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 OF WICHITA'S RESPONSE TO EQUUS BEDS GROUNDWATER MANAGEMENT DISTRICT NO. 2'S MOTION IN LIMINE TO EXCLUDE EXPERT TESTIMONY OF THE CITY

The City of Wichita, Kansas (the "City") submits the following as a written response to the recent Motion in Limine to Exclude Expert Testimony of the City, submitted by Equus Beds Groundwater Management District No. 2 ("GMD2") herein:

- On March 18, 2018, the City submitted its proposal herein, which covered a wide array of matters based on the technical work of City staff and outside engineering consultants.
- 2. In the City's Response to Interrogatory No. 7 of GMD2's First Interrogatories, the City provided further, extensive information on the matters in the proposal (and some other referenced documents) which would be covered by particular listed experts, as follows:
 - 7. Please identify all experts you have hired or consulted with regarding the Subject Matter of this administrative hearing or the AMC Proposal, and:
 - a. Identify all documents that have been provided to all such experts;
 - b. Identify all documents that have been provided to you by such experts;
 - c. State the subject matter in which each expert was consulted and the substance of their expected testimony at hearing.

RESPONSE:

Counsel objects to the Interrogatory as overly broad, unduly burdensome, and designed to invade work product.

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

Subject to and without waiving the foregoing objection, the City further responds as follows:

Preliminary Expert Disclosures were provided consistent with the schedule set in the Prehearing Order. The City offers the following additional information relating to listed experts, some of whom may also testify as fact witnesses (To the extent documents in the production response are referred to, this data is additionally responsive to the District's Production Requests 8 and 9):

Alan King; Director, City of Wichita Public Works & Utilities

- a) Alan King's factual observations and opinions are presented in the ASR Permit Modification Proposal and cover letter. Specific contributions are as indicated in the table <u>Summary of Expert Witness</u> Contributions.
- b) Consulted for: Municipal Utility Management, and also City Council directions and policy development with regard to water utility infrastructure, water conservation, and drought response
- c) The grounds for Alan Kings's opinions are knowledge of pertinent information presented in the subdirectories <u>Proposal</u>, <u>Proposal</u> Communication, and Meetings.
- d) Documents
- i. Documents prepared by or under the supervision of Alan King are provided in the subdirectories <u>Proposal</u> and <u>Proposal Communications</u>.
- ii. Alan King was provided, relied upon, or reviewed documents included in the subdirectories <u>Proposal</u>, <u>Proposal Communications</u> and <u>Reports</u>.
- e) Additional documents provided by Alan King include correspondence found in the subdirectory <u>Electronic Communications</u>.
- f) Alan King is a City of Wichita employee; his compensation is publicly available.
- g) Alan King's qualifications are as presented in the City of Wichita's Preliminary Expert Disclosure.

Joseph Pajor, Deputy Director, City of Wichita Public Works and Utilities

- a) Joseph Pajor's factual observations and opinions are presented in the ASR Permit Modification Proposal, cover letter, and supporting appendices presented in the subdirectory <u>Proposal</u>. Specific contributions are as indicated in the table Summary of Expert Witness Contributions
- b) Consulted for: Wichita's historical interactions with Groundwater Management District No. 2, the history of the City's water resources and the purposes of the changes contemplated by the City's current ASR proposal
- c) The grounds for Joseph Pajor's opinions are knowledge of pertinent information presented in the subdirectories <u>Proposal</u>, <u>Proposal</u>, <u>Communication</u>, <u>Meetings</u>, and <u>Reports</u>.
- d) Documents
- i. Documents prepared by or under the supervision of Joseph Pajor are provided in the subdirectories <u>Proposal</u> and <u>Proposal Communications</u>.
- ii. Joseph Pajor was provided, relied upon, or reviewed documents included in the subdirectories <u>Proposal Communications</u> and <u>Reports</u>.

- e) Additional documents provided by Joseph Pajor include correspondence found in the subdirectory <u>Electronic Communications</u>.
- f) Joseph Pajor is a City of Wichita employee; his compensation is publicly available.
- g) Joseph Pajor's qualifications are as presented in the City of Wichita's Preliminary Expert Disclosure.

