

**BEFORE THE OFFICE OF ADMINISTRATIVE HEARINGS
STATE OF KANSAS**

IN THE MATTER OF:

The Application of the Cities of
Hays, Kansas and Russell, Kansas
For Approval to Transfer Water
From Edwards County, Kansas
Pursuant to the Kansas Water
Transfer Act.

OAH No. 23AG0003 AG

INITIAL ORDER

The above matter comes before the Presiding Officer/Administrative Law Judge (ALJ) to issue this *Initial Order* following the completion of the formal public hearing held in the above captioned matter.

I. Statement of the Case

The Cities of Hays, Kansas (Hays) and Russell, Kansas (Russell), collectively “The Cities,” filed an application with the Chief Engineer of the Division of Water Resources to transfer the place of use of water rights owned by the Cities. In accordance with the Water Transfer Act (WTA),¹ the Water Transfer Hearing Panel (WTHP) appointed the undersigned ALJ to serve as the presiding officer for a hearing on the Cities’ application.

The issue to be addressed was whether the Cities’ application to transfer water should be approved in accordance with the WTA.

II. Parties to the Case

The Cities were represented by counsel, David Traster and Daniel Buller. Additionally, Melvin Sauer, Hays Assistant City Attorney, and Donald Hoffman, Hays City Attorney, appeared on behalf of Hays. Kenneth Cole, Russell City Attorney, appeared on behalf of Russell.

¹ K.S.A. 82a-1501 *et seq.*

Water Protection Association of Central Kansas (Water PACK), and Edwards County (collectively, Intervenor), appeared through counsel, Charles Lee, Myndee Lee, and Michah Schwalb.^{2, 3}

Kate Langworthy, staff attorney, appeared on behalf of the Kansas Department of Agriculture (KDA), Division of Water Resources (DWR) a commenting agency, throughout the proceeding and at the formal public hearing.

Christina Hansen, attorney at law, and Lynn Preheim, attorney at law, appeared for portions of the proceeding, including portions of the formal public hearing on behalf of Groundwater Management District No. 5 (GMD5), a commenting agency in this proceeding. Sarah Struby, attorney at law, appeared on November 6, 2023 for the conclusion of the formal public hearing on behalf of GMD5.^{4, 5}

Prior to the start of the formal public hearing the Kansas Department of Health and Environment (KDHE) requested and was recognized as a commenting agency. Emily Quinn, staff attorney, entered an appearance on behalf of KDHE.^{6, 7}

Prior to the start of the formal public hearing, the Kansas Water Office (KWO) also submitted correspondence to OAH indicating it wished to follow the proceeding and KWO was recognized as a commenting agency.⁸ Matt Unruh, assistant director of KWO, attended the formal public hearing to observe the proceeding *pro se* on behalf of KWO.

² Intervenor’s petition for intervention listed Michah Schwalb, an attorney with the same firm as Charles Lee and Myndee Lee as counsel for the Intervenor. However, Mr. Schwalb did not appear in person at the formal public hearing on behalf of the Intervenor.

³ Documentation provided to OAH had identified Mark Frame, attorney at law, as the County Attorney for Edwards County. However, it is noted that while Mr. Frame has been included on service lists for documentation issued by OAH through the course of this proceeding, Mr. Frame did not appear on behalf of Edwards County at the formal public hearing. Charles Lee and Myndee Lee appeared on behalf of the Intervenor (jointly).

⁴ GMD5 would be considered a “commenting agency” pursuant to K.S.A. 82a-1501(i). GMD also filed a petition to intervene in the case and was granted intervention in the proceeding. However, any reference to “Intervenor” in this order does not include GMD5.

⁵ Although GMD5 participated in the prehearing conferences in this matter through counsel, GMD5’s manager, Orin Ferrell appeared without counsel at the public comment hearing held on June 20, 2023. Mr. Ferrell appeared to be following the proceeding through the Zoom video conference link during the formal public hearing held July 19-31, 2023. However, GMD5 counsel was only present for the formal public hearing on Friday, July 28, 2023, when Mr. Ferrell was called as a witness.

⁶ KDHE did not appear at the formal public hearing, but its counsel was observed as one of the viewers watching the proceeding online through Zoom. KDHE was recognized as a commenting agency pursuant to K.S.A. 82a-1501(i). On November 6, 2023, Alexandra Finley, staff attorney, filed an entry of appearance as counsel of record for KDHE and has been added to the service list for further filings in this matter.

⁷ After the conclusion of the formal public hearing, but prior to the issuance of the order, substitute counsel entered their appearance on behalf of KDHE, a recognized commenting agency in this proceeding.

⁸ KWO was recognized as a commenting agency pursuant to K.S.A. 82a-1501(i).

After the evidentiary portion of the formal public hearing was completed, the Kansas Water Authority (KWA) and Kansas Department of Wildlife and Parks (KDWP) both requested recognition as commenting agencies and were subsequently recognized as commenting agencies.

III. Legal Authority and Procedural Background

1. Water appropriation in Kansas is based upon the prior appropriation doctrine, often summarized as “first in time is first in right.”⁹
2. The Kansas Water Appropriations Act (KWAA), codified by the Legislature at K.S.A. 82a-701 *et seq.* governs the appropriation of water in Kansas. The file number of an appropriation right identifies the seniority of that appropriation right against other appropriation rights.
3. The KWAA, and the regulations adopted under the KWAA set forth procedures by which someone can apply for a new water right. If requirements on a new application are met, a certificate may be issued allowing the applicant to start the process of completing the diversion works and developing the water right. If all requirements are met, a water right can be perfected and that water right would establish the conditions for water use authorized under that water right.
4. An “appropriation right” is a right to divert a specified quantity of water, at a specified rate, from a defined source (provided water is available for all vested and senior appropriated rights) for a specified use.¹⁰ The water right effectively says how much water can be taken, how fast the water can be taken, where it can be taken, where it can be used, and how it can be used.
5. A water right is a real property right which may be transferred, with or without the land connected to the water right.¹¹
6. If the owner of a water right wishes to change the point of diversion, place of use or type of use, the owner must submit a change application to DWR and seek approval from the Chief Engineer. However, the Kansas Legislature enacted the WTA for circumstances involving an attempt to transfer a large quantity of water greater distances from the place where the water is originating.

⁹ K.S.A. 82a-707(c).

¹⁰ K.S.A. 82a-701(f).

¹¹ K.S.A. 82a-701(g);

7. A water transfer, as defined by Kansas law, is diversion and transportation of water of a quantity of 2,000 acre-feet per year for beneficial use at a point outside of a 35-mile radius from the point of diversion.¹²
2. The WTA was first enacted by the Kansas Legislature in 1983, and has been amended several times since then. However, the record in this matter as well as additional representations from the parties suggests this is the first instance in which an applicant has sought approval for a water transfer pursuant to the WTA.
3. The WTA establishes a Water Transfer Hearing Panel (WTHP) consisting of DWR's Chief Engineer, the Director of the KWO, and the Secretary of KDHE (or their designee), with the Chief Engineer serving as the chairperson of the WTHP.¹³ The Legislature's amendments to the WTA in 2005, which applies in this matter, requires the WTHP to request a presiding officer from the Office of Administrative Hearings (OAH) to conduct a hearing on the application.^{14, 15}
4. The WTHP is to request a presiding officer from OAH when (1) the WTHP has a complete application for a water transfer; or (2) either the Chief Engineer, or a majority vote of the WTHP determines it to be in the best interest of the State of Kansas to conduct a water transfer hearing on the application for either a new water right or a change to an existing water right.¹⁶
5. The presiding officer must be "an independent person knowledgeable in water law, water issues and hearing procedures." Additionally, the presiding officer may employ such persons, and contract for services and facilities necessary to carry out their duties under the WTA.^{17, 18}

¹² K.S.A. 82a-1501(a)(1).

¹³ K.S.A. 82a-1501, K.S.A. 82a-1501a(a).

¹⁴ K.S.A. 82a-1501a(b).

¹⁵ It was noted by KDA that an administrative regulation, K.A.R. 5-50-8, adopted in 1996, specified that the WTHP was to accept nominations of individuals who could serve as a presiding officer in a water transfer hearing from (i) the applicant, (ii) commenting agencies, and (iii) entities located in the basin of origin of the proposed transfer. KDA reported that even though action had not been taken to revoke or amend the regulation, the 2005 amendment to the statute effectively nullified the regulation. K.S.A. 82a-1904 authorizes the Chief Engineer to waive an administrative regulation for good cause shown if such waiver does not unreasonably affect public interest or impair existing water rights. The Chief Engineer issued an order dated November 10, 2023 waiving K.A.R. 5-50-8.

¹⁶ K.S.A. 82a-1501a(b).

¹⁷ K.S.A. 82a-1501a(c).

¹⁸ The Presiding Officer in this case is an Administrative Law Judge with the Office of Administrative Hearings. Judge Spurgin has attended courses through the National Judicial College addressing evidence, administrative hearings, and water/environmental law issues. Judge Spurgin has knowledge and previous experience in Kansas water rights cases as well as experience in a judicial role conducting administrative hearings, including hearings addressing water right matters.

6. Approval pursuant to the WTA is required to make a water transfer. The WTA establishes criteria to be addressed for approval of a transfer, specifically addressing the impacts of approval or denial of the application to the affected geographic areas as well as the benefit to the entire State.¹⁹
7. When an application under the WTA is submitted to the Chief Engineer of DWR, it must include specific information. If the application does not contain the required information, the Chief Engineer is required to return the application so the applicant can complete or correct it for the necessary information.²⁰
8. When a pending application is accepted as complete, the WTA sets out a procedural timetable as follows:
 - a. The Presiding Officer has 14 days to issue notice of a prehearing conference after the Presiding Officer is appointed.
 - b. The notice of prehearing conference is to be provided by mail to the applicant, parties who have intervened, and appropriate commenting agencies.
 - c. The notice of prehearing conference is to be published in the Kansas Register and at least two newspapers having general circulation in the area where the proposed point of diversion is located.
 - d. The Presiding Officer must hold the prehearing conference at least 90 days, and no more than 120 days after notice was given, and the prehearing conference must conclude no more than 45 days after it was commenced.
 - e. The Presiding Officer must commence the formal public hearing no less than 90 and no more than 120 days after the conclusion of the prehearing conference with the formal public hearing to be held in the basin of origin. If deemed necessary by the Presiding Officer, a public comment hearing may be held in the basin of use.
 - f. The formal public hearing must conclude no more than 120 days after it was commenced.
 - g. The Presiding Officer must issue an initial order no more than 90 days after the conclusion of the formal public hearing.²¹
9. The WTA further provides that petitions for intervention must be in accordance with the Kansas Administrative Procedures Act (KAPA) and must be filed no later than 60 days prior to the formal public hearing.²²
10. Witnesses appearing to testify at the hearing do so upon terms and conditions determined by the Presiding Officer.²³

¹⁹ K.S.A. 82a-1502.

²⁰ K.S.A. 82a-1503(a).

²¹ K.S.A. 82a-1503(b).

²² K.S.A. 82a-1503(c).

²³ K.S.A. 82a-1503(d).

11. By letter dated October 20, 2022, the WTHP requested the appointment of a presiding officer. On October 27, 2022, upon receipt of the application and associated documents, the undersigned ALJ was appointed to serve as the Presiding Officer in this matter.
12. On November 8, 2022, the presiding officer issued a *Prehearing Order and Notice of Prehearing Conference*. The notice of the prehearing conference was also published in the Kansas Register, the Edwards County Sentinel, Larned Tiller & Toiler, Dodge City Daily Globe, Russell County News, and Hays Daily News in accordance with the provisions of the WTA.²⁴ It is noted that notice was issued to the Kansas Department of Agriculture (KDA) and Groundwater Management District #5 (GMD5), as information had been submitted to establish these entities were interested to receive notice appropriately as commenting agencies.²⁵
13. A prehearing conference was held on February 15, 2023 pursuant to the WTA. As the WTA specifies that the prehearing conference is to be concluded within 45 days, the prehearing conference therefore had to be concluded by April 3, 2023.²⁶ During the prehearing conference the parties addressed procedural issues with respect to the adjudicative process of this matter. The prehearing conference was continued to March 3, 2023 when the parties reconvened with additional information, and it was then continued again for the parties to obtain additional information and the parties reconvened to resume the prehearing conference a final time on March 31, 2023.
14. Based upon the information in the record and representations from the parties, this application is the first time an applicant has sought approval of a water transfer since the enactment of the WTA. Therefore, the parties utilized time during the prehearing conference settings to address the most effective ways to proceed with this case when there was not historical examples in Kansas to look to for reference. Without prior cases of this nature, the Presiding Officer and the parties could only speculate on certain factors

²⁴ K.S.A. 82a-1503(b).

²⁵ K.S.A. 82a-1501(i) contains a list of entities who are identified as commenting agencies; however, the statute uses the words, “including but not limited to.” K.S.A. 82a-1503 specifies that notice of the prehearing conference is to be sent to the parties, intervenors, and “appropriate commenting agencies” but provides no further guidance as to how the presiding officer is to determine which potential the entities who are “appropriate commenting agencies” to receive notice. Notice of the February 15, 2023 prehearing conference was sent to KDA and GMD5 as “appropriate commenting agencies” as information had been provided to OAH which identified service to those entities. At a later date during the course of the adjudicative process, the Kansas Department of Health and Environment (KDHE) and the Kansas Water Office (KWO), provided notification that they wished to receive notice as commenting agencies. Both KWO and KDHE were recognized as commenting agencies and included on the service list to receive notice and pleadings in this matter from that point forward.

²⁶ The 45th day would have fallen on Saturday, April 1, 2023, which would then roll to the next business day of Monday, April 3, 2023.

such as how many members of the public may wish to express their opinions or observe the proceeding.²⁷

15. During the prehearing conference, the parties were given the opportunity to offer suggestions and discuss procedural measures that would be most efficient and economical for all involved in the proceeding. The parties were asked about how much time they believed would be necessary to present their respective cases as well as potential blocks of time for hearing dates which would comply with the statutory requirements. The parties also discussed how witness testimony would be presented, particularly testimony from expert witnesses.
16. The parties were asked about potential locations for the formal public hearing and what facilities might be available with sufficient space and equipment for the hearing. Although the WTA specified the formal public hearing is to be held in the “basin of origin,” the term “basin” is not further clarified.
17. The parties were given an opportunity to present their views regarding how the WTA should be interpreted with respect to the location for the formal public hearing.²⁸
18. The Cities suggested the hearing be held in Wichita, Kansas. Intervenors suggested the hearing be held in Greensburg, Kansas.
19. The Presiding Officer weighed the suggestions of the parties, and also considered factors including but not limited to:
 - a. Access for parties and witnesses, including accessibility for expert witnesses who may be flying in from outside of Kansas.
 - b. Facilities to accommodate a hearing for all parties, and those members of the public who may want to observe the proceeding.
 - c. Possibilities to secure an alternate facility on the designated dates if the planned location became unavailable on short notice.
 - d. Technological equipment available with support to allow the proceeding to be streamed online for those interested but unable to attend the proceeding in person.²⁹

²⁷ K.S.A. 77-523(f) specifies that hearings are open to public observation, unless there is a specific provision of law which would necessitate closing part of a proceeding due to confidentiality or specifically authorizing the closure of the proceeding.

²⁸ K.S.A. 82a-1503 provides, “The formal public hearing shall be held in the basin of origin.” The Cities presented information that based upon which basin or basin map was considered the basin of origin, Sedgwick County and Wichita, along with most of Edwards County, would fall within the Arkansas River basin which covers a large portion of South-Central Kansas.

²⁹ KAPA specifies that hearings are open to the public unless the Presiding Officer determines it necessary to close parts of the hearing due to provisions of law requiring confidentiality or expressly authorizing closure. K.S.A. 55-723(f).

- e. Availability of a court reporter to be present to transcribe the proceeding.
- 20. The Presiding Officer determined a hearing to be held in Wichita, Kansas was the best option for all involved parties.
- 21. The Presiding Officer further determined a public comment hearing would be held to allow a means for the public to submit any comments since members of the public would not be permitted to speak at the formal public hearing in Wichita. It was agreed the public comment hearing in the “basin of use” would be held in Hays, Kansas as there were adequate facilities available for use at Fort Hays State University.
- 22. During the prehearing conference the parties agreed to utilize a procedure of “pre-filed” testimony for expert witnesses, through which expert witnesses would draft written direct and rebuttal testimony which they could, under oath, adopt on the record at the formal public hearing as their testimony if they were asked those same questions at the hearing, similar to the process used by the Kansas Corporation Commission (KCC) in utility rate case hearings where multiple expert witnesses may be hired by any party to offer their opinions on issues within their field of expertise.
- 23. The parties further agreed to a procedural schedule which was incorporated into a prehearing order issued on April 19, 2023.
- 24. It was agreed that the public comment hearing would be held prior to the formal public hearing, which would allow the parties to hear any public comments and then potentially address any issues raised from public comments when presenting their cases at the formal public hearing if a party believed it necessary. It was further addressed with the parties that each party or commenting agency would be given an opportunity at the start of the public comment hearing to give a brief presentation regarding the pending application and their role or position in the case.
- 25. The prehearing conference concluded on March 31, 2023. Therefore, according to the WTA, the formal public hearing was to commence at least 90, and no more than 120 days later.
- 26. The public comment hearing was held in Hays, Kansas on June 20, 2023. At the request of the parties, written public comments were also submitted to the WTHP in the care of the Chief Engineer.
- 27. The public comment hearing was available for individuals to observe by video conference and an audio recording was made of the public comment hearing.

28. The audio recording of the public comment hearing was entered into the record. Timely written public comments submitted to the WTHP in the care of the Chief Engineer were submitted to OAH and admitted to the record. The parties were given the opportunity to submit their respective PowerPoint presentations from the public comment hearing for the record as well.³⁰
29. The parties began the formal public hearing as agreed on July 19, 2023 in Wichita, Kansas, 110 days after the prehearing conference was concluded. The formal public hearing was transcribed by a court reporter. The formal public hearing was also streamed as a videoconference link for observation by those unable to observe the proceeding in person. The parties had previously determined they would convene for this evidentiary phase of the formal public hearing beginning July 19, 2023 and continuing through August 2, 2023.³¹ The parties were able to complete presentation of their witnesses and evidence on July 31, 2023.
30. The parties agreed that rather than concluding with oral closing arguments, they would prefer to submit written closing briefs with proposed findings of fact and conclusions of law.
31. The WTA specifies the formal public hearing is to be concluded within 120 days of the date it commenced and then gives the Presiding Officer 90 days after the conclusion of the formal public hearing to issue an order.
32. The parties agreed that in order to comply with the statutory timelines as well as provide the parties time to compile their proposed findings of fact and conclusions of law without limiting the time for the Presiding Officer to review the filings and issue an

³⁰ The public comment hearing was conducted on the record. However, the record of the proceeding was an audio recording. Therefore, as PowerPoint presentations had been presented on the record by the Cities, Intervenor, and commenting agencies, they were given the opportunity to file those presentations with OAH so the visual presentations would be included in the record of this proceeding.

³¹ When the parties agreed to hearing dates, it was initially reported that counsel for GMD5 would not be available on Wednesday, July 26, 2023 due to a previously schedule matter pending in a district court. During the prehearing conference, the dates of July 19, 2023 to August 2, 2023 were set as hearing dates as the best option when all parties were available, and facilities could be secured for the formal public hearing. It was anticipated that the parties would recess on July 25, 2023, and reconvene on July 27, 2023 and not conduct any proceeding on July 26, 2023. However, Counsel for GMD5 did not appear for the first several days of the formal public hearing, although GMD5's manager, Orin Ferrell, was noted to be logged on observing the proceeding through Zoom. Counsel for the Cities contacted counsel for GMD5 and advised the Presiding Officer that GMD5's counsel was not planning to attend the formal public hearing until Orin Ferrell was called as a witness. Accordingly, the previously noted conflict of GMD5's counsel with proceeding on July 26, 2023 became moot. Therefore, to ensure the parties were not pressed for time to conclude the hearing prior to August 2, 2023, the parties convened to continue with the formal public hearing on July 26, 2023. It is further noted that although the facility was scheduled anticipating the formal public hearing may continue through August 2, 2023, the parties completed the evidentiary portion of the formal public hearing on July 31, 2023.

order, the formal public hearing could be continued after the parties had completed their cases in the evidentiary phase of the formal public hearing so long as the formal public hearing was concluded within 120 days from when it commenced on July 19, 2023.

33. Since the formal public hearing commenced on July 19, 2023, the statutory 120-day period to complete the formal public hearing meant the formal public hearing had to conclude no later than November 16, 2023. The 90-day period to issue the initial order after the conclusion of the formal public hearing would therefore not begin until the formal public hearing officially concluded. It was agreed that the formal public hearing would be continued until November 6, 2023 to allow a short period of time before the 120-day conclusion deadline of November 16th, in the event any issues arose which would have required additional time to address before concluding the formal public hearing and closing the record.
34. The parties agreed to a procedural schedule for the remainder of the formal public hearing which allowed for the parties to file closing briefs with their proposed findings of fact and conclusions of law, as well as an opportunity to respond to the filings of the opposing party. The schedule further allowed for commenting agencies to file any written comments for the consideration of the Presiding Officer.
35. On the record during the formal public hearing the parties agreed the proceeding would continue based upon the following procedural schedule:
 - a. July 31, 2023 – End of the evidentiary portion of the formal public hearing in Wichita, Kansas. The parties further agreed that no additional evidence may be submitted to the record absent good cause shown and without further order of the Presiding Officer following further hearing or with the consent of all parties.
 - b. September 15, 2023 – Deadline for the Cities and Intervenors to submit post-hearing briefs, proposed findings of fact, and proposed conclusions of law.³²
 - c. October 27, 2023 – Deadline for the Cities and Intervenors to submit any responses to proposed findings of fact, conclusions of law, or post hearing briefs submitted by an opposing party.
 - d. October 27, 2023 – Deadline for commenting agencies to file comments with OAH.
 - e. November 6, 2023 – Date for the formal public hearing to resume. The parties agreed the hearing would resume by video conference for wrapping up and officially concluding the formal public hearing in accordance with K.S.A. 82a-1503(b).

³² The parties subsequently submitted a joint motion to extend the September 15, 2023 deadline for the Cities and Intervenors to submit post-hearing briefs, proposed findings of fact, and proposed conclusions of law to September 29, 2023. The motion is granted.

