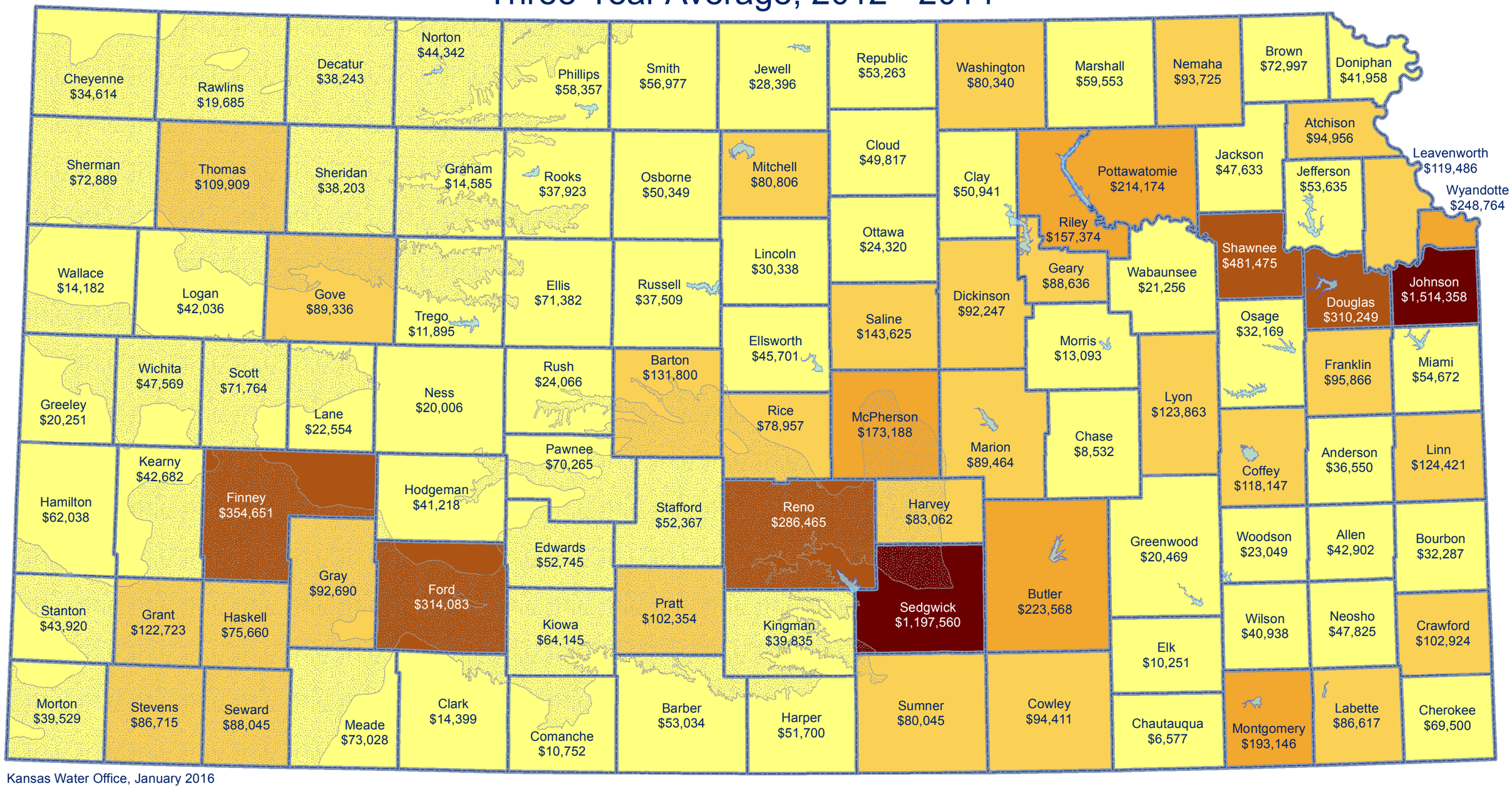
Tier One - $2.45 million				
Ranking	***Item***	***Description***	***Agency*** ****agency receiving appropriation is in bold***	***Funding requests for FY 2018, FY 2019 (per year)***
1	Less Water Intensive Crop Research	To increase adoption of less water intensive crop varieties in Kansas and support integrated programmatic efforts focused on sorghum and wheat as a part of rotational cropping systems well-suited to dry land and limited irrigation production in the soils and climate of Western Kansas.	**K-State**	$250,000 state + match from K-State
2	TMDL Initiatives	Utilize funds to focus on Milford Lake harmful algae blooms and likely contract out to increase spatial resolution and temporal frequency of phosphorus, nitrogen, and chlorophyll sampling in the upper zone of Milford Lake to attempt to geographically isolate the contributing areas that may support the cyanobloom in the lake toward late summer and autumn when loadings from the Republican River Watershed have diminished with low flows. This would help direct tactical treatment approaches to these "hot spots" and cut off the nutrient supply fueling the bloom.	**KDHE**, KDA, KWO, KWA	$400,000
3	Study of Harmful Algae Blooms	Conduct a study to determine the cause of higher concentration of harmful algae blooms in certain state bodies of water and potential solutions for decreasing harmful algae blooms.	**KBS**	$100,000
4	On-site Technical Assistance for Public Water Systems	Aid communities in dealing with operational emergencies; water and wastewater treatment plant operations to meet Clean Drinking Water and other public health safety standards; and restore statutorily required funding to the program.	**KWO**	$100,000
5	Streambank Stabilization, Watershed BMPs, Nutrient Reduction	Streambank stabilization and watershed BMPs minimize the inflow of new sediment into state reservoirs. In addition, install cost-effective conservation projects in identified "hot zones" to prevent nutrients from entering priority waterbodies.	**KWO**, KBS	$1.0 million
6	Irrigation Technology	Focus on the demonstration and adoption of irrigation efficiency. Access to this technology is key to successful conservation and reduction in water use and dry land cropping systems and limited irrigation strategies should be identified to preserve both surface water and groundwater. In addition, data collection would occur that would help measure the impact of decreased water use on extending the life of the Ogallala Aquifer. Funding should be prioritized to assist irrigators in LEMAs and WACs.	**KWO**, KDA	$400,000 state + match from any other entity, except NRCS
7	Kansas River Alluvial Aquifer Observation Well Network	This would improve understanding of the Alluvial Aquifer and its relationship to Kansas River flow through establishment of an observation well network in the Kansas River alluvial aquifer and installation of river flow gages. The joint project with KBS and KGS would help to better predict water availability in the next growing season for irrigators.	**KBS**, **KGS**	$100,000
8	Reservoir Bathymetric Surveys and Biological Research	The surveys and research would be related to sediment bypass, source of sediment, rate of loss of storage capacity, flood control, and drought protection.	**KBS**	$100,000

Tier Two - $2.965 million				
Ranking	***Item***	***Description***	***Agency*** ****agency receiving appropriation is in bold***	***Funding requests for FY 2018, FY 2019 (per year)***
1	Evaluation of Streambank Stabilization Projects	Study where streambank stabilization, WRAPS, buffer strips, terracing, low water dams, and other technologies and techniques are most effective in reducing sediment flow to lakes.	**KWO**, KBS, KDHE, Kansas Forest Service	$150,000
2	Streamgaging and Install Additional Monitoring Wells	Restore nine streamgages on streams and rivers that monitor conditions during a variety of flow conditions. Streamgaging has a vital role in reservoir operation decisions made by the KWO and the USACE to most efficiently schedule reservoir release. In addition, funding would be used to install additional monitoring wells.	**KWO**, KGS	$230,000
3	GIS Database	Funding would support the KWO and KBS combined effort to provide GIS mapping applications, including Kansas land cover, Kansas species ranges and known locations, the influence of the biofuel industry, flood risk, water resources, crop yields, and more through the Kansas Lakes and Reservoirs Data Repository Portal.	**KWO**, KBS	$100,000
4	Public Wholesale Water Supply Districts - Infrastructure; Drinking Water Protection	KWO would contract with organizations that work with small water systems to assist communities with major drinking water supply problems. The program would help build infrastructure, such as building water systems to tie communities to better community water systems. KDHE would identify nitrate risks to surface and groundwater supplies, study cost-effective methods of abating the risks, and provide small communities financial and technical assistance to protect their source water from contaminants.	**KWO**, KDHE	$1.5 million + local contribution
5	Abandoned Well Plugging	The funding would restore the amount of the statutory transfer from the SWPF to the KCC's Abandoned Oil and Gas Well/Site Remediation Fund. The The KCC maintains an inventory of all abandoned wells in the state and focuses on plugging those wells that lack a responsible party and post an ongoing or potential threat to the environment.	**KCC**	$400,000
6	Environmental Scientist positions	Salary and wages for three environmental scientists based in Western Kansas, dedicated to assisting in the development of the WCAs, assisting water users, and executing the Governor's Water Vision.	**KDA**	$175,000
7	Engineer Position	Salary and wages for one engineer in DWR dedicated to protecting Kansas water users and water resources in interstate water compacts, based in Garden City office.	**KDA**	$100,000 state + local match
8	Research/Professor Positions	Salary and wages for two researchers (assistant/associate professors) stationed at the Colby and Garden City Experiment Stations that would be responsible for increasing adoption of new irrigation technologies. This would speed up the implementation of new technologies to encourage water conservation.	**K-State Research and Extension**	$100,000 + match

9	John Redmond WRAPS	KDHE would contract the funds to the Cottonwood WRAPS Project above John Redmond Reservoir for targeted water quality BMP implementation and to extend the benefit of the 2016 dredging project.	**KDHE**	$60,000
10	Buffer Strips	Enhance the effectiveness of the streambank stabilization program and conservation district terracing.	**Kansas Forest Service**	$150,000
11	Contamination Remediation	Funding would be used for the assessment, monitoring, and remediation of contaminated sites where the responsible party is unknown or unable to undertake the necessary clean-up action.	**KDHE**	$100,000

Tier Three - $2.5 million				
Ranking	***Item***	***Description***	***Agency*** ****agency receiving appropriation is in bold***	***Funding requests for FY 2018, FY 2019 (per year)***
1	Purchase of Future Use Storage	Use funding to purchase a portion of future use storage at certain federal reservoirs (possibilities include Big Hill, Clinton, Hillsdale, Milford, and Perry reservoirs). Total unfunded liability for this storage is approximately $100.0 million.	**KWO**	$2.5 million