<u>Don Henry, Assistant Director, City of Wichita Public Works and</u> Utilities,

- a) Don Henry's factual observations and opinions are presented in the ASR Permit Modification Proposal, cover letter, and supporting appendices presented in the subdirectory <u>Proposal</u>. Specific contributions are as indicated in the table Summary of Expert Witness Contributions
- b) Consulted for: Municipal Water Utility Management and planning, including the history of the City's water resources, history and trends in the aquifer, 1993 water levels and the purposes of the changes contemplated by the City's current ASR proposal
- c) The grounds for Don Henry's opinions are knowledge of pertinent information presented in the subdirectories <u>Proposal</u>, <u>Proposal</u> Communication, Meetings, and Reports.
- d) Documents
- i. Documents prepared by or under the supervision of Don Henry are provided in the subdirectories <u>Proposal</u> and <u>Proposal</u> Communications.
- ii. Don Henry was provided, relied upon, or reviewed documents included in the subdirectories <u>Proposal Communications</u> and <u>Reports</u>.
 - e) Additional documents provided by Don Henry include correspondence found in the subdirectory Electronic Communications.
- f) Don Henry is a City of Wichita employee; his compensation is publicly available.
- g) Don Henry's qualifications are as presented in the City of Wichita's Preliminary Expert Disclosure.

Scott Macey, Water Resources Engineer, City of Wichita Public Works & Utilities

- a) Scott Macey's factual observations and opinions are presented in the ASR Permit Modification Proposal, cover letter, and supporting appendices presented in the subdirectory <u>Proposal</u>. Specific contributions are as indicated in the table Summary of Expert Witness Contributions
- b) Consulted for: current and historical water use trends, current City treatment processes and infrastructure planning, and technical tools and models used for water resource decision making

- c) The grounds for Scott Macey's opinions are knowledge of pertinent information presented in the subdirectories <u>Proposal</u>, <u>Proposal</u>, <u>Proposal</u>, <u>Communication</u>, <u>Meetings</u>, <u>Reports</u>, and <u>Water Rights</u>.
- d) Documents
- i. Documents prepared by or under the supervision of Scott Macey are provided in the subdirectories Proposal and Proposal Communications.
- ii. Scott Macey was provided, relied upon, or reviewed documents included in the subdirectories <u>Proposal Communications</u>, <u>Reports</u>, and <u>Model</u>.
- e) Additional documents provided by Scott Macey include correspondence found in the subdirectory <u>Electronic Communications</u>.
- f) Scott Macey is a City of Wichita employee; his compensation is publicly available.
- g) Scott Macey's qualifications are as presented in the City of Wichita's Preliminary Expert Disclosure.

Brian Meier, Burns & McDonnell

- a) Brian Meier's factual observations and opinions are presented in the ASR Permit Modification Proposal, cover letter, and supporting appendices presented in the subdirectory <u>Proposal</u>. Specific contributions are as indicated in the table <u>Summary of Expert Witness Contributions</u>
- b) Consulted for: Wichita's ASR project history, including its missions, goals, and methods, and the interagency coordination as the City's water utility employed a dynamic plan for its water resources
- c) The grounds for Brian Meier's opinions are knowledge of pertinent information presented in the subdirectories <u>Proposal</u>, <u>Proposal</u> <u>Communication</u>, <u>Meetings</u>, <u>Reports</u>, and <u>Water Rights</u>.
- d) Documents
- i. Documents prepared by or under the supervision of Brian Meier are provided in the subdirectories <u>Proposal</u> and <u>Proposal Communications</u>.
- ii. Brian Meier was provided, relied upon, or reviewed documents included in the subdirectories <u>Proposal Communications</u>, <u>Reports</u>, and <u>Model</u>.
- e) Additional documents provided by Brian Meier include correspondence found in the subdirectory <u>Electronic Communications</u>.
- f) Brian Meier is a Burns & McDonnell employee; the Contracts provided in the City's Production of Documents disclose a Fee Schedule for each class of employee.
- g) Brian Meier's qualifications are as presented in the City of Wichita's Preliminary Expert Disclosure.

