STATE OF KANSAS
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	**)**	**Case No. 18 WATER 14014**
In Harvey and Sedgwick Counties, Kansas	**)**	
	)	

Pursuant to K.S.A. 82a-1901 and K.A.R. 5-14-3a

CITY'S RESPONSE TO INTERVENORS' PROPOSED FINDINGS & CONCLUSIONS

The City responds to Intervenors' referenced numbered paragraphs as indicated, but (due to page limitations) should not be regarded as implicitly accepting any paragraphs unaddressed.

Intervenors' Proposed Findings of Fact

1. David Pope only approved the permits for ASR Phase I (Vol. X., p. 2706, lines 6-7). Chief Engineer David Barfield approved the permits for ASR Phase II (September 18, 2009 Initial Order, p. 7).

2. Construction of ASR Phase I was completed in 2007 (2013 Annual Accounting Report, p. 1-1, Section 1.1, first sentence).

5. The last sentence is not supported by a citation to the record, and the use of "similar to" renders the intended meaning and scope (and hence, accuracy) uncertain.

9. As it relates to AMCs, the Proposal is to allow the City to accumulate AMCs for water left in the aquifer due to the City's use of water pumped directly from the Little Arkansas River, adjusted for imputed initial and recurring annual losses (City Exhibit 1, p. 3-1, last paragraph, and p. 4-3). As it relates to changes in the lower index levels, the Proposal is to adjust the lower index levels for each index cell as shown for each index cell in table 2-11 of the Proposal (City Exhibit 1, p. 2-25), but the changes will not be applicable to recovery of credits for ASR Phase I infrastructure (City Exhibit 1, p. 2-23).

12. Various of the Intervenors may be using water for irrigation and domestic purposes, but Intervenors have not been certified as class representatives, and so, do not represent in this proceeding any rights holders other than themselves. The Intervenors who testified did not have any wells in the part of the basin storage area where the Romero (Balleau Groundwater) graphic (District Exhibit 68, Figure 7) showed potential loss of capacity from drawdown to the proposed lower index levels (Intervenors' Exhibit 1; District Exhibit 68, Figure 7). Rather, Intervenors' Exhibit 1 shows the Carmichael well on the southern border on Index cell 32, the Carp well near the western edge of Index Cell 31, and the Basore wells in Index Cells 32 and 35 (Intervenors' Exhibit 1). These are all in the shallow zones where Balleau Groundwater projected 1 or 2 foot of additional drawdown from pumping to the proposed lower index levels (District Exhibit 68, Figure 6, Scenario C). The six domestic wells projected to have possible capacity issues from pumping to the lower levels are in Index Cells 10, 16, 20, 27 and 28 (District Exhibit 68, Figure 7). Mr. Basore's concern is not running out of water (Vol. XII, p. 3253, lines 2-3), and he is already impacted by chlorides regardless of the pumping scenario (Vol. XII., p. 3255, lines 8-9). Mr. Carmichael is on the cusp of being impacted by chlorides, and is projected to be impacted under existing pumping conditions (Vol. XIII., p 3364, lines 11-20; p. 3350, lines 19-20; District Exhibit 68, Figure 8). Mr. Carmichael has not looked at installing a reverse osmosis system for his domestic well, and so does not actually know if chloride impacts would render his domestic well unsustainable (Vol. XIII, p. 3342, line 23 through p. 3343, line 13).

13. The cited testimony reflects that two of the three (3) Intervenors who testified rely on their Equus Beds wells as their exclusive source of water, but does not establish whether "many" (or any) of the remaining Intervenors do (Vol. XII, p. 3237, lines 10-11; Vol. XIII, p. 3324, line 22). Mr. Carp's testimony was simply that he wouldn't say he has a backup plan if the aquifer

became contaminated or unavailable (Vol. XIII, p. 3379, line 24). As to priority and safe yield, Mr. Basore's cited testimony shows that his specific permits predated the Proposal and were subject to safe yield analysis but he did not testify to the same regarding the permits of other Intervenors (Vol. XII, p. 3301-3302).

17. Mr. McCormick specifically testified that the AMC concept was not envisioned by the City as early as 2007, and that in 2007, when the system was first started, there was a big hole in the ground and plenty of space to put water and "we weren't expecting the substantial challenges that we have now with the higher water levels." (Vol. IV, p. 1120, lines 16-21).

18. The first sentence garbles the concept on the referenced page of the Proposal, which actually states, "The City is proposing that the water left in storage because of utilizing Little Arkansas River flows be considered a ASR Aquifer Maintenance Credit (AMC) with similar characteristics to the current ASR recharge credits." (City Exhibit 1, p. 3-5). The focus is on the water left in storage, not the water drawn from the river (Id.) and it is also clear that the credit would be accounted for with initial and recurring annual losses (City Exhibit 1, p. 4-3). The statement based on Mr. Letourneau's testimony that "The accumulation of AMCs is not limited by, or correlated to, the amount the City could have pumped from the aquifer but didn't" ignores the testimony of the witness just before the first cited passage, "Q: So what water does the City leave in the aquifer? A: It would be their native water right or any re – any accumulated recharge credit" (Vol. IV, p. 1828, lines 14-17). This reflects that the witness understands leaving rights unexercised is an element of the AMC, but has somehow been confused by the line of questioning (Id.). The testimony cited from Vol. VIII, p. 1984, lines 4-12 is simply a reflection that water taken from the river for direct use might or might not be an offset of water the City could have drawn from the aquifer (e.g., if the City has already drawn it native rights for the year

and its available credits, direct use of water from the river could not then be an offset of rights to draw from the aquifer).

20. The statement concerning the definition of recharge in K.A.R. 5-1-1(lll) is not found in the referenced testimony or exhibit (Vol. VII, pp. 1915-1917, City Exhibit 1, p. 3-1). The witness's actual statement concerning recharge was that the *location* of the recharge is theoretical for AMCs, and further, the witness was simply reading from the Proposal as requested (Vol. VI, pp. 1443-1444). The characterization about converting Equus Beds water to recharge credits by agency action with an accounting methodology is also not what the witness said (Vol. VII, p. 1827, Lines 18-19).

22. The statement on AMC accumulation rate has been altered from the cited sources in that "based on" has been substituted for "dependent on" (KDA-DWR Summary at public meeting June 28, 2018, p. 2; District Exhibit 2, p. 5). The AMCs are "dependent on" the river water treated and sent to the City, but subject to an initial 5% loss, plus annual recurring losses, and only during times when physical recharge opportunities are limited by the water levels in the aquifer (District Exhibit 2, p. 5). The 18,000 AF limit referenced by Intervenors differs from the 19,000 AF figure referenced at times by the City because Mr. Boese, in the testimony Intervenors cite in the FN 1, added the withdrawal limitations of ASR Phase II permits only (Vol. VIII, p. 2266, lines 13-15 and 22-23). The City would be open to an appropriately crafted permit restriction limiting use of credits to defined drought conditions (Vol. II, p. 310 line 20, through p. 311, line 14).

25. Intervenors' citation of K.A.R. 5-12-1 is inapposite. It deals with storing source water diverted under a permit for artificial recharge. It does not say that an operator cannot store water

that is not source water by diverting source water for municipal use and leaving native rights unexercised (K.A.R. 5-12-1).

29. The statement is overgeneralized to the extent of being inaccurate, as the referenced testimony was specific to the use of "passive recharge credit" in the ASR Phase I permit (Vol. VII, p. 1631, lines 10-19). From other testimony of this witness it is clear that he does not view AMCs as passive recharge credits (Vol. VII, p. 1895, lines 9-11).

38. The criticism of DWR for not testing the City's modeling is irrelevant, given the findings of Balleau Groundwater that differences between their model simulations and the City's were not enough to affect their overall conclusions (District Exhibit 68, p. 2 of 16, lines 54-58).

40. AMCs represent water that is left in storage, but the witness did not say it was water left in storage simply because it was not pumped (Vol. VI, p. 1515, lines 6-8). Under the conditions of the City's Proposal, AMCs are not generated simply because water is not pumped, but require that the water has been left in storage due to the use of source water diverted from the river that could not be physically recharged due to high aquifer levels (Proposal, City Exhibit 1, p. 1-2, last paragraph).

41. AMCs allow the City to obtain the same credits it could obtain under its existing permits, but without pumping a hole in the aquifer to create capacity for physical recharge (Vol. V, p. 1288, line 12 through p. 1289, line 2).

43. For the reasons noted in response to Paragraph 41, AMCs in fact cannot have the effect contended.

44. This is also a partial and inaccurate statement of the basis for AMCs, because the credits are not based simply on not pumping when recharge is impossible, but on the point that

water has been left in storage due to the use of source water diverted from the river (Proposal, City Exhibit 1, p. 1-2, last paragraph).

45. The paragraph does not show that any of the irrigators referred to would have the ability to gain credits for recharge if they pumped the unused water and then replaced it. Accordingly, it is an apples-to-oranges comparison.

46 through 48. Yet, during the two-year drought of 2011-2012, water rights holders other than the City were increasing their usage because of the climate conditions (Vol. I, p. 173, lines 3-7). In fact, groundwater use for irrigation in drought years 2011 through 2013 appears slightly higher than other historical peak years shown in the USGS graph in Figure 12 of the Proposal (Vol. 1, p. 147, lines 7-11; Proposal, City Exhibit 1, p. 3-3, Figure 12). Irrigation use trended above 1993 use for most of the 1993 to 2016 period (Vol. 1, p. 147, lines 1-6; Proposal, City Exhibit 1, p. 3-3, Figure 12). The City's total use of water for public supply in the years since 1992 has not demonstrated an increase from 1992 quantities (Vol. 1, p. 147, lines 12-16; Proposal, City Exhibit 1, p. 3-3, Figure 12).

52 and 53. The Proposal speaks of the AMCs as credits for the water left in storage as a result of using water diverted from the Little Arkansas River (City Exhibit 1, p. 3-5). DWR has also understood that leaving in storage water that could have been pumped as native rights or existing credits is an element of AMCs (Vol. IV, p. 1828, lines 14-17). This notion is inherent in the intent of the Proposal, the very purpose of which is to allow the City to obtain the same credits it could obtain under its existing permits, but without pumping a hole in the aquifer to create capacity for physical recharge (Vol. V, p. 1288, line 12 through p. 1289, line 2). If Intervenors are concerned by the absence of a specific written condition that an equivalent

quantity of rights be unexercised in the year of AMC creation, that could certainly be addressed in the permit conditions.

54. The AMC concept does not increase consumptive use, because it simply allows the City to obtain the same credits it could obtain under its existing permits, but without pumping a hole in the aquifer to create capacity for physical recharge (Vol. V, p. 1288, line 12 through p. 1289, line 2).

55. No, the City could not accumulate AMCs at a much faster rate, because the rate of accrual of all recharge credits could not exceed the constructed physical diversion capacity of the ASR system including direct surface water diversions and future bank storage wells, and would be limited to the rate and quantity authorized by Water Right No. 46627 (Proposal, City Exhibit 1, p. 3-6, Section 3.4, proposed condition 2). AMCs simply allow the City to obtain the same credits it could obtain under its existing permits, but without pumping a hole in the aquifer to create capacity for physical recharge (Vol. V, p. 1288, line 12 through p. 1289, line 2). Mr. Boese may have meant that the City could begin to accrue AMCs *sooner*, which would be true in the sense that water levels would not need to be reduced to 1998 levels to accrue AMCs, but the referenced testimony does not explain how anyone would be prejudiced by accruing credits sooner while leaving the water levels unreduced.

57. Physical recharge has been difficult because of the high water levels in the aquifer (Vol. I, p. 151, line 19 through p. 152, line 8; Vol. 1, p. 242, lines 15-23). By comparing ASR plant capacity with simulated transient water levels modeled by the USGS, the City determined that creating potential for efficient physical recharge at the ASR plant capacity rate of 30 MGD would require reduction of water levels in the aquifer to 1998 levels (Proposal, City Exhibit 1, p. 2-11, Section 2.4.2; Vol. I, p. 159, lines 14-20). The point of the AMCs is to allow the City to

obtain the same credits it could obtain under its existing permits, but without pumping a hole in the aquifer to create capacity for physical recharge (Vol. V, p. 1288, line 12 through p. 1289, line 2).

