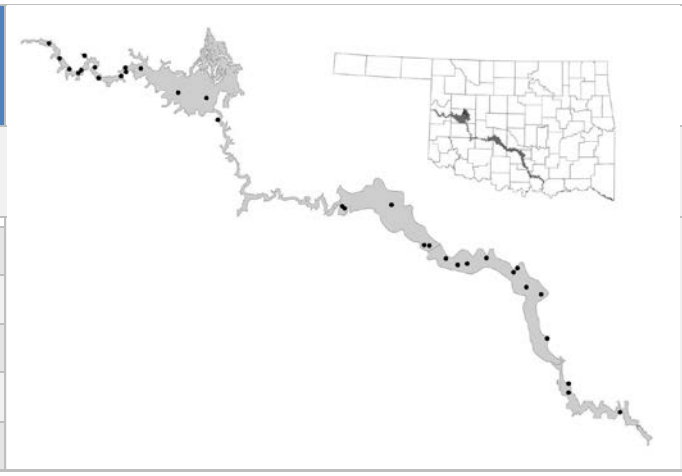
Washita River Aquifer

Baseline Sample Period	Sampling Sites	Water Level Sites
July-August 2014	31	30



General		
	Location	runs West Central to South Central Oklahoma
	Area (km^2)	2,452
	Capacity (acre-feet)	4,920,000
	Primary Uses	Public Supply; Domestic; Irrigation; Industrial
	Category	Alluvial & Terrace

Parameters	General Field	Parameter	Mean	SEM[i]	Minimum	25%	Median	75%	Maximum	Comments
		Well Depth (ft)	95.85	6.27	28	70	85	111	190	n=42
		Depth to Water (ft)	24.78	2.77	4.6	13.26	23.99	30.07	67.75	Below ground surface
		Temperature (°C)	19.86	0.325	17.48	18.68	19.35	20.55	25.4	
		Specific Conductance (µS/cm)	1902	204.8	231.9	893.5	1736	2866	4073	
		Dissolved Oxygen (mg/L)	2.06	0.365	0.25	0.455	0.82	3.68	7.5	
		pH (units)	7.18	0.043	6.52	7	7.21	7.37	7.57	
		Reduction Potential (mV)	241.9	22.15	202.4	223.5	244.5	261.8	279	n=3
		Alkalinity (mg/L)	297.9	30.76	35.4	175.5	264	410.5	720	
		Hardness (mg/L)	1034	116.9	142	447	1820	1663	1916	
		Calculated Bicarbonate (mg/L)	366.4	37.86	43.4	215.5	325	505	886	
		Total Dissolved Solids (mg/L)	1554	214.2	138	509.5	990	2740	3650	SMCL: 500; 24 over

Parameters	Nutrient Constituents	Parameter	Mean	SEM[i]	Minimum	25%	Median	75%	Maximum	Comments
		Ammonia (mg/L)	0.154	0.036	<0.1	<0.1	<0.1	0.135	0.74	
		Nitrate & Nitrite (mg/L)	2.33	0.719	<0.05	<0.05	0.88	2.79	18.7	MCL: 10; 2 over
		Total Dissolved Phosphorus(mg/L)	0.082	0.019	<0.005	0.014	0.04	0.093	0.382	

Parameters	Mineral Constituents	Parameter	Mean	SEM[i]	Minimum	25%	Median	75%	Maximum	Comments
		Bromide (µg/L)	537.6	97.06	124	293.5	363	465.5	2570	
		dissolved Calcium (mg/L)	209.2	27.01	24.5	81.4	127	363.5	534	
		Chloride (mg/L)	49.99	13.57	<10	17.1	31	47.35	412	SMCL: 250; 1 over
		Fluoride (mg/L)	0.231	0.027	<0.2	<0.2	0.23	0.275	0.7	MCL: 4; 0 over
		dissolved Magnesium (mg/L)	85.53	8.97	5.3	43.75	8.6	127	172	
		dissolved Potassium (mg/L)	2.08	0.169	<0.5	1.55	2	2.4	4	
		dissolved Silica (mg/L)	22.28	1.39	8.92	18.35	21.3	35.25	41.6	
		dissolved Sodium (mg/L)	89.78	16.03	5.3	29.05	58.1	108	365	
		Sulfate (mg/L)	803.6	157.7	<10	28.85	111	1760	2300	SMCL: 250; 15 over

Parameters		Parameter	Mean	SEM[i]	Minimum	25%	Median	75%	Maximum	Comments
	Metal & Trace Element Constituents	dissolved Arsenic (µg/L)	2.68	0.339	<1	1.15	2.5	4.1	8.7	MCL: 10; 0 over
		dissolved Barium (µg/L)	142.2	30.93	<5	11.1	82.4	210	524	MCL: 2000; 0 over
		dissolved Boron (µg/L)	508.8	99.29	30.6	122	332	617.5	2070	HA: 6000; 0 over
		dissolved Chromium (µg/L)	All Values <5, except 1 (18)							MCL: 100; 0 over
		dissolved Copper (µg/L)	All Values <5, except 4 (5.6, 6, 7.1, 8.4)							MCL: 1300; 0 over
		dissolved Iron (µg/L)	364.5	91.94	<20	<20	27.2	688	1580	SMCL: 300; 10 over
		dissolved Manganese (µg/L)	202.0	48.02	<5	7.3	34	353.5	1070	SMCL: 50, 15 over. HA:300; 1 over
		dissolved Molybdenum (µg/L)	4.62	0.661	<5	<5	<5	5.8	15.8	HA: 40; 0 over
		dissolved Selenium (µg/L)	All Values <10, except 1 (10)							MCL: 50; 0 over
		dissolved Uranium (µg/L)	6.31	1.43	<1	<1	4.6	8.2	40.7	MCL: 30; 1 over
		dissolved Vanadium (µg/L)	10.45	1.82	<5	<5	8	14.15	37.6	
		dissolved Zinc (µg/L)	27.93	15.0	<5	<5	<5	9.95	460	SMCL: 5000; 0 over. HA: 2000 0 over

Parameters	Parameters Below Detectable Limits			
		Aluminum Antimony	Beryllium Cadmium Cobalt	Lead Mercury	Nickel Silver

[i] Standard Error of the Mean