Don Koci, Burns & McDonnell

- a) Don Koci's factual observations and opinions are presented in the ASR Permit Modification Proposal, cover letter, and supporting appendices presented in the subdirectory <u>Proposal</u>. Specific contributions are as indicated in the table Summary of Expert Witness Contributions
- b) Consulted for: Wichita's ASR project history, goals and mission, in addition to water rights and regulatory structures
- c) The grounds for Don Koci's opinions are knowledge of pertinent information presented in the subdirectories <u>Proposal</u>, <u>Proposal</u> <u>Communication</u>, <u>Meetings</u>, <u>Reports</u>, and <u>Water Rights</u>.
- d) Documents
- i. Documents prepared by or under the supervision of Don Koci are provided in the subdirectories <u>Proposal</u> and <u>Proposal Communications</u>.
- ii. Don Koci was provided, relied upon, or reviewed documents included in the subdirectories <u>Proposal Communications</u>, <u>Reports</u>, and <u>Model</u>.
- e) Additional documents provided by Don Koci include correspondence found in the subdirectory <u>Electronic Communications</u>.
- f) Don Koci is a Burns & McDonnell employee; the Contracts provided in the City's Production of Documents disclose a Fee Schedule for each class of employee.
- g) Don Koci's qualifications are as presented in the City of Wichita's Preliminary Expert Disclosure.

John Winchester, High Country Hydrology

- a) John Winchester's factual observations and opinions are presented in the ASR Permit Modification Proposal, cover letter, and supporting appendices presented in the subdirectory <u>Proposal</u>. Specific contributions are as indicated in the table <u>Summary of Expert Witness Contributions</u>
- b) Consulted for: municipal water resources planning, hydrological analyses, drought simulation, use of the 1% drought in the planning process, and technical tools and models
- c) The grounds for John Winchester's opinions are knowledge of pertinent information presented in the subdirectory <u>HCH</u>.
- d) Documents
- i. Documents prepared by or under the supervision of John Winchester are provided in the subdirectory <u>HCH</u>.
- ii. John Winchester was provided, relied upon, or reviewed documents included in the subdirectory <u>HCH</u>.
- e) Additional documents provided by John Winchester include correspondence found in the subdirectory <u>Electronic Communications</u>.

- f) John Winchester is a High Country Hydrology employee; the subdirectory <u>Contracts</u> provided in the City's Production of Documents discloses contractual agreements with R.W. Beck, Inc., and SAIC Energy, Environment & Infrastructure, LLC. Each company was directly engaged by the City of Wichita; these Contracts are also provided.
- g) John Winchester's qualifications are as presented in the City of Wichita's Preliminary Expert Disclosure.

Daniel Clement, Burns & McDonnell

- a) Daniel Clement's factual observations and opinions are presented in the ASR Permit Modification Proposal, cover letter, and supporting appendices presented in the subdirectory Proposal.
- b) Consulted for: Equus Beds aquifer water usage and sustainable yield, recharge mechanisms and accounting, water resource conditions, and technical tools and models
- c) The grounds for Daniel Clement's opinions are knowledge of pertinent information presented in the subdirectories <u>Proposal</u>, <u>Proposal</u>, <u>Proposal</u>, <u>Communication</u>, <u>Meetings</u>, <u>Reports</u>, <u>Model</u>, and <u>Water Rights</u>.
- d) Documents
- i. Documents prepared by or under the supervision of Daniel Clement are provided in the subdirectories <u>Proposal</u>, <u>Proposal Communications</u>, <u>and Model</u>.
- ii. Daniel Clement was provided, relied upon, or reviewed documents included in the subdirectories <u>Proposal Communications</u> and <u>Reports</u>.
 - e) Additional documents provided by Daniel Clement include correspondence found in the subdirectories <u>Proposal Communication</u> and Electronic Communications.
- f) Daniel Clement is a Burns & McDonnell employee; the Contracts provided in the City's Production of Documents disclose a Fee Schedule for each class of employee.
- g) Daniel Clement's qualifications are as presented in the City of Wichita's Preliminary Expert Disclosure.