36. Before adjourning on July 31, 2023, the parties were directed to ensure that all exhibits they had submitted had been submitted to OAH and uploaded to the OAH E-File system.³³ The parties were instructed to verify that all exhibits they believed had been offered and admitted to the record had in fact been admitted, and if any exhibit had been missed, it could be addressed when the parties reconvened to officially conclude the formal public hearing.
37. The parties were instructed that when submitting their closing briefs, proposed findings of fact, and conclusions of law their filings should address the factors as set forth in the WTA. The parties were asked to address any considerations that should apply if the application for the transfer of water was approved for a lesser quantity than requested, or if any terms, conditions, and limitations should be deemed necessary for the protection of the public interest of the state as a whole. The parties were also asked to include in their filings any arguments as to how the costs of the proceeding should be distributed among the parties.
38. The Cities filed their proposed findings of fact and conclusions of law on September 29, 2023. The Intervenor also filed their proposed findings of fact and conclusions of law on September 29, 2023.
39. On October 27, 2023, comments were filed with OAH from the following commenting agencies: KDHE, KWA, KDA/DWR, and KWO.
40. The Cities filed responses to the proposed findings of fact and conclusions of law filed by Intervenor on October 27, 2023. Additionally, Intervenor filed responses to the proposed findings of fact and conclusions of law filed by the Cities on October 27, 2023.
41. The procedural schedule addressed on the record during the hearing did not provide for any parties to file “responses” to comments filed by any commenting agencies. However, on November 3, 2023, Intervenor filed a response to the comments filed by KDA/DWR.
42. On November 6, 2023, the formal public hearing resumed. The Cities appeared. However, Intervenor failed to appear when the hearing resumed on November 6, 2023. Therefore, the proceeding was resumed without the Intervenor. The formal public hearing in this matter officially concluded on November 6, 2023. Accordingly, the Initial Order from the Presiding Officer is to be issued no later than Monday, February 5, 2024.

³³ The parties had previously marked and pre-filed exhibits prior to the commencement of the formal public hearing. However, additional documents were referenced, marked, and admitted as exhibits during the hearing. The parties were requested to ensure their respective exhibits has all been uploaded to the OAH E-file system so the record in this matter would be complete.

IV. Evidentiary Rulings

The following exhibits were admitted to the record during the formal public hearing.³⁴

On behalf of the Cities:³⁵

- Exs. 1-2865;
- Exs. 2867-2873;
- Exs. 2876-2882a;³⁶

On behalf of the Intervenors:

- Exs. WP001 – WP1869.

As noted above, the parties agreed to utilize pre-filed testimony for expert witnesses. The pre-filed testimony and attached exhibits of the following witnesses were admitted to the record:

- Paul McCormick – Prefiled Direct Testimony Ex. 2827 and Ex. 2828.
- Amy Hasse – Prefiled Direct Testimony Ex. 2825; Prefiled Rebuttal Testimony Ex. 2868.
- Kevin Waddell – Prefiled Direct Testimony Ex. 2829.
- Dr. Anthony Layzell – Prefiled Direct Testimony Ex. 2826.
- Dr. Keith Harmony – Prefiled Direct Testimony Ex. 2824.
- Dr. Jeff Basara – Prefiled Direct Testimony Ex. 2822.
- Dr. Stephen Hamilton – Prefiled Direct Testimony Ex. 2823; Prefiled Rebuttal Testimony Ex. 2869.
- David Barfield – Prefiled Rebuttal Testimony Ex. 2867.
- Edward Harvey – Prefiled Direct Testimony Ex. WP0001866.³⁷
- Susan Walker – Prefiled Rebuttal Testimony Ex. WP001867.³⁸

³⁴ Exhibits offered by the Cities are identified as “Cities” followed by a number. Exhibits offered by Intervenors are identified as “WP” followed by a number.

³⁵ The Cities exhibits were identified with exhibit numbers, along with Bates Stamp numbers beginning with Exhibit 1, followed by Bates Stamp number “Cities 0000001.” References in this order to exhibits, where appropriate, includes the page number by identifying the exhibit along with the Bates Stamp page number, i.e., Ex. 1-2 at Cities 0000108.

³⁶ Exhibit numbers 2866, 2874, and 2875 were not utilized for exhibits that were offered for the record.

³⁷ On May 30, 2023, Intervenors pre-filed direct testimony of Edward Harvey (Harvey), principal with Harvey Economics, as an indication Harvey would testify appear as an expert witness. The pre-filed testimony consisted of nine (9) pages in which Harvey identified Susan Walker (Walker), a director at Harvey Economics as a collaborator in preparing his report. Harvey’s pre-filed direct testimony referenced his report as Exhibit 1. However, no exhibit was attached to Harvey’s pre-filed direct testimony and no additional report was presented as evidence at the hearing. Pre-filed expert rebuttal testimony from Walker, along with attachments had been filed by Intervenors on June 28, 2023. Intervenors advised that Walker had co-authored Harvey’s report and would adopt his direct testimony as her own. No objections were raised, and Walker adopted Harvey’s pre-filed testimony.

³⁸ Walker’s rebuttal testimony filed on June 28, 2023 contained 26 pages, which include an Exhibit 1, entitled “Harvey Economics Rebuttal Report.”

- Steve Larson – Prefiled Direct Testimony Ex. WP001864.

The Cities disclosed David Barfield (Barfield) as an expert on rebuttal pursuant to the agreed upon procedural schedule and pre-filed Barfield's direct testimony in rebuttal to testimony presented by Intervenor's expert, Steven Larson (Larson). Just before the start of the hearing, Intervenor filed an objection to Barfield's pre-filed expert testimony and objection to Barfield testifying as an expert in the proceeding. Intervenor's motion also sought to strike Barfield's pre-filed testimony from the record.

Intervenor questioned Barfield's qualifications as an "expert" in the subject matter at issue. Intervenor further suggested Barfield should not be allowed as an expert witness alleging that his opinion and testimony was biased due to Barfield's prior employment as the Chief Engineer of the DWR. As addressed in greater detail below, Barfield issued the "Master Order" addressing the Cities application to change the R9 Water Rights from irrigation to municipal use when Barfield had served as the Chief Engineer of DWR. The Cities filed a written response the day before the hearing started.

At the start of the hearing the parties were informed the Presiding Officer would review the respective filings and arguments before making a ruling.

After considering the argument and authorities of both parties, Intervenor's motion was denied. The Presiding Officer concluded Barfield would be permitted to testify and the Cities could offer Barfield's pre-filed testimony to the record.

The arguments raised by Intervenor regarding alleged bias or impartiality of Barfield were arguments addressing the weight and credibility of any testimony or opinions Barfield might offer. Intervenor therefore would have the opportunity to raise such concerns on cross examination of Barfield.

As previously noted, the procedural schedule the parties agreed to prior to the hearing set deadlines for the parties to disclose expert witnesses, pre-file testimony of expert witnesses, disclose rebuttal experts, and pre-file testimony of rebuttal experts. The procedural schedule also set deadlines for the parties to file lists of the witnesses they intended to call at the hearing. Intervenor's witness list included Larson and the generic language to list witnesses necessary for rebuttal.

The Intervenor had identified Larson as an expert witness and had pre-filed Larson's direct expert testimony. The Cities had disclosed Barfield as an expert witness in rebuttal, and pre-filed his expert testimony as rebuttal to Larson's direct testimony offered by the Intervenor. Intervenor alleged that since the prehearing order that set forth the procedural schedule for this matter did not include language to either allow or not allow sur-rebuttal expert testimony.

Intervenors alleged they should be allowed to call additional expert witnesses for sur-rebuttal to ensure due process.

The procedural schedule set a deadline for the parties to disclose expert witnesses and to pre-file the testimony of their expert witnesses. The procedural schedule set forth a deadline for disclosure of rebuttal expert witnesses and for pre-filing of the supplemental or rebuttal expert testimony. However, there was no deadline set for sur-rebuttal expert disclosure or filing of sur-rebuttal expert testimony because that was not a factor that was a consideration.

The WTA has specific deadlines regarding when the formal public hearing must begin following the conclusion of the prehearing conference. Courts have long held that the basic elements of due process are that parties are given notice and an opportunity to be heard at a meaningful time and in a meaningful manner.³⁹

It could be argued that one reason parties are generally required to disclose expert witnesses in advance is for efficiency. An opposing party may wish to present evidence that might call into question the qualifications of a proposed expert or to challenge the conclusions or opinions of the proposed expert. As with the Cities identifying Barfield as an expert witness for rebuttal purposes, the Intervenors had an opportunity to compile information that could be presented if they wished to challenge his qualifications or the credibility of his conclusions. However, what the Intervenors suggest could lead to a slippery slope of never-ending witness disclosures if parties would be permitted to continue to propose further experts in response to experts the other party proposed at a previous deadline. Such ongoing back and forth attempts to one up the other party have to conclude at some point to allow a proceeding to move forward.

The Cities had proposed Barfield as an expert witness in rebuttal to the Intervenor's expert witness, Larson.

Intervenors request to identify, and call another expert witness not previously disclosed was denied. The Cities objection to Larson offering additional testimony to address anything presented by Barfield was overruled.

As noted above, Intervenors were informed that they would have the opportunity to cross examine Barfield. Intervenors were informed that if Barfield testified and his pre-filed direct testimony was offered for admission to the record, the Intervenors would have an opportunity to question Larson about Barfield's opinions or conclusions (or to re-call Larson if he had already testified) since Larson had previously been identified as a witness.

GMD5 submitted prefiled direct and rebuttal testimony of an expert witness, Dave Romero (Romero), a hydrologist with Balleau Groundwater Inc., who had prepared the GMD5

³⁹ *Winston v. State Dep't of Soc. & Rehab. Servs.*, 274 Kan. 396, , 49 P.3d 1274, (2002), citing *Kennedy v. Board of Shawnee County Comm'rs*, 264 Kan. 776, (1998). See also: *Mathews v. Eldridge*, 424 U.S. 319 (1976).

groundwater model (BGW model discussed below). In accordance with the procedures for the proceeding, prefiled expert testimony could be admitted to the record during the hearing with the expert adopting that testimony as if he or she were giving the same testimony during the hearing. However, GMD5 did not present Romero as a witness. GMD5's counsel was only identified as present during a portion of the evidentiary phase of the formal public hearing in Wichita on July 28, 2023 when GMD5 Manager Orin Feril (Feril) appeared as a witness.

When the evidentiary portion of the formal public hearing was wrapping up on July 31, 2023, The Cities inquired about the admission of Romero's prefiled testimony and expert report and whether it would be admitted to the record. The Presiding Officer noted that although GMD5 was a commenting agency pursuant to the WTA, it had also filed a petition to intervene. A factor in utilizing pre-filed testimony for expert witnesses was that the expert (or another qualified individual adopting that prefiled testimony) could appear at the hearing, adopt that prefiled direct testimony as the same testimony that would be given at the hearing, along with the opportunity to make any corrections, and then that witness would be available for cross examination. Therefore, opposing parties would have the opportunity to cross examine a witness. While an administrative proceeding is not subject to the strict rules of evidence and evidence is not excluded solely because it is hearsay, without an opportunity to cross examine, pre-filed testimony would effectively amount to nothing more than written statements of individuals who claim to have factual or subject matter knowledge. Such evidence would not carry the same weight as testimony from a witness who was available for cross examination. During the evidentiary phase of the formal public hearing, the Presiding Officer did not admit Romero's prefiled testimony to the record and noted it would be speculative to anticipate whether GMD5 would submit any comments as a commenting agency which may address any of Romero's expert report or opinion. The Presiding Officer determined the matter could be addressed after waiting to see if GMD5 submitted any comments as a commenting agency.

GMD5 did not submit any comments as a commenting agency. No party made a motion to admit Romero's prefiled testimony or expert report to the record when the parties reconvened to conclude the formal public hearing on November 6, 2023. Therefore, Romero's prefiled testimony and report was not admitted to the record. However, it is acknowledged that several witnesses discussed the Romero report and BGW groundwater model developed by Balleau Groundwater Inc. for GMD5.

V. Findings of Fact

A. General Background Facts and Procedures

1. The Cities own land located in Edwards County, Kansas known as the R9 Ranch, along with multiple associated water rights collectively referred to as the R9 Water Rights

In the Matter of: The Application of the Cities of Hays, Kansas
and Russell, Kansas For Approval to Transfer Water From
Edwards County, Kansas Pursuant to the Kansas Water Transfer Act.
OAH No. 23AG0003 AG

Initial Order

which authorized a combined diversion of 7,625.7 acre-feet for use for irrigation on the R9 Ranch property.

2. A previous application with DWR requesting contingent approval for changing the use of the R9 Water Rights from irrigation use to municipal use (Change Application) resulted in a reduction to 6,756.8 acre-feet annual when applying calculations for the change in type of use. The contingent approvals from the Change Application were addressed in a Master Order issued by the Chief Engineer, which is discussed in further detail below.
3. The Cities then filed an application for a water transfer with DWR seeking approval to change the place of use of the water authorized to be diverted pursuant to the R9 Water Rights, in a quantity exceeding 2,000 acre-feet per year from the R9 Ranch in Edwards County, Kansas, to locations more than 35 miles away. This is the application pending in this present case.
4. The Cities jointly own the R9 Ranch and the associated R9 Water Rights designated as DWR 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. (Ex. 1-2 at Cities 0000108, ¶ 3; Cities 0000109, ¶¶ 17 and 18.)
5. The R9 Water Rights are located in a contiguous parcel of land previously used for irrigated agriculture known as the R9 Ranch, which sits along the south side of the Arkansas River in Edwards County, approximately 5 miles southwest of Kinsley. (Ex. 1-1; Ex. 300; Ex. 918 at Cities 0024532; Ex. 821 at Cities 0021831.)
6. Notice is taken that the following terms, in plain language, have the following meanings as published by the Kansas Geological Survey:⁴⁰
 - a. “aquifer” is a porous and permeable geologic formation able to transmit water sufficient to feed a spring or a well.
 - b. “alluvium” is unconsolidated material such as clay, silt, sand, or gravel deposited by running water in the bed of a stream or its floodplain.
 - c. “alluvial aquifer” is an aquifer formed by material laid down in a floodplain or river channel.
 - d. “watershed” is an area of land from which all water drains into a single waterway such as a creek, river, lake, or wetland.
 - e. “river basin” is the drainage area encompassing two or more watersheds.

⁴⁰ See: geokansas.ku.edu.

- f. "surface water" is water visible in lakes, rivers, creeks, ponds, playas and other wetlands.
 - g. "groundwater" is water stored in subsurface layers of rock and sediment. The diversion of groundwater is done through a well drilled into the groundwater source.
7. Most of the R9 Ranch is in the Middle Arkansas River Basin. A small area extends into the Rattlesnake Creek Sub-Basin. (Ex. 2827 at Cities 0103697.)
 8. The R9 ranch is located more than 35 miles from either Hays or Russell. (Ex. 2687; Ex. 918 at Cities 0024565.)
 9. The R9 Ranch covers approximately 6,900 acres (Ex. 1-1; Ex. 918 at Cities 0024532; *See also* Ex. 830) and is located within the Big Bend Groundwater Management District No. 5 ("GMD5"). GMD5 is effectively closed to new permits to appropriate water due to a sustainable yield regulation.⁴¹ (K.A.R. 5-25-4; Ex. 1-2 at Cities 0000112, ¶ 44.)
 10. The R9 Water Rights authorized irrigation from 54 separate wells across 43 tracts with partial or complete center pivot irrigation systems, and a total annual appropriation of 7,625.7 acre-feet. (Ex. 1 at Cities 0000005; Ex. 1-1 ; Ex. 2827 at Cities 0103693; Ex. 2631 at Cities 0098162; Ex. 2824 at Cities 0103565; Ex. 1743 at Cities 0072092.)
 11. Hays purchased the R9 Ranch in 1994. The purchase agreement was signed by the sellers in August 1994. (Ex.1286 at Cities 0067874-75.) The deed was filed of record in early 1995. (Ex. 830.)
 12. When the R9 ranch was purchased, the R9 Water Rights were existing perfected water rights. Hays purchased the R9 Ranch on the open market. (Dougherty Test., Tr. Vol. 1 at 102-103.)
 13. In August 1995, Hays sold an undivided 18% interest in the R9 Ranch to Russell (Ex. 831.)
 14. The Cities purchased the R9 Ranch with an intent to convert the existing R9 Water Rights from irrigation use to municipal use. The Cities believed their existing sources of water were not reliable and did not meet the long-term needs of either city, or current needs of either city during droughts. (Dougherty Test., Tr. Vol. 1 at 94-99; 101-102; Quinday

⁴¹ K.A.R. 5-25-4 specifies the entire district of GMD5 is closed to new surface and groundwater appropriations with limited exceptions including reasons such as domestic use, temporary permits, or a proposed use that has no significant consumptive use in either the quantity or availability of water for use by other appropriated right holders.

Test., Tr. Vol. 2 at 480–484; 511–513; 536–537; Letourneau Test., Tr. Vol. 4 at 906–24; Ex. 1-37 at Cities 0002460.)

15. Before a well begins diverting groundwater, the aquifer is saturated. When the pump is turned on, the well diverts the water in the well bore and then begins pulling water into the well and drawing the aquifer down near the wellbore, creating a cone radiating out from the wellbore. As pumping continues, the cone gets larger and larger until reaching an equilibrium. The size of the cone stops expanding when the quantity being diverted equals the quantity flowing from the aquifer into the well bore. (Letourneau Test., Tr. Vol. 4 at 837–838; Wenstrom Test, Tr. Vol. 8 at 1400–1403.)
16. The rate of diversion in gallons per minute affects the size of the cone of depression. Reducing the rate reduces the diameter of the cone of depression. (Letourneau Test., Tr. Vol. 4 at 845; Wenstrom Test, Tr. Vol. 8 at 1402.)
17. The Intervenor argued further “anti-speculation doctrine” should prevent approval of the transfer because the Cities had not established a need for the quantity of water authorized under the R9 Water Rights. The Intervenor suggested seeking approval for a transfer in excess of what was reasonably needed constituted waste.

B. Change Application for the Approved Use of R9 Water Rights (Master Order)

18. The R9 Water Rights as acquired with the purchase of the R9 Ranch authorized water diverted under those water rights to be used for irrigation purposes on the R9 Ranch, with each individual water right specifying the location of use for water diverted under each right as well as the point of diversion for each water right. The R9 Water Rights collectively authorized the diversion of 7,625.7 acre-feet of water each year for irrigation use.
19. In June 2015, the Cities filed an application to change the collective R9 Water Rights from irrigation use to municipal use and consolidating the points of diversion for the collective R9 Water Rights. (Change Application.) The Change Application sought contingent approval of the Chief Engineer of DWR to convert the total quantity of 7,625.7 acre-feet authorized under the collective R9 Water Rights from irrigation use to municipal use. (Ex. 1-2 at Cities 0000112, ¶¶ 47–48, ¶ 50; Ex. 3-2.)⁴²

⁴² It is noted that while the concerns and matters regarding the Change Applications were referenced during this proceeding, this proceeding does not have the jurisdiction to address an order addressing the change in use of a water right from irrigation use to municipal use. This proceeding, a hearing regarding an application under the WTA, K.S.A. 82a-1501 *et seq.*, can only address the application submitted by the Cities seeking approval for a transfer of the place of use of the R9 Water Rights.

20. DWR administrative regulations require the Chief Engineer to consider “consumptive use” when reviewing a change application, which is a calculation based upon the quantity of water diverted, less any returns to the source.⁴³ In short, when water is used for irrigation, it is accepted that a portion of that water would go back into to the ground and make its way back into the watershed to provide some replenishment/recharge of the source. However, a change application could result in more water being “consumed” and not returned to replenish the source.
21. When the Cities submitted their Change Application, calculations were made pursuant to the applicable regulation for the consideration for consumptive use changes when converting the irrigation use of the R9 Water Rights to municipal use. DWR determined the quantity of 7,625.7 acre-feet of water under the collective R9 Water Rights for irrigation purposes should be reduced to 6,756.8 acre-feet using the consumptive use calculations. The Cities agreed with the consumptive use calculation that resulted in reducing the maximum quantity of water to 6,756.8 acre-feet per year if the water is diverted for municipal use.⁴⁴ (Ex. 1-2 at Cities 0000113, ¶ 51.) (Ex. 1-2 at Cities 0000119–22, ¶¶ 76–91. Master Order as Appendix C. Ex. 1-2 at Cities 0000165–66.)
22. The Cities and the Chief Engineer agreed to a further reduction in the quantity of water available for municipal use from the R9 Water Rights. The Chief Engineer determined diverting the entire 6,756.8 acre-feet each year was not sustainable. Therefore, the Cities and the Chief Engineer agreed to a Ten-Year Rolling Aggregate Limitation (TYRA Limitation). The quantity of water diverted by the Cities from the R9 Water Rights for municipal use would not be allowed to exceed an average of 4,800 acre-feet per year over any rolling ten-year period. Therefore, while the R9 Water Rights would authorize a quantity of water up to 6,756.8 acre-feet in a year, the TYRA Limitation reduces that total quantity to an average of 4,800 acre-feet per year over any rolling 10-year period. (Ex. 1-2 at Cities 0000108, ¶ 13; at Cities 0000110, ¶ 24; at Cities 0000123, ¶¶ 95- 96; at Cities 0000136–39, ¶¶ 159–70; at Cities 0000148, ¶¶ 225–30.)
23. In addition to reductions in the quantity authorized under the collective R9 Water Rights, the Master Order also reduced the rate of diversion that would be authorized under the rights to further ensure the change would not cause impairment of any water rights in the area. Even though the R9 Water Rights were senior to most of the appropriated rights in the immediate area, the Master Order reduced the combined rate from all the R9 Water Rights. The Combined R9 Water Rights would have been authorized to divert up to 38,244 gallons per minute (gpm). However, the Master Order reduced this rate to 13,950 gpm. (Ex. 1-2 at 173, Table 3; Ex. WP14895.) The 14 municipal wells planned

⁴³ See: K.A.R. 5-5-8 and K.A.R. 5-5-9.

⁴⁴ The record reflects DWR’s consumptive use calculations were based upon the 1994 version of K.A.R. 5-5-9, which was in effect at the time the Change Applications were submitted.

by the Cities are expected to operate at 350 gpm for a combined total of 4,900 gpm. (Ex. 2832 at Cities 0171064.)