Kansas Water Plan Fund Revenue by County
Three-Year Average, 2012 - 2014



Kansas Water Office, January 2016

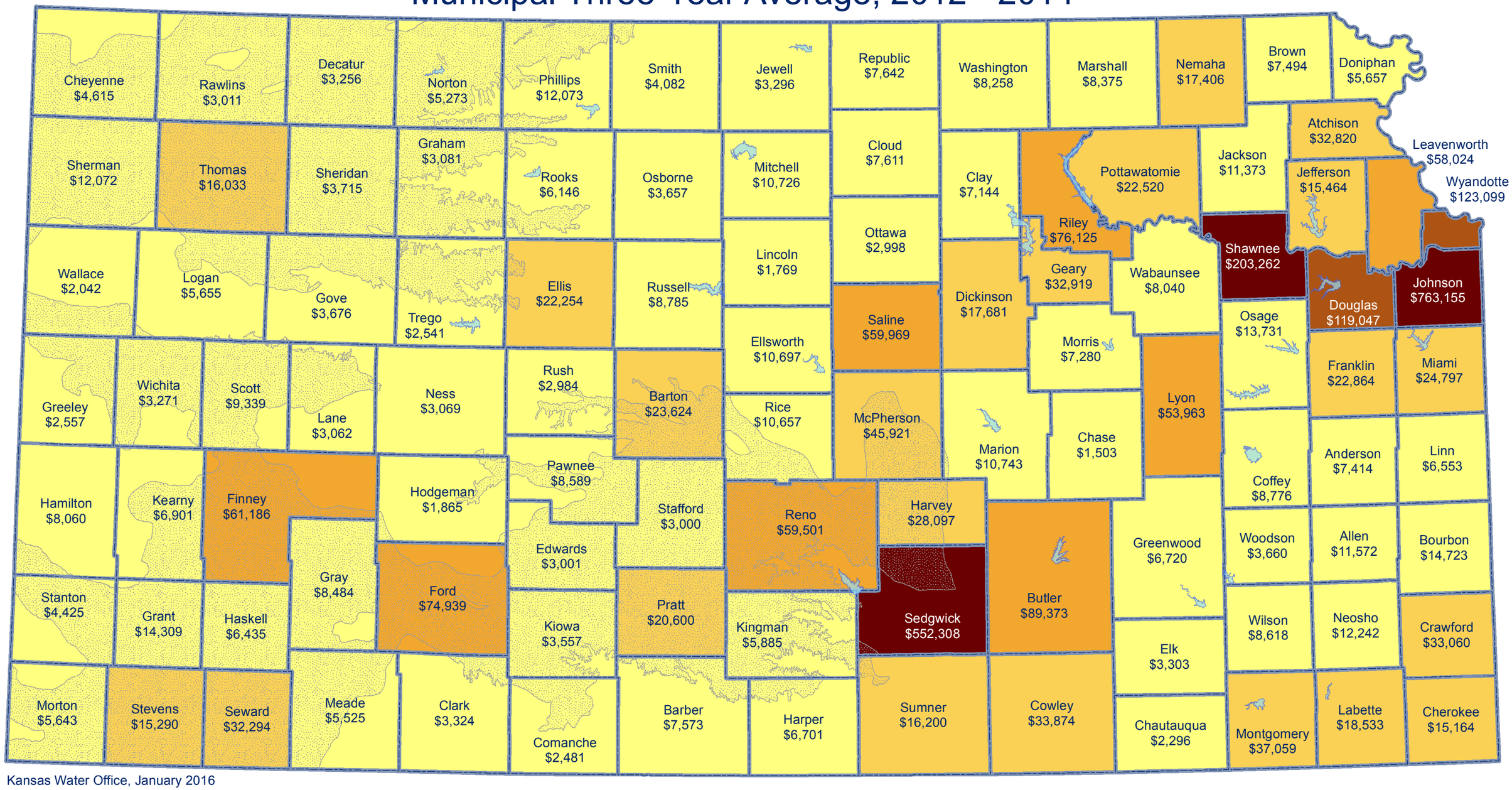
Federal Lake | County | HighPlains

Average Revenue 2012-2014

- Less than $75,000
- $75,000 - $150,000
- $150,001 - $250,000
- $250,001 - $500,000
- More than $500,000

* Includes Municipal, Industrial, Stock, Clean Drinking Water and Fertilizer revenue. Sand, Pollution and Pesticide revenues are not included.

Kansas Water Plan Fund Revenue by County
Municipal Three-Year Average, 2012 - 2014



Kansas Water Office, January 2016

Federal Lake

County

HighPlains

Average Revenue 2012-2014

Less than $15,000

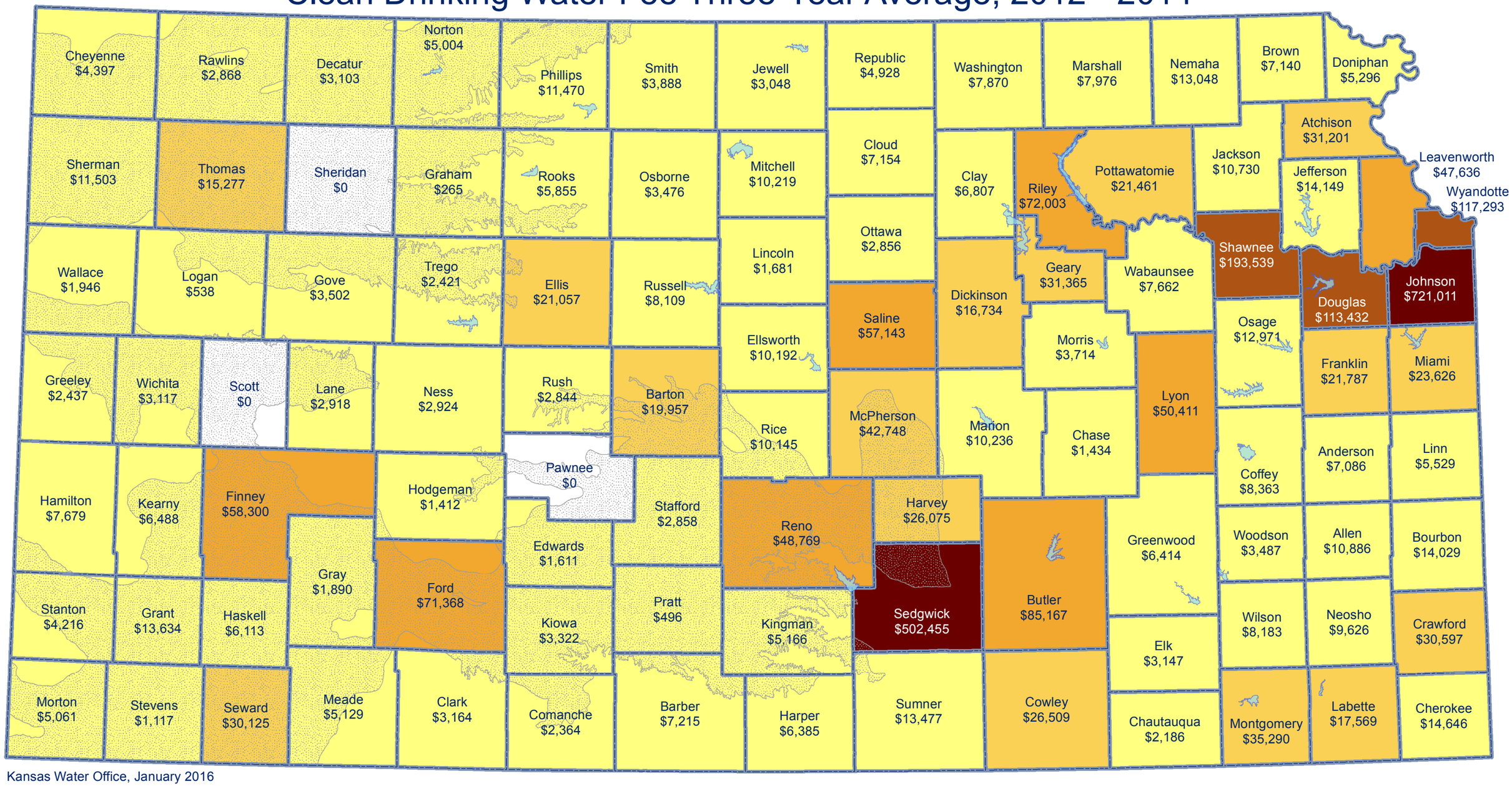
$15,000 - $50,000

$50,001 - $100,000

$100,001 - $200,000

More than $200,000

Kansas Water Plan Fund Revenue by County
Clean Drinking Water Fee Three-Year Average, 2012 - 2014



Kansas Water Office, January 2016

Federal Lake

County

HighPlains

Average Revenue 2012-2014

Less than $15,000

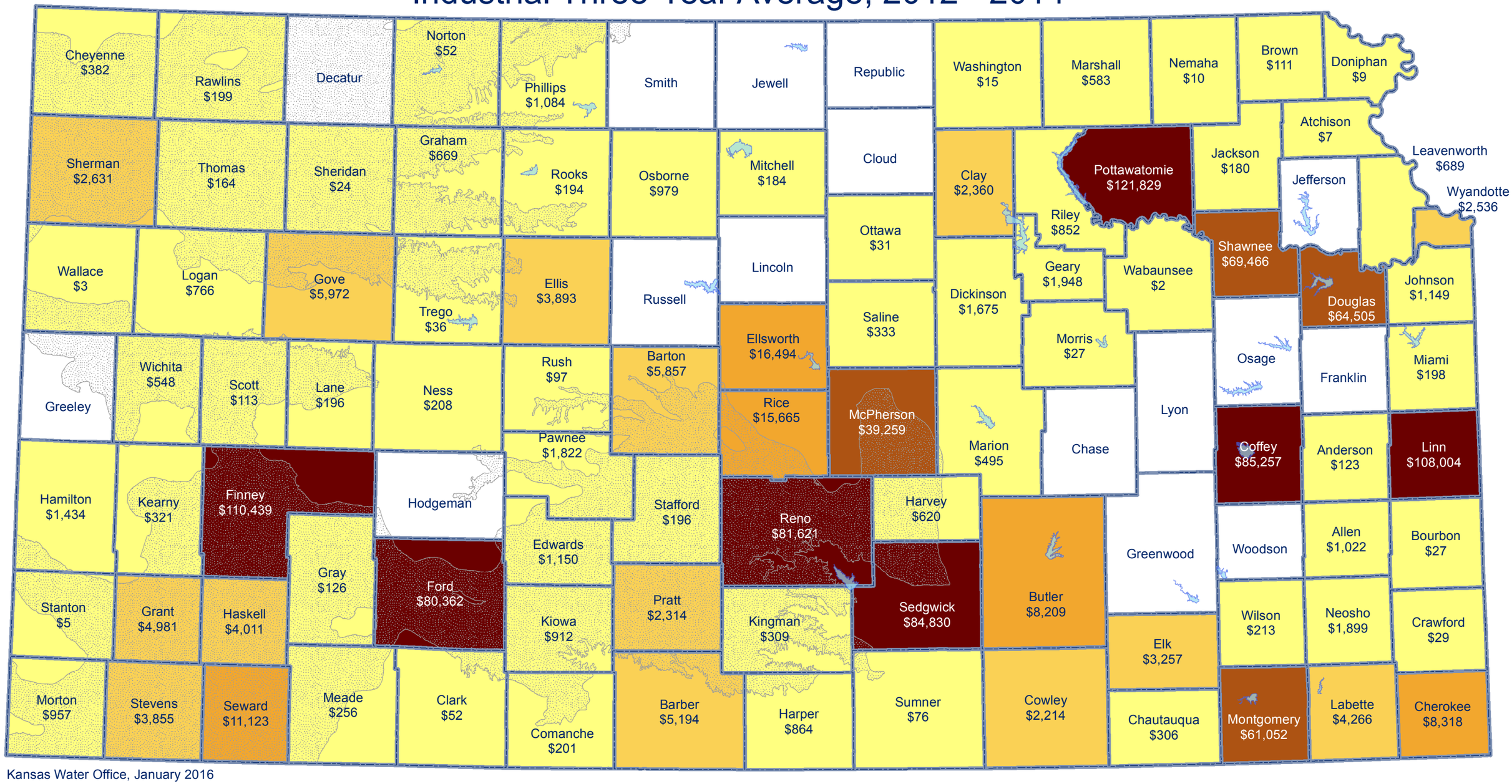
$15,000 - $45,000

$45,001 - $100,000

$100,001 - $200,000

More than $200,000

Kansas Water Plan Fund Revenue by County
Industrial Three-Year Average, 2012 - 2014