58. These factors will also limit accrual of AMCs, as the rate of accrual of all recharge credits could not exceed the constructed physical diversion capacity of the ASR system including direct surface water diversions and future bank storage wells, and would be limited to the rate and quantity authorized by Water Right No. 46627 (Proposal, City Exhibit 1, p. 3-6, Section 3.4, proposed condition 2). The point of the AMCs is to allow the City to obtain the same credits it could obtain under its existing permits, but without pumping a hole in the aquifer to create capacity for physical recharge (Vol. V, p. 1288, line 12 through p. 1289, line 2).

60. There is no cap on the quantity of credits that can be accumulated under the existing permits (Vol. 1, p. 158, lines 18-22).

64. The paragraph does not identify any surface water rights claimed by Intervenors. The City does not propose to withdraw 120,000 acre feet of recharge credits at the rate of 19,000 AF per year (Proposal, City Exhibit 1, p. 2-10, Table 2-5, with correction to 5th year credits noted in testimony at Vol. III, p. 715, lines 1-18). Also, the testimony Intervenors rely on does not differentiate between physical recharge credits and AMCs (Vol. VII, p. 1700, lines 13-23), so if withdrawal of credits at 19,000 AF per year is a problem, it is not an issue with the Proposal, but an issue already inherent in the existing permits. The existing permits do not have a 120,000 AF cap on accrual of credits (Vol. I, p. 158, lines 18-22).

66. Per this argument about all water being dedicated, every new domestic well would be impairing somebody's existing water right, yet the statutes allow new domestic wells to be

installed without the approval of the chief engineer, signifying that Intervenors' understanding is flawed (See, K.S.A. 82a-705).

68. The referenced testimony is missing any citation to the Kansas Water Appropriations Act that differentiates between physical credits and AMCs. As Joe Pajor pointed out, the argument that AMCs cannot be allowed because all water in the aquifer is appropriated is flawed, in that such a precept would apply to physical recharge credits and AMCs alike (Vol. II, p. 334, lines 12-21). Mr. Pajor also pointed out (consistent with the notion of an "over-appropriated aquifer") that the state, by its own decision and policy, has created rights to remove more water than the aquifer has available (Vol. II, p. 333, lines 2-9). Finally, the testimony referenced in Intervenors' paragraph 68 misses the point that direct use of source water from the river in lieu of water from the aquifer is a use of additional supply (Vol. IV, p. 1062, lines 16-25).

69. through 76. Under the proposal, the rate of accrual of all recharge credits could not exceed the constructed physical diversion capacity of the ASR system including direct surface water diversions and future bank storage wells, and will be limited to the rate and quantity authorized by Water Right No. 46627 (Proposal, City Exhibit 1, p. 3-6, Section 3.4, proposed condition 2). AMCs only allow the City to obtain the same credits it could obtain under its existing permits, but without pumping a hole in the aquifer to create capacity for physical recharge (Vol. V, p. 1288, line 12 through p. 1289, line 2). Accordingly, any potential for the Intervenors' speculative harms tied to quantity of withdrawal and water quality issues already exists with the credits allowed under the existing permits.

77. through 84. An AMC cannot have any greater impact on safe yield than a physical recharge credit generated by withdrawing water and then replacing that water (Vol. VII, p.

1875, line 7 through p. 1876, line 1).

85. through 98. Although Mr. Pope approved the ASR Phase I permits, it was David Barfield who approved the Phase II permits (Vol. X., p. 2706, lines 6-7; September 18, 2009 Initial Order, p. 7). As Intervenors admit in their proposed findings paragraph 88, the Phase I findings conceived of "passive recharge" as meaning simply "water the City could legally have pumped, but did not pump" (Intervenors' proposed finding ¶ 88). But AMCs require much more than simply not pumping a portion of existing rights, because they require that source water was available from the Little Arkansas River, that it actually was diverted at the permitted point of diversion, and that it was treated at the ASR treatment facility so that it could be injected if there was space in the aquifer (Vol. V, p. 1288, lines 1-11). By those steps, the City has to physically prove that it had treated source water ready for injection to generate physical recharge credits had there been space to inject it. Intervenors' characterization of the basis of the credit as "not pumping a water right" (Intervenors' proposed finding ¶ 95) is mistaken. Because of the distinction between what AMCs are and what the prohibition of "passive recharge credits" was meant to preclude, Mr. Barfield, who approved the ASR Phase II permits, concluded that AMCs are not "passive recharge credits" (DWR Exhibit 4, September 18, 2017 letter of David Barfield, p. 1, paragraph 2).

99. through 106. From the parties' submissions, it is evident that Intervenors take one interpretation of applicable statutes and regulations, while the City and DWR take another, and these have been developed adequately in the parties' initial submissions.

Statutes and regulations, of course, exist as real world expressions of public policy, and should be interpreted to reach sensible results in furtherance of that policy. In the area of statutory interpretation (but rationally applicable to construing regulations as well), our courts

have held that, if particular language is open to more than one reasonable interpretation a court may consider the overall statutory purpose and favor a reading that comes to a consistent, harmonious, and sensible result effectuating that purpose. Judicial interpretation should avoid adding something to the statutory language or negating something already there. A court, of course, may also deploy those analytical tools to debunk a suggested interpretation of a statute as improbable, particularly when the suggestion would undermine a legislative purpose. The court should construe the statute to avoid unreasonable or absurd results. *Travelers Casualty Insurance v. Karns*, 56 Kan.App. 3d 388, 393, 431 P.3d 301 (2018).

In the present case, the AMCs are only designed to allow the City to obtain the same credits it could obtain under its existing permits, but without pumping a hole in the aquifer to create capacity for physical recharge (Vol. V, p. 1288, line 12 through p. 1289, line 2). This cannot generate any adverse consequences that would not already be associated with drawing the aquifer down to 1998 levels and accumulating the credits as physical recharge credits. It would avoid the adverse consequences of drawing the aquifer down to 1998 levels for a period of years. Accordingly, DWR's construction of applicable statutes and regulations to allow the permit changes requested for AMCs is a more sensible construction, and is also more in keeping with the public interest and the core purposes of the KWAA.

