. EL 002 and Water Right, File Nos. 1,248; 5,757; 18,857; 18,858; 21,729-D1; 21,729-D2; 21,730; 21,731; 21,732-D1; 21,732-D2; 21,733; 21,734; 21,841; 21,842; 22,325; 22,326; 22,327; 22,329; 22,330; 22,331; 22,332; 22,333; 22,334; 22,335; 22,338; 22,339; and 22,340 the water used shall not exceed 1,847.650 million gallons (5,670.23 acre-feet) per calendar year (the "Reasonable-Need Limitation" for the City of Hays, as such term is defined and calculated in the Master Order).

4. In all other respects, the Certificate, as modified and amended by the aforementioned orders, including the Master Order, remains as issued.

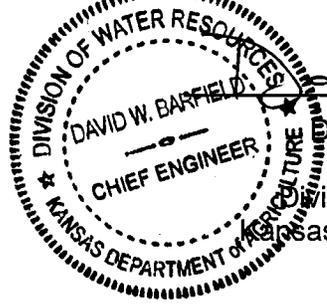
5. This Change Approval is contingent and conditioned upon the terms of the Master Order and will not become effective unless and until such time as the Master Order becomes effective.

6. Any person who is aggrieved by this Change Approval may file a petition for administrative review by the Secretary pursuant to K.S.A. 82a-708b, K.S.A. 2016 Supp. 82a-1901, and K.S.A. 77-527. K.S.A. 2016 Supp. 82a-1901 applies because the proceeding regarding this matter began before the 2017 amendments became effective. Any petition for administrative review by the Secretary must include a statement of its basis as provided in K.S.A. 77-527(c). This Change Approval will become a final order, without further notice, unless a petition for administrative review by the Secretary pursuant to K.S.A. 82a-708b, K.S.A. 2016 Supp. 82a-1901, and K.S.A. 77-527 is filed within 15 days after the date of service shown on the Certificate of Service. Any request for administrative review by the Secretary must be in writing and submitted to the attention of:

Chief Legal Counsel,
Kansas Department of Agriculture,
1320 Research Park Drive,
Manhattan, Kansas 66502,
Fax: (785) 564-6777,

with copies to those shown in the Certificate of Service.

Dated at Manhattan, Kansas, this 27th day of March, 2019.



David W. Barfield

David W. Barfield, P.E.
Chief Engineer
Division of Water Resources
Kansas Department of Agriculture

State of Kansas)
) SS
County of Riley)

The foregoing instrument was acknowledged before me this 27th day of March, 2019, by David W. Barfield, P.E., Chief Engineer, Division of Water Resources, Kansas Department of Agriculture.



Karen Hunter
Notary Public

CERTIFICATE OF SERVICE

On this 28 day of March 2019, I hereby certify that the attached original Approval of Application to Change the Place of Use, the Point of Diversion and the Use Made of the Water Under an Existing Water Right, Water Right, File No. 22,341, dated March 27, 2019, was mailed postage prepaid, first class, US mail to the following:

Toby Dougherty, City Manager
CITY OF HAYS
City Hall, 16th & Main
P.O. Box 490
Hays, KS 67601

With photocopies to:

Jon Quinday, City Manager
CITY OF RUSSELL
133 W. 8th Street
P.O. Box 112
Russell, KS 67665

David M. Traster
FOULSTON SIEFKIN LLP
1551 N. Waterfront Parkway, Suite 100
Wichita, Kansas 67206-4466

Daniel J. Buller
FOULSTON SIEFKIN LLP
9225 Indian Creek Parkway, Suite 600
Overland Park, Kansas 66210

John T. Bird
Todd Powell
GLASSMAN BIRD AND POWELL, LLP
Attention: Attorneys for the City of Hays, Kansas
200 West Thirteenth Street
Hays, KS 67601-0727

Kenneth L. Cole
WOELK & COLE
4 S. Kansas St.
P.O. Box 431
Russell, KS 67665-0431

Stafford Field Office
Stockton Field Office
Big Bend Groundwater Management District No. 5



KDA Staff

THE STATE  OF KANSAS

KANSAS DEPARTMENT OF AGRICULTURE
Mike Beam, Acting Secretary of Agriculture

DIVISION OF WATER RESOURCES
David W. Barfield, Chief Engineer

APPROVAL OF APPLICATION
TO CHANGE
THE PLACE OF USE, THE POINT OF DIVERSION AND THE USE MADE
OF THE WATER UNDER AN EXISTING WATER RIGHT

WATER RIGHT
FILE NO. 22,342

The Chief Engineer, Division of Water Resources, Kansas Department of Agriculture, after due consideration of the written Application for Approval to Change the Place of Use, the Point of Diversion or the Use Made of the Water Under an Existing Water Right, submitted by Toby Dougherty, City Manager, on behalf of the City of Hays, 1507 Main Street, Hays, Kansas 67601, and by Jon Quinday, City Manager, on behalf of the City of Russell, 133 W. 8th Street, Russell, Kansas 67665, and received in this office on June 26, 2015, as amended (the "Change Application"), for approval of changes in the location of the place of use, the point of diversion, and the use made of water under the Certificate of Appropriation issued on April 27, 1992 (the "Certificate"), pursuant to the application for permit to appropriate water for beneficial use regarding the above-mentioned Water Right, File No. 22,342 (the "Water Right"), as modified and amended by the order of the Chief Engineer dated May 2, 1994, correcting the location of the point of diversion, finds that the changes requested in the Change Application are reasonable and will not impair existing rights, that such changes relate to the same local source of supply, and that the Change Application should be and is hereby approved pursuant to K.S.A. 82a-708b and as provided herein.

This approval order (the "Change Approval") is attached as an exhibit to, is incorporated in, and is subject to the terms of that certain Master Order Contingently Approving Change Applications Regarding R9 Water Rights (the "Master Order"), issued by the Chief Engineer concurrently with this Change Approval. The effective date of the changes approved herein for the Water Right shall be as provided in the Master Order. Upon effectiveness as provided in the Master Order:

1. The authorized use made of water for the Water Right shall be:

Municipal Use,

and the authorized locations of the places of use shall be those that are specifically described in **Appendix F** to the Master Order,

and the location of the point of diversion for the Water Right shall be authorized from one (1) well located as follows:

one (1) well (Well M) located in the Southwest Quarter of the Northeast Quarter of the Northeast Quarter (SW $\frac{1}{4}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$) of Section 15, more particularly described as being near a point 4,367 feet North and 1,228 feet West of the Southeast corner of said section, in a quantity not to exceed 24.439 million gallons (75 acre-feet) of groundwater per calendar year at a diversion rate not in excess of 630 gallons per minute (1.40 c.f.s.), Township 26 South, Range 20 West, Edwards County, Kansas,

to be completed within the mapped boundaries as shown on the maps marked Exhibits O, and P accompanying the Change Application, and pursuant to the Master Order.

2. The following additional conditions of this Change Approval also shall apply to this Water Right:

a. Installation of the works for diversion of water shall be completed on or before December 31, 2029, or within any authorized extension of time granted by the Chief Engineer for good cause shown. The Water Right owner shall notify the Chief Engineer when construction of the diversion works has been completed.

b. All wells with a diversion rate of 100 gallons per minute or more drilled under the authority of this Change Approval shall have a tube or other device installed in a manner acceptable to, and in accordance with, specifications adopted by the Chief Engineer. This tube or device shall be suitable for making water level measurements and shall be maintained in a condition satisfactory to the Chief Engineer.

c. The Water Right owner shall submit to the Chief Engineer a copy of the well log required by the Kansas Department of Health and Environment under the authority of K.S.A. 82a-1212, currently form WWC-5, within 30 days following the drilling of the well at the location authorized herein.

d. All diversion works 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.

e. Prior to the use of water, the Water Right owner shall properly install an acceptable water meter on the diversion works authorized for this Water Right, in strict accordance with K.A.R. 5-1-4 through 5-1-12. The Water Right owner shall notify the Chief Engineer when installation of the water meter has been completed. The Water Right owner shall maintain the water meter in an operating condition satisfactory to the Chief Engineer at all times during diversion of water and shall maintain records from which the total quantity of water diverted may be determined. The Water Right owner shall also annually report to the Chief Engineer the reading of said water meter and the total quantity of water diverted. Such records shall be furnished to the Chief Engineer by March 1 following the end of each calendar year.

3. Further, the following Limitations (as that term is defined in the Master Order), shall apply to this Water Right, for which Limitations the Chief Engineer specifically retains jurisdiction and authority to review and modify, as provided in the Master Order:

As provided in the Master Order, this Water Right is subject to a Limitation such that when this Water Right is combined with Water Right, File Nos. 22,340 and 22,341, the total rate of diversion shall not exceed 950 gallons per minute (2.12 c.f.s.) for municipal use from the point of diversion authorized herein.

As provided in the Master Order, the authorized quantity of water for municipal use under this Water Right is subject to a Limitation such that when this Water Right is combined with Water Right, File Nos.: 21,729-D1; 21,729-D2; 21,730; 21,731; 21,732-D1; 21,732-D2; 21,733; 21,734; 21,841; 21,842; 22,325; 22,326; 22,327; 22,329; 22,330; 22,331; 22,332; 22,333; 22,334; 22,335; 22,338; 22,339; 22,340; 22,341; 22,343; 22,345; 22,346; 27,760; 29,816; 30,083; and 30,084 the water used shall not exceed a rolling ten-year aggregate Limitation of 15,640.848 million gallons (48,000 acre-feet) during any, each, and every ten (10) consecutive calendar years (the "Ten-Year Rolling Aggregate Limitation" as defined in the Master Order) at the places of use authorized herein.

As provided in the Master Order, the authorized quantity of water for municipal use under this Water Right is subject to a Limitation such that when this Water Right is combined with Vested Right, File No. RS 008; and Water Right, File Nos. 206; 1,267; 1,861; 17,586; 17,587; 21,729-D1; 21,729-D2; 21,730; 21,731; 21,732-D1; 21,732-D2; 21,733; 21,734; 21,841; 21,842; 22,325; 22,326; 22,327; 22,329; 22,330; 22,331; 22,332; 22,333; 22,334; 22,335; 22,338; 22,339; 22,340; and 22,341 the water used shall not exceed 600.000 million gallons (1,841.3 acre-feet) per calendar year (the "Reasonable-Need Limitation" for the City of Russell, as such term is defined and calculated in the Master Order).

As provided in the Master Order, the authorized quantity of water for municipal use under this Water Right is subject to a Limitation such that when this Water Right is combined with Vested Right, File No. EL 002 and Water Right, File Nos. 1,248; 5,757; 18,857; 18,858; 21,729-D1; 21,729-D2; 21,730; 21,731; 21,732-D1; 21,732-D2; 21,733; 21,734; 21,841; 21,842; 22,325; 22,326; 22,327; 22,329; 22,330; 22,331; 22,332; 22,333; 22,334; 22,335; 22,338; 22,339; 22,340; and 22,341 the water used shall not exceed 1,847.650 million gallons (5,670.23 acre-feet) per calendar year (the "Reasonable-Need Limitation" for the City of Hays, as such term is defined and calculated in the Master Order).

4. In all other respects, the Certificate, as modified and amended by the aforementioned orders, including the Master Order, remains as issued.

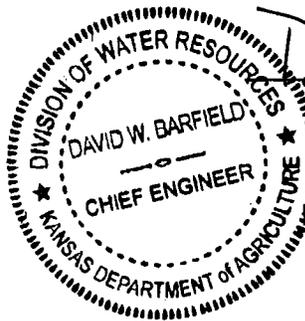
5. This Change Approval is contingent and conditioned upon the terms of the Master Order and will not become effective unless and until such time as the Master Order becomes effective.

6. Any person who is aggrieved by this Change Approval may file a petition for administrative review by the Secretary pursuant to K.S.A. 82a-708b, K.S.A. 2016 Supp. 82a-1901, and K.S.A. 77-527. K.S.A. 2016 Supp. 82a-1901 applies because the proceeding regarding this matter began before the 2017 amendments became effective. Any petition for administrative review by the Secretary must include a statement of its basis as provided in K.S.A. 77-527(c). This Change Approval will become a final order, without further notice, unless a petition for administrative review by the Secretary pursuant to K.S.A. 82a-708b, K.S.A. 2016 Supp. 82a-1901, and K.S.A. 77-527 is filed within 15 days after the date of service shown on the Certificate of Service. Any request for administrative review by the Secretary must be in writing and submitted to the attention of:

Chief Legal Counsel,
Kansas Department of Agriculture,
1320 Research Park Drive,
Manhattan, Kansas 66502,
Fax: (785) 564-6777,

with copies to those shown in the Certificate of Service.

Dated at Manhattan, Kansas, this 27th day of March, 2019.



David W. Barfield

David W. Barfield, P.E.
 Chief Engineer
 Division of Water Resources
 Kansas Department of Agriculture

State of Kansas)
) SS
 County of Riley)

The foregoing instrument was acknowledged before me this 27th day of March, 2019, by David W. Barfield, P.E., Chief Engineer, Division of Water Resources, Kansas Department of Agriculture.



Karen Hunter

Notary Public

CERTIFICATE OF SERVICE

On this 28 day of March, 2019, I hereby certify that the attached original Approval of Application to Change the Place of Use, the Point of Diversion and the Use Made of the Water Under an Existing Water Right, Water Right, File No. 22,342, dated March 27, 2019, was mailed postage prepaid, first class, US mail to the following:

Toby Dougherty, City Manager
CITY OF HAYS
City Hall, 16th & Main
P.O. Box 490
Hays, KS 67601

With photocopies to:

Jon Quinday, City Manager
CITY OF RUSSELL
133 W. 8th Street
P.O. Box 112
Russell, KS 67665

David M. Traster
FOULSTON SIEFKIN LLP
1551 N. Waterfront Parkway, Suite 100
Wichita, Kansas 67206-4466

Daniel J. Buller
FOULSTON SIEFKIN LLP
9225 Indian Creek Parkway, Suite 600
Overland Park, Kansas 66210

John T. Bird
Todd Powell
GLASSMAN BIRD AND POWELL, LLP
Attention: Attorneys for the City of Hays, Kansas
200 West Thirteenth Street
Hays, KS 67601-0727

Kenneth L. Cole
WOELK & COLE
4 S. Kansas St.
P.O. Box 431
Russell, KS 67665-0431

Stafford Field Office
Stockton Field Office
Big Bend Groundwater Management District No. 5


KDA Staff

THE STATE  OF KANSAS

KANSAS DEPARTMENT OF AGRICULTURE
Mike Beam, Acting Secretary of Agriculture

DIVISION OF WATER RESOURCES
David W. Barfield, Chief Engineer

APPROVAL OF APPLICATION
TO CHANGE
THE PLACE OF USE, THE POINT OF DIVERSION AND THE USE MADE
OF THE WATER UNDER AN EXISTING WATER RIGHT

WATER RIGHT
FILE NO. 22,343

The Chief Engineer, Division of Water Resources, Kansas Department of Agriculture, after due consideration of the written Application for Approval to Change the Place of Use, the Point of Diversion or the Use Made of the Water Under an Existing Water Right, submitted by Toby Dougherty, City Manager, on behalf of the City of Hays, 1507 Main Street, Hays, Kansas 67601, and by Jon Quinday, City Manager, on behalf of the City of Russell, 133 W. 8th Street, Russell, Kansas 67665, and received in this office on June 26, 2015, as amended (the "Change Application"), for approval of changes in the location of the place of use, the point of diversion, and the use made of water under the Certificate of Appropriation issued on May 21, 1987 (the "Certificate"), pursuant to the application for permit to appropriate water for beneficial use regarding the above-mentioned Water Right, File No. 22,343 (the "Water Right"), finds that the changes requested in the Change Application are reasonable and will not impair existing rights, that such changes relate to the same local source of supply, and that the Change Application should be and is hereby approved pursuant to K.S.A. 82a-708b and as provided herein.

This approval order (the "Change Approval") is attached as an exhibit to, is incorporated in, and is subject to the terms of that certain Master Order Contingently Approving Change Applications Regarding R9 Water Rights (the "Master Order"), issued by the Chief Engineer concurrently with this Change Approval. The effective date of the changes approved herein for the Water Right shall be as provided in the Master Order. Upon effectiveness as provided in the Master Order:

1. The authorized use made of water for the Water Right shall be:

Municipal Use,

and the authorized locations of the places of use shall be those that are specifically described in **Appendix F** to the Master Order,

and the location of the point of diversion for the Water Right shall be authorized from one (1) well located as follows:

one (1) well (Well N) located in the Southwest Quarter of the Northwest Quarter of the Southeast Quarter (SW $\frac{1}{4}$ NW $\frac{1}{4}$ SE $\frac{1}{4}$) of Section 15, more particularly described as being near a point 1,714 feet North and 2,450 feet West of the Southeast corner of said section, in a quantity not to exceed 39.754 million gallons (122 acre-feet) of groundwater per calendar year at a diversion rate not in excess of 810 gallons per minute (1.80 c.f.s.), Township 26 South, Range 20 West, Edwards County, Kansas,

to be completed within the mapped boundaries as shown on the maps marked Exhibits O, and P accompanying the Change Application, and pursuant to the Master Order.

2. Due to the aforementioned changes, the Water Right shall be reduced to a total authorized quantity not to exceed 39.754 million gallons (122 acre-feet) of water per calendar year.

3. The following additional conditions of this Change Approval also shall apply to this Water Right:

a. Installation of the works for diversion of water shall be completed on or before December 31, 2029, or within any authorized extension of time granted by the Chief Engineer for good cause shown. The Water Right owner shall notify the Chief Engineer when construction of the diversion works has been completed.

b. All wells with a diversion rate of 100 gallons per minute or more drilled under the authority of this Change Approval shall have a tube or other device installed in a manner acceptable to, and in accordance with, specifications adopted by the Chief Engineer. This tube or device shall be suitable for making water level measurements and shall be maintained in a condition satisfactory to the Chief Engineer.

c. The Water Right owner shall submit to the Chief Engineer a copy of the well log required by the Kansas Department of Health and Environment under the authority of K.S.A. 82a-1212, currently form WWC-5, within 30 days following the drilling of the well at the location authorized herein.

d. All diversion works 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.

e. Prior to the use of water, the Water Right owner shall properly install an acceptable water meter on the diversion works authorized for this Water Right, in strict accordance with K.A.R. 5-1-4 through 5-1-12. The Water Right owner shall notify the Chief Engineer when installation of the water meter has been completed. The Water Right owner shall maintain the water meter in an operating condition satisfactory to the Chief Engineer at all times during diversion of water and shall maintain records from which the total quantity of water diverted may be determined. The Water Right owner shall also annually report to the Chief Engineer the reading of said water meter and the total quantity of water diverted. Such records shall be furnished to the Chief Engineer by March 1 following the end of each calendar year.

4. Further, the following Limitations (as that term is defined in the Master Order), shall apply to this Water Right, for which Limitations the Chief Engineer specifically retains jurisdiction and authority to review and modify, as provided in the Master Order:

As provided in the Master Order, the authorized quantity of water for municipal use under this Water Right is subject to a Limitation such that when this Water Right is combined with Water Right, File Nos.: 21,729-D1; 21,729-D2; 21,730; 21,731; 21,732-D1; 21,732-D2; 21,733; 21,734; 21,841; 21,842; 22,325; 22,326; 22,327; 22,329; 22,330; 22,331; 22,332; 22,333; 22,334; 22,335; 22,338; 22,339; 22,340; 22,341; 22,342; 22,345; 22,346; 27,760; 29,816; 30,083; and 30,084 the water used shall not exceed a rolling ten-year aggregate Limitation of 15,640.848 million gallons (48,000 acre-feet) during any, each, and every ten (10) consecutive calendar years (the "Ten-Year Rolling Aggregate Limitation" as defined in the Master Order) at the places of use authorized herein.

As provided in the Master Order, the authorized quantity of water for municipal use under this Water Right is subject to a Limitation such that when this Water Right is combined with Vested Right, File No. RS 008; and Water Right, File Nos. 206; 1,267; 1,861; 17,586; 17,587; 21,729-D1; 21,729-D2; 21,730; 21,731; 21,732-D1; 21,732-D2; 21,733; 21,734; 21,841; 21,842; 22,325; 22,326; 22,327; 22,329; 22,330; 22,331; 22,332; 22,333; 22,334; 22,335; 22,338; 22,339; 22,340; 22,341; and 22,342 the water used shall not exceed 600,000 million gallons (1,841.3 acre-feet) per calendar year (the "Reasonable-Need Limitation" for the City of Russell, as such term is defined and calculated in the Master Order).

As provided in the Master Order, the authorized quantity of water for municipal use under this Water Right is subject to a Limitation such that when this Water Right is combined with Vested Right, File No. EL 002 and Water Right, File Nos. 1,248; 5,757; 18,857; 18,858; 21,729-D1; 21,729-D2; 21,730; 21,731; 21,732-D1; 21,732-D2; 21,733; 21,734; 21,841; 21,842; 22,325; 22,326; 22,327; 22,329; 22,330; 22,331; 22,332; 22,333; 22,334; 22,335; 22,338; 22,339; 22,340; 22,341; and 22,342 the water used shall not exceed 1,847.650 million gallons (5,670.23 acre-feet) per calendar year (the "Reasonable-Need Limitation" for the City of Hays, as such term is defined and calculated in the Master Order).

5. In all other respects, the Certificate, as modified and amended by the aforementioned orders, including the Master Order, remains as issued.

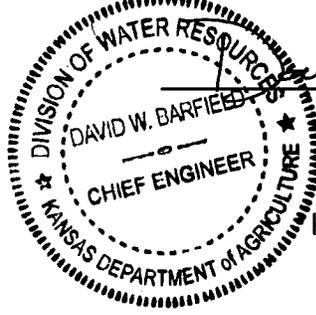
6. This Change Approval is contingent and conditioned upon the terms of the Master Order and will not become effective unless and until such time as the Master Order becomes effective.

7. Any person who is aggrieved by this Change Approval may file a petition for administrative review by the Secretary pursuant to K.S.A. 82a-708b, K.S.A. 2016 Supp. 82a-1901, and K.S.A. 77-527. K.S.A. 2016 Supp. 82a-1901 applies because the proceeding regarding this matter began before the 2017 amendments became effective. Any petition for administrative review by the Secretary must include a statement of its basis as provided in K.S.A. 77-527(c). This Change Approval will become a final order, without further notice, unless a petition for administrative review by the Secretary pursuant to K.S.A. 82a-708b, K.S.A. 2016 Supp. 82a-1901, and K.S.A. 77-527 is filed within 15 days after the date of service shown on the Certificate of Service. Any request for administrative review by the Secretary must be in writing and submitted to the attention of:

Chief Legal Counsel,
Kansas Department of Agriculture,
1320 Research Park Drive,
Manhattan, Kansas 66502,
Fax: (785) 564-6777,

with copies to those shown in the Certificate of Service.

Dated at Manhattan, Kansas, this 27th day of March, 2019.



David W. Barfield

 David W. Barfield, P.E.
 Chief Engineer
 Division of Water Resources
 Kansas Department of Agriculture

State of Kansas)
) SS
 County of Riley)

The foregoing instrument was acknowledged before me this 27th day of March, 2019, by David W. Barfield, P.E., Chief Engineer, Division of Water Resources, Kansas Department of Agriculture.



Karen Hunter

 Notary Public

CERTIFICATE OF SERVICE

On this 28 day of March 2019, I hereby certify that the attached original Approval of Application to Change the Place of Use, the Point of Diversion and the Use Made of the Water Under an Existing Water Right, Water Right, File No. 22,343, dated March 27, 2019, was mailed postage prepaid, first class, US mail to the following:

Toby Dougherty, City Manager
CITY OF HAYS
City Hall, 16th & Main
P.O. Box 490
Hays, KS 67601

With photocopies to:

Jon Quinday, City Manager
CITY OF RUSSELL
133 W. 8th Street
P.O. Box 112
Russell, KS 67665

David M. Traster
FOULSTON SIEFKIN LLP
1551 N. Waterfront Parkway, Suite 100
Wichita, Kansas 67206-4466

Daniel J. Buller
FOULSTON SIEFKIN LLP
9225 Indian Creek Parkway, Suite 600
Overland Park, Kansas 66210

John T. Bird
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Attention: Attorneys for the City of Hays, Kansas
200 West Thirteenth Street
Hays, KS 67601-0727

Kenneth L. Cole
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4 S. Kansas St.
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Stafford Field Office
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Big Bend Groundwater Management District No. 5


KDA Staff

THE STATE OF KANSAS



KANSAS DEPARTMENT OF AGRICULTURE
Mike Beam, Acting Secretary of Agriculture

DIVISION OF WATER RESOURCES
David W. Barfield, Chief Engineer

APPROVAL OF APPLICATION
TO CHANGE
THE PLACE OF USE, THE POINT OF DIVERSION AND THE USE MADE
OF THE WATER UNDER AN EXISTING WATER RIGHT

WATER RIGHT
FILE NO. 22,345

The Chief Engineer, Division of Water Resources, Kansas Department of Agriculture, after due consideration of the written Application for Approval to Change the Place of Use, the Point of Diversion or the Use Made of the Water Under an Existing Water Right, submitted by Toby Dougherty, City Manager, on behalf of the City of Hays, 1507 Main Street, Hays, Kansas 67601, and by Jon Quinday, City Manager, on behalf of the City of Russell, 133 W. 8th Street, Russell, Kansas 67665, and received in this office on June 26, 2015, as amended (the "Change Application"), for approval of changes in the location of the place of use, the point of diversion, and the use made of water under the Certificate of Appropriation issued on May 21, 1987 (the "Certificate"), pursuant to the application for permit to appropriate water for beneficial use regarding the above-mentioned Water Right, File No. 22,345 (the "Water Right"), finds that the changes requested in the Change Application are reasonable and will not impair existing rights, that such changes relate to the same local source of supply, and that the Change Application should be and is hereby approved pursuant to K.S.A. 82a-708b and as provided herein.

This approval order (the "Change Approval") is attached as an exhibit to, is incorporated in, and is subject to the terms of that certain Master Order Contingently Approving Change Applications Regarding R9 Water Rights (the "Master Order"), issued by the Chief Engineer concurrently with this Change Approval. The effective date of the changes approved herein for the Water Right shall be as provided in the Master Order. Upon effectiveness as provided in the Master Order:

1. The authorized use made of water for the Water Right shall be:

Municipal Use,

and the authorized locations of the places of use shall be those that are specifically described in **Appendix F** to the Master Order,

and the location of the point of diversion for the Water Right shall be authorized from one (1) well located as follows:

one (1) well (Well N) located in the Southwest Quarter of the Northwest Quarter of the Southeast Quarter (SW $\frac{1}{4}$ NW $\frac{1}{4}$ SE $\frac{1}{4}$) of Section 15, more particularly described as being near a point 1,714 feet North and 2,450 feet West of the Southeast corner of said section, in a quantity not to exceed 51.810 million gallons (159 acre-feet) of groundwater per calendar year at a diversion rate not in excess of 820 gallons per minute (1.83 c.f.s.), Township 26 South, Range 20 West, Edwards County, Kansas,

to be completed within the mapped boundaries as shown on the maps marked Exhibits O, and P accompanying the Change Application, and pursuant to the Master Order.

2. The following additional conditions of this Change Approval also shall apply to this Water Right:

a. Installation of the works for diversion of water shall be completed on or before December 31, 2029, or within any authorized extension of time granted by the Chief Engineer for good cause shown. The Water Right owner shall notify the Chief Engineer when construction of the diversion works has been completed.

b. All wells with a diversion rate of 100 gallons per minute or more drilled under the authority of this Change Approval shall have a tube or other device installed in a manner acceptable to, and in accordance with, specifications adopted by the Chief Engineer. This tube or device shall be suitable for making water level measurements and shall be maintained in a condition satisfactory to the Chief Engineer.

c. The Water Right owner shall submit to the Chief Engineer a copy of the well log required by the Kansas Department of Health and Environment under the authority of K.S.A. 82a-1212, currently form WWC-5, within 30 days following the drilling of the well at the location authorized herein.

d. All diversion works 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.

e. Prior to the use of water, the Water Right owner shall properly install an acceptable water meter on the diversion works authorized for this Water Right, in strict accordance with K.A.R. 5-1-4 through 5-1-12. The Water Right owner shall notify the Chief Engineer when installation of the water meter has been completed. The Water Right owner shall maintain the water meter in an operating condition satisfactory to the Chief Engineer at all times during diversion of water and shall maintain records from which the total quantity of water diverted may be determined. The Water Right owner shall also annually report to the Chief Engineer the reading of said water meter and the total quantity of water diverted. Such records shall be furnished to the Chief Engineer by March 1 following the end of each calendar year.

3. Further, the following Limitations (as that term is defined in the Master Order), shall apply to this Water Right, for which Limitations the Chief Engineer specifically retains jurisdiction and authority to review and modify, as provided in the Master Order:

As provided in the Master Order, this Water Right is subject to a Limitation such that when this Water Right is combined with Water Right, File No. 22,343, the total rate of diversion shall not exceed 1,040 gallons per minute (2.32 c.f.s.) for municipal use from the point of diversion authorized herein.

As provided in the Master Order, the authorized quantity of water for municipal use under this Water Right is subject to a Limitation (as that term is defined in the Master Order) such that when this Water Right is combined with Water Right, File Nos.: 21,729-D1; 21,729-D2; 21,730; 21,731; 21,732-D1; 21,732-D2; 21,733; 21,734; 21,841; 21,842; 22,325; 22,326; 22,327; 22,329; 22,330; 22,331; 22,332; 22,333; 22,334; 22,335; 22,338; 22,339; 22,340; 22,341; 22,342; 22,343; 22,346; 27,760; 29,816; 30,083; and 30,084 the water used shall not exceed a rolling ten-year aggregate Limitation of 15,640.848 million gallons (48,000 acre-feet) during any, each, and every ten (10) consecutive calendar years (the "Ten-Year Rolling Aggregate Limitation" as defined in the Master Order) at the places of use authorized herein.

As provided in the Master Order, the authorized quantity of water for municipal use under this Water Right is subject to a Limitation such that when this Water Right is combined with Vested Right, File No. RS 008; and Water Right, File Nos. 206; 1,267; 1,861; 17,586; 17,587; 21,729-D1; 21,729-D2; 21,730; 21,731; 21,732-D1; 21,732-D2; 21,733; 21,734; 21,841; 21,842; 22,325; 22,326; 22,327; 22,329; 22,330; 22,331; 22,332; 22,333; 22,334; 22,335; 22,338; 22,339; 22,340; 22,341; 22,342; and 22,343 the water used shall not exceed 600,000 million gallons (1,841.3 acre-feet) per calendar year (the "Reasonable-Need Limitation" for the City of Russell, as such term is defined and calculated in the Master Order).

As provided in the Master Order, the authorized quantity of water for municipal use under this Water Right is subject to a Limitation such that when this Water Right is combined with Vested Right, File No. EL 002 and Water Right, File Nos. 1,248; 5,757; 18,857; 18,858; 21,729-D1; 21,729-D2; 21,730; 21,731; 21,732-D1; 21,732-D2; 21,733; 21,734; 21,841; 21,842; 22,325; 22,326; 22,327; 22,329; 22,330; 22,331; 22,332; 22,333; 22,334; 22,335; 22,338; 22,339; 22,340; 22,341; 22,342 and 22,343 the water used shall not exceed 1,847.650 million gallons (5,670.23 acre-feet) per calendar year (the "Reasonable-Need Limitation" for the City of Hays, as such term is defined and calculated in the Master Order).

4. In all other respects, the Certificate, as modified and amended by the aforementioned orders, including the Master Order, remains as issued.

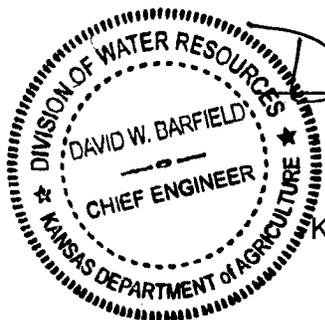
5. This Change Approval is contingent and conditioned upon the terms of the Master Order and will not become effective unless and until such time as the Master Order becomes effective.

6. Any person who is aggrieved by this Change Approval may file a petition for administrative review by the Secretary pursuant to K.S.A. 82a-708b, K.S.A. 2016 Supp. 82a-1901, and K.S.A. 77-527. K.S.A. 2016 Supp. 82a-1901 applies because the proceeding regarding this matter began before the 2017 amendments became effective. Any petition for administrative review by the Secretary must include a statement of its basis as provided in K.S.A. 77-527(c). This Change Approval will become a final order, without further notice, unless a petition for administrative review by the Secretary pursuant to K.S.A. 82a-708b, K.S.A. 2016 Supp. 82a-1901, and K.S.A. 77-527 is filed within 15 days after the date of service shown on the Certificate of Service. Any request for administrative review by the Secretary must be in writing and submitted to the attention of:

Chief Legal Counsel,
Kansas Department of Agriculture,
1320 Research Park Drive,
Manhattan, Kansas 66502,
Fax: (785) 564-6777,

with copies to those shown in the Certificate of Service.

Dated at Manhattan, Kansas, this 27th day of March , 2019.



David W. Barfield

 David W. Barfield, P.E.
 Chief Engineer
 Division of Water Resources
 Kansas Department of Agriculture

State of Kansas)
) SS
 County of Riley)

The foregoing instrument was acknowledged before me this 27th day of March , 2019, by David W. Barfield, P.E., Chief Engineer, Division of Water Resources, Kansas Department of Agriculture.