Paul McCormick, Burns & McDonnell

- a) Paul McCormick's factual observations and opinions are presented in the ASR Permit Modification Proposal, cover letter, and supporting appendices presented in the subdirectory <u>Proposal</u>.
- b) Consulted for: aquifer water usage and sustainable yield, recharge mechanisms and accounting, water resource conditions, and technical tools and models

- c) The grounds for Paul McCormick's opinions are knowledge of pertinent information presented in the subdirectories <u>Proposal</u>, <u>Proposal</u>, <u>Communication</u>, <u>Meetings</u>, <u>Reports</u>, and <u>Model</u>.
- d) Documents
- i. Documents prepared by or under the supervision of Paul McCormick are provided in the subdirectories <u>Proposal</u>, <u>Proposal Communications</u>, <u>and Model</u>.
- ii. Paul McCormick was provided, relied upon, or reviewed documents included in the subdirectories <u>Proposal Communications</u> and <u>Reports</u>.
- e) Additional documents provided by Paul McCormick include correspondence found in the subdirectories <u>Proposal Communication</u> and Electronic Communications.
- f) Paul McCormick is a Burns & McDonnell employee; the Contracts provided in the City's Production of Documents disclose a Fee Schedule for each class of employee.
- g) Paul McCormick's qualifications are as presented in the City of Wichita's Preliminary Expert Disclosure.

Luca DeAngelis, Burns & McDonnell

- a) Luca DeAngelis's factual observations and opinions are presented in the ASR Permit Modification Proposal, cover letter, and supporting appendices presented in the subdirectory <u>Proposal</u>.
- b) Consulted for: historical and current aquifer conditions, such as chloride transport, and modeling simulation tools
- c) The grounds for Luca DeAngelis' opinions are knowledge of pertinent information presented in the subdirectories <u>Proposal</u>, <u>Reports</u>, and Model.
- d) Documents
- iii. Documents prepared by or under the supervision of Luca DeAngelis are provided in the subdirectory <u>Proposal</u>.
- iv. Luca DeAngelis was provided, relied upon, or reviewed documents included in the subdirectories <u>Proposal Communications</u> and <u>Reports</u>.
 - e) Additional documents provided by Luca DeAngelis include correspondence found in the subdirectory <u>Electronic Communications</u>.
 - f) Luca DeAngelis is a Burns & McDonnell employee; the Contracts provided in the City's Production of Documents disclose a Fee Schedule for each class of employee.
 - g) Luca DeAngelis's qualifications are as presented in the City of Wichita's Preliminary Expert Disclosure.

Nathan Dunahee, Burns & McDonnell

- a) Nathan Dunahee's factual observations and opinions are presented in the ASR Permit Modification Proposal, cover letter, and supporting appendices presented in the subdirectory Proposal.
- b) Consulted for: geochemical effects of natural and artificial aquifer groundwater recharge, and modeling simulation tools
- c) The grounds for Nathan Dunahee's opinions are knowledge of pertinent information presented in the subdirectories <u>Proposal</u>, <u>Reports</u>, and Model.
- d) Documents
- i. Documents prepared by or under the supervision of Nathan Dunahee are provided in the subdirectory <u>Proposal</u>.
- ii. Nathan Dunahee was provided, relied upon, or reviewed documents included in the subdirectories Proposal Communications and Reports.
- e) Additional documents provided by Nathan Dunahee include correspondence found in the subdirectory <u>Electronic Communications</u>.
- f) Nathan Dunahee is a Burns & McDonnell employee; the Contracts provided in the City's Production of Documents disclose a Fee Schedule for each class of employee.
- g) Nathan Dunahee's qualifications are as presented in the City of Wichita's Preliminary Expert Disclosure.
- 3. The interrogatory responses were accompanied by an Exhibit B Summary of Expert Witness Contributions (also copied and attached to this Response), which showed the expert witnesses' opinions that were embodied in the various identified sections of the proposal and exhibits.
- 4. The expert reports furnished by the City, and complained of in GMD2's Motion, were in addition to the disclosures referenced above.
- 5. In the July 23, 2018 Prehearing Conference Order in this matter (¶ 3), the Hearing Officer stated that rules of evidence would not be strictly adhered to in the formal phase of this hearing. No specific format or content requirement for "expert reports" was provided for in any of the prehearing orders.
- 6. The disclosures made by the City, taken together, were sufficient to enable GMD2 to determine the matters to which various, listed City witnesses would offer expert opinions, as well as documents upon which such witnesses would rely, and (within

the proposal itself) explanations of the manner in which conclusions set forth in the

proposal were arrived at.