Kansas Water Office, January 2016

Federal Lake

County

HighPlains

Average Revenue 2012-2014

Less than $2,000

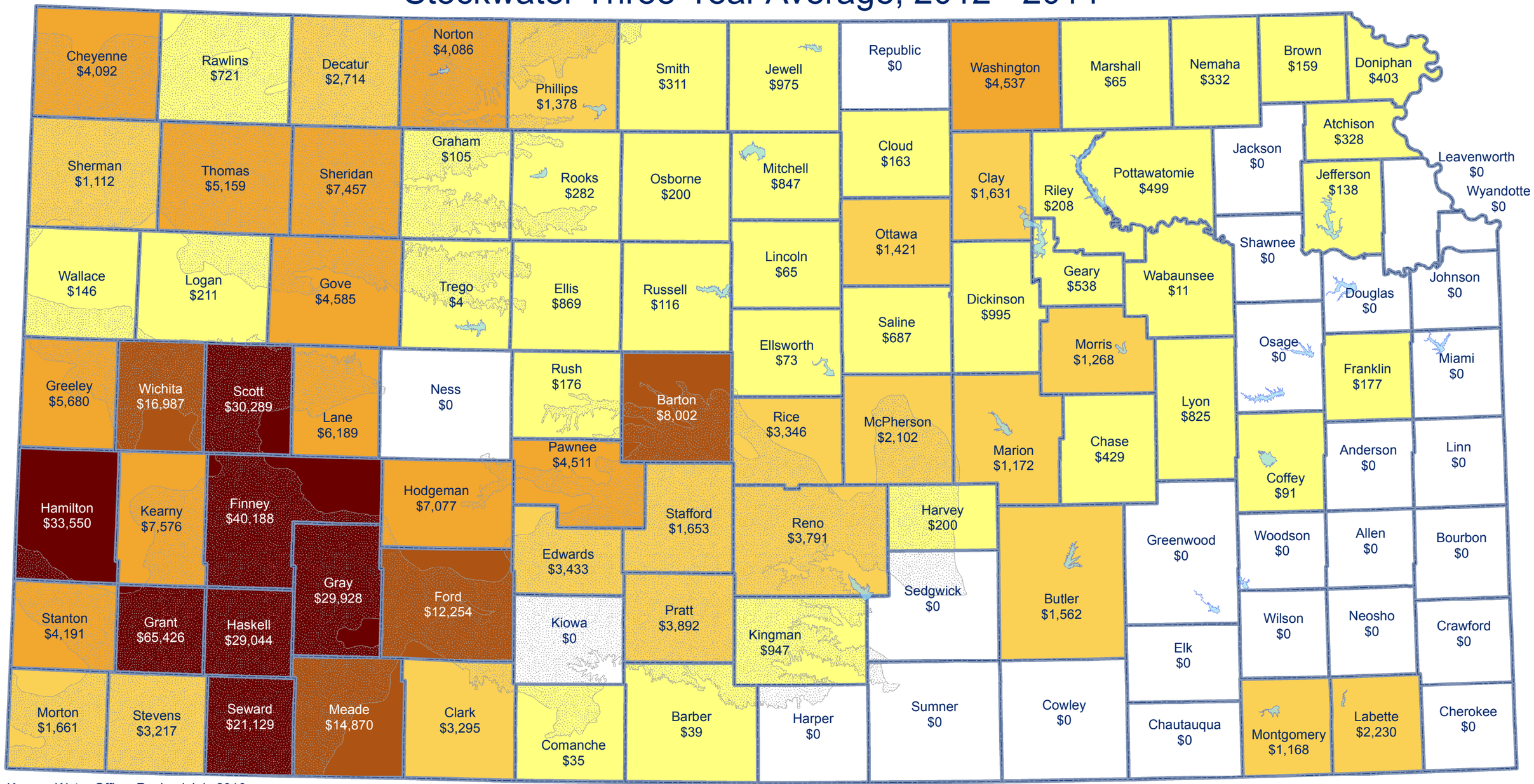
$2,000 - $6,000

$6,001 - $16,500

$16,500 - $80,000

More than $80,000

Kansas Water Plan Fund Revenue by County
Stockwater Three-Year Average, 2012 - 2014



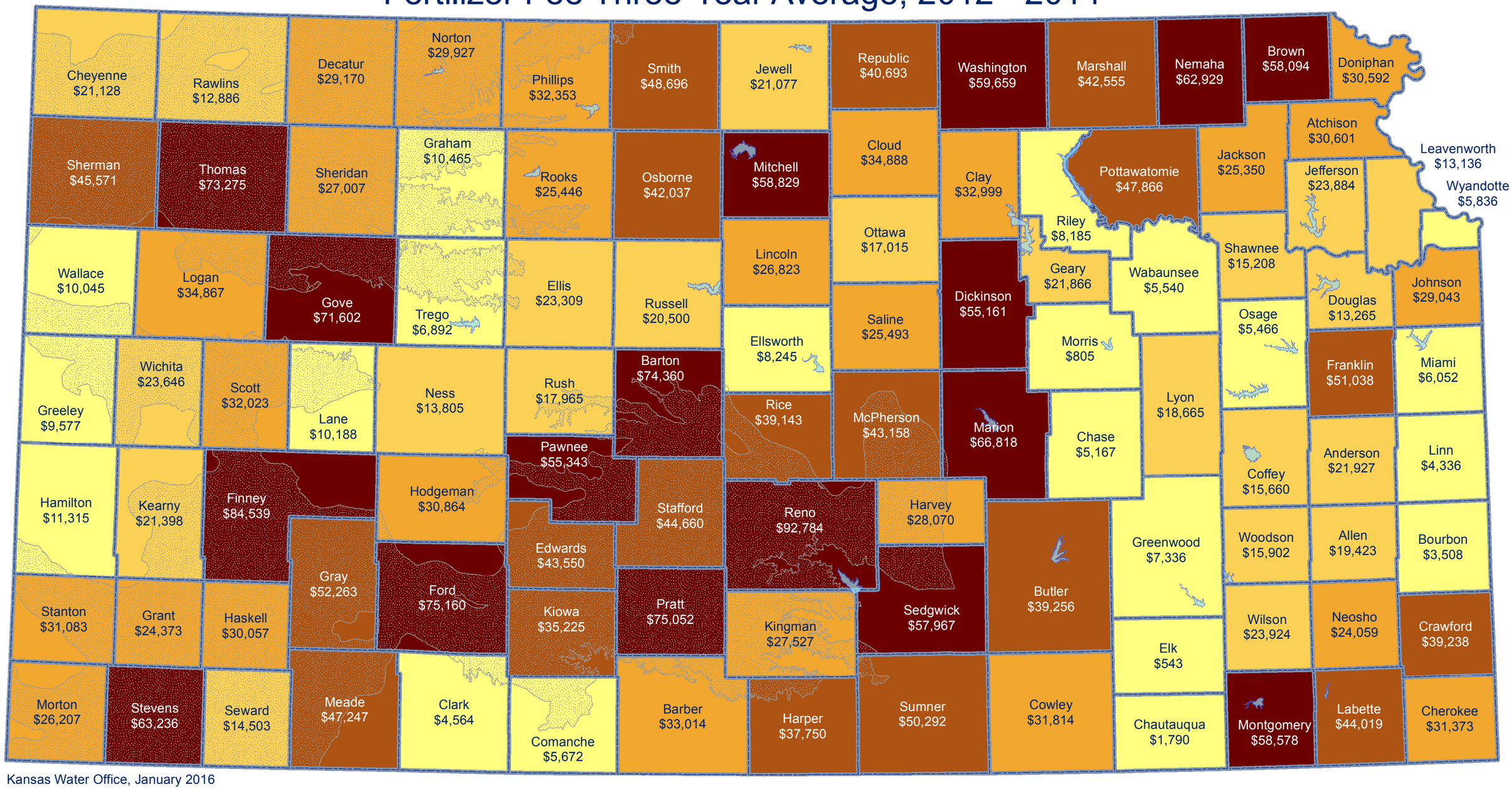
Kansas Water Office, Revised July 2016

Federal Lake | County | HighPlains

Average Revenue 2012-2014

- Less than $1,000
- $1,000 - $4,000
- $4,001 - $8,000
- $8,001 - $20,000
- More than $20,000

Kansas Water Plan Fund Revenue by County
Fertilizer Fee Three-Year Average, 2012 - 2014



Kansas Water Office, January 2016

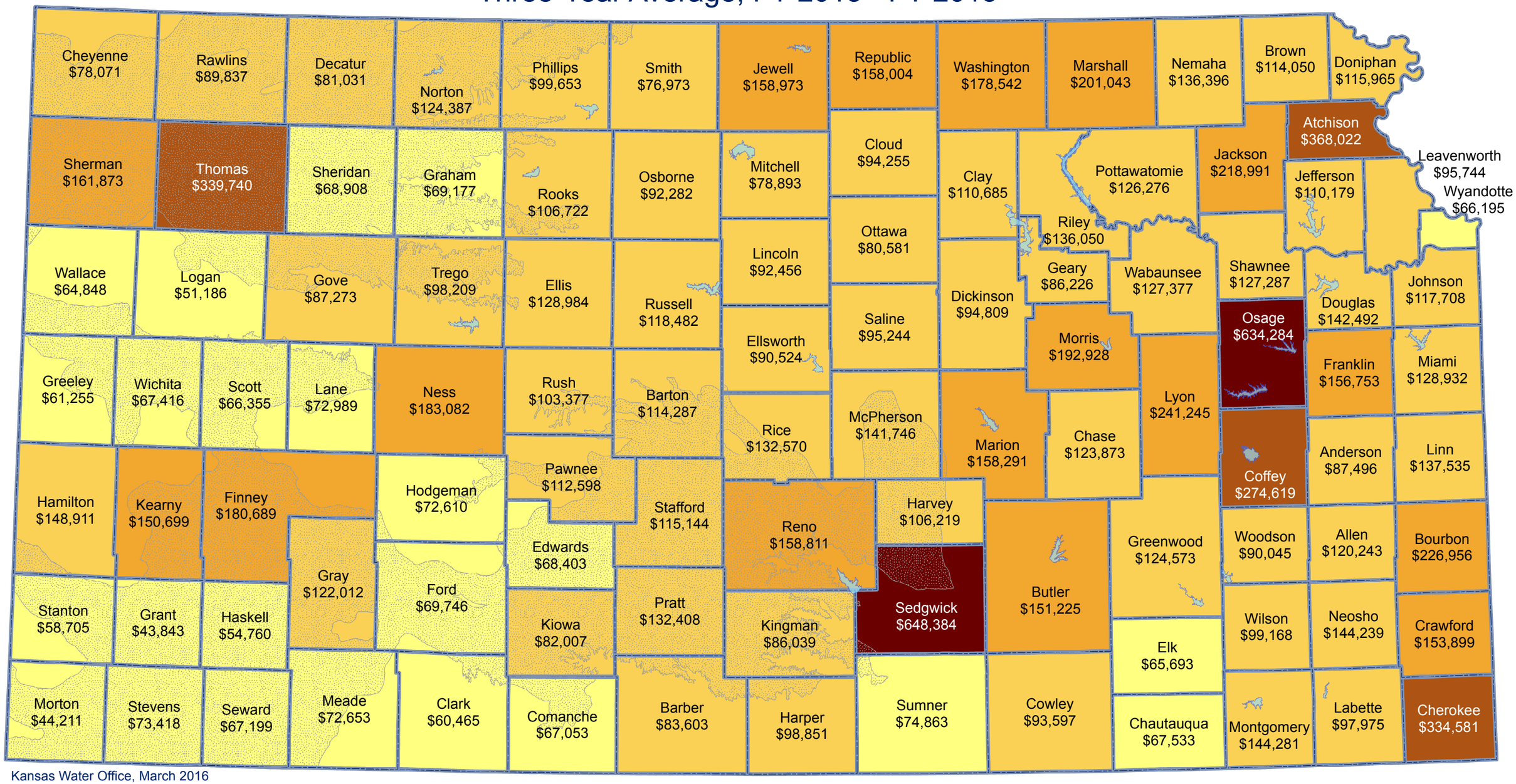
Federal Lake | County | HighPlains

Average Revenue 2012-2014

- Less than $12,000
- $12,000 - $24,000
- $24,001 - $35,000
- $35,001 - $55,000
- More than $55,000

* A three-year average revenue of $88,992 was not identified by Kansas county, and is not shown in this map.