24. The Master Order was issued by the former Chief Engineer, David Barfield, on March 27, 2019. The Master Order approved the changing the R9 Water Rights from irrigation to municipal use, and changing the places of use to Hays, Russell, as well as the R9 Ranch, and changing the points of diversion from multiple irrigation wells to 14 municipal wells. (Ex. 1-2 at Cities 0000148, 000052, and 0000172.)
25. Additionally, the Master Order imposed a “Reasonable-Need” limitation, which limits the amount of water either Hays or Russell may use from the R9 Water Rights when combined with all their other water rights. This limit restricts Hays to no more than 5,670.23 acre-feet of water per year combined with its other existing water rights. Russell is limited to a total annual volume of 1,841.3 acre-feet for water from the R9 Water Rights combined with its existing water rights. (Ex. 1-2 at Cities 0000149.) Either city would have to seek approval from the Chief Engineer to increase this limitation. (Ex. 1-2 at Cities 000115 and Cities 000150.) The reasonable needs limitation was based upon a projected 2% population growth for both Hays and Russell. (Ex. 1-2 at Cities 0000167 and 0000168.)
26. Future reasonable needs for the Cities was calculated based upon regional data for per capita water use, referred to as Gallons Per Capita Per Day (GPCD). The United States Geological Survey (USGS) has published usage data broken down for eight (8) different regions in Kansas. Hays is located in Region 5 and Russell is in Region 6. (Ex. 1841.)
27. With the GPCD for each region, the Master Order estimated future needs for Hays using the Region 5 figure of 149.57 GPCD. (Ex. 1-2 at Cities 0000167.) The Master Order based future needs for Russell using the Region 6 figure of 137.25 GPCD. (Ex. 1-2 at Cities 0000169.)
28. The Master Order also based the future needs on a projection of a 2% growth rate for both Hays and Russell. (Ex. 1-2 at Cities 0000167 and 0000169.)
29. The Master Order noted that GMD5 Model projections showed the intended use of the R9 Water Rights by the Cities would cause the water levels of the R9 Ranch to continue to decline at varying but reasonable rates. Neighboring water rights near the R9 Ranch would continue to deplete the aquifer as well but without the limitations imposed on the Cities by the Master Order. (Ex. 1-2 at Cities 0000130.)
30. The changes were contingent upon a final, non-appealable order allowing the transfer of water pursuant to the WTA. (Ex. 1-2 at Cities 0000154.) The changes are also contingent on written notice to DWR that the City of Hays has entered into a written contract to

drill one or more of the 14 proposed municipal wells, excluding test drilling. (Ex. 1-2 at Cities 0000154.)

31. The Master Order provided for the Chief Engineer to increase the TYRA Limitation under certain conditions. Specifically, if data and groundwater modeling supported a finding of larger estimated yield of the groundwater, the Chief Engineer could increase the TYRA Limitation following a public hearing. (Ex. 1-1 at Cities 0000149, ¶229, ¶230, Ex. 2462.)⁴⁵
32. The Cities agreed to prohibit locating any new municipal well within a half mile of any existing irrigation wells outside the boundaries of the R9 Ranch. (Ex. 251 at 0017036-0017038; Ex. 1-2 at 00000145 ¶208.)
33. In approving the Master Order, the Chief Engineer found the requested changes for points of diversion were reasonable and would not cause impairment of existing water rights. (Ex. 1-2 at 00000146 ¶212.)

C. Pending Water Transfer Application

34. The Cities filed an application with DWR seeking approval to transfer the water in a quantity of up to 6,756.8 acre-feet per year from the R9 Water Rights from the permitted place of use (R9 Ranch in Edwards County) a distance of more than 35 miles from the point(s) of diversion in Edwards County to the Hays and Russell. (Ex. 1.)⁴⁶
35. The Cities submitted the application to be able to transfer water from the R9 Ranch to Hays and Russell. The Cities identified their current water sources and noted how those sources were vulnerable during times of drought. The Cities submitted studies concluding how droughts were projected to impact the availability of water either Hays or Russell could obtain from their current sources. Essentially, despite the quantity of water each city had the authority to obtain under their permits for each of their respective sources, the quantity of water that could be reasonably obtained from each source would be significantly less than the authorized quantity based upon the length of any given drought period.

⁴⁵ Water PACK appealed the Master Order. The matter was remanded back to the District Court where it is still pending. However, as addressed in this proceeding, the matter before the Presiding Officer is only the application for the transfer of a quantity of water exceeding 2,000 acre-feet per year from the R9 Ranch to the Cities for use at locations more than 35 miles from the point(s) of diversion. The only matter which the Presiding Officer has the authority to address is the water transfer application. Any issues with the actions of the KDA/DWR and the action taken by the agency with the issuance of the Master Order are outside the scope of the authority of this proceeding.

⁴⁶ The annual quantity of 6,756.8 acre-feet is the annual quantity of water available from the R9 Water Rights after application of consumptive use calculations and subject to the agreed upon TYRA Limitation of 4,800 acre-feet per year pursuant to the Chief Engineer's Master Order granting conditional approval for the change in use of the R9 water rights.

36. The Cities presented data, reports and expert opinions concluding the cities were at risk of facing water shortages as their current sources for municipal water supply were extremely vulnerable during times of drought. During drought periods, the quantity of water the Cities can reasonably expect to pump from their current water sources would decrease as those sources start to dry up. During extended periods of drought, water from the Cities could reasonably expect to pump from their current sources would steadily decrease to the point that the Cities experts projected the cities would experience a shortage and they would not be able to meet the needs of their consumers based upon current consumption, without taking into consideration any additional water usage needs attributable to future population growth or future economic growth.
37. The Cities presented information addressing the vulnerability of their current water supply if they were unable to obtain water from one source for any reason, including reasons not attributed to drought conditions such as treatment equipment failures or issues with contamination of a water source.
38. The Cities presented information that their limited water supplies have harmed growth of both Hays and Russell. Existing businesses have not been able to expand, and new businesses have not been able to consider building facilities in Hays or Russell without a commitment of either city to provide water necessary for their respective operations.
39. The Cities presented testimony, data, and expert opinions addressing how Hays, Russell, the region, and the State of Kansas could benefit economically if the transfer application was approved giving Hays and Russell access to additional water from a source less vulnerable to droughts.
40. In opening statements and at the public comment hearing, the Intervenors indicated they did not disagree that Hays and Russell needed additional water sources for their municipal water systems. However, the Intervenors did not believe the Cities needed the quantity of water sought in the transfer application.
41. The Intervenors disagreed with population growth figures, and suggested that projections for future growth should have been calculated with much lower growth rates.
42. The Intervenors alleged that if the Cities were able to transfer water from the R9 Ranch, the transfer would result in lowering the water table in the area around the R9 Ranch causing harm to the area.
43. The Intervenors alleged that if approved, the water transfer did not provide a benefit but a “net cost,” and that there had not been enough data or analysis to determine the future needs of Hays or Russell. The Intervenors further alleged the Cities’ water transfer application was incomplete because it lacked information the Intervenors alleged was

needed to demonstrate a need for the water or more accurate future projections of the Cities' needs. The Intervenor suggested the application did not provide sufficient details of project plans, costs, or how the Cities would finance the project.

D. Hays, Kansas, and Russell, Kansas

44. Hays and Russell are both located in a part of the state which receives limited rainfall. Hays has historically received 22-24 inches of precipitation per year while Russell has historically received 24-26 inches of precipitation per year, compared to Topeka and Shawnee County which have historically received 34-38 inches of precipitation per year. (Ex. 1665; 2823.)
45. Official Notice is taken that Russell, Kansas is located in Russell County, Kansas. The City of Russell is located near the junction of Interstate 70 and U.S. Highway 281. Official Notice is taken that as of the 2020 U.S. Census, Russell had a population of approximately 4,400.
46. Official Notice is taken that Hays, Kansas is located approximately 30 miles West of Russell in Ellis County, Kansas near the junction of Interstate 70 and U.S. Highway 183.
47. According to Russell's city manager, John Quinday (Quinday), Russell has seen an influx of young people moving back into Russell to the point that housing has become limited and there are waiting lists for housing. (Quinday Test., Tr. Vol.2 at 491-492.)
48. Russell's largest employer is an ethanol and wheat gluten production facility owned by Purefield Ingredients (Purefield). Purefield has indicated it would like to expand its facility in Russell; however, the lack of available water in Russell has prevented Purefield from moving forward with expansion of the Russell facility. An expansion of Purefield would likely result in additional population for Russell. (Quinday Test., Tr. Vol. 2. At 494, 541; Wagner Test., Tr. Vol. 2. At 460-461; Haase Test., Tr. Vol. 5 at 955-958.)
49. Hays is a city of the second class with a population of nearly 22,000 residents as of the 2020 U.S. Census. (Dougherty Test., Tr. Vol. 1 at 76-77.)
50. Ellis county is the only county in western Kansas with a population over 15,000 which does not have access to a major aquifer. (Exs. 2658, 2660, 2823.)
51. Hays is the regional economic hub of northwest Kansas, home to Fort Hays State University, Hays Medical Center, and myriad retail, dining, and medical services. (Dougherty Test., Tr. Vol. 1 at 78.)

52. A “trade pull factor” is a calculation of the ration of local shoppers and shoppers from outside of the community. (Dougherty Test., Vol. 2. at 229.)
53. Hays is consistently ranked in the top 5 highest trade pull factors of all cities in the State of Kansas. (Ex. 2857; Dougherty Test., Tr. Vol. 2 at 229–230.)
54. Hays city manager, Toby Dougherty (Dougherty) testified that for the year 2020 Hays had a trade pull factor of 1.74, which means Hays provided retail services to a population of 1.7 times greater than its local population.
55. Amy Hasse (Hasse) is an urban planner with RDG Planning & Design, an urban planning firm based in Omaha, Nebraska. Hasse holds a master’s degree in urban studies and has more than 24 years’ experience in the field. She has worked on population and housing market analysis in multiple cities and multiple states, including Kansas, Nebraska, Missouri, and Oklahoma. Hasse provided pre-filed direct testimony as an expert witness regarding her population analysis for Hays. (Ex. 2825.) Hasse also provided pre-filed rebuttal testimony in response to expert testimony offered by Intervenor’s expert, Susan Walker (Walker). (Ex. 2868.)
56. Hasse’s report looked at the population change from 1960 to 2020 with a growth rate per decade of 0.29% to 2.5%. Hasse noted that Hays accounts for approximately 73% of the population of Ellis County. Hasse’s report further took into consideration data from KansasWorks,⁴⁷ as well as information from businesses, and local government leaders in preparing her planning forecasts. Hasse’s report commented that she gathered information from employers in 2022 regarding postings for open positions and she learned some employers were not even listing all open positions with their business due to labor shortages. Hasse’s report considered increases in household income in Hays as well as the pull factor for the Hays business economy. Additionally, Hasse noted the age of the population in Hays was younger than that of neighboring counties. (Ex. 2825.)
57. Hasse’s report further noted she considered the presence of Fort Hays State University (FHSU) and the impact of FHSU on the student population component of the overall population. (Ex. 2825.)
58. Hasse’s study concluded that it was reasonable to project a 1% annual growth rate for Hays. (Ex. 2825.)

⁴⁷ Official Notice is taken that KansasWorks, a web-based job matching and labor market information system through the Kansas Department of Commerce/Kansas Workforce Development Centers in partnership with other agencies including the Kansas Department of Labor and the Kansas Department for Children and Families Vocational Rehabilitation Services.

59. When the Chief Engineer of DWR reviewed the Change Application (addressed further below), the Chief Engineer considered reasonable future needs of the Cities utilizing a 2% annual growth rate.
60. Hasse analyzed historical population data as well as information collected from her interactions in the community speaking firsthand with landlords, property owners, business owners, community leaders, and city officials. (Hasse Test., Tr. Vol. 5 at 950.)
61. Intervenors presented their expert witness Harvey and Walker to address projected water needs and opinions of economic impacts of the proposed water transfer.⁴⁸ (Ex. WP01866, WP001867.)
62. Harvey and Walker agreed that a calculation of per-capita water use was an appropriate means of projecting future water needs. However, their opinion disagreed with the figures presented by the Cities and those utilized for the Master Order. (Ex. WP01866, WP001867.)
63. Intervenor's experts offered the opinion that calculations for projected future water needs of the Cities should have been based upon per capita water use more specific to Hays and Russell, rather than regional figures. Walker believed the per capita water should have been based upon figures calculating 86 GPCD for Hays and 79 GPCD for Russell. (Ex. WP01866, WP001867.)
64. Intervenors argued the 1% projection utilized by Hasse and the 2% growth projection used by the Chief Engineer to determine the reasonable needs limitation of the Master Order were inaccurate.
65. Harvey and Walker presented their opinion that their data for growth for the Cities as well as projections from the University of Kansas supported a lower growth rate of 0.34% for Hays and 0.06% for Russell. (Ex. WP01866.)
66. A lack of a reliable water supply has restricted construction of new homes. Construction has not been able to keep up with demand. (Haase Test., Tr. Vol 5. At 960; Williams Test., Tr. Vol.2 at 426.)
67. The Cities have implemented conservation measures which have resulted in residents of both Hays and Russell using less water than residents of other cities in the region.
68. The Cities offered Stephen F. Hamilton, Ph.D. (Hamilton) as an expert witness to address the economic impacts associated with the application to transfer water from the R9 Ranch

⁴⁸ Walker adopted the pre-filed direct testimony of Harvey as her own. Walker had co-authored the Harvey report. (Ex. WP001866.)

to Hays and Russell. (Ex. 2823.) Hamilton further offered expert testimony in rebuttal to factors addressed by Harvey/Walker regarding future water needs of the Cities. (Ex. 2869.)

69. Hamilton's report compared two years of water use: 2012 during which the State of Kansas experienced a drought, and 2014, during which precipitation was slightly above average. Hamilton noted that in 2012 Hays used 2,391 acre-feet of water, or 102 GPCD. However, in 2014, Hays used 1,954 acre-feet of water, or 81 GPCD. The conclusion being that during times of drought, water consumption increases. (Ex. 2823 at Cities 0103505; Ex. 2869 at Cities 1072028.)
70. Dougherty noted a memorandum from the Docking Institute of Public Affairs from 2001 to the former Chief Engineer of DWR. This memorandum noted that the 1991 drought had stunted growth in Hays and Russell and that the availability of water has been, and would continue to be a key component in population growth of both Hays and Russell. The memorandum reported economic growth in Hays and Russell benefited Kansas as a whole noting when the cities are thriving, state benefits from added tax revenues.
71. The Cities offered credible evidence addressing their available water supplies, and how those water supplies are affected during times of drought addressed further in the Current Water Supply section below.
72. Intervenors' experts Harvey and Walker opined that the Cities should have used more recent as well as longer term historical GPCD data to calculate future needs. Harvey and Walker suggested more project planning with better data was necessary to determine net future water needs. (Ex. WP01866.)
73. Intervenors' expert Harvey and Walker⁴⁹ opined that the proposed water transfer represented a net cost rather than a net benefit to the Cities and the State of Kansas. While Harvey and Walker agreed that GPCD was an appropriate measure of future water needs, it was their opinion that the Cities calculations were erroneous because they believed the Cities had overestimated their future growth rates. (Ex. WP01866.)
74. Harvey and Walker also argued that project costs would result in higher water rates for Hays and Russell. (Ex. WP01866.)
75. The Cities reported it has never been an intent to finance the project through rate increases. Hays previously implemented a half-cent sales tax which it used to raise money for a potential project such as constructing the infrastructure necessary to bring water to Hays from other locations. Dougherty testified Hays was also aware of funding

⁴⁹ As noted above, Walker co-authored the Harvey Report (Ex. 01866) and adopted Harvey's pre-filed direct testimony as her own at the hearing.

options from both state and federal programs which might be options to assist with financing of the infrastructure construction. (Dougherty Test., Tr. Vol.1 at 204-206.)

76. The Harvey/Walker expert report presented by the Intervenors utilized a methodology which factored in the conservation measures already utilized by the Cities reflected by a lower GPCD figure than the regional figures. In his pre-filed rebuttal testimony, Hamilton noted the Harvey/Walker calculations inappropriately used the GPCD based on current conservation measures because those conservation measures had been implemented because of the Cities lack of drought-resistant water sources. Hamilton concluded the Harvey/Walker calculation ignored the data showing water usage tends to increase during periods of drought. (Ex. 2869 at Cities 0172030-0172031.)

E. Current Water Supply

77. Hays uses approximately 2,000 acre-feet of water.⁵⁰ (Dougherty Test. Vo. 2 at 319.) In 2012, a period of drought, Hays used 2,391 acre-feet of water. (Ex. 2823 at Cities 0103505.) Russell uses approximately 1,000 acre-feet of water per year. (Quinday Test., Vol. 3 at 571.)
78. The Kansas Water Office (KWO) published a study in 2018 which noted the Cities are located in a region that utilizes a mix of surface and groundwater to meet needs, but that supply is often low during periods of drought or low precipitation. The report further noted a concern with maintaining present water usage while allowing for expanded use to support economic development and growth. (Ex. 2823.)
79. Hays currently obtains water from three wellfield sources (1) Big Creek alluvial aquifer permitted for a maximum quantity of 1,429.46 acre-feet per year; (2) Smoky Hill River alluvial aquifer permitted for a maximum quantity of 2,285 acre-feet per year; (3) Dakota groundwater aquifer permitted to divert a maximum of 882 acre-feet per year. However, the Dakota wellfield can sustainably provide no more than 120 acre-feet per year, regardless of the precipitation levels in the area. Permitted conditions on the current Hays water sources limit the total capacity available to Hays to 3,675 acre-feet per year. (Ex. 2828 at Cities 0103744-0103745.)
80. Hays's water rights for diversion at the Smoky Hill aquifer are permitted on paper for a total quantity of 2,800 acre-feet per year.⁵¹ However, this source is subject to an Intensive Groundwater Use Control Area (IGUCA) restriction which limits this source

⁵⁰ The Cities expert, Hamilton, noted 2020 water use for Hays at 1,974-acre feet. Intervenors also referenced this figure in their trial brief. However, on cross examination of Dougherty, Intervenor's attorney questioned Dougherty with reference to a 2020 usage figure of 1,792 acre-feet for Hays and approximately 1,000 acre-feet per year for Russell.

⁵¹ Water Right, File Nos. 1,248, 5,757, and 33,296. (Cities Exs. 935, 938, 981.)

to 2,285.8 acre-feet per year.⁵² (Cities Exs. 935 at Cities 0026052; 2440 at Cities 0082529; 2828 at Cities 0103744.)

81. As a result of a drought in 1991, Hays drilled wells at the Dakota wellfield. (Dougherty Test., Tr. Vol. 1, at p. 123 and pp. 126-127.)
82. The permits for the Dakota wells contain limitations addressing the formations from which water may be pumped under these water rights. The wells must have seals preventing movement of water between formations. (Cities Exs. 1-112, 1-113, 1-114, 1-115, 1-116, and 1-117.)
83. The Dakota formation is a confined system with no nearby sources of freshwater recharge. (Cities Ex. 1-120 at Cities 0005502; Dougherty Test., Vol. 1 at 88:6–89:8; Letourneau Test. Vol. 4 at 843:12-23.)
84. The water from the Dakota wells is of poor quality. The water has varying chloride and sulfate concentrations. The water from this source is hard to blend and it requires advanced treatment methods for use by Hays. (Ex. 2828 at Cities 0103764, 0103783; Dougherty Test. Vol 1, at 121.)
85. Studies conducted since 1992 have conclude the 882 acre-feet authorized by the water rights for the Dakota wellfield is not a sustainable quantity. The studies concluded an annual total diversion of only 120 acre-feet was sustainable without significantly depleting the source to where it would require years of recharge to reestablish the availability of water. (Ex. 2828 at Cities 0103764; Dougherty Test., Tr. Vol 1 at 86-89, 120-122; Hamilton report, P. 17; (Ex. 2828 at Cities 0103764; Dougherty Test. Vol. 1 at 121.)
86. Paul McCormick (McCormick) testified as an expert witness on behalf of the Cities and completed a wellfield yield report addressing the wellfields where Hays and Russell draw their current water supplies. McCormick is a hydrogeologist and licensed Professional Engineer in Kansas, Missouri, Iowa, Nebraska, and South Dakota. He has worked in the groundwater industry for 29 years providing design and consulting services for clients regarding hydrogeology, groundwater modeling, and water well and wellfield design for water supply purposes. McCormick is employed as a Senior Associate Geological Engineer with Burns & McDonnell Engineering Company Inc. (Burns & McDonnell). (Ex. 2828 at Cities 0103713-0103744.)
87. McCormick detailed each of the Cities' water sources, including observed water-level trends, tracking and modeling tools, and the respective vulnerability of each source to

⁵² Beginning in 1987 the Lower Smoky Hill IGUCA restricted municipal water rights to 90% of the maximum quantity used during 1981, 1982, and 1983.

drought scenarios, including his findings relating to the sustainable yield of each source under respective drought scenarios. (Ex. 2828 at Cities 0103744.)

88. Following a brief drought that occurred around 1991, Hays became aware of vulnerabilities in its current water supply.
89. Hays utilizes an Aquifer Health Index (AHI) Tool which provide monitoring of the aquifers at the Big Creek and Smoky Hill wellfields. The AHI Tool incorporates information relating to saturated thickness of the aquifer, streamflow, and pumping utilizing monitoring wells and USGS streamflow gages. The AHI Tool develops a score measuring the health of the aquifers so decisions can be made for when additional conservation measures need to be enacted. (Exs. 255, 2625, and 2828. *See also*, Dougherty Test., Tr. Vol. 1 at 112-113; Crispin Test., Tr. Vol. 3 at 620-622 and 624-625.)
90. In response to drought conditions, Hays implemented a protocol based on the conditions of the aquifer/wellfields. Aquifer health categories are classified as i) Good, ii) Watch, iii) Warning, and iv) Emergency. Conditions are monitored by city staff on a daily basis. (Ex. 2625 at Cities 0098125; Crispin Test., Tr. Vol. 3 at 628-629.)
91. When aquifer conditions drop too low, Hays must reduce production from that source. (Ex. 2828 at Cities 0103759.)
92. McCormick prepared a report addressing the wellfield yield for the available water from the Hays sources in the event of 2-year (moderate); 5-year (exceptional), 10-year (decadal), and 20-year (multidecadal) drought.
93. McCormick's report noted Burns & McDonnell did not have sufficient data to evaluate long term yield of Russell's current water sources from Big Creek or Smoky Hill. At times the flow of Big Creek is too low to allow Russell to utilize its surface water intake to divert water from Big Creek. Russell's points of diversion from both Big Creek and Smoky Hill sources are downstream from Hays. If drought conditions impact availability of water at any time, water flows must make it past upstream diversion points before water would be available for those located downstream. (Ex. 2828 at Cities 013764-013765.)
94. McCormick's report noted that during a drought from 2011-2013, Hays pumped 1,335.05 acre-feet in 2011 and 1,342.36 acre-feet from its Big Creek wells and water levels did not decline to the point of limiting production. (Ex. 2828 at Cities 0103760.)
95. During the 2011-2013 drought period, Hays went into a water warning, followed by a water emergency on two occasions. (Ex. 255 at Cities 0017106.)