7. GMD2's objections to the reports elevate form over substance in a manner that is

unwarranted by, and contrary to the intent of, the prehearing orders.

8. If GMD2 wished to "voir dire" any of the City's listed experts, GMD2 could

certainly have done so by taking the depositions of any or all of them, but chose not

to do so. The proposal to require "voir dire" of City witnesses at the hearing is

another obvious mechanism to protract and delay the proceedings, which have been

scheduled for a two-day timeframe.

9. Just as GMD2 notes that the Hearing Officer "has immense discretion to exclude

expert testimony," it follows equally that the Hearing Officer also has immense

discretion not to exclude expert testimony.

10. To the extent GMD2 purports to believe that particular witnesses are unqualified to

give opinions on scientific or technical matters, or hat such opinions are mistaken,

GMD2 presumably will address those concerns in cross examination of the

witnesses or in rebuttal.

WHEREFORE, GMD2's Motion in Linime to Exclude Expert Testimony of the City

should be denied.

Respectfully submitted,

Office of the City Attorney

of the City of Wichita, Kansas

By /s/ Brian K. McLeod

Brian K. McLeod, SC # 14026

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CERTIFICATE OF FILING AND SERVICE

The undersigned hereby certifies that he transmitted the above and foregoing Response to GMD2's Motion in Limine to Exclude Expert Testimony of The City by electronic mail on this 18th day of March, 2019, for filing, to David.Barfield@ks.gov and Kenneth.Titus@ks.gov 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

Aaron Oleen Division of Water Resources Kansas Department of Agriculture 1320 Research Park Drive Manhattan, Kansas 66502 Aaron.oleen@ks.gov