Kansas Water Plan Fund Distribution by County
KS Dept. of Health and Environment, KS Dept. of Agriculture and Kansas Water Office
Three-Year Average, FY 2013 - FY 2015



Kansas Water Office, March 2016

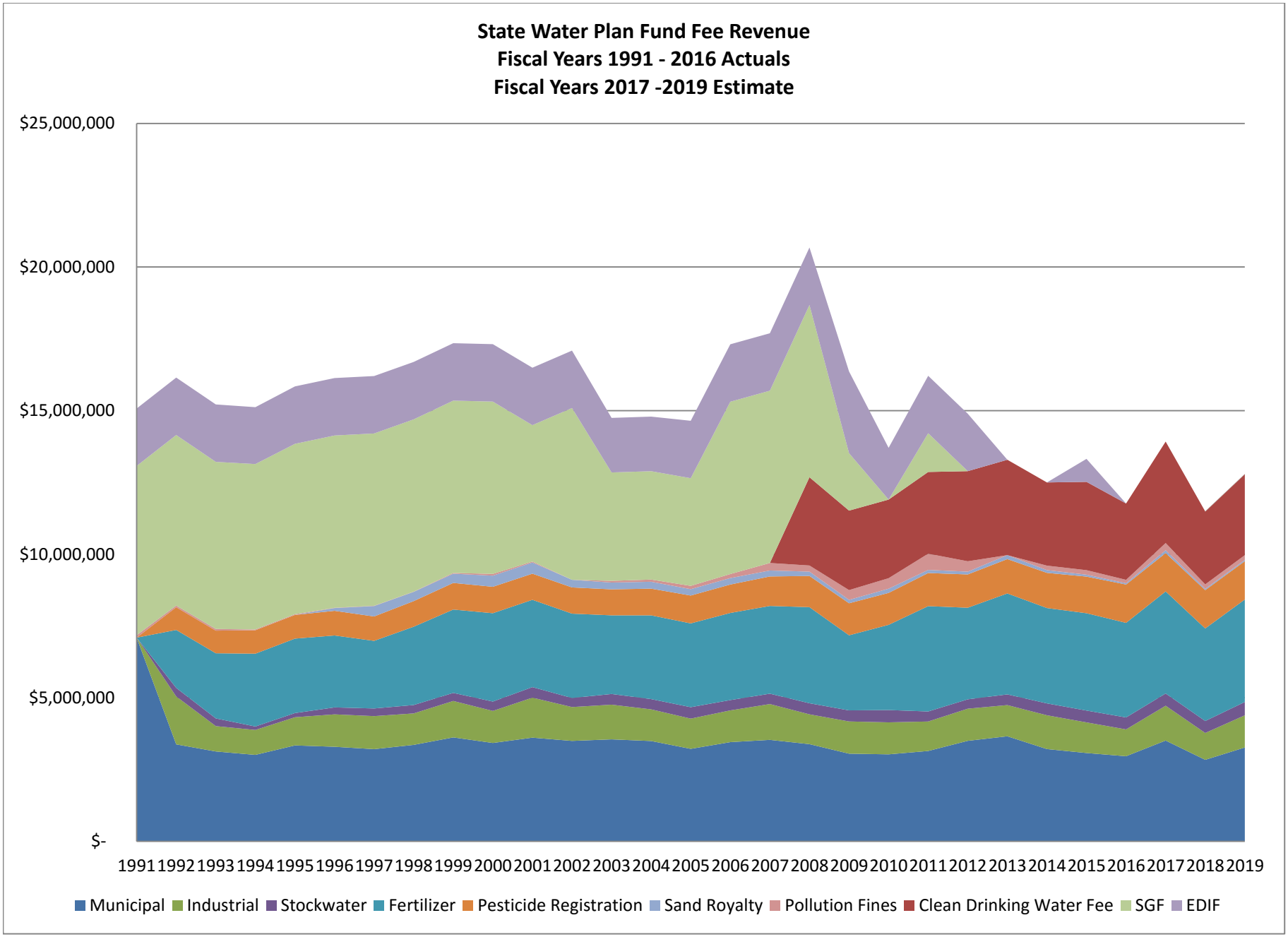
Federal Lake | County | HighPlains

Average Distribution 2013-2015

- Less than $75,000
- $75,001 - $150,000
- $150,001 - $250,000
- $250,001 - $500,000
- More than $500,000

State Water Plan Fund Receipts

Fiscal Year	SGF	EDIF	Municipal Fees	Industrial Fees	Stock Fees	Fertilizer Fees	Pesticide Fees	Fines	Sand Royalties	Clean Water Drinking Water Fee Fund
1991	$ 5,895,000	$ 2,000,000	$ 7,093,289					$ 83,310		
1992	$ 5,940,000	$ 2,000,000	$ 3,376,555	$ 1,668,381	$ 297,799	$ 2,018,020	$ 791,000	$ 57,277	$ -	$ -
1993	$ 5,820,000	$ 2,000,000	$ 3,128,802	$ 883,640	$ 267,852	$ 2,268,457	$ 788,200	$ 57,416	$ -	$ -
1994	$ 5,760,000	$ 1,980,000	$ 3,010,492	$ 868,229	$ 120,012	$ 2,535,750	$ 817,015	$ 26,699	$ -	$ -
1995	$ 5,932,800	$ 2,000,000	$ 3,339,531	$ 981,224	$ 145,485	$ 2,592,587	$ 824,900	$ 25,594	$ -	$ -
1996	$ 6,000,000	$ 2,000,000	$ 3,292,606	$ 1,128,911	$ 241,777	$ 2,504,117	$ 860,000	$ 9,470	$ 96,160	$ -
1997	$ 6,000,000	$ 2,000,000	$ 3,209,816	$ 1,149,832	$ 266,422	$ 2,354,756	$ 850,100	$ 9,470	$ 362,317	$ -
1998	$ 6,000,000	$ 2,000,000	$ 3,358,914	$ 1,095,518	$ 292,298	$ 2,726,361	$ 891,800	$ 7,329	$ 321,879	$ -
1999	$ 6,000,000	$ 2,000,000	$ 3,618,947	$ 1,268,946	$ 280,500	$ 2,902,623	$ 927,300	$ 26,480	$ 322,226	$ -
2000	$ 6,000,000	$ 2,000,000	$ 3,424,725	$ 1,116,221	$ 325,570	$ 3,077,292	$ 920,000	$ 61,525	$ 387,547	$ -
2001	$ 4,750,000	$ 2,000,000	$ 3,610,375	$ 1,392,046	$ 368,180	$ 3,039,987	$ 910,300	$ 31,650	$ 390,456	$ -
2002	$ 5,981,400	$ 2,000,000	$ 3,496,901	$ 1,178,943	$ 315,742	$ 2,937,721	$ 912,700	$ -	$ 265,321	$ -
2003	$ 3,773,949	$ 1,900,000	$ 3,550,865	$ 1,207,480	$ 372,992	$ 2,738,590	$ 904,880	$ 59,841	$ 236,784	$ -
2004	$ 3,773,949	$ 1,900,000	$ 3,493,043	$ 1,102,567	$ 357,276	$ 2,916,460	$ 930,180	$ 75,951	$ 240,266	$ -
2005	$ 3,748,839	$ 2,000,000	$ 3,220,072	$ 1,052,932	$ 398,653	$ 2,917,628	$ 969,990	$ 114,612	$ 222,076	$ -
2006	$ 6,000,000	$ 2,000,000	$ 3,454,401	$ 1,104,837	$ 359,112	$ 3,034,328	$ 989,800	$ 140,395	$ 225,460	$ -
2007	$ 6,000,000	$ 2,000,000	$ 3,532,987	$ 1,247,221	$ 361,565	$ 3,054,967	$ 1,027,200	$ 262,070	$ 206,824	$ -
2008	$ 6,000,000	$ 2,000,000	$ 3,384,068	$ 1,038,246	$ 386,364	$ 3,345,545	$ 1,086,990	$ 213,622	$ 150,500	$ 3,073,743
2009	$ 2,000,000	$ 2,846,126	$ 3,052,361	$ 1,122,203	$ 385,391	$ 2,614,836	$ 1,115,800	$ 340,647	$ 117,734	$ 2,768,052
2010	$ -	$ 1,802,141	$ 3,028,646	$ 1,113,890	$ 429,826	$ 2,966,702	$ 1,111,880	$ 365,647	$ 146,743	$ 2,737,277
2011	$ 1,348,245	$ 2,000,000	$ 3,146,069	$ 1,026,703	$ 348,862	$ 3,668,297	$ 1,153,740	$ 565,426	$ 107,915	$ 2,845,569
2012	$ -	$ 2,000,000	$ 3,499,474	$ 1,119,751	$ 325,455	$ 3,189,480	$ 1,160,092	$ 362,053	$ 96,323	$ 3,138,403
2013			$ 3,657,617	$ 1,086,576	$ 372,414	$ 3,515,556	$ 1,196,600		$ 137,896	$ 3,320,650
2014		$ -	$ 3,212,299	$ 1,177,336	$ 413,395	$ 3,320,482	$ 1,226,000	$ 156,118	$ 94,831	$ 2,897,102
2015	$ -	$ 800,000	$ 3,075,258	$ 1,066,382	$ 412,114	$ 3,389,702	$ 1,275,667	$ 156,623	$ 67,402	$ 3,075,258
2016	$ -	$ -	$ 2,962,911	$ 934,928	$ 415,975	$ 3,294,145	$ 1,334,523	$ 118,651	$ 44,634	$ 2,658,398
2017	$ -	$ -	$ 3,509,018	$ 1,212,943	$ 425,921	$ 3,554,503	$ 1,336,353	$ 250,000	$ 99,000	$ 3,531,723
2018	$ -	$ -	$ 2,838,217	$ 934,928	$ 415,975	$ 3,224,145	$ 1,334,523	$ 155,000	$ 45,000	$ 2,539,046
2019	$ -	$ -	$ 3,267,271	$ 1,120,701	$ 464,256	$ 3,568,921	$ 1,334,523	$ 165,000	$ 45,000	$ 2,820,674


State Water Plan Fund Fee Revenue
Fiscal Years 1991 - 2016 Actuals
Fiscal Years 2017 -2019 Estimate
$25,000,000
$20,000,000
$15,000,000
$10,000,000
$5,000,000
$-
1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019
Municipal
Industrial
Stockwater
Fertilizer
Pesticide Registration
Sand Royalty
Pollution Fines
Clean Drinking Water Fee
SGF
EDIF

Water Use (Acre-Feet) in Kansas by Source of Water, Type of Use and Regional Planning Area, 2011-2015 and 5-Year Average

Statewide

	2011		2012		2013		2014		2015		5-Year Average	
Type of Use	GW	SW	GW	SW	GW	SW	GW	SW	GW	SW	GW	SW
Municipal	191,598	268,089	194,072	292,372	173,631	245,071	162,921	254,913	152,263	241,348	174,897	260,359
Industrial	60,932	97,936	61,540	114,982	56,838	98,782	53,498	90,200	52,096	74,972	56,981	95,375
Irrigation	4,102,568	171,883	3,961,778	186,914	3,359,720	141,018	3,260,989	102,029	2,869,081	136,942	3,510,827	147,757
Stockwater	42,489	434	42,843	378	42,676	428	43,438	509	44,613	467	43,212	443
Other	48,961	1,233,212	42,363	895,632	37,711	970,932	36,225	1,016,295	33,165	1,194,295	39,685	1,062,073
Total	4,446,548	1,771,555	4,302,595	1,490,278	3,670,575	1,456,231	3,557,072	1,463,946	3,151,217	1,648,024	3,825,602	1,566,007

Cimarron

	2011		2012		2013		2014		2015		5-Year Average	
Type of Use	GW	SW	GW	SW	GW	SW	GW	SW	GW	SW	GW	SW
Municipal	12,296	-	12,413	-	11,522	-	13,700	-	9,761	-	11,938	-
Industrial	5,030	-	4,907	-	5,610	-	5,328	-	5,584	-	5,292	-
Irrigation	1,079,344	-	959,482	-	899,887	-	882,130	-	712,484	-	906,665	-
Stockwater	9,216	-	9,713	-	8,963	-	9,677	-	9,560	-	9,426	-
Other	1,128	-	1,064	-	1,117	-	1,623	-	576	-	1,101	-
Total	1,107,014	-	987,578	-	927,098	-	912,458	-	737,965	-	934,423	-

