

**BEFORE THE DIVISION OF WATER RESOURCES  
KANSAS DEPARTMENT OF AGRICULTURE**

In the Matter of the City of Wichita’s )  
Phase II Aquifer Storage and Recovery Project in ) Case No. 18 WATER 14014  
Harvey and Sedgwick Counties, Kansas. )  
\_\_\_\_\_) )  
Pursuant to K.S.A. 82a-1901 and K.A.R. 5-14-3a.

**ORDER REGARDING THE CITY OF WICHITA’S PROPOSED MODIFICATION  
OF THE AQUIFER STORAGE AND RECOVERY PROJECT PHASE II WATER  
APPROPRIATION PERMITS**

COMES NOW, Earl D. Lewis, P.E., Chief Engineer of the Division of Water Resources, Kansas Department of Agriculture (“Chief Engineer”) who, after review and consideration of the Recommendations on the City of Wichita’s Proposed Modification of the Aquifer Storage and Recovery Project Phase II Water Appropriation Permits issued by the designated presiding officer on January 14, 2022 (“Recommended Order”), hereby determines the modifications proposed by the City of Wichita should be denied for the reasons set forth herein.

**I. PROCEDURAL MATTERS**

On July 23, 2018, then Chief Engineer David W. Barfield, P.E., issued a Pre-Hearing Conference Order that set forth the basic procedures and issues for consideration of the proposed changes to the City of Wichita’s Aquifer Storage and Recovery Project Phase II Appropriation Permits (“Project”). The issues set forth were as follows:

1. Should the new applications filed by the City of Wichita to allow recovery of aquifer storage credits from existing production wells be approved?
2. Should the bottom of the basin storage area be lowered as proposed by the City of Wichita?
3. Should the applicable accounting procedures for Phase II of the Project be modified to allow the City to develop recharge credits via its Aquifer Maintenance Credit (“AMC”) proposal?

The new applications were subsequently withdrawn and not considered as a part of this hearing process. The request to lower the bottom of the basin storage area and to modify the accounting procedures (collectively the “Proposal”) were requests to modify an order of the Chief Engineer,

established pursuant to K.S.A. 82a-712 when the Phase II applications were approved. However, lacking a clearly applicable standard for review of such terms and conditions, Chief Engineer Barfield initially ordered that the proposals be considered under the same standards as change applications pursuant to K.S.A. 82a-708b in order to protect existing water rights and the public interest. Ultimately, this hearing process was delegated, and the presiding officer recommended that the Proposal be denied because it should have been filed as new applications pursuant to K.S.A. 82a-711 and subject to the requirements therein.

K.A.R. 5-14-3a provides that any hearing held under the Kansas Water Appropriation Act, K.S.A. 82a-701 *et seq.* (“KWAA”) may be conducted pursuant to this regulation, including the designation of a presiding officer and the limitation that such presiding officer issue only recommendations to the Chief Engineer after a hearing. The Chief Engineer is required to then set forth what, if any, recommendations are adopted. K.A.R. 5-14-3 authorizes the Chief Engineer to hold a hearing prior to issuance of an order. Any review of the order issued by the Chief Engineer as a result of such hearing may be reviewed as authorized by statute. Although it was somewhat unclear at the outset of these proceedings, the portion of the City of Wichita’s proposal that was reviewed by the presiding officer was not submitted pursuant to 82a-708b or 82a-711, and therefore is not subject to review by the Secretary of Agriculture pursuant to K.S.A. 82a-1901. Therefore, this order shall be considered a final order for purposes of the Kansas Judicial Review Act, K.S.A. 77-601, *et seq.*

## **II. FINDINGS OF FACT**

The Chief Engineer hereby adopts the following Findings of Fact from the Recommended Order:

### Previous Rights and Orders

1. The City of Wichita (“City”) owns water rights in the Equus Beds well field, located in Harvey and Sedgwick Counties, Kansas, between the Arkansas and Little Arkansas Rivers. (Vested Water Right, File No. HV-006, Water Rights, File Nos. 388 and 1006). These water rights in the Equus Beds well field authorize the diversion of up to 40,000 acre-feet of groundwater per year from the Equus Beds Aquifer (“Aquifer”) (Letourneau, Tr. p.1245.). The City also owns water rights that allow it to divert a