96. McCormick's report noted that "Without recharge, the aquifer is in a state of managed depletion, and the resource will not recover until precipitation and surface water infiltration return. (Ex. 2828 at Cities 0103759.)
97. McCormick projected that during a moderate drought, Hays could only expect to divert a sustainable yield of only 2,549.46 acre-feet of water from its current sources. During an exceptional drought, the sustainable yield available for Hays would drop further to 1,760 acre-feet. During a decadal drought the sustainable yield of these sources would drop to 840 acre-feet, and during a multi-decadal drought the available water from Hays's current sources would drop even further to a sustainable yield of only 480 acre-feet per year. (Ex. 2828.)
98. In the event of longer droughts, McCormick found it reasonable to assume water levels in the aquifer and the ability of Hays to produce water would continue to decline. (Ex. 2828 at Cities 0103765.)
99. Hays has faced contamination and water quality issues with its current water sources. Two wells on Hays' Big Creek wellfield (Well C-20 and C-23 under Water Right EL-02 have been contaminated with volatile organic compounds. In 1991 Hays filed a change application with DWR seeking approval to move the points of diversion for Water Right EL-02 so the wells could be moved a significant distance to ensure water from the new well locations was not contaminated. (Ex. 1-60 at Cities 0003055-0003059.) DWR's chief engineer suspended well C-20. Hays then worked with KDHE to address the contamination issue entering into a consent agreement for treatment of the water to allow the city to use it to augment its supply. (Exs. 1-61; 1-62; 1-65.) Water from the C-20 well is now filtered through an "air stripper" to treat it and remove contaminants. Dougherty Test., Tr. Vol. 1 at 111-112; Ex. 255 at Cities 0017104.)
100. Russell obtains water from both surface water and groundwater sources, mostly at Big Creek and Smoky Hill. Russell has access to a small irrigation water right as well as water storage at Cedar Bluff Reservoir and Fossil Lake. (Ex. 1055.)
101. Russell is permitted to divert 1,842 acre-feet of water per year from a surface water intake at Big Creek and wells in the Smoky Hill alluvial aquifer located in the Pfeifer Wellfield. (Ex. 2828 at Cities 0103744-0103745.)
102. Russell has two water rights permitting up to 1,767.0 acre-feet of surface water to be diverted from Big Creek.⁵³ Since this is a surface water right, the water level must be sufficiently high for Russell to capture the water. (Quinday Test., Tr. Vol 2 at 474-476.)

⁵³ Water Right, File Nos. RS-08 and 206.

103. Surface water sources are vulnerable to contamination such as algae blooms. (Dougherty Test., Tr. Vol. 1 at 99.)
104. Big Creek frequently runs dry which results in Russell not being able to obtain water from this source. (Quinday Test. Tr. Vol. 2 at 475-476.) Russell has experienced occasions when water from Big Creek was unusable such as during a period of an algae bloom. (Quinday Test., Tr. Vol. 2 p. 484-486.)
105. Water from Big Creek is treated at Russell's softening plant that was built in 1938. (Quinday Test., Tr. Vol. 2 at 474:2-20; 494:17-495:7.)
106. Russell holds water rights which authorize both surface water and groundwater in the Smoky Hill alluvium near Pfeifer, Kansas. Russell's Smoky Hill water rights authorize diversion of 1,840.0 acre-feet per year, but are limited to 1,435.00 acre-feet per year by IGUCA limitations.⁵⁴
107. Russell's Smoky Hill wellfield near Pfeifer is capable of supplying water for short durations when Big Creek is not available.
108. Water from Smoky Hill is treated at Russell's electro dialysis reversal (EDR) plant, which was built in 2006. This plant would also be able to treat water from the R9 Water Rights that is used by Russell. However, the EDR plant is not able to treat water Russell obtains from Big Creek. Big Creek water must be treated at Russell's softening plant. If its softening plant is not in service, Russell is only able to use water drawn from the Smoky Hill source. (Quinday Test., Tr. vol. 2 p. 474, 484-486, 494-496.)
109. Russell has storage rights for 2,700 acre-feet of water at Cedar Bluff with 2,000 acre-feet for direct municipal use. However, even with releases from Cedar Bluff the actual quantity for use by Russell cannot exceed the 1,435.5 acre-feet limitation imposed by the IGUCA on Russell's Smoky Hill water rights. (Cities Exs. 937 at Cities 0027257; 2440 at Cities 0082529.)
110. Water from Cedar Bluff is not always available, especially at times of need. Conditions must be just right for water to be released. Priorities apply to the water and during times of drought, water owned by one entity may be reduced based on priorities. (Quinday Test., Tr. Vol. 2 at 468; 470-471; Cities Exs. 354, 878, 1,407, 1,573, 1,574, 1,627, 1,649 and 2,603.)
111. Water released from Cedar Bluff reservoir storage must flow downstream to reach locations where Russell can utilize it. Released water flows into the riverbed and must follow the river channel to the wellfield near Pfeifer. (Quinday Test., Tr. Vol. 2 at 469.)

⁵⁴ Water Right, File Nos. DWR File Nos. 206, 1,267, 1,861, 7,628, 17,586, and 17,587.

112. If water is released during times of drought, little if any water may actually make it downstream far enough to where Russell could make use of the water. The Hays Smoky Hill wellfield at Shoенchen is located up-stream from Russell diversion points for its Smoky Hill water rights at the Smoky Hill wellfield near Pfeifer. If the Hays wellfield is dry, water released from Cedar Bluff Reservoir for Russell may be soaked up into the Hays wellfield before even reaching Russel. (Dougherty Test., Tr. Vol. 1 at 152.)⁵⁵
113. Russell has access to use a small amount of water from an irrigation water right that allowed Russell access to 62.0 acre-feet of water.⁵⁶ Russell also has a small storage right at Fossil Lake.
114. The Cities presented expert testimony from Dr. Jeffrey Basara (Basara), to address drought impacts and risks to Hays' current water source from the Smoky Hill River. Basara holds a joint appointment as a professor at the University of Oklahoma between the School of Meteorology and the School of Civil Engineering and Environmental Science. Basara is also the Executive Associate Director for the Hydrology and Water Security Program at the University of Oklahoma. Basara has over 20 years of experience working on weather-climate research. (Ex. 2822 at Cities 0130401.)⁵⁷
115. Basara concluded that drought is "an ever present risk in the Smoky Hill Watershed and climate change has had and will continue to have on the hydroclimate of the Great Plains and especially in the Smoky Hill Watershed ("SHW") and, in particular, (1) the likelihood of increased drought conditions over the next 25-100 years for the Cities, and (2) the associated impacts to water sources that supply those areas." (Ex. 2822 at Cities 0103402:17-23.)
116. Basara concluded the climatological record shows "consistent, regular, and recent high-impact and multiyear drought events for the area." Additionally, Basara concluded that the data projected a significantly increasing risk of multiyear droughts for the area over the next 25 to 100 years posing a significant threat to water resources across the Smoky Hills Watershed. (Ex. 2822 at Cities 0103403.)
117. Intervenors did not present an expert to address projections or offer opinions on climate forecasts either as direct expert testimony or in rebuttal of Basara's expert opinion.

⁵⁵ Dougherty noted in his testimony that if there was adequate saturation for water from Cedar Bluff Reservoir to make it to Russell it was probably not a time when Russell needed the release. (Dougherty Test., Tr. Vol.1 at 152-153.)

⁵⁶ Water Right, File No. 34,505.

⁵⁷ The Cities noted in its proposed findings of fact and conclusions of law that since providing testimony at the formal public hearing in July 2023, Basara has subsequently accepted a position as Chair of the Meteorology & Atmospheric Science Department at the University of Massachusetts.

118. The Cities presented Dr. Anthony L. Layzell (Layzell), as an expert witness. Layzell is a scientist with the Kansas Geological Survey at the University of Kansas who studies mapping and environmental factors. Layzell has published numerous articles including “A thousand years of drought and climate variability in Kansas: Implications for water resources management” which was attached as an exhibit to his pre-filed expert testimony. (Ex. 2826.)
119. Layzell reported that data is available to analyze drought patterns in western Kansas going back to the year 837 AD and from the year 1000 for the entire state of Kansas. Layzell reported that growth rings in trees and preserved wood can be measured to reconstruct climatic patterns. Layzell concluded that western Kansas has experienced more severe droughts than eastern and northern Kansas and typically has experienced more severe droughts than southern Kansas over the past 1,000 years. Several past drought episodes have lasted over 50 years and one lasted 110 years. (Ex. 2826.)
120. Layzell concluded based upon historical evidence, it is likely that a drought as severe as the Dust Bowl of the 1930s will occur in Kansas three to four times a century. Layzell further concluded there is an 80% chance that a decadal length drought would occur within any 40-year period in Western Kansas. (Ex. 2826 at Cities 0103654.)
121. No rebuttal experts were offered to dispute Layzell’s opinions or calculations.
122. Walker acknowledged Hays would experience a shortage of 643 acre-feet of water in the event of a 5-year drought from its current water supplies. (Ex. WP01867.)
123. Sufficient evidence was presented to establish that the Cities’ current water supply sources are at risk during drought periods and limit the Cities’ ability to develop retail or commercial growth and to attract additional population growth.

F. Water Management and Water Conservation

124. Hays and Russell each try to manage the water usage of the users of their municipal water system through warnings, conservation programs, efficiency measures, and billing.
125. Hays has implemented water use limits which place restriction on watering outdoor plants, even when using private wells. (Dougherty Test., Ex. 2625.) Water rate structures for Hays customers are codified into city code. The rate structure is a tiered system. The per unit rate increases with each tier. The first 500 cubic feet of water used make up the base rate. The rate then increases per 100 cubic feet of water used after that. The rate structure applies at all to encourage efficient use of water at all times. (Ex. 1762, Crispin Test., Tr. Vol. 3 at 634-638.)

126. During times of drought, Hays's rate structure triggers the "Conservation tier 2 – Water warning or water emergency" rate, which increases rates over the base rate substantially. Rates over base rate increase 453% for residential customers and 347% for business and multi-family dwellings when exceeding the base usage rate. (Ex. 1762 at Cities 0072736. Dougherty Test., Tr. Vol. 1 at 162; Crispin Test., Tr. Vol. 3 at 638.)
127. Hays has implemented a conservation plan which has been approved by the Kansas Water Office. (Ex. 101—p. 4737.)
128. Hays utilizes the "Green" plumbing code, and rebate programs to encourage customers to upgrade to water saving toilets and shower heads. Hays has implemented water utility rates which result in higher rates for "outdoor" use of water. Hays has also supported educational programs for the public and even in schools to reinforce water conservation principals with children at a young age.
129. Brad Wagner (Wagner), a lifelong Russell resident and member of the Russell City Council testified about the economic impacts of limited water supply on Russell. Williams graduated from Russell High School, went to Hays to attend Fort Hays State University, and returned to Russell after graduating with a finance degree. Williams worked as a financial advisor with UMB Bank and Edward Jones for 35 years before retiring recently. (Wagner Test., Tr. Vol. 2, at 445-446.)
130. Wagner recalled frequent water restrictions in Russell even before he graduated from high school in 1978, including limitations on outdoor watering and bans on washing vehicles. Wagner stated that for over a decade, since the beginning of the 2011-2013 drought, Russell has been under continuous water restrictions at various levels, and on numerous occasions, has banned all outdoor use of water, including prohibiting the use of faucets on the outside of homes to water plants or gardens. (Wagner Test., Tr. Vol. 2, at 447-448.)
131. Due to severe water restrictions, Wagner has barrels to capture rainwater from downspouts on a shed he owns on a different piece of property, and Wagner then transports those rainwater barrels to his home to use that rainwater for outdoor watering. Wagner said, "you have to have a plan like that in place or you can potentially lose your trees." (Wagner Test. Tr. Vol. 2 at 450.)
132. Wagner further stated that he, like many other Russell residents, capture "gray water" which is the excess water from showers or bathtubs in order to have some water that can be used to water small outdoor plants when they are prohibited from using faucets to water outdoors. (Wagner Test. Tr. Vol. 2 at 451.)

133. Russell's City Council has had to vote in recent years whether the city would use water to fill the public pool due to water shortages. (Quinday Test., Vol. 2 at 499-500.)
134. Russell's water rates allow for the implementation of "emergency water rates." Beginning in 2006, the Russell City Council implemented a rate structure during periods of critical water supply. When such emergency goes into effect, a customer's water usage from the previous December/January/February is averaged to determine their average water usage, and during the emergency if they exceed that average usage level, they pay a 100% surcharge. The rate structure was unpopular, but a tool used to promote conservation. (Quinday Test., Vol. 2 at 501.)
135. Russell has adopted programs similar to Hays which distribute low-flow showerheads and offers rebates to encourage residents to replace old toilets with water efficient toilets. (Quinday Test., Vol. 2 at 502.)
136. Russell uses effluent from its wastewater system for watering parks and its golf course. Russell also loads effluent into a water tank to trickle on to trees on city right-of-way areas, especially along Main Street, to provide for outdoor watering. (Quinday Test., Vol. 2 at 501-502.)
137. While not part of an official policy or procedure, city staff review water bills and attempt to identify abnormal usage. City staff then attempt to notify the customer which has resulted in stopping water waste from leaking toilets or water lines. Russell's system also implemented a system to set off an alarm to identify if a water meter has been running continuously for seven days as another means to identify potential leaks or unintended water usage. Quinday testified the Russell City Clerk's office makes approximately 150 calls per month to customers to notify customers of potential issues that may be resulting in excess water usage. (Quinday Test., Vol. 2 at 502-504.)
138. The Cities have each demonstrated a track record of promoting water conservation by reducing water usage and rate structures that discourage excessive use of water. Both Hays and Russell have developed conservation plans which have been reviewed and approved by the Kansas Water Office (KWO) pursuant to K.S.A. 74-2608. (Dougherty Test., Tr. Vol. 1 at 166:17- 167:19; 168:15-169:4; 126:21-127:10; Ex. 1-52 (consolidated document including: (1) a March 28, 2014 letter to the Chief Engineer relating to Hays' updated Water Conservation Plan, and (2) Hays' updated Water Conservation Plan).)
139. Hays requested the Chief Engineer create an IGUCA in the city to conserve, preserve, and protect the Big Creek aquifer. Domestic wells has been drilled in the Big Creek alluvium which competed with Hays' wells. (Ex. 2828.) On July 3, 1985 the Chief Engineer established an IGUCA within the corporate boundaries of Hays and the

immediate area. (Ex. 1-53.) As a result of the IGUCA order, Hays was delegated the authority to ban use of private wells for outdoor watering to prevent waste of water. (Ex. 769.)

140. Hays implemented a conservation plan in 1991 following a drought that exposed vulnerabilities in its water sources. Hays' Water Conservation Plan has been approved by the Kansas Water Office. (Crispin Test., Tr. Vol. 3 at 640:12–14.)
141. Hays' Water Conservation Plan is consistent with the Kansas Municipal Water Conservation Plan Guidelines. (Exs. 817, 1-52 at Cities 0002859; Crispin Test., Tr. Vol. 3 at 640.)
142. Hays is in full compliance with its water conservation program. (*Compare* Ex. 817 with Ex. 1-52 at Cities 0002861–62.) Hays has adopted numerous regulations that encourage effective conservation measures by its residents such as limitations on the amount of cool-season turf that can be installed, thereby limiting irrigated area, and prohibitions on overhead spray irrigation within 5 feet of a hard surface. (Dougherty Test., Tr. Vol. 1 at 163.)
143. Hays reuses effluent water from its wastewater treatment plant to irrigate ballfields, sports complexes, parks, and golf courses, utilizing up to 35% of total produced effluent. (Dougherty Test., Tr. Vol. 1 at 129–131.)
144. Hays limits outdoor water use during the summer months, prohibiting it between noon and 7:00 p.m. from June 1 to September 30. (Dougherty Test., Tr. Vol. 1 at 164.)
145. Hays also regulates water use from private domestic wells in the same way as from the City's distribution system during times of drought. (Dougherty Test., Tr. Vol. 1 at 163–164.)
146. Hays was the first city in Kansas to hire a water conservation specialist and implement the "green plumbing code." Hays has had a water conservation specialist on staff since 2012. (Dougherty Test., Tr. Vol. 1 at 168; Dickman Tet., Tr. Vol 4 at 763.)
147. The green plumbing code ensures that new constructions in the City "are designed for efficient water use, both indoor use and irrigation systems used outdoors." (Dougherty Test., Tr. Vol. 1 at 168–169.)
148. Holly Dickman (Dickman), the current water conservation specialist for Hays testified regarding the city's conservation efforts and the impact of those programs. (*See* Dickman Test., Tr. Vol. 4 beginning at 760.)

149. As Water Conservation Specialist, Dickman's responsibilities include Hays' conservation rebate programs, education and outreach programs, and marketing the Cities' conservation program to its residents. (Dickman Test., Tr. Vol. 4 at 761.)
150. Hays has numerous rebate programs to encourage and enhance conservation.
151. Hays offers a rebate program to encourage residents to install low-flow toilets. Dickman reported this has saved approximate 8.3 acre-feet of water per year. (Dickman Test., Tr. Vol. 4 at 768.)
152. Hays offers a washing machine rebate program which Dickman reported has saved approximately 2.8 acre-feet of water per year. (Dickman Test., Tr. Vol. 4, at 770-771.)
153. Dickman reported the program encouraging installation of low-flow shower heads has saved approximately 4.9 acre-feet of water. (Dickman Test., Tr. Vol. 4 at 774.)
154. According to Dickman, programs encouraging converting lawn turf to surfaces requiring less water converted over 41,000 square feet of lawn space in 2019. (Dickman Test., Tr. Vol. 4 at 771-774.)
155. Additionally, Hays invests time and resources to work with residents on conservation education and outreach initiatives through means such as displays, press briefings, news releases, television and radio advertisements, social media posts, and informational booths at school events, festivals, and other events. Hays holds an annual water poster contest and has utilized a mascot "WaterSmart Wally" to help promote water conservation to young children. (Dickman Test., Tr. Vol. 4 at 774-76; Ex. 933.)
156. Dickman testified that the City's conservation efforts have increased since 2019. Dickman stated she had given more than 20 presentations to middle school and grade school students in Hays during 2023. (Dickman Test., Tr. Vol. 4 at 791-793.)
157. Hays' Drought Response Plan is codified in City ordinances and, consistent with its AHI Tool, implementing stages based on the current conditions. (Ex. 1-52 at Cities 0002870; Ex. 820.)
158. The management and regulatory actions applicable to each successive drought stage are described in the City's Drought Response Plan and include increasing levels of mandatory conservation and education interventions. (Ex. 1-52 at Cities 0002871 (Stage 1 – Water Watch), Cities 0002872-73 (Stage 2 – Water Warning), Cities 0002874-75 (Stage 3 – Water Emergency); Crispin Test., Tr. Vol. 3 at 629-630.)

159. These conservation measures include locking of irrigation meters, prohibition on water in swimming pools (private and municipal), prohibition on all outdoor watering, and other measures. (Ex. 1-52 at Cities 0002872–75.)
160. The Hays water conservation program is enforced; there are “water restrictions every summer” from June 1 to September 30, which “is enforced by the Hays Police Department.” (Dickman Test., Tr. Vol. 4 at 802.)
161. The Hays water utility department notifies customers if excessive water use is detected. Williams, the Executive Director of Grow Hays, and lifelong Hays resident, testified that he has personally received calls from Hays’ water utility department advising that water use for one or more of his properties is high during a given month. (Williams Test., Tr. Vol. 2 at 395– 397.)
162. “[T]he City of Hays has a[n] ordinance prohibiting the wasting of water, and so if you had a ... misadjusted sprinkler head that was watering the street or if the lawn vegetation you were watering was overly saturated and what you were putting down was running onto the street, you can actually receive a ticket for that.” (Dougherty Test., Tr. Vol. 1 at 160–161.)
163. Violations of Hays’ water conservation measures can result in tickets issued by the police department and applies to both residential and commercial customers. (See Crispin Test., Tr. Vol. 3 at 616–618.)
164. Russell has also implemented a water conservation plan.
165. Quinday addressed the actions taken by Russell to implement its conservation plan. Russell’s conservation plan was approved by the Kansas Water Office, in 1997. (Exs. 1-68; 940 at Cities 0029370-90; 1-71; Ex. 1-72; Quinday Test., Tr. Vol. 2 at 496–497.)
166. Russell frequently updates its Water Conservation Plan, the most current of which is dated November 15, 2022. (Ex. 2653; Quinday Test., Tr. Vol. 2 at 496.)
167. Each time Russell substantively updates its Water Conservation Plan, it sends a copy to DWR and follows guidelines developed and maintained by the Kansas Water Office. (Quinday Test., Tr. Vol. 2 at 497.)
168. Russell is in full compliance with its water conservation program, which has been approved by the Kansas Water Office. (Quinday Test., Tr. Vol. 2 at 496– 497.)
169. Russell has codified a water rate structure into city ordinance to encourage efficient use of water. Similar to the rate structure used by Hays, rates for water increase after

customers use the quantity designated as the “base rate” and the rate structure applies at all times, regardless of precipitation conditions to encourage efficient use of water. (Ex. 1-71.)

G. R9 Ranch/R9 Water Rights

170. At the time Hays purchased the R9 ranch, it was the largest contiguous track of water rights for sale in Kansas. (Ex. 762 at Cities 0020716; Dougherty Test., Tr. Vol. 2 at 275.)
171. After Hays purchased the R9 Ranch, the property was leased back to the sellers to continue utilizing the property as irrigated farmland. (Ex. 1290.) Between 2007 and 2017 the irrigated circles of cropland on the R9 Ranch were taken out of production. None of the R9 Ranch property has been used as irrigated farmland since 2017. The center pivot irrigation structures were removed, and the circles were seeded back to a mixture of vegetation consisting of predominantly native grasses. (Ex. 2824 at Cities 0103565; Ex. 1741.)
172. The R9 Water Rights had authorized 54 separate wells across the R9 Ranch property. All but two of the irrigation wells on the R9 Ranch have been plugged and abandoned. (Dougherty Test. Tr. Vol. 1 at 214:20–215:1; Clement Test., Tr. Vol. 3, 724:6– 25; Ex. 2397 (R9 Ranch 2018 Well Abandonment Report).) The two remaining wells were relatively new, are not being used for irrigation, but have been capped. (Clement, Tr. Vol. 3, 724:6–25.)
173. File 21,729 D-1 is the most senior appropriation right of the R9 Water Rights with a January 2, 1974 priority date. (Ex. 1-5 at Cities 0000442.)
174. File 30,084, the most junior appropriation right of the R9 Water Right has a July 1, 1977, priority date. (Ex. 1-36 at Cities 0002450.)
175. The six most senior appropriation rights of the R9 Water Rights are senior to all other appropriation rights within three miles of the R9 Ranch. Of the 27 most senior appreciation rights within 3 miles of the R9 ranch, 26 of those water rights belong to the Cities as part of the 30 appropriation rights included in the R9 Water Rights. (Ex. 2873.)
176. In areas closed to new water appropriation rights, DWR advises the purchase of an existing irrigation water right and an application to change the water right to a new use as permitted by K.S.A. 82a-708b, which is precisely what the Cities did in this instance. (Letourneau Test., Tr. Vol. 4 at 827:4–12; 889:7–22.)
177. The R9 Ranch is located in GMD5. GMD5 has regulations applicable to change applications including well location requirements to be met by each well. These well

location requirements were addressed in the Master Order. (Ex. 1-2 at Cities 0000111 and Cities 0000145.)

178. GMD5's Revised Management Plan specifically mentions that water transfers do not impose obligations or requirements on transfer applicants. Monitoring wells are required near "new large capacity wells." (Ex. 67b at Cities 0003177 and 00003180.)
179. The location of a well can be moved up to one-half mile but it must stay far enough from other wells to avoid direct well-to-well impairment. (Letourneau Test., Tr. Vol. 4 at 839:2–841:1; Tr. Vol. 4 at 843:24–844:12.)
180. McCormick also filed a report as an expert witness on behalf of the cities addressing groundwater modeling at the R9 Ranch. McCormick's report and expert testimony addressed the long-term changes in groundwater conditions at the R9 Ranch if the water transfer is approved. (Ex. 2827.)
181. McCormick utilized a groundwater flow model developed by Balleau Groundwater, Inc. (BGW Model) for GMD5. (Ex. 2827 at Cities 0103671.)
182. The BGW model was "designed to address [GMD5] management questions regarding impacts of alternative actions on future hydrologic conditions, and to project future conditions in the aquifer and interrelated streams." (Ex. 2727 at Cities 0102700 (quoting the "BGW Model Report," Ex. 2297 at Cities 0080979.)
183. McCormick's modeling calculated the aquifer around the R9 Ranch had a saturated thickness of 45 feet increasing to 140 feet saturated thickness. The area with the thickest saturation around the R9 Ranch property was identified as the area on the west and southwest side of the property. Overall, the area around the R9 Ranch has an average thickness of 100 feet. (Ex. 2827 at Cities 0103697-0103698; Ex. 2666.)
184. McCormick concluded that if the proposed municipal wells on the R9 property pumped an average of 4,800 acre-feet per year (the limit of the TYRA pursuant to the Master Order) for a 51-year period, the result would be 0.6-foot decline in the saturated thickness of the R9 Ranch. (Ex. 2827 at Cities 0103671 – 0103672.)
185. The Intervenor's expert witness, Larson, prepared illustrated figures with his pre-filed testimony and expert report which reflected Larson's calculations that the neighboring well closest to the R9 Ranch would have approximately a 2.4-foot decline in the water level after 51 years of maximum pumping by the Cities. (Ex. WP-01864 Figure 4.) Letourneau referenced this to be a 2.8-foot decline in the water level in his testimony based upon Larson's models. Letourneau noted that in an area with a 140-foot saturated

thickness, this reflected roughly a 2% decline in the water level, which DWR believed to be a reasonable decline.

186. Intervenor's witness, Richard Wenstrom (Wenstrom)⁵⁸ confirmed the most saturated thickness of the R9 Ranch was in the area of the R9 Ranch property where the proposed municipal wells were to be located.
187. McCormick utilized data for the R9 Water Rights from the period of 1991 to 2007. The R9 Water Rights were documented as averaging a diversion of 4,054 acre-feet per year for the 17-year period of 1991 to 2007. Utilizing the BGW model, McCormick concluded if the R9 Water Rights diverted 4,800 acre-feet per year⁵⁹ over a 17-year period the water level would be reduced by 3.6 inches and over a 51-year period of diverting 4,800 acre-feet per year the water level would be reduced by 7.2 inches. (Ex. 2827 at Cities 0103671-0103672.)
188. Lane Letourneau (Letourneau) is the water appropriation program manager for the DWR at KDA and has been employed with DWR for 36 years. (Letourneau Test., Tr. Vol. 4 at 811.) Letourneau is not aware of any evidence of potential impairment of other water rights that will result from approval of the transfer. (Letourneau Test., Tr. Vol. 4 at 847-848.)
189. Letourneau stated in his testimony that the KWAA would allow for reducing water in an aquifer as long as others were not impacted. (Letourneau Test., Tr. Vol. 4 at 853); K.S.A. 82a-711; K.S.A. 82a-711a.) Additionally, when the R9 Ranch was operating as irrigated farmland, that irrigation was contributing to the decline of the aquifer. (Letourneau Test., Tr. Vol. 4 at 854-855.)
190. Letourneau stated that Dr. Sam Perkins, a DWR employee whom Letourneau described as an "excellent modeler" ran the GMD5 groundwater model and the Burns & McDonnell model and provided the results to Letourneau for review which confirmed McCormick's groundwater modeling was accurate. (Letourneau Test., Tr. Vol. 4 at 856-863; *See also* Ex. 2465 at Cities 0087539-70 (DWR Staff Review of Ranch Pumping and Water Levels, by Sam Perkins); Ex. 1-2 at Cities 00000108 ¶7; Ex. 1-2 at Cities 00000117 ¶65; Ex. 1-2 at Cities 00000129 ¶33 (referring to DWR's independent review

⁵⁸ Wenstrom appeared as a witness on behalf of the Intervenor and also provided public comments at the public comment hearing opposing the water transfer. Wenstrom owns farmland neighboring the R9 Ranch and was one of the original members and an officer of Water PACK. Wenstrom has a bachelor's degree in agricultural engineering and a masters in irrigation engineering. The Intervenor disclosed Wenstrom as a witness prior to the hearing as required, but did not disclose Wenstrom as a proposed expert witness.

⁵⁹ The TYRA Limitation in the Master Order limits the Cities diversion of water from the R9 Water Rights to an average of 4,800 acre-feet in any rolling ten-year period.

of the model performance); Ex. 1-2 at Cities 00000131 ¶¶ 141-142; and Ex. 1-2 at Cities 00000134-00000135 ¶¶152.)

191. Letourneau testified that based upon the data available, the Cities use of the R9 Water Rights for municipal water would cause no impact to neighboring wells, even if the Cities continuously pumped their maximum allowed quantity for 51 consecutive years, and even assuming the worse case groundwater modeling scenarios suggested by Intervenor’s expert Larson. (Letourneau Test., Tr. Vol. 4 at 867-868.)
192. Letourneau testified that he is not aware of any reasonably foreseeable future users of the water on the R9 Ranch other than the Cities because Hays and Russell own the R9 Water Rights, the area is closed to new appropriation so new water cannot be applied for, and the forfeiture statute, K.S.A. 82a-718, no longer allows for termination of a water right for non-use in closed areas, which includes GMD5, so “that water is locked up by Hays and Russell.” (Letourneau Test., Tr. Vol. 4 at 897:19–898:9.)
193. Letourneau was questioned about the “Anti-Speculation Doctrine.” Letourneau testified this doctrine prohibits tying up *new* water rights that should be available to somebody else but does not apply to *existing* water rights, especially after the changes to the forfeiture statute, K.S.A. 82a-718. (Letourneau Test., Tr. Vol. 4 at 876:23–877:2; 879:10–24.)
194. Dr. Keith Harmoney (Harmoney) was presented by the Cities as an expert witness. Harmoney is a Range Scientist for Kansas State University (K-State) operating out of the KSU Agricultural Research Center in Hays, Kansas. Harmoney provided his opinion as an expert in rangeland science and native grasses on the impacts of converting the R9 Ranch circle land units from tilled and cropped to a mixture of managed native grasses. (Ex. 2824.)
195. The R9 Ranch at one time had 43 land units with partial or complete circle pivot irrigation systems. Most recently 42 land units had been used in some form of crop production.
196. Harmoney concluded:

The majority of the circle land units on the R9 Ranch have become, and the others will become, much more similar to the diverse native grassland ecosystem that once covered these lands. After conversion back to native grasses, these circle land units should: (1) function similarly to the grassland dominated ecological sites that once covered the landscape; (2) have reduced erosion, in terms of water and

especially wind erosion, than prior tilled croplands; (3) provide a year-round vegetative ground cover with less water loss and water consumption than prior harvested field crops; and (4) provide critical habitat to native grassland birds and other wildlife. (Ex. 2824 at Cities 0103561.)

197. In Harmoney's opinion, the native grasses reestablished on the R9 Ranch would utilize less water than agricultural crops because the native grasses had greater water use efficiency to survive hot and dry periods, form leaf tissue for photosynthesis and to produce "sugars to sustain meristem and perennial buds each year based upon precipitation alone." (Ex. 2824 at Cities 0103562.)
198. Intervenors presented Steven P. Larson (Larson) as an expert witness to address potential impacts of changing R9 Water Rights from irrigation use to municipal use. Larson is employed as Executive Vice President and Senior Principal with S.S. Papadopulus & Associates, a consulting firm. Larson holds both a bachelor's and master's degree in civil engineering from the University of Minnesota. Before joining S.S. Papadopulus & Associates in 1980, Larson was employed as a hydrologist with the U.S. Geological Survey conducting hydrological studies on groundwater and surface water. (Ex. WP01864.)
199. Larson reviewed the reports prepared by Burns & McDonnell in February 2018, but revised in September 2018 to address the impacts of changing the use of the R9 Water Rights from irrigation to municipal use. In Larson's opinion, McCormick's analysis and the Burns & McDonnell evaluation, "failed to consider how groundwater recharge on irrigated land would change when the land was no longer irrigated." (Ex. WP01864 at 3.)
200. In his rebuttal report, Barfield agreed McCormick did not account for irrigation enhanced precipitation recharge in his modeling, but that omission was reasonable because the GMD5 model did not include that feature. (Ex. 2867)
201. Available water from the Cities current supplies, is vulnerable in times of drought. As previously noted, even though Russell owns water storage at Cedar Bluff, if water is released from Cedar Bluff it must travel downstream before making it to Russell. Letourneau noted in his testimony that if the Cities were able to utilize water from the R9 Water Rights during times of drought, rather than drawing as much as they could from their other sources, that could improve conditions downstream along the Smoky Hill River between Cedar Bluff and the Kanopolis Reservoir in Ellsworth County. This could make more water available for other downstream users resulting in "a benefit to the state larger than just a local benefit."(Letourneau Test., Tr. Vol. 4, at 899-900.)

202. GMD5's revised management plan dated October 11, 2018 was approved by the former Chief Engineer on January 2, 2019. (Ex. 67b.) Regulations applicable to GMD5 are found at K.A.R. 5-25-1 *et seq.*
203. As applied to the proposed water transfer, GMD5 regulations would govern placement of well locations for each of the proposed municipal wells, which was addressed in the Master Order. (Ex. 1-2 at Cities 0000111 ¶ 42, and Cities 0000145 ¶ 207.)
204. GMD5 requirements specify municipal wells may not be moved more than 2,640 feet from their authorized points of diversion and must be at least 1,320 feet from wells with an earlier priority date except for wells owned by the Cities. Municipal wells must be at least 660 feet from existing domestic wells except domestic wells owned by the Cities. (K.A.R. 5-25-2a(a).) Municipal wells must be completed in the same aquifer(s) in which the current authorized wells were authorized to be completed. (K.A.R. 5-25-2a(d).)
205. GMD5 Staff reviewed the Master Order and recommended the R9 Ranch Water Level Monitoring Plan (Ex. 2462) be amended to address water quality in accordance with K.A.R. 5-25-7. (Ex. 266 at Cities 0020385 ¶7 and ¶10.) The Cities amended the monitoring plan as a result of the GMD5 recommendations which is attached as Exhibit 34 to the Master Order. (Ex. 1-2 at Cities 00000118 ¶69; and Cities 00000147 ¶219; Ex. Cities 1-2 at Cities 00000345-51.)

H. Economic Impacts

206. Doug Williams (Williams), Executive Director of Grow Hays, the economic development organization for Ellis County testified about some of the economic impacts for Hays with current limitations on the availability of water. Williams has lived in Hays since 1960 and before he became the Executive Director of Grow Hays in 2019, he had been a real estate broker since 1977. (Williams Test., Tr. Vol. 2 p. 383 - 387.)
207. In his work as a real estate professional as well as with Grow Hays Williams, has worked with both existing and prospective businesses considering locating in Hays and Ellis County. (Williams Test., Tr. Vol.2 at 285.)
208. According to Williams, a lack of available water has been a barrier to additional growth of the Hays community. (Williams Test., Vol 2, at 424.)
209. Williams alleged that Hays' lack of water has resulted in lost and inhibited commercial opportunities available to the City and stunted Hays' population growth. (Williams Test., Tr. Vol. 2 at 407-408.)

210. Dougherty also testified regarding economic impacts to Hays. Dougherty testified that “[t]he statewide impact of approval [of the water transfer] is maintaining the health of a \$2 billion regional economy [E]very dollar of sales tax and income tax and commerce that’s generated in the Cities of Hays and Russell benefits the State of Kansas.” (Dougherty Test., Tr. Vol. 1 at 206:5–11.)
211. Dougherty further testified that approving the water transfer application impacted the entire state of Kansas by maintaining the regional economy for the Cities because sales tax and income tax generated in Hays and Russell benefited the entire state. (Dougherty Test., Tr. Vol. 1 at 206–207.)
212. The Cities presented exhibits showing values of property in both Ellis County and Russell County which reflected publicly owned and leased property in Ellis County, appraised at \$237,172,060.00 and publicly owned and leased property in Russell County appraised at \$49,812,310. (Ex. 1-44; Ex. 1-45).
213. The Cities presented reports from the Docking Institute addressing the impact of the Hays, Russell, and the value of water in Southwest Kansas. (*See*: Ex. 1-46 and Ex. 1-51.)
214. As noted above, Russell’s largest employer is an ethanol and wheat gluten facility owned by Purefield Ingredients (Purefield). Quinday and Wagner both testified about the importance of Purefield to the economy of Russell as Purefield offers numerous high paying jobs with insurance, retirement benefits and economic stability for Russell (Quinday Test., Tr. Vol. 2 at 494, Wagner Test., Tr. Vol. 2 at 459.)
215. Purefield would like to expand its facility in Russell. However, that expansion is dependent on whether Russell is able to acquire additional water sources necessary for the facility. (Wagner Test., Tr. Vol. 2 at 460.)
216. Wagner reported he has observed as many as 20 semitrucks/trailers per hour hauling product in and out of the Purefield facility. Wagner believed that in addition to the Purefield facility in Russell, the numerous truck drivers as well as the grain going into the facility and the by-product coming out all provide economic benefit to Kansas. (Wagner Test., Tr., Vol. 2 at 461.)
217. Quinday reported that the industry projected expenditure for expansion of the Purefield facility was \$300 million. However, Russell would need to commit to being able to supply Purefield an additional 500,000 gallons of water per day in order for Purefield to consider expansion of the Russell facility. (Quinday Test., Tr. Vol. 2. at 541.)

218. The Cities presented Stephen F. Hamilton, Ph.D. (Hamilton) as an expert witness to address the economic impacts associated with the application to transfer water from the R9 Ranch to Hays and Russell.
219. Hamilton is a professor of economics at California Polytechnic State University, San Luis Obispo (Cal Poly). Hamilton has a Ph.D. in Agriculture and Resource Economics from the University of California, Berkeley, and has held positions as a professor at Kansas State University, the University of Arizona, the University of Central Florida, and Cal Poly. His research areas focus on the application of statistical methods and economic theories of industrial organizations to wholesale and retail market pricing. His prior publications have included analysis of economic losses from water supply disruptions and the economic benefits of groundwater use. (Ex. 2823.)
220. Hamilton's academic work addresses water valuation, water rationing, the conjunctive use of surface and groundwater sources, discounting, the internal rate of return, and the dynamic analysis of non-renewable and renewable resources. (Ex. 2823 at Cities 0103497.)
221. Hamilton's analysis addressed two components. (1) Statewide economic benefits if the water transfer is approved due to investments in the water infrastructure. (2) The economic impacts for the Cities caused by drought-induced water shortages. (Ex. 2823 at Cities 0103489.)
222. Hamilton detailed ways the Cities water project would generate impact across Kansas including the direct effect of spending (procurement of fabricated pipelines, equipment, and materials for urban centers across Kansas), and the indirect effect/ripple effects in other regions of the state (e.g. sale of fabricated pipelines from Wichita generates additional sales of resin plastics generated in Topeka and additional sales of piping materials from Lawrence). Hamilton also opined that the state further benefits from mobility of workers and geographic distribution of their consumption activities (e.g. construction worker earns income from the project and consequently spends that income in ways such as visiting zoos, going to college basketball games, or paying for a child's tuition at a college in Kansas). These economic effects are captured and measured in Hamilton's IMPLAN model. (Ex. 2823 at Cities 0103514.)
223. Hamilton's analysis of benefits connected to water infrastructure investments used the IMPLAN model as well as impacts after the completion of the project the value of avoid water shortages. (Ex. 2823 at Cities 0103490.)
224. Hamilton relied upon the findings and conclusions of Layzell and Basara, the expert witnesses who had addressed the likelihood of future drought periods based on historical records, and the impact of droughts of various durations on the Cities' current water

- sources. Hamilton also relied upon McCormick's wellfield yield analysis. (Ex. 2823 at Cities 0103502-0103506.)
225. Hamilton developed Multi-Region Input-Output (MIRO) analysis consisting of three regions. Phase I region – Edwards County, Pawnee County, Rush County, and Ellis County. Phase II region – Russell County. Phase III Region – the rest of Kansas. (Ex. 2823 at Cities 0103515.)
226. Hamilton's report offered the following expert opinions:
- a. Without access to new water sources, the Cities' existing sources would not be sufficient to meet demand for the cities during periods of drought and projected climate change could make water shortages more frequent, longer in duration, and more severe.
 - b. Approving the transfer would positively impact the economy of the State of Kansas by increasing the economic value of the water through reallocation to urban use and with the associated investments in infrastructure necessary to convey the water to Hays and Russell.
 - c. Investments in the necessary infrastructure would produce statewide economic impact of \$167 million as well as 752 full time jobs and state tax revenue impact of \$4.4 million.
 - d. Approving the transfer mitigates the risk of economic losses for Hays and Russell from periodic water shortages.
 - e. If the transfer is approved, over a 50-year period it would provide an economic benefit of \$43 million, on average, and up to \$117 million in some conditions.
 - f. Combining statewide impact of i) economic impact from water infrastructure; and ii) avoiding future water shortages the economic benefit to the State of Kansas could exceed \$200 million if hydrologic conditions from 2023-2071 correspond with the average conditions in the hydrologic record and nearly \$300 million if future water conditions correspond to periods in the historic record that were drier. (Ex. 2823 at Cities 0103499-0103500).
227. Hamilton's conclusion that approval of the water transfer would generate a \$167 million economic impact includes \$112.2 million of direct impact; \$32.2 million of indirect impact, and \$22.5 million of induced impact. (Ex. 2823 at Cities 1013516.)

228. Hamilton concluded the 752 full time equivalent jobs connected to the project would generate average earnings of \$53,881 per year, which is higher than the average salary estimated for Kansas by the Bureau of Labor Statistics. (Ex. 2823 at Cities 0103516.)
229. Hamilton concluded that approving the water transfer would have a positive impact on the Kansas economy from the conveyance infrastructure alone. (Ex. 2823 at Cities 0103499.) Hamilton relied upon the opinion and cost estimates of the Cities expert witness who addressed construction costs. (Ex. 2823 at Cities 0103509.)
230. Hamilton further testified at the hearing his opinion that expansion of the Purefield facility in Russell would offer additional statewide benefit above and beyond the projections in his pre-filed testimony and expert report. (Hamilton Test., Tr. Vol 7 at 1137-1138.)
231. Hamilton concluded that approving the water transfer mitigates the risk of economic losses to the Cities from periodic water shortages, providing a direct benefit to water users as well as indirect and induced benefits to the regional economy through supply chain development to support industrial and commercial uses in Kansas which will inure to the benefit of the State. (Ex. 2823 at Cities 0103489.) Hamilton's analysis "recognizes both the commendable conservation efforts by the Cities' citizens and their vision for economic growth, and the harsh reality that, without water from the Ranch, the Cities face significant risks of water shortages resulting in economic losses." Without the water transfer the Cities could face losses of commercial and industrial businesses as well as residential losses in the event of water shortages during periods of drought. (Ex. 2823 at Cities 0103517 – 0103518.)
232. Hamilton further recognized the Cities have already attempted to overcome water supply limitations with years of aggressive conservation efforts. Consequently, the demand for water would be "hardened by existing conservation efforts, making further conservation costly." Hamilton concluded that without the water transfer, if the Cities were forced to impose even more restrictions to deal with an insufficient water supply beyond what they have already accomplished, further reductions would become more costly because economical conservation methods have already been exhausted. (Ex. 2823 at Cities 0103506-0103508.) "[D]uring droughts, the economic impact in Hays and Russell is higher than in other communities that have not actively engaged in conservation measures." (Ex. 2823 at Cities 0103520.) Hamilton testified that costs associated with droughts is greater because the Cities have already exhausted reasonable conservation measures. (Hamilton Test., Tr. Vol.7 at 1178-1179.)
233. Intervenors' experts Harvey and Walker claimed there was no net benefit.

234. Intervenors alleged neither Hays nor Russell had firm commitments from businesses to pursue economic development in either city.

I. Costs of the Project

235. Kevin Waddell (Waddell) is a professional engineer who serves as the Preconstruction & Estimating Manager for Water Infrastructure with Burns & McDonnell. Waddell was offered as an expert witness by the Cities to address projected construction costs. Waddell has worked in the construction industry for nearly three decades with 26 years' experience as a contractor constructing water infrastructure systems around the country. (Ex. 2829.)

236. Waddell reported that the current estimate of costs for the project to construct the infrastructure necessary to transport water from the R9 Ranch in Edwards County to Hays and Russell to be \$106.6 million, which is 46.29% more than the initial estimate calculated by Burns & McDonnell in 2015. (Ex. 2829 at Cities 0104177.)

237. Waddell acknowledged a specific route for the project had not yet been identified. However, it was Waddell's opinion, with 80% certainty that by the year 2025 the costs of the proposed infrastructure project would increase another 26.53% to \$134.9 million. Waddell's projection of costs was developed in accordance with industry standards based on the Association for Advancement of Cost Engineering (AACE) estimate classification. (Ex. Cities 2829 at 0104177.)

238. Hays indicated it hoped to proceed with the project without increasing rates for water customers. Hays has anticipated the need for funding such a project and has previously passed a local sales tax the City intends to use towards project costs.

239. Quinday, acknowledged the costs for acquiring additional water sources may result in increased rates for Russell water customers, but other expenses have also factored into increased utility rates over time.

240. Both Quinday and Dougherty indicated the intent of their respective cities to pursue all funding options including both state and federal programs for which the Cities' may qualify.

J. Other Sources of Water

241. The Cities have pursued other options for water to increase their respective supply sources. No alternative sources were located which would meet the long term needs of the Cities. The evidence reflects consideration of many potential options for water supply for both Hays and Russell.

242. New water rights appropriations are not available in the region.
243. In 1977 Hays engaged the services of Black and Veatch engineering to examine existing and anticipated water requirements and recommend a plan to expand the supply including options to add additional wells in the Smoky Hill River alluvium, both east and west of the wellfield that existed at that time. (Ex. 1-92.)
244. In July 1979 Hays filed applications for five additional water rights in the Smoky Hill wellfield, which requested permits to drill 18 new wells to divert an additional 1,400 acre-feet of water, which would have increased the Smoky Hill wellfield source to 3,900 acre-feet of water annually. (Exs. 1-93, 981, and 1051-1054.) However, the Chief Engineer agreed to consider approval of only one of the five requested permits if Hays withdrew the other four. (Ex. 981 at Cities 0048383.)
245. Hays withdrew four of its permit applications and proceeded with just one new permit for water in the Smoky Hill River alluvium as recommended by the Chief Engineer. In January 1981 the Chief Engineer issued a single permit authorizing two new wells with a total maximum combined quantity of 300 acre-feet per year. (Ex. 1-93.)
246. In 1989 Hays received approval from the Corps of Engineers for “one time construction” of three (3) temporary in-stream dams along the Smoky Hill River to hold water in an attempt to recharge the aquifer. However, the approval was conditioned as one-time construction for “emergency water storage” and Hays would have been required to remove the dams immediately following the recharge of the well field or elimination of an emergency. Construction of dams could have caused impairment of downstream water rights, and the approval did not provide a long-term sustainable water supply. The dams were never constructed. (Ex. 1-94, at Cities 0004518; Ex. 1-95 at Cities 00004511.)
247. A Bartlett & West study issued in 2014 concluded the Smoky Hill River alluvium is not a viable source for additional water for Russell noting the existence of the IGUCA, minimum desirable streamflow requirements, and the need for treatment. (Ex. 1-54 at pp. 23-24.)
248. The construction of the Cedar Bluff Reservoir cut off the flow of water from the west into Ellis and Russell Counties, impairing water rights held by both Cities in the Smoky Hill River alluvium. (Cities Exs. 1-162 and 232.)
249. Numerous proposals and studies about Cedar Bluff serving as a potential water supply for the Cities were undertaken over the years, but none of them have resulted in viable

projects. (*See, e.g.*, Exs. 1-54, 1-102, 1-127, 1-128, 1-134, 1-139, 1-157, 1-158, and 2130.)

250. It became clear in 2003 that Cedar Bluff was not a viable source for water for municipalities in Kansas. The KWO issued a memorandum to the Governor's office advising that Cedar Bluff could not keep up with surface evaporation during extended periods and did not recommend further consideration of water in the reservoir for municipal water supply. (Ex. 1-182.) A report issued in 2003 by the KWO and the Corps of Engineers concluded Cedar Bluff should be eliminated as a potential water source for the Eastern Smoky Hill-Saline Basin (which includes Hays and Russell) because of Cedar Bluff's poor historical record. (Ex. 1-134.) KWO also wrote in a letter dated January 30, 2003 that the "Kansas Water Office has completed an analysis that indicates that Cedar Bluff Lake is not a viable option for a sustainable, significant, long-term public water supply." (Ex. 1-158.)
251. Not considering Cedar Bluff as a reliable long-term water supply for the Cities is further supported by the fact that DWR has established two IGUCAs along the Smoky Hill River, one downstream from the Cedar Bluff Reservoir (Exs. 159-60) and a second upstream from the Reservoir. (Ex. 161.)
252. In the 1990s Public Wholesale Water Supply District No. 15 (PWWS District No. 15) worked on development of the "South Russell Project." The project sought to utilize a specialized well called a "Raney Collector well" to capture surface water in addition to new water appropriation rights sought in the alluvium in Southeast Russell county. Water would then be piped to treatment facilities and then to Hays and Russell. A review of the project determined the yield was not as high as originally anticipated and also questioned the reliability noting the project would be subject to the same drought factors as Hays and Russell. (Ex. 176; Ex. 1064-172; Exs.1074-1084; Ex. 1-56; Ex. 327, Ex. 1-122.)
253. Additional water from the Dakota aquifer does not provide the City with a source of sufficient water for municipal use because the formation is a non-renewable source. (Ex. 2667.)
254. In 1984 the Chief Engineer issued an order establishing the Lower Smoky Hill River IGUCA which reduced the total combined quantity Hays was authorized to divert from its water rights at the Smoky Hill Wellfield to 2,285.8 acre-feet per year. (Ex. 1-94.)
255. Hays worked with outside consultants and engineers through numerous studies pursuing efforts to increase yield and sustain its Smoky Hill River wellfield, especially when facing times of drought. Burns & McDonnell cautioned against overpumping the wellfield, noting that doing so could result in "accelerated deterioration of the wells,

- well screens, surrounding gravel pack and aquifer materials, and potential water quality deterioration because of aeration of the aquifer materials. (Exs. 1-96; 1-97; 1-98; 1-99.)
256. Wilson Lake was completed in 1964 and is managed by the Corps. (Ex. 1- 155 at Cities 0007282; 1-102 at Cities 0011986.)
257. Wilson Lake was not authorized as a municipal and industrial water supply. (Ex. 1-102 at Cities 0011986.)
258. A March 1967 Water Supply Study for the City of Russell states that storage would be available in Wilson Lake but concludes that the water has “excessive amounts of chlorides” that are “too high to merit consideration of the source for a municipal water supply.” (Ex. 1-128 at Cities 0005912–13.)
259. In 1991 the Cities filed an application for a water appropriation right to divert up to 8,000 acre-feet of water from Wilson Lake for municipal purposes, even with the known water quality issues with water from Wilson Lake. (Ex. 1-129.) The application remained viable until December 31, 2016. (Ex. 1-130.)
260. A report from Black and Veatch in 1993 reviewed the feasibility of developing a water supply from Wilson Lake and concluded desalination would be required due to high concentrations of total dissolved solids, nitrates, chlorides, and sulfates. Desalination would require a brine disposal well. (Cities Ex. 1-131 at Cities 0005942.) Additionally, to utilize water from Wilson Lake, a reallocation study would be necessary for authority to reallocate existing storage from present use to municipal use. (Ex. 1-132.)
261. Dougherty testified that the Corps of Engineers, “pulled the plug” on the reallocation study. Dougherty went to Washington D.C. in 2011 to lobby the Corps of Engineers to continue the reallocation study. Dougherty testified that he “was flat out told our efforts are on flood control right now, not -- not water supply.... I was in a conference room with several members of the Corps of Engineers headquarters advocating for them to put funds available for the study and was turned down.” (Dougherty Test., Tr. Vol. 2 at 242:9–20; *see also id.* at 276:5–282:6 describing multiple issues with Wilson as a source.)
262. The KWO operates the Kansas Water Marketing and the Kansas Water Assurance Programs. The State of Kansas owned storage space in several federal reservoirs and obtains water reservation rights pursuant to the Kansas Water Plan Storage Act.⁶⁰ The KWO is authorized to enter into contracts for the sale of that water.⁶¹ A contract to purchase water from KWO requires a minimum annual payment of 50% of the amount

⁶⁰ K.S.A. 82a-1301 *et seq.*

⁶¹ K.S.A. 82a-1305-K.S.A. 82a-1315a.

of water under contract times the rate per 1,000 gallons.⁶² That rate is subject to the approval of the KWA, subject to annual review.⁶³ Rates are computed as if all water was in a single reservoir with purchasers across the state paying the same rate.⁶⁴ Beginning in the sixth year, the amount of water contracted for can be reduced, or must be paid for in full, regardless of whether it is taken.⁶⁵ If there are not sufficient quantities of water available, KWO determines who receives water based on health, safety, and welfare, not by priority.⁶⁶ The lack of assurances of delivery of water, high costs, and uncertainty about rates caused concern for the Cities in pursuing water sources through contracts with KWO. (Exs. 242 & 243.)

263. Ogallala Aquifer:

- a. Studies have concluded the Ogallala aquifer is not a viable source of supply for the Cities. In most of Rooks, Graham, Gove, Trego, and Lane Counties, the counties closest to Hays and Russell, the studies concluded the saturated thickness and recharge of the Ogallala aquifer are minimal and its useable lifetime is already “below minimum threshold.” (Exs. 1-136.)
- b. The portions of the Ogallala aquifer closest to the Cities would be within Groundwater Management District No. 1 (GMD1) and Groundwater Management District No. 4 (GMD4). The Ogallala aquifer is severely depleted within GMD1 and GMD4. Both GMD1 and GMD4 are “closed” for new appropriations of water.⁶⁷
- c. Recommendations dating back to 1985 suggested Hays look at the Ogallala formation for a water supply. In 1987 Hays engaged Black and Veatch and a drilling company to drill test wells to explore the option of this source. A 1989 report presented options for a small quantity of water with the home other sources could be located nearby which would reduce the cost to the City for the quantity of water that could be obtained for the initial cost estimate of \$11,000,000 for a pump station, two wells, and pipeline.
- d. The 1989 proposal would have required approval for the transfer of water pursuant to the original version of the WTA. Additional sources in the area were not located, new water rights would be needed, the available quantity of water was limited and bore a high cost for the minimal amount of water that was available. Consequently, Hays decided this was not a viable option. (Exs. 1-137, 1-138, 1-139.)
- e. In 1989 Hays’s engineering contractor, Black & Veatch, learned of the possibility of obtaining water from an irrigation water right from the Ogallala formation in Graham County which might be utilized as a source for Hays. However, a

⁶² K.S.A. 82a-1308a(a)(2).

⁶³ K.S.A. 82a-1306(a).

⁶⁴ K.S.A. 82a-1306(b).

⁶⁵ K.S.A. 82a-1306(a)(4).

⁶⁶ K.S.A. 82a-1306(a)(7).

⁶⁷ K.A.R. 5-21-4(a), K.A.R. 5-21-2(a).

subsequent report ranked this option low on the list of options because of the water quality along with the high cost for the infrastructure, including treatment plant expansions due to the hardness level of the water. Black and Veatch's report in 1997 concluded Ogallala water was not an economically feasible alternative source for the Cities. (Exs. 140-141.)

264. Kanopolis Reservoir was also determined to not be a viable option. Kanopolis Lake was completed in 1948 by the Corps of Engineers on the Smoky Hill River downstream of both Hays and Russell. The Cities asked Black and Veatch to study the feasibility of developing Kanopolis Reservoir as a water supply in 1997. Black and Veatch compared this option to the R9 Ranch, Wilson Reservoir, and groundwater rights in Graham County as potential sources for the Cities. 9Ex. 1-141. Kanopolis Reservoir was the most distant alternative considered and would have required the greatest capital investment to transport the water to Hays and Russell. (Ex. 1-127.)
265. In 2003 the KWO and the Corps of Engineers proposed piping water from Kanapolis Reservoir to a treatment facility operated by Hays, Russell, or a Public Wholesale Water Supply District as well as other alternatives as a regional system, which would have been dependent upon numerous potential participants intended to achieve economies of scale. The report proposing this portion identified 34 cities and 22 rural watershed districts as potential participants with recommendations for participants to form regional public wholesale water supply districts and limit contracts to 20-year increments. However, this proposal would have required the cities construct new transmission lines for both raw and treated water as well as additional treatment plants. Kanapolis Reservoir is also not a drought resistant source. Storage loss from sedimentation and reduced inflow from the Smoky Hill river has become worse since 1950. (Exs. 1-134; 1-142.)
266. Post Rock Rural Water District (Post Rock) serves customers near Russell, but has limited capacity to provide additional water to the area without significant infrastructure investment. In 1998 Black and Veatch evaluated the cost to acquire Post Rock and pipe water from Kanapolis and concluded it would be a high cost to obtain only 645 acre-feet of water. (Exs. 1-127; 1-143.) Hays also had consultants evaluate the possibility of acquiring Post Rock in 2005 when Post Rock was experiencing financial difficulties and having trouble with repayment of United States Department of Agriculture (USDA) loans. (Ex. 851.) Burns & McDonnell concluded in a 2006 report that Post Rock's treatment facility was under an abatement order from KDHE. The report further noted problems with Post Rock's infrastructure requiring frequent repairs due to use of improper construction materials and high-pressure differentials throughout the system and significant capital investment would be required to comply with KDHE regulations. The report concluded it would not be beneficial for Hays to acquire Post-Rock, even if USDA loans were forgiven. (Ex. 1-144.)

267. Over 50 years ago, Russell looked into alternative sources of water, including water from the Saline River alluvium. A consultant firm prepared a report in 1967 analyzing alternative sources of water, including the Saline River Valley noting significant water quality issues. The report noted “The sustained large draft that would be necessary for a municipal supply would almost certainly draw the brackish river water into the aquifer, . . .” The report further noted considering the quality of the water and quantity likely to be found in the saline river valley it was not a feasible option for municipal supply. (Ex. 1-128.).
268. Hays requested consultants provide a hydrology report on the Saline River Valley area north of Hays in 1974 for potential water supplies. The consultants did not find sufficient water quantities of acceptable quality to meet the needs of Hays and concluded it was not a viable source to pursue when considering the distance from Hays. (Ex. 1-50.)
269. In 2014 Bartlett and West concluded Russell might be able to obtain additional water from new appropriation rights from the Saline River alluvium and the Salt Creek alluvium with a projected cost of \$7.6 Million. (Ex. 1-154.)
270. DWR limited new appropriations of water from unconfined aquifers by regulation. Appropriations are limited to 75% of the calculated recharge available. (Ex. 1-154; K.A.R. 5-3-11.)
271. In 2008 Burns & McDonnell evaluated the possibility of acquiring 904 acre-feet of water rights owned by Cedar Bluff Cattle Feeders (CBCF). Previously in 2005 the Hays had agreed with DWR and KWO to evaluate potential purchase and retirement of water rights with a goal of reducing use impacts in the Smoky Hill IGUCA. CBCF was seeking to sell land, facilities, and water rights. The property valued at approximately \$1,000,000 However, CBCF was asking \$6,000,000. Burns & McDonnell’s report concluded acquiring and retiring the CBCF water rights would have a positive but limited benefit to Hays. The report valued the water rights alone at \$400,000-\$468,000, but noted that was an inflated value since a portion of the available water right was for stock watering and a high percentage of the property was uncultivated and not irrigated. It was concluded acquiring CBCF to retire the water rights was not an economically feasible option. (Exs. 1-164, 1-165; Dougherty Test., Tr. Vol. 2, at 259-261.)
272. Russell’s explored options of a wellfield in the Arkansas River Valley northwest of Great Bend along Walnut Creek in the 1960s. A consultant’s report in 1967 concluded this source should not be pursued unless other options were not feasible. (Ex. 1-128.)

273. In the 1980s and 1998s, Black and Veatch evaluated potential wellfield sites in the Big Bend area of the Arkansas River for Hays. Development sites were proposed at three locations: Walnut Creek basin, Pawnee River basin, and an area southwest of Great Bend for a projected cost of \$27,000,000. (Ex. 1-166.)
274. Walnut Creek is closed to further development. (Ex. 1-166.) The Chief Engineer adopted Administrative Policy No. 90-10 in September 1989 addressing surface and groundwater from Walnut Creek, its tributaries, alluviums, and other hydraulically connected aquifers. The policy specified that new permits to appropriate surface or groundwater in this area would be accepted and given a file number, but would be denied because approval would unreasonably affect the public interest or impair existing water rights. (Ex. 1-168.)
275. On July 8, 1981 the Chief Engineer issued an IGUCA for the Pawnee River Basin from Larned, Kansas, west to the Pawnee County line making it difficult to obtain new rights. (Ex. 1-173.) Another IGUCA Order on September 13, 1985 further restricted the issuance of new rights. New water rights in the Pawnee River alluvium were possible until March 16, 2001 if regulatory criteria was met. (Ex. 1-174.) However, the Cities understood GMD5 representatives had indicated new rights would have been difficult to obtain in the Pawnee River Basin. (Ex. 1-166.) The Chief Engineer subsequently closed all of GMD5 to new appropriations effective March 16, 2021 with the amendment of K.A.R. 5-24-4. This closed the Pawnee River Basin in Pawnee County The Pawnee River Basin area outside GMD-5 was subsequently closed to new appropriations on October 25, 2022 with K.A.R. 5-3-26.
276. The Cities considered proposals to purchase water near Great Bend in the Middle Arkansas River Basin. Although no IGUCA was noted to limit appropriation of water availability in that area, the Cities determined it was not feasible.
277. Waconda Lake, a/k/a Glen Elder Reservoir is a flood control structure in the Kansas River basin northeast of Hays and Russell. (Ex. 1-102.) Hays filed an application to appropriate 15,000 acre-feet of water from Waconda Lake in 1997. DWR dismissed the application in 2004. (Ex. 1-176.) The Corps of Engineers conducted a feasibility analysis of the potential for Waconda Lake as a municipal water supply. The analysis noted significant decrease inflow into Waconda Lake since the mid-1950s and corresponding decrease Waconda Lake has provided to the Solomon River and concluded Waconda Lake water had limited potential for water supply needs of the Smoky Hill River Basin. (Ex. 1-102.) Waconda Lake is a federal reservoir and therefore it was further concluded additional contracts with the federal government would be required before acting on any application proposing storage or use of water from Waconda Lake resulting in it being economically unfeasible, similar to issues with water from Wilson Lake. (Ex. 1-178.)

278. In 1993 and 1995 Central Kansas Utilities from Great Bend proposed selling water to Hays at a cost of approximately \$864 per acre-foot. However, the option was not pursued because the water would be subject to price increases. (Ex. 1-167.)
279. In the late 1990s, the Kickapoo Tribe of Kansas sought to develop a relationship between the Kickapoo Reservation in northeast Kansas and PWWSD No. 15 and other public agencies to supply water from the Reservation. The proposed plan called the “Pikitanoi Water Project” (Pikitanoi) proposed a pipeline from the western boundary of the Reservation to deliver water to western Kansas with the anticipation the majority of the project would be funded through federal sources. The Pikitanoi project plan called for 304 miles of transmission pipeline diverting water from Missouri River under Tribal water rights. Discussions between PWWSD No. 15 and the Kickapoo Tribe involved the potential of PWWSD No. 15 supplying water to Ellis and Russell Counties. (Ex. 1-180.) KWO issued a report in 1999 noting the project would produce 5,086 acre-feet of water but only extended the distribution as far east as Riley, County. The proposed pipeline was never constructed, and the project was abandoned in the early 2000. (Ex. 1-181.)
280. In 1997 the Cities were approached by a real estate broker representing landowners called the Southside Ditch Association who owned vested surface water rights in the Arkansas River west of Lakin, Kansas. The Southside Ditch Association was seeking to sell 20,000 acre-feet of water at \$2,000 per acre-foot. (Ex. 183) Surface water in the Arkansas River is an unreliable source and high in chlorides (Ex. 184.) This source was not pursued due the high cost, distance from the source to both Hays and Russell, vulnerability of the source and quality of the water.
281. The R9 Ranch along with the R9 Water Rights were purchased on the open market.
282. The R9 Water Rights have sufficient saturated thickness which makes them more resistant to drought conditions than surface water rights such as lake water. The R9 Water Rights are in a portion of the aquifer that regularly receives recharge from precipitation. (Dougherty Test., Tr. Vol. 1 at 86-87. *See also* Ex. 2659. *See also* Ex. 1-54 at Cities 0002902–03.)

K. Commenting Agencies

283. **Kansas Water Office:** KWO was recognized as a commenting agency.
- a. KWO’s comments reported that the Cities’ respective conservation plans are consistent with the KWO conservation plan guidelines consistent with K.S.A. 74-2608 and have been in effect for more than 12 months.

- b. KWO reported that Hays has been recognized as a leader in water conservation across Kansas and therefore KWO believed the applicants conservation efforts to be effective.
- c. KWO noted it had no reason to dispute efforts of the Cities to secure water from other sources.

284. **Kansas Water Authority:** KWA was recognized as a commenting agency. KWA was established by the Kansas Legislature with the responsibility of advising the Governor, Legislature, and Director of KWO on water policy issues and for approving the Kansas Water Plan, federal contracts, administrative regulations and proposed legislation.

- a. KWA solicited feedback from two of its Regional Advisory Committees (RAC) which serve as KWA’s local voice. KWA obtained feedback from Great Bend Prairie RAC and the Smoky Hill-Saline RAC.
- b. The Great Bend Prairie RAC covers the area in Edwards County where the R9 ranch is located. KWA reported the Great Bend Prairie feedback included:
 - i. A recommendation that the hearing panel hear all parties and give due consideration before making a final decision.
 - ii. Acknowledgment of the conservation efforts that Hays and Russell have implemented.
 - iii. A request to ensure that the decision to transfer water is a sound choice.
 - iv. The Great Bend Prairie RAC wished to challenge the experts to define “What is Sustainability.”
- c. The Smoky Hill-Saline RAC covers an area that includes both Hays and Russell. KWA reported feedback from the Smoky Hill-Saline RAC included:
 - i. Recognizing the time and financial commitments that Hays and Russel had put forth in this process.
 - ii. A desire to ensure the allocation numbers and data are accurate to ensure sustainability into the future.
 - iii. Encouraging all parties to continue open discussions.
 - iv. Acknowledgment that all parties involved are willing participants and eminent domain was not used to purchase the R9 Ranch or the R9 Water Rights.
- d. KWA reported that after the full KWA met to review the comments of the RACs and consider comments to provide as a commenting agency the following comments were provided for the Presiding Officer:
 - i. KWA endorsed the recommendation of its RACs, but recognized that a definition of “sustainability” is not part of the statutory criteria on which the Presiding Officer is to base a decision.
 - ii. If approved, KWA did not think this transfer should be regarded as precedent for any future interbasin transfers.
 - iii. KWA encouraged the Presiding Officer to honor the process of compiling data and analytical review for an evidence-based decision.

285. **Kansas Department of Health and Environment:** KDHE was recognized as a commenting agency. KDHE noted it has limited authority over water rights but provided the following comments:

- a. KDHE has authority over water quality in the waters of Kansas.
- b. The water at issue originating from the R9 Ranch in Edwards County involved water that lies within the Great Bend Prairie Aquifer, which is part of the High Plains Aquifer.
- c. The water at issue is not directly subject to the Federal Clean Water Act and KDHE offered no comment on items under the jurisdiction of the KWAA.
- d. The transfer involved groundwater, which had historically been used for irrigation. However, KDHE did not foresee any water quality impacts to the Arkansas River, which interfaces with the Great Bend Prairie Aquifer and has established minimum desirable streamflow.
- e. KDHE noted that if the water transfer is approved, KDHE would appropriately condition the discharge of any increased wastewater from the Cities' treatment facilities to ensure applicable Kansas Surface Water Quality Standards are met.
- f. Any impacts to stream crossing from constructed conveyance infrastructure will be mitigated by provisions of a National Pollution Discharge Elimination System General Permit for Construction Activities issued by KDHE, and therefore, KDHE did not foresee any environmental impacts regardless of whether the water transfer was approved or denied.
- g. KDHE noted that the restriction on using the Drinking Water State Revolving Fund (DWSRF) for water transfer projects was removed from the definition of "project" effective July 1, 2022. KDHE commented that the DWSRF cannot fund projects where the need comes solely from future projected growth, but KDHE can fund projects to address resilience and redundancy that accommodate reasonable growth and that projects must be sized only to accommodate a reasonable amount of population growth over the useful life of the facility.⁶⁸
- h. KDHE took no position whether future DWSRF applications to KDHE would or would not qualify for funding. KDHE would review engineering reports accompanying any DWSRF applications to ensure a project's needs are not based solely on future projected growth and KDHE would rely upon findings of the WTHP to determine if water transported to the Cities of Hays and Russell accommodates reasonable growth.

286. **Kansas Department of Wildlife and Parks:** The KDWP was recognized as a commenting agency but did not submit any comments for consideration.

⁶⁸ See: K.S.A. 65-163d(c), K.A.R. 28-15-56(b), and 40 C.F.R. § 35.3520(e)(5).

287. **Groundwater Management District No. 5:** GMD5 was recognized as an intervenor and also as a commenting agency pursuant to the WTA. GMD5 did not submit comments for consideration.
288. **Division of Water Resources:** The KDA/DWR was recognized as a commenting agency. DWR noted the process under the WTA specified that once it was determined that an application to transfer water was complete, the Chief Engineer of DWR was then to request the appointment of a Presiding Officer from OAH. DWR noted the WTA specified that DWR was to be a commenting agency, and DWR's intent was to provide technical advice regarding the statutory conditions for approval under the WTA. DWR provided the following in its comments:
- a. K.S.A. 82a-1502 sets forth the conditions that must be satisfied for a transfer to be approved under the WTA amounting to a two-step analysis.
 - i. First, the WTA specifies no water transfer is to 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 where the diversion of the water will occur unless the panel determines the benefit to the state for approving the transfer outweigh the benefits for not approving it.⁶⁹
 1. The WTA sets forth factors for consideration when weighting the benefits to the State for approving or not approving the transfer.⁷⁰
 2. DWR commented further the WTA specifies the benefits balancing test need only apply if the amount of available water in the area from which water is being taken will be reduced.
 - ii. Second, the WTA does not allow approval of a water transfer (1) if the transfer would impair existing rights and (2) unless the applicant has adopted and implemented sufficient conservation plans and practices.⁷¹
 - b. Approval of the transfer application would not reduce the amount of water available in the area surrounding the R9 Ranch.
 - i. The Master Order placed limitations on the R9 Water Rights when it granted contingent approval to change the use from irrigation to municipal use.
 1. While the Cities owned perfected rights authorizing the diversion of 7,625.7 acre-feet of water per year, this amount was reduced through the consumptive use calculations accounting for a change in the amount of water consumed under the R9 Water Rights which reduced the total annual quantity available to the cities to 6,756.8 acre-feet per year.⁷² Therefore, this condition verified the amount

⁶⁹ See: K.S.A. 82a-1502(a).

⁷⁰ See: K.S.A. 82a-1502(c).

⁷¹ See: K.S.A. 82a-1502(b).

⁷² See: K.A.R. 5-5-9.

- of water diverted from the R9 Water Rights for municipal use would not exceed the amount consumed under the original irrigation use.
2. The Master Order further limited diversion from the R9 Water Rights to the TYRA Limitation of 48,000 acre-feet, or an average of only 4,800 acre-feet in any rolling 10-year period.
 3. DWR reported the conditions contained within the Master Order ensured the use contemplated by the transfer would have no more impact on the area around the R9 Ranch than if the R9 Water Rights were continuing for their approved irrigation use.
 4. the original water rights authorizing the water to be used for irrigation purposes.
- ii. Ownership of a water right entitles the owner of that water right to divert and use water, even when such diversion and use depletes the groundwater source.⁷³
 - iii. The area of GMD5 is closed to new appropriations of water, and a water right in an area closed to new appropriations is immune from claims of abandonment.⁷⁴ Any existing beneficial use and any future beneficial use of the R9 Water Rights remains subject to current authorized quantities.
- c. Approval of the transfer would not impair existing water rights near the R9 Ranch.
 - i. DWR noted impairment was defined by the Legislature in the KWAA to include the unreasonable lowering of the static water level or unreasonable deterioration of water quality at a user's point of diversion when addressing new appropriations of water.⁷⁵ DWR noted this was consistent with the Court of Appeals applying the common definition of "impair" allowing a senior water right owner to seek relief against a junior water right owner when use by the junior water right, "diminishes, weakens, or injures the prior right."⁷⁶
 - ii. DWR's opinion that the transfer would not impair existing rights was based on an analysis of data relating those rights which are senior to those included in the R9 Water Rights.
 - iii. Lane Letourneau, DWR's Water Appropriations Program Manager testified at the hearing that irrigation use of the R9 Water Rights had never caused an impairment complaint and no evidence was presented to counter his testimony.
 - iv. Conditions in the Master Order include reduced pumping rates, well spacing requirements, and the TYRA Limitations. Therefore, since the original use under the R9 Water Rights without consideration of well spacing, rate or quantity limitations required by the Master Order had not resulted in any

⁷³ See: K.S.A. 82a-702(g).

⁷⁴ See: K.A.R. 5-25-4; See also: K.S.A. 82a-718(e).

⁷⁵ See: K.S.A. 82a-711.

⁷⁶ *Garretson Bros. v. American Warrior, Inc.*, 56 Kan.App. 2d 623, 650 (2019).

impairment complaints; DWR commented that it was DWR's conclusion that it was highly unlikely the pending water transfer application, if approved, would result in any impairment to senior water right holders.

- v. DWR noted that the Intervenor put forth the opinion of their expert witness, Larson, alleging that the groundwater modeling used by the Cities underestimated potential negative impacts to groundwater levels if irrigation pumping was replaced with municipal pumping. However, even using Larson's methodology, the greatest level of impact reflected was a lowering of one irrigation well by 2.6 feet. DWR noted that the Cities' expert, McCormick testified the average saturated thickness on the R9 Ranch is approximately 100 feet. Therefore, lowering the water level by 2.6 feet in 100 feet of saturated thickness only represented a long-term lowering of the water level by 2.6%. DWR considered a 2.6% lowering of the groundwater level to be reasonable lowering which would not impair existing water rights.⁷⁷
- d. Intervenor's claims that approval of the water transfer at the quantity requested constitutes waste is not substantiated. The Cities presented evidence of the inadequacy of their existing water supplies and their conservation practices. Even if the Cities did not require the entire quantity of water from the R9 Water Rights based on current needs, there is no evidence the approval would constitute a waste of water. A waste of water is defined in DWR's regulations as "any act or omission that causes . . . (4) the application of water to an unauthorized beneficial use in excess of the needs for this use."⁷⁸ Absent an application of water, any claim of waste would be purely theoretical and speculative.

VI. Applicable Law

1. The Chief Engineer of DWR is charged with enforcement and administration of the laws pertaining to the beneficial use of water in Kansas.⁷⁹
2. The KWAA⁸⁰ specifies that water within the State of Kansas is dedicated to the use of the people of the state, subject to the control and regulation of the state.
3. Appropriation of surface or groundwaters does not constitute ownership of such water, and appropriation rights remain subject to the principal of beneficial use.⁸¹

⁷⁷ Larson's Figure 4 with his expert report reflected a map with overlapping lines identifying locations where he calculated declines in the water level after 51-years of maximum pumping by the cities. Regardless of whether the decline was 2.4 feet, 2.6 feet, or 2.8 feet, the few inches difference is minimal where the saturated thickness is an average of 100 feet and up to 140 feet.

⁷⁸ K.A.R. 5-1-1.

⁷⁹ K.S.A. 82a-706.

⁸⁰ See: Kansas Water Appropriation Act (KWAA), K.S.A. 82a-1701 *et seq.*

⁸¹ K.S.A. 82a-707.

4. A person may apply for a permit to appropriate water to a beneficial use.⁸²
5. The waste of water is prohibited.⁸³
6. DWR has closed GMD5 to new appropriations.⁸⁴
7. Appropriations of water must be for some beneficial use. A water right that is not used for five consecutive years is deemed abandoned unless the water right is enrolled in a conservation program or is in an area closed to new appropriations of water.⁸⁵
8. The KWAA imposes minimum desirable streamflow requirements on water rights with priority dates after April 12, 1984.⁸⁶
9. Water rights are based upon the doctrine of prior appropriation.⁸⁷ If there is not sufficient water to meet the needs of all right holders diverting water from a source, the most senior right has priority for the full quantity reasonably needed for their use, even if junior right holders receive nothing. The date of priority of every water right, not the purpose of use determines the right to divert water.⁸⁸ “First in time is first in right.”⁸⁹ The legislature has further specified in the act that appropriations are limited to reasonable needs.⁹⁰
10. DWR’s administrative regulations further specify that an approval for a change in use of water is also to be limited by the quantity reasonable for the use proposed by the change.⁹¹
11. “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.”⁹²

⁸² K.S.A. 82a-708a.

⁸³ K.A.R. 5-5-7.

⁸⁴ K.A.R. 5-25-4.

⁸⁵ K.S.A. 82a-718.

⁸⁶ K.S.A. 82a-703b(a).

⁸⁷ See: K.S.A. 82a-706, 82a-706b, 82a-706e, 82a-707, 82a-708b, 82a-710, 82a-711, 82a-711a, 82a-716, and 82a-717.

⁸⁸ K.S.A. 82a-707(b).

⁸⁹ K.S.A. 82a-707(c).

⁹⁰ K.S.A. 82a-707(e).

⁹¹ K.A.R. 5-5-9(a)(5); see also K.A.R. 5-5-9(a)(6) (1994 version effective prior to September 22, 2017).

⁹² K.S.A. 82a-708b(a).

12. The KWAA permits changes to three of the characteristics of a water appropriation right “*without losing priority of right*,”: the point of diversion, the place of use, and the type of use.⁹³
13. The KWAA specifies the Chief Engineer shall approve an application if the proposed use neither impairs an existing water right nor unreasonably affects the public interest.⁹⁴ Impairment of an existing water right includes the unreasonable lowering of the static water level at the point of diversion “beyond a reasonable economic limit.”⁹⁵
14. “It shall be an express condition of each appropriation of surface or ground water that the right of the appropriator shall relate to a specific quantity of water and that such right must allow for a reasonable raising or lowering of the static water level . . . at the appropriator’s point of diversion.” . . . “[I]n determining such reasonable raising or lowering of the static water level in a particular area, the chief engineer shall consider the economics of diverting or pumping water for the water uses involved; and nothing herein shall be construed to prevent the granting of permits to applicants later in time on the ground that the diversions under such proposed later appropriations may cause the water level to be raised or lowered at the point of diversion of a prior appropriator, so long as the rights of holders of existing water rights can be satisfied under such express conditions.”⁹⁶
15. The WTA governs the applicable criteria an application to transfer water when a water rights holder is seeking approval for the transfer of the use of water from one location to another when the application is seeking to transfer a quantity of water of 2,000 acre-feet or more per year for use at a point more than 35 miles from the point of diversion.⁹⁷
16. The Chief Engineer is to request a Presiding Officer from OAH when an application for a water transfer is complete.⁹⁸
17. The KWAA specifies that a right must allow for a reasonable lowering of the static water level, and that the Chief Engineer is to consider the economics of diverting water for the uses involved. The mere fact that the level may be lowered at the point of diversion of a prior appropriator is not to prevent the granting of an application as long as the existing water rights can be satisfied.⁹⁹

⁹³ K.S.A. 82a-708b(a).

⁹⁴ K.S.A. 82a-711(a).

⁹⁵ K.S.A. 82a-711(b).

⁹⁶ K.S.A. 82a-711a.

⁹⁷ *See*: K.S.A. 82a-1501 *et seq.*

⁹⁸ K.S.A. 82a-1501a(b).

⁹⁹ *See*: K.S.A. 82a-711a.

18. Under the WTA, an application to transfer water cannot be approved which would reduce the amount of water required to meet present or reasonably foreseeable needs of water in the area where the water is coming from unless the “benefits to the state for approving the transfer outweigh the benefits to the state for not approving the transfer.”¹⁰⁰

19. The WTA also specifies that a water transfer cannot be approved:

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.¹⁰¹

20. The WTA further provides nine (9) criteria to be considered to determine whether the benefits to the state for approving the transfer outweigh the benefits to the state for not approving the transfer:

- (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*

¹⁰⁰ K.S.A. 82a-1502(a).

¹⁰¹ K.S.A. 82a-1502(b)

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.¹⁰²

21. The WTA provides that the Presiding Officer shall fairly and equitably assess the costs of the hearing among the applicant and other parties for the costs of 1) the hearing facility, 2) the court reporter, 3) the salary of the presiding officer who is not paid for services as a hearing officer by state funds, 4) travel expenses of the presiding officer, and 5) other reasonable costs associated with the hearing.¹⁰³
22. The Presiding Officer must issue an order either approving or not approving the proposed water transfer. The order must include findings of fact related to each of the factors set forth in K.S.A. 82a-1502(c). The Presiding Officer may approve a transfer of a lesser quantity of water than requested upon such terms, conditions, and limitations deemed necessary for the protection of the public interest of the state as a whole.¹⁰⁴

VII. Analysis and Conclusions of Law

1. The WTA applies in this case because the Cities are seeking approval to transfer a quantity of water exceeding 2,000 acre-feet per year for use at a point more than 35 miles from the point of diversion.¹⁰⁵
2. The WTA provides the WTHP is to request a Presiding Officer from OAH when a water transfer application is complete. The Intervenor suggested the Cities' application was incomplete because the Intervenor believed it should have included additional

¹⁰² K.S.A. 82a-1502(c)(1)-(9).

¹⁰³ K.S.A. 82a-1503(e).

¹⁰⁴ K.S.A. 82a-1504(a).

¹⁰⁵ See: K.S.A. 82a-1501 *et seq.*

information. However, the WTA specifies that the Chief Engineer is to request a Presiding Officer after a transfer application is complete. The WTA does not give the Presiding Officer the authority to determine whether a water transfer application is complete.

3. The Presiding Officer finds the conclusions of the Cities' experts Layzell, Basara, and McCormick are reasonable and reliable, and further finds that Hamilton's reliance on those conclusions in setting forth his opinions about the economic impacts to the State of Kansas caused by droughts of those durations in the event the water transfer is denied is also reasonable.
4. The Intervenors suggested the forecasts for growth of Hays or Russell were inflated. However, to some extent, attempting to forecast growth is in many ways like trying to predict the weather or predicting financial markets and investment returns. Economists, engineers and other highly educated and intelligent people can analyze data and attempt to determine what will happen. There is almost always going to be some disagreement in projecting the future results. The Cities cited to a 1% growth rate, the Intervenors allege future growth should be less than 1%, and the Master Order utilized a 2% growth rate. The WTA does not specify a consideration for future growth of a municipality or what range of growth projections would be considered reasonable. In light of the record as a whole, the range of growth rates identified in this proceeding are all within a reasonable range of what could happen.
5. Sufficient evidence has been presented to establish the Cities existing water sources are vulnerable and unlikely to facilitate further significant growth without securing additional water supplies.
6. Implementing the project necessary to transfer water from the R9 Ranch to Hays and Russell will not occur overnight. While there are construction cost estimates, those estimates are also likely to increase over time. It is clear the Cities are aware the project carries a significant financial cost and the money had to come from somewhere. Whether funding is available from state or federal funding programs or revolving loan programs, or whether the Cities need to secure financing elsewhere is not a specific factor for consideration by the Presiding Officer pursuant to the provisions of the WTA.
7. The Presiding Officer finds that the argument of the Intervenors that the potential costs of the water transfer project and the opinion of Intervenors' expert witness Walker that the construction project will yield a net cost because of the potential of higher water rates for the residents of Hays or Russell to be irrelevant and inapplicable as those are strictly local impacts and the passing of funds from residents/customers to Hays or Russell is, at worst, a net balance in terms of statewide economic impacts.

8. The Presiding Officer finds any financing the Cities must obtain or any rate increases resulting from the costs of the project are local issues which do not affect the overall benefit to the state of approving the water transfer compared to benefits of not approving the water transfer.
9. The most junior of the R9 Water Rights has a priority date of July 1, 1977. Accordingly, the minimal desirable streamflow requirements of K.S.A. 82a-703b(a) do not apply.
10. The R9 Water Rights are senior to the majority of the water rights in the area immediately surrounding the R9 Ranch.
11. Senior water rights have priority over junior rights. Therefore, the R9 Water Rights could continue to divert water to the maximum authorized rates and quantities even to the detriment of any neighboring junior water rights.
12. Evidence was presented that the R9 Ranch was purchased on the open market. At that time anyone could have purchased the R9 Ranch along with the R9 Water Rights. Since GMD5 is closed to new appropriations of water, the R9 Water Rights cannot be abandoned. That means even if the water rights and quantities authorized in each of the R9 Water Rights was not used, those rights would not be subject to abandonment. The 7,625.7 acre-feet of water authorized for irrigation under the collective R9 Water Rights is not available for anyone else to acquire through a new appropriation of water.
13. The Intervenors argue that the water transfer is not “sustainable.” However, as noted by KWA in its comments, sustainability is not part of the criteria for consideration under the WTA. The criteria for consideration under the WTA is whether a proposed transfer would cause impairment of existing water rights.
14. Concerns with the quantity of water, rate of diversion, point of diversion and type of use are not subject to the authority of the Presiding Officer in this proceeding. While the Presiding Officer does not have the jurisdiction to alter, amend, or vacate the Master Order, the resulting terms and conditions of that Master Order are part of the record demonstrating efforts to preserve the availability of water in the source area.
15. The WTA applies only because of the quantity of water and distance of the transfer involved. A water transfer is defined as “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.”¹⁰⁶ It is also noted that the R9 Water Rights are existing water rights, which are senior to many of the water rights in the area.

¹⁰⁶ K.S.A. 82a-1501(a)(1).

16. If the R9 Ranch continued full use as irrigated crop production, the R9 Water Rights would have the capability of diverting a total of 7,625.7 acre-feet of water per year. It is understood that when that water is used for irrigation, some of the water returns through the ground to recharge the source. That changes when use is changed to municipal use, which is what was addressed in the Master Order. In that Master Order, rather than just applying the consumptive use calculations, the Chief Engineer issued the additional restrictions of the TYRA and reasonable needs limitation. As a result, even after factoring in the consumptive use factor for water not going back to recharge the source, under the Master Order, the maximum net water usage permitted is less than if the R9 Water Rights continued with irrigation use.
17. As a result of the terms and conditions in the Master Order, the Cities are limited as to how much water can be diverted from the R9 Water Rights. Effectively, less water will be diverted than would be if the R9 Water Rights were used for their full permitted quantities for irrigation purposes, and even after applying the consumptive use calculations to convert the use from irrigation to municipal, the authorized quantities will most likely result in less impact to the water level of the surrounding area than if the land was returned to irrigated farmland.
18. As noted by DWR in its comments, McCormick's expert analysis reported the groundwater saturation in the area around the R9 Ranch in the neighborhood of 100-140 feet. Even using methodology by the Intervenors' expert, Larson, for a worst-case scenario this any change to the water level at the R9 Ranch area resulting from the transfer of water from the R9 Ranch to Hays and Russell is minimal.¹⁰⁷ Additionally, The provisions of the KWAA addressing a change application provides that impairment is diversion "beyond a reasonable economic limit."¹⁰⁸
19. No evidence was presented that approval of the requested water transfer will cause regional impairment of vested or water appropriation rights. Water PACK produced no evidence that any of its members' water rights will be directly impaired by approval of the transfer.

¹⁰⁷ It is also noted the expert calculations as to any lowering of the water level at the R9 Ranch as a result of the project assumed maximum diversion by the Cities, or 4,800 acre-feet per year for a 51-year period. However, it is noted that the Master Order also imposed a reasonable needs limitation limiting the amount of water the Cities could divert from the R9 Water Rights combined with their existing water rights. Therefore, it would be unlikely that the Cities would immediately begin diverting their maximum quantity of water from the R9 Ranch as soon as the transportation infrastructure was completed. Effectively, the evidence suggests usage would likely be less initially, and unlikely to immediately begin 51 years of maximum diversion.

¹⁰⁸ K.S.A. 82a-711(b).

20. The Presiding Officer finds that Hamilton's methodology and conclusions relating to the statewide economic impacts in the event the water transfer is approved to be reasonable and credible and adopts his conclusions as factual in this proceeding.
21. The Presiding Officer therefore concludes the record is not sufficient to establish that approval of the Cities Water Transfer Application would cause impairment of vested or water appropriation rights pursuant to K.S.A. 82a-1502(b)(1).
22. The Cities own and control the R9 Water Rights, they are the only foreseeable present or future users of the rights. The only current beneficial use of the water could be as irrigation at the R9 Ranch. Because the R9 Ranch is located in an area that is closed to new appropriations of water, no new applications could be submitted seeking to appropriate water from this area for another use another owner. The only beneficial use of the water authorized under the R9 Water Rights is to whomever owns those water rights.¹⁰⁹
23. Sufficient, substantial, competent, and credible evidence was presented to establish there would be a beneficial economic, environmental, public health and welfare impacts if the water transfer is approved.
 - a. The evidence in the record is sufficient, substantial, competent, and credible to establish multiple impacts related to the water transfer application. There can be no argument that the need for reliable water sources is not vital to any community.
 - b. Economic benefits involved include expansion of existing businesses, attraction of new businesses, and the construction of new homes, all of which are likely impacted by the pending transfer application. Population growth is clearly dependent upon economic growth, availability of jobs, businesses, housing, and services such as medical services. Additionally, approval of the transfer would come with the economic impact associated with the construction of the infrastructure necessary to transport water from the R9 Ranch to Hays and Russell. And for the area around the R9 Ranch in Edwards County, there may be some economic benefit as well associated with the construction. Sufficient, substantial, competent, and credible evidence was presented to establish revenue and wages earned by workers associated with the construction of the required infrastructure would have a positive economic impact to both local governments as well as tax revenue for the state as a whole.
 - c. Intervenors have suggested negative impact to the area around the R9 Ranch, but they have failed to establish impacts that would outweigh the benefits to the State as a whole. The Intervenors have not credibly established sufficient negative

¹⁰⁹ See: K.S.A. 82a-1502(c)(1) and K.S.A. 82a-1502(c)(2).

impacts (economic, environmental, or health and welfare) to the state as a whole if the application was approved.

- d. The expert opinion, study, report, and testimony of McCormick is credible and reliable. The Presiding Officer finds McCormick's projections regarding water from the Cities existing sources is sufficient, substantial, competent, and credible evidence regarding the current water sources of the Cities.
 - e. While the Cities are meeting their current water needs through their existing sources under "normal" conditions, their current sources are vulnerable. Sufficient, substantial, competent, and credible evidence was presented to establish that during an extended drought period, neither Hays nor Russell would be able to meet their current water needs. While they have both implemented conservation and water management programs to reduce water usage, it is noted that their conservation efforts can only take them so far. Once everyone has a water efficient toilet or low flow shower head, those relatively simple steps cannot be taken again to continue to reduce water usage.
 - f. Sufficient, substantial, competent, and credible evidence was presented to establish the current limitations of both Hays and Russell on availability of water has hindered their ability to court new businesses to their communities or to attempt to grow existing businesses with a need for water. However, if they have additional water available, it is reasonable to conclude they could pursue future growth that requires availability of water supplies.
 - g. Sufficient, substantial, competent, and credible evidence was presented to establish economic development in Hays or Russell would generate tax revenues for the State of Kansas. Sufficient, substantial, competent, and credible evidence was also presented to establish that construction of water transfer infrastructure would also generate jobs, business revenue, and resulting tax revenue for both local areas and the entire state of Kansas.
 - h. Sufficient, substantial, competent, and credible evidence was presented to establish the availability of water sources that were not vulnerable to drought is a benefit for the public health and welfare.¹¹⁰
24. The Presiding Officer finds that the Cities have pursued alternative sources of water and concluded that the transfer of water from the R9 Ranch is the best course of action for them to pursue to secure a drought resistant water source.¹¹¹

¹¹⁰ See: K.S.A. 82a-1502(c)(3).

¹¹¹ See: K.S.A. 82a-1502(c)(4).

25. The Presiding Officer finds that the Cities have taken all appropriate measures to remediate contamination of water currently available for use by the Cities.¹¹²
26. The Cities have engaged the services of Burns & McDonnell, a professional engineering firm with experience in water projects to estimate the costs and plan for the infrastructure necessary to transport water from the R9 Ranch to Hays and Russell. Although construction costs have been projected to increase substantially, it is clear that the Cities have a realistic understanding of what will be involved with implementing the infrastructure facilities necessary. The Presiding Officer finds that Waddell's conclusions and methodology to be reasonable and credible and adopts his opinions relating to the probable construction costs of the R9 Ranch Water Transfer as factual in this proceeding. The Presiding Officer further finds that Hamilton's reliance on Waddell's opinion of probable construction costs is reasonable.¹¹³
27. There is sufficient, substantial, competent, and credible evidence in the record to establish the Cities have adopted and implemented conservation plans and practices which have reduced water consumption. The Intervenor's expert witnesses even noted that water usage in GPCD for residents of Hays and Russell was below regional averages. Comments received from the KWO advised that both Hays and Russell have adopted and implemented conservation plans with KWO pursuant to K.S.A. 74-2608. Further KWO noted Hays has been recognized as a leader in water conservation practices.¹¹⁴
28. The proposed water transfer meets the applicable requirements of the GMD5 Management Program.¹¹⁵
29. Balancing the benefits of approval and denial is only required if approval will reduce the quantity of water "required" to meet the to meet reasonable future needs of other beneficial users. As addressed numerous times in this order, GMD5 is closed to new appropriations. The R9 Water Rights are not subject to abandonment if they are not used. Effectively, no other user could seek to acquire the water appropriated under the R9 Water Rights. Therefore, regardless of whether the transfer is approved or denied, no other beneficial user would be prevented from acquiring an appropriation of the water associated with the R9 Water Rights.
30. The Intervenor's suggest the "anti-speculation doctrine" should result in denial of the pending water transfer because the Cities do not currently need the quantity of water sought in the transfer.

¹¹² See: K.S.A. 82a-1502(c)(5).

¹¹³ See: K.S.A. 82a-1502(c)(6).

¹¹⁴ See: K.S.A. 82a-1502(c)(7) and K.S.A. 82a-1502(c)(8).

¹¹⁵ See: K.S.A. 82a-1502(c)(9).

31. As noted by Letourneau in his testimony, a framework prohibiting speculation is included within the KWAA and the regulations adopted by DWR pursuant to the KWAA.¹¹⁶ In very brief terms, someone can submit a new application to DWR, if the application meets requirements, a certificate would be issued giving the holder of that certificate a certain amount of time to perfect the water right and receive an appropriation water right. The quantity of water used during that certification period, and not what the holder thinks or speculates may be future needs. As a result, quantities of water not being put to use by the certificate holder are not tied up and made unavailable for others to use. Administrative regulations prohibit the waste of water.¹¹⁷
32. No Kansas cases were identified specifically addressing the “anti-speculation” doctrine. The Intervenor’s offered two cases from Colorado cases under the axiom of the “anti-speculation doctrine”¹¹⁸ are not controlling precedent for this proceeding. Furthermore, the facts of the Colorado cases cited by the Intervenor are distinguishable from the present case.
33. The R9 Water Rights are fully perfected water rights. The Cities are not applying for new appropriation rights. The R9 Water Rights are not being issued with a speculation as to the quantity that the Cities will use. The quantities authorized in the R9 Water Rights has already been fully perfected.
34. GMD5 is closed to new appropriations of water.¹¹⁹ Therefore, the R9 Water Rights are not subject to the abandonment provisions of the KWAA.¹²⁰ The Cities’ ownership and use or non-use of the R9 Water Rights does not prevent another user from seeking approval to use this allocation of water. Under the current provisions of the KWAA and associated regulations, the water associated with the R9 Water Rights can only be utilized by whoever owns the R9 Water Rights.
35. It is important to note that the cases cited from Colorado involve conditional water rights, which are defined by Colorado statute as “a right to perfect a water right with a certain priority upon the completion with reasonable diligence of the appropriation upon which such water right is to be based.”¹²¹

¹¹⁶ See: K.S.A. 82a-701 *et seq.*, See also: K.A.R. 5-3-1 *et seq.* (Appropriation Rights.); and K.A.R. 5-8-1 *et seq.* (Certification of Water Rights.)

¹¹⁷ See: K.A.R. 5-5-1; K.A.R. 5-5-7.

¹¹⁸ *Paygosa Area Water & Sanitation Dist. V. Trout Unlimited*, 170 P.3d 308 (2007) [Referenced as *Paygosa I*] and *Paygosa Area Water & Sanitation Dist. V. Trout Unlimited*, 219 P.3d 774 (2009) [Referenced as *Paygosa II*].

¹¹⁹ K.A.R. 5-25-4.

¹²⁰ See: K.S.A. 82a-718.

¹²¹ Colo.Rev. Stat. §37-92-103(6).

36. DWR's administrative regulations specify approval of a change application is to be limited by the quantity reasonable for the use proposed by the change.¹²² It has been established that when the Chief Engineer approved the Master Order granting the conditional change in use from irrigation to municipal, a condition was put in place placing a reasonable needs limitation on the quantity available to be transferred until such time as approval was granted to increase that limitation. As noted above, the Presiding Officer in this proceeding does not have jurisdiction to alter, amend, or vacate the Master Order, only to address the transfer application under the WTA.
37. K.S.A. 82a-1504 requires the Presiding Officer to render an order either approving or disapproving the proposed transfer. Further, it provides that the Presiding Officer may order approval of a transfer of a smaller amount of water than requested upon terms, conditions, and limitations the Presiding Officer deems necessary to protect the public interest of the State as a whole. Prior to the conclusion of the evidentiary portion of the formal public hearing, the Presiding Officer provided the parties instructions for filing their closing briefs/proposed findings of fact/conclusions of law. The Presiding Officer requested the parties address the factors set forth in K.S.A. 82a-1502 as well as any supporting citations supporting whether, if approved, such approval should be limited to a lesser quantity than requested in the application pursuant to K.S.A. 82a-1504(a). The Cities offered that approval for a reduced quantity could only occur if it was necessary for the protection of the public interest of the state as a whole. The Intervenor did not indicate a basis upon which the Presiding Officer should approve a transfer for a reduced quantity.
38. It is noted that approval of a reduced quantity under K.S.A. 82a-1504 is authorized if the Presiding Officer deems it necessary to protect the public interest of the State as a whole. However, it must be recognized that the Master Order approving the change in use already implemented conditions and limitations to the authorized quantity and a reasonable need limitation. It is clear the Chief Engineer has taken such factors into consideration already. While the Intervenor disagreed with the projections for future needs of the water from the R9 Ranch, the Intervenor did not offer any persuasive evidence or authority to justify why the Presiding Officer should grant approval of a lesser quantity in this water transfer case.
39. The evidence on the record is sufficient, substantial, competent, and credible to establish the Cities' application to transfer water provides benefits to the State of Kansas as a whole and that the benefits for approving the transfer outweigh the benefits of denying the transfer. Accordingly, the Application to transfer water from Edwards County to Hays and Russell is approved in accordance with the conditions and limitations placed on such transfer by the Chief Engineer in the Master Order as addressed above.

¹²² K.A.R. 5-5-9(a)(5); *see also* K.A.R. 5-5-9(a)(6) (1994 version effective prior to September 22, 2017).

40. COSTS OF THE HEARING: The WTA provides that the Presiding Officer shall fairly and equitably assess the costs of the hearing among the applicant and other parties for the costs of 1) the hearing facility, 2) the court reporter, 3) the salary of the presiding officer not paid for services as a hearing officer by state funds, 4) travel expenses of the presiding officer, and 5) other reasonable costs associated with the hearing.¹²³
- a. The “parties” in this case are effectively the Applicants – Hays and Russell (the Cities) and the Intervenors. While GMD5 filed a petition to intervene, by statute, GMD5 would be allowed to participate as a commenting agency.¹²⁴ GMD5 is treated as a commenting agency, and not as an intervenor for purposes of assessment of costs among the parties.¹²⁵
- b. OAH operates as a fee-funded agency. OAH contracts with state agencies, including KDA to provide services of a hearing officer at an hourly rate. Direct expenses associated with cases before OAH are passed through to the administrative agency. Such costs in this case have included:
- Publication fees for notices.
 - Facility rental and technology fees for the public comment hearing and the formal public hearing.
 - Travel expenses for the Presiding Officer.
 - Court reporter charges.
 - Hourly fees for OAH services billed to KDA pursuant to OAH’s contract with KDA.
- c. These expenses, and any other itemized expenses deemed by OAH to be billed to KDA associated with this case, or any expenses identified by KDA as expenses directly chargeable to this proceeding are all deemed to be reasonable costs associated with the hearing.
- d. At the conclusion of the formal public hearing on July 31, 2023, it was requested that the parties include in their closing briefs/proposed findings of fact/conclusions

¹²³ K.S.A. 82a-1503(e).

¹²⁴ GMD5’s counsel was not present for most of the formal public hearing to cross-examine witnesses offered by either the Cities or Water PACK. GMD5 filed no comments or proposed findings of fact or conclusions of law.

¹²⁵ K.S.A. 82a-1501(h) defines a party to include a person who successfully intervenes, “**and** actively participates in the hearing.” GMD5’s participation in the hearing was limited. GMD5 could have effectively provided nearly the same amount of participation without petitioning to intervene and proceeding only as a commenting agency as recognized by the WTA. Accordingly, GMD5 is considered a commenting agency for purposes of distribution of costs of the proceeding.

of law, any arguments supporting how costs of the proceeding should be divided in accordance with K.S.A. 82a-1503(e).

- e. Only the Cities submitted arguments and justification for a distribution of costs. The Cities suggested the Intervenor should be assessed with 78% of the costs of the proceeding.
- f. During the prehearing process, all involved agreed that ten (10) days of hearing would be necessary. As addressed above regarding the procedural background for this case, the formal public hearing was to begin on July 19, 2023 and potential continue through August 2, 2023. However, the evidentiary portion of the formal public hearing concluded on Monday, July 31, 2023 for a total of nine (9) days for the evidentiary portion of the formal public hearing.¹²⁶
- g. Effectively, the Cities argument is that they believe they could have presented the information to make their case in two days of hearing, and therefore the additional seven (7) days of hearing should be attributed to the Intervenor. As a result, Cities suggested the Intervenor should be responsible for 7 of the 9 days of the hearing, and should bear the cost of 78% of the proceeding.¹²⁷
- h. It is noted that the Intervenor did not submit any arguments or authorities regarding the distribution of costs of the proceeding in their proposed findings of fact and conclusions of law. The Intervenor further failed to appear on November 6, 2023 when the parties reconvened by Zoom video conference to conclude the formal public hearing.
- i. While the length of any legal proceeding would certainly be shorter with fewer parties presenting evidence, it is speculative for anyone to calculate the number of days which would have been necessary for an evidentiary hearing if the Intervenor had not intervened in the proceeding. As noted elsewhere in this order, this case marks the first time an applicant has sought approval for the transfer in the place of use of water under the WTA. There are no previous cases which can be looked at for reference or baseline to try to determine how much time or expense should have been involved for the proceeding.

¹²⁶ Although it was not anticipated that the hearing would be conducted on Saturdays or Sundays during this time, the hearing facility was reserved and remained setup for the proceeding. Additionally, although the evidentiary portion of the formal public hearing was ultimately adjourned on July 31, 2023 the hearing facility had been reserved through August 2, 2023 as those were the dates initially agreed upon by the parties for the length of time necessary to allow for the proceeding.

¹²⁷ $7 \div 9 = 0.78$ (78%).

- j. During the prehearing conference process, the parties addressed ways to proceed with the hearing in an efficient manner and agreed upon having expert witnesses pre-file their direct testimony/expert reports as a means of saving time (and ultimately expense) for the proceeding. If an expert witness may have otherwise spent several hours (or longer) on direct examination going through his or her credentials, expert analysis, methodology, and conclusion but could take the stand and the adopt their pre-filed direct testimony for the record as if they gave the same answers to those questions on the witness stand, the proceeding would see a benefit of reduced time and lower expenses. However, it is also possible that if there had been no intervenors involved in this proceeding, the Cities may not have agreed to utilizing pre-filed direct testimony of expert witnesses.
- k. Additionally, there are expenses that are not all directly connected to the length of the formal public hearing. Publication of the Notice of Prehearing Conference as required by the WTA would have had to occur regardless of whether there were any intervening parties. Expenses for a public comment hearing would likely have been incurred with or without intervening parties. Time billed by OAH to KDA for services provided would occur with or without intervening parties. Although it is likely that time attributed to the formal public hearing hearing, and amount of time spent by the Presiding Officer going through all the pleadings filed by all parties in this matter may be decreased if the Intervenor has not been involved and had therefore not filing pleadings for the Presiding Officer to review it is difficult to quantify that the total time involved would have been 78% less if the Intervenor had not been involved in this case. While the Presiding Officer understands how the Cities came up with the 78% allocation figure, in light of the record as a whole and in the interests of justice that 78% allocation cannot be supported for all expenses of the case. It is noted that the Cities effectively consist of two entities: Hays and Russell. The Intervenor also consist of two entities: Water Pack and Edwards County.
- l. Costs of this proceeding which have been passed through to KDA by OAH should therefore be divided equally, 50% of such costs should be paid by the Cities and the other 50% of costs shall be paid by the Intervenor.
- m. Hays and Russell should be jointly and severally responsible for payment of 50% of the costs of the proceeding to KDA and they may determine between themselves how the Cities share of expenses should be divided.
- n. Intervenor shall also be responsible for payment of 50% of the costs of the proceeding to KDA with Water PACK and Edwards County jointly and severally liable for the Intervenor's share of costs. Water PACK and Edwards County may

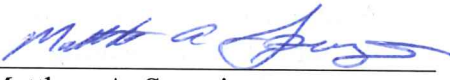
determine between themselves how the Intervenors' respective share of costs should be divided between Water PACK and Edwards County.

VIII. Conclusion

The Cities Water Transfer Application is hereby approved subject to the terms, conditions, and limitations contained in the Chief Engineer's Master Order.

The Cities and the Intervenors shall each be responsible for payment of 50% of the costs of the proceeding as determined by KDA.

IT IS SO ORDERED.


Matthew A. Spurgin
Administrative Law Judge
Office of Administrative Hearings
(Presiding Officer)

Appeal Rights and Other Administrative Relief

In accordance with the WTA, this order shall be deemed an Initial Order, and the Water Transfer Hearing Panel is deemed to be the agency head.¹²⁸

Either party may request a review of this initial order by filing a petition for review with the Water Transfer Hearing Panel within fifteen (15) days from the date this initial order was served. Failure to timely request a review by the Water Transfer Hearing Panel may preclude further judicial review. A petition for review shall be mailed or personally delivered to: Water Transfer Hearing Panel, c/o Chief Engineer, Kansas Department of Agriculture, 1320 Research Park Drive, Manhattan, KS 66502.¹²⁹

If neither party requests a review by the Water Transfer Hearing Panel, this initial order becomes final and binding on both parties on the 30th day following its service.¹³⁰

Until the time at which a petition for judicial review would no longer be timely, a party may submit to the presiding officer or agency head a petition for stay of effectiveness of an initial or final order, unless otherwise provided by statute or stated in the initial or final order.¹³¹

¹²⁸ K.S.A. 82a-1504(b).

¹²⁹ K.S.A. 77-527.

¹³⁰ K.S.A. 77-530.

¹³¹ K.S.A. 77-528.

In the Matter of: The Application of the Cities of Hays, Kansas
and Russell, Kansas For Approval to Transfer Water From
Edwards County, Kansas Pursuant to the Kansas Water Transfer Act.
OAH No. 23AG0003 AG

Initial Order

Certificate of Service

On February 5th, 2024, I certify that a copy of the foregoing was placed in the United States first class mail, postage prepaid, addressed to:

City of Hays
c/o Toby Dougherty, City Manager
PO Box 490
Hays, KS 67601

Mark Frame, Attorney at Law
PO Box 37
Kinsley, KS 67547

City of Russell
c/o John Quinday, City Manager
133 W. 8th Street
Russell, KS 67665

Lynn D. Preheim
Christina J. Hansen
Stinson LLP
1625 Waterfront Pkwy, Ste. 300
Wichita, KS 67206

Melvin Sauer Jr.
Donald Hoffman
Dreiling, Bieker & Hoffman LLP
PO Box 579
Hays, KS 67601-0579

and I further certify that I caused a copy of the foregoing to be served electronically through OAH's e-filing system to:

Stephanie Kramer, Chief Counsel
Kate Langworthy, Staff Attorney
Kansas Department of Agriculture
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Manhattan, KS 66502

Daniel Buller
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In the Matter of: The Application of the Cities of Hays, Kansas
and Russell, Kansas For Approval to Transfer Water From
Edwards County, Kansas Pursuant to the Kansas Water Transfer Act.
OAH No. 23AG0003 AG

Initial Order

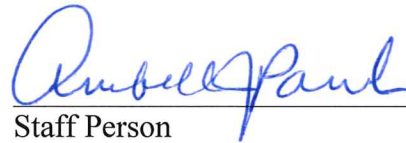
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