and

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

/s/ Brian K. McLeod
Brian K. McLeod

	RY OF EXPERT WITNESS CONTRIBUTIONS				Macey		Koci	Winchester	Clement	McCormick	DeAngelis	Dunahee	Streete
Proposal Cover Lett	ter .	X	X	×		x	Ш						
1.0 introduction	植物医医红色性动物 经国际经验的现代 生 鐵 经济 电影片	X	X	X	765	×	1			的是分數		HEER	100
2.0 proposed ASR minimum index levels		X	X	X	X				X	x	x	x	
	Table 2-1: City of Wichita Drought Response Plan (DRP) Stages	×	×	X	×	193		Mary 19	200		19	0000	×
	2.11% Drought Reconstruction - Palmer Drought Severity Index (PDSI)				X			x	x				x
DOC ON A	Table 2-2: 1% Drought Reconstruction from PDSI	于2000年5月		1512	X			×	X	DE B		1020	X
	2.2 City of Wichita - Future Raw Water Demand Assessment		X	x	X								x
FOR CHILD	2.3 Integrated Water Resources Management During a 1% Drought Using MODSIM-DSS		8/19	176	×	1000		×	×	后去多	1800	2000	X
	Figure 1 - MODSIM DSS Network GUI				x			×	×				
	Table 2-3: MODSIM-DSS simulation results for the 1% drought utilizing projected 2060 demands	199	88		×		100	PROS	X	100	BUT EL	(Dibt)	1000
	2.4 Groundwater Modeling Setup - 1% Drought Simulation								×	x			
BE 364	Figure 2 - Simulated Conditions of 1% Drought Demand on Cheney Reservoir	\$ WEST	6 18	1000	×	DATE:		明 (8)	×	图 图	1000	13/3	1000
	2.4.1 Stress Period (SP) Development								×	×			
	Figure 3 - USGS Equus Beds Groundwater Flow Model Active Model Boundary		0.8		100	8/1/3	8-5	23200	X	×	x	IS IS IS	283
	Table 2-4: PDSI values for South-Central Kansas							×	×		x		
	Table 2-5: Water Variables and Inputs to the EBGWM by Stress Period	No.	98	150	Distance of the last	1000	300	(FIRST)	×	×	x	110000	100
	2.4.2 Starting Groundwater Model Elevations				×				×	×	x		
	2.4.3 Groundwater Pumping - Agricultural Irrigation, Industrial Use, Other Municipal Users	1/20 523	98	FILE	1950	6000	100	S S S S S S S S S S S S S S S S S S S	×	×	x	10000	1000
	Table 2-6: Net Irrigation Use in the 1% Drought Model .								×	×	×		
Control of	2.4.4 Groundwater Pumping - City of Wichita		经验	603	×	100	THE ST	Nava San	X	X	×	100,000	1000
	Table 2-7: Distributed City of Wichita Pumping by Stress Period								×	×	×		-
新 斯拉斯斯	2.4.5 Streamflow - Arkansas River, Little Arkansas River, Cow Creek	C 100 C 100	86	1000	47/31/6	THE REAL PROPERTY.	200	87189: Tulip	×	X	x	130300	000
	2.4.6 Precipitation & Natural Aquifer Recharge					Julius Santa			x	×	x		-
STEEL SECTION AND ADDRESS.	Figure 4 - Locations of USGS Stream Gages Within and Near the ASR BSA		8.00	8258	Sec.	2000			×	×	×	The state of	330
	Table 2-8: Simulated Natural Aquifer Recharge Inputs for EBGWM		-	-				School of Sales of the	×	×	x	310000	10000
Too Caleda	2.4.7 Evaporation & Transpiration	(E)	9 50	1000	NASA SA	SECON	1924		X	x	- Distriction	10000	2000
	2.5 Groundwater Modeling Results 1% Drought Simulation	-			- Contract	-		SERVICE SERVICE	×	×		SKILLEDGE	200000
NOVE STATE	Table 2-9: Groundwater Modeling Results for 1% Drought Simulation	55 Sept.	0 90	1200	DESCRIPTION	1000			×	×	Description of the last of the	No train	10000
	2.6 Proposed Modifications to ASR Minimum Index Water Levels	and the last of	-					CORNE DE LES TRA	x	×	Maria Caraca		10000
	Figure 5 - Initial Groundwater Elevations at Beginning of Simulated Drought	1100 000	10 60	Harris .	17900	1000	000	1000000	×	×	10000	EASOS	1000
	Figure 6 - Modeled Groundwater Elevations at the End of Simulated Drought (SP8)	1000	-	-	-			A CHARLES	x	×		200000	10000
PECHNICAL SERVICE	Figure 7 - Modeled Groundwater Elevations End of Simulated Recovery Year 1 (SP9)	S 200 ISS		1003	1000	1000			×	×	10000		40500
	Figure 8 - Groundwater Elevations End of Simulated Recovery Year 2 (SP10)							-	×	×			and the last
CAL CHIEF	Figure 9 - 1993 Groundwater Levels as a Percentage of Predevelopment Saturated Aquifer Thickness		15.60	Britis.	1000	12/12	60	1000 Page 1	×	×	(CONTRACTOR OF THE PARTY OF THE	100000	1000
	Figure 10 - Modeled Aquifer Conditions by ASR Index Cell at the End of Simulated Drought (SP8)							THE RESERVE	×	×	Marie State And		CONTRACT OF
DE-1003	2.7 Summary		F. 60	1000	No. of Concession, Name of Street, or other Designation, Name of Street, or other Designation, Name of Street,	1000		STATE OF THE PARTY OF	×	×			
	Table 2-10: Development of Proposed ASR Minimum Index Levels	MARKET SPECIES						The Later of	X	X	Total Control	10000	1000
	Table 2-11: Proposed ASR Milmmum Index Levels .	SECTION STATE	21 50		1000	10000			×	×	District Control		
	Figure 11 - Average Aquifer Conditions by Index Cell at Proposed Minimum Levels	Marie Contract		INC.		No.			×	X	SECTION.	PERM	100