- maximum of approximately 60,000 to 70,000 acre-feet of surface water annually from Cheney Reservoir, and additional groundwater rights in the E&S Wellfield and the Bentley Reserve Wellfield. (See Letourneau, Tr. p.1774.)
2. The City also owns water rights that allow it to divert a maximum of 45,230 acre-feet annually from the Little Arkansas River for the combined uses of municipal and artificial recharge. (Permit File No. 46,627.)
  3. In March 2006, the City began construction of the Equus Beds ASR project to store and later recover groundwater, and to form a hydraulic barrier to the known chloride plume near Burrton, Kansas. (USGS SIR 2013-5042, p.1.) The Aquifer Storage and Recovery project (Project) would allow the City to divert surface water flows from the Little Arkansas River during times of high flows, treat that water to drinking water standards, inject it into the Aquifer, and later withdraw a corresponding amount of water from the Aquifer.
  4. David L. Pope was Chief Engineer of the Division of Water Resources, Kansas Department of Agriculture at the time the City initiated discussions with him about creating an aquifer storage and recovery (ASR) program under Kansas regulatory law. (Pope, Tr. pp.2702-03). Consequently, under his statutory authority as Chief Engineer (K.S.A. 82a-706a), Pope promulgated regulations to govern ASR projects. (Id.)
  5. In November of 2006 and February of 2007, the City of Wichita filed applications with the Chief Engineer seeking approval of Phase II of its ASR project. The applications sought to divert high flows from the Little Arkansas River by means of a surface water intake, treat the water to drinking water standards and inject it into the Equus Beds Aquifer for later withdrawal by means of the same aquifer storage and recovery wells for municipal purposes. (GMD Ex. 28.)
  6. Chief Engineer David Barfield approved the 2006 and 2007 ASR applications, detailing the conditions in a Findings and Order dated September 18, 2009. (“In the Matter of the Findings and Order For the City of Wichita’s Aquifer Storage and Recovery Project – Phase II”) This approved project is referred to herein as Phase II.
  7. The Phase II approval contained a number of findings, including the following:

- a. This order contained the same definition of “aquifer storage and recovery” as detailed in the Phase I approval. (Finding 6.)
- b. That the City and Equus Beds Groundwater Management District No. 2 (GMD2) entered into a Memorandum of Understanding (MOU), dated December 3, 2008, documenting the agreements related to the proposed permitting, installation and operation of the ASR Phase II project, a final version of which was filed with the office of the Chief Engineer. (Finding 7.) Other findings referenced aspects of the MOU, and the fact that in accordance with the MOU, GMD2 recommended a waiver of the applicable well spacing requirements, and approval subject to specific conditions. (Findings 12, 15.)
- c. “That as referenced by GMD #2 in their recommendation of approval, and to maintain consistency with the Phase I ASR project,” this approval incorporated the pertinent conditions established in the Phase I orders, including the following:
  - i. “That passive recharge credits shall not be allowed.”
  - ii. That the locations of the index wells and index water levels for the basin storage area shall be as set forth in attachments to the Phase I order.
  - iii. “That if the City develops an improved model or methodology to account for water stored in the basin storage area that is approved by the Chief Engineer after consideration of the recommendation of the GMD # 2, that the Chief Engineer may approve such improved methodology without the necessity of holding additional public hearings.”
  - iv. That water shall only be injected into the basin storage area by means of the injection wells when the water level within 660 feet of an injection well is 10 feet or more below the land surface elevation.
  - v. That recharge credits may be withdrawn from an index cell only when recharge credits are available from the cell and the static water level at its index well is above the lowest index level.
  - vi. That water may be recharged when the static water level is below the lowest index level in that well.