Karen Hunter

 Notary Public

CERTIFICATE OF SERVICE

On this 28 day of March 2019, I hereby certify that the attached original Approval of Application to Change the Place of Use, the Point of Diversion and the Use Made of the Water Under an Existing Water Right, Water Right, File No. 22,345, dated March 27, 2019, was mailed postage prepaid, first class, US mail to the following:

Toby Dougherty, City Manager
CITY OF HAYS
City Hall, 16th & Main
P.O. Box 490
Hays, KS 67601

With photocopies to:

Jon Quinday, City Manager
CITY OF RUSSELL
133 W. 8th Street
P.O. Box 112
Russell, KS 67665

David M. Traster
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1551 N. Waterfront Parkway, Suite 100
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Daniel J. Buller
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Overland Park, Kansas 66210

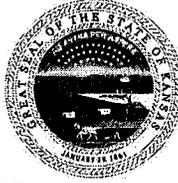
John T. Bird
Todd Powell
GLASSMAN BIRD AND POWELL, LLP
Attention: Attorneys for the City of Hays, Kansas
200 West Thirteenth Street
Hays, KS 67601-0727

Kenneth L. Cole
WOELK & COLE
4 S. Kansas St.
P.O. Box 431
Russell, KS 67665-0431

Stafford Field Office
Stockton Field Office
Big Bend Groundwater Management District No. 5



KDA Staff

THE STATE  OF KANSAS

KANSAS DEPARTMENT OF AGRICULTURE
Mike Beam, Acting Secretary of Agriculture

DIVISION OF WATER RESOURCES
David W. Barfield, Chief Engineer

**APPROVAL OF APPLICATION
TO CHANGE
THE PLACE OF USE, THE POINT OF DIVERSION AND THE USE MADE
OF THE WATER UNDER AN EXISTING WATER RIGHT**

**WATER RIGHT
FILE NO. 22,346**

The Chief Engineer, Division of Water Resources, Kansas Department of Agriculture, after due consideration of the written Application for Approval to Change the Place of Use, the Point of Diversion or the Use Made of the Water Under an Existing Water Right, submitted by Toby Dougherty, City Manager, on behalf of the City of Hays, 1507 Main Street, Hays, Kansas 67601, and by Jon Quinday, City Manager, on behalf of the City of Russell, 133 W. 8th Street, Russell, Kansas 67665, and received in this office on June 26, 2015, as amended (the "Change Application"), for approval of changes in the location of the place of use, the point of diversion, and the use made of water under the Certificate of Appropriation issued on November 30, 1987 (the "Certificate"), pursuant to the application for permit to appropriate water for beneficial use regarding the above-mentioned Water Right, File No. 22,346 (the "Water Right"), finds that the changes requested in the Change Application are reasonable and will not impair existing rights, that such changes relate to the same local source of supply, and that the Change Application should be and is hereby approved pursuant to K.S.A. 82a-708b and as provided herein.

This approval order (the "Change Approval") is attached as an exhibit to, is incorporated in, and is subject to the terms of that certain Master Order Contingently Approving Change Applications Regarding R9 Water Rights (the "Master Order"), issued by the Chief Engineer concurrently with this Change Approval. The effective date of the changes approved herein for the Water Right shall be as provided in the Master Order. Upon effectiveness as provided in the Master Order:

1. The authorized use made of water for the Water Right shall be:

Municipal Use,

and the authorized locations of the places of use shall be those that are specifically described in **Appendix F** to the Master Order,

and the location of the points of diversion for the Water Right shall be authorized from two (2) wells located as follows:

one (1) well (Well N) located in the Southwest Quarter of the Northwest Quarter of the Southeast Quarter (SW $\frac{1}{4}$ NW $\frac{1}{4}$ SE $\frac{1}{4}$) of Section 15, more particularly described as being near a point 1,714 feet North and 2,450 feet West of the Southeast corner of said section, in a quantity not to exceed 45.749 million gallons (140.4 acre-feet) of groundwater per calendar year at a diversion rate not in excess of 600 gallons per minute (1.34 c.f.s.), Township 26 South, Range 20 West, Edwards County, Kansas,

to be completed within the mapped boundaries as shown on the maps marked Exhibits O, and P accompanying the Change Application, and pursuant to the Master Order.

2. Due to the aforementioned changes, the Water Right shall be reduced to a total authorized quantity not to exceed 45.749 million gallons (140.4 acre-feet) of water per calendar year.

3. The following additional conditions of this Change Approval also shall apply to this Water Right:

a. Installation of the works for diversion of water shall be completed on or before December 31, 2029, or within any authorized extension of time granted by the Chief Engineer for good cause shown. The Water Right owner shall notify the Chief Engineer when construction of the diversion works has been completed.

b. All wells with a diversion rate of 100 gallons per minute or more drilled under the authority of this Change Approval shall have a tube or other device installed in a manner acceptable to, and in accordance with, specifications adopted by the Chief Engineer. This tube or device shall be suitable for making water level measurements and shall be maintained in a condition satisfactory to the Chief Engineer.

c. The Water Right owner shall submit to the Chief Engineer a copy of the well log required by the Kansas Department of Health and Environment under the authority of K.S.A. 82a-1212, currently form WWC-5, within 30 days following the drilling of the well at the location authorized herein.

d. All diversion works 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.

e. Prior to the use of water, the Water Right owner shall properly install an acceptable water meter on the diversion works authorized for this Water Right, in strict accordance with K.A.R. 5-1-4 through 5-1-12. The Water Right owner shall notify the Chief Engineer when installation of the water meter has been completed. The Water Right owner shall maintain the water meter in an operating condition satisfactory to the Chief Engineer at all times during diversion of water and shall maintain records from which the total quantity of water diverted may be determined. The Water Right owner shall also annually report to the Chief Engineer the reading of said water meter and the total quantity of water diverted. Such records shall be furnished to the Chief Engineer by March 1 following the end of each calendar year.

4. Further, the following Limitations (as that term is defined in the Master Order), shall apply to this Water Right, for which Limitations the Chief Engineer specifically retains jurisdiction and authority to review and modify, as provided in the Master Order:

As provided in the Master Order, this Water Right is subject to a Limitation such that when this Water Right is combined with Water Right, File Nos. 22,343 and 22,345, the total rate of diversion shall not exceed 1,040 gallons per minute (2.32 c.f.s.) for municipal use from the point of diversion authorized herein.

As provided in the Master Order, the authorized quantity of water for municipal use under this Water Right is subject to a Limitation (as that term is defined in the Master Order) such that when this Water Right is combined with Water Right, File Nos.: 21,729-D1; 21,729-D2; 21,730; 21,731; 21,732-D1; 21,732-D2; 21,733; 21,734; 21,841; 21,842; 22,325; 22,326; 22,327; 22,329; 22,330; 22,331; 22,332; 22,333; 22,334; 22,335; 22,338; 22,339; 22,340; 22,341; 22,342; 22,343; 22,345; 27,760; 29,816; 30,083; and 30,084 the water used shall not exceed a rolling ten-year aggregate Limitation of 15,640.848 million gallons (48,000 acre-feet) during any, each, and every ten (10) consecutive calendar years (the "Ten-Year Rolling Aggregate Limitation" as defined in the Master Order) at the places of use authorized herein.

As provided in the Master Order, the authorized quantity of water for municipal use under this Water Right is subject to a Limitation such that when this Water Right is combined with Vested Right, File No. RS 008; and Water Right, File Nos. 206; 1,267; 1,861; 17,586; 17,587; 21,729-D1; 21,729-D2; 21,730; 21,731; 21,732-D1; 21,732-D2; 21,733; 21,734; 21,841; 21,842; 22,325; 22,326; 22,327; 22,329; 22,330; 22,331; 22,332; 22,333; 22,334; 22,335; 22,338; 22,339; 22,340; 22,341; 22,342; 22,343; and 22,345 the water used shall not exceed 600.000 million gallons (1,841.3 acre-feet) per calendar year (the "Reasonable-Need Limitation" for the City of Russell, as such term is defined and calculated in the Master Order).

As provided in the Master Order, the authorized quantity of water for municipal use under this Water Right is subject to a Limitation such that when this Water Right is combined with Vested Right, File No. EL 002 and Water Right, File Nos. 1,248; 5,757; 18,857; 18,858; 21,729-D1; 21,729-D2; 21,730; 21,731; 21,732-D1; 21,732-D2; 21,733; 21,734; 21,841; 21,842; 22,325; 22,326; 22,327; 22,329; 22,330; 22,331; 22,332; 22,333; 22,334; 22,335; 22,338; 22,339; 22,340; 22,341; 22,342; 22,343; and 22,345 the water used shall not exceed 1,847.650 million gallons (5,670.23 acre-feet) per calendar year (the "Reasonable-Need Limitation" for the City of Hays, as such term is defined and calculated in the Master Order).

5. In all other respects, the Certificate, as modified and amended by the aforementioned orders, including the Master Order, remains as issued.

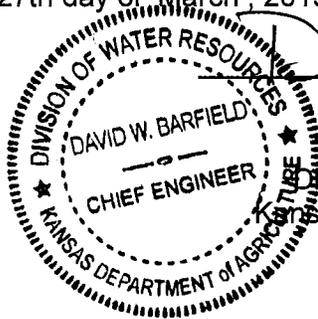
6. This Change Approval is contingent and conditioned upon the terms of the Master Order and will not become effective unless and until such time as the Master Order becomes effective.

7. Any person who is aggrieved by this Change Approval may file a petition for administrative review by the Secretary pursuant to K.S.A. 82a-708b, K.S.A. 2016 Supp. 82a-1901, and K.S.A. 77-527. K.S.A. 2016 Supp. 82a-1901 applies because the proceeding regarding this matter began before the 2017 amendments became effective. Any petition for administrative review by the Secretary must include a statement of its basis as provided in K.S.A. 77-527(c). This Change Approval will become a final order, without further notice, unless a petition for administrative review by the Secretary pursuant to K.S.A. 82a-708b, K.S.A. 2016 Supp. 82a-1901, and K.S.A. 77-527 is filed within 15 days after the date of service shown on the Certificate of Service. Any request for administrative review by the Secretary must be in writing and submitted to the attention of:

Chief Legal Counsel,
Kansas Department of Agriculture,
1320 Research Park Drive,
Manhattan, Kansas 66502,
Fax: (785) 564-6777,

with copies to those shown in the Certificate of Service.

Dated at Manhattan, Kansas, this 27th day of March, 2019.



David W. Barfield

David W. Barfield, P.E.
Chief Engineer
Division of Water Resources
Kansas Department of Agriculture

State of Kansas)
) SS
County of Riley)

The foregoing instrument was acknowledged before me this 27th day of March, 2019, by David W. Barfield, P.E., Chief Engineer, Division of Water Resources, Kansas Department of Agriculture.



Karen Hunter
Notary Public

CERTIFICATE OF SERVICE

On this 28 day of March, 2019, I hereby certify that the attached original Approval of Application to Change the Place of Use, the Point of Diversion and the Use Made of the Water Under an Existing Water Right, Water Right, File No. 22,346, dated March 27, 2019, was mailed postage prepaid, first class, US mail to the following:

Toby Dougherty, City Manager
CITY OF HAYS
City Hall, 16th & Main
P.O. Box 490
Hays, KS 67601

With photocopies to:

Jon Quinday, City Manager
CITY OF RUSSELL
133 W. 8th Street
P.O. Box 112
Russell, KS 67665

David M. Traster
FOULSTON SIEFKIN LLP
1551 N. Waterfront Parkway, Suite 100
Wichita, Kansas 67206-4466

Daniel J. Buller
FOULSTON SIEFKIN LLP
9225 Indian Creek Parkway, Suite 600
Overland Park, Kansas 66210

John T. Bird
Todd Powell
GLASSMAN BIRD AND POWELL, LLP
Attention: Attorneys for the City of Hays, Kansas
200 West Thirteenth Street
Hays, KS 67601-0727

Kenneth L. Cole
WOELK & COLE
4 S. Kansas St.
P.O. Box 431
Russell, KS 67665-0431

Stafford Field Office
Stockton Field Office
Big Bend Groundwater Management District No. 5



KDA Staff

THE STATE OF KANSAS



KANSAS DEPARTMENT OF AGRICULTURE
Mike Beam, Acting Secretary of Agriculture

DIVISION OF WATER RESOURCES
David W. Barfield, Chief Engineer

APPROVAL OF APPLICATION
TO CHANGE
THE PLACE OF USE, THE POINT OF DIVERSION AND THE USE MADE
OF THE WATER UNDER AN EXISTING WATER RIGHT

WATER RIGHT
FILE NO. 27,760

The Chief Engineer, Division of Water Resources, Kansas Department of Agriculture, after due consideration of the written Application for Approval to Change the Place of Use, the Point of Diversion or the Use Made of the Water Under an Existing Water Right, submitted by Toby Dougherty, City Manager, on behalf of the City of Hays, 1507 Main Street, Hays, Kansas 67601, and by Jon Quinday, City Manager, on behalf of the City of Russell, 133 W. 8th Street, Russell, Kansas 67665, and received in this office on June 26, 2015, as amended (the "Change Application"), for approval of changes in the location of the place of use, the point of diversion, and the use made of water under the Certificate of Appropriation issued on June 13, 1997 (the "Certificate"), pursuant to the application for permit to appropriate water for beneficial use regarding the above-mentioned Water Right, File No. 27,760 (the "Water Right"), as modified and amended by the order of the Chief Engineer dated August 18, 1998, approving the application to change the point of diversion, finds that the changes requested in the Change Application are reasonable and will not impair existing rights, that such changes relate to the same local source of supply, and that the Change Application should be and is hereby approved pursuant to K.S.A. 82a-708b and as provided herein.

This approval order (the "Change Approval") is attached as an exhibit to, is incorporated in, and is subject to the terms of that certain Master Order Contingently Approving Change Applications Regarding R9 Water Rights (the "Master Order"), issued by the Chief Engineer concurrently with this Change Approval. The effective date of the changes approved herein for the Water Right shall be as provided in the Master Order. Upon effectiveness as provided in the Master Order:

1. The authorized use made of water for the Water Right shall be:

Municipal Use,

and the authorized locations of the places of use shall be those that are specifically described in **Appendix F** to the Master Order,

and the location of the points of diversion for the Water Right shall be authorized from two (2) wells located as follows:

one (1) well (Well K) located in the Northwest Quarter of the Southwest Quarter of the Northeast Quarter (NW $\frac{1}{4}$ SW $\frac{1}{4}$ NE $\frac{1}{4}$) of Section 11, more particularly described as being near a point 3,646 feet North and 2,143 feet West of the Southeast corner of said section, in a quantity not to exceed 46.466 million gallons (142.6 acre-feet) of groundwater per calendar year at a diversion rate not in excess of 670 gallons per minute (1.49 c.f.s.), and

one (1) well (Well L) located in the Southwest Quarter of the Northeast Quarter of the Southeast Quarter (SW $\frac{1}{4}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$) of Section 10, more particularly described as being near a point 1,863 feet North and 883 feet West of the Southeast corner of said section, in a quantity not to exceed 46.434 million gallons (142.5 acre-feet) of groundwater per calendar year at a diversion rate not in excess of 800 gallons per minute (1.78 c.f.s.),

both in Township 26 South, Range 20 West, Edwards County, Kansas,

to be completed within the mapped boundaries as shown on the maps marked Exhibits R, S, T, and U accompanying the Change Application, and pursuant to the Master Order.

2. Due to the aforementioned changes, the Water Right shall be reduced to a total authorized quantity not to exceed 92.900 million gallons (285.1 acre-feet) of water per calendar year.

3. The following additional conditions of this Change Approval also shall apply to this Water Right:

a. Installation of the works for diversion of water shall be completed on or before December 31, 2029, or within any authorized extension of time granted by the Chief Engineer for good cause shown. The Water Right owner shall notify the Chief Engineer when construction of the diversion works has been completed.

b. All wells with a diversion rate of 100 gallons per minute or more drilled under the authority of this Change Approval shall have a tube or other device installed in a manner acceptable to, and in accordance with, specifications adopted by the Chief Engineer. This tube or device shall be suitable for making water level measurements and shall be maintained in a condition satisfactory to the Chief Engineer.

c. The Water Right owner shall submit to the Chief Engineer a copy of the well log required by the Kansas Department of Health and Environment under the authority of K.S.A. 82a-1212, currently form WWC-5, within 30 days following the drilling of the well at the location authorized herein.

d. All diversion works 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.

e. Prior to the use of water, the Water Right owner shall properly install an acceptable water meter on the diversion works authorized for this Water Right, in strict accordance with K.A.R. 5-1-4 through 5-1-12. The Water Right owner shall notify the Chief Engineer when installation of the water meter has been completed. The Water Right owner shall maintain the water meter in an operating condition satisfactory to the Chief Engineer at all times during diversion of water and shall maintain records from which the total quantity of water diverted may be determined. The Water Right owner shall also annually report to the Chief Engineer the reading of said water meter and the total quantity of water diverted. Such records shall be furnished to the Chief Engineer by March 1 following the end of each calendar year.

4. Further, the following Limitations (as that term is defined in the Master Order), shall apply to this Water Right, for which Limitations the Chief Engineer specifically retains jurisdiction and authority to review and modify, as provided in the Master Order:

As provided in the Master Order, this Water Right's rate of diversion from the well described as (Well K): located in the Northwest Quarter of the Southwest Quarter of the Northeast Quarter (NW $\frac{1}{4}$ SW $\frac{1}{4}$ NE $\frac{1}{4}$) of Section 11, more particularly described as being near a point 3,646 feet North and 2,143 feet West of the Southeast corner of said section, Township 26 South, Range 20 West, Edwards County, Kansas, is subject to a Limitation such that the rate of diversion shall not exceed 700 gallons per minute (1.56 c.f.s.), when this Water Right is combined with Water Right, File Nos. 22,333; 22,334 and 22,335, for municipal use.

As provided in the Master Order, this Water Right's rate of diversion from the well described as (Well L) located in the Southwest Quarter of the Northeast Quarter of the Southeast Quarter (SW $\frac{1}{4}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$) of Section 10, more particularly described as being near a point 1,863 feet North and 883 feet West of the Southeast corner of said section, Township 26 South, Range 20 West, Edwards County, Kansas, is subject to a Limitation such that the rate of diversion shall not exceed 950 gallons per minute (2.12 c.f.s.), when this Water Right is combined with Water Right, File Nos. 22,338 and 22,339, for municipal use.

As provided in the Master Order, the authorized quantity of water for municipal use under this Water Right is subject to a Limitation (as that term is defined in the Master Order) such that when this Water Right is combined with Water Right, File Nos.: 21,729-D1; 21,729-D2; 21,730; 21,731; 21,732-D1; 21,732-D2; 21,733; 21,734; 21,841; 21,842; 22,325; 22,326; 22,327; 22,329; 22,330; 22,331; 22,332; 22,333; 22,334; 22,335; 22,338; 22,339; 22,340; 22,341; 22,342; 22,343; 22,345; 22,346; 29,816; 30,083; and 30,084 the water used shall not exceed a rolling ten-year aggregate Limitation of 15,640.848 million gallons (48,000 acre-feet) during any, each, and every ten (10) consecutive calendar years (the "Ten-Year Rolling Aggregate Limitation" as defined in the Master Order) at the places of use authorized herein.

As provided in the Master Order, the authorized quantity of water for municipal use under this Water Right is subject to a Limitation such that when this Water Right is combined with Vested Right, File No. RS 008; and Water Right, File Nos. 206; 1,267; 1,861; 17,586; 17,587; 21,729-D1; 21,729-D2; 21,730; 21,731; 21,732-D1; 21,732-D2; 21,733; 21,734; 21,841; 21,842; 22,325; 22,326; 22,327; 22,329; 22,330; 22,331; 22,332; 22,333; 22,334; 22,335; 22,338; 22,339; 22,340; 22,341; 22,342; 22,343; 22,345; and 22,346 the water used shall not exceed 600.000 million gallons (1,841.3 acre-feet) per calendar year (the "Reasonable-Need Limitation" for the City of Russell, as such term is defined and calculated in the Master Order).

As provided in the Master Order, the authorized quantity of water for municipal use under this Water Right is subject to a Limitation such that when this Water Right is combined with Vested Right, File No. EL 002 and Water Right, File Nos. 1,248; 5,757; 18,857; 18,858; 21,729-D1; 21,729-D2; 21,730; 21,731; 21,732-D1; 21,732-D2; 21,733; 21,734; 21,841; 21,842; 22,325; 22,326; 22,327; 22,329; 22,330; 22,331; 22,332; 22,333; 22,334; 22,335; 22,338; 22,339; 22,340; 22,341; 22,342; 22,343; 22,345; and 22,346 the water used shall not exceed 1,847.650 million gallons (5,670.23 acre-feet) per calendar year (the "Reasonable-Need Limitation" for the City of Hays, as such term is defined and calculated in the Master Order).

5. In all other respects, the Certificate, as modified and amended by the aforementioned orders, including the Master Order, remains as issued.

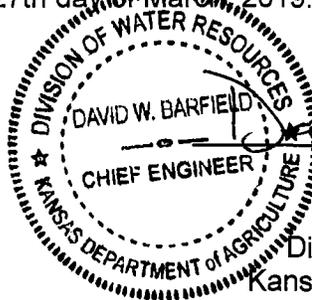
6. This Change Approval is contingent and conditioned upon the terms of the Master Order and will not become effective unless and until such time as the Master Order becomes effective.

7. Any person who is aggrieved by this Change Approval may file a petition for administrative review by the Secretary pursuant to K.S.A. 82a-708b, K.S.A. 2016 Supp. 82a-1901, and K.S.A. 77-527. K.S.A. 2016 Supp. 82a-1901 applies because the proceeding regarding this matter began before the 2017 amendments became effective. Any petition for administrative review by the Secretary must include a statement of its basis as provided in K.S.A. 77-527(c). This Change Approval will become a final order, without further notice, unless a petition for administrative review by the Secretary pursuant to K.S.A. 82a-708b, K.S.A. 2016 Supp. 82a-1901, and K.S.A. 77-527 is filed within 15 days after the date of service shown on the Certificate of Service. Any request for administrative review by the Secretary must be in writing and submitted to the attention of:

Chief Legal Counsel,
Kansas Department of Agriculture,
1320 Research Park Drive,
Manhattan, Kansas 66502,
Fax: (785) 564-6777,

with copies to those shown in the Certificate of Service.

Dated at Manhattan, Kansas, this 27th day of March, 2019.



David W. Barfield

David W. Barfield, P.E.
Chief Engineer
Division of Water Resources
Kansas Department of Agriculture

State of Kansas)
) SS
County of Riley)

The foregoing instrument was acknowledged before me this 27th day of March, 2019, by David W. Barfield, P.E., Chief Engineer, Division of Water Resources, Kansas Department of Agriculture.



Karen Hunter

Notary Public

CERTIFICATE OF SERVICE

On this 28 day of March, 2019, I hereby certify that the attached original Approval of Application to Change the Place of Use, the Point of Diversion and the Use Made of the Water Under an Existing Water Right, Water Right, File No. 27,760, dated March 27, 2019, was mailed postage prepaid, first class, US mail to the following:

Toby Dougherty, City Manager
CITY OF HAYS
City Hall, 16th & Main
P.O. Box 490
Hays, KS 67601

With photocopies to:

Jon Quinday, City Manager
CITY OF RUSSELL
133 W. 8th Street
P.O. Box 112
Russell, KS 67665

David M. Traster
FOULSTON SIEFKIN LLP
1551 N. Waterfront Parkway, Suite 100
Wichita, Kansas 67206-4466

Daniel J. Buller
FOULSTON SIEFKIN LLP
9225 Indian Creek Parkway, Suite 600
Overland Park, Kansas 66210

John T. Bird
Todd Powell
GLASSMAN BIRD AND POWELL, LLP
Attention: Attorneys for the City of Hays, Kansas
200 West Thirteenth Street
Hays, KS 67601-0727

Kenneth L. Cole
WOELK & COLE
4 S. Kansas St.
P.O. Box 431
Russell, KS 67665-0431

Stafford Field Office
Stockton Field Office
Big Bend Groundwater Management District No. 5


KDA Staff

THE STATE OF KANSAS



KANSAS DEPARTMENT OF AGRICULTURE
Mike Beam, Acting Secretary of Agriculture

DIVISION OF WATER RESOURCES
David W. Barfield, Chief Engineer

APPROVAL OF APPLICATION TO CHANGE THE PLACE OF USE, THE POINT OF DIVERSION AND THE USE MADE OF THE WATER UNDER AN EXISTING WATER RIGHT

WATER RIGHT FILE NO. 29,816

The Chief Engineer, Division of Water Resources, Kansas Department of Agriculture, after due consideration of the written Application for Approval to Change the Place of Use, the Point of Diversion or the Use Made of the Water Under an Existing Water Right, submitted by Toby Dougherty, City Manager, on behalf of the City of Hays, 1507 Main Street, Hays, Kansas 67601, and by Jon Quinday, City Manager, on behalf of the City of Russell, 133 W. 8th Street, Russell, Kansas 67665, and received in this office on June 26, 2015, as amended (the "Change Application"), for approval of changes in the location of the place of use, the point of diversion, and the use made of water under the Certificate of Appropriation issued on May 10, 1988 (the "Certificate"), pursuant to the application for permit to appropriate water for beneficial use regarding the above-mentioned Water Right, File No. 29,816 (the "Water Right"), as modified and amended by the order of the Chief Engineer dated September 13, 1991, approving the application to change the place of use, finds that the changes requested in the Change Application are reasonable and will not impair existing rights, that such changes relate to the same local source of supply, and that the Change Application should be and is hereby approved pursuant to K.S.A. 82a-708b and as provided herein.

This approval order (the "Change Approval") is attached as an exhibit to, is incorporated in, and is subject to the terms of that certain Master Order Contingently Approving Change Applications Regarding R9 Water Rights (the "Master Order"), issued by the Chief Engineer concurrently with this Change Approval. The effective date of the changes approved herein for the Water Right shall be as provided in the Master Order. Upon effectiveness as provided in the Master Order:

1. The authorized use made of water for the Water Right shall be:

Municipal Use,

and the authorized locations of the places of use shall be those that are specifically described in **Appendix F** to the Master Order,

and the location of the points of diversion for the Water Right shall be authorized from two (2) wells located as follows:

one (1) well (Well E) located in the Northwest Quarter of the Southeast Quarter of the Southeast Quarter (NW $\frac{1}{4}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$) of Section 5, more particularly described as being near a point 1,577 feet North and 901 feet West of the Southeast corner of said section, in a quantity not to exceed 31.933 million gallons (98 acre-feet) of groundwater per calendar year at a diversion rate not in excess of 800 gallons per minute (1.78 c.f.s.), and

one (1) well (Well F) located in the Northwest Quarter of the Southeast Quarter of the Northeast Quarter (NW $\frac{1}{4}$ SE $\frac{1}{4}$ NE $\frac{1}{4}$) of Section 4, more particularly described as being near a point 4,545 feet North and 1,311 feet West of the Southeast corner of said section, in a quantity not to exceed 29.327 million gallons (90 acre-feet) of groundwater per calendar year at a diversion rate not in excess of 750 gallons per minute (1.67 c.f.s.), and

both in Township 26 South, Range 19 West, Edwards County, Kansas,

to be completed within the mapped boundaries as shown on the maps marked Exhibits N, O, P, and Q accompanying the Change Application, and pursuant to the Master Order.

2. The following additional conditions of this Change Approval also shall apply to this Water Right:

a. Installation of the works for diversion of water shall be completed on or before December 31, 2029, or within any authorized extension of time granted by the Chief Engineer for good cause shown. The Water Right owner shall notify the Chief Engineer when construction of the diversion works has been completed.

b. All wells with a diversion rate of 100 gallons per minute or more drilled under the authority of this Change Approval shall have a tube or other device installed in a manner acceptable to, and in accordance with, specifications adopted by the Chief Engineer. This tube or device shall be suitable for making water level measurements and shall be maintained in a condition satisfactory to the Chief Engineer.

c. The Water Right owner shall submit to the Chief Engineer a copy of the well log required by the Kansas Department of Health and Environment under the authority of K.S.A. 82a-1212, currently form WWC-5, within 30 days following the drilling of the well at the location authorized herein.

d. All diversion works 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.

e. Prior to the use of water, the Water Right owner shall properly install an acceptable water meter on the diversion works authorized for this Water Right, in strict accordance with K.A.R. 5-1-4 through 5-1-12. The Water Right owner shall notify the Chief Engineer when installation of the water meter has been completed. The Water Right owner shall maintain the water meter in an operating condition satisfactory to the Chief Engineer at all times during diversion of water and shall maintain records from which the total quantity of water diverted may be determined. The Water Right owner shall also annually report to the Chief Engineer the reading of said water meter and the total quantity of water diverted. Such records shall be furnished to the Chief Engineer by March 1 following the end of each calendar year.

3. Further, the following Limitations (as that term is defined in the Master Order), shall apply to this Water Right, for which Limitations the Chief Engineer specifically retains jurisdiction and authority to review and modify, as provided in the Master Order:

As provided in the Master Order, this Water Right's rate of diversion from the well described as (Well E) located in the Northwest Quarter of the Southeast Quarter of the Southeast Quarter (NW $\frac{1}{4}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$) of Section 5, more particularly described as being near a point 1,577 feet North and 901 feet West of the Southeast corner of said section, Township 26 South, Range 19 West, Edwards County, Kansas, is subject to a Limitation such that the rate of diversion shall not exceed 1,270 gallons per minute (2.83 c.f.s.), when this Water Right is combined with Water Right, File No. 21,842, for municipal use.

As provided in the Master Order, this Water Right's rate of diversion from the well described as one (1) well (Well F) located in the Northwest Quarter of the Southeast Quarter of the Northeast Quarter (NW $\frac{1}{4}$ SE $\frac{1}{4}$ NE $\frac{1}{4}$) of Section 4, more particularly described as being near a point 4,545 feet North and 1,311 feet West of the Southeast corner of said section, Township 26 South, Range 19 West, Edwards County, Kansas, is subject to a Limitation such that the rate of diversion shall not exceed 1,040 gallons per minute (2.32 c.f.s.), when this Water Right is combined with Water Right, File No. 21,841, for municipal use.

As provided in the Master Order, the authorized quantity of water for municipal use under this Water Right is subject to a Limitation (as that term is defined in the Master Order) such that when this Water Right is combined with Water Right, File Nos.: 21,729-D1; 21,729-D2; 21,730; 21,731; 21,732-D1; 21,732-D2; 21,733; 21,734; 21,841; 21,842; 22,325; 22,326; 22,327; 22,329; 22,330; 22,331; 22,332; 22,333; 22,334; 22,335; 22,338; 22,339; 22,340; 22,341; 22,342; 22,343; 22,345; 22,346; 27,760; 30,083; and 30,084 the water used shall not exceed a rolling ten-year aggregate Limitation of 15,640.848 million gallons (48,000 acre-feet) during any, each, and every ten (10) consecutive calendar years (the "Ten-Year Rolling Aggregate Limitation" as defined in the Master Order) at the places of use authorized herein.

As provided in the Master Order, the authorized quantity of water for municipal use under this Water Right is subject to a Limitation such that when this Water Right is combined with Vested Right, File No. RS 008; and Water Right, File Nos. 206; 1,267; 1,861; 17,586; 17,587; 21,729-D1; 21,729-D2; 21,730; 21,731; 21,732-D1; 21,732-D2; 21,733; 21,734; 21,841; 21,842; 22,325; 22,326; 22,327; 22,329; 22,330; 22,331; 22,332; 22,333; 22,334; 22,335; 22,338; 22,339; 22,340; 22,341; 22,342; 22,343; 22,345; 22,346; and 27,760 the water used shall not exceed 600.000 million gallons (1,841.3 acre-feet) per calendar year (the "Reasonable-Need Limitation" for the City of Russell, as such term is defined and calculated in the Master Order).

As provided in the Master Order, the authorized quantity of water for municipal use under this Water Right is subject to a Limitation such that when this Water Right is combined with Vested Right, File No. EL 002 and Water Right, File Nos. 1,248; 5,757; 18,857; 18,858; 21,729-D1; 21,729-D2; 21,730; 21,731; 21,732-D1; 21,732-D2; 21,733; 21,734; 21,841; 21,842; 22,325; 22,326; 22,327; 22,329; 22,330; 22,331; 22,332; 22,333; 22,334; 22,335; 22,338; 22,339; 22,340; 22,341; 22,342; 22,343; 22,345; 22,346; and 27,760 the water used shall not exceed 1,847.650 million gallons (5,670.23 acre-feet) per calendar year (the "Reasonable-Need Limitation" for the City of Hays, as such term is defined and calculated in the Master Order).

4. In all other respects, the Certificate, as modified and amended by the aforementioned orders, including the Master Order, remains as issued.

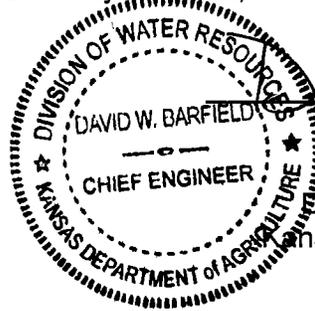
5. This Change Approval is contingent and conditioned upon the terms of the Master Order and will not become effective unless and until such time as the Master Order becomes effective.

6. Any person who is aggrieved by this Change Approval may file a petition for administrative review by the Secretary pursuant to K.S.A. 82a-708b, K.S.A. 2016 Supp. 82a-1901, and K.S.A. 77-527. K.S.A. 2016 Supp. 82a-1901 applies because the proceeding regarding this matter began before the 2017 amendments became effective. Any petition for administrative review by the Secretary must include a statement of its basis as provided in K.S.A. 77-527(c). This Change Approval will become a final order, without further notice, unless a petition for administrative review by the Secretary pursuant to K.S.A. 82a-708b, K.S.A. 2016 Supp. 82a-1901, and K.S.A. 77-527 is filed within 15 days after the date of service shown on the Certificate of Service. Any request for administrative review by the Secretary must be in writing and submitted to the attention of:

Chief Legal Counsel,
Kansas Department of Agriculture,
1320 Research Park Drive,
Manhattan, Kansas 66502,
Fax: (785) 564-6777,

with copies to those shown in the Certificate of Service.

Dated at Manhattan, Kansas, this 27th day of March, 2019.