Equus-Walnut

	2011		2012		2013		2014		2015		5-Year Average	
Type of Use	GW	SW	GW	SW	GW	SW	GW	SW	GW	SW	GW	SW
Municipal	55,711	58,174	51,662	60,229	46,938	47,828	36,326	62,825	33,116	65,585	44,750	58,928
Industrial	27,210	38	24,050	379	22,657	412	19,913	387	18,265	524	22,419	348
Irrigation	202,647	4,239	182,112	4,308	104,162	2,497	138,521	3,729	124,845	2,599	150,458	3,474
Stockwater	575	22	667	28	370	32	493	37	517	38	524	32
Other	22,473	15	18,092	132	15,764	471	14,348	492	12,997	3,530	16,735	928
Total	308,616	62,487	276,583	65,076	189,891	51,240	209,602	67,469	189,739	72,277	234,886	63,710

Great Bend Prairie

	2011		2012		2013		2014		2015		5-Year Average	
Type of Use	GW	SW	GW	SW	GW	SW	GW	SW	GW	SW	GW	SW
Municipal	10,661	-	11,048	-	9,270	-	9,028	-	8,909	-	9,783	-
Industrial	3,971	-	6,569	-	5,339	-	4,366	-	4,573	-	4,964	-
Irrigation	721,050	398	627,119	175	475,412	78	489,824	242	530,540	269	568,789	232
Stockwater	2,903	-	3,017	-	3,056	-	3,096	-	3,230	-	3,060	-
Other	7,761	13,945	7,905	4,024	6,471	7,950	5,883	3,105	5,535	9,993	6,711	7,803
Total	746,346	14,343	655,658	4,199	499,548	8,028	512,197	3,347	552,787	10,262	593,307	8,036

Water Use (Acre-Feet) in Kansas by Source of Water, Type of Use and Regional Planning Area, 2011-2015 and 5-Year Average

Kansas

	2011		2012		2013		2014		2015		5-Year Average	
Type of Use	GW	SW	GW	SW	GW	SW	GW	SW	GW	SW	GW	SW
Municipal	45,118	73,504	49,092	81,596	43,207	74,182	43,808	77,271	41,272	60,291	44,500	73,369
Industrial	5,436	43,781	5,674	57,132	5,559	49,687	5,466	48,504	7,165	33,847	5,860	46,590
Irrigation	52,543	11,020	85,736	16,136	55,047	12,182	54,395	12,558	33,191	9,671	56,182	12,314
Stockwater	747	-	694	-	697	-	694	-	772	-	721	-
Other	8,101	1,206,647	8,271	882,579	8,223	952,446	9,130	1,002,226	9,225	1,168,759	8,590	1,042,531
Total	111,944	1,334,952	149,467	1,037,443	112,734	1,088,497	113,493	1,140,560	91,625	1,272,569	115,853	1,174,804

Marais des Cygnes

	2011		2012		2013		2014		2015		5-Year Average	
Type of Use	GW	SW	GW	SW	GW	SW	GW	SW	GW	SW	GW	SW
Municipal	287	15,779	387	16,778	533	14,926	351	15,413	373	14,537	386	15,487
Industrial	9	12,693	6	19,149	27	11,737	6	10,851	10	10,851	11	13,056
Irrigation	668	2,584	598	2,383	497	2,272	511	1,775	462	1,986	547	2,200
Stockwater	0	106	0	85	0	88	0	85	0	63	0	85
Other	-	3,743	24	4,377	3	2,467	22	2,662	0	1,806	10	3,011
Total	964	34,905	1,015	42,773	1,060	31,491	890	30,785	845	29,243	955	33,839

Missouri

	2011		2012		2013		2014		2015		5-Year Average	
Type of Use	GW	SW	GW	SW	GW	SW	GW	SW	GW	SW	GW	SW
Municipal	3,581	86,693	4,410	99,091	5,526	77,645	4,504	67,445	4,620	68,705	4,528	79,916
Industrial	427	36	115	34	123	30	161	39	99	20	185	32
Irrigation	412	646	2,429	1,436	2,747	1,717	1,997	1,666	1,611	1,769	1,839	1,447
Stockwater	44	-	57	-	66	-	70	-	77	-	63	-
Other	2,154	1,684	490	1,809	591	2,390	33	2,212	291	921	712	1,803
Total	6,618	89,059	7,501	102,370	9,053	81,782	6,765	71,362	6,699	71,415	7,327	83,198

Neosho

	2011		2012		2013		2014		2015		5-Year Average	
Type of Use	GW	SW	GW	SW	GW	SW	GW	SW	GW	SW	GW	SW
Municipal	6,783	15,645	6,376	15,781	6,168	13,790	6,255	14,231	5,508	14,853	6,218	14,860
Industrial	192	31,421	194	30,843	187	29,184	169	25,748	279	22,510	204	27,941
Irrigation	1,233	3,654	1,718	3,222	1,048	2,164	1,706	2,404	1,368	1,716	1,415	2,632
Stockwater	267	236	290	193	302	247	246	304	210	311	263	258
Other	59	5,297	61	1,633	89	4,399	85	4,822	51	8,833	69	4,997
Total	8,533	56,252	8,639	51,672	7,794	49,784	8,461	47,508	7,417	48,223	8,169	50,688

Water Use (Acre-Feet) in Kansas by Source of Water, Type of Use and Regional Planning Area, 2011-2015 and 5-Year Average

Red Hills

	2011		2012		2013		2014		2015		5-Year Average	
Type of Use	GW	SW	GW	SW	GW	SW	GW	SW	GW	SW	GW	SW
Municipal	5,915	1,079	5,638	1,145	4,802	1,155	4,316	1,438	4,122	1,340	4,958	1,232
Industrial	1,135	969	1,330	779	695	146	1,495	238	1,042	195	1,139	465
Irrigation	58,200	512	49,964	505	34,020	335	39,584	410	37,473	377	43,848	428
Stockwater	415	-	465	-	425	-	422	-	423	-	430	-
Other	165	40	240	44	102	449	565	112	478	68	310	143
Total	65,830	2,599	57,637	2,473	40,043	2,085	46,383	2,199	43,539	1,980	50,686	2,267

Smoky-Hill Saline

	2011		2012		2013		2014		2015		5-Year Average	
Type of Use	GW	SW	GW	SW	GW	SW	GW	SW	GW	SW	GW	SW
Municipal	11,941	5,289	12,033	5,969	10,948	4,864	10,357	4,864	11,044	4,590	11,265	5,115
Industrial	633	61	721	72	500	42	589	77	333	42	555	59
Irrigation	22,917	3,944	26,467	3,912	14,311	1,402	17,626	2,717	18,024	2,444	19,869	2,884
Stockwater	596	-	595	-	440	-	447	-	498	-	515	-
Other	2,013	1,834	2,346	1,034	1,533	360	1,762	664	1,392	385	1,809	855
Total	38,100	11,127	42,162	10,986	27,732	6,667	30,781	8,322	31,292	7,460	34,014	8,913

Solomon-Republican

	2011		2012		2013		2014		2015		5-Year Average	
Type of Use	GW	SW	GW	SW	GW	SW	GW	SW	GW	SW	GW	SW
Municipal	6,302	1,539	6,762	1,830	6,132	1,651	5,903	1,596	5,524	1,603	6,125	1,644
Industrial	278	7	283	3	304	2	412	-	440	-	343	3
Irrigation	36,415	107,402	60,662	148,861	44,747	113,761	41,854	57,069	41,229	65,209	44,982	98,460
Stockwater	1,135	-	1,119	-	1,119	-	997	-	1,265	-	1,127	-
Other	1,349	-	1,284	-	1,011	0	1,002	-	1,118	0	1,153	0
Total	45,479	108,948	70,110	150,694	53,313	115,414	50,169	58,665	49,576	66,813	53,729	100,107

Upper Arkansas

	2011		2012		2013		2014		2015		5-Year Average	
Type of Use	GW	SW	GW	SW	GW	SW	GW	SW	GW	SW	GW	SW
Municipal	24,075	-	23,687	-	19,546	-	19,675	-	19,604	-	21,317	-
Industrial	15,318	-	16,411	-	14,389	-	14,336	-	13,070	-	14,705	-
Irrigation	1,256,585	36,012	1,154,884	4,734	1,037,087	3,559	983,533	18,501	818,068	50,043	1,050,031	22,570
Stockwater	17,265	-	16,195	-	17,558	-	17,838	-	18,302	-	17,432	-
Other	2,341	-	1,674	-	1,376	-	752	-	593	-	1,347	-
Total	1,315,583	36,012	1,212,851	4,734	1,089,956	3,559	1,036,134	18,501	869,636	50,043	1,104,832	22,570

Water Use (Acre-Feet) in Kansas by Source of Water, Type of Use and Regional Planning Area, 2011-2015 and 5-Year Average

Upper Republican

	2011		2012		2013		2014		2015		5-Year Average	
Type of Use	**GW**	**SW**	**GW**	**SW**	**GW**	**SW**	**GW**	**SW**	**GW**	**SW**	**GW**	**SW**
Municipal	6,419	-	7,618	-	6,640	-	6,454	-	6,291	-	6,684	-
Industrial	1,101	3	1,047	1	1,128	-	1,053	-	884	4	1,043	2
Irrigation	447,252	2	566,867	13	490,025	8	418,467	6	397,290	-	463,980	6
Stockwater	2,462	-	2,758	-	2,780	0	2,683	-	3,148	-	2,766	0
Other	1,185	-	838	-	1,402	-	941	-	843	-	1,042	-
Total	458,419	5	579,128	14	501,975	8	429,598	6	408,456	4	475,515	8

Upper Smoky Hill

	2011		2012		2013		2014		2015		5-Year Average	
Type of Use	**GW**	**SW**	**GW**	**SW**	**GW**	**SW**	**GW**	**SW**	**GW**	**SW**	**GW**	**SW**
Municipal	2,490	-	2,933	-	2,384	-	2,235	-	2,111	-	2,431	-
Industrial	192	-	232	1	321	-	203	-	349	-	260	0
Irrigation	223,286	-	243,731	-	200,729	-	190,841	-	152,495	1	202,216	0
Stockwater	6,815	-	7,242	-	6,849	-	6,710	-	6,564	-	6,836	-
Other	3	-	5	-	2	-	3	-	4	-	3	-
Total	232,786	-	254,144	1	210,285	-	199,991	-	161,524	1	211,746	0

Verdigris

	2011		2012		2013		2014		2015		5-Year Average	
Type of Use	**GW**	**SW**	**GW**	**SW**	**GW**	**SW**	**GW**	**SW**	**GW**	**SW**	**GW**	**SW**
Municipal	19	10,388	13	9,954	15	9,029	9	9,828	9	9,844	13	9,809
Industrial	0	8,928	0	6,589	0	7,542	0	7,038	2	6,979	0	7,415
Irrigation	14	1,471	10	1,227	-	1,043	-	952	-	856	5	1,110
Stockwater	50	70	31	73	52	61	65	84	47	54	49	68
Other	231	9	69	-	26	-	76	-	61	0	93	2
Total	314	20,866	123	17,843	93	17,675	150	17,903	119	17,734	160	18,404

Sources:
Kansas Department of Agriculture, Division of Water Resources, Query Date 2/06/17
Kansas Water Office, Water Marketing Program

Beneficial Uses of Water[1]

Artificial Recharge
"The use of source water to artificially replenish the water supply in an aquifer."

Contamination Remediation
"The diversion of water by a state agency, or under a written agreement or order of an appropriate state agency, for the purpose of improving the water quality."

Dewatering
"The removal of surface water or groundwater to achieve either of the following:

(1) Facilitate the construction of a building, pipeline, or other facility; or
(2) protect a building, levee, mining activity, or other facility."

Domestic Use
"The use of water by any person or by a family unit or household for household purposes, or for the watering of livestock, poultry, farm and domestic animals used in operating a farm, and for the irrigation of lands not exceeding a total of two acres in area for the growing of gardens, orchards and lawns."[2]

Fire Protection
"The use of water for fire protection by a fire department for public protection in general."