Exhibit B: SUMMA	RY OF EXPERT WITNESS CONTRIBUTIONS	Kin	g Pajor	Henry	Macey	Meier	Koci	Winchester	Clement	McCormick	DeAngelis	Dunahee	Streeter
3.0 Aquifer Mainte	nance Credits proposal	,		X	130	X	X	BODIES	0 3	BEET ST	A STATE OF	270107	21800
	3.1 Integrated Local Water Supply Plan (ILWSP)		X	x		x	x						
	3.2 City of Wichita ASR Program Development	SER FEET	×	X	188	X	x	Digital (d	1000	KING B			113339
	Figure 12 - Historic Water Use in the ASR BSA		T		×				x				
	Figure 13 - Historic Groundwater Level Changes in the ASR BSA.	DESCRIPTION OF		BU	X		100	1000	X	TO SOLD		10000	100
	3.3 Benefits of ASR Aquifer Maintenance Credits (AMCs)		×	x		x	x						
	3.4 Proposed AMC Permit Conditions	ARCHIO DE	X	X	1300	X	x	BURNS.	2370	TO KOR	NE GO	order to	200
	3.5 ASR Physical Recharge & ASR Operations Plan				×	x			x		×		
ROBERT SE	3.6 Outcome Based Management of Water Resources		X	X	1000	×	x		miles.		Telegraph	20020	No.
	Table 3-1: Benefits to Multiple Aquifer Users and Water Resources from AMCs		x	×		x	x						-
	Figure 14 - AMC Operations Table 2016 Example	ST 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	300	100	×	1250	100	Married St.	X	100.90	1866	03/9/16	COLUMN TO SERVICE SERV
4.0 Proposed ASR A	Accounting Methodology					x	x		×	x	No. of Concession, Name of Street, or other Persons, Name of Street, or ot	100000000000000000000000000000000000000	-
FER SER	Figure 15 - ASR Accounting Loss Percentage Map		483	69	1000	1970	160	Aller (S	X	X	2 50	College	100
	Table 4-1: Index Cell Infrastructure and Loss Percentage.								×	×	and the second	-	
TOWN D	Figure 16 - Current and Proposed Accounting Method Results Comparison	HO NEED OF	98	829	(F.E.)	KAR	198	10/2/11/0	×	X	1-0-03	10000	1000
	Table 4-2: Current and Proposed Accounting Method Results Comparison								×	×		-	
	Table 4-3: Theoretical Recharge Accounting Example for Index Cell 15			103	1000	1/3			X	X	THE SE	000	
Attachment A	City of Wichita Drought Response Plan	, .	×	×	×		186	1000000			T. Blocks		10000
Attachment B	Palmer Drought Severity Index, Research Paper No. 45	-	an annual		-	-	-	x	×	100000000000000000000000000000000000000			
Attachment C	HCH 1% Drought Reconstruction Technical Memorandum	SERVICE STATE	200	1000	×	DAY.	820	X	0.70			20 5 2	Total St
Attachment D	City of Wichita Water Demand Assessment		×	x	×			X	-		Maria Constitution of the		
Attachment E	USGS SIR 2013-5042 Groundwater Model Report		99		×	1003	(50)	100000	×	×	×	1986	Name :
Attachment F	Historic NOAA PDSI Values for SC Kansas				×			x	×		Maria Caralla		NAME OF TAXABLE PARTY.
Attachment G	Streamflows for Arkansas, Little Arkansas River 2011-2012	No. of the last	100	130	1000		190	N. STORY CO.	×	×	10000	0	Part of
Attachment H	USGS SIR 2013-5170, Revised 1993 Groundwater Levels				×				×	×			
Attachment I	Drought Model Simulation Results & Hydrographs			100	1000	1000	500	Station Law	×	×	E97,050	100000	1000
Attachment J	ASR Accounting Simulations						-	CONTRACTOR OF STREET	×	×	ACCRECATE OF	10000	-