David W. Barfield

David W. Barfield, P.E.
Chief Engineer
Division of Water Resources
Kansas Department of Agriculture

State of Kansas)
) SS
County of Riley)

The foregoing instrument was acknowledged before me this 27th day of March, 2019, by David W. Barfield, P.E., Chief Engineer, Division of Water Resources, Kansas Department of Agriculture.



Karen Hunter

Notary Public

CERTIFICATE OF SERVICE

On this 28 day of March, 2019, I hereby certify that the attached original Approval of Application to Change the Place of Use, the Point of Diversion or the Use Made of the Water Under an Existing Water Right, Water Right, File No. 29,816, dated March 27, 2019, was mailed postage prepaid, first class, US mail to the following:

Toby Dougherty, City Manager
CITY OF HAYS
City Hall, 16th & Main
P.O. Box 490
Hays, KS 67601

With photocopies to:

Jon Quinday, City Manager
CITY OF RUSSELL
133 W. 8th Street
P.O. Box 112
Russell, KS 67665

David M. Traster
FOULSTON SIEFKIN LLP
1551 N. Waterfront Parkway, Suite 100
Wichita, Kansas 67206-4466

Daniel J. Buller
FOULSTON SIEFKIN LLP
9225 Indian Creek Parkway, Suite 600
Overland Park, Kansas 66210

John T. Bird
Todd Powell
GLASSMAN BIRD AND POWELL, LLP
Attention: Attorneys for the City of Hays, Kansas
200 West Thirteenth Street
Hays, KS 67601-0727

Kenneth L. Cole
WOELK & COLE
4 S. Kansas St.
P.O. Box 431
Russell, KS 67665-04301

Stafford Field Office
Stockton Field Office
Big Bend Groundwater Management District No. 5



KDA Staff

THE STATE OF KANSAS



KANSAS DEPARTMENT OF AGRICULTURE
Mike Beam, Acting Secretary of Agriculture

DIVISION OF WATER RESOURCES
David W. Barfield, Chief Engineer

APPROVAL OF APPLICATION
TO CHANGE
THE PLACE OF USE, THE POINT OF DIVERSION AND THE USE MADE
OF THE WATER UNDER AN EXISTING WATER RIGHT

WATER RIGHT
FILE NO. 30,083

The Chief Engineer, Division of Water Resources, Kansas Department of Agriculture, after due consideration of the written Application for Approval to Change the Place of Use, the Point of Diversion or the Use Made of the Water Under an Existing Water Right, submitted by Toby Dougherty, City Manager, on behalf of the City of Hays, 1507 Main Street, Hays, Kansas 67601, and by Jon Quinday, City Manager, on behalf of the City of Russell, 133 W. 8th Street, Russell, Kansas 67665, and received in this office on June 26, 2015, as amended (the "Change Application"), for approval of changes in the location of the place of use, the point of diversion, and the use made of water under the Certificate of Appropriation issued on April 27, 1992 (the "Certificate"), pursuant to the application for permit to appropriate water for beneficial use regarding the above-mentioned Water Right, File No. 30,083 (the "Water Right"), as modified and amended by the order of the Chief Engineer dated June 1, 2007, correcting the location of the point of diversion, finds that the changes requested in the Change Application are reasonable and will not impair existing rights, that such changes relate to the same local source of supply, and that the Change Application should be and is hereby approved pursuant to K.S.A. 82a-708b and as provided herein.

This approval order (the "Change Approval") is attached as an exhibit to, is incorporated in, and is subject to the terms of that certain Master Order Contingently Approving Change Applications Regarding R9 Water Rights (the "Master Order"), issued by the Chief Engineer concurrently with this Change Approval. The effective date of the changes approved herein for the Water Right shall be as provided in the Master Order. Upon effectiveness as provided in the Master Order:

1. The authorized use made of water for the Water Right shall be:

Municipal Use,

and the authorized locations of the places of use shall be those that are specifically described in **Appendix F** to the Master Order,

and the location of the point of diversion for the Water Right shall be authorized from one (2) wells located as follows:

one (1) well (Well M) located in the Southwest Quarter of the Northeast Quarter of the Northeast Quarter (SW $\frac{1}{4}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$) of Section 15, more particularly described as being near a point 4,367 feet North and 1,228 feet West of the Southeast corner of said section, in a quantity not to exceed 22.712 million gallons (69.7 acre-feet) of groundwater per calendar year at a diversion rate not in excess of 455 gallons per minute (1.02 c.f.s.), Township 26 South, Range 20 West, Edwards County, Kansas,

to be completed within the mapped boundaries as shown on the maps marked Exhibits L, and M accompanying the Change Application, and pursuant to the Master Order.

2. Due to the aforementioned changes, the Water Right shall be reduced to a total authorized rate of diversion not to exceed 455 gallons per minute (1.02 c.f.s.).

3. The following additional conditions of this Change Approval also shall apply to this Water Right:

a. Installation of the works for diversion of water shall be completed on or before December 31, 2029, or within any authorized extension of time granted by the Chief Engineer for good cause shown. The Water Right owner shall notify the Chief Engineer when construction of the diversion works has been completed.

b. All wells with a diversion rate of 100 gallons per minute or more drilled under the authority of this Change Approval shall have a tube or other device installed in a manner acceptable to, and in accordance with, specifications adopted by the Chief Engineer. This tube or device shall be suitable for making water level measurements and shall be maintained in a condition satisfactory to the Chief Engineer.

c. The Water Right owner shall submit to the Chief Engineer a copy of the well log required by the Kansas Department of Health and Environment under the authority of K.S.A. 82a-1212, currently form WWC-5, within 30 days following the drilling of the well at the location authorized herein.

d. All diversion works 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.

e. Prior to the use of water, the Water Right owner shall properly install an acceptable water meter on the diversion works authorized for this Water Right, in strict accordance with K.A.R. 5-1-4 through 5-1-12. The Water Right owner shall notify the Chief Engineer when installation of the water meter has been completed. The Water Right owner shall maintain the water meter in an operating condition satisfactory to the Chief Engineer at all times during diversion of water and shall maintain records from which the total quantity of water diverted may be determined. The Water Right owner shall also annually report to the Chief Engineer the reading of said water meter and the total quantity of water diverted. Such records shall be furnished to the Chief Engineer by March 1 following the end of each calendar year.

4. Further, the following Limitations (as that term is defined in the Master Order), shall apply to this Water Right, for which Limitations the Chief Engineer specifically retains jurisdiction and authority to review and modify, as provided in the Master Order:

As provided in the Master Order, this Water Right is subject to a Limitation such that when this Water Right is combined with Water Right, File Nos. 22,340; 22,341; and 22,342, the total rate of diversion shall not exceed 950 gallons per minute (2.12 c.f.s.) for municipal use from the point of diversion authorized herein.

As provided in the Master Order, the authorized quantity of water for municipal use under this Water Right is subject to a Limitation (as that term is defined in the Master Order) such that when this Water Right is combined with Water Right, File Nos.: 21,729-D1; 21,729-D2; 21,730; 21,731; 21,732-D1; 21,732-D2; 21,733; 21,734; 21,841; 21,842; 22,325; 22,326; 22,327; 22,329; 22,330; 22,331; 22,332; 22,333; 22,334; 22,335; 22,338; 22,339; 22,340; 22,341; 22,342; 22,343; 22,345; 22,346; 27,760; 29,816; and 30,084 the water used shall not exceed a rolling ten-year aggregate Limitation of 15,640.848 million gallons (48,000 acre-feet) during any, each, and every ten (10) consecutive calendar years (the "Ten-Year Rolling Aggregate Limitation" as defined in the Master Order) at the places of use authorized herein.

As provided in the Master Order, the authorized quantity of water for municipal use under this Water Right is subject to a Limitation such that when this Water Right is combined with Vested Right, File No. RS 008; and Water Right, File Nos. 206; 1,267; 1,861; 17,586; 17,587; 21,729-D1; 21,729-D2; 21,730; 21,731; 21,732-D1; 21,732-D2; 21,733; 21,734; 21,841; 21,842; 22,325; 22,326; 22,327; 22,329; 22,330; 22,331; 22,332; 22,333; 22,334; 22,335; 22,338; 22,339; 22,340; 22,341; 22,342; 22,343; 22,345; 22,346; 27,760; and 29,816 the water used shall not exceed 600.000 million gallons (1,841.3 acre-feet) per calendar year (the "Reasonable-Need Limitation" for the City of Russell, as such term is defined and calculated in the Master Order).

As provided in the Master Order, the authorized quantity of water for municipal use under this Water Right is subject to a Limitation such that when this Water Right is combined with Vested Right, File No. EL 002 and Water Right, File Nos. 1,248; 5,757; 18,857; 18,858; 21,729-D1; 21,729-D2; 21,730; 21,731; 21,732-D1; 21,732-D2; 21,733; 21,734; 21,841; 21,842; 22,325; 22,326; 22,327; 22,329; 22,330; 22,331; 22,332; 22,333; 22,334; 22,335; 22,338; 22,339; 22,340; 22,341; 22,342; 22,343; 22,345; 22,346; 27,760; and 29,816 the water used shall not exceed 1,847.650 million gallons (5,670.23 acre-feet) per calendar year (the "Reasonable-Need Limitation" for the City of Hays, as such term is defined and calculated in the Master Order).

5. In all other respects, the Certificate, as modified and amended by the aforementioned orders, including the Master Order, remains as issued.

6. This Change Approval is contingent and conditioned upon the terms of the Master Order and will not become effective unless and until such time as the Master Order becomes effective.

7. Any person who is aggrieved by this Change Approval may file a petition for administrative review by the Secretary pursuant to K.S.A. 82a-708b, K.S.A. 2016 Supp. 82a-1901, and K.S.A. 77-527. K.S.A. 2016 Supp. 82a-1901 applies because the proceeding regarding this matter began before the 2017 amendments became effective. Any petition for administrative review by the Secretary must include a statement of its basis as provided in K.S.A. 77-527(c). This Change Approval will become a final order, without further notice, unless a petition for administrative review by the Secretary pursuant to K.S.A. 82a-708b, K.S.A. 2016 Supp. 82a-1901, and K.S.A. 77-527 is filed within 15 days after the date of service shown on the Certificate of Service. Any request for administrative review by the Secretary must be in writing and submitted to the attention of:

Chief Legal Counsel,
Kansas Department of Agriculture,
1320 Research Park Drive,
Manhattan, Kansas 66502,
Fax: (785) 564-6777,

with copies to those shown in the Certificate of Service.

CERTIFICATE OF SERVICE

On this 28 day of March, 2019, I hereby certify that the attached original Approval of Application to Change the Place of Use, the Point of Diversion and the Use Made of the Water Under an Existing Water Right, Water Right, File No. 30,083, dated March 27, 2019, was mailed postage prepaid, first class, US mail to the following:

Toby Dougherty, City Manager
CITY OF HAYS
City Hall, 16th & Main
P.O. Box 490
Hays, KS 67601

With photocopies to:

Jon Quinday, City Manager
CITY OF RUSSELL
133 W. 8th Street
P.O. Box 112
Russell, KS 67665

David M. Traster
FOULSTON SIEFKIN LLP
1551 N. Waterfront Parkway, Suite 100
Wichita, Kansas 67206-4466

Daniel J. Buller
FOULSTON SIEFKIN LLP
9225 Indian Creek Parkway, Suite 600
Overland Park, Kansas 66210

John T. Bird
Todd Powell
GLASSMAN BIRD AND POWELL, LLP
Attention: Attorneys for the City of Hays, Kansas
200 West Thirteenth Street
Hays, KS 67601-0727

Kenneth L. Cole
WOELK & COLE
4 S. Kansas St.
P.O. Box 431
Russell, KS 67665-0431

Stafford Field Office
Stockton Field Office
Big Bend Groundwater Management District No. 5


KDA Staff

THE STATE OF KANSAS



KANSAS DEPARTMENT OF AGRICULTURE
Mike Beam, Acting Secretary of Agriculture

DIVISION OF WATER RESOURCES
David W. Barfield, Chief Engineer

APPROVAL OF APPLICATION
TO CHANGE
THE PLACE OF USE, THE POINT OF DIVERSION AND THE USE MADE
OF THE WATER UNDER AN EXISTING WATER RIGHT

WATER RIGHT
FILE NO. 30,084

The Chief Engineer, Division of Water Resources, Kansas Department of Agriculture, after due consideration of the written Application for Approval to Change the Place of Use, the Point of Diversion or the Use Made of the Water Under an Existing Water Right, submitted by Toby Dougherty, City Manager, on behalf of the City of Hays, 1507 Main Street, Hays, Kansas 67601, and by Jon Quinday, City Manager, on behalf of the City of Russell, 133 W. 8th Street, Russell, Kansas 67665, and received in this office on June 26, 2015, as amended (the "Change Application"), for approval of changes in the location of the place of use, the point of diversion, and the use made of water under the Certificate of Appropriation issued on June 11, 1987 (the "Certificate"), pursuant to the application for permit to appropriate water for beneficial use regarding the above-mentioned Water Right, File No. 30,084 (the "Water Right"), as modified and amended by the order of the Chief Engineer dated January 3, 1994, approving the application to change the location of the place of use and point of diversion, finds that the changes requested in the Change Application are reasonable and will not impair existing rights, that such changes relate to the same local source of supply, and that the Change Application should be and is hereby approved pursuant to K.S.A. 82a-708b and as provided herein.

This approval order (the "Change Approval") is attached as an exhibit to, is incorporated in, and is subject to the terms of that certain Master Order Contingently Approving Change Applications Regarding R9 Water Rights (the "Master Order"), issued by the Chief Engineer concurrently with this Change Approval. The effective date of the changes approved herein for the Water Right shall be as provided in the Master Order. Upon effectiveness as provided in the Master Order:

1. The authorized use made of water for the Water Right shall be:

Municipal Use,

and the authorized locations of the places of use shall be those that are specifically described in **Appendix F** to the Master Order,

and the location of the point of diversion for the Water Right shall be authorized from one (2) wells located as follows:

one (1) well (Well J) located in the Northeast Quarter of the Southwest Quarter of the Southwest Quarter (NE $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$) of Section 1, more particularly described as being near a point 1,634 feet North and 4,078 feet West of the Southeast corner of said section, in a quantity not to exceed 24.439 million gallons (75 acre-feet) of groundwater per calendar year at a diversion rate not in excess of 700 gallons per minute (1.56 c.f.s.), Township 26 South, Range 20 West, Edwards County, Kansas,

to be completed within the mapped boundaries as shown on the maps marked Exhibits L, and M accompanying the Change Application, and pursuant to the Master Order.

2. Due to the aforementioned changes, the Water Right shall be reduced to a total authorized rate of diversion not to exceed 700 gallons per minute (1.56 c.f.s.).

3. The following additional conditions of this Change Approval also shall apply to this Water Right:

a. Installation of the works for diversion of water shall be completed on or before December 31, 2029, or within any authorized extension of time granted by the Chief Engineer for good cause shown. The Water Right owner shall notify the Chief Engineer when construction of the diversion works has been completed.

b. All wells with a diversion rate of 100 gallons per minute or more drilled under the authority of this Change Approval shall have a tube or other device installed in a manner acceptable to, and in accordance with, specifications adopted by the Chief Engineer. This tube or device shall be suitable for making water level measurements and shall be maintained in a condition satisfactory to the Chief Engineer.

c. The Water Right owner shall submit to the Chief Engineer a copy of the well log required by the Kansas Department of Health and Environment under the authority of K.S.A. 82a-1212, currently form WWC-5, within 30 days following the drilling of the well at the location authorized herein.

d. All diversion works 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.

e. Prior to the use of water, the Water Right owner shall properly install an acceptable water meter on the diversion works authorized for this Water Right, in strict accordance with K.A.R. 5-1-4 through 5-1-12. The Water Right owner shall notify the Chief Engineer when installation of the water meter has been completed. The Water Right owner shall maintain the water meter in an operating condition satisfactory to the Chief Engineer at all times during diversion of water and shall maintain records from which the total quantity of water diverted may be determined. The Water Right owner shall also annually report to the Chief Engineer the reading of said water meter and the total quantity of water diverted. Such records shall be furnished to the Chief Engineer by March 1 following the end of each calendar year.

4. Further, the following Limitations (as that term is defined in the Master Order), shall apply to this Water Right, for which Limitations the Chief Engineer specifically retains jurisdiction and authority to review and modify, as provided in the Master Order:

As provided in the Master Order, this Water Right is subject to a Limitation such that when this Water Right is combined with Water Right, File Nos. 22,329; 22,330; 22,331 and 22,332, the total rate of diversion shall not exceed 700 gallons per minute (1.56 c.f.s.) for municipal use from the point of diversion authorized herein.

As provided in the Master Order, the authorized quantity of water for municipal use under this Water Right is subject to a Limitation (as that term is defined in the Master Order) such that when this Water Right is combined with Water Right, File Nos.: 21,729-D1; 21,729-D2; 21,730; 21,731; 21,732-D1; 21,732-D2; 21,733; 21,734; 21,841; 21,842; 22,325; 22,326; 22,327; 22,329; 22,330; 22,331; 22,332; 22,333; 22,334; 22,335; 22,338; 22,339; 22,340; 22,341; 22,342; 22,343; 22,345; 22,346; 27,760; 29,816; and 30,083 the water used shall not exceed a rolling ten-year aggregate Limitation of 15,640.848 million gallons (48,000 acre-feet) during any, each, and every ten (10) consecutive calendar years (the "Ten-Year Rolling Aggregate Limitation" as defined in the Master Order) at the places of use authorized herein.

As provided in the Master Order, the authorized quantity of water for municipal use under this Water Right is subject to a Limitation such that when this Water Right is combined with Vested Right, File No. RS 008; and Water Right, File Nos. 206; 1,267; 1,861; 17,586; 17,587; 21,729-D1; 21,729-D2; 21,730; 21,731; 21,732-D1; 21,732-D2; 21,733; 21,734; 21,841; 21,842; 22,325; 22,326; 22,327; 22,329; 22,330; 22,331; 22,332; 22,333; 22,334; 22,335; 22,338; 22,339; 22,340; 22,341; 22,342; 22,343; 22,345; 22,346; 27,760; 29,816; and 30,083 the water used shall not exceed 600.000 million gallons (1,841.3 acre-feet) per calendar year (the "Reasonable-Need Limitation" for the City of Russell, as such term is defined and calculated in the Master Order).

As provided in the Master Order, the authorized quantity of water for municipal use under this Water Right is subject to a Limitation such that when this Water Right is combined with Vested Right, File No. EL 002 and Water Right, File Nos. 1,248; 5,757; 18,857; 18,858; 21,729-D1; 21,729-D2; 21,730; 21,731; 21,732-D1; 21,732-D2; 21,733; 21,734; 21,841; 21,842; 22,325; 22,326; 22,327; 22,329; 22,330; 22,331; 22,332; 22,333; 22,334; 22,335; 22,338; 22,339; 22,340; 22,341; 22,342; 22,343; 22,345; 22,346; 27,760; 29,816; and 30,083 the water used shall not exceed 1,847.650 million gallons (5,670.23 acre-feet) per calendar year (the "Reasonable-Need Limitation" for the City of Hays, as such term is defined and calculated in the Master Order).

5. In all other respects, the Certificate, as modified and amended by the aforementioned orders, including the Master Order, remains as issued.

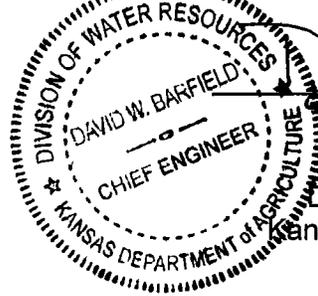
6. This Change Approval is contingent and conditioned upon the terms of the Master Order and will not become effective unless and until such time as the Master Order becomes effective.

7. Any person who is aggrieved by this Change Approval may file a petition for administrative review by the Secretary pursuant to K.S.A. 82a-708b, K.S.A. 2016 Supp. 82a-1901, and K.S.A. 77-527. K.S.A. 2016 Supp. 82a-1901 applies because the proceeding regarding this matter began before the 2017 amendments became effective. Any petition for administrative review by the Secretary must include a statement of its basis as provided in K.S.A. 77-527(c). This Change Approval will become a final order, without further notice, unless a petition for administrative review by the Secretary pursuant to K.S.A. 82a-708b, K.S.A. 2016 Supp. 82a-1901, and K.S.A. 77-527 is filed within 15 days after the date of service shown on the Certificate of Service. Any request for administrative review by the Secretary must be in writing and submitted to the attention of:

Chief Legal Counsel,
Kansas Department of Agriculture,
1320 Research Park Drive,
Manhattan, Kansas 66502,
Fax: (785) 564-6777,

with copies to those shown in the Certificate of Service.

Dated at Manhattan, Kansas, this 27th day of March, 2019.



David W. Barfield

David W. Barfield, P.E.
Chief Engineer
Division of Water Resources
Kansas Department of Agriculture

State of Kansas)
) SS
County of Riley)

The foregoing instrument was acknowledged before me this 27th day of March, 2019, by David W. Barfield, P.E., Chief Engineer, Division of Water Resources, Kansas Department of Agriculture.



Karen Hunter
Notary Public

CERTIFICATE OF SERVICE

On this 28th day of March, 2019, I hereby certify that the attached original Approval of Application to Change the Place of Use, the Point of Diversion and the Use Made of the Water Under an Existing Water Right, Water Right, File No. 30,084, dated March 27, 2019, was mailed postage prepaid, first class, US mail to the following:

Toby Dougherty, City Manager
CITY OF HAYS
City Hall, 16th & Main
P.O. Box 490
Hays, KS 67601

With photocopies to:

Jon Quinday, City Manager
CITY OF RUSSELL
133 W. 8th Street
P.O. Box 112
Russell, KS 67665

David M. Traster
FOULSTON SIEFKIN LLP
1551 N. Waterfront Parkway, Suite 100
Wichita, Kansas 67206-4466

Daniel J. Buller
FOULSTON SIEFKIN LLP
9225 Indian Creek Parkway, Suite 600
Overland Park, Kansas 66210

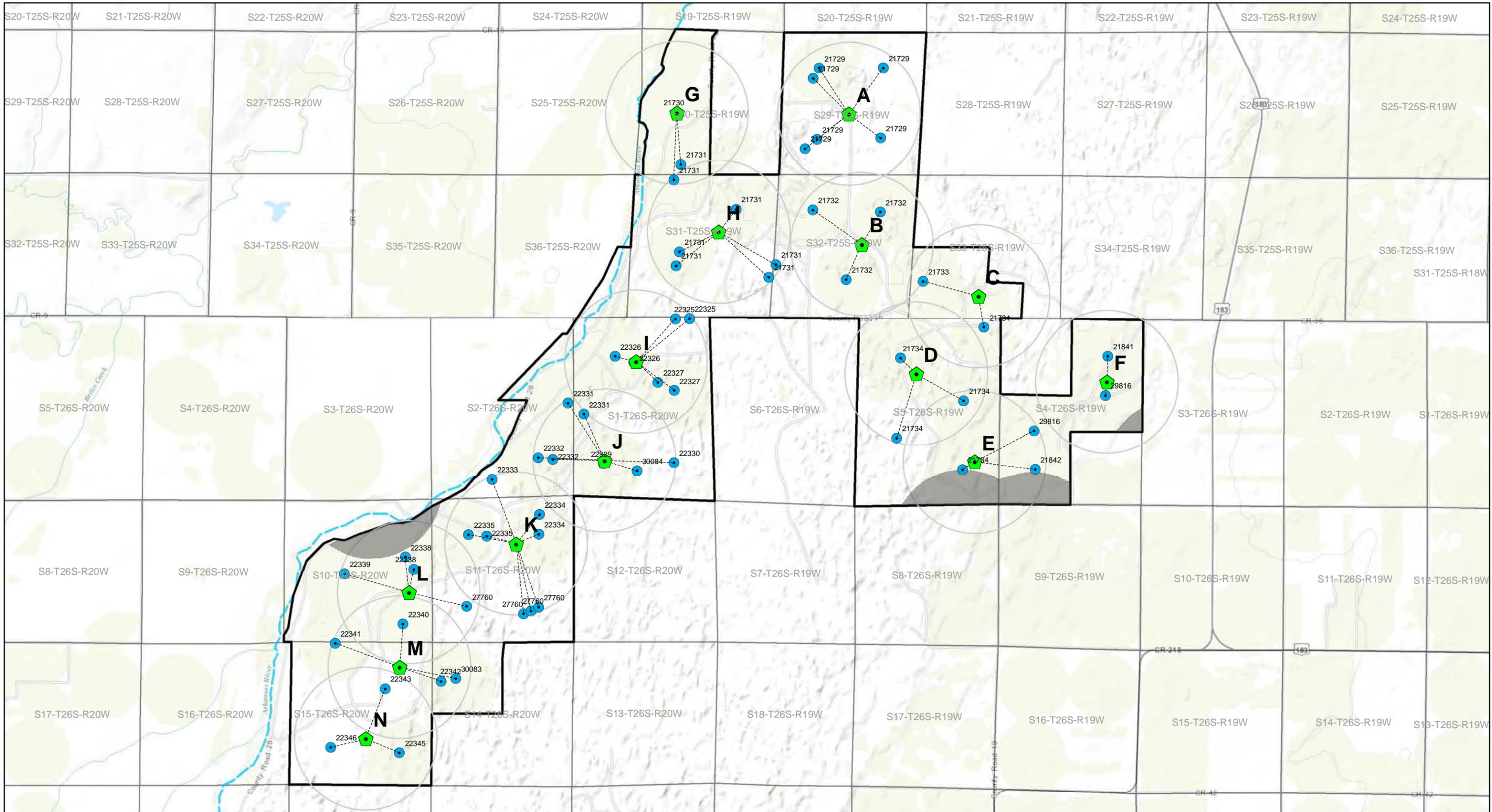
John T. Bird
Todd Powell
GLASSMAN BIRD AND POWELL, LLP
Attention: Attorneys for the City of Hays, Kansas
200 West Thirteenth Street
Hays, KS 67601-0727

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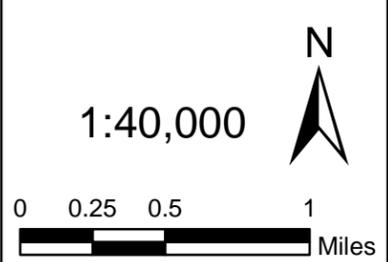


KDA Staff



Legend

- ◆ Proposed Municipal Wells (A-N)
- Existing R9 Ranch Points of Diversion
- 1/2 Mile Buffer Around Proposed Wells
- Water Rights Consolidation Lines
- Area Excluded From Proposed Wells
- River Centerline
- R9 Ranch Property Boundary
- PLSS Sections



**EXHIBIT
33**

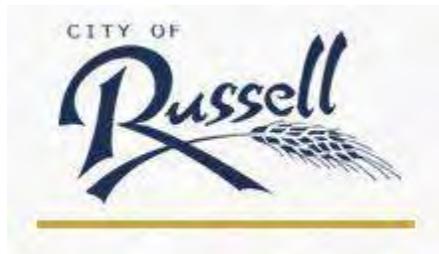
Water Level & Water Quality Monitoring Plan for the R9 Ranch

prepared for

City of Hays, Kansas



City of Russell, Kansas



February 2019

1.0 INTRODUCTION

Burns & McDonnell, Inc. (Burns & McDonnell) has developed this Water Level and Water Quality Monitoring Plan (Plan) for the R9 Ranch to support the development and operation of the property for municipal water supply. This Plan outlines the standard practices that will be used to monitor the groundwater levels and quality throughout the aquifer underlying the R9 Ranch. Since the water will be used as a public drinking water supply, the Cities of Hays and Russell, KS (Cities) will also be conducting water quality sampling in accordance with the Kansas Department of Health and Environment (KDHE) regulations and the Safe Drinking Water Act (SDWA) requirements.

The purpose of this Plan is to provide a detailed scope of work and methodology for the gathering of water quality and water level information. The primary objectives of the water level and water quality monitoring plan include:

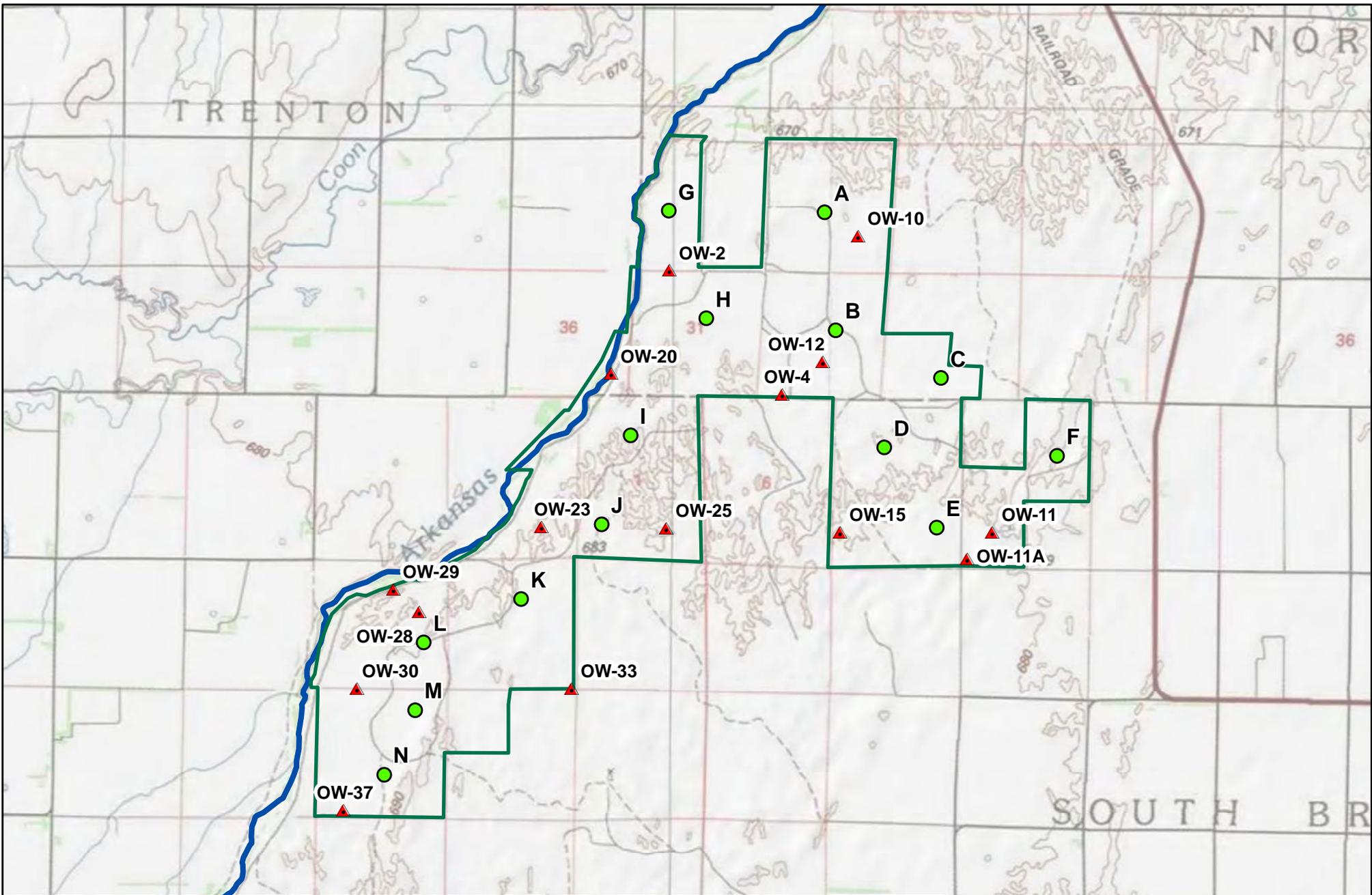
- Establish the locations of observation wells on the R9 Ranch property.
- Describe water level measurement sites, method of measurement, and frequency of measurement.
- Describe water quality sample collection sites, methodology, frequency, and constituents to be sampled for in addition to KDHE and SDWA requirements for the development and operation of a public water supply.

2.0 OBSERVATION WELLS

The R9 Ranch property contains a total of fifteen (15) existing observation wells. These wells were originally installed as part of an initial site evaluation completed by Groundwater Associates in 1995. These observation wells were completed in the aquifer at total depths ranging from 38 to 131 feet. Each well is constructed of 2-inch PVC casing and mill cut PVC screen. The names and coordinates of the observation wells are listed in Table 1, and shown on Figure 1.

3.0 MUNICIPAL WELLS

The municipal well field that will be constructed for municipal water supply at the R9 Ranch is currently anticipated to be constructed in multiple phases. Each municipal well will be constructed with a water level measurement port such that manual measurements can be taken utilizing an electronic measurement tape. The names and coordinates of the currently proposed municipal wells are listed in Table 2, and shown on Figure 1.



Legend

- R9 Ranch Boundary
- Proposed Municipal Wells
- ▲ R9 Observation Wells

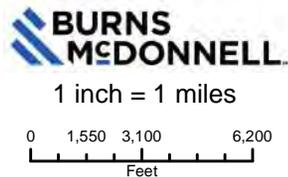


Figure 1
R9 Ranch Site Map

Table 1
R9 Ranch Observation Well Locations

Observation Well Name	UTM NAD83 Easting	UTM NAD83 Northing	Legal Description
OW-2	459934	4188151	30FT NE OF PIVOT
OW-4	461346	4186613	SE OF CIRCLE 4
OW-10	462281	4188587	22FT NE OF PIVOT
OW-11	463663	4184572	30FT NE OF PIVOT
OW-11A	463973	4184906	SW OF CIRCLE 11
OW-12	461850	4187020	24FT SW OF PIVOT
OW-15	462074	4184897	SW OF CIRCLE 15
OW-20	459211	4186856	N OF CIRCLE 20
OW-23	458351	4184946	30FT N OF PIVOT
OW-25	459908	4184937	30 FT N OF PIVOT
OW-28	456834	4183880	30FT N OF PIVOT
OW-29	456512	4184154	NE OF CIRCLE 29
OW-30	456063	4182921	29FT W OF PIVOT
OW-33	458736	4182935	SE OF CIRCLE 33
OW-37	455904	4181403	SW OF CIRCLE 37
Future OW	To Be Determined	To Be Determined	East of Municipal Well F

Table 2
R9 Ranch Municipal Well Locations

Municipal Well Name	UTM NAD83 Easting	UTM NAD83 Northing
A	461875	4188879
B	462020	4187410
C	463337	4186824
D	462635	4185953
E	463292	4184960
F	464785	4185861
G	459934	4188890
H	460406	4187550
I	459473	4186087
J	459116	4184975
K	458120	4184039
L	456908	4183492
M	456804	4182650
N	456422	4181844

3.0 WATER LEVEL MONITORING

Water levels will be collected from the observation wells identified in Table 1 and each of the municipal wells once they are constructed. Once Municipal Well F is constructed, an Observation Well will be installed between it and the property boundary and added to the monitoring schedule. Water level measurement procedures and water level measurement frequency are described below.