Hydraulic Dredging
"The removal of saturated aggregate from a stream channel, pit, or quarry by means of hydraulic suction and the pumping of the aggregate and water mixture as a slurry to a location where at least 95 percent of the water returns directly to the source of supply."

Industrial
"The use of water in connection with the manufacture, production, transport, or storage of products, or the use of water in connection with providing commercial services, including water used in connection with steam electric power plants, greenhouses, fish farms, poultry operations that are not incidental to the operation of a traditional farmstead pursuant to K.S.A. 82a-701(c) and amendments thereto, secondary and tertiary oil recovery, air conditioning, heat pumps, equipment cooling, and all uses of water associated with the removal of aggregate for commercial purposes except the following:

(1) The evaporation caused by exposing the groundwater table or increasing the surface area of a stream, lake, pit, or quarry by excavation or dredging, unless the evaporation has a substantially adverse impact on the area groundwater supply; and
(2) hydraulic dredging."

Irrigation
"The use of water for the following:

(1) The growing of crops;

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[1] K.A.R. 5-1-1.
[2] K.S.A. 82a-701

(2) the watering of gardens, orchards, and lawns exceeding two acres in area; and
(3) the watering of golf courses, parks, cemeteries, athletic fields, racetrack grounds, and similar facilities."

Municipal

"The various uses made of water delivered through a common distribution system operated by any of the following:
(1) A municipality;
(2) a rural water district;
(3) a water district;
(4) a public wholesale water supply district;
(5) any person or entity serving 10 or more hookups for residences or mobile homes; or
(6) any other similar entity distributing water to other water users for various purposes.

Municipal use shall also include the use of water by restaurants, hotels, motels, churches, camps, correctional facilities, educational institutions, and similar entities using water that does not qualify as a domestic use."

Recreation

"Use of water in accordance with a water right that provides entertainment, enjoyment, relaxation, and fish and wildlife benefits."

Sediment Storage

"A beneficial use of water that meets both of the following criteria:
(1) The water is stored in a reservoir that has no other authorized type of beneficial use, except domestic use.
(2) The water is stored only in the part of the reservoir designed and constructed for the storage of sediment.

Stockwater

"The watering of livestock and other uses of water directly related to either of the following:
(A) The operation of a feedlot with the capacity to confine 1,000 or more head of cattle; or
(B) any other confined livestock operation or dairy that would divert 15 or more acre-feet of water per calendar year.

(2) Stockwatering shall not include the irrigation of feed grains or other crops.

(3) For the purposes of this subsection, a group of feedlots or other confined feeding operations shall be considered to be one feedlot or confined feeding operation if both of these conditions are met:
(A) There are common feeding or other physical facilities.
(B) The group of facilities is under common management."

Thermal Exchange

"The use of water for climate control in a nondomestic building and in a manner that is essentially nonconsumptive to the source of supply."

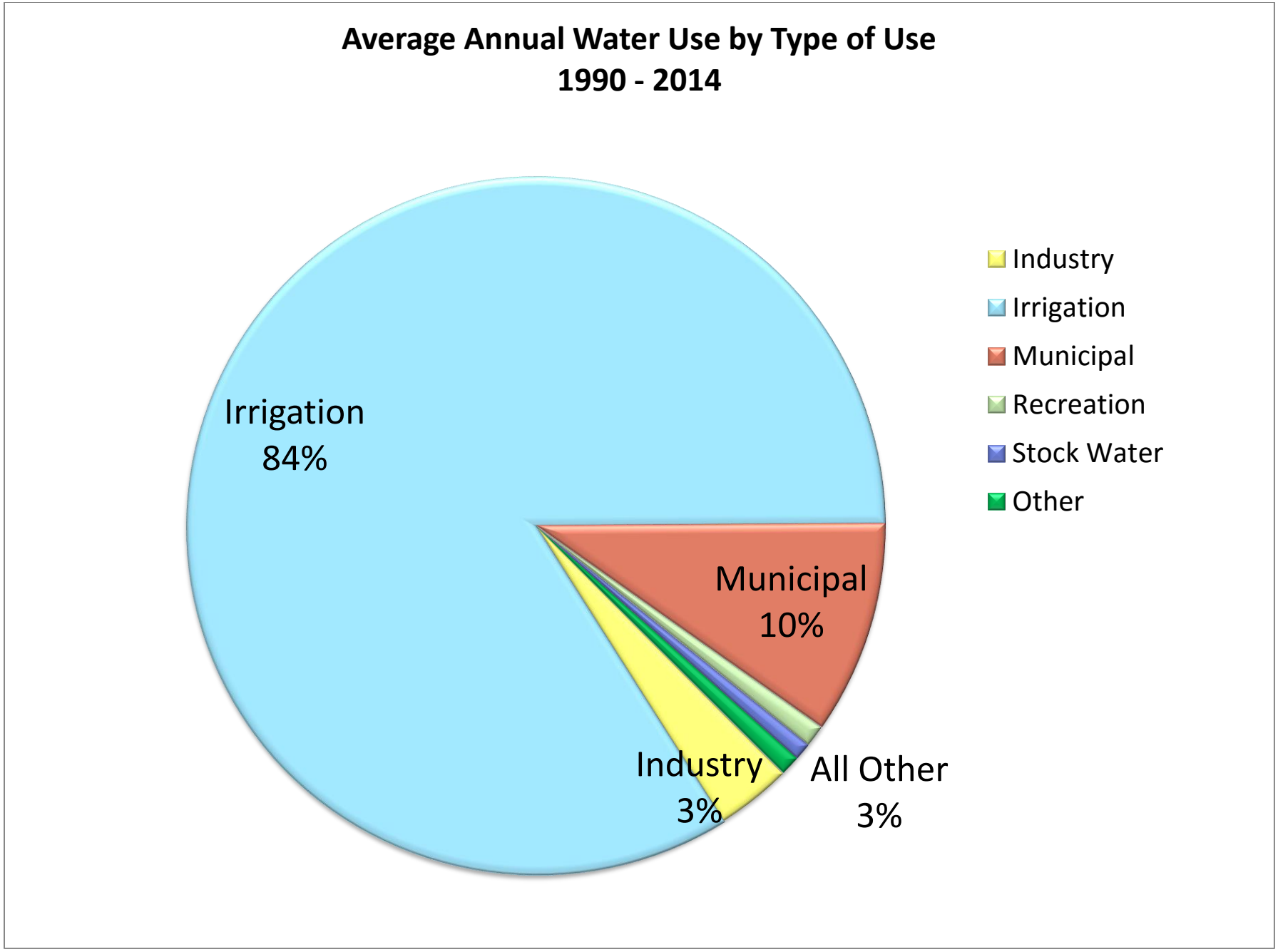
Water Power

"The use of falling water for hydroelectric or hydromechanical power."

Water Use by Type (Acre-Feet)
Kansas, 1990 - 2015

Year	ART	CON	DEW	DOM	FPR	HYD	IND	IRR	MUN	REC	SED	STK	THX	WTR	Total
1990	10	5,529	0	122	0	22,675	162,143	4,678,403	411,477	58,668	0	26,491	0	0	5,365,518
1991	10	7,344	0	128	0	14,263	161,579	4,771,579	427,430	34,299	0	27,984	0	0	5,444,615
1992	0	9,951	0	84	0	18,715	149,735	3,370,887	384,648	38,379	0	26,983	0	0	3,999,381
1993	10	9,751	0	35	0	21,997	145,158	2,912,863	370,212	49,641	0	24,737	0	0	3,534,404
1994	0	12,079	0	170	0	21,329	156,295	4,040,147	419,187	39,198	0	25,579	0	0	4,713,984
1995	0	14,501	0	189	0	18,920	162,499	3,767,296	409,396	37,338	0	27,702	0	0	4,437,841
1996	426	12,293	0	141	0	27,661	165,412	3,502,515	409,703	71,326	0	30,620	0	1,373,530	5,593,628
1997	159	12,211	0	181	0	20,708	167,350	3,421,900	407,415	92,827	0	32,577	0	1,355,805	5,511,132
1998	993	15,397	0	207	0	24,839	122,696	3,631,266	435,252	56,811	0	31,566	0	1,430,664	5,749,691
1999	777	12,961	0	242	0	28,741	156,056	3,304,352	431,216	49,198	0	39,352	0	1,548,530	5,571,426
2000	183	14,213	0	214	0	27,949	154,143	4,144,390	463,523	61,950	0	34,430	0	1,497,473	6,398,469
2001	2,755	11,927	209	190	46	30,332	165,627	3,783,362	456,168	53,757	0	41,687	2,821	1,117,958	5,666,839
2002	109	11,344	201	212	47	28,533	136,680	4,434,746	464,632	50,219	0	36,512	1,942	862,257	6,027,433
2003	17	15,135	453	408	48	25,543	155,200	3,862,567	461,751	36,455	0	36,690	1,322	776,015	5,371,603
2004	10	17,269	1,121	174	26	26,871	159,525	3,255,660	433,626	43,878	0	37,960	1,365	882,668	4,860,152
2005	25	17,535	1,443	214	21	27,254	154,183	3,070,254	450,340	29,449	0	39,394	1,693	833,234	4,625,039
2006	17	16,540	541	202	23	30,662	164,433	3,598,925	473,415	35,086	0	40,626	2,183	683,342	5,045,995
2007	1,218	16,548	1,993	328	22	21,200	149,058	3,193,828	454,401	34,150	0	39,271	2,331	826,492	4,740,841
2008	1,060	14,320	1,610	341	22	17,224	136,619	3,401,888	428,914	21,647	0	39,155	1,904	836,158	4,900,863
2009	1,655	21,381	9,022	152	18	20,631	125,296	3,148,396	409,549	30,836	0	37,493	1,594	1,003,651	4,809,675
2010	321	16,839	2,744	231	18	30,742	150,171	3,412,391	436,100	67,538	0	41,046	1,911	1,100,036	5,260,088
2011	0	15,400	3,495	302	25	24,058	158,869	4,274,769	459,687	40,617	0	42,925	1,684	1,196,592	6,218,423
2012	119	14,959	1,334	351	14	23,566	176,521	4,148,097	486,444	23,826	0	43,267	1,289	872,536	5,792,325
2013	78	15,476	2,834	358	23	17,872	155,621	3,498,250	418,697	26,274	0	43,103	1,245	944,486	5,124,317
2014	329	12,123	860	248	23	17,508	143,698	3,363,409	417,756	24,781	0	43,947	1,420	995,294	5,021,396
2015	3,162	12,023	848	117	26	15,352	127,068	3,006,023	393,611	33,526	0	45,080	1,957	1,160,449	4,799,241

ART	Artificial Recharge	HYD	Hydraulic Dredging	SED	Sediment Storage
CON	Contamination Remediation	IND	Industrial	STK	Stockwater
DEW	Dewatering	IRR	Irrigation	THX	Thermal Exchange
DOM	Domestic	MUN	Municipal	WTR	Water Power
FPR	Fire Protection	REC	Recreation		


Average Annual Water Use by Type of Use
1990 - 2014
Irrigation
84%
Municipal
10%
Industry
3%
All Other
3%
Industry
Irrigation
Municipal
Recreation
Stock Water
Other

Water Use by Type (Acre-Feet) and State Water Plan Fund Payments
Kansas, 1990-02015