107. to 119. Intervenors' proposed finding paragraphs 107 and 108 actually conflict with one another as to the nature of AMCs as a change in accounting methodology. As to the remainder of the paragraphs, the City has shown that, at 2006 water levels, the simplified accounting method would produce nearly the same results as the existing accounting method for physical recharge credits (Proposal, City Exhibit 1, p. 4-6, Figure 16), while for later years, when aquifer levels were higher than 2006, the proposed method mirrors the current accounting

system results, but with a variance that increases as water levels in the aquifer increase (Proposal, City Exhibit 1, p. 4-3, and p. 4-6, Figure 16; Vol. IV, p. 1095, lines 9-14, p. 1096, lines 22-25). The conservative percentage losses Intervenors complain of are based on the retention that would occur if the aquifer were pumped down to allow 30 MGD in physical recharge, and was intentionally designed to avoid a penalty in the form of the higher leakage that occurs when the aquifer is kept full (i.e., to avoid the need to pull the aquifer down to lower levels to achieve a higher physical retention rate)(Vol. V, p. 1186, line 15, through p. 1187, line 11; p. 1205, line 19 through p. 1206, line 5).

123. It does not follow that the public interest would not be protected with lower levels, or that the index levels cannot be adjusted. If credits exist to be taken, that in and of itself would be an indication the City has caused the related quantities of water to be present (under the current permit, it would have to be water the City physically injected).

125. and 126. Again, the conclusion that the 1993 levels protect against impairment does not mean that lower levels would cause impairment. However, the evidence cited by Intervenors does further support the conclusion that if adjusted lower index levels are not approved, the AMCs, standing alone, will not cause impairment (Intervenors' proposed finding ¶¶ 125 and 126 and supporting references therein).

128. The testimony reflects Burns & McDonnell's concerns with the adequacy of the lower index levels would have been after the Phase II permitting (Vol. V, p. 1196, line 24 through p. 1197, line 4). Mr. Pajor indicated in his testimony that the City's concern with drought response planning issues and potential for stranded credits arose as a result of experience with the 2011-2012 drought (Vol. I, p. 173, line 3, through p. 175, line 4).

131. As the City noted in its own Proposed Findings and Conclusions, the fact that the

contingencies were added beyond projected needs suggests that actual withdrawals under the Proposal would be less than the withdrawals modeled by Balleau Groundwater (which assumed pumping to the limits of permit conditions). Part of the need for any contingency arises from recent changes like multi-year flex accounts that may influence how agricultural use occurs in future periods (Vol. IV, p. 866, line 20, through p. 867, line 12).

135. The first sentence is in error in that it refers to the City's modeling results when Mr. Romero was obviously discussing Balleau Groundwater's modeling results and report (Vol. IX, p. 2496, line 8-25). Instead of modeling the withdrawals projected as needed to meet demand on the City's Table 2-5, Balleau modeled the City pumping its full 40,000 AF rights for all eight years of the modeled period (Vol. IX, p. 2496, lines 13-16). Their simulation was not designed to show impacts of the projected City drought response, but to evaluate the impacts of pumping all the way to the proposed new lower index levels (District Exhibit 68, p. 4 of 16, lines 98-100 and 106-107).

136. The characterization of credits reachable due to the proposed adjusted limits as a "new appropriation" is Mr. Romero's lay opinion (Vol. IX, p. 2577, lines 1-12). The credits can only be drawn if they exist, and in such an event, they have either been physically injected (true for all credits under the current permit conditions) or created under the AMC accounting method (if approved) by direct use of water that could not be injected due to lack of space in the aquifer.

137. Recharge credits are not subject to safe yield analysis, and if AMCs are allowed as recharge credits, they will not be subject to safe yield analysis (Vol. VI, p. 1500, lines 8-12; p. 1510, lines 19-25). An AMC cannot have any greater impact on safe yield than a physical recharge credit generated by withdrawing water and then replacing that water (Vol. VII, p.

1875, line 7 through p. 1876, line 1).

141. Mr. Boese failed to identify what he would propose in place of "such a large contingency."

143. This is an additional indication that the City's actual use of water under the Proposal (if approved) will not be as modeled in Balleau Groundwater's worst-case scenario (Intervenors' proposed finding ¶ 143 and references cited therein).

147. Intervenors provide no authority for the premise that KDHE approval is required for the Proposal (Intervenors' proposed finding ¶ 147).

148. The referenced testimony does not support the assertion. One witness testified he did not personally do research on whether the Proposal would be "good for the aquifer" or on water quality or minimum desirable streamflow, and the other testified that he did not personally do modeling on water quality (Vol. III, pp 595, line 24 to 596 line 11; Vol. IV, P. 1109, lines 5-12).

149. through 163. As covered in the City's Proposed Findings and Conclusions, the Intervenors with chloride issues appear to have them already, and they have failed to show how AMCs can possibly pose any chloride impact compared to the existing physical credits, and have also generally failed to consider that the impact of reducing the lower index levels would likely be a lesser concern for chloride migration than lowering water levels to facilitate physical recharge for a long period of years.

164. Intervenors have failed to identify which (if any) of them claim water rights in the two rivers referred to (Intervenors' proposed finding ¶ 164).

169. This 2011-2012 impact on minimum desirable streamflow coincided with a spike in consumption by irrigators (Vol. I. p. 147, lines 7-11).

170. to 177. All of this comes down to trying to elevate an infrequent potential impact in protracted drought conditions over the favorable impact in usual and normal conditions, where the higher aquifer levels will benefit minimum desirable streamflow, and DWR clearly did consider the issue and took a contrary approach (Vol. VII, p. 1675, line 20 through p. 1676, line 2).

182. What is not contained in this paragraph is any claim that any of the letters seeking well spacing waivers were addressed to, or relied upon, by any of the Intervenors. This is because they were not (District Exhibit 57). The people who received the letters and consented to the waivers, rather than the Intervenors or the District, would be the ones to raise an issue if they thought there was one.

184. The District is not the authority that grants spacing waivers, as that is within the purview of the chief engineer (Vol. VII, p. 1840, line 15, through p. 1842, line 2). The proposed permit conditions would protect domestic well owners, including the well owners who signed spacing waivers, from issues with quality or quantity of water, such that DWR believes any vestigial requirement for waivers (if such exists) should be approved (Vol. VII, p.1842, line 3, through p. 1843, line 4).

190. Of these 35 wells, Intervenors' fail to mention that 29 of them would be impacted by the City's use of its 40,000 acre feet of native rights, without any pumping of credits (District Exhibit 68, p. 12 of 16, lines 351-353). The remaining six wells identified by Balleau Groundwater as potentially impacted would only be impacted if the City pumped credits to reach the proposed new lower index levels (District Exhibit 68, p. 12 of 16, lines 353-354). All six are domestic wells (Exhibit 68, Figure 7). It appears that five of the six (all except the well in index cell 20) are within 660 feet of City wells (Exhibit 68, Figure 7), and so would be protected by

proposed permit conditions. Intervenors do not assert that any of the six wells are owned by Intervenors (Intervenors' proposed finding ¶ 190).

191. The impacts are not impacts of the City's "proposed withdrawals," but of Balleau Groundwater's substantially greater modeled withdrawals (Vol. IX, p. 2496, lines 13-16). Also, Mr. Romero testified that *some* wells projected to lose their water columns in Balleau's modeling were more than 660 feet from City wells (Vol. X, p. 2545, lines 17-20). It appears this is true of only one of the six domestic wells that might be impacted by the Proposal (District Exhibit 68, Figure 7). Intervenors do not indicate whether that well or any of the six are wells owned by Intervenors (Intervenors' proposed finding ¶ 191).

193. It is unclear what regulations are included in the reference to "some regulations," but the actual testimony, referring to familiarity with "similar types of regulations" suggests these are not Kansas regulations (Vol. X, p. 2610, lines 16-21).

194. This opinion amounts to an opinion that the six domestic wells may be impaired by actually pumping all the way down to the proposed lower index levels "if impairment is defined in the sense of wells losing their water columns" (Intervenors' proposed finding ¶ 194 and references cited therein). K.S.A. 82a-711(c) and K.A.R. 5-4-1 reflect that "impairment" is not so defined.

195. and 196. These assertions are contradicted by numerous permissible changes testified to by Tim Boese, as detailed in the City's Proposed Findings and Conclusions, and in Intervenors' own proposed finding paragraph 203.

197. through 203. The City is not asking for an increased appropriation or increase in consumptive use, and the remainder of the assertions in these paragraphs have been adequately addressed in the prior submissions of the City and DWR.

206. The cited testimony relates to Mr. Basore and his individual water sources.

207. Mr. Holle individually may have had an application denied. Foundation for any assertion that applicants in the well field have generally been denied due to safe yield since 1980 is lacking (Intervenors' proposed finding ¶ 207 and references cited therein).

208. to 214. Largely redundant and already addressed.

215. The assertion is mistaken, as the rate of accrual of all recharge credits could not exceed the constructed physical diversion capacity of the ASR system including direct surface water diversions and future bank storage wells, and will be limited to the rate and quantity authorized by Water Right No. 46627 (Proposal, City Exhibit 1, p. 3-6, Section 3.4, proposed condition 2). AMCs only allow the City to obtain the same credits it could obtain under its existing permits, but without pumping a hole in the aquifer to create capacity for physical recharge (Vol. V, p. 1288, line 12 through p. 1289, line 2).

216. This abstract complaint as to storage under the land of others would exist with recharge credits under the current permits, as AMCs only allow the City to obtain the same credits it could obtain under its existing permits, but without pumping a hole in the aquifer to create capacity for physical recharge (Vol. V, p. 1288, line 12 through p. 1289, line 2).

217. through 220. As covered in the City's Proposed Findings and Conclusions, testifying Intervenors are facing existing quality issues, which will not be impacted by AMCs, and the potential impact of infrequently recovering credits below the 1993 index levels is likely to be less than the impact of maintaining the aquifer at 1998 levels for a period of years to facilitate physical recharge. In Intervenors' proposed finding paragraph 220, they note Mr. Basore testified he does not understand the potential impacts of the Proposal (Vol. XII, p. 3273, lines 6-9).

221. The Balleau Groundwater modeling results reflect that six (6) domestic wells may be impacted by pumping all the way to the proposed lower limits (District Exhibit 68, p. 12 of 16, lines 353-354, and Figure 7). The Balleau Groundwater report did not speak to whether any of these wells fully penetrate the aquifer, or whether any of them are owned by Intervenors (District Exhibit 68). Data developed on saturated thickness suggests it would be possible to extend wells that may be impacted (Vol. IV, pp. 1000-1002).

231. In the cited testimony, Mr. Basore testified to his opinion that the hypothetical reduction of water supply suggested by Intervenors' counsel would impact everyone in the area, but he did not testify that the hypothetical harms would occur (Vol. XII, p. 3315, line 24, through p. 3317, line 16). Additionally, Intervenors have no standing to raise hypothetical harms to the interests of others.

232. In the actual testimony referred to, Mr. Romero "anticipated" recovery would take tens of years, but admitted that he hadn't modeled it and didn't quantify it, so he did not know. It was simply a guess, unsupported by modeling or actual knowledge (Vol. X, 2643, lines 14-20).

234. Yes. The City's Proposed Findings and Conclusions make this same point, that the City's modeling is based on the pumping actually projected in the City's Proposal, as opposed to simply pumping all quantities that could be pumped under the modified permit conditions (Intervenors' proposed finding ¶ 234). For this very reason, the City's modeling results are more probative of likely impacts than the Balleau Groundwater modeling.

238. To complete and repair the statement made in the paragaph, the City's MODSIM modeling was not reviewed *by Mr. Romero*. (The reference to the Record is also incorrect, and should be Vol. X, p. 2638, line 12).

239. The language Intervenors cite from the USGS report is ambiguous, and likely

signifies that the model cannot be used to simulate the drawdown attributable to the operation of a single well. This is supported by the testimony of Mr. Romero, who essentially ran the model just as Burns and McDonnell did, but with the addition of information on the depth of individual wells in each grid square (Vol. X, p. 2583, line 3, through p. 2585, line 25). Intervenors acknowledge in their next paragraph that the model limitations do not prevent evaluating pumping wells in the 400 x 400 foot cells (Intervenors' proposed finding ¶ 240).

242. through 246. Mr. Austin did not identify any other model that would be better for assessing potential for impairment (Vol. XII, p. 3149, lines 4-12). Although he later suggested use of "a more specific model," he did not indicate whether such existed or what model it might be, other than it was "not necessarily MODFLOW" (Vol. X, p. 3195, lines 6-11). All of his observations on seasonal irrigation and cones of depression during agricultural pumping were uninformed by modeling, because he did not do any modeling (Vol. X, p. 3106, lines 11-19).

247. through 251. Use of the 1998 levels is related to comparison of plant capacity and historical water levels by which the City determined water levels would have to be reduced to 1998 levels to accommodate 30 MGD of recharge (Proposal, City Exhibit 1, p. 2-11, Section 2.4.2; Vol. I, p. 159, lines 14-20). Because the City could not assume AMCs would be approved, the Burns and McDonnell simulation assumed existing permit conditions, and so used water levels reduced to 1998 levels to allow accumulation of credits by physical recharge (Proposal, p. 2-11, Section 2.4.2). The Balleau Groundwater modeling also assumed 1998 water levels as starting levels (Vol. IX, p. 2497, line 22 through p. 2498, line 4). If the modeling were redone starting with the aquifer 100% full (i.e., if we were to assume AMCs were approved), the existing minimum index levels would not be affected as soon (Vol. IV, p. 944, lines 2-16).

252. To the extent Intervenors complain of the City modeling not showing impacts on

individual wells, this was subsequently addressed by the Balleau Groundwater modeling, in a modeled scenario where all possible City pumping occurred (District Exhibit 68).

253. and 254. Intervenors do not explain how the City would ever possibly assess the practical saturated thickness of every individual well in the aquifer, as well as that of every potential alternative site to which each well might be relocated. If applicants were required to produce this level of information to show that a proposed use would not impair other users, no permits would ever be approved.

255. To the extent Intervenors had this concern, it has been addressed by the Balleau Groundwater modeling (District Exhibit 68).

256. The City cannot give a blanket commitment to "maintain the aquifer full" because it does not control the conduct of other rights holders, such as the irrigators who increased their usage in the drought of 2011-2012 (Vol. I. p. 147, lines 7-11).

257. Under the proposed permit conditions, the City would be obligated to use source water for physical recharge rather than AMCs if the capacity for physical recharge is present (Proposal, City Exhibit 1, p. 3-6, Section 3.4, proposed condition 1). The City would not have a reason to randomly pump a hole in the aquifer, and if it did, it would then have to devote available source water to physical recharge.

258. Collaborative discussions concerning the preparation of the Proposal consumed many months, and the Proposal itself has been stalled in protracted litigation for several years, may continue to be so for many more years, and may perhaps never be approved. Accordingly, the only way for the City to be sure it is on the way to positioning ASR for production of credits is to deplete the aquifer to 1998 levels. There is no other way to obtain credits under existing permit conditions (Vol. 1, p. 158, line 23 through P. 159, line 7).

259. So long as there is not capacity for physical recharge, there is nothing conceptually wrong with the City using source water to generate AMCs while simultaneously continuing to use some portion of its native rights in the aquifer. There is no rational basis for an expectation that the City would give up all use of its native rights in the aquifer as a condition of accruing AMCs. If there is physical capacity for recharge, the City will use available source water for recharge (Proposal, City Exhibit 1, p. 3-6, Section 3.4, proposed condition 1).

260. The City can draw the aquifer down below 1993 levels now, using its native rights, because the 1993 index levels only limit the recovery of recharge credits (Vol. III, p. 539, lines 13-15).

261. The regulation has a facial exception for deviations from population trends (Vol. V, p. 1365, lines 4-6) and only applies to new applications (Vol. V, p. 1365, lines 12-25) and some municipalities have projected out further than 20 years (Vol. V, p. 1366, lines 7-11).

262. There is an annual restriction of 19,000 AF (Vol. VII, p. 1667, lines 19-24). The Balleau Groundwater modeling confirms the probability of stranded credits (Vol. IX, p. 2504, lines 6-14).

263. The 1% exceedance probability suggests the event will be infrequent. The 120,000 AF cap on accumulation of credits is a feature that does not exist in the original permits (Vol. 1, p. 158, lines 18-22).

Intervenors' Proposed Conclusions

The City incorporates the analysis from its Proposed Findings and Conclusions and DWR's post-hearing brief as opposition to all contrary conclusions proposed by Intervenors, not all of which can be addressed, due to page limit considerations. Additionally (again by reference paragraph):

2. The KWAA does not appear to speak to the method of accumulating credits.

3. AMCs meet this definition.

15. This misstates the Proposal because the City does not seek, and does not support, credits for the mere non-use of water.

18. *Garetson Brothers v. American Warrior, Inc.*, 56 Kan.App.2d 623, 648-649 (2019) interpreted "impairment" for purposes of K.S.A. 82a-717a injunctive actions against actual, present impairment. Although it did not adopt and apply K.S.A. 82a-711(c) as supplying the relevant definition of "impairment" for injunctive actions, it also did not install its alternative definition in K.S.A. 82a-711(c) for purposes of determining whether a proposed use impairs existing rights. By the terms of K.S.A. 82a-711(a), K.S.A. 82a-711 is still the statute that applies to evaluation of proposed uses, and K.S.A. 82a-711(c) continues to provide the relevant definition of "impairment" when evaluating proposed uses.

19. Assuming Intervenors mean to reference K.S.A. 82a-717a(b)(1), they have not made any attempt to follow the applicable procedure to seek relief under such section.

20. through 23. Further, as to AMCs, Intervenors' own proposed findings (paragraphs 125 and 126) reflect Intervenors' understanding that if the lower index limits are not revised, the 1993 index levels will prevent any impairment by recovery of recharge credits.

24. and 25. Further, as to modification of the lower index levels, the Balleau Groundwater modeling, premised on use considerably beyond that actually projected by the City, shows potential impact on only six (6) domestic wells, none of which have been shown to fully penetrate the aquifer as contemplated by K.A.R. 5-4-1, and none of which have been shown to be wells owned by Intervenors.

27. The Intervenors' own proposed findings cite the hydrological link between the Little

Arkansas River and the Equus Beds Aquifer (Intervenors' proposed finding ¶ 164), and the AMCs represent the water left in storage in the aquifer as a result of the use of source water from the river, which is the same water that would be injected for physical recharge credits if there were space in the aquifer to do that.

28. AMCs have the same impact on the aquifer as if water was withdrawn and replaced with river water for a physical recharge credit. If the effect of physical recharge credits is neutral (which Intervenors acknowledge) the impact of AMCs must also be neutral.

31. through 34. Any potential adverse impact on minimum desirable streamflow will be infrequent, and DWR did in fact consider the issue, concluding that in most periods, the Proposal will have a favorable impact on streamflow by keeping water levels in the aquifer high.

34. through 40. It is impossible for AMCs to adversely affect safe yield, as they are simply a mechanism for the City to accrue the same credits it could accrue under existing permits, but without pumping a hole in the aquifer to create capacity for recharge.

41. through 45. AMCs cannot cause any deterioration in water quality. Water quality issues associated with revised lower index levels will be infrequent, and likely of lesser magnitude than the water quality issues that would result from maintaining the aquifer at 1998 levels for a long period of years. The Intervenors who testified about water quality concerns appear to have such issues with or without the permit revisions. The revisions will not apply to ASR Phase I facilities, as to which, the City will continue to recover only physical recharge credits, with water levels above the 1993 index levels.

46. through 48. The City has amply demonstrated that the proposed revisions are in the public interest.

49. through 58. As to the place of use argument, the City is allowed under current

permit conditions to inject water for physical recharge below the 1993 index levels, which only impact recovery of credits. Accordingly, revising the lower index levels is not expanding the area available for storage and cannot possibly be a change in the place of use. The remainder of the arguments in these paragraphs have been refuted in DWR's post-hearing brief.

59. through 71. Intervenors' arguments in these paragraphs miscomprehend the *Clawson* case, as demonstrated in the City's Proposed Findings and Conclusions, and have also been refuted in DWR's post-hearing brief.

72. and 73. Given that storage is expressly contemplated in regulations Intervenors themselves have cited repeatedly, the contention that storage is not a permitted beneficial use is untenable. Storage and drought supply are both legitimate municipal uses.

74. The City is not asking for a guaranteed supply of water during a 1% drought. The City is asking for more leeway to recover credits it has taken steps to create, rather than losing access to those credits when it most needs them.

75. Storing water in time of surplus in order to use it in a time of need is a commonsense activity and is part of the public benefit that ASR was always intended to further. This is why the existing permits provide for physical recharge credits, and why they should provide for AMCs as well.

76. The 120,000 AF cap is not an "appropriation," but a cap on credits the City would be allowed to accrue by causing water to be stored in the aquifer through physical recharge and AMCs. The City only obtains credits by taking the steps necessary to generate them. There is no cap on physical recharge credits under the existing permits.

77. The characterization of the City's needs as "speculative" has been refuted in DWR's post-hearing brief. Balleau Groundwater's modeling also confirms the validity of the concern

with stranded credits.

78. through 81. The regulation cited in Intervenors' paragraph 78 is applicable to new permit applications. The likely intent of the regulation is to make sure that if multiple operators of ASR facilities are active in the same recharge basin, there is a consistent method to allocate credits between them. The existing Phase I and Phase II permits each allow for subsequent changes in accounting method, and the changes proposed by the City essentially expand the accounting method to provide for AMCs. Physical recharge will continue to be accounted for as it has been, and as that is the only recharge contemplated for Phase I facilities, there is no possible conflict between the accounting procedures for Phases I and II, and so, no practical need to revise the Phase I permits to add the procedures for AMCs. The accounting procedures for AMCs are soundly based on experience with physical recharge credits, and the modeling by Burns and McDonnell shows that the results of the AMC procedures would closely track the results of the existing methodology for physical recharge credits. Intervenors' complaints as to the accounting procedures for AMCs have been addressed in greater detail in DWR's post-hearing brief.

82. through 111. DWR's post-hearing brief addressed these various "taking" claims to a considerable degree. Intervenors' understanding of the character of water rights, and particularly, rights in an over-appropriated aquifer cannot be correct. If they were, the very fact that the aquifer is over-appropriated would signify that the state has engaged in unconstitutional takings, some of them perhaps benefitting the Intervenors. Under Intervenors' view that over-appropriation forecloses later rights, the statute allowing new domestic wells in the aquifer would be an unconstitutional taking. Further (as Joe Pajor pointed out in his testimony) the argument would leave no room for physical recharge credits, given that every gallon in the

aquifer is "spoken for" by someone under existing appropriations. One Intervenor actually testified that because of this, rights holders with appropriations permitted before ASR should be able to use physical recharge credits before the City can (Vol. XIII, p. 3440, lines 2-9).

The Proposal is not seeking to modify any of the permits held by Intervenors. Not a word or a letter will change in any of those permits as a result of the City's Proposal. Although Intervenors worry about imagined harms, it is impossible for AMCs to cause any harm, because the AMCs are simply a mechanism for the City to do what it already could do under its existing permits by depleting the aquifer to 1998 levels and maintaining it at those levels to accrue physical recharge credits. The whole point of the AMCs is to provide a path for the City to achieve the same credits without having to reduce the aquifer to 1998 levels. It is a mechanism to prevent adverse impacts, not to cause them. Intervenors' own proposed findings recognize that if the 1993 index levels are not adjusted, recovery of recharge credits will not cause any impairments (Intervenors' proposed finding ¶¶ 125 and 126). It is a conclusion already reached when Phase I was approved, and a conclusion which Intervenors' proposed findings acknowledge, and it is not (and cannot be) any different for AMCs than for physical credits.

Further, in the event that both the AMCs and the adjusted lower index levels are approved, the Balleau Groundwater modeling, based on pumping every gallon that could be pumped, for eight years, shows that the impact would be a potential supply issue for six domestic wells, and additional drawdown amounting to 1-2 feet in the shallow part of the aquifer and 5 feet in the deeper portion. Intervenors' imagined parade of horribles simply is not real.

Intervenors imagine they will lose something because the aquifer is fully appropriated (Intervenors' proposed conclusion ¶¶ 88 and 96). They imagine they will be losing some "contract" right they imagine they have in the Phase I and Phase II MOUs between the City and

the District (Intervenors' proposed conclusion ¶ 89). They assume they are losing some imagined "right to exclude" (Intervenors' proposed conclusion ¶¶ 90 and 94). They imagine they are somehow losing the ability to make any beneficial use of their property (Intervenors' proposed conclusion ¶¶ 92 and 93). Although the City can inject source water below the 1993 levels under its existing permits, Intervenors imagine that adjusting the lower index levels is somehow increasing the City's ability to do this on an expanded basis, allegedly violating the property rights of the owners above (Intervenors' proposed conclusion ¶ 97). Despite paragraphs in their own proposed findings that require a contrary conclusion, Intervenors imagine that AMCs will somehow or another deprive them of the right to withdraw water under their permits (Intervenors' proposed conclusion ¶ 98). Intervenors assume (without any supporting evidence) that there will be extensive damages from the imagined loss of access to quality water (Intervenors' proposed conclusion ¶ 103).