3.1 Measurement Procedures

Water levels will be collected manually from the observation wells identified in Table 1 and each municipal well at the R9 Ranch after they are constructed using a calibrated electronic or steel measurement tape. The following items shall be recorded at each site during a manual measurement of water levels:

- Well Name, Time of Day, Date, and Personnel completing the measurement.
- Depth to Water to the nearest hundredth of an inch from an established static measuring point.
- Where possible, the total depth of the well shall be verified with a weighted tape to check for signs of casing failure or sedimentation.

The municipal wells may be constructed with water level transducers that provide feedback to a central City Supervisory Control and Data Acquisition (SCADA) system. This system may also facilitate additional digital logging and trending of water level information.

3.2 Measurement Frequency

Manual water level measurements will be collected quarterly. The quarterly water level measurement frequency is ideal for capturing water level changes and responses over a range of varying groundwater demand and hydrologic conditions. To achieve consistent annual trending of static water level conditions, the first quarterly measurement will be taken during January. Water level measurements will be collected at the times described below:

- Quarterly Measurement 1 (Static Conditions Q1) - January
- Quarterly Measurement 2 (Q2) - March/April
- Quarterly Measurement 3 (Q3) - July/August
- Quarterly Measurement 4 (Q4) - September/October

If water level transducers and a SCADA system are implemented at the municipal wells, the digital recording of water levels will occur on a monthly basis at a minimum. Quarterly manual

water level measurements can be compared to SCADA equipment recordings for verification of SCADA equipment and transducer accuracy.

4.0 WATER QUALITY MONITORING

There are several key parameters in the groundwater at the R9 Ranch with the potential to impact the development and operation of the property as a public water supply. These parameters mainly include nitrate and elevated sulfate concentrations. Additionally, chloride and hardness have also been detected at elevated levels on the R9 Ranch property.

To monitor the groundwater quality on the R9 Ranch, the Cities will complete a full water quality analysis as required to meet the KDHE and SDWA water quality testing parameters for development and testing of public water supply sources. In addition, water quality monitoring will be completed for the following constituents at each of the observation wells identified in Table 1 :

Nitrate	Chloride	Potassium	Sodium
Fluoride	Sulfate	Iron	Manganese
Alkalinity	Bicarbonate	pH	Total Dissolved Solids (TDS)
Calcium	Magnesium	Hardness	

4.1 Sampling Procedures

Samples will be collected from the observation wells identified in Table 1 in accordance with the standard methods defined in the United States Environmental Protection Agency (EPA) Handbook for Sampling and Sample Preservation of Water and Wastewater. Samples will be collected in containers prepared by the lab contracted for completion of the analysis as well as packaged and delivered in a manner consistent with lab requirements. Field measurements of temperature, pH, and conductivity will be recorded for each sample.

4.2 Sampling Frequency

Water quality samples will be collected semi-annually from the observation wells identified in Table 1. This monitoring frequency is ideal for capturing any changes in the groundwater chemistry over a range of varying groundwater demand and hydrologic conditions. Semi-annual sampling of the observation wells will be completed according to the following schedule:

- Observation wells will be sampled once during the month of January
- Observation wells be sampled once during the month of either July or August

4.3 Laboratory Analysis

Water quality samples from the observation wells identified in Table 1 will be sent to a KDHE certified laboratory for analysis.

5.0 REPORTING & DATA ANALYSIS

Water level and water quality information will be evaluated, and a report generated annually and submitted to DWR and GMD5. The DWR Chief Engineer may periodically review the results of the report and authorize a reduction in the scope of the monitoring plan or reporting requirements if appropriate.

The report will include:

- an evaluation of the analytical results,
- a groundwater surface elevation contour map,
- a map showing the areal distribution of nitrate concentrations,
- a map showing the areal distribution of sulfate concentrations,
- a map showing the areal distribution of chloride concentrations,
- a map showing the areal distribution of TDS concentrations,
- hydrographs of the observation well water levels illustrating the historical water level trends with time, and
- tables containing the analytical data results.

ELECTRONICALLY FILED
2019 May 29 AM 8:02
CLERK OF THE EDWARDS COUNTY DISTRICT COURT
CASE NUMBER: 2019-CV-000005

EXHIBIT B
GERMANE DWR STATUTES AND REGULATIONS

a. KSA § 82a-708a – Applications for permits to appropriate water; fee.

(a) Any person may apply for a permit to appropriate water to a beneficial use, notwithstanding that the application pertains to the use of water by another, or upon or in connection with the lands of another. Any rights to the beneficial use of water perfected under such application shall attach to the lands on or in connection with which the water is used and shall remain subject to the control of the owners of the lands as in other cases provided by law.

(b) Except as otherwise provided in subsections (d), (e) and (f), each application for a permit to appropriate water, except applications for permits for domestic use, shall be accompanied by an application fee fixed by this section for the appropriate category of acre feet in accordance with the following:

[Schedule of Domestic Use Application Fees Omitted]

The chief engineer shall render a decision on such permit applications within 150 days of receiving a complete application except when the application cannot be processed due to the standards established in K.A.R. 5-3-4c. Upon failure to render a decision within 180 days of receipt of a complete application, the application fee is subject to refund upon request.

(c) Except as otherwise provided in subsections (d), (e) and (f), each application for a permit to appropriate water for storage, except applications for permits for domestic use, shall be accompanied by an application fee fixed by this section for the appropriate category of storage-acre feet in accordance with the following:

[Schedule Storage Application Fees Omitted]

The chief engineer shall render a decision on such permit applications within 150 days of receiving a complete application except when the application cannot be processed due to the standards established in K.A.R. 5-3-4c. Upon failure to render a decision within 180 days of receipt of a complete application, the application fee is subject to refund upon request.

(d) Each application for a term permit pursuant to K.S.A. 82a-736, and amendments thereto, shall be accompanied by an application fee established by rules and regulations of the chief engineer in an amount not to exceed \$400 for the five-year period covered by the permit.

(e) For any application for a permit to appropriate water, except applications for permits for domestic use, which proposes to appropriate by both direct flow and storage, the fee charged shall be the fee under subsection (b) or subsection (c), whichever is larger, but not both fees.

(f) Each application for a permit to appropriate water for water power or dewatering purposes shall be accompanied by an application fee of \$100 plus \$200 for each 100 cubic feet per second, or part thereof, of the diversion rate requested in the application for the proposed project.

(g) All fees collected by the chief engineer pursuant to this section shall be remitted to the state treasurer as provided in K.S.A. 82a-731, and amendments thereto.

ii. **KAR 5-3-5 – Approval of application.**

The approval of an application on the prescribed form shall constitute a permit to proceed with the construction of authorized diversion works and the diversion and use of water.

The applicant shall be notified of the approval of the application by transmitting to him or her the original document setting forth the terms, conditions, and limitations of the permit which has been duly dated and signed by the chief engineer or his or her authorized representative. A copy of the approval of application and permit to proceed shall be maintained in the office of the chief engineer or the appropriate field office.

(Authorized by K.S.A. 82a-706a; modified, L. 1978, ch. 460, May 1, 1978.)

b. **KSA § 82a-708b – Application for change in place of use, point of diversion or use; fee; review of action on application.**

(a) Any owner of a water right may change the place of use, the point of diversion or the use made of the water, without losing priority of right, provided such owner shall: (1) Apply in writing to the chief engineer for approval of any proposed change; (2) demonstrate to the chief engineer that any proposed change is reasonable and will not impair existing rights; (3) demonstrate to the chief engineer that any proposed change relates to the same local source of supply as that to which the water right relates; and (4) receive the approval of the chief engineer with respect to any proposed change. The chief engineer shall approve or reject the application for change in accordance with the provisions and procedures prescribed for processing original applications for permission to appropriate water. If the chief engineer disapproves the application for change, the rights, priorities and duties of the applicant shall remain unchanged. Any person aggrieved by an order or decision by the chief engineer relating to an application for change may petition for review thereof in accordance with the provisions of K.S.A. 82a-1901, and amendments thereto.

(b) Each application to change the place of use, the point of diversion or the use made of the water under this section shall be accompanied by the application fee set forth in the schedule below:

[Schedule of Fees Omitted]

The chief engineer shall render a decision on such permit applications within 150 days of receiving a complete application except when the application cannot be processed due to the standards established in K.A.R. 5-3-4c. Upon failure to render a decision within 180 days of receipt of a complete application, the application fee is subject to refund upon request.

(c) All fees collected by the chief engineer pursuant to this section shall be remitted to the state treasurer as provided in K.S.A. 82a-731, and amendments thereto.

d. KAR. 5-5-1, et seq. (the “Change Order Regulations”)¹

KAR 5-5-1 – Filing an application for change.

(a) An application for approval to change the place of use, the point of diversion, the use made of water, or combinations thereof, filed pursuant to K.S.A. 82a-708b and amendments thereto, shall be made on a form prescribed by the chief engineer and shall include whatever information is required by the chief engineer to properly understand the proposed change in the place of use, the point of diversion, the use made of water, or any combination of these.

(b) Before the application may be accepted for filing, the application shall be signed by at least one owner of the water right, or a duly authorized agent of an owner.

(c) Except as set forth in subsection (e), before any approval of an application can be granted, all of the water right owners, including their spouses, or a duly authorized agent of the owners of the water right, shall verify upon oath or affirmation that the statements contained in the application are true and complete.

(d) If one or more owners refuse to sign the application, or a written request is filed by one or more owners to withdraw their signatures from the application before the application is approved, the application shall be dismissed.

(e) (1) An application to change the location of a groundwater point of diversion that proposes to do only the following shall be signed by at least one owner of the approval of application or water right, or the duly authorized agent, who verifies upon oath or affirmation all of the items specified below in paragraph (e)(2):

(A) Move the location of the well 300 or fewer feet; and

(B) have the new well located on land owned by all the same owners as the owners of the original point of diversion.

(2) (A) The signer of the application for change has the authority to sign the application on behalf of all the owners.

(B) None of the ownership interests of any of the owners of the approval of application or water right will be adversely affected if the application for change is approved as filed.

(C) If the application is not approved expeditiously, there will be substantial damage to property, public health, or safety.

(Authorized by K.S.A. 82a-706a; implementing K.S.A. 1999 Supp. 82a-708b; modified, L. 1978, ch. 460, May 1, 1978; amended Sept. 22, 2000.)

KAR 5-5-2a – Complete change application.

(a) An application to change a water right pursuant to K.S.A. 82a-708b, and amendments thereto, shall be considered to be a “complete application,” if the application completely and accurately meets all of the requirements specified in this regulation and the following criteria:

(1) The requirements specified in K.S.A. 82a-708b, and amendments thereto;

(2) any water conservation plans required by the chief engineer pursuant to K.S.A. 82a- 733, and amendments thereto;

(3) the requirements specified in K.A.R. 5-5-1;

(4) the requirements specified in K.A.R. 5-5-5;

(5) the requirements specified in K.A.R. 5-3-4d;

¹ Except as otherwise noted below, all regulations reproduced herein reflect the currently-enacted versions.

- (6) a demonstration that the proposed point of diversion meets all applicable well spacing criteria; and
- (7) the requirements of K.S.A. 82a-301 through K.S.A. 82a-305a, and amendments thereto, if the proposed point of diversion, or rediversion, is a dam or stream obstruction.

(b) If the applicant is requesting a waiver or exemption of a regulation pursuant to K.S.A. 82a-1904, and amendments thereto, the applicant shall submit a written request for the waiver or exemption, and documentation to support the waiver or exemption.

(c) If the proposed point of diversion is located within the boundaries of a groundwater management district, a final recommendation or an analysis of water availability has been received from the groundwater management district within the time allowed by the chief engineer concerning the approval, denial, or modification of the application.

(d) If any questions have been raised concerning whether approval of the application could cause impairment of senior water rights or prejudicially and unreasonably affect the public interest, the applicant shall submit sufficient information to resolve those questions.

(e) If any actions are required to be taken by the applicant on other approvals of applications or water rights owned by the applicant in order to make the application for change approvable, including dismissals, division agreements, reductions in water rights in accordance with K.A.R. 5-7-5, and applications for change, all necessary forms shall be completed and filed with the chief engineer.

(f) If the application involves a change in the place of use or the use made of water, the applicant shall submit all information and data necessary to ensure that the consumptive use will not be increased substantially in violation of K.A.R. 5-5-3.

(g) If the application proposes to add one or more additional wells in accordance with the provisions of K.A.R. 5-5-16, the applicant shall submit all tests, data, and information required by that regulation.

(h) If there is an issue as to whether the water right for which the change application has been filed has been abandoned in whole or in part pursuant to K.S.A. 82a-718, and amendments thereto, the applicant shall submit whatever information is necessary to resolve all abandonment issues.

(i) Each application shall be accompanied by an aerial photograph or a detailed plat with a scale of one inch equals 1,320 feet, or a U.S. geological survey topographic map with a scale of 1:24,000. The following information shall be plotted on the plat, photograph, or topographic map:

- (1) The section corners;
- (2) the center of the section, identified by the section number, township, and range;
- (3) the actual location of the currently authorized point of diversion and the location of the proposed point of diversion indicated by appropriate symbols;
- (4) the location of the place of use identified by crosshatching or by some other appropriate method;
- (5) the location of all other water wells of every kind within one-half mile of the well or wells to be authorized by the proposed appropriation, each of which shall be identified by its use and the name and mailing address of the owner, if the proposed appropriation is for use of groundwater;
- (6) the name and mailing address of the owner or owners of each tract of land adjacent to the stream for a distance of one-half mile upstream and one-half mile downstream from the property lines of

- the land owned or controlled by the applicant, if the proposed appropriation is for the use of surface water;
- (7) the location of proposed or existing dams, dikes, reservoirs, canals, pipelines, power-houses, and other structures for the purpose of storing, conveying, or using water; and
 - (8) a north arrow and scale.

All information shown on the photograph, plat, or map shall be legible. Black line prints may be submitted in lieu of the original drawing if a plat is submitted.

(j) The applicant shall certify on the application that all water wells of any kind located within one-half mile of the requested point of diversion have been plotted on the plat, photograph, or map attached to the application.

(k) The applicant shall submit all information and data necessary to demonstrate that the application complies with the applicable regulations adopted by the chief engineer.

(Authorized by K.S.A. 82a-706a; implementing K.S.A. 82a-706a, K.S.A. 2002 Supp. 82a-708b, K.S.A. 82a-709, K.S.A. 82a-710, K.S.A. 2002 Supp. 82a-711, K.S.A. 2002 Supp. 82a-718, K.S.A. 82a-733, and K.S.A. 2002 Supp. 82a-1904; effective Oct. 24, 2003.)

KAR 5-5-3 – Change in consumptive use.

The extent of consumptive use shall not be increased substantially after a vested right has been determined or the time allowed in which to perfect the water right has expired, including any authorized extension of time to perfect the water right.

(Authorized by K.S.A. 82a-706a, 82a-708b; effective May 1, 1983.)

KAR 5-5-5 – Signatures required on change applications.

If more than one person is the owner of a water right, and an application is filed for a change in the place of use, point of diversion, use made of the water, or any combination thereof, only the signature(s) of the landowner(s) whose portion of the water right(s) is (are) involved in the change shall be required on the application. If the extent of each owner's interest in the water right has not been legally determined, then all landowners holding an undetermined portion of the water right must sign the change application or the landowners must submit an agreement signed by all landowners agreeing how the water right should be divided.

(Authorized by K.S.A. 82a-706a, 82a-708b; effective May 1, 1980.)

KAR 5-5-6 – Failure to construct diversion works at authorized location.

(a) If an application to appropriate water for beneficial use is approved by the chief engineer, the location of the point of diversion shall be limited to a specific tract of land and to within 300 feet of a point identified in distances measured in feet north and west from the southeast corner of the legal section.

(b) If the diversion works were not constructed at the location authorized for the point of diversion, but the appropriator can demonstrate to the satisfaction of the chief engineer that all of the following criteria have been met, the authorized location shall be corrected to the actual location of the point of diversion by a correctional order issued by the chief engineer:

- (1) The original application was filed before January 1, 1978.
- (2) The diversion works were constructed before the date the original application to appropriate water was signed.
- (3) It was not discovered that the actual diversion works were not constructed at the authorized point of diversion until after the application was approved.
- (4) The diversion works were constructed at a location that could have been approved at the time the original application was filed based on the criteria in effect at the time the original application was filed.

(c) An application for a change in point of diversion filed pursuant to K.S.A. 82a-708b and amendments thereto shall be approved by the chief engineer, authorizing the actual location where the diversion works were constructed and extending the time to construct the diversion works until the end of the calendar year in which the application to change the point of diversion was approved, if the diversion works were not constructed at the authorized location, but the appropriator can demonstrate to the satisfaction of the chief engineer that all of the following criteria have been met:

- (1) The original application was filed with the chief engineer before January 1, 1978.
- (2) The diversion works were completed after the application was filed, but within the time authorized to construct the diversion works.
- (3) The diversion works were constructed within 1,320 feet of the authorized point of diversion.
- (4) The diversion works were constructed at a location that could have been approved at the time that the original application was filed based upon the criteria in effect at the time the original application was filed.
- (5) The change application meets the other criteria of K.S.A. 82a-708b and amendments thereto.

If the actual point of diversion is within a groundwater management district, the application shall be sent to the groundwater management district board for review and recommendation.

(d) The point of diversion shall be authorized at the actual location by approval of a new application to appropriate water by the chief engineer if the diversion works were not constructed at the authorized location, but the appropriator can demonstrate to the chief engineer that all of the following criteria have been met:

- (1) The original application was filed on or after January 1, 1978.
- (2) The diversion works were subsequently completed within the time authorized to complete the diversion works.
- (3) The diversion works were constructed within 1,320 feet of the authorized point of diversion.
- (4) The time authorized to complete the diversion works has expired.
- (5) There is no water available for a new appropriation to be approved at the location of the actual point of diversion.
- (6) The application would have met all the criteria for a new application that were in effect at the time the original new application was filed.

If the actual point of diversion is within a groundwater management district, the application shall be sent to the groundwater management district board for review and recommendation.

(Authorized by K.S.A. 82a-706a; implementing K.S.A. 1999 Supp. 82a-708b, and K.S.A. 82a-728; effective May 1, 1980; amended Sept. 22, 2000.)

KAR 5-5-6c – Authorized point of diversion or place of use.

(a) If a point of diversion or place of use meets the following conditions, the authorized location shall be administratively corrected by the chief engineer to the more accurate location and the owner notified of this action:

- (1) Has been determined by the chief engineer to be located at the authorized location by a vested right determination, a certificate of appropriation, or other similar action or approval by the chief engineer;
- (2) has not been physically moved or expanded since the location was certified or otherwise approved by the chief engineer; and
- (3) is determined by the chief engineer to be incorrect based on a more accurate survey, a global positioning system determination, or other reliable means.

No enforcement action shall be taken against the owner of the water right solely because the location was determined to be at an unauthorized location with the use of better technology than was previously available.

(b) The maximum annual quantity of water authorized to be used by the water right shall not be decreased or increased because of any administrative correction made to the water right pursuant to subsection (a).

(Authorized by and implementing K.S.A. 82a-706a; effective P-Oct. 31, 2008.)

KAR 5-5-7 – Waste of water.

Each person shall not commit a waste of water as defined in these regulations. Upon a finding by the chief engineer that waste of water has occurred, the chief engineer may suspend use of that water right until the owner shows to the satisfaction of the chief engineer that the waste of water will no longer occur.

(Authorized by K.S.A. 82a-706(a); implementing K.S.A. 82a-706; effective Dec. 3, 1990.)

KAR 5-5-8 – Standards for approval of an application for a change in the place of use and a change in the use made of water (“No Injury Regulation”).

(a) Each application for a change in the place of use or the use made of water which will materially injure or adversely affect water rights or permits to appropriate water with priorities senior to the date the application for change is filed shall not be approved by the chief engineer.

(b) Each approval of a change application shall be conditioned by the chief engineer with the terms, conditions and limitations the chief engineer deems necessary to protect the public interest and enforce the terms of K.A.R. 5-5-3.

(c) As used in K.A.R. 5-5-3, “consumptive use” means gross diversions minus:

- (1) waste of water, as defined in K.A.R. 5-1-1(cc); and
- (2) return flows to the source of water supply:
 - (A) through surface water runoff which is not waste; and
 - (B) by deep percolation.

(d) The maximum annual quantity and maximum rate of diversion of water authorized by an approval of an application for a change in the use made of water shall not exceed the maximum annual quantity or maximum rate of diversion perfected at the time the application for change in the use made of water is filed with the chief engineer.

(Authorized by K.S.A. 82a- 706a; implementing K.S.A. 1993 Supp. 82a-708b; effective Nov. 28, 1994.)

KAR 5-5-9 (1994 version) – Approval of application for a change in the use made of water from irrigation to any other type of beneficial use of water (“Consumptive Use Regulations”).

(a) The approval of a change in the use made of water from irrigation to any other type of beneficial use shall not be approved if it will cause the net consumptive use from the local source of water supply to be greater than the net consumptive use from the same local source of water supply by the original irrigation use based on the following criteria:

(1) The maximum annual quantity of water to be allowed by the change approval shall be the net irrigation requirement (NIR) for the 50% chance rainfall for the county of origin, as set forth in K.A.R. 5-5-12, multiplied by the maximum acreage legally Irrigated under the authority of the water right in any one calendar year during the perfection period. For vested rights, the acreage used shall be the maximum acreage irrigated prior to June 28, 1945; or

(2) if the applicant establishes to the satisfaction of the chief engineer the need for more flexibility in the authorized annual quantity, the application may be approved subject to the following limits.

(A) The maximum annual quantity of water to be allowed by the change approval shall be the NIR for the 80% chance rainfall for the county of origin, as set forth in K.A.R. 5-5-12, multiplied by the maximum acreage legally irrigated in any one calendar year during the perfection period. For vested rights the acreage used shall be the maximum acreage irrigated prior to June 28, 1945.

(B) The new type of beneficial use shall be further limited by a five year fixed allocation of water in which the NIR for a 50% chance rainfall for the county of origin, as set forth in K.A.R. 5-5-12, is multiplied by five times the maximum acreage lawfully irrigated in any one calendar year during the perfection period. For vested rights, the acreage used shall be the maximum acreage irrigated prior to June 28, 1945.

(C) An application for a term permit which will circumvent the five year allocation of water limit shall not be approved by the chief engineer.

(3) In determining whether the net consumptive use of water will be increased by the proposed change in the use made of water, the applicant shall be given credit by the chief engineer for any return flows from the proposed type of beneficial use which will return to the same local source of supply as the return flows from the originally authorized type of beneficial use as substantiated by the applicant to the satisfaction of the chief engineer by an engineering report or similar type of hydrologic analysis.

(4) The authorized quantity to be changed to the new type of beneficial use shall never exceed the maximum annual quantity authorized by the water right.

(5) If a water right which overlaps the authorized place of use of one or more other water rights, either in whole or in part, is being changed to a different type of beneficial use, the total net consumptive use of all water rights after the change is approved shall not exceed the total net consumptive use of all of the rights before the change is approved.

(6) The approval for a change in the use made of water shall also be limited by that quantity reasonable for the use proposed by the change in the use made of water.

(b) Upon request of the applicant, the historic net consumptive use actually made during the perfection

period, or prior to June 28, 1945 in the case of vested rights, under the water right proposed to be changed shall be considered by the chief engineer, but the burden shall be on the owner to document that historic net consumptive use with an engineering study, or an equivalent documentation and analysis, and demonstrate to the satisfaction of the chief engineer that the analysis submitted by the applicant is a more accurate estimate of the historic net consumptive use than the net consumptive use calculated using the methodology set forth in paragraph (a)(1).

(c) If the methods set forth in subsection (a) produce an authorized annual quantity of water which appears to be unrealistic and could result in impairment of other water rights, the chief engineer shall make a site-specific net consumptive use analysis to determine the quantity of water which was actually beneficially consumed under the water right. The quantity approved shall be limited to the quantity determined to be reasonable by the chief engineer's analysis.

(Authorized by K.S.A. 82a-706a; implementing K.S.A. 1993 Supp. 82a-708b; effective Nov. 28, 1994.)

KAR 5-5-10 – Partial changes in the use made of water from irrigation to another type of beneficial use of water.

[omitted]

KAR 5-5-11 – Applications for change in place of use for irrigation purposes.

(a) For the purpose of this regulation, "base acreage" means:

- (1) the maximum number of acres actually legally irrigated in any one calendar year on or before December 31, 1994 if the perfection period expired on or before December 31, 1994 or the water right is a vested right; or
- (2) if the perfection period expires after December 31, 1994, and the perfection period has not expired at the time the change application has been filed, the base acreage shall be the number of acres authorized by the permit; or
- (3) if the perfection period expires after December 31, 1994, and the perfection period has expired at the time the change application was filed, the base acreage shall be the maximum acreage legally irrigated in any one calendar year during the perfection period.
- (4) Any year in which any of the terms, conditions and limitations of the water right or permit were violated shall not be used to determine base acreage.

(b) An application to change the authorized place of use for irrigation purposes which would permit the applicant to exceed the base acreage by 10 acres or 10 percent, whichever is less, shall not be approved by the chief engineer because it would result in a substantial increase in net consumptive use in violation of K.A.R. 5-5-3 except when one of the six following criteria are met.

- (1) Identical places of use.
 - (A) The change application shall be filed only for the purpose of creating an identical place of use with another water right or rights;
 - (B) there shall not be a net increase in authorized acres;
 - (C) each water right involved in the proposed identical overlap in place of use shall be certified by the chief engineer prior to processing the change application if approval of the change application would authorize an increase in base acreage; and
 - (D) the total quantity authorized by all existing water rights and all permits involved shall be reasonable to irrigate the land authorized after the change in place of use is approved.
- (2) Necessity to install more efficient irrigation system; limited acres and quantity.

(A) The change applicant shall submit information demonstrating to the satisfaction of the chief engineer that it is necessary to increase the base acreage so that a significantly more efficient irrigation delivery system may be installed. Types of crops to be grown or tillage practices used shall not be considered in deciding whether the proposed system is more efficient.

(B) If the chief engineer approves the application for a change in place of use pursuant to this subsection, the following limitations shall apply.

(i) The authorized quantity of water under the water right shall be limited to a 5 year fixed allocation, computed by dividing the net irrigation requirement (NIR), as set forth in K.A.R. 5-5-12, for the 50% chance rainfall for the county where the place of use is located, by an efficiency factor of 0.85, multiplying by the base acreage as determined in subsection (a) of this regulation, and then multiplying by 5. In any given year, the water right owner shall still be authorized to divert the maximum annual quantity authorized, provided that the 5 year allocation is not exceeded.

(ii) The maximum number of irrigated acres that shall be allowed under the proposed change in place of use shall be computed by multiplying the currently authorized annual quantity by 0.85 and dividing by the NIR, as set forth in K.A.R. 5-5-12, for the 80% chance rainfall for the county where the place of use is located.

(iii) The approval of the change shall be conditioned so that the use of water in excess of the five year allocation shall result in a two year suspension of all water use under that water right and a subsequent restriction of the authorized place of use to the base acreage at a location specifically set forth in the change approval.

(3) Necessity to install a more efficient irrigation system; limited quantity.

(A) The groundwater management district in which the point of diversion is located shall agree to assume monitoring responsibility to ensure compliance with the conditions of the change approval;

(B) the applicant shall submit information demonstrating to the satisfaction of the chief engineer that it is necessary to increase the base acreage so that a significantly more efficient irrigation delivery system may be installed;

(C) the applicant shall submit a feasible operation plan demonstrating to the satisfaction of the chief engineer that the amount of water available for appropriation under that water right is reasonable to irrigate the number of acres requested to be irrigated; and

(D) the water right owner shall have no recent pattern of water use significantly in excess of the maximum annual quantity of water authorized.

(E) If the chief engineer approves the application for a change in place of use pursuant to this subsection, the following limitations shall apply.

(i) The authorized quantity of water under the water right shall be limited to a 5-year fixed allocation, computed by dividing the net irrigation requirement (NIR), as set forth in K.A.R. 5-5-12, for the 50% chance rainfall for the county where the place of use is located by an efficiency factor of 0.85, multiplying by the base acreage irrigated as determined in subsection (a) of this regulation, and then multiplying by 5. In any given year, the water right owner shall still be authorized to divert the maximum annual quantity authorized, provided that the 5-year allocation is not exceeded.

(ii) The approval of the change shall be conditioned so that the use of water in excess of the five-year allocation shall result in a two-year suspension of all water use under that water right and a subsequent restriction of the authorized place of use to the base acreage at a location specifically set forth in the change approval.

(4) Rotation of the irrigated land within the authorized place of use.

(A) The point of diversion is located outside a groundwater management district or the groundwater management district in which the point of diversion is located shall agree to assume monitoring responsibility to ensure compliance with the conditions of the change approval;

(B) the water right owner shall have no recent pattern of water use significantly in excess of the maximum annual quantity of water authorized; and

(C) approval of the change application shall result in a net increase in the number of acres authorized for irrigation purposes solely for the purpose of rotation of the irrigated land within the authorized place of use.

(D) If the chief engineer approves the application for a change in place of use pursuant to this subsection, the following limitations shall apply.

(i) Approval of the change application shall be limited by the chief engineer so that the net acres physically irrigated in any one calendar year after the change approval shall not exceed the base acreage; and

(ii) the approval shall be conditioned so that the use of water on more than the maximum number of acres authorized to be irrigated in any one calendar year shall result in a two-year suspension of all water use under that water right and a subsequent restriction of the authorized place of use to the base acreage at a location specifically set forth in the change approval.

(5) Specific groundwater management district regulation.

The application shall meet the criteria in a regulation adopted by the chief engineer pursuant to K.S.A. 82a-1028(o) and K.S.A. 82a-706a specifically for changes in place of use for irrigation purposes for the groundwater management district in which the point of diversion is located.

(6) No increase in historic net consumptive use.

The applicant shall demonstrate to the satisfaction of the chief engineer, with an engineering report or similar type of hydrologic analysis, that the historic net consumptive use will not be increased substantially if the proposed change in place of use is approved.

(c) If the chief engineer determines that the application cannot be approved as filed, the applicant shall be notified in writing by the chief engineer prior to denial that the change application requirements have not been met and the reason for the proposed denial.

(1) In this written notice the chief engineer shall allow the applicant 15 days to request time in which to submit additional information to show why the application should be approved.

(2) Upon written request, the applicant shall be given a reasonable time specified by the chief engineer to submit an engineering report or similar type of hydrologic analysis to show that approval of the change application will not substantially increase the historic net consumptive use.

(3) The applicant shall have the burden of demonstrating to the satisfaction of the chief engineer that approval of the change application will not cause the historic net consumptive use to be increased substantially.

(d) Whether or not the time to perfect the water right has expired, including any authorized extensions of time, the application for a change in place of use to change the size of the authorized place of use for irrigation purposes may be approved without the certificate of appropriation being issued except as provided in subsection (b)(1)(C) of this regulation.

(1) If a certificate of appropriation has not been issued, the increase in base acreage shall be determined based on reliable information.

(2) The types of acceptable information shall include, but not be limited to, field inspection reports or U.S. department of agriculture records.

(e) A flow meter meeting the specifications adopted by the chief engineer, and installed and maintained in a manner satisfactory to the chief engineer, shall be required by the chief engineer in all cases where there

is an increase in the base acreage authorized to be irrigated by the approval of the change in the place of use, except when:

- (1) the application for change in place of use is filed solely to create an identical place of use with other water rights; and
- (2) the total quantity authorized by all existing water rights and all permits to appropriate water that are involved equals or exceeds the NIR, as set forth in K.A.R. 5-5-12, in that county for a 50% chance rainfall divided by an irrigation efficiency of 0.85.

(Authorized by K.S.A. 82a-706a; implementing K.S.A. 1993 Supp. 82a-708b; effective Nov. 28, 1994.)

KAR 5-5-12 – Net irrigation requirements (NIR).

[NIR Tables Omitted]

KAR 5-5-13 – Relocation of alluvial wells.

(a) If an authorized point of diversion is a well that has as its source of supply an alluvium in a reach of a basin that is fully appropriated or closed to new appropriations, the approval of a change in point of diversion, and any subsequent approvals of changes in points of diversion, shall not authorize the distance between the well and the centerline of the stream to be decreased by more than 10 percent as measured from the following:

- (1) The authorized well location when the basin became fully appropriated or was closed to new appropriations; and
- (2) the centerline of the stream when the change application was filed.

(b) Only for the purposes of applying this regulation, the term “stream” shall include the main stem and any tributary to the main stem that was a perennial stream when the basin was closed to new appropriations.

(Authorized by K.S.A. 82a-706a; implementing K.S.A. 2007 Supp. 82a-708b; effective Sept. 22, 2000; amended Oct. 31, 2008.)

KAR 5-5-14 – Duties of owners of approvals of applications and water rights.

[omitted]

KAR 5-5-16 – Additional wells.

(a) An application to change a point of diversion by adding an additional point of diversion to divert groundwater, by either constructing a new well or moving a portion of a water right to a well that has previously been authorized by the chief engineer, shall not be approved unless the application meets the following requirements:

- (1) Each proposed point of diversion shall meet the requirements of K.S.A. 82a-708b, and amendments thereto, and any applicable regulations adopted by the chief engineer.
- (2) The total maximum quantity of water authorized to be diverted each calendar year by the original well or wells, and the additional well or wells, shall not exceed any of the following limits:
 - (A) The maximum annual quantity of water that has been perfected;
 - (B) the maximum annual quantity of water authorized to be diverted before approval of the change; or
 - (C) the maximum consumptive use of water during the perfection period as required by K.A.R. 5-5-3 and as specified in either of the following:

(i) If the water right authorizes the use of water for irrigation use, the consumptive use of water shall be presumed to not be increased in violation of K.A.R. 5-5-3 if the maximum annual quantity requested does not exceed the quantity in acre-feet calculated by use of the following formula: multiply the maximum number of acres legally irrigated in any one year during the perfection period by the 80 percent chance net irrigation requirements (N.I.R.), as specified in K.A.R. 5-5-12 expressed in acre-feet, and divide that number by a delivery efficiency of 0.85; or (ii) if the water right authorizes the use of water for irrigation and an additional well or wells are authorized for a beneficial use of water that is not irrigation, the consumptive use of the portion of the water right used for irrigation shall be determined as specified in paragraph (a)(2)(C)(i). The non-irrigation portion of the water right available for diversion shall be determined as specified in K.A.R. 5-5-9 and K.A.R. 5-5-10.

(3) The total maximum rate of diversion that may be authorized for the original well or wells and the additional well or wells shall not be greater than the total maximum rate of diversion that could have been diverted from the original well or wells if they were currently being replaced by new wells at substantially the originally authorized location or locations in the same local source of supply. The maximum rate of diversion shall be one of the following:

(A) The total rate of diversion based on a current water flow rate test done on the point or points of diversion; or

(B) a value resulting from a hydraulic analysis, which may include rate tests, pump tests, and water level data, submitted by the applicant and acceptable to the chief engineer based on the veracity of its data and its proper application of scientific principles, showing the current capacity of the aquifer to yield water at the currently authorized point or points of diversion.

(4) A condition shall be placed on the approval of the application for change authorizing the additional well or wells that provides that, for the sole purpose of administering wells concerning direct impairment, the additional well or wells shall be considered to have the priority of the date the application was filed to add the additional well or wells.

(b) The applicant shall submit the following information:

(1) A well completion log of the currently authorized well or a stratigraphic log of a test hole located within 300 feet of the currently authorized well;

(2) the depth of the currently authorized well;

(3) the current depth to the static water level of the currently authorized well;

(4) a stratigraphic log of a test hole located within 300 feet of the proposed location of each of the proposed additional well or wells; and

(5) any additional information that the chief engineer may require to understand the nature of the proposed additional well or wells.

(c) The proposed additional well or wells shall meet one of the following conditions:

(1) Meet the well spacing requirements to all other wells with a priority earlier than the date on which the change application was filed; or

(2) demonstrate by a hydraulic analysis, which may include rate tests, pump tests, and water level data, as submitted by the applicant and acceptable to the chief engineer based on the veracity of its data and its proper application of scientific principles, that the approval of an additional well within 300 feet of a currently authorized well location, or within the geographic center of a currently authorized battery of wells, will neither impair any water rights senior to the date on which the application for change was filed nor prejudicially affect the public interest.

(d) Each point of diversion authorized by an approval of an application for change for an additional well shall have a specific assignment of a maximum instantaneous rate of diversion and a maximum annual quantity of water.

(e) Each well authorized by a water right that has been changed under the provisions of this regulation shall be equipped with a separate water flowmeter that meets or exceeds the specifications for water flowmeters adopted by the chief engineer.

(f) Each approval of an additional well or wells shall have a condition that reserves jurisdiction for the chief engineer to review the approval of the additional well or wells at intervals of at least five years, and not more than 10 years, to determine if the total annual quantity of water actually being withdrawn by all wells authorized by the approval of an application for change is exceeding the total annual quantity of water that could have been physically withdrawn if the additional well or wells had not been approved. If the chief engineer determines during the review that the total annual quantity being withdrawn by all the wells, including the additional wells, exceeds the total annual quantity of water that could have been physically withdrawn by the original well or wells, the total maximum annual quantity that can be withdrawn by all the wells shall be reduced by the chief engineer to the total maximum annual quantity that could have been physically withdrawn by the original well or wells.

(Authorized by K.S.A. 82a-706a; implementing K.S.A. 82a-706a and K.S.A. 2016 Supp. 82a-708b; effective Sept. 22, 2000; amended Oct. 24, 2003; amended Sept. 22, 2017.)

e. KSA § 82a-1501, et seq.(the “Water Transfer Act”)

KSA § 82a-1501 – Water transfer act; definitions.

As used in the water transfer act:

- (a) (1) "Water transfer" means the diversion and transportation of water in a quantity of 2,000 acre feet or more per year for beneficial use at a point of use outside a 35-mile radius from the point of diversion of such water. In determining the amount of water transferred in the case of a water transfer supplying water to multiple public water supply systems or other water users, the amount of water transferred shall be considered to be the aggregate amount of water which will be supplied by the transfer to all public water supply systems and other water users whose points of use are located outside a 35-mile radius from the point of diversion of such water.
- (2) Water transfer does not include a release of water from a reservoir to the water's natural watercourse for use within the natural watercourse or watershed, made under the authority of the state water plan storage act (K.S.A. 82a-1301 et seq. and amendments thereto) or the water assurance program act (K.S.A. 82a-1330 et seq. and amendments thereto).
- (b) "Point of diversion" means:
- (1) The point where the longitudinal axis of the dam crosses the center line of the stream in the case of a reservoir;
 - (2) the location of the headgate or intake in the case of a direct diversion from a river, stream or other watercourse;
 - (3) the location of a well in the case of groundwater diversion; or
 - (4) the geographical center of the points of diversion in the case of multiple diversion points.
- (c) "Point of use" means the geographical center of each water user's proposed or authorized place of use where any water authorized by the proposed transfer will be used.
- (d) "Chief engineer" means the chief engineer of the division of water resources of the Kansas department of agriculture.
- (e) "Secretary" means the secretary of the department of health and environment, or the director of the division of environment of the department of health and environment if designated by the secretary.
- (f) "Director" means the director of the Kansas water office.
- (g) "Panel" means the water transfer hearing panel.
- (h) "Party" means: (1) The applicant; or (2) any person who successfully intervenes pursuant to K.S.A. 82a-1503 and amendments thereto and actively participates in the hearing. "Party" does not mean a person who makes a limited appearance for the purpose of presenting a statement for or against the water transfer.
- (i) "Commenting agencies" means groundwater management districts and state natural resource and environmental agencies, including but not limited to the Kansas department of health and environment, the Kansas water office, the Kansas water authority, the Kansas department of wildlife parks and tourism and the division of water resources of the Kansas department of agriculture.
- (j) "Public water supply system" means any water supply system, whether publicly or privately owned, for which a permit is required pursuant to K.S.A. 65-163 and amendments thereto.

KSA § 82a-1501a – Hearing panel; presiding officer appointed, when.

(a) The water transfer hearing panel shall consist of the chief engineer, the director and the secretary. The chief engineer shall serve as chairperson of the panel. All actions of the panel shall be taken by a majority of the members. The panel shall have all powers necessary to implement the provisions of this act.

(b) The panel shall request a presiding officer from the office of administrative hearings to conduct a hearing in accordance with this act when: (1) An application for a water transfer is complete; or (2) the chief engineer, or the panel by a majority vote which includes the vote of the chief engineer, determines it to be in the best interest of the state to conduct a water transfer hearing on an application for a permit to appropriate water or an application for a change to an existing water right pursuant to the Kansas water appropriation act or on a proposed contract for the sale of water from the state's conservation storage water supply capacity, even though the appropriation or sale would not be a water transfer as defined by K.S.A. 82a-1501 and amendments thereto.

(c) The hearing officer shall be an independent person knowledgeable in water law, water issues and hearing procedures. The hearing officer shall be a presiding officer for the purposes of the Kansas administrative procedure act. Subject to approval by the panel, the hearing officer, on behalf of the state, may employ such personnel and contract for such services and facilities as necessary to carry out the hearing officer's duties under this act.

KSA § 82a-1502 – Approval of Transfers, Conditions.

(a) No person shall make a water transfer in this state unless and until the transfer is approved pursuant to the provisions of this act. No water transfer shall be approved which would reduce the amount of water required to meet the present or any reasonably foreseeable future beneficial use of water by present or future users in the area from which the water is to be taken for transfer unless: (1) The panel determines that the benefits to the state for approving the transfer outweigh the benefits to the state for not approving the transfer; (2) the chief engineer recommends to the panel and the panel concurs that an emergency exists which affects the public health, safety or welfare; or (3) the governor has declared that an emergency exists which affects the public health, safety or welfare. Whenever an emergency exists, a water transfer may be approved by the panel on a temporary basis for a period of time not to exceed one year under rules and regulations adopted by the chief engineer. The emergency approval shall be subject to the terms, conditions and limitations specified by the panel.

(b) No water transfer shall be approved under the provisions of this act: (1) If such transfer would impair water reservation rights, vested rights, appropriation rights or prior applications for permits to appropriate water; and (2) unless the presiding officer determines that the applicant has adopted and implemented conservation plans and practices that (A) are consistent with the guidelines developed and maintained by the Kansas water office pursuant to K.S.A. 74-2608, and amendments thereto, (B) have been in effect for not less than 12 consecutive months immediately prior to the filing of the application on which the hearing is being held and (C) if the transfer is for use by a public water supply system, include the implementation of a rate structure which encourages the efficient use of water that is determined by the presiding officer to be effective and if designed, implemented and maintained properly, will result in wise use and responsible conservation and management of water used by the system.

(c) To determine whether the benefits to the state for approving the transfer outweigh the benefits to the state for not approving the transfer, the presiding officer shall consider all matters pertaining thereto, including specifically:

- (1) Any current beneficial use being made of the water proposed to be diverted, including minimum desirable streamflow requirements;
- (2) any reasonably foreseeable future beneficial use of the water;
- (3) the economic, environmental, public health and welfare and other impacts of approving or denying the transfer of the water;
- (4) alternative sources of water available to the applicant and present or future users for any beneficial use;
- (5) whether the applicant has taken all appropriate measures to preserve the quality and remediate any contamination of water currently available for use by the applicant;
- (6) the proposed plan of design, construction and operation of any works or facilities used in conjunction with carrying the water from the point of diversion, which plan shall be in sufficient detail to enable all parties to understand the impacts of the proposed water transfer;
- (7) the effectiveness of conservation plans and practices adopted and implemented by the applicant and any other entities to be supplied water by the applicant;
- (8) the conservation plans and practices adopted and implemented by any persons protesting or potentially affected by the proposed transfer, which plans and practices shall be consistent with the guidelines for conservation plans and practices developed and maintained by the Kansas water office pursuant to K.S.A. 74-2608, and amendments thereto; and
- (9) any applicable management program, standards, policies and rules and regulations of a groundwater management district.

KSA § 82a-1503 – Application for transfer; hearing, procedure; costs of hearing, fund.

(a) Any person desiring to make a water transfer shall file with the chief engineer an application in the form required by rules and regulations adopted by the chief engineer. If the chief engineer finds the application to be insufficient to enable the chief engineer to determine the source, nature and amount of the proposed transfer, or if the application is not complete, the application shall be returned for correction or completion or for any other necessary information.

(b) The presiding officer shall commence the hearing process by giving notice of the prehearing conference not more than 14 days after the panel is assigned an officer. Such notice shall be given by mail to the applicant, any other parties who have intervened and the appropriate commenting agencies and shall be published in the Kansas register and in at least two newspapers having general circulation in the area where the proposed point of diversion is located. The presiding officer shall hold a prehearing conference which shall commence not less than 90 and not more than 120 days after the required notice has been given and shall conclude not later than 45 days after commencement. Not less than 90 and not more than 120 days after the conclusion of the prehearing conference, the presiding officer shall commence a formal public hearing. The formal public hearing shall be held in the basin of origin and, if deemed necessary by the presiding officer, a public comment hearing shall be held in the basin of use. The formal public hearing shall conclude not later than 120 days after commencement and the initial order of the presiding officer approving or disapproving the water transfer shall be issued not later than 90 days after conclusion of the formal public hearing. The presiding officer may extend a time limit provided by this subsection, but only with the written consent of all parties or for good cause shown.

(c) Intervention in the hearing shall be in accordance with the Kansas administrative procedure act, except that any petition for intervention must be submitted and copies mailed to all parties not later than 60 days before the formal hearing.

(d) Any person shall be permitted to appear and testify at any hearing under this act upon the terms and conditions determined by the presiding officer.

(e) At intervals during or at the conclusion of the hearing, the presiding officer shall fairly and equitably assess the following costs of the hearing among the applicant and other parties: The hearing facility, the court reporter, the salary of a presiding officer who is not paid for services as a hearing officer by state funds, the travel expenses of the presiding officer and other reasonable costs associated with the hearing. The presiding officer may assess any or all anticipated costs to the applicant before the hearing and subsequently may assess other parties for the parties' fair and equitable portion of the anticipated costs assessed the applicant. Amounts assessed pursuant to this subsection shall be paid to the chief engineer. Upon receipt thereof, the chief engineer shall remit the entire amount to the state treasurer in accordance with the provisions of K.S.A. 75-4215, and amendments thereto. Upon receipt of each such remittance, the state treasurer shall deposit the entire amount in the state treasury to the credit of the water transfer hearing fund established by subsection (f).

- (f) (1) There is hereby established in the state treasury the water transfer hearing fund.
- (2) Moneys credited to the water transfer hearing fund shall be used only to pay: (A) Costs of hearings conducted pursuant to the water transfer act; (B) reimbursement of the applicant for anticipated costs assessed the applicant and subsequently assessed other parties; and (C) refunds of unused moneys assessed as anticipated costs before the hearing. Expenditures from such fund shall be made in accordance with appropriation acts upon warrants of the director of accounts and reports, or a person designated by the director of accounts and reports pursuant to K.S.A. 75-3732 and amendments thereto, issued pursuant to vouchers approved by the chief engineer, or a person designated by the chief engineer.
- (3) On or before the 10th of each month, the director of accounts and reports shall transfer from the state general fund to the water transfer hearing fund interest earnings based on:
- (A) The average daily balance of moneys in the water transfer hearing fund for the preceding month; and
 - (B) the net earnings rate for the pooled money investment portfolio for the preceding month.

KSA § 82a-1504 – Order of presiding officer; review by panel, procedure; record of proceedings.

(a) The presiding officer shall render an order either approving or disapproving the proposed water transfer. The presiding officer's order shall include findings of fact relating to each of the factors set forth in subsection (c) of K.S.A. 82a-1502 and amendments thereto. The presiding officer may order approval of a transfer of a smaller amount of water than requested upon such terms, conditions and limitations as the presiding officer deems necessary for the protection of the public interest of the state as a whole.

(b) An order of the presiding officer disapproving or approving a water transfer, in whole or in part, shall be deemed an initial order. The panel shall be deemed the agency head for the purpose of the Kansas administrative procedure act and shall review all initial orders of the presiding officer in accordance with the Kansas administrative procedure act. Review by the panel shall be in accordance with the standards provided by this act for the presiding officer's initial order and shall be based on the record of the hearing. The final order of the panel shall be entered not later than 90 days after entry of the hearing officer's initial order, except that the panel may extend the 90-day limit, but only with the written consent of all parties or for good cause shown.

(c) Any proceedings pursuant to this act and notice of such proceedings shall be in accordance with the provisions of the Kansas administrative procedure act except as specifically provided by this act.

(d) The record of any hearing or other proceeding held pursuant to this act shall be maintained and made [made] available for public examination in the office of the chief engineer.

KSA § 82a-1505 – Review and enforcement of panel action; precedence over other cases.

- (a) Any action of the panel is subject to review in accordance with the Kansas judicial review act.
- (b) The review proceedings shall have precedence in the district court. Appellate proceedings shall have precedence in the court of appeals and in the state supreme court under such terms and conditions as the supreme court may fix by rule.

Kan. Stat. Ann. § 82a-1506 – Same; rules and regulations.

The chief engineer shall adopt all rules and regulations necessary to effectuate and administer the provisions of this act.

Kan. Stat. Ann. § 82a-1507 – Title of act; application of other laws.

(a) K.S.A. 82a-1501 through 82a-1506, K.S.A. 82a-1501a and this section shall be known and may be cited as the water transfer act.

(b) This act shall not be construed as to exempt the applicant from first complying with the provisions of:
(1) Any applicable management program adopted by a groundwater management district pursuant to K.S.A. 82a-1020 and amendments thereto, if such management program (A) does not prohibit water transfers out of the district, (B) applies equally to water users both inside and outside the district and (C) does not have the effect of discriminating against users located outside the district; or (2) the Kansas water appropriation act or the state water plan storage act, whichever is applicable.

KSA § 82a-1508 – Severability.

If any provision of this act or the application thereof to any person or circumstances is held invalid, the invalidity does not affect other provisions or applications of this act which can be given effect without the invalid provision or application. To this end the provisions of this act are severable.

i. Kan. Admin. Regs. 5-50-1, et seq. (the “Water Transfer Regulations”)

KAR 5-50-1 – Definitions.

As used in these rules and regulations, unless the context clearly requires otherwise:

(a) Application" means the document, made on the prescribed form furnished by the chief engineer, to request a permit to transfer water. The application shall be filed in the office of the chief engineer as provided in K.S.A. 82a-1501 et seq., as amended.

(b) Approval of application" means issuance of a permit to transfer water as defined in K.S.A. 82a-1501(a)(1), as amended.

(Authorized by K.S.A. 82a-1506; implementing K.S.A. 1995 Supp. 82a-1501; effective May 1, 1984; amended Dec. 27, 1996.)

Kan. Admin. Regs. 5-50-2 – Requirements for application.

To be complete, a water transfer application shall show the following:

(a) the name and mailing address of the applicant;

(b) the maximum quantity of water proposed to be transferred in a calendar year and the proposed maximum diversion rate;

(c) the location of the proposed point or points of diversion;

(d) the location of the proposed point or points of use;

(e) the proposed use made of the water;

(f) any economically and technologically feasible alternative source or sources of supply available to the applicant and to any other present or future users of the water proposed to be transferred. The water transfer application shall specify why this source of supply was selected over the alternative sources available;

(g) the proposed plan of design, construction and operation of any works or facilities used in conjunction with carrying the water from the point or points of diversion to the proposed point or points of use. The proposed plan shall be in sufficient detail to enable all parties to understand the impacts of the proposed water transfer;

(h) the estimated date for completion of the infrastructure and initial operation thereof;

(i) that the benefits to the state if the transfer is approved outweigh the benefits to the state if the transfer is not approved;

(j) that the proposed transfer will not impair water reservation rights, vested rights, appropriation rights or prior applications for permits to appropriate water;

(k) any current beneficial use of the water that is proposed to be transferred, including minimum desirable streamflow requirements;

- (l) any reasonably foreseeable future beneficial use of the water;
- (m) the economic, environmental, public health and welfare, and other impacts of approving or denying the transfer of water;
- (n) any and all measures the applicant has taken to preserve the quality and remediate any contamination of water currently available for use by the applicant;
- (o) the provisions of a revised management program adopted by a groundwater management district that are applicable to the proposed transfer whenever any of the proposed points of diversion are located within a groundwater management district;
- (p) whether or not the applicant, and any entity to be supplied water by the applicant, have adopted and implemented conservation plans and practices that fulfill the following requirements:
 - (1) are consistent with guidelines developed and maintained by the Kansas water office, pursuant to K.S.A. 74-2608 and its amendments;
 - (2) have been in effect for not less than 12 consecutive months immediately before the filing of this water transfer application; and
 - (3) provide for a rate structure that encourages efficient use of water and results in conservation and wise, responsible use of water, if the transfer is for use by a public water supply system;
- (q) the effectiveness of conservation plans and practices that have been adopted and implemented by the applicant and any other entities to be supplied water by the applicant;
- (r) if applicable, population projections for any public water supply system that will be supplied by the water transfer, and the basis for those projections;
- (s) the projected water needs of the applicant and of any other entities to be supplied water by the applicant, and the basis for those projections;
- (t) plans for any environmental mitigation made necessary by the proposed water transfer;
- (u) a list of other federal, state and local permits necessary to complete the proposed water transfer and the projected dates they will be obtained;
- (v) the current per capita per day usage of any public water supply user to be supplied water by the applicant, and the current average per capita per day usage of other similar users in a region of the state that is climatically similar. If the applicant's per capita per day usage exceeds the regional average, the applicant shall show why its per capita per day usage is reasonable.
- (w) the projected per capita per day usage of any public water supply user to be supplied water by the applicant;
- (x) a copy of the following contingently approved documents:
 - (1) a permit to appropriate water;
 - (2) an application for change in any or all of the following: (A) the place of use;
(B) the type of use;
(C) point of diversion; or
 - (3) a contract to purchase water pursuant to the state water plan storage act;
- (y) pursuant to K.A.R. 28-16-28b and K.A.R. 28-16-28d, the impacts of the proposed

transfer on the water quality and designated uses of any stream that may be affected by the proposed transfer; and

(z) any additional factors that may be required by the chief engineer.

(Authorized by K.S.A. 82a-1506; implementing K.S.A. 1995 Supp. 82a-1503; effective May 1, 1984; amended Dec. 27, 1996.)

KAR 5-50-4 – Emergency use.

[Omitted]

KAR 5-50-5 – Emergency transfer of water.

[Omitted]

KAR 5-50-6 – Authority of the chief engineer.

[Omitted]

KAR 5-50-7 – Filing an application.

Unless this requirement is waived by the chief engineer for good cause, a water transfer application shall not be considered complete until one of the following has been approved contingent upon receiving a permit to transfer water:

(a) a new application to appropriate water pursuant to the Kansas water appropriation act (KWAA), K.S.A. 82a-701 et seq.;

(b) an application for a change in any or all of the following: (1) point of diversion;
(2) place of use; or
(3) use made of water filed pursuant to the KWAA; or

(c) a contract for the purchase of water pursuant to the state water plan storage act, K.S.A. 82a-1301, et seq.

(Authorized by K.S.A. 82a-1506; implementing K.S.A. 1995 Supp. 82a-1503; effective Dec. 27, 1996.)

Kan. Admin. Regs. 5-50-8 – Selection of hearing officer.

(a) The panel shall mail notices to, and request nominations for a hearing officer from:

- (1) the applicant;
- (2) entities in the area or basin where the potential point or points of diversion are located; and
- (3) the commenting agencies.

(b) The panel shall also publish one notice in the Kansas register requesting nominations for a hearing officer. The panel shall allow 30 days following the notice for the nominations to be submitted.

(c) After the 30-day notice period has expired, the panel shall meet to consider the nominations and select an independent hearing officer.

(Authorized by K.S.A. 82a-1506; implementing K.S.A. 1995 Supp. 82a-1501a; effective Dec. 27, 1996.)

EXHIBIT C
BURNS & MCDONNELL REPORT



September 24, 2018

Mr. Toby Dougherty
City Manager
City of Hays, Kansas
1507 Main Street
Hays, Kansas 67601

Re: R9 Ranch Modeling Results – Revision 2

Dear Toby:

Attached is the revised report on the R9 Modeling results. During their review of the model files and the R9 Ranch Modeling Results provided by Burns & McDonnell (BMcD) to DWR on February 13, 2018, Balleau Ground Water, Inc. (BGW) identified a technical error in the operation of the Streamflow Routing Package (SFR) used by BMcD in preparing the modeling-results report. Due to this error, the model was not correctly routing flow from cell to cell along the river flow paths. BMcD corrected this error, completed the model runs with the SFR package operating correctly, and revised the modeling results report to reflect the amended results.

As a part of BMcD's identification and correction of the technical error in the SFR package noted above, BMcD conducted a comprehensive review of all runs of the model to verify that the SFR package was functioning correctly. This included a review of the short-term (1991-2007) runs of the model, which revealed that the SFR package was not accurately accounting for streambed downcutting. This error was also corrected.

Please note that the revised groundwater model report does not address the "alternative" approaches to groundwater modeling offered by BGW or Keller-Bliesner Engineering, which were discussed in BMcD's September 13, 2018 letter to Mr. Dougherty and forwarded to the Chief Engineer.

Below is a listing of the substantive revisions made to the report, to assist with your review.

1. The text describing Figure 4 on page 5 was revised to note that at 4,800 acre-feet of municipal pumping the water level drop is 0.2 feet instead of 0.6 feet as originally reported. Figure 4 was also revised accordingly.
2. Table 1 was revised to account for the corrected model runs.
3. On Page 7, the discussion of the differences between the Scenario 2 and Scenario 1 output was revised to reflect the new model results.
4. The text describing Figure 6 on pages 7–8 was revised to state that there is only 0.3 feet of additional drawdown on the Ranch, instead of 0.5 feet of drawdown as provided in the original report. Figure 6 was revised accordingly.
5. Table 2 was updated in accordance with the revised model runs.

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6. The discussion of the results of the Scenario 3 baseline 51-year run on pages 10 and 11 was revised.
7. The discussion of the differences between Scenario 3 and Scenario 4 was updated on page 11.
8. Figure 9 was revised and the discussion of Figure 9 on page 11 was updated to reflect that the drawdown on the Ranch was reduced to 0.4 additional feet (from 0.7 feet) in the northeastern portion and to 0.8 feet (from 1.5 feet) in the southwestern portion.
9. The comparison of the results of Scenario 5 with Scenarios 3 and 4 on page 12 was revised.
10. Figure 10 was revised.
11. The discussion of the results of Scenario 6 were revised on page 14.
12. Figure 11 was revised.
13. Figure 13 was revised.

The corrected model runs result in somewhat more water available to the Cities and further support the conservative approach taken by BMcD in the original model report. Nevertheless, the results of the corrected model runs do not change BMcD's overall conclusions contained the original model report. The water level changes and model mass balance from the corrected model runs support the conclusion that 4,800 acre-feet per year is a sustainable pumping rate for the R9 Ranch.

If you have any questions regarding the revisions to the report, please contact me at 816.695.3940 or pmccormick@burnsmcd.com.

Sincerely,
BURNS & MCDONNELL



Paul McCormick, P.E.
Associate Geological Engineer

Enclosure

cc: Jon Quinday – City of Russell
John T. Bird – Glassman, Bird, Brown & Powell
David Traster – Foulston Siefkin
Daniel Buller – Foulston Siefkin



September 24, 2018

Mr. Toby Dougherty
City Manager
City of Hays, Kansas
1507 Main Street
Hays, KS 67601

Re: R9 Ranch Modeling Results – Revision 2

Dear Toby:

The Cities of Hays and Russell, Kansas (Cities) purchased the R9 Ranch (R9 Ranch) in 1995 for potential development as an alternative water supply source to diversify their long-term water supply portfolios and secure a drought-resistant raw water resource. The Cities intend to develop and operate a municipal wellfield at the R9 Ranch in a sustainable manner that maintains the resource as a viable long-term water supply. Operating the well field in this manner includes considering the effects of pumping on the local aquifer and surrounding users. This letter report details the results of Burns & McDonnell's (BMcD) work to evaluate the long-term maximum average pumping rate for the R9 Ranch and the effects that the planned municipal wellfield development and pumping will have on the surrounding aquifer.

The R9 Ranch covers approximately 6,900 acres and is located approximately five miles southeast of Kinsley, Kansas (Figure 1). The R9 Ranch has historically been used for irrigated agricultural purposes, such as growing corn, alfalfa, and soybeans. Irrigation was accomplished using 53 irrigation wells supplying water to 41 center-pivot irrigation areas. Perfected irrigation water rights on the R9 Ranch total 7,719 acre-feet per year. Change applications have been filed with the Kansas Department of Agriculture, Division of Water Resources (DWR) and the total quantity of water available for municipal use after DWR's reductions for consumptive use is 6,756.8 acre-feet per year.

Geology on the R9 Ranch is generally comprised of Quaternary aged sands and gravels. Along the Arkansas River corridor, recent age alluvial deposits are found at the surface. As distance from the river corridor increases, the recent alluvial deposits blend into the Meade formation, with dune sand at the surface. Differences between the characteristics of the alluvial deposits and the Meade formation are minimal, and they are typically referred to jointly as undifferentiated Pleistocene deposits. They are composed mostly of sand and gravel with some lenses of silt and clay, and occasional areas containing caliche. These are the aquifers utilized for pumping on the R9 Ranch.

Beneath the Meade formation are sands and gravels of the Pliocene aged Ogallala Formation which is composed principally of fine sands and gravels. Bedrock beneath the Ogallala is

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composed of the Lower Cretaceous aged Dakota formation. This formation is composed of fine to medium grained sandstones with some shale and clay.

Depth to bedrock varies across the R9 Ranch, increasing from west to east. Top of bedrock elevation at the Arkansas River is approximately 2,185 feet above mean sea level (amsl), and top of bedrock elevation at the east boundary of the R9 Ranch is approximately 2,125 feet amsl. The saturated thickness of the aquifer varies from 45 feet along the Arkansas River to 140 feet on the eastern portion of the R9 Ranch, with an average saturated thickness of approximately 100 feet.

Historic water use at and around the R9 Ranch was typically in the form of center-pivot irrigation systems. Center-pivot systems require relatively high flows, on the order of 600 to 800 gallons per minute (gpm). This pumping typically occurs only for a portion of the year, during the irrigation and growing season. Comparatively, the proposed municipal wells will pump at the lower rate of approximately 350 gpm for longer periods of time. Operationally, the proposed municipal wells will cycle on and off monthly. This operational frequency, combined with the lower pumping rate, reduces the overall stress applied to the aquifer compared to the stress caused by the higher-intensity, shorter-duration pumping of center-pivot irrigation. Therefore, the calculated water levels from the municipal well scenarios are often higher than the water levels calculated based on historic irrigation pumping.

Groundwater Modeling

Quantifying the long-term yield of the R9 Ranch was accomplished using a three-dimensional groundwater flow model developed for the Big Bend Groundwater Management District No. 5 (GMD5). The model utilizes the United States Geological Survey (USGS) MODFLOW™2000 three-dimensional groundwater flow modeling code. A detailed report of the construction and calibration of the model can be found in the Balleau Groundwater, Inc. (BGW) report titled *Hydrologic Model of Big Bend Groundwater Management District No. 5*, dated June 2010 (BGW Report).

BMcD acquired the BGW Report and model files from the DWR through a Kansas Open Records Act (KORA) request. BMcD and the Cities are very appreciative of the guidance and cooperation provided by DWR staff during this modeling effort and development of this work product.

The model area encompasses the entirety of GMD5 and a substantial area up-gradient of GMD5, as well as an area down-gradient. The R9 Ranch is located in the west-central portion of GMD5, centrally located within the extents of the three-dimensional groundwater flow model. The model framework is composed of seven layers representing the major geologic divisions in the regional stratigraphy. For calculation purposes, the model is further divided into nine units, to

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differentiate between areas with varying hydrologic characteristics within layers. The model is divided into a one-half mile by one-half mile grid. It includes the recharge, streamflow, and pumping data for a 68-year period, from December 1939 through December 2007.

BMcD utilized Groundwater Vistas Version 6.0 (GWV) pre- and post-processing software to run the GMD5 model. GWV provides a graphical user interface to streamline data entry and processing of the model results. The model construction, hydrogeological parameters, and well pumping data contained in the root MODFLOW files obtained through the KORA request were imported into GWV. BMcD did not make any changes to the data or hydrogeological parameters of the GMD5 model.

BMcD completed an initial run to verify that the model was correctly imported and set up in GWV. Verification was accomplished by direct comparison to the results from the GMD5 model. Mass balance results, drawdown values and water level contours were compared to the values from the BGW Report and the model output files obtained through the KORA request.

The water level, drawdown, and mass balance results calculated during the evaluation run correlated very well with the values reported for the base case in the BGW Report and output files obtained through the KORA request. The variance between the inflow and outflow mass balance results was less than 1.49 percent on average and was well within the margin of error of the model described in the BGW Report. These variations could be caused by differences in the data handling methods from the pre-and post-processing software packages or in the rounding of numbers within the processing software. This close correlation indicates that the change in the pre- and post-processing method to operate the model did not significantly impact the model output.

Modeled Groundwater System

Water supplied to the aquifer under the R9 Ranch varies seasonally and annually, based on the climatic conditions. Water levels in the aquifer fluctuate in response to these changes. As stated previously, the Cities intend to operate the R9 Ranch well field in a sustainable manner for the long-term. To accomplish this, the average volume of water pumped from the well field should not exceed the average volume of water recharged to the aquifer. Multiple pumping scenarios were run using the model to evaluate the amount of water the aquifer on the R9 Ranch would yield while allowing for reasonable water level fluctuations.

The model calculates changes in water levels over time for the entire region. Localized effects caused by pumping can be evaluated by comparison of changes in water levels from a baseline case to a modeled scenario. To evaluate the long-term yield of the R9 Ranch, the model cells containing the R9 Ranch were identified as a sub-region and an accounting was kept of the flux

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in and out of the sub-region. The internal Hydrostratigraphic Units (HSU) package in GWV was utilized for the computation of the sub-regional water balance instead of the USGS ZONEBUDGET package which was utilized by BGW. These two packages perform the same function and provide equivalent results, effectively calculating the mass balance for a sub-region of the model. The model cells comprising the sub-region evaluated as the R9 Ranch HSU are illustrated in the inset in Figure 1, located at the end of this report.

Figure 2 illustrates the flow in and out of a groundwater system. Net values for the model parameters are calculated from the MODFLOW™2000 mass balance as inflow to the R9 Ranch HSU minus outflow from the R9 Ranch HSU for each parameter. The model was run to calculate the amount of water that flows into and out of the R9 Ranch HSU. Properties included in the mass balance analysis were recharge, evapotranspiration, well pumping, lateral groundwater flow (flow into and out of the HSU from the surrounding aquifer), streamflow and storage.

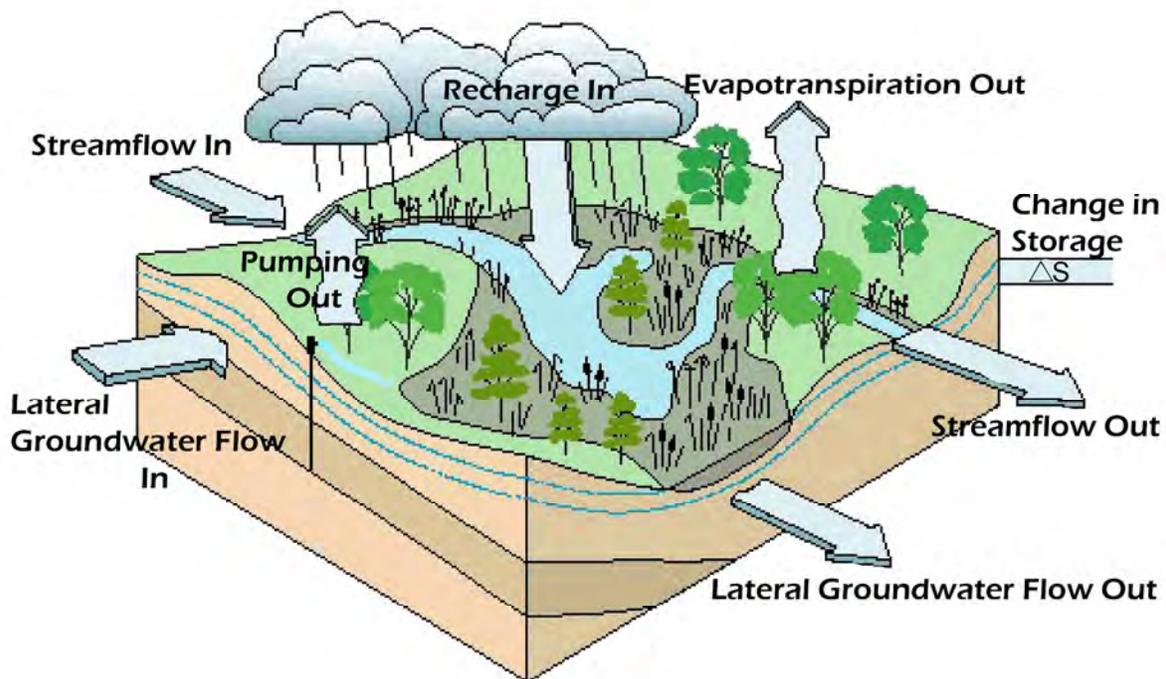


Figure 2 – Typical groundwater mass balance properties.

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The Cities' principal objective is to develop and operate the R9 Ranch as a municipal water supply in a long-term sustainable manner as a source of raw water. To accomplish this, effects to the resource must be quantified under different wellfield development scenarios. Evaluation of these effects was accomplished by comparing the water levels generated by the historical irrigation and agricultural pumping with the proposed municipal pumping activities under varying time frames and hydrologic conditions.

Existing Conditions

The full BGW model simulates the period of time from December 1939 through December 2007. As described in the BGW Report, the period from 1991 to 2007 provides the highest quality data, as the pumped well volumes equal the metered volumes reported to DWR. BMcD utilized this time period to complete the initial evaluation of the R9 Ranch. As shown in Figure 3, water levels calculated by the model from 1991 through 2007 correlate well with the observed water levels from USGS monitoring wells located on the R9 Ranch.

BMcD utilized an iterative process to evaluate the maximum average pumping rate for the R9 Ranch. Multiple model runs were completed with the proposed municipal wells on the R9 Ranch operating at rates ranging from zero to 6,714 gpm. The water levels generated by the model were evaluated and a determination was made as to whether any changes in water levels were reasonable.

Intuitively, water levels rise as pumping rates decrease, and decline as pumping rates increase. When pumping is sustainable, water levels are reasonably stable. Figure 4 shows the change in water levels in comparison to pumping rates on the R9 Ranch for six of the iterative model runs. Water levels are dropping at higher pumping rates, rising at lower pumping rates, and are reasonably stable in the zone where the yield is sustainable. As can be seen in this figure, with 4,800 acre-feet of pumping, water levels are relatively stable with a drop of only 0.2 feet at the end of the 1991 to 2007 model runs. Based on the average saturated thickness of the aquifer under the R9 Ranch of 100 feet, this represents a reasonable change of less than 0.2 percent of the average available saturated thickness of the aquifer after 17 years.

BMcD ran numerous scenarios in the short-term model to evaluate the yield for the R9 Ranch for the period from 1991 through 2007. The two scenarios described below summarize the results of this preliminary evaluation of the short-term yield of the R9 Ranch:

1. **Short-Term Baseline Irrigation Scenario** – Used the existing model configuration with no changes. This scenario includes the irrigation and irrigation return wells associated with the historic R9 Ranch operations. (BGW utilized irrigation return wells in the initial model development to simulate the volume of water that infiltrates back into the aquifer

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during irrigation operations. See the BGW Report for further description and explanation of how the return flows were calculated.)

2. **Short-Term Maximum Average Scenario** – The R9 Ranch irrigation and irrigation return wells were removed from the model. The 14 proposed municipal wells were inserted and assigned uniform pumping rates to extract a total of 4,800 acre-feet of water on a 24 hour per day, 365.25 day per year basis.

The scenario results are discussed below, and the mass balance is summarized in Table 1.

Scenario 1 – Short-Term Baseline Irrigation Scenario

For Scenario 1:

- Net pumping values on the R9 Ranch varied from a maximum of 6,322 acre-feet in 1991 to a minimum of 616 acre-feet in 1996. The net average pumped from the R9 Ranch during this period was 4,054 acre-feet per year.
- Annual recharge averaged 4,732 acre-feet.
- The Arkansas River was in a losing condition, contributing water to the aquifer.
- ET losses were approximately 1,100 acre-feet per year, on average.
- Approximately 1,350 acre-feet per year of groundwater flowed laterally off of the R9 Ranch.

Figure 5 shows the model-generated water levels at the end of the Scenario 1 model run, illustrating that groundwater flow is to the northeast. Based on this flow direction, there are very few groundwater wells down-gradient of the R9 Ranch, with the nearest approximately 1.5 miles away. The wells located closest to the R9 Ranch are located to the southeast, which is side-gradient to the direction of groundwater flow.

Scenario 2 – Short-Term Maximum Average Scenario

Scenario 2 was run with the R9 Ranch irrigation and irrigation return wells removed and the 14 proposed municipal wells pumping continuously. As can be seen in the inset image on Figure 1, some of the cells included in the R9 Ranch HSU extend beyond the R9 Ranch property boundary. Some of the center pivot circles from irrigation operations surrounding the R9 Ranch extend partially onto some of these cells. On average, approximately eight acre-feet of irrigation return flow per year is applied to those cells from the surrounding irrigator's operations. Since it is assumed that those irrigation operations will be ongoing, that irrigation return flow is included

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in the totals for the R9 Ranch HSU. This reduces the net average pumping from the R9 Ranch HSU to approximately 4,793 acre-feet per year.

Comparing the individual Scenario 2 net parameter results to those from Scenario 1:

- Net pumping increased by approximately 739 acre-feet per year, on average.
- Stream contribution was increased, most likely because of the increase in the volume of pumping and the constant rate of pumping as compared to the cyclical nature of irrigation pumping. Irrigation pumping is typically cyclical, with intermittent pumping at higher rates during the growing season.
- Recharge did not change.
- ET declined slightly, by 24 acre-feet per year most likely due to differences in the calculated water levels caused by continuous municipal pumping.
- Approximately 1,160 acre-feet per year of groundwater flowed laterally off of the R9 Ranch.

Figure 6 was created to more clearly illustrate and evaluate the effects of pumping 4,800 acre-feet per year from the R9 Ranch on the aquifer and surrounding users. For this figure, the water level contours at the end of the Scenario 1 were subtracted from the water level contours at the end of Scenario 2. As can be seen in Figure 6, pumping 4,800 acre-feet per year resulted in approximately 0.3 feet of additional drawdown at the northeastern R9 Ranch boundary after 17 years of pumping. A slight water level decrease such as this is expected, since Scenario 2 has a higher pumping rate than Scenario 1. Further examination of Figure 6 indicates that water levels in a few of the surrounding wells closest to the R9 Ranch would be approximately as much as 0.3 feet lower while the wellfield is operating at a constant rate of 4,800 acre-feet per year.

Short-Term Scenarios Summary

The 17-year period from 1991-2007 has the highest-quality data available for input to the model. For this reason, this period was utilized for the evaluation of the maximum average pumping rate of the R9 Ranch. Table 1 summarizes the net results of some key model parameters for Scenarios 1 and 2.

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Table 1.
Short-Term Model Scenario Mass Balance Budget Summary

Model Results	Short-Term Model Run Scenarios	
	Scenario 1	Scenario 2
	Baseline Irrigation	Maximum Average
Net Average Model Mass Balance Parameters¹		
Pumping	-4054	-4793
Recharge	4732	4732
Evapotranspiration	-1098	-1074
Stream Leakage	1313	1766
Lateral Groundwater Flow	-1346	-1157
Change in Storage	465	553
Wells in Pumping Scenario	Irrigation & Return Wells	Proposed Municipal Wells

All units are acre-feet per year.

¹ Net flows are calculated as Inflow - Outflow, therefore negative values are flows out of the Ranch area, positive are flows into the Ranch area.

Long-Term Pumping Scenarios

To simulate the long-term effects of municipal pumping on the R9 Ranch, the 1991 through 2007 model data was used to develop a forecasting model representing a 51-year period (Long-Term model). The 1991 to 2007 data was duplicated twice, repeating the hydrologic conditions for those years in three 17-year cycles. Data from 1991 through 2007 was used for years 1 through 17, repeated for years 18 through 34, and again for years 35 through 51. The Long-Term model uses actual historic climatic and hydrologic conditions and provides a means to evaluate the long-term effects of pumping over a 51-year period.

Two changes were made to the hydrogeologic structure and parameters from the baseline model for the Long-Term model. Both changes were to the Arkansas River parameters; one to the projected streamflow, and the second to the streambed elevation. Those two changes are described in the following paragraphs.

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Historic flow data in the Arkansas River compiled from the Dodge City and Kinsley gages reflect a significant decrease in streamflow after 2006. BMcD set the initial upstream flow in the Arkansas River to zero after year 16 in the Long-Term model to provide a conservative estimate and to recognize changing conditions resulting in reduced flows in the Arkansas River. Baseflow can still occur if the model calculated water level elevation in the aquifer rises high enough to cause the aquifer to discharge to the River. If that occurs, the streamflow routing package will calculate a discharge from the aquifer to the stream and generate baseflow for the River. However, the upstream baseflow contribution flowing into the model area that occurred historically is not contributing water to the model after year 16 of the Long-Term model.

The second change is to the riverbed elevation. As stated in the BGW Report, the modeled elevation of the Arkansas River was declining linearly each year. Down-cutting of a stream or river channel is caused by flow velocity eroding the bottom of the channel and carrying away fine-grained materials. Since flow in the stream channel during the period of the Long-Term model is significantly reduced, continued down-cutting is minimized, and the riverbed elevation was held constant.

BMcD ran the following scenarios to evaluate the long-term maximum average pumping rate at the R9 Ranch:

3. **Long-Term Baseline Irrigation Scenario** – All model hydrogeological parameters and pumping stresses simulated in the 1991 to 2007 model run were repeated three times. This scenario includes the historic R9 Ranch irrigation and associated irrigation return wells.
4. **Long-Term Maximum Average Scenario** – The R9 Ranch irrigation and associated irrigation return wells were removed from the model, and replaced with the 14 proposed municipal wells, which were inserted and assigned uniform pumping rates to extract 4,800 acre-feet of water on a 24 hour per day, 365.25 day per year basis.
5. **Long-Term Projected Operations Scenario** – The R9 Ranch irrigation and associated irrigation return wells were removed from the model, and replaced with the 14 proposed municipal wells, which were inserted and assigned pumping rates equal to the anticipated actual operations of the R9 Ranch as municipal supply wells. This includes phased installation of the municipal wells, cycling pumping between wells operating at the actual anticipated rates of operation, and increasing production over time based on the anticipated increases in demand.

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Figure 7 illustrates the pumping and recharge conditions simulated in each of the Long-Term model scenarios listed above. The results of these three scenarios are discussed below and the mass balance results for key parameters from Scenarios 3 through 5 are summarized in Table 2.

**Table 2.
 Long-Term Model Scenario Mass Balance Budget Summary**

Model Results	Long-Term Scenarios ²			
	Scenario 3 Baseline Irrigation	Scenario 4 Maximum Average	Scenario 5 Projected Operations	Scenario 6 Projected Operations w/2% Drought
Net Model Mass Balance Parameters¹				
Pumping	-4054	-4793	-2426	-2741
Recharge	4732	4732	4732	4390
Evapotranspiration	-646	-610	-488	-412
Stream Leakance	1579	1990	410	625
Lateral Groundwater Flow	-1909	-1670	-2506	-2206
Change in Storage	319	367	281	352
Wells in Pumping Scenario	Irrigation & Return Wells	Proposed Municipal Wells	Proposed Municipal Wells	Proposed Municipal Wells

All units are acre-feet per year.

¹ Net flows are calculated as Inflow - Outflow, therefore negative values are flows out of the Ranch area, positive are flows into the Ranch area.

² 1991-2007 data repeated three times. Assumes zero flow in Ark River after year 16.

Scenario 3 – Long-Term Baseline Irrigation Scenario

The following describes the results of Scenario 3, and Figure 8 illustrates the model calculated water levels at the end of the scenario. Groundwater flow continues to be to the northeast.

- Net pumping values on the R9 Ranch varied from a maximum of 6,322 acre-feet to a minimum of 616 acre-feet. The net average volume pumped from the R9 Ranch during this period was 4,054 acre-feet per year.

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- Annual average recharge to the R9 Ranch was 4,732 acre-feet.
- The aquifer was receiving water from the Arkansas River.
- ET losses were lower on average than the 1991 to 2007 baseline scenario, most likely due to reduced flows in the River.
- Approximately 1,900 acre-feet of water flowed laterally off of the R9 Ranch within the aquifer.

Scenario 4 – Long-Term Maximum Average Scenario

Scenario 4 was run with the R9 Ranch irrigation and irrigation return wells removed and the 14 proposed municipal wells pumping continuously throughout. An annual average of approximately eight acre-feet of irrigation return flow per year was included from surrounding irrigator's ongoing operations, making the net average pumping 4,793 acre-feet per year. Figure 7 presents the R9 Ranch municipal pumping modeled for this scenario.

Evaluating the individual parameters in comparison to Scenario 3:

- Higher pumping rates in this scenario reversed the gradient at the River, resulting in an average net gain to the aquifer from the River.
- Average annual recharge remained the same.
- Average ET was approximately equal to the baseline scenario.
- There was approximately 1,670 acre-feet per year of groundwater flow leaving the R9 Ranch laterally.

Comparison of the results of Scenario 4 and Scenario 3 illustrates the effect of pumping an average of 4,800 acre-feet per year from the R9 Ranch for 51 years. Figure 9 was created by subtracting the water level contours at the end of the Scenario 3 from the water level contours at the end of Scenario 4.

As illustrated in Figure 9, Scenario 4 pumping resulted in approximately 0.4 feet of additional drawdown at the R9 Ranch boundary in the northeast portion of the R9 Ranch at the end of 51-years. Approximately 0.8 feet of additional drawdown is seen at the southwestern border of the R9 Ranch during this same period. Drawdown contours extend across the River to the northwest because it is not a hydraulic boundary when there are periods of zero flow in the River.

The higher apparent impact to the southwestern portion of the R9 Ranch is due to the change from historic operations. Irrigation in the southwestern portion of the R9 Ranch was minimal during the period from 1991 to 2007, as most of the ranch farming operations had moved away from this area. Since there was very little to zero historic irrigation pumping in the southwest

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City of Hays, Kansas
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portion of the R9 Ranch, the drawdown effect appears higher with the introduction of new pumping.

Scenario 5 – Long-Term Projected Operations Scenario

Scenario 5 was developed to simulate the actual projected operation of the municipal wellfield on the R9 Ranch. The R9 Ranch irrigation and irrigation return wells were removed and the 14 proposed municipal wells inserted. The R9 Ranch is intended to be developed in a phased manner, rather than fully constructed and brought online all at once. Initial development is currently anticipated to begin in the northeast portion of the R9 Ranch, with later phases being developed moving to the southwest. A constant flow of approximately one million gallons per day will be required to maintain a minimum flow in the pipeline. For the operations scenario this flow was initially distributed among proposed Wells A through H. Pumping was increased in June, July and August of each year to reflect increased demand during the hot summer months. In later years, as demands increased, pumping rates were increased and additional wells (I through N) were added to deliver the required yield. Figure 7 illustrates the annual average pumping rates for this scenario.

An annual average of approximately eight acre-feet of irrigation return flow per year was included from surrounding irrigator's ongoing operations, making the net average pumping 2,426 acre-feet per year.

Evaluating the individual parameters from Scenario 5 in comparison to Scenarios 3 and 4:

- The average net pumping rates in this scenario are approximately 2,300 acre-feet per year lower.
- The aquifer was gaining approximately 410 acre-feet of water from the River channel.
- Annual average recharge did not change.
- Average ET losses were slightly higher than in Scenarios 3 and 4, due to higher water levels from lower pumping rates.
- There was approximately 2,500 acre-feet per year of groundwater flow laterally leaving the R9 Ranch.

Figure 10 was created by subtracting the water level contours at the end of Scenario 3 from the water level contours at the end of Scenario 5. Comparison of the drawdown at the end of Scenario 5 and Scenario 3 illustrates the differences between projected operations pumping from the R9 Ranch and irrigation pumping over the same time frame. As can be seen in Figure 10, operations pumping resulted in water levels over most of the R9 Ranch and surrounding area that

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Page 13

were higher than the water levels caused by historical irrigation pumping. There was approximately 0.5 feet of water level rise on average at the R9 Ranch boundary to the north and east at the end of the 51-year period. The area between contours in Figure 10 are colored, with darker colors representing higher water levels, and lighter colors representing lower water levels.

Similar to the Scenario 4 results shown in Figure 9, drawdown at the southwest end of the R9 Ranch increased slightly. This higher drawdown is due to the lack of historic irrigation pumping in that area from 1991 to 2007.

Long-Term Drought Scenarios

At DWR's request, additional scenarios incorporating a two percent drought were run with the Long-Term model. Kansas regulations define a two percent drought as the equivalent of the 1952 to 1957 historical period. To simulate a two percent drought, the recharge and ET data from the original GMD5 model for 1952 through 1957 was extracted and inserted into the Long-Term model as years 35 through 39. This places the drought two-thirds of the way through the 51 year model run, when projected municipal demands have increased.

To establish a basis for comparison to the drought conditions, the Long-Term Baseline Irrigation Scenario (Scenario 3) was re-run utilizing the two percent drought recharge and ET data. This run calculated water levels for the Baseline Irrigation Scenario with the reduced recharge values from the simulated drought. Figure 11 was generated to illustrate the difference between the model-predicted baseline water level with and without the drought at the end of the Long-Term model run. As expected, adding the two percent drought conditions resulted in lower water levels throughout the area, and over five feet lower in the area east of the R9 Ranch.

Scenario 6 – Long-Term Operations with two percent Drought Scenario

Scenario 6 was developed to simulate the potential operation of the R9 Ranch during a two percent drought. Figure 12 illustrates the simulated recharge and the average pumping rate for this scenario.

For Scenario 6, the R9 Ranch irrigation and associated irrigation return wells were removed and replaced with the 14 proposed municipal wells. An annual average of approximately eight acre-feet of irrigation return flow per year was included from surrounding irrigator's ongoing operations, resulting in net average pumping of 2,741 acre-feet per year.

As seen in Figure 12, the operations pumping scheme from Scenario 5 was modified for Scenario 6 during the drought years (model years 35 through 39). Pumping begins with the same pattern as Scenario 5, but increases substantially once the drought begins. After the drought ends the

Mr. Toby Dougherty
City of Hays, Kansas
September 24, 2018
Page 14

pumping returns to the Scenario 5 pattern. This pumping scenario maximizes the amount pumped from the R9 Ranch during the drought without exceeding a ten-year rolling average of 4,800 acre-feet.

Table 2 summarizes the results calculated for Scenarios 3, 4, 5 and 6. An evaluation of the individual parameters calculated for Scenario 6 compared with those from Scenarios 3, 4 and 5 indicates:

- Average net pumping rates in this scenario are lower than Scenarios 3 and 4, but higher than Scenario 5.
- Stream leakage indicated a higher average net gain to the aquifer from the River than in Scenario 5, but lower than Scenarios 3 and 4.
- Average recharge dropped significantly during years 35 through 39, and by an average of approximately 340 acre-feet per year for the entire period of the model.
- Average ET losses were similar to Scenario 5 and slightly lower than Scenarios 3 and 4.
- An average of approximately 2,206 acre-feet of water per year of groundwater flowed laterally from the R9 Ranch.

Figure 13 was created by subtracting the model generated water levels from the baseline two percent drought run from the water levels generated from running Scenario 6 with R9 Ranch projected municipal drought operations pumping. Comparison of the water levels at the end of Scenario 6 with baseline R9 Ranch pumping under two percent drought conditions demonstrates the differences in the water level caused by operations pumping from the municipal wells during a two percent drought.

As can be seen in Figure 13, drought operations pumping resulted in water levels throughout most of the R9 Ranch and surrounding area that are higher than the water levels caused by historic irrigation pumping. There was approximately 0.4 feet of water level rise on average at the R9 Ranch boundary to the north and east at the end of the 51-year period. The area between contours in Figure 13 are colored, with darker colors representing higher water levels, and lighter colors representing lower water levels. Drawdown at the southwest end of the R9 Ranch is again slightly higher because historic irrigation pumping was minimal in that area from 1991 to 2007.

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Summary and Conclusions

Table 3 summarizes the mass balance water budget results from all six scenarios discussed in this report. Comparison of the results from the various scenarios illustrates that the changes in the amount of water assigned to each of the key parameters in each of the modeled scenarios. This is due to the pumping influences and their effects on the flow from various contributing sources.

The Cities' intent in developing a municipal water supply wellfield on the R9 Ranch is to provide a long-term viable raw water resource for the future. Scenarios 3, 4, 5 and 6 were developed from the existing model to simulate the effects of the R9 Ranch pumping over a 51-year period. Evaluating the changes in water levels caused by changes in pumping through an iterative process resulted in Scenario 4, indicating that a sustainable, long-term pumping rate at the R9 Ranch is approximately 4,800 acre-feet per year.

The Long-Term model was run with the proposed municipal wells pumping 4,800 acre-feet per year. Evaluation of the water levels and results of the model mass balance at the end of this run supports a long-term average yield of 4,800 acre-feet. The calculated water levels fluctuate throughout the time period of the model, but overall changes in water level are minimal at approximately 0.5 feet. This is a change of approximately one-half of one percent of the average saturated thickness of the aquifer at the R9 Ranch.

Actual projected operations on the R9 Ranch after conversion to municipal use were modeled to illustrate the anticipated effects of the pumping on the R9 Ranch and surrounding area. Scenario 5 indicates that there will be an average reduction in pumping on the R9 Ranch as compared to the historical irrigation usage. The model calculated water levels indicate that this will result in an average increase in water levels throughout the area.

The R9 Ranch is also intended to provide additional drought tolerance for the City's water supply. Scenario 6 was included to evaluate how the R9 Ranch and surrounding area would react under simulated two percent drought conditions. The results of this scenario indicate that even in the event of a two percent drought, water levels would be higher throughout the area at the projected operational pumping rates than they would be if the historic irrigation pumping were continuing.

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September 24, 2018
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Based on the model results, 4,800 acre-feet per year is a reasonable value for the long-term maximum average yield of the R9 Ranch. Applied on a 10-year rolling average, extraction of this volume of water will not result in detrimental effects on the aquifer under the R9 Ranch and surrounding area. Operating the R9 Ranch in this manner will protect the resource and maintain it as a long-term viable raw water supply for the Cities future water supply.

Sincerely,
BURNS & MCDONNELL



Paul A. McCormick, P.E.
Associate Geological Engineer



cc: Jon Quinday – City of Russell
John T. Bird – Glassman, Bird, Brown & Powell
David Traster – Foulston Siefkin
Daniel Buller – Foulston Siefkin

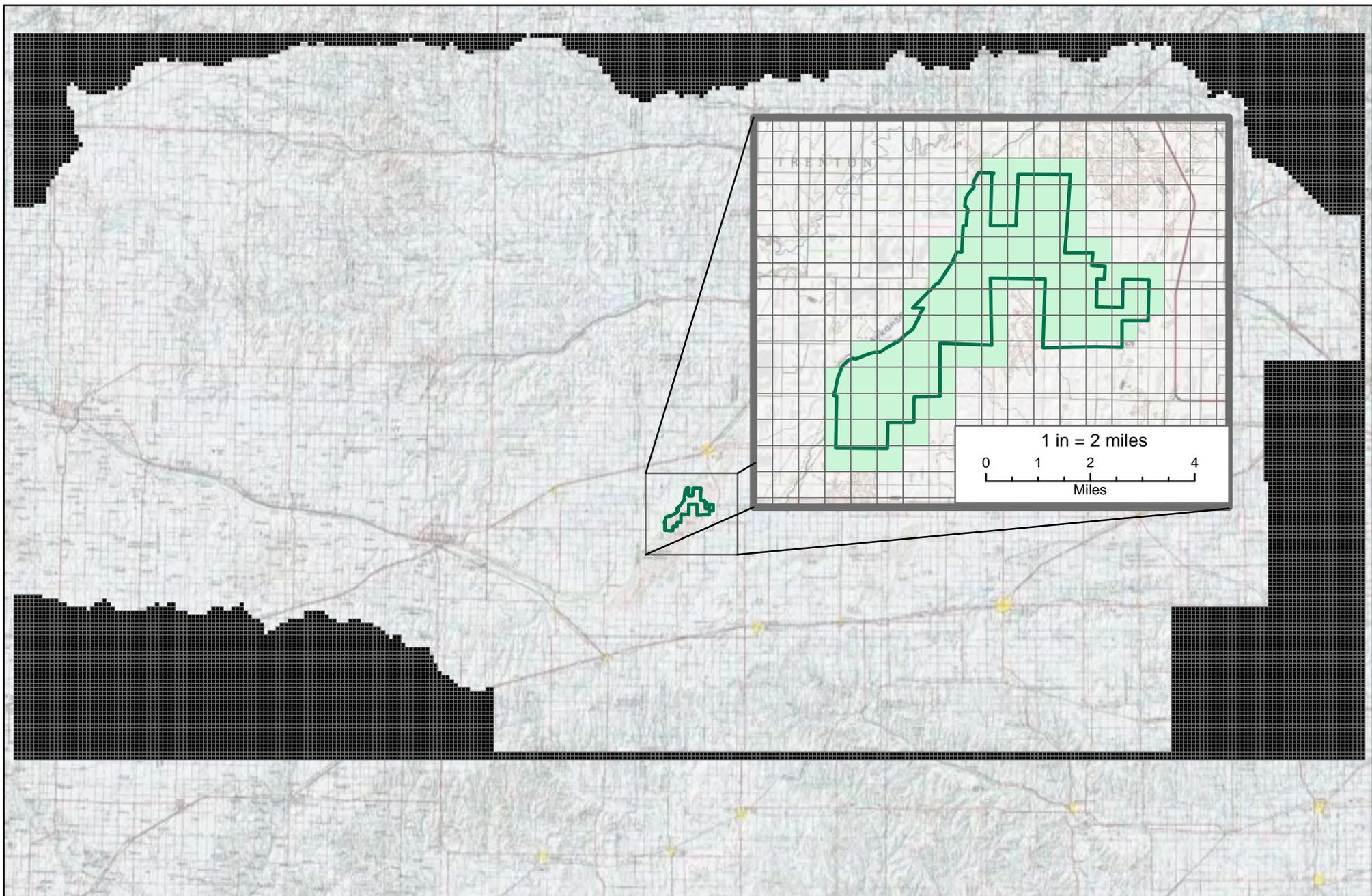
Table 3
Sustainable Yield Calculation Summary

Model Results	Short-Term Model Run Scenarios		Long-Term Scenarios ²			
	Scenario 1 Baseline Irrigation	Scenario 2 Maximum Average	Scenario 3 Baseline Irrigation	Scenario 4 Maximum Average	Scenario 5 Projected Operations	Scenario 6 Projected Operations w/2% Drought
Average Net Model Mass Balance Parameters¹						
Pumping	-4054	-4793	-4054	-4793	-2426	-2741
Recharge	4732	4732	4732	4732	4732	4390
Evapotranspiration	-1098	-1074	-646	-610	-488	-412
Stream Leakance	1313	1766	1579	1990	410	625
Lateral Groundwater Flow	-1346	-1157	-1909	-1670	-2506	-2206
Change in Storage	465	553	319	367	281	352
Wells in Pumping Scenario	Irrigation & Return Wells	Proposed Municipal Wells	Irrigation & Return Wells	Proposed Municipal Wells	Proposed Municipal Wells	Proposed Municipal Wells

All units are acre-feet per year.

¹ Net flows are calculated as Inflow - Outflow, therefore negative values are flows out of the Ranch area, positive are flows into the Ranch area.

² 1991-2007 data repeated three times. Assumes zero flow in Ark River after year 16.



Legend

-  R9 Ranch Boundary
-  Model grid
-  R9 Hydrostratigraphic Unit
-  NoFlow Outline

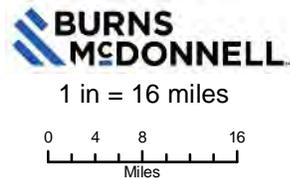
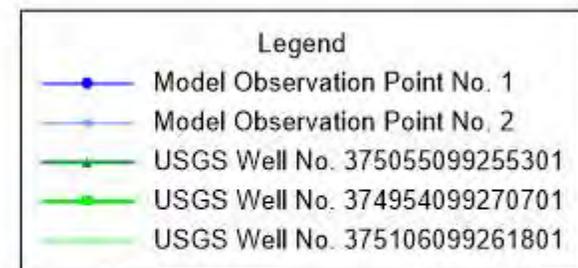
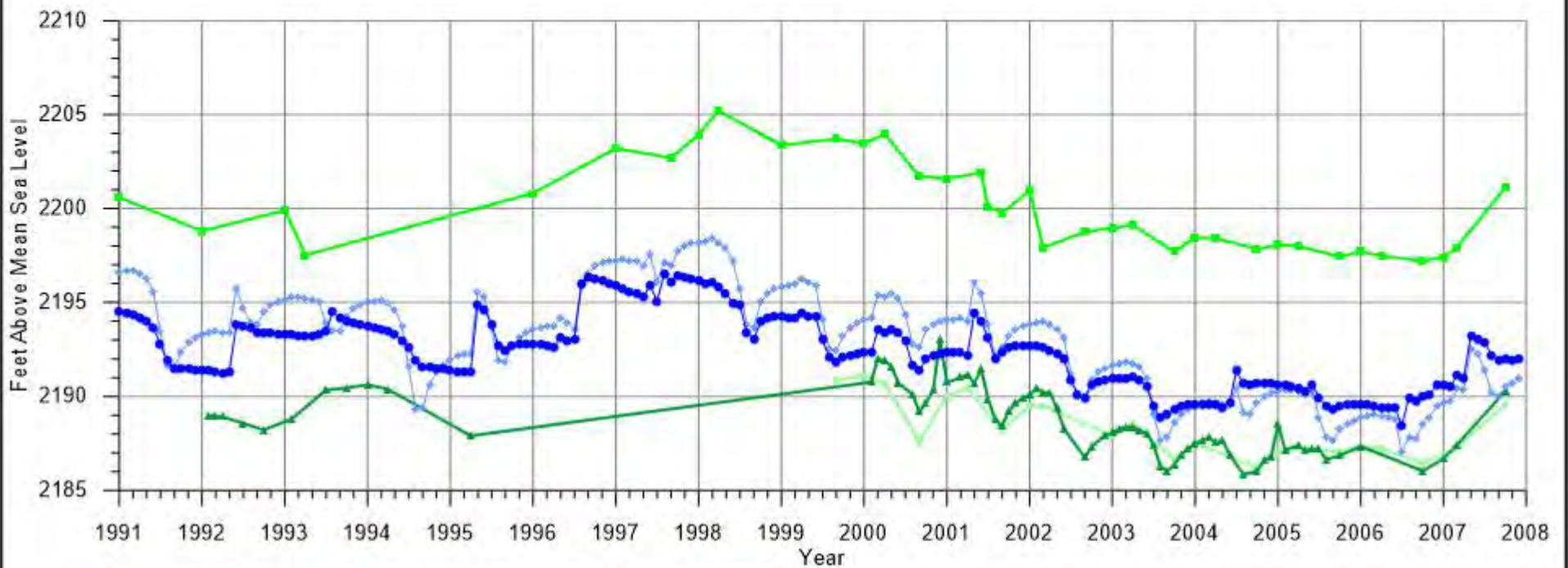


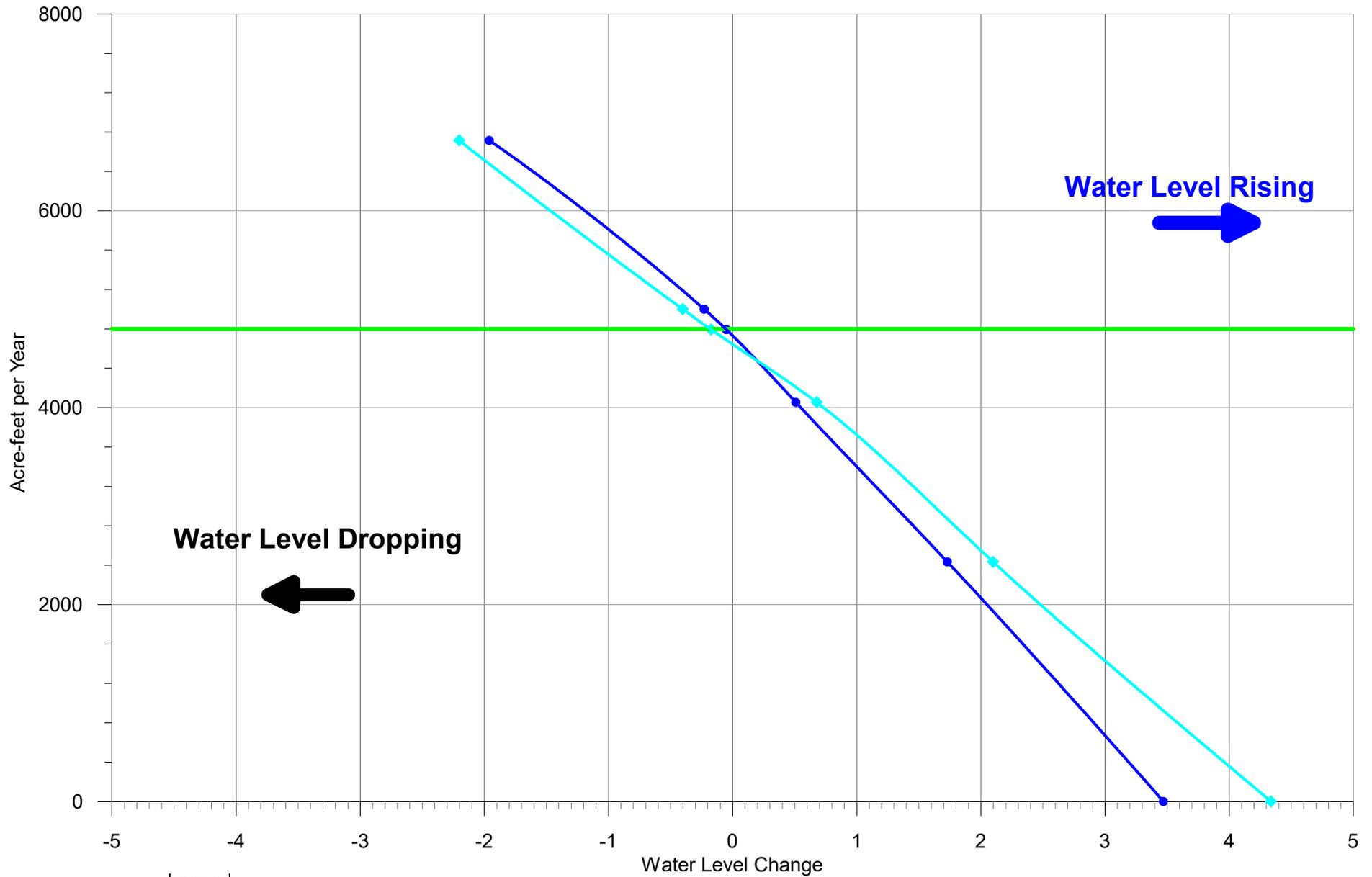
Figure 1

Model Area, R9 Ranch Location
& R9 Ranch Hydrostratigraphic Unit



Project No. 91211 File Name: Water Levels GMD5 Model.grf

Figure 3
Observed and Modeled Water Levels on the R9 Ranch



Legend

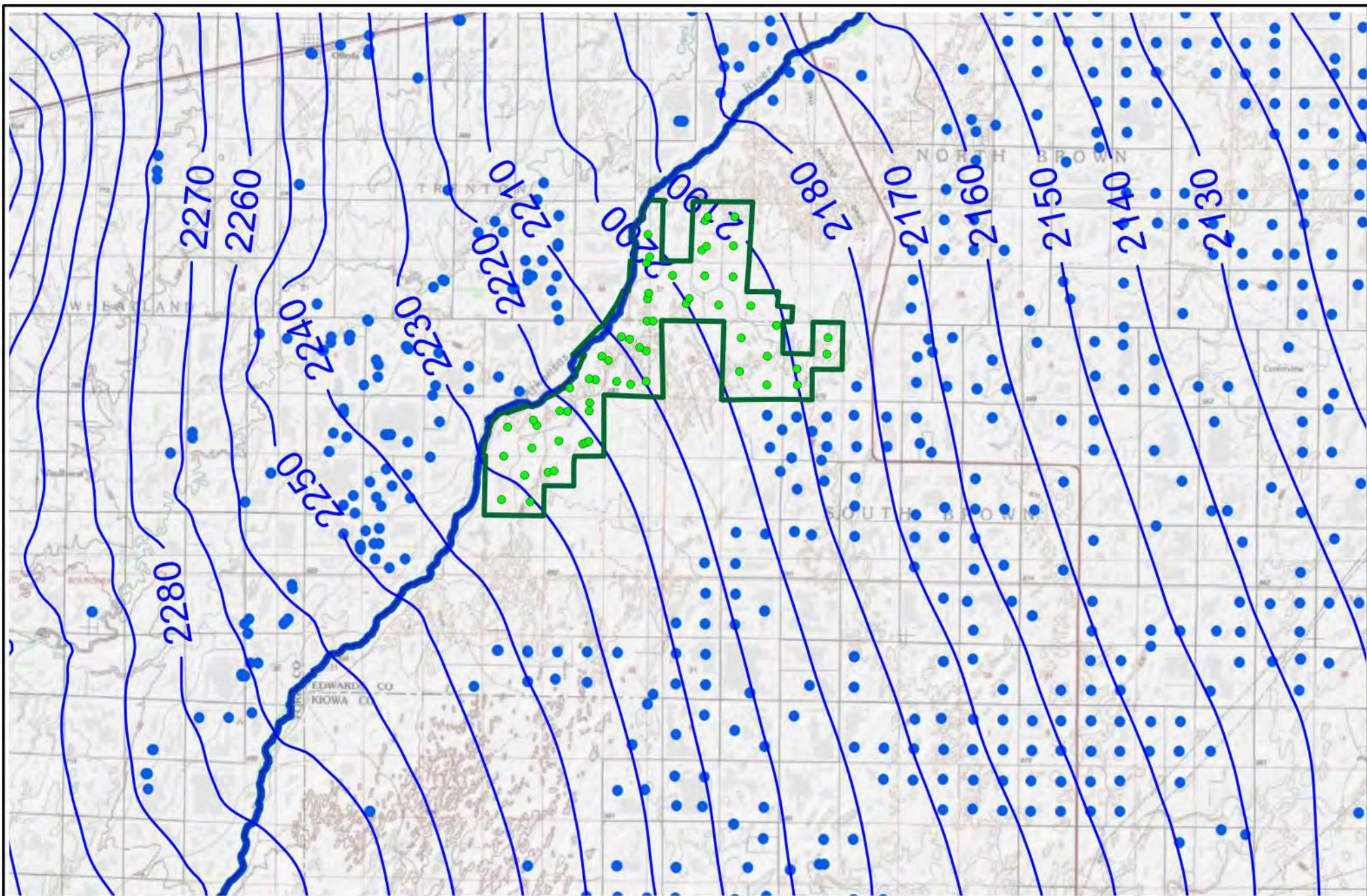
- Observation Point No. 1
- ◆ Observation Point No. 2
- 4800 Acre-feet per year



Project No.
91211

File Name:
Fig 04 - Sus Yield Regression.grf

Figure 4
Sustainable Pumping Range
with Reasonable Water Level Change
1991 - 2007 Simulation



Legend

- Water Level Contour
- R9 Ranch Boundary
- Historic R9 Irrigation Well
- Surrounding Irrigation Well



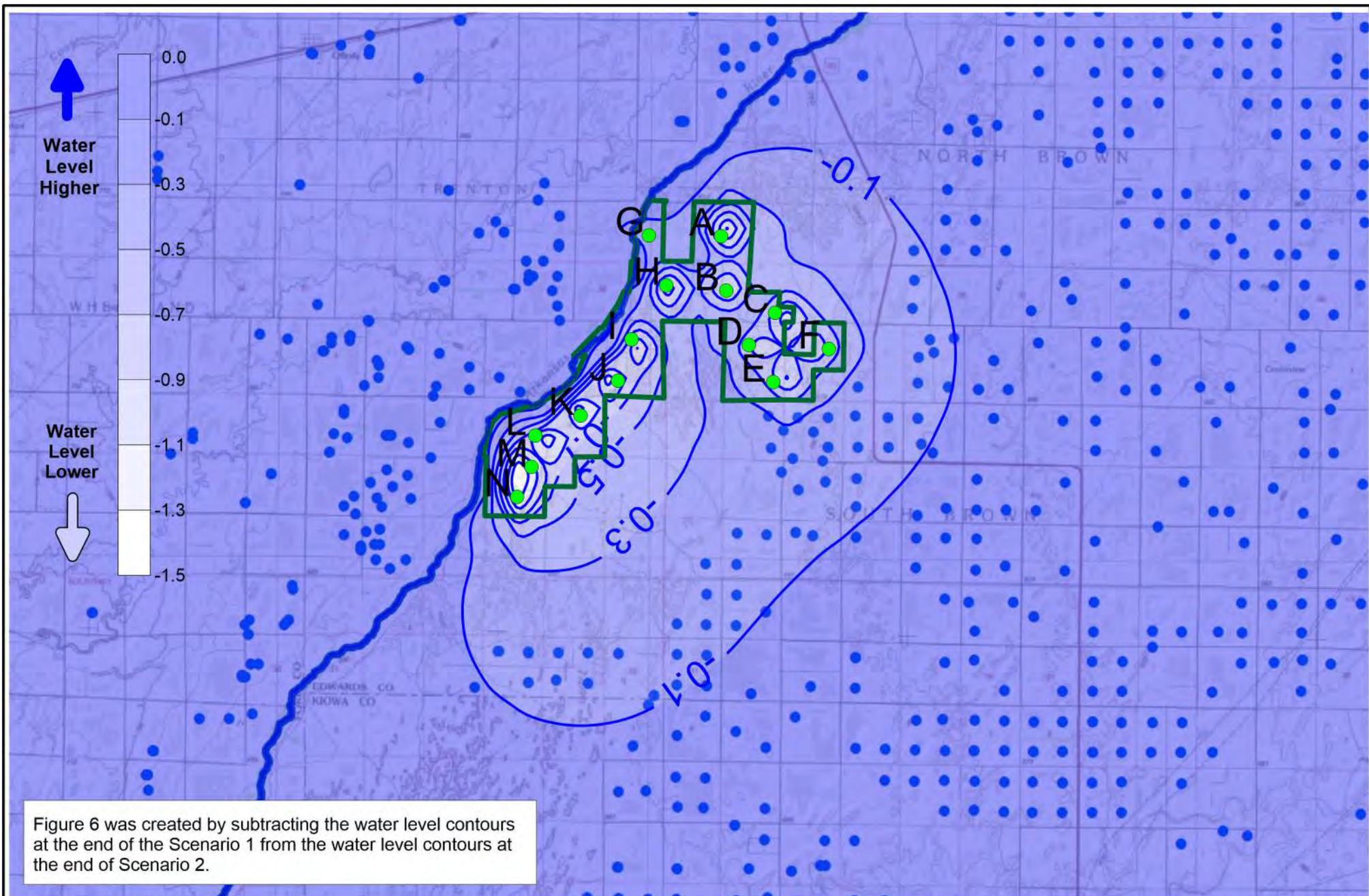
**BURNS
MCDONNELL**

0 3,000 6,000 12,000
Feet

1 inch = 2 miles



Figure 5
Model Generated Water Levels
Scenario 1 - Historic Irrigation Pumping
1991 - 2007 Simulation



Legend

-  Water Level Contour
-  R9 Ranch Boundary
-  Proposed Municipal Well
-  Surrounding Irrigation Well



**BURNS
MCDONNELL**

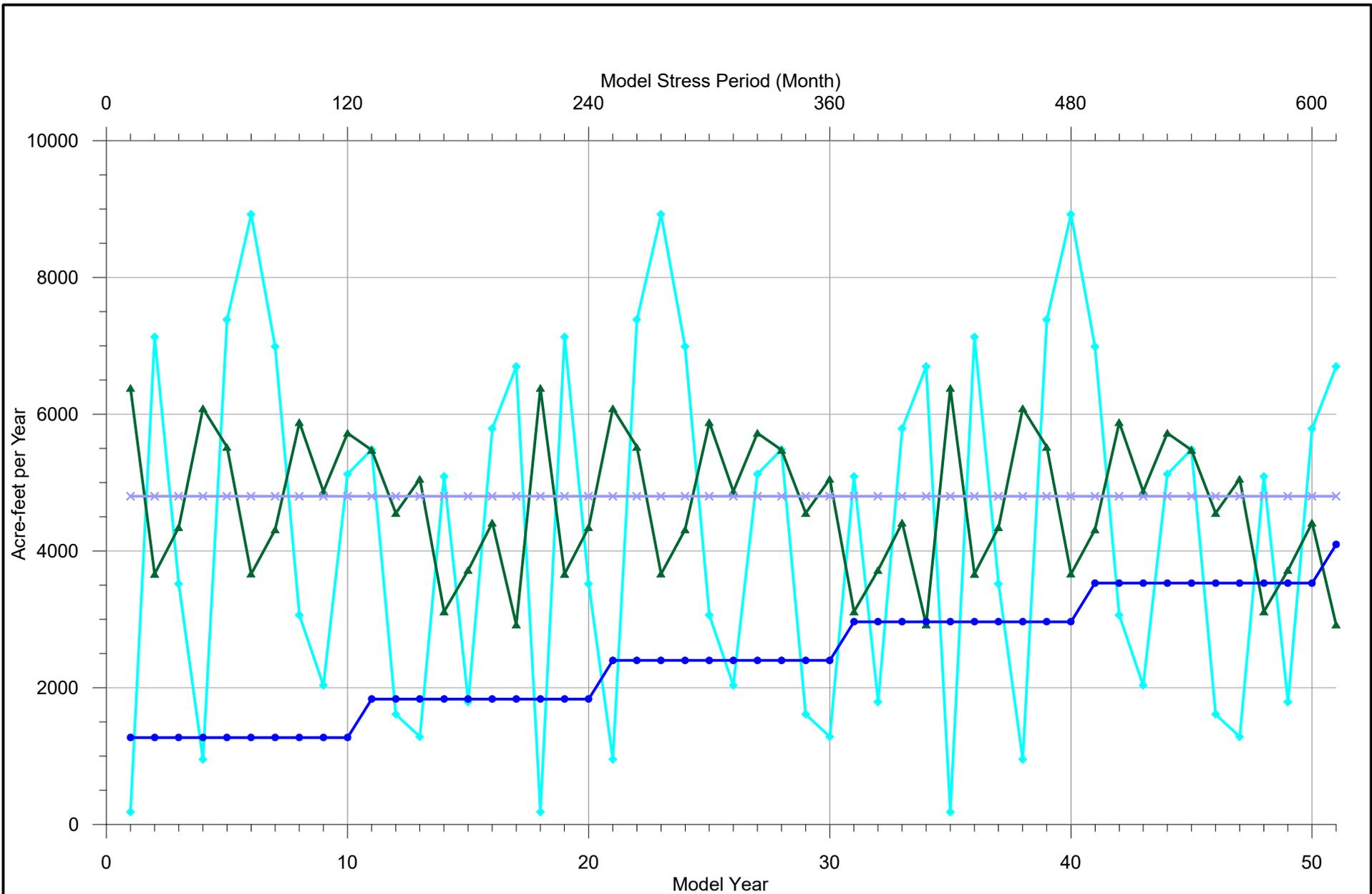
0 3,000 6,000 12,000
Feet

1 inch = 2 miles



Figure 6

Model Generated Difference in Water Levels
Scenario 2 - Historic Irrigation Pumping vs.
Proposed Municipal Wells Pumping 4800 AF/Year
1991 - 2007 Simulation



Legend

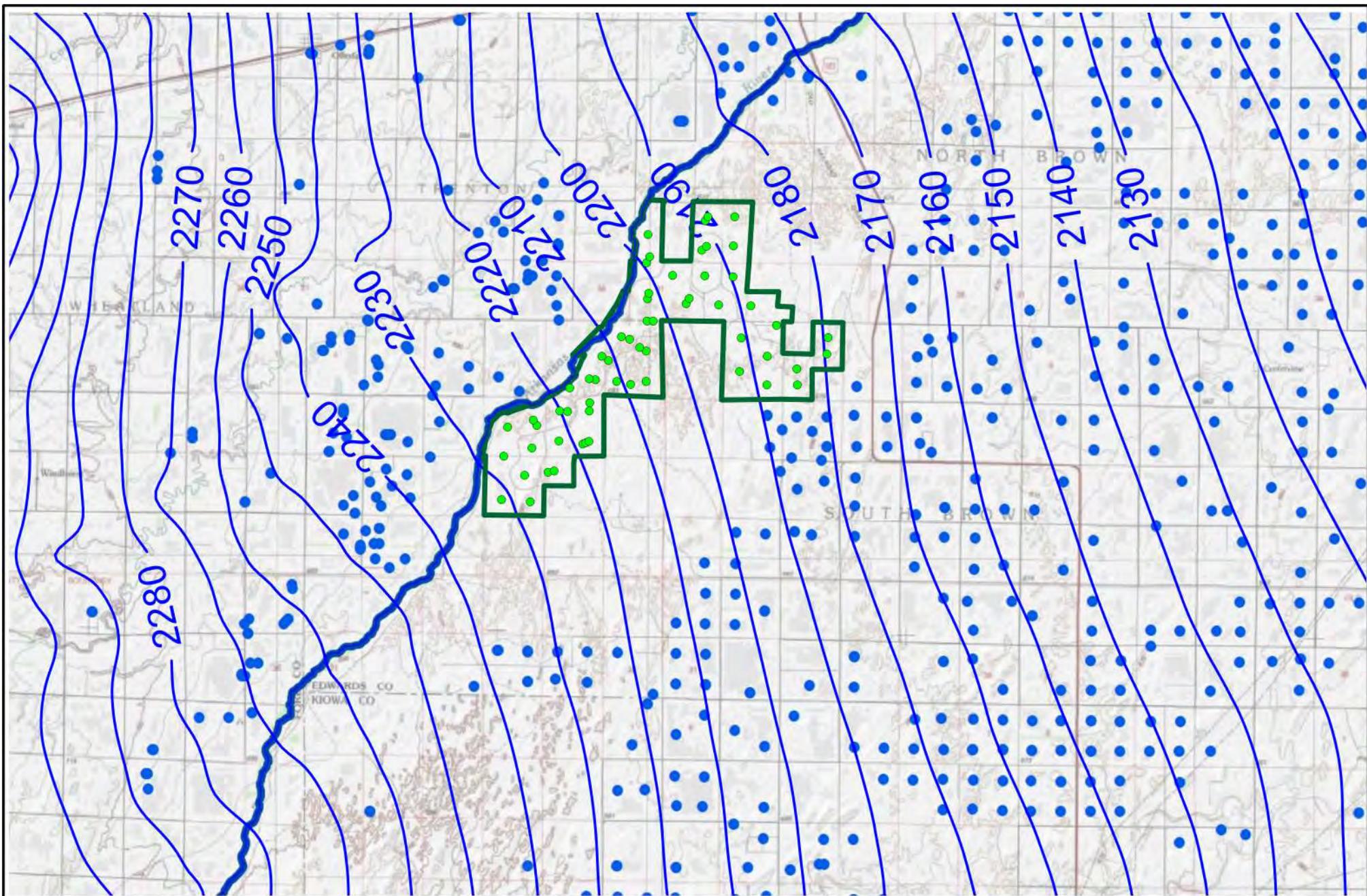
- ▲— Scenario 3 - Modeled Baseline 51-Year Pumping
- ×— Scenario 4 - Modeled 51-Year Projected Sustainable Pumping
- Scenario 5 - Average Annual 51-Year Operations Pumping
- ◆— Scenarios 3, 4, & 5 - Modeled Recharge



Project No.
91211

File Name:
Fig 7 - 51 yr Pumping.grf

Figure 7
Simulated Recharge & Pumping
Scenarios 3, 4, and 5
51-Year Simulation



Legend

- Water Level Contour
- R9 Ranch Boundary
- Historic R9 Irrigation Well
- Surrounding Irrigation Well

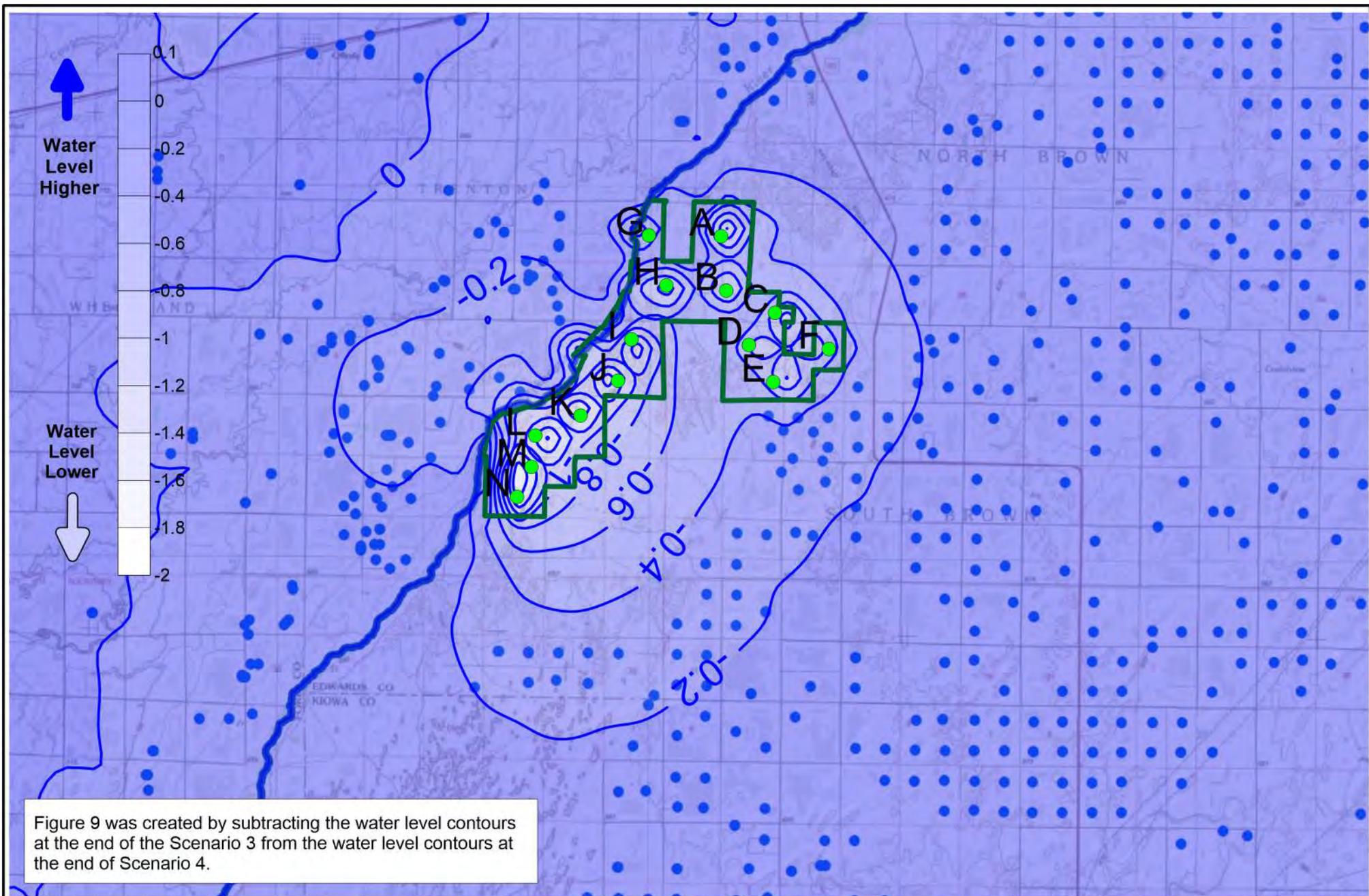


1 inch = 2 miles



Figure 8

Model Generated Water Levels
 Scenario 3 - Baseline with
 Historic Irrigation Well Pumping
 51-Year Simulation



Legend

-  Water Level Contour
-  R9 Ranch Boundary
-  Proposed Municipal Well
-  Surrounding Irrigation Well



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0 3,000 6,000 12,000
Feet

1 inch = 2 miles



Figure 9

Model Generated Difference in Water Levels
Scenario 4 - Historic Irrigation Pumping vs.
Proposed Municipal Wells Pumping 4800 AF/Year
51-Year Simulation

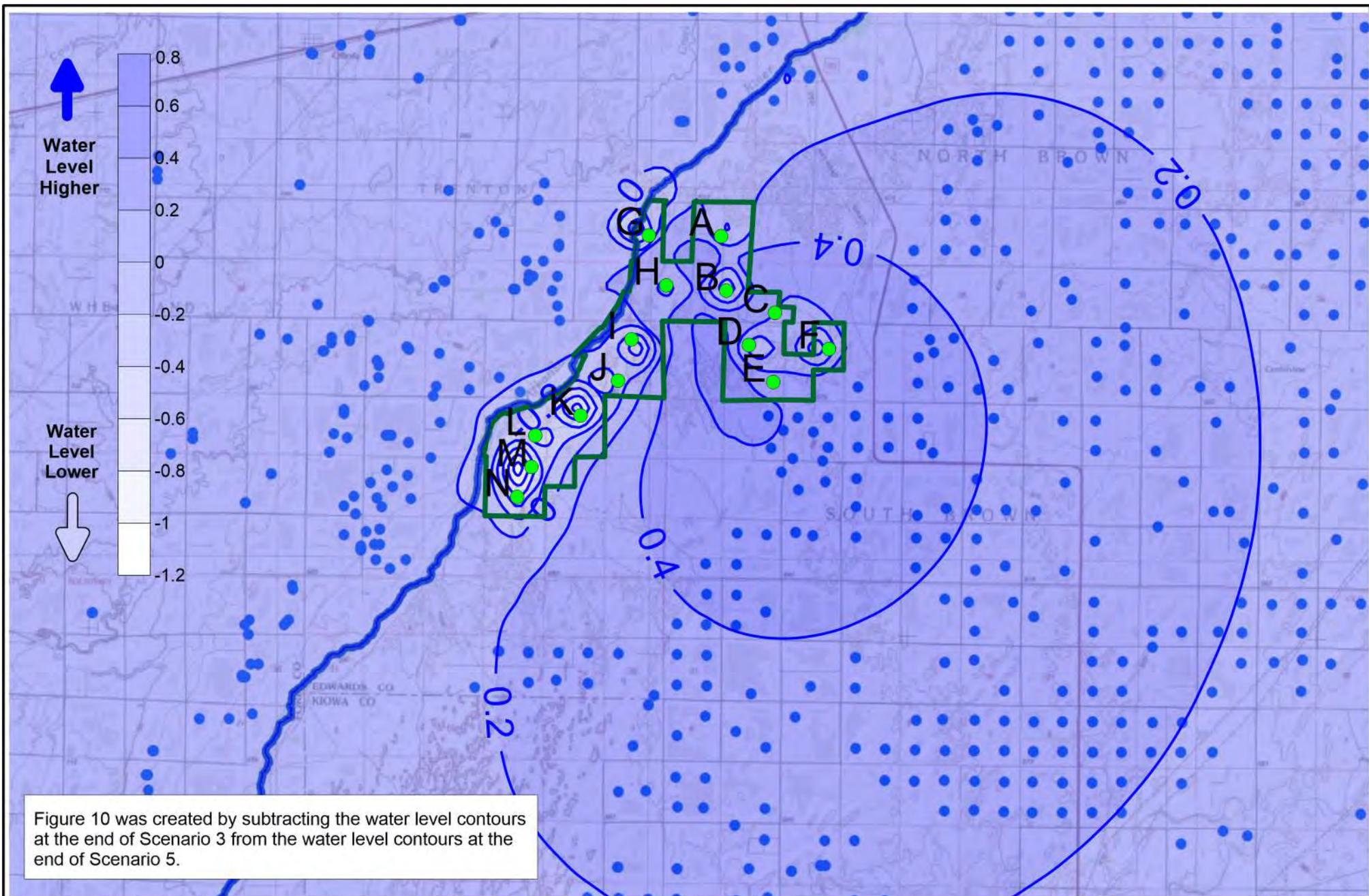
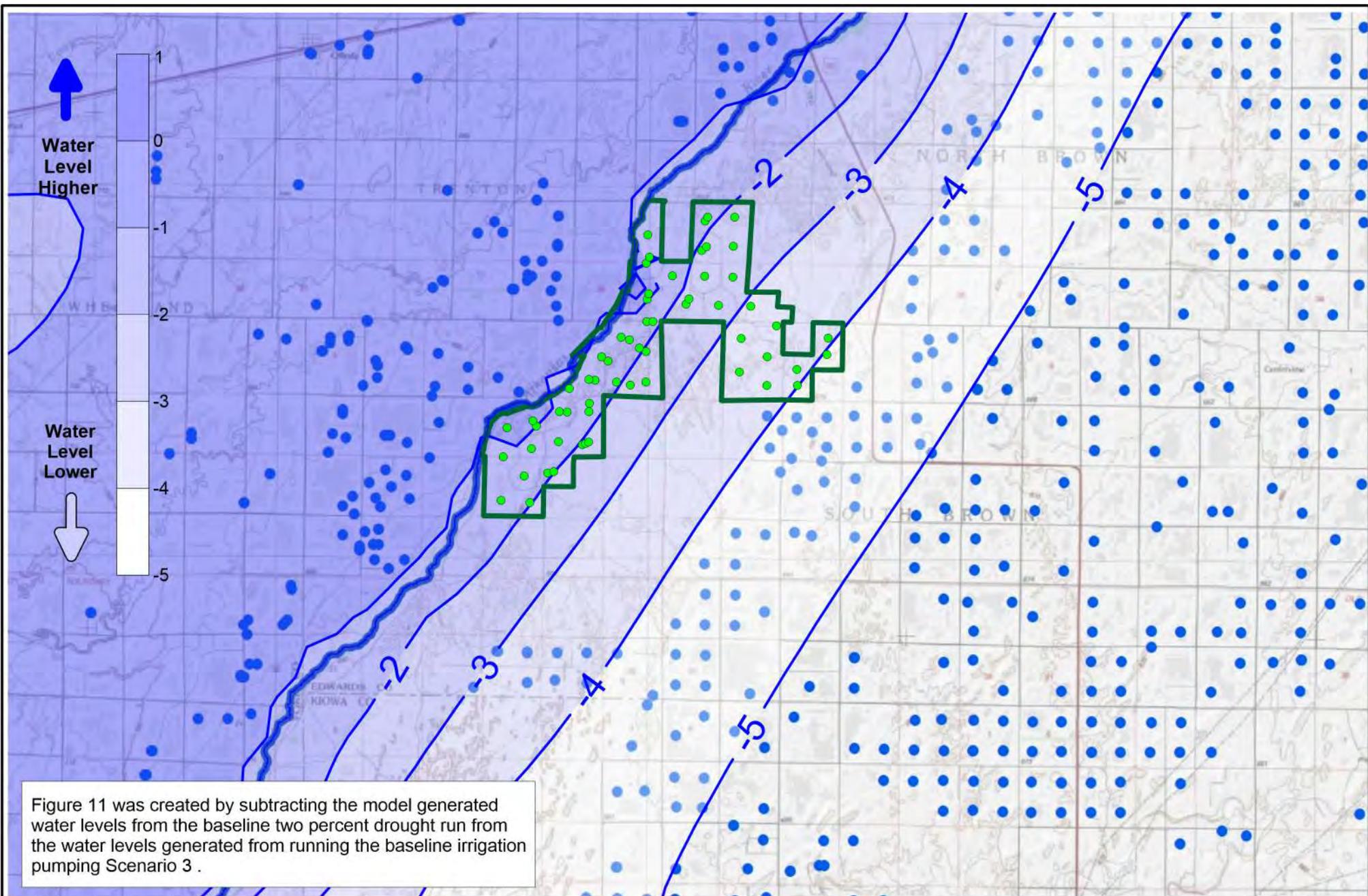


Figure 10 was created by subtracting the water level contours at the end of Scenario 3 from the water level contours at the end of Scenario 5.

<p>Legend</p> <ul style="list-style-type: none"> — Water Level Contour R9 Ranch Boundary ● Proposed Municipal Well ● Surrounding Irrigation Well 	<p>N</p>  <p>BURNS MCDONNELL</p> <p>0 3,000 6,000 12,000 Feet</p> <p>1 inch = 2 miles</p> 	<p>Figure 10</p> <p>Model Generated Water Level Difference Scenario 5 - Historic Irrigation Pumping vs Proposed Municipal Well Operations Pumping 51-Year Simulation</p>
--	---	--



Legend

- Water Level Contour
- R9 Ranch Boundary
- Historic R9 Irrigation Well
- Surrounding Irrigation Well



**BURNS
MCDONNELL**

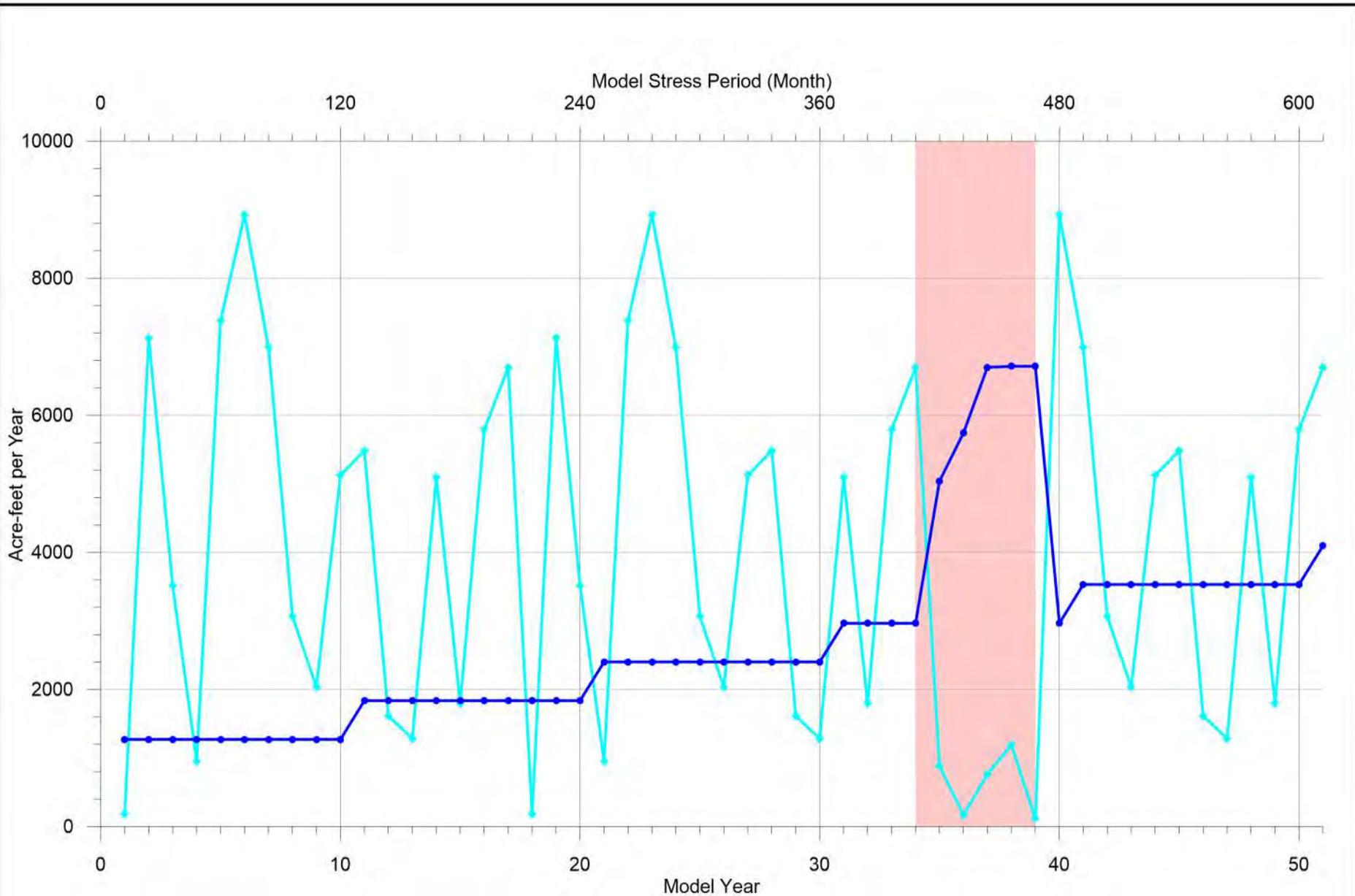
0 3,000 6,000 12,000
Feet

1 inch = 2 miles



Figure 11

Model Generated Water Level Difference
Baseline Historic Irrigation Pumping vs
Historic Irrigation Pumping During 2% Drought
51-Year Simulation



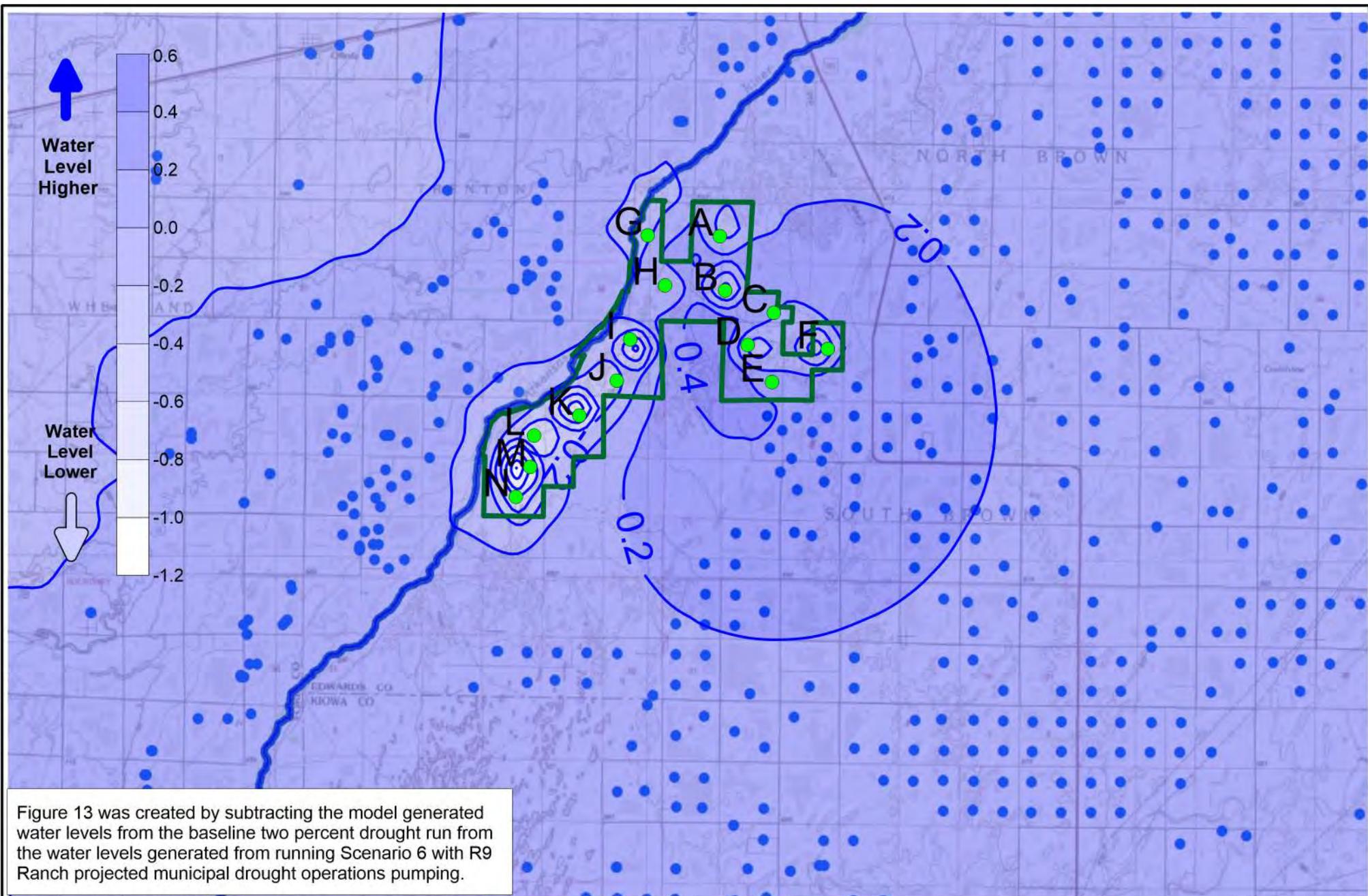
Legend

- Modeled Average Operations Scenario Pumping
- Modeled Recharge
- Drought Period



Project No. 91211 File Name: Fig 12 - 51 yr Drought Pumping.grf

Figure 12
Scenario 6 - Simulated Recharge & Operations Pumping with 2% Drought 51-Year Simulation



Legend

- Water Level Contour
- R9 Ranch Boundary
- Proposed Municipal Well
- Surrounding Irrigation Well



**BURNS
MCDONNELL**

0 3,000 6,000 12,000
Feet

1 inch = 2 miles



Figure 13

Model Generated Water Level Difference
Scenario 6 - Historic Irrigation Pumping vs
Proposed Municipal 2% Drought Operations Pumping
51-Year Simulation

EXHIBIT D
EXCERPT FROM 1994 REPORT OF CITIES' PRIOR ENGINEER

12

B1

Ground Water Associates, Inc.

610 N. MAIN, P.O. BOX 3834 • WICHITA, KANSAS 67201 • 316-262-3322

November 17, 1994

Subject: Conclusions - Circle K Ranch

(1) The ranch area can support the removal of 5500 acre feet of water per year with recharge from the Arkansas River, but continued recharge from this source appears doubtful;

(2) The area can naturally support the removal of between 3200 and 3800 acre feet of water per year, and the actual amount would depend upon whether the average recharge to the area is one or two inches;

(3) When potable water quality is considered, this amount could be reduced to approximately 1400 acre feet;

(4) The water quality problem for a potable water supply concerns excessive nitrates (more than ten parts per million) and sulfates (over 500 ppm). The western and northern portions of the ranch are affected. It is probable that the nitrate problem could be corrected within five to ten years with proper management of the water. The sulfate problem would be more difficult and would require much more time.

Very truly yours,



Robert L. Vincent, C.P.G.
GROUND WATER ASSOCIATES, INC.

RLV/jv



EXPERTISE IN WATER & WELLS

EXHIBIT E
REQUEST FOR ADMINISTRATIVE REVIEW OF THE MASTER ORDER

RECEIVED

APR 9 2019

LEGAL SECTION
KS DEPT. OF AGRICULTURE

BEFORE THE KANSAS DEPARTMENT OF AGRICULTURE

1320 Research Park Drive
Manhattan, Kansas 66502

In the Matter of
City of Hays' and the City of Russell's
Applications for Approval for Change in
Place of Use, Point of Diversion, and Use
Made of Water Under Existing Water Rights

FILE NOS. 21,729-D1; 21,729-D2; 21,730;
21,731; 21,732-D1; 21,732-D2; 21,733;
21,734; 21,841; 21,842; 22,325; 22,326;
22,327; 22,329; 22,330; 22,331; 22,332;
22,333; 22,334; 22,335; 22,338; 22,339;
22,340; 22,341; 22,342; 22,343; 22,345;
22,346; 27,760; 29,816; 30,083; and 30,084.

Pursuant to K.S.A. chs. 82a and 77

PETITION FOR REVIEW OF CHANGE APPROVALS

Water PACK asks the Secretary of Agriculture to review the Change Approvals set forth in Exhibits 1-32 of the Master Order issued March 27, 2019 ("Master Order") in the above-captioned proceeding(s).¹ The Secretary may review the Change Approvals pursuant to K.S.A. §§ 77-527, 82a-708b, and 82a-1901 (2016).

BASIS FOR PETITION

Both K.S.A. § 82a-708b (the "Change Order Statute") and enabling regulations set forth in K.A.R. 5-5-1, *et seq.* (the "Change Order Regulations") prohibit unreasonable changes and impairments of existing water rights in connection with a change approval, while omitting reference to contingencies of the kind included in the Master Order. Instead, the Change Order Statute, the Change Order Regulations, and the Kansas Water Transfer Act envision a thumbs up or thumbs down act of *pollice verso* on the part of the Chief Engineer, while the Change Order Statute and Change Order Regulations require due regard for future impacts on water rights holders that will be affected by the Change Approvals, regardless of seniority.

The Change Approvals May Not Include Contingencies

As written and as applied, the contingencies embedded in the Change Approvals exceed the jurisdiction of the Chief Engineer and run counter to the express provisions of the Change Order Statute and the Change Order Regulations. *See Hoesli v. Triplett, Inc.*, 303 Kan. 358, 362, 361 P.3d 504 (2015); *Friedman v. Kansas State Bd. of Healing Arts*, 296 Kan. 636, 640, 294 P.3d 287 (2013). The Change Order Statute specifies that once an applicant satisfies certain conditions, only then can the Chief Engineer "approve or reject the application for change in accordance with the provisions and procedures prescribed for processing original applications for permission to appropriate water." And while the administrative regulations for the Kansas Water Transfer Act contemplate submission of "contingently approved documents" like the Change Applications, neither the Change Order Statute nor K.A.R. 5-5-1 *et seq.* contemplate contingent approvals of the kind embodied in the Master Order. *Compare* K.S.A. § 82a-708b(a) *with* K.A.R. 5-5-1 *et seq.* *and*

¹ Except where otherwise noted in this petition, capitalized terms have the meanings set forth in the Master Order.

K.A.R. 5-50-2(x)(2). Approval of a change application is instead an all-or-nothing proposition, subject to conditions of approval DWR may include in connection with the Water Transfer Act.

The Change Approvals are Unreasonable

Neighboring Colorado already suffers from the “buy and dry” phenomenon,² yet the Master Order expressly contemplates that the intended use of the R9 Ranch water will “cause the water levels of the R9 Ranch to continue to decline”[.] Master Order at ¶ 137. The Change Approvals thus conflict with Kansas laws and policies intended to promote the economic vitality of Kansas, deviate from principles set forth in the Kansas Water Plan, and yield an unrealistic analysis of how withdrawals will impact local water users. Such agency actions are unreasonable, because they are taken without due regard to the benefit or harm to all interested parties, because DWR fails to consider important aspects of the problems presented, and because DWR’s explanation of those problems runs counter to the evidence before it and its own regulations.

For example, by virtue of specific local conditions, and as noted in prior submissions to DWR, there is zero return flow when pumped water is transferred out of the Mid-Arkansas Subbasin in southwest Edwards County.³ See K.A.R. 5-5-8(c)(2). Water PACK’s prior comments submitted July 16, 2018 further state that:

7. Water PACK believes strongly in the lack of recharge available from the base flow of the Arkansas River from the Dodge City area downstream to the R9 Ranch. The Mid-Arkansas Sub-Basin, in which the R9 Ranch is located, has the weakest base flow in the SW corner of the Sub-Basin, and is unlikely to improve over time. This is due to the absence of flow in the Arkansas River in this reach of the river, plus the heavy pumping from irrigators just a few miles west in GMD # 3, who are allowed to pump up to 24 inches of water each year.
8. It is likely that in the near future irrigators in this area around and adjacent to the R9 Ranch will need to create solutions, such as WCA's or similar programs, to address a declining water table, which they will almost certainly continue to experience in the alluvial and surrounding area aquifers. A good question is whether the cities of Hays/Russell will participate in these programs, or will they be allowed to continue to draw down the water table in the area (especially if allowed to pump the quantities given in the Master Order). Their legal representatives at the June 21 meeting in Greensburg alluded to the thought that their client cities would be exempt from these types of programs!
9. In 2003, the Division of Water Resources determined that the Mid-Ark Sub-Basin was in overdraft by irrigation pumping by some 41,000 Acre-Feet per year, with the SW area of the Sub-Basin being the prime area where this is occurring. Subsequent analysis by Dr. Andy Keller, Keller-Bliesner Engineering, on behalf of

² See, e.g., EDF, ALTERNATIVE WATER TRANSFERS IN COLORADO 8 (2016), <https://www.edf.org/sites/default/files/alternative-water-transfers-colorado.pdf>.

³ See Petition for Review Submitted Concurrently by Jane Wenstrom, noting that transfers from the R9 Ranch will ensure that local users will rely entirely upon high-precipitation events for recharge of the aquifer.

Water PACK, determined the overdraft to be closer to 10,000 Acre-Feet per year. He also confirmed the SW area as the area where this is predominant. Whichever number you prefer, this is a good snapshot of what was happening in the early 2000's. Water PACK's analysis of the static water levels in the area of the R9 Ranch from state & GMD data give strong evidence that this lowering of the water tables is continuing to occur, and Dr. Keller's updated analysis indicates that the decline is accelerating.

10. Years of experience by agricultural irrigators in the area of the R9 Ranch provide insight into what it is like to irrigate the sandy soil types with shallow aquifer depths and declining pumping rates during the irrigation season. A study of the R9 Ranch soil types using the Edwards County Soil Survey Maps (USDA/Soil Conservation Service, now NRCS) yields the following information: Approximately 17 % of the R9 Ranch has a Tivoli Fine Sand Soil Type. The manual states that this soil type is not suitable for irrigation due to its extreme permeability. About 67% of the R9 Ranch is Pratt-Tivoli Loamy Fine Sand soil type. The USDA manual states that this soil has "extremely low water holding capacity, rapid permeability, and subject to blowing". Taken together, 84% of the R9 Ranch has extremely low water holding capacity. With declining pumping rates in shallow aquifer areas during the summer months, this is hardly a place to be growing economical alfalfa or corn. Local area irrigators know this, and verify the low levels of production from either crop. Alfalfa is recognized as a "cover crop" in that only one or 2 cuttings of alfalfa are possible unless there is abnormally high rainfall. Yet this is the basis for the Division of Water Resources determination that alfalfa and corn were able to consumptively use 88% of applied irrigation water during the irrigation season within the perfection period of 1984 and 1985! And this leads to the overstatement of water that could be converted from agricultural to municipal use in the Master Order.

As written, the Master Order thus yields unrealistic numbers by overlooking evidence submitted by Water PACK and other participants in this proceeding. K.A.R. 5-5-9(c) (1994) version). Such data shows that the net consumptive use, calculated relative to the maximum acreage legally irrigated under the authority of the water rights during the perfection period (1984), was far less than the net consumptive use calculated by DWR. *See* K.A.R. 5-5-9(a)(1) (1994 version).

Water PACK therefore urges the Secretary to review whether the Change Approvals will cause groundwater levels in the area to decline or decline excessively; cause the rate of withdrawal of groundwater within the area in question to equal or exceed the rate of recharge in such area; or cause preventable waste of water to occur within the area in question. *See* K.S.A. §§ 82a-1036, 82a-1041. Water PACK also asks the Secretary to examine cropping data for the R9 Ranch from the year of record, satellite photography matching the cropping data reported by KBE, and NRCS studies of the unique soil conditions at the R9 Ranch.⁴ What's more, given continuing concerns

⁴ See Petition for Administrative Review of Master Order Submitted by Richard J. Wenstrom, P.E., which is incorporated by this reference.

regarding the long-term sustainability of the Arkansas River Basin,⁵ policies set forth in the Groundwater Management District Act (as amended), and data supplied by interested parties, Water PACK believes that is unreasonable to authorize transfer of the quantities contemplated in the Change Approvals in the absence of a site-specific survey, as well as further consideration of projected impacts posited by KBE. *See* K.A.R. 5-5-9(c) (1994 version).

The Master Order Improperly Concludes the Change Approvals Will Not Impair Existing Rights in Spite of BMcD's Evidence to the Contrary, and Relies on Unrealistic Numbers

The Master Order concludes that the Change Approvals “will not impair existing rights”[.] Master Order at ¶ 70. This finding appears to be based upon statements made by the Cities in a September 18 letter suggesting that “[t]here is no evidence that the proposed changes would impar water rights that are **senior** to the water rights on the R9 Ranch[.]” Master Order at ¶ 85 (emphasis supplied). The Change Order Statute, however, encompasses *all* users in the context of its impairment analysis. Specifically, the statute states that “an applicant must demonstrate that the change is reasonable, that it will not **impair existing rights**, and that water will be diverted from the same local source of supply.” Master Order at ¶ 34 (emphasis supplied). Likewise, the Change Order Regulations do not distinguish between impairment of senior or junior users, and instead require DWR to determine whether authorized annual quantities calculated under K.A.R. 5-5-9 (a) (1994 version) yield numbers that appear to be “unrealistic” and “could result in impairment of **other water rights**.” K.A.R. 5-5-9(c) (1994 version) (emphasis supplied).

However, data submitted by BMcD clearly shows that pumping by the Cities will impair both junior and senior water rights immediately adjacent to the R9 Ranch.⁶ Given that Kansas law defines impairment in terms of whether a diversion “diminishes, weakens, or injures” another water right, and in light of concerns regarding the consumptive use analysis detailed above, Water PACK urges the Secretary to consider whether findings in the Master Order properly address and consider the impacts of the Change Approvals on both junior and senior water rights. *See* Garetson Bros. v. Am. Warrior, Inc., 347 P.3d 687, 699 (Kan. App. 2015).

CONCLUSION

The express language of the Change Order Statute and the Change Order Regulations provide the Chief Engineer with a binary choice: e.g., whether to approve or reject a change application. Had the Kansas legislature wished to provide for contingent approvals in the statute, or consideration of only senior water users in connection with impairments caused by a change application, the legislature could have done so. Further, it is unrealistic for DWR to disregard data suggesting that the post-change use of water at the R9 Ranch will increase consumptive use in violation of K.A.R. 5-5-3 and impair junior users. *See* Master Order at ¶ 86. We therefore request your review.

⁵ KANSAS DEPARTMENT OF AGRICULTURE, UPPER ARKANSAS RIVER CONSERVATION RESERVE ENHANCEMENT PROGRAM PERFORMANCE REPORT 1 (Oct. 1, 2014-Sept. 30, 2015).

⁶ Letter from BMcD to Toby Dougherty, City Manager, City of Hays, R9 Ranch Modeling Result, at page 24, fig. 9 (Feb. 13, 2018), *available at* https://agriculture.ks.gov/docs/default-source/dwr-water-appropriation-documents/r9-ranch-modeling-report_feb-13-2018.pdf?sfvrsn=9dd680c1_4.

Respectfully submitted,

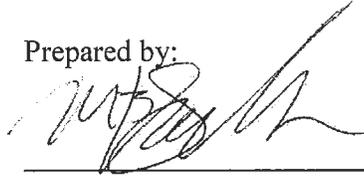
WATER PROTECTION ASSN. OF CENTRAL
KANSAS

306-A N. Main Street
Saint John, Kansas 67576



By Kent Moore, its President

Prepared by:



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April 5, 2019

RECEIVED
APR 10 2019
LEGAL SECTION
KS DEPT. OF AGRICULTURE

The Honorable Mike Beam
~~Acting~~ Secretary
Kansas Department of Agriculture
1320 Research Park Drive
Manhattan, Kansas 66502

Dear Secretary Beam:

RE: Petition for Administrative Review of the Master Order Contingently Approving Change Applications Regarding R9 Water Rights, issued on March 27, 2019 by David W. Barfield, P.E., Chief Engineer, Division of Water Resources

My name is Richard Wenstrom, and I am the owner of an irrigated farm in Edwards County and have farmed in the area for over 40 years now. Part of our farm is adjacent to property owned by the cities of Hays and Russell known as the R9 Ranch (formerly Circle K Ranch). In addition, I am a licensed Professional Engineer in the state of Kansas, and Past President and a current Board member of the Water Protection Association of Central Kansas (Water PACK), a private group of irrigated producers who are organized to support irrigated agriculture.

The basis for my petition is to outline problems that I see with the determination of the consumptive use by the Chief Engineer under K.A.R. 5-5-9 (1994 version) and how it is used to determine the amount of water that can be changed from agricultural use to municipal use.

The Chief Engineer and the consultant for Hays/Russell are quick to point out that they did not do a site specific analysis of net consumptive use as outlined in K.A.R.5-5-9 6(c) because the reasons given in the statute were not met in their view. I would say that this is a precedent setting project involving many water rights that involves removing water from one part of the state with no subsequent return flows to the aquifer of supply, and exporting that water to another part of the state. The public interest is of paramount importance in this project due to the magnitude of the removal and the finality of the consequences of the decisions spelled out in the Master Order, not to mention the effect of this project on the irrigated producers and communities in the vicinity of the Ranch.

For example, the Chief Engineer and his staff failed to check the validity of the cropping records for the R9 Ranch for the year of record back in the mid 80's. If they had gained access to FSA records they would have found an entirely different cropping pattern. A few local producers and citizens contacted the tenants that were in place during the year of record, and these two tenants agreed to go to the FSA-USDA in Edwards County to see what the reported cropping for

that year actually was. The former tenants obtained the cropping data, and graciously agreed to give us access to the data. What we learned is that, instead of the 2,901 acres of alfalfa and 2,247 acres of corn reported by the Chief Engineer, the FSA records show: 2,387 acres alfalfa, 488 acres corn, 176 acres milo, 1,670 acres wheat, 293 acres of circles not farmed or crop destroyed. This also explains why the satellite photos of the R9 Ranch for the year of record generated for Water PACK by Dr. Andy Keller, Keller-Bliesner Engineering, show so many circles that were obviously not corn or alfalfa....some actually look like they were not even farmed, but now we know that was wheat stubble.

The NIR for corn for 50 % chance rainfall for Edwards County is 13 inches for corn, and 20.9 inches for alfalfa, as specified and used by the Chief Engineer. THE NIR for milo and wheat for 50 % chance rainfall for Edwards County is 11 inches and 8.7 inches, respectively. Obviously, if the cropping acres were accurately known, with wheat, milo, and empty circles replacing corn and alfalfa, the consumptive use on the R9 Ranch during the perfection period would have been much less as the NIR and acreage figures are adjusted lower. This would then have caused the amount of water that can be converted from agricultural to municipal would also have been correspondingly lower as well.

Consumptive use is supposed to be a measurement of the water that is actually consumed by the crop being irrigated or watered by precipitation as a fraction of the total water that is applied in either case. As irrigated producers, we have an obligation and a task of minimizing the amount of irrigation water that is not consumed by the crop, as this water is being pumped at cost and any water not consumed is wasted through deep percolation and/or evaporation. We live with this process every day of the growing season. It is no wonder, then, that when we observe a process set in place by the Chief Engineer that ignores what is happening to consumptive use at the actual irrigation site at the R9 Ranch (apparently allowable under K.A.R. 5-5-9 even though this consumptive use may seem unrealistic but does not impair other water users) we are dismayed considerably.

Here's why.....the R9 Ranch has many factors where it is well nigh impossible to optimize beneficial consumptive use on crops raised under irrigation. The best evidence for this is the history of unprofitable crop production at the R9 Ranch (formerly Circle K Ranch) back through its troubled history. As owners discovered this, they sold the ranch over and over again to try to recover their investment through land appreciation rather than through profitable farming. This is not to say that this ranch has not had good farmers.....there have been some excellent famers who have tried to make a profit on this operation. But Mother Nature is extremely cruel to those who try.

First of all, low water holding capacity soils on the ranch.....I personally used the USDA/SCS Soil Manual for Edwards County and offer these observations: 17 % of the R9 Ranch has a Tivoli fine sand soil type. This soil type is so coarse that it is labeled by the Manual as "not applicable to irrigation". How easy would it be to have positive consumptive use on this soil type? 67 % of the Ranch has a Pratt-Tivoli loamy fine sand soil type. The Manual says this soil has "extremely low water holding capacity, rapid permeability, and subject to blowing". What happens to

crops on these soils is that the irrigator keeps pumping and pumping, but most of the water returns to the aquifer through deep percolation without positive consumptive use. As the season progresses, this vicious cycle continues and the result is very poor yields for corn, and reduced cuttings in quantity and quality for alfalfa compared to normal soils that can hold more water. The Chief Engineer, given his decision on consumptive use allowing 6,767.8 Acre-Feet of consumptive use (out of 7,625.7 Acre feet of Ag water rights) has essentially said that 88.6 % of the water pumped on these soils during the perfection period was used consumptively by the crops. As a farmer and irrigation engineer, I cannot agree with this decision.

Further complicating this situation are the shallow wells on the R9 Ranch.....most are less than 100 feet deep, with 40-60 feet of saturated thickness. Under high pumping situations such as heat, wind and low humidity affecting Ranch crops, especially corn and alfalfa, the wells tend to dewater and provide only a portion of designed flow rates. This further complicates the irrigator's ability to provide enough irrigation water to meet evapotranspiration demands. This has always been a huge problem for operators of the R9 Ranch, or its predecessors. Sadly, even if the wells did not dewater, and pump normally, most of the water just returns to the aquifer as deep percolation because of the coarse gravelly soils, as stated above. This is also why local producers such as us are concerned about the amount of water that is allowed to be transferred in this water transfer matter. There will be no more deep percolation to the aquifer as there was under irrigated crops, since Hays/Russell will pump water from the aquifer and transfer 100 % of this water out of our basin and to another part of Kansas. If that quantity is too high, eventually impairments will occur with nearby farms like ours. This will not be good for Hays/Russell either.

Finally, some comments regarding the unique situation this matter presents to anyone who attempts to quantify consumptive use under K.A.R. 5-5-9 to determine the amount of water that can be changed to municipal use from agricultural use. In full disclosure, I discussed the following with Dr. Andy Keller, P.E., President, Keller-Bliesner Engineering. Dr. Keller is widely recognized as one of the foremost experts in Consumptive Use Concepts under Irrigation in the entire world, and a very able hydrologist. Water PACK has been extremely fortunate to be able to access his services as a consultant. He is very familiar with central Kansas, having worked here early in his career, and also has provided consulting service to Water PACK on two other occasions.

The Kansas Water Appropriation Rules and Regulations governing change in use of water from irrigation to other beneficial use are intended to ensure the change does not result in an increase in the net consumptive use from the water source:

"K.A.R. 5-5-9. Criteria for the approval of an application for a change in the use made of water from irrigation to any other type of beneficial use of water. (a) The approval of a change in the use made of water from irrigation to any other type of beneficial use shall not be approved if it will cause the net consumptive use from the local source of water supply to be greater than the net

consumptive use from the same local source of water supply by the original irrigation use..."

When formerly irrigated land is no longer irrigated, in time, as dryland vegetation becomes established, the consumed portion of precipitation falling on the land will become greater than under irrigated conditions. This is what will happen on the R9 Ranch when irrigation ceases. Accordingly, to ensure no net increase in consumptive use from the R9 Ranch post-transfer, the increased consumptive use of precipitation under dryland conditions should be accounted in determining the amount of water that can be transferred.

The Chief Engineer, in his Master Order, appears to not agree the consumed portion of precipitation on the R9 Ranch would increase under dryland conditions and, without substantiation, concludes (paragraph 89) "the diversion of a total of up to 6,756.8 acre-feet of water per calendar year from all of the R9 Water Rights combined, will not cause the net consumptive use from the local source of water supply for the new municipal use to exceed the net consumptive use from the same local source of water supply by the original irrigation use." The net consumptive use of 6,756.8 acre-feet per year found by the Chief Engineer is significantly greater than the 3,790 acre-feet per year calculated by Water PACK's consultant and, at a minimum, should trigger a site-specific net consumptive use analysis by the Chief Engineer per K.A.R. 5-5-9 (c) to ensure no increase in net consumptive use from the R9 Ranch as a result of the change from irrigation to municipal use.

Thank you very much for this opportunity to submit this Petition.

Sincerely,

A handwritten signature in black ink, appearing to read "Richard J. Wenstrom". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

Richard J. Wenstrom, P.E.

**EXHIBIT F
DECLINATION**

BEFORE THE KANSAS DEPARTMENT OF AGRICULTURE

1320 Research Park Drive
Manhattan, Kansas 66502

In the Matter of the

City Hays' and the City of Russell's Applications for Approval to Change the Place of Use, the Point of Diversion and the use made of the Water Under an Existing Water Right.

Water Right File Nos. 21,729-D1; 21,729-D2; 21,730; 21,731; 21,732-D1; 21,732-D2; 21,733; 21,734; 21,841; 21,842; 22,325; 22,326; 22,327; 22,329; 22,330; 22,331; 22,332; 22,333; 22,334; 22,335; 22,338; 22,339; 22,340; 22,341; 22,342; 22,343; 22,345; 22,346; 27,760; 29,816; 30,083; and 30,084.

Pursuant to K.S.A. 82a-1901 and K.S.A. 77-527.
Case No. 15856 WATER 2019.

ORDER DECLINING REQUEST FOR SECRETARIAL REVIEW

COMES NOW, Michael Beam, Secretary, Kansas Department of Agriculture ("Secretary") and hereby declines to exercise review of the Master Order Contingently Approving Change Applications Regarding R9 Water Rights ("Master Order") for the reasons stated herein.

That on March 28th, 2019, David W. Barfield, P.E., Chief Engineer, Division of Water Resources, Kansas Department of Agriculture issued the Master Order approving changes to multiple water rights owned by the City of Hays and the City of Russell.

That on April 9, 2019, Water PACK timely submitted a request for review of the Master Order by the Secretary pursuant to K.S.A. 82a-1901.

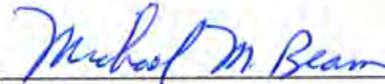
Pursuant to K.S.A. 77-527, should the Secretary decline to exercise review, the parties must be notified of such decision within 20 days.

That prior to his appointment and confirmation as Secretary of Agriculture, the Secretary worked at the Kansas Livestock Association ("KLA") and was the staff member appointed to the Water Policy Committee. Such committee directly considered the merits of the matters contained in the Master Order and developed a policy statement regarding the proposed applications which was ultimately adopted by the KLA. The committee included members that have now asked the Secretary to exercise review of the Master Order.

The issues raised in the request for review by the Secretary also primarily concern issues that should be specifically considered under the Water Transfer Act, K.S.A. 82a-1501 *et seq.*, and therefore are more properly reviewed by the Water Transfer Panel, when that body is convened.

THEREFORE, considering all the reasons set forth herein, the Secretary hereby declines to exercise review in the above matter pursuant to K.S.A. 77-527(b).

IT IS SO ORDERED, THIS 29th DAY OF APRIL 2019 IN MANHATTAN, RILEY COUNTY, KANSAS.



Michael Beam, Secretary
Kansas Department of Agriculture

PREPARED BY:



Kenneth B. Titus #26401
Chief Counsel
Kansas Department of Agriculture
1320 Research Park Drive
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Phone: (785) 564-6715
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CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the foregoing *Order Declining Secretarial Review* was deposited in the U.S. mail on the 29th day of April, 2019, first class postage prepaid, addressed to the following:

Kent Moore, President
Water Protection Association of Central Kansas
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and to the following parties via electronic mail:

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KDA Staff

Final Order

This is a final order of the Secretary which shall become effective upon service pursuant to K.S.A. 77-530.

Judicial Review

Review of this order may be had pursuant to the Kansas Act for Judicial Review and Civil Enforcement of Agency Actions, K.S.A. 77-601 *et seq.* Any petition for such judicial review must be filed within thirty (30) days after service of this order in a Kansas court of competent jurisdiction. The agency officer designated to receive service of a petition for judicial review on behalf of the Kansas Department of Agriculture is:

Kenneth B. Titus
Chief Legal Counsel
Kansas Department of Agriculture
1320 Research Park Drive
Manhattan, Kansas 66502