- vii. The City shall annually report an accounting of water diverted from the surface water intake and recharged into the basin storage area in the Equus Beds Aquifer, per specifications outlined in the approval.
- 8. The Phase II approval contained specific order provisions which applied the findings listed immediately above (and others) as mandatory aspects of the approval.
- 9. The Phase II approval was comprised of the following:
  - a. An Approval of Application and Permit to Proceed authorizing the City to divert a total combined maximum of 45,320 acre-feet of surface water per year from the Little Arkansas River during times of high flows, for artificial recharge and municipal use. (Water Right File No. 46,627.) This permit allowed for two types of use: (1) diversion for immediate municipal use by the City, and (2) injection into the Aquifer for artificial recharge for which a recharge credit is earned. The former contributes to perfection for municipal use; the injection of water (and simultaneous accumulation of an ASR credit) contributes to perfection for artificial recharge. (Letourneau, Tr. p.1809.)
  - b. An Approval of Application and Permit to Proceed for each of 24 additional initial applications authorizing the withdrawal of “groundwater recharge credits accumulated in the Equus Beds aquifer, that may be recovered pursuant to the operation of the approved aquifer storage and recovery project.” (Water Right File Nos. 46,714 to 46,733 and 47,718 to 47,181). Each of these permits authorized recovery of recharge credits up to a maximum annual quantity of 500 acre-feet each. Under these permits, the withdrawal of recharge credits from storage in the Aquifer, for use in the City, would contribute to perfection for municipal use. (Letourneau, Tr. p.1811.)
  - c. Each of the recovery approvals includes provisions similar to the following excerpt from File No. 46,714: “19. That the proposed recovery of water artificially recharged by the City shall only occur when recharge credits are determined to be available in Cell No. 6, and the static water level is above elevation 1,387 mean sea level (msl).” A similar requirement reflecting the 1993 levels for each index cell is included for each of the recovery permits. (Boese, Tr.

pp.2102-2103; Water Right File Nos. 46,714 to 46,733 and 47,718 to 47,181, et al.).

- d. Each of the recovery approvals includes provisions similar to the following excerpt from File No. 46,714: “7. That the applicant shall not be deemed to have acquired a water appropriation right for groundwater from the Equus Beds aquifer, except for recovery of water recharged pursuant to the approved aquifer storage and recovery project”. (Water Right File Nos. 46,714 to 46,733 and 47,718 to 47,181, et al.).
  - e. Each of the recovery approvals includes provisions similar to the following excerpt from File No. 46,714: “25. That this approval of application is subject to the terms, conditions, and limitations of the Memorandum of Understanding between Equus Beds Groundwater Management District No. 2 and the City of Wichita, Kansas, dated December 3, 2008”. (Water Right File Nos. 46,714 to 46,733 and 47,718 to 47,181, et al.).
  - f. Seven additional permits authorizing one recharge well each were approved for ASR Phase II on September 28, 2010, with conditions essentially identical to the first 24 Phase II permits; one notable exception is that these seven permits authorized a total maximum annual recharge quantity of 1000 acre-feet each, as compared to the 500 acre-feet limit for the first 24 permits. (Permit Nos. 47,400, 47,448 to 47,453.)
10. The ASR Phase II approval initially authorized a total maximum quantity of 19,000 acre feet in artificial recharge credits which the City could pump each year (if the recharge credits were available). (Boese, Tr. p.2962.) This maximum authorized quantity would be in addition to the City’s 40,000 acre-feet of native water rights in the Equus Beds Aquifer. (Letourneau, Tr. p.1247.) The recharge credits could only be pumped to the extent that the City has earned them through physical injection into the Aquifer. (Id.)
11. The Phase II approval expressly requires compliance with the MOU between the City and GMD2 as a condition of the approval. This MOU is dated December 3, 2008. (“Memorandum of Understanding Between Equus Beds Groundwater Management District No. 2 And The City of Wichita, Kansas Regarding Wichita’s Proposed

Aquifer Storage and Recovery Project, Phase II”); GMD Ex. 27.) This MOU detailed eight Items of Understanding upon which the City and GMD agreed, including:

“Issue 5. How can the City protect domestic water wells from changes in water quality standards? Commitment: ‘If water quality in existing or future domestic wells meet the then-current drinking water standards and the water quality is subsequently changed by the Project such that those standards are not met, the City will provide and install a home water treatment system to bring the water back to drinking water standards or provide other remedies . . . without additional cost to the resident.’”

“Issue 6. How will the City protect domestic water wells within 660 feet of a Project recharge and recovery well from adverse drawdown impacts that may result from operation of the well? Commitment: ‘Because the Project recharge and recovery wells can only be pumped if water levels in the aquifer are higher than the historic low level, no impairment is expected. Nonetheless, if a domestic water well, existing before the approval of this MOU and within 660 feet of an existing or new Project well, is adversely impacted by drawdown from such well, the City will re-drill or take other appropriate, affirmative action to restore productivity of such domestic well to the same rate and quality as existed before.’”

#### City’s Purpose for Proposal

12. On March 12, 2018, the City submitted to the Chief Engineer of DWR, “ASR Permit Modification Proposal Revised Minimum Index Levels & Aquifer Maintenance Credits” (“Proposal”). (City Ex. 1.) The Proposal consists of two requests: (1) obtain a new type of recharge credit, called an Aquifer Maintenance Credit (AMC) based on water left in storage in the Aquifer (adjusted for imputed initial and recurring losses), when the Aquifer is at or near capacity, through the diversion of surface water from the Little Arkansas River that is sent directly to the City for municipal use, and (2) lower the minimum index levels at which the City can withdraw recharge credits. (City Ex. 1.)
13. In an order issued September 27, 2018, Chief Engineer Barfield stated, “Upon request of the City of Wichita, the new applications filed by the City and originally scheduled

to be considered at the public hearing in this matter, will be dismissed.” (“Order to Modify Hearing and Schedule”, Sept. 27, 2018.)

14. The City approved a Drought Response Plan on October 8, 2013, identifying 4 stages of response, depending on the severity of drought. (City Ex. 16; Henry, Tr. p.519.) Stage 1 involves voluntary conservation; Stage 2 imposes some mandatory timed restrictions on outdoor water usage, discretionary conservation measures by the City, and reducing diversions from Cheney Reservoir; Stage 3 bans all outdoor water usage for residential, wholesale and most business customers, exempting businesses that rely on outdoor water usage for their core economic activity; Stage 4 bans all outdoor watering and customers (other than hospitals) would be required to reduce their demand by 15%. (City Ex. 16.)
15. Pajor testified that the rationale for the current Proposal is twofold: (1) the Aquifer recharged from 1993 levels to nearly functionally full to predevelopment conditions, and (2) the only water the City needs in addition to Cheney Reservoir’s surface water and the Equus Beds well field is water during a severe drought, so “the ASR’s mission today is to become that supply” during protracted severe drought to meet customer demands “that our native rights in our water sources do not meet.” (Pajor, Tr. p.297-298; See Henry, Tr. p.523; Letourneau, Tr. p.1240.)
16. Pajor testified, “In non drought (sic) conditions we have sufficient supplies in our native water rights to meet customer demand throughout the 50 year planning period.” (Pajor, Tr. p.152.)

#### Aquifer Maintenance Credits

17. The City’s requested solution to allow it the ability to earn more credits for future use is to divert surface water from the Little Arkansas River (at times of high flows) and directly send the surface water to the City’s main treatment plant for consumption for municipal use by the City, bypassing the act of storing the water in the Aquifer. The City would thereby earn a new kind of recharge credit for “water left in storage”, on the theory that the City could have pumped, but did not pump.... (Pajor, Tr. pp.242-243; McCormick, Tr. p. 123; City Ex. 1, p.3-1.) The City calls this new kind of credit an Aquifer Maintenance Credit (AMC).



18. The Approval orders for ASR Phase I and Phase II both expressly forbid passive recharge credits. (GMD Ex. 26, p.14 of 21; GMD Ex. 28, p.5.) The ASR Phase I and Phase II approval orders contain the following declaration, “That passive recharge credits shall not be allowed.” (GMD Ex. 26, p.14 of 21; GMD Ex. 28, p.5.)
19. The term “passive recharge credit” is not defined in statute or regulation, but the definition is actually obtained from the ASR Phase I and Phase II approval orders. (Letourneau, Tr. p.1633.)
20. The ASR Phase I approval order uses the following language to clarify the concept of “passive recharge”: “water which the City could have legally pumped but did not pump” and “credits for not pumping City wells in the basin storage area”. (GMD Ex. 26, pp.2 and 9 of 21.) 69. The ASR Phase I approval order contained the following conclusion: “That passive recharge credits should not be allowed because they are not ‘artificial recharge’ as defined in K.A.R. 5-7-1, because no source water is being artificially recharged to create those credits.” (GMD Ex. 26, p.11 of 21.)
21. Clement stated that, under the AMC concept, the City “wouldn’t get an AMC credit for anything you could physically inject”. (Clement, Tr. p.760)

#### Lowering the Minimum Index Levels

22. The ASR Phase II orders contained the following condition, “That recharge credits may be withdrawn from an index cell only when recharge credits are available from the cell and the static water level at its index well is above the lowest index level.” The lowest index levels referenced in the Phase I and Phase II orders are the 1993 water levels (the levels to which the Aquifer dropped as a result of the 1991-1992 drought and the use preceding and during it). These 1993 levels are collectively referred to throughout these proceedings as the “minimum index level” approved under the ASR Phase I and Phase II orders. (Boese, Tr., p.2095.) The Proposal’s second request is to change this permit condition to allow the City to withdraw recharge credits (when available) when the water level is lower than the currently approved 1993 levels. (City Ex. 1.)
23. In a letter to Chief Engineer Barfield dated May 24, 2013, Michael G. Jacobs, Interim Water Resources Engineer for the City, requested DWR remove the restrictions

- limiting recharge withdrawal to when aquifer levels are above the 1993 levels. (City Ex. 19.) In support, Jacobs explained that the City had seen aquifer levels declining despite the City's use of only about 50% of its Equus Beds water rights, attributing the levels to a recent drought and irrigation use. He asserted that if surface water became depleted, and the use of the Aquifer caused it to drop below 1993 levels, the City would be unable to withdraw its recharge credits when it needed them most. Jacobs requested DWR to "revise" the ASR Phase II permits regarding this limitation. (Id; See Henry, Tr. p.523.)
24. Letourneau testified that the condition setting the current minimum index levels at the 1993 levels is a "fundamental aspect of ASR Phase I and Phase II orders" and the requested change would be a "fundamental modification" of the permits. (Letourneau, Tr. p.1687.)
25. If the City wanted to pump recharge credits in excess of the currently approved maximum quantity, the City would need to file a new application and obtain an approval of a new permit. (Letourneau, Tr. p.1290.) Letourneau testified that an expansion of the maximum quantity authorized by a permit or water right requires a new water permit application. (Letourneau, Tr. pp.1657-1658.) Boese agreed. (Boese, Tr. p.2168.)
26. The City has not filed an application to change a water right pursuant to K.S.A. 82a-708b; this fact is uncontroverted.

### III. APPLICABLE LAW

27. **K.S.A. 82-706. Duties of chief engineer as to beneficial use and rights of priority of appropriation.** The chief engineer shall enforce and administer the laws of this state pertaining to the beneficial use of water and shall control, conserve, regulate, allot and aid in the distribution of the water resources of the state for the benefits and beneficial uses of all of its inhabitants in accordance with the rights of priority of appropriation.
28. **K.S.A. 82a-706a. Rules, regulations and standards.** The chief engineer shall adopt, amend, promulgate, and enforce such reasonable rules, regulations, and standards necessary for the discharge of his or her duties and for the achievement of the

purposes of this act pertaining to the control, conservation, regulation, allotment, and distribution of the water resources of the state.

**29. K.S.A. 82a-708b. Application for change in place of use, point of diversion or**

**use; fee; review of action on application.** (a) Any owner of a water right may change the place of use, the point of diversion or the use made of the water, without losing priority of right, provided such owner shall: (1) Apply in writing to the chief engineer for approval of any proposed change; (2) demonstrate to the chief engineer that any proposed change is reasonable and will not impair existing rights; (3) demonstrate to the chief engineer that any proposed change relates to the same local source of supply as that to which the water right relates; and (4) receive the approval of the chief engineer with respect to any proposed change. The chief engineer shall approve or reject the application for change in accordance with the provisions and procedures prescribed for processing original applications for permission to appropriate water. If the chief engineer disapproves the application for change, the rights, priorities and duties of the applicant shall remain unchanged....

**30. K.S.A. 82a-711. Permits to appropriate water; standards for approval of use;**

**review of action on application.** (a) If a proposed use neither impairs a use under an existing water right nor prejudicially and unreasonably affects the public interest, the chief engineer shall approve all applications for such use made in good faith in proper form which contemplate the utilization of water for beneficial purpose, within reasonable limitations except that the chief engineer shall not approve any application submitted for the proposed use of fresh water in any case where other waters are available for such proposed use and the use thereof is technologically and economically feasible. Otherwise, the chief engineer shall make an order rejecting such application or requiring its modification to conform to the public interest to the end that the highest public benefit and maximum economical development may result from the use of such water.

(b) In ascertaining whether a proposed use will prejudicially and unreasonably affect the public interest, the chief engineer shall take into consideration:

(1) Established minimum desirable streamflow requirements;

(2) the area, safe yield and recharge rate of the appropriate water supply;

- (3) the priority of existing claims of all persons to use the water of the appropriate water supply;
  - (4) the amount of each claim to use water from the appropriate water supply; and
  - (5) all other matters pertaining to such question.
- (c) With regard to whether a proposed use will impair a use under an existing water right, impairment shall include the unreasonable raising or lowering of the static water level or the unreasonable increase or decrease of the streamflow or the unreasonable deterioration of the water quality at the water user's point of diversion beyond a reasonable economic limit. Any person aggrieved by any order or decision by the chief engineer relating to that person's application for a permit to appropriate water may petition for review thereof in accordance with the provisions of K.S.A. 82a-1901, and amendments thereto.

31. **K.S.A. 82a-712. Same; notice of approval or disapproval of application; approval constitutes permit.** The chief engineer shall notify the applicant of the approval or disapproval of the application. ...The chief engineer may approve an application for a smaller amount of water than requested and he or she may approve an application upon such terms, conditions, and limitations as he or she shall deem necessary for the protection of the public interest. The approval of the application by the chief engineer, subject to the terms and conditions thereof, upon issuance, constitutes a permit to proceed with construction of diversion or other authorized works and with the diversion and use of water in accordance with the terms and conditions of his or her permit and no common-law claimant without a vested right, or other person without a vested right, a prior appropriation right, or an earlier permit shall prevent, restrain, or enjoin an applicant from proceeding in accordance with the terms and conditions of his or her permit or from diminishing the water supply.
32. **K.A.R. 5-12-1 through K.A.R. 5-12-4.** Generally, the specific requirements for aquifer storage and recovery systems.
33. **K.A.R. 5-14-3 and K.A.R. 5-14-3a.** Generally, regulations with specific procedural requirements for review of orders of the Chief Engineer.

#### IV. DISCUSSION

The City's Proposal consisted of two primary issues: whether the bottom of the basin storage area could be lowered and whether AMCs, as proposed by the City, constituted a legal method of accounting for credits. Based on the record presented to the Chief Engineer, these issues became subordinate to the threshold issue of whether the City had standing to present these proposals without first filing a new or change application and if not, under what criteria should they be considered. The Presiding Officer recommends that the proposal be denied because a new application filed pursuant to K.S.A. 82a-711 would be required in order to lower the basin storage area and create a new method for establishing credits. The Presiding Officer also went on to consider many other questions in the event that the recommendation for a new application was not accepted. These other questions made up the majority of the evidentiary phases of the formal hearing. However, the Chief Engineer finds that the issue may be decided on the threshold issue and that the majority of the evidence placed in the record is not relevant to the decision entered herein and is not adopted as part of this final order.

*1. Is the filing of a new application required for lowering the minimum index level?*

First, the Presiding Officer is correct that the changes requested were not subject to an application for change pursuant to K.S.A. 82a-708b. An application for change may be filed to change a water right's point of diversion, place of use, or type of use. While some administrative changes may be made to the water right, such as legal descriptions of the point of diversion, it is not typical to change the rate or quantity of an existing water right and there are some limitations on how far a point of diversion may be moved. None of these attributes were identified for change in the existing project, and hence, K.S.A. 82a-708b does not govern the proposal. Recommended Order, pp. 122-123.

Second, the Presiding Officer is correct that certain attributes of a water right cannot be changed. This includes the date of priority, maximum annual quantity, maximum rate of diversion, and authorized source of supply. *Id.*, pp. 123-124. Regarding the need for a new application, the Presiding Officer is correct, but the record does not support the Presiding Officer's conclusions that lowering the minimum index level requires a new application because it would increase the annual authorized quantity and constitute a new source of supply.

*A. Would lowering the minimum index level allow the City to exceed the annual authorized quantity of the Project?*

The Presiding Officer erroneously concluded that the lowering of the minimum index level would cause the annual authorized quantity of the Project to be exceeded. At best, the Presiding Officer suggested it was a “possibility.” *Id.* at 126. The Presiding Officer described the proposal in terms of whether the minimum index level is lowered *and/or* AMCs are approved, therefore, I must assume that her conclusions about the possibility of exceeding the annual authorized quantity of the Project apply if both elements of the Proposal are approved or if either of the elements of the proposal is approved alone. Even the Presiding Officer’s description presents conflicting evidence in the record. She states that existing limitations on withdrawals would remain in place and further that it is “true that the Proposal does not expressly request an increase in the annual authorized quantity in acre-feet increments.” *Id.* at 129-130. Whether the minimum index level is lowered, or even raised, the annual authorized quantity of the Project would not change. The only method by which the City may withdraw groundwater through the Project is by earning credits. Changing the minimum index level, without any changes in how the City accrues or uses credits does not increase the annual authorized quantity of the Project. However, other changes in accounting may still be necessary to continue to properly track leakage, etc. When considered as a standalone proposal, the lowering of the minimum index level does not increase the number of credits available to the City that are developed through diversion from the Little Arkansas River and injection into the Equus Beds Aquifer.

*B. Would lowering the minimum index level allow the City to withdraw water from a new or different source of supply?*

The Project water rights are clear and the Presiding Officer correctly notes that (for the Project) the current “authorized source of supply is the source water injected into and stored in the aquifer.” *Id.* at 131. The Presiding Officer makes an interesting distinction, stating that according to “the record, water existing below the bottom of the lower index level is Equus Beds water, existing outside the basin storage area.” *Id.* Based on this assumption, to which there is no citation and no evidence of in either the Phase I or Phase II orders, the Presiding Officer goes on to argue that lowering the minimum index level would make new water available for withdrawal by the Project. This appears to be an oversimplification that misses the mark. The basin storage

area is an entirely artificial area agreed upon between the Chief Engineer, GMD No. 2, and the City during establishment of Phase I of the Project. The basin storage area does not contain only water injected by the Project, but also native Equus Beds water the City and other right holders routinely withdraw from the basin storage area as well. It is possible that the actual water molecules injected into the ground by the Project are withdrawn by irrigators or other municipalities and put to beneficial use. This attempt to create artificial distinctions regarding source of supply is not helpful. The proposal to lower the minimum index level does not allow the City to extract Equus Beds water. A designation by the Chief Engineer of an imaginary line, while a limiting factor upon operation of the Project, does not create a new source of water. Indeed, the source of water remains the Little Arkansas River. If the minimum index levels are lowered, the City is still only entitled to the credits earned from injected water. However, lowering the minimum index levels would be a change to the current limitations on the operation of the Project.

### *C. Procedural Methods for Lowering the Minimum Index Level*

If lowering of the minimum index level does not allow for an increase in consumptive use nor constitute withdrawals from a new source of supply, the question remains, why would a new application be required for this type of change to the Project? The Presiding Officer correctly concludes that *Clawson v. State, Depart. Of Agriculture, Div. of Water Resources*, 49 Kan. App.2d 789 (2013) does not prohibit jurisdiction to change the terms and conditions of a water right (excluding reduction in quantity and rate of diversion against the will of the owner). Therefore, Section II.A.2 of the *Recommended Order* is hereby adopted by reference.

Having established jurisdiction, we must also consider the general nature of aquifer storage and recovery (“ASR”). There is no specific statute that authorizes the development of ASR systems. However, with the adoption of K.A.R. 5-12-1 *et seq.*, it was generally acknowledged that management of ASR falls under the general authority of the Chief Engineer to “control, conserve, regulate, allot, and aid in the distribution” of the state’s water (K.S.A. 82a-706) and to implement rules, regulations, and standards to carry out such duties (K.S.A.82a-706a). A cursory review of the current statutes show that ASR systems do not fit neatly within the available methods for modifying water rights, and therefore, administration of these systems should be done based on rules and regulations adopted by the Chief Engineer. Changes of the

type proposed by the City are important and the public interest must be fully considered. In the absence of rules and regulations to set forth parameters for changes to ASR projects, it is logical to require a new application pursuant K.S.A. 82a-711 for any proposal that modifies an existing ASR system but does not propose any of the changes available under K.S.A. 82a-708b.

*2. Is the filing of a new application required to create AMCs?*

For the same reasons set forth in Section IV.1 above, a new application would be required for proper consideration of the proposal to create AMCs. The record presented in the Recommended Order contains numerous conflicting statements about the administrative nature and hydrological impact of AMCs. *See e.g.*, the Recommended Order, pp. 48-49, Findings of Fact Nos. 74, 75, and 84, wherein the presiding officer adopts conflicting opinions as “facts.” Based upon the conflicting testimony adopted, it is unclear if AMCs are truly passive recharge credits or something else, but as with lowering the minimum index level, this type of fundamental change, in the absence of rules and regulations that more clearly govern changes to ASR systems, must be dealt with through a new application. Further, the record does indicate that the proposal put forward by the City needs more consideration of the appropriate terms and conditions necessary to protect the public interest. The Project is still in its perfection period and there is much that is unknown about its long-term operation. Without ruling in advance on the merits of a new application, the record established in this case indicates that a successful proposal similar to AMCs would need to include greater detail and study on the additional impacts and future operation of the Project.

## **V. CONCLUSIONS OF LAW**

1. The City of Wichita’s proposal to lower the minimum index level and establish aquifer maintenance credits for their aquifer storage and recovery project were not properly submitted to the Chief Engineer for review.
2. In the absence of rules and regulations that control the modification of existing aquifer storage and recovery systems of the sort proposed by the City, the proposed modifications should have been submitted as new applications pursuant to K.S.A. 82a-711.



3. Therefore, in the absence of properly submitted applications, the City's proposal should be denied.

### **ORDER**

**COMES NOW**, the Chief Engineer, who based on upon substantial competent evidence, as provided at hearing and based upon the recommendations of the presiding officer, orders that the proposal to lower the minimum index level and establish aquifer maintenance credits regarding the City of Wichita's Aquifer Storage and Recovery System is **DENIED**.

**ENTERED THIS 21st DAY OF JUNE, 2022 AT MANHATTAN, RILEY COUNTY, KANSAS.**



Earl D. Lewis, P.E.  
Chief Engineer, Division of Water Resources  
Kansas Department of Agriculture

PREPARED BY:



Kenneth B. Titus #26401  
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Kansas Department of Agriculture  
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### **Final Order**

This is a final order of the Chief Engineer which shall become effective upon service pursuant to K.S.A. 77-530.

### **Judicial Review**

Review of this order may be had pursuant to the Kansas Act for Judicial Review and Civil Enforcement of Agency Actions, K.S.A. 77-601 *et seq.* Any petition for such judicial

review must be filed within thirty (30) days after service of this order in a Kansas court of competent jurisdiction. The agency officer designated to receive service of a petition for judicial review on behalf of the Kansas Department of Agriculture is:

Kenneth B. Titus  
Chief Legal Counsel  
Kansas Department of Agriculture  
1320 Research Park Drive  
Manhattan, Kansas 66502

### CERTIFICATE OF SERVICE

On this 21st day of June 2022, I hereby certify that the original of the foregoing **“ORDER REGARDING THE CITY OF WICHITA’S PROPOSED MODIFICATION OF THE AQUIFER STORAGE AND RECOVERY PROJECT PHASE II WATER APPROPRIATION PERMITS”** was sent by electronic mail to the following:

City of Wichita  
Department of Public Works & Utilities  
455 North Main Street  
Wichita, Kansas 67202  
[bmcleod@wichita.gov](mailto:bmcleod@wichita.gov)

Intervenors  
1010 Chestnut Street  
Halstead, Kansas 67056  
[twendling@mac.com](mailto:twendling@mac.com)

Equus Beds Groundwater Management  
District No. 2  
313 Spruce  
Halstead, Kansas 67056  
[tom@aplawpa.com](mailto:tom@aplawpa.com)  
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KDA Staff