However, none of those things are real (and notably, Intervenors have filed no inverse condemnation action against the state to assert their "taking" claims). On the facts of the actual record developed over the course of the hearing process, there is not a basis in fact or in law for the contentions Intervenors maintain. Their own exhibits and experts have shown that even if both facets of the Proposal are approved, and if the City then for some reason reduces the aquifer to 1998 levels (the starting levels modeled by Balleau Groundwater) anyway, and accumulates the maximum possible credits, and then pumps every possible gallon under the revised permits, that pumping could cause a few hundred feet of additional chloride migration, and might require the extension of six domestic wells, five of which are within 660 feet of City wells and would be protected by proposed permit conditions.

The "economic injuries and hardships" assumed by Intervenors in support of their

"takings" arguments (Intervenors' proposed conclusion ¶ 111) are not supported by the record. The imagined deprivations of life, liberty or property (Intervenors' proposed conclusion ¶112) are not happening. The scenario the Intervenors claim still needs to be modeled, "where the City pumps the full quantity of water allowed by the AMCs" (Intervenors' proposed conclusion ¶ 113) cannot possibly happen under the Proposal, and Intervenors' own modeling expert *showed them that* in his report concluding that, even with the revised lower limits, the City could only access an aggregate of 94,400 AF of credits if it pumped every possible gallon allowed under the modified permits (Intervenors' proposed finding, ¶ 170). It is not reasonable to demand that the City, in support of its Proposal, must fund a pointless modeling study of a scenario already shown by modeling experts not to be possible under the Proposal. The demand reflects the degree to which Intervenors' positions are not based on the evidence, and suggests that no possible quantum of evidence can be produced to allay their objections to the Proposal.

115. With respect to Intervenors' complaint that other users of the aquifer should be able to accrue credits, there is no indication DWR would not accommodate any such users who are similarly situated to the City, with similar rights to draw source water from the Little Arkansas River to recharge the aquifer, and similar treatment and injection facilities and permits that would enable them to inject the water if there were space in the aquifer to do so. Absent DWR taking an inconsistent position, to oppose a proposal by such a party for AMCs, there is no due process or equal treatment issue for analysis.

116. The City has a burden of proof in this case, which is, as Intervenors recognize, to establish requisite facts by a preponderance of the evidence. When the evidence of record is fairly and objectively considered, the City has met its burden. Many of Intervenors' criticisms have been focused on typographical errors in the proposal and on issues they considered not

sufficiently addressed within the Proposal itself. However, over the course of the hearing, typographical errors were identified and corrected in witness testimony, chloride migration studies were introduced, several witnesses addressed water quality issues, Mr. Lane Letourneau addressed the basis of DWR's staff analysis, and Mr. Dave Romero provided modeling work by Balleau Groundwater to assess potential impacts on individual wells and minimum desirable streamflow.

On the whole of the record, the Proposal and its supporting modeling, supplemented by the testimony of witnesses and the documents and additional modeling placed of record, establish that the Proposal should be approved. Both facets of the Proposal meet the requirements for ASR projects set forth in K.A.R. 5-12-1, et seq., and K.S.A. 82a708b, including that the proposed changes are reasonable, promote the public interest, relate to the same source of water supply and will not cause impairment to existing rights.

117. Intervenors incorrectly state that the Proposal encompasses no obligation to recharge the aquifer. The Proposal provides that the City would use available source water to conduct physical recharge when it is possible to do so (Proposal, City Exhibit 1, p. 3-6, Section 3.4, proposed condition 1).

118. There is no evidence to support Intervenors' assertion that other rights users are bearing burdens and costs of repurposing ASR as a drought mitigation tool. This proposed conclusion also fails to appreciate significant cost considerations of the City. City ratepayers bore substantial construction costs for the ASR facilities, and have borne and continue to bear annual maintenance costs as well. For this reason, the City needs to be able to use ASR to provide something of value to the City and its residents. It would not make financial sense to maintain ASR on standby, waiting to top up the aquifer in small quantities as local irrigators

deplete it, with no attendant benefit to the City. Accordingly, to the extent ASR can be repurposed as a mechanism to generate credits for drought mitigation purposes, there is a compelling case for the City to pursue that, notwithstanding that it theoretically could select other options that would leave ASR facilities standing idle.

119. City management of water resources must be adaptable to changing circumstances. ASR has done what it can do in terms of establishing a barrier to slow chloride migration. Integrated water supply analysis has shown that ASR is not needed as a source to meet regular demand, but could have value as a drought mitigation mechanism. The 2011-2012 drought, and irrigators' depletion of the aquifer in that drought, highlighted problems with the potential stranding of credits due to the existing lower index levels. High water levels in the aquifer have limited the potential for physical recharge, yet, prior to reversing its demand allocation to draw down the aquifer, the City suggested the alternatives in the Proposal. Because the Proposal is mired in litigation and its future remains uncertain, and because the need for drought planning and mitigation remains a current concern, the City has been left with the course of action by which it can generate credits under existing permit conditions.

120. This paragraph is simply a reiteration of the Intervenors' various arguments that have not been supported by the evidence at hearing. They have been adequately dealt with in the City's Proposed Findings and Conclusions, DWR's post-hearing brief, and this response.

The City's Proposal should be approved.

Respectfully submitted,

Office of the City Attorney
of the City of Wichita, Kansas

By /s/ Brian K. McLeod
Brian K. McLeod, SC # 14026

CERTIFICATE OF FILING AND SERVICE

The undersigned hereby certifies that he transmitted the above and foregoing City's Response to Intervenors' Proposed Findings and Conclusions by electronic mail on this 4th day of October, 2021, for filing, to ConnieOwen@everestkc.net and served the same upon counsel for the other parties herein by electronic mail addressed to:

Thomas A. Adrian
David J. Stucky
tom@aplawpa.com
stucky.dave@gmail.com
313 Spruce
Halstead, Kansas 67056
And
Leland Rolfs
Leland.rolfs@sbcglobal.net
Attorneys for
Equus Beds Groundwater Management District No. 2

Stephanie Murray
Division of Water Resources
Kansas Department of Agriculture
1320 Research Park Drive
Manhattan, Kansas 66502
Stephanie.Murray@ks.gov

and

Tessa M. Wendling
1010 Chestnut Street
Halstead, Kansas 67056
twendling@mac.com

/s/ Brian K. McLeod_____
Brian K. McLeod