	Industry		Municipal		Stockwater	
Year	**Water Use**	**SWPF $**	**Water Use**	**SWPF $**	**Water Use**	**SWPF $**
1990	162,143	$ -	411,477	$ -	26,491	$ -
1991	161,579	$ -	427,430	$ -	27,984	$ -
1992	149,735	$ 1,668,381	384,648	$ 3,376,555	26,983	$ 297,799
1993	145,158	$ 883,640	370,212	$ 3,128,802	24,737	$ 267,852
1994	156,295	$ 868,229	419,187	$ 3,010,492	25,579	$ 120,012
1995	162,499	$ 981,224	409,396	$ 3,339,531	27,702	$ 145,485
1996	165,412	$ 1,128,911	409,703	$ 3,292,606	30,620	$ 241,777
1997	167,350	$ 1,149,832	407,415	$ 3,209,816	32,577	$ 266,422
1998	122,696	$ 1,095,518	435,252	$ 3,358,914	31,566	$ 292,298
1999	156,056	$ 1,268,946	431,216	$ 3,618,947	39,352	$ 280,500
2000	154,143	$ 1,116,221	463,523	$ 3,424,725	34,430	$ 325,570
2001	165,627	$ 1,392,046	456,168	$ 3,610,375	41,687	$ 368,180
2002	136,680	$ 1,178,943	464,632	$ 3,496,901	36,512	$ 315,742
2003	155,200	$ 1,207,480	461,751	$ 3,550,865	36,690	$ 372,992
2004	159,525	$ 1,102,567	433,626	$ 3,493,043	37,960	$ 357,276
2005	154,183	$ 1,052,932	450,340	$ 3,220,072	39,394	$ 398,653
2006	164,433	$ 1,104,837	473,415	$ 3,454,401	40,626	$ 359,112
2007	149,058	$ 1,247,221	454,401	$ 3,532,987	39,271	$ 361,565
2008	136,619	$ 1,038,246	428,914	$ 3,384,068	39,155	$ 386,364
2009	125,296	$ 1,122,203	409,549	$ 3,052,361	37,493	$ 385,391
2010	150,171	$ 1,113,890	436,100	$ 3,028,646	41,046	$ 429,826
2011	158,869	$ 1,026,703	459,687	$ 3,146,069	42,925	$ 348,862
2012	176,521	$ 1,119,751	486,444	$ 3,499,474	43,267	$ 325,455
2013	155,621	$ 1,086,576	418,697	$ 3,657,617	43,103	$ 372,414
2014	143,698	$ 1,177,336	417,756	$ 3,212,299	43,947	$ 413,395
2015	127,068	$ 1,066,382	393,611	$ 3,075,258	45,080	$ 412,114
Total		$ 27,198,015		$ 80,174,824		$ 7,845,056

Examples of Current Costs for Various Water User Groups

		Irrigated Section - GMD 5 (Stafford Co)	Dryland Section - GMD5 (Stafford Co)	Irrigated Section - Kansas River Valley	Stockwater - Feedlot in GMD3 (Finney Co)	Industrial - Kansas River Valley	Municipal Customer - Finney County	Municipal Customer - Johnson County
Assumptions		**130 acre irrigated, 1.5AF/acre, irrigated - 288lb fertilizer/acre**	**160 acre dryland, 100lb fertilizer/acre**	**130 acre irrigated, 1AF/acre, 288lb fertilizer/acre (Douglas County - AR zone property tax)**	**Facility with 40,000 head cattle capacity, 12 gphd for 365 days**	**Electric Generating Facility on Kansas River**	**204 gpcd, household of 4, median residential home property tax for county**	**154 gpcd, household of 4, median residential home property tax for county**
Current Fees to State Water Plan								
Water Protection Fee (per 1000 gallons)		**$ -**	**$ -**	**$ -**	**$ 0.03**	**$ 0.03**	**$ 0.03**	**$ 0.03**
Clean Drinking Water Fee (per 1000 gallons)		**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 0.03**	**$ 0.03**
Fertilizer fee (per ton)		**$ 1.42**	**$ 1.42**	**$ 1.42**				
Fertilizer Use - tons		**18.72**	**8**	**18.72**				
Average yearly Residential use - Household of 4 (gallons)							**297,840**	**224,840**
Yearly livestock water use (gallons)					175,200,000			
Industrial use Kansas River Valley						1,742,142,000		
State Water Plan Funding - Subtotal		$ 26.58	$ 11.36	$ 26.58	$ 5,256.00	$ 52,264.26	$ 17.87	$ 13.49
Fee per Acre-foot		$ 0.14	$ -	$ 0.20	$ 9.78	$ 9.78	$ 19.55	$ 19.55
Fee per 1000 gallons		**$ 0.00042**	**$ -**	**$ 0.00063**	**$ 0.03**	**$ 0.03**	**$ 0.06**	**$ 0.06**
GMD and Local Water Use Fees								
GMD Water Assessment Rate per Acre-foot		$ 0.67	$ 0.67		$ 0.14		NA	NA
Water Right Allocation (Acre-feet)		**195**		**130**	**517**		**NA**	**NA**
GMD Land Assessment Rate (Acre)		$ 0.05	$ 0.05		$ 0.05		$ 0.05	NA
GMD Lands Assessed		160	160		285		1	NA
Municipal Water Service Fee (12 months)							$ 134	$ 275
Local Municipal Water Rate (12 months)							$ 565	$ 952
Kansas River Assurance District Fee						$ 39,636		
GMD and Local Water Use Fees - Subtotal		$ 139	$ 8	$ -	$ 87	$ 39,636	$ 699	$ 1,227
Fee per Acre-foot		$ 0.71			$ 0.17	$ 7.41	$ 764.66	$ 1,777.56
Water Plan Funding, GMD, and Local Water Use Fees per Acre-foot		$ 0.85	NA	$ 0.20	$ 9.94	$ 17.19	$ 784.21	$ 1,797.11
Water Plan Funding, GMD, and Local Water Use Fees per 1000 gallons		$ 0.00260	NA	$ 0.00063	$ 0.03051	$ 0.05275	$ 2.40666	$ 5.51513
Property Tax								
Irrigated Property Tax Rate (acre)		$ 17.24	$ 17.24	$ 17.65				
Non-irrigated Property Tax Rate (acre)		7.22	7.22					
Feedlot Property Tax (acre)					$ 113	$ -		$ -
Median Residential Property Tax							$ 1,483.00	$ 2,790.00
Industrial Property Tax (acre)						Unable to Calculate - DOR ($11.1 million for property)		
Property Tax Subtotal		$ 2,458	$ 1,155	$ 2,824	$ 32,205	$ -	$ 1,483	$ 2,790
State Water Plan Funding - Subtotal		$ 26.58	$ 11.36	$ 26.58	$ 5,256.00	$ 52,264.26	$ 17.87	$ 13.49
Other Fees and Tax - Subtotal		$ 2,596.45	$ 1,163.20	$ 2,824.00	$ 32,291.63	Unable to Calculate - DOR	$ 2,181.93	$ 4,016.53
State Water Plan Fee, Other Fees, & Tax Total		$ 2,623	$ 1,175	$ 2,851	$ 37,548	$ 91,900	$ 2,200	$ 4,030
State Water Plan Fee, Other Fees, & Tax per Acre-foot used		$ 13.45	NA	$ 21.93	$ 72.63	Unable to Calculate - DOR	$ 2,406.69	$ 5,840.54

130 acre irrigated fertilizer rate,	160 acre dryland fertilizer rate	130 acre irrigated fertilizer rate	Garden City Water Fee Rates 0-15000 $1.80/1000 & 15001-30000 $2.05/1000 GMD water use assessment on the MUN water right not included	WaterOne block 1 $4.08/1000 gal, block 2 $5.43/1000 gal (12000 gal block 1 & 6700 gal block 2 for this example)

2017

Kansas Water Office

AD ASTRA PER ASPERA

Agency Overview

Dredging

Reservoirs

Streambank Restoration

Conservation

Education

Water Technology Farms

Technology

Kansas Water Office - Agency Overview

Agency Priorities:

- Sustain the states reservoir system to meet current and future demands under the Reservoir Sustainability Initiative.
- Conserve and extend the life of the Ogallala Aquifer.
- Implement strategies for the protection and restoration of watersheds, with an emphasis on sediment and nutrient reduction.
- Develop regional water supply strategies where appropriate throughout Kansas.

Purpose:

- Development of comprehensive State Water Plan
- Coordinate the water resource operations of agencies at all levels of government
- Ensure adequate quantities of good quality water to meet future needs
- Efficiently operate state owned storage in federal reservoirs

Statutory Authority

74-2613 Kansas Water Office established

74-2608 Water Policy Development, Water Planning, and Agency Coordination

74-2622 Kansas Water Authority established

82a-220 Grant of streambank easement for navigable waters

82a-733 Water conservation plans

82a-901 et seq. State Water Resources Planning Act

82a-1101 et seq. Coordination of streambank projects

82a-1301 et seq. State Water Plan Storage Act

82a-1330 et seq. Water Assurance Program Act

82a-1401 et seq. Weather Modification Act

82a-1501a Water Transfer Act

82a-1604 et seq. Multipurpose Small Lakes Act

8sa-1801 et seq. Water Litigation Act and fund

82a-2101 Clean Drinking Water Fee

82a-2301 et seq. Lower Smoky Hill Supply Access Program

82a-2401 et seq. Reservoir Improvement District Act

Total Office Positions: 18.5

17 Professional Staff

1.5 Administrative Staff

Appointed Board Members: 13

Budget

Program	FY2016 Actual	FY2017 Budget	FY2018 Budget	FY2019 Budget
Administration	$6,173,394	$ 4,283,256	$ 2,200,164	$ 2,185,322
Kansas Water Authority	$35,270	$ 28,695	$ 28,699	$ 28,700
Public Water Supply Programs	$4,180,408	$ 4,314,403	$ 4,360,666	$ 4,373,846
Total	**$10,389,072**	**$ 8,626,354**	**$ 6,589,529**	**$ 6,587,868**

Kansas Water Office - Administration

Purpose:

- Development of comprehensive State Water Plan
- Coordinate the water resource operations of agencies at all levels of government
- Ensure adequate quantities of good quality water to meet future needs

Statutory Authority

74-2613 Kansas Water Office established

74-2608 Water Policy Development, Water Planning, and Agency Coordination

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8sa-1801 et seq. Water Litigation Act and fund

82a-2101 Clean Drinking Water Fee

Total Positions: 10.5

9.5 Professional Staff

1 Administrative Staff

Budget

Program	FY2016	FY2017	FY2018	FY2019
Administration	$6,173,394	$4,283,256	$2,200,164	$2,185,322

FY2016 Actual Revenue and Expenditure by Fund

Revenue by Fund FY 2016	Revenue or Appropriation	Expended	Carryover	Budget %
State General Fund	$1,091,641	$1,091,641	$0	17.7%
State Water Plan Fund	$2,105,604	$1,854,510	$251,094	30%
General Fee Fund	$167,086	$91,340	$75,746	1.5%
Indirect Cost Fund	$124,258	$6,531	$117,727	.1%
Local Water Project Match	$110,900	$110,900	$0	1.8%
Republican River Wtr Cnsv Prj	$3,500,000	$2,654,375	$845,625	43%
Stream stabilization Fund	$45,058	$45,058	$0	.7%
Kansas Drought Tournament	$150,000	$99,525	$50,475	1.6%
EPA Wetland Grant Fund	$ 219,541	$219,541	$0	3.6%
Total Funds	$7,514,088	$6,173,394	$1,340,667	100%

Major Expenditures

Major Expenditures	FY2016 Actual	FY2017 Budget	FY2018 Budget	FY2019 Budget
Salaries and Wages	$807,382	$788,573	$789,152	$799,585
Contractual Services	$4,942,413	$3,260,925	$1,33,345	$1,308,945
Commodities	$90,889	$17,937	$60,846	$61,000
Capital Outlay	$32,050	$15,821	$15,821	$15,792
Capital Improvements	$0	$0	$0	$0
Aid to Locals	$36,146	$0	$0	$0
Other Assistance	$264,514	$200,000	$0	$0
Total Expenditures	**$6,173,394**	**$4,283,256**	**$2,200,164**	**$2,185,322**

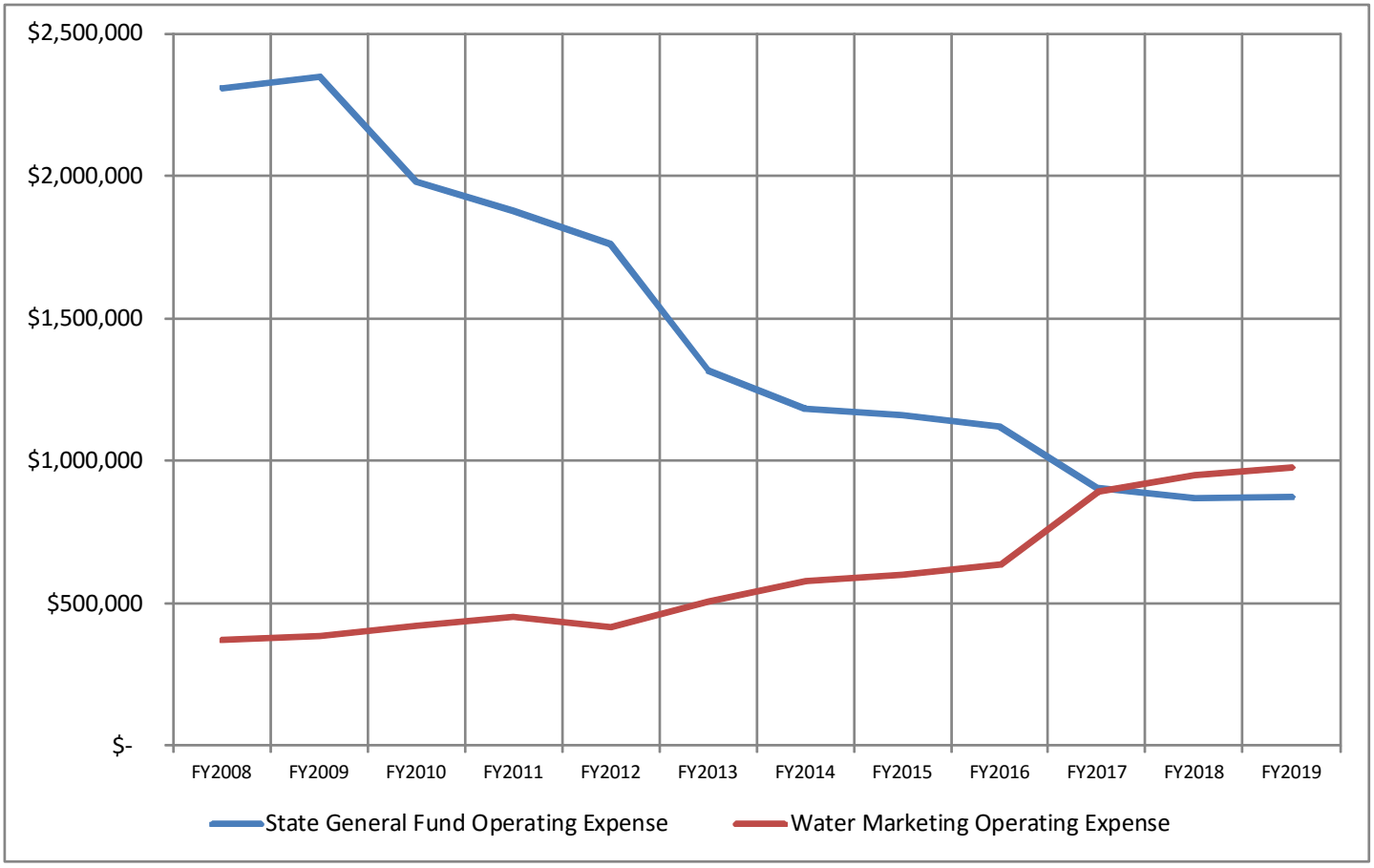
Kansas Water Office - Budget History

Kansas Water Office Budget History

Over the past ten fiscal years the Kansas Water Office State General Fund appropriation has experienced a 60% reduction. As a result, the agency has left vacant positions unfilled and increased our reliance on Water Marketing Program revenue for administrative support.

In 2016, a SGF allotment reduced our FY 2017 appropriation from $1,154,576 to $904,576. This reduction of $250,000 represents 21.7% of the SGF appropriation for the agency.

We mitigated this reduction by shifting additional operating expenses to the Water Marketing Fund. The increased reliance on Water Marketing Fund revenue for agency operations resulted in the shift of available funding from streambank stabilization projects above John Redmond and Tuttle Creek Reservoirs. The $250,000 SGF reduction is recommended to be continued into FY 2018 and FY 2019.



Kansas Water Office - Public Water Supply

Purpose:

- Ensure adequate quantities of good quality water to meet future needs
- Efficiently operate state owned storage in federal reservoirs

Statutory Authority

82a-1301 et seq. State Water Plan Storage Act

82a-1330 et seq. Water Assurance Program Act

82a-1604 et seq. Multipurpose Small Lakes Act

82a-2301 et seq. Lower Smoky Hill Supply Access Program

82a-2401 et seq. Reservoir Improvement District Act

Total Positions: 8

7.5 Professional Staff

.5 Administrative Staff

Budget

Program	FY2016	FY2017	FY2018	FY2019
State Water Plan	$301,374	$289,889	$363,699	$350,000
Water Marketing	$3,584,308	$3,716,537	$3,667,526	$3,698,575
Water Assurance	$294,726	$307,977	$329,441	$325,271
Total	**$4,180,408**	**$4,314,403**	**$4,360,666**	**$4,373,846**

FY2016 Actual Revenue and Expenditure by Fund

Revenue by Fund FY 2016	Revenue or Appropriation	Expended	Carryover	Budget %
Stae Water Plan Fund	$301,374	$301,374	$0	7.2%
Water Supply Storage Acquisition Financing Fund	$0	$0	$0	0
Water Marketing Fund	$3,250,591	$3,584,308	$3,494,005	85.7%
Water Marketing Fund—Reserve Account	$0	$0	$248,030	0%
State Conservation Storage Water Supply Fund	$0	$0	$219,756	0%
Water Supply Storage Assurance Fund	$350,182	$294,726	$159,129	7.1%
Total Funds	$3,902,147	$4,180,408	$4,120,920	100%

Major Expenditures

Major Expenditures	FY2016 Actual	FY2017 Budget	FY2018 Budget	FY2019 Budget
Salaries and Wages	$559,972	$683,453	$694,488	$711,005
Contractual Services	$1,695,628	$1,947,466	$1,960,405	$1,995,720
Commodities	$3,124	$1,470	$16,800	$16,800
Capital Outlay	$11,747	$9,439	$16,400	$21,468
Debt Service—Interest	$866,506	$699,580	$699,698	$638,376
Debt Service—Principal	$1,043,431	$972,995	$1,002,875	$1,034,199
Non-Expense Items	$0	$0	$0	$0
Total Expenditures	**$4,180,408**	**$4,314,403**	**$4,360,666**	**$4,417,568**

Kansas Water Office - Public Water Supply-Water Marketing

Water Marketing Program Description:

The Water Marketing Program operates on a cash basis, with a variable rate set each year that is adequate to meet the expected expenses. Currently, seventy five percent of water paid for under the Water Marketing Program is by customers with contracts that predate the 1983 establishment of the current variable rate structure, such that their rate is capped at $0.10; revenue collected from those contracts makes up over half of the Program total revenue.

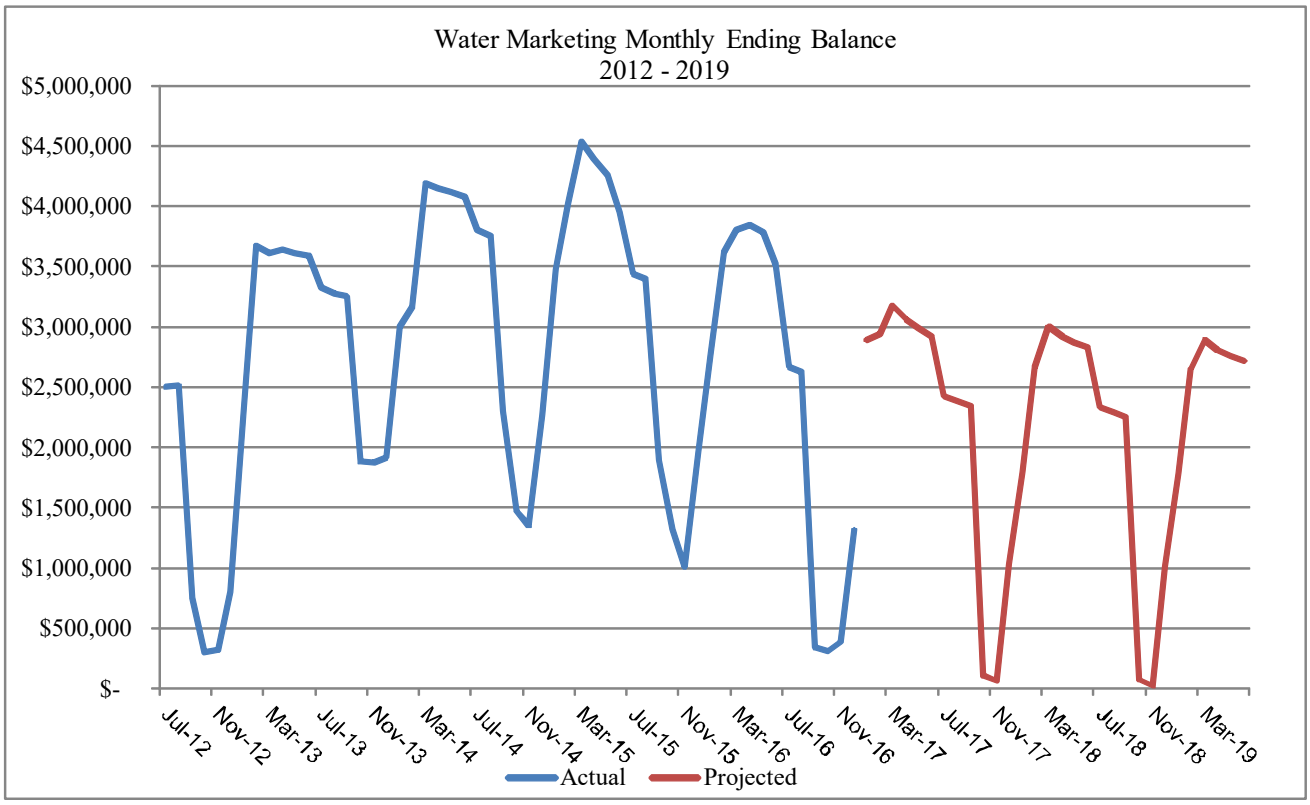
The variable rate under which the remaining 25% of water paid for is set using the factors shown in the text box below. The fifth component, "an amount necessary to meet the needs of the *Water Marketing Program Capital Development and Storage Maintenance Plan* as approved by the Kansas Water Authority", is the most significant factor to ensure sufficient revenue is available to meet the needs of the Program.

The *Water Marketing Program Capital Development and Storage Maintenance Plan* also provides for the long-term planning of future Program needs, including acquisition of all the water supply storage under federal contracts, potential new storage development and protection and restoration of the storage owned by the State.

This Plan continues the schedule approved by the Kansas Water Authority in June 2006 for calling future use storage into service in Clinton and Hillsdale lakes. It also incorporates the plan to bond the final increment payments for Clinton and Hillsdale, and for the first time, Big Hill. The Plan assumes Milford and Perry reservoirs storage will be dedicated to the Kansas River Water Assurance District in the future and will not impact the Marketing Program. The 2014 Capital Development and Storage Maintenance Plan also continues the funding initiated in the current year for dredging John Redmond Reservoir.

The Water Marketing rate for calendar year 2017 is $0.38

Water fees assessed to support the Water Marketing Program are principally aimed at meeting contractual obligations to the Corps of Engineers for debt service and operations and maintenance at the 13 reservoirs under the Program. Further impacts to the SGF and Water Marketing Program will result in likely increases in annual fees assessed under the Marketing Program and/or significant impacts to cash/flow balances necessary to operate the program when fee revenues are diminished in high rainfall years. The graph below shows the Water Marketing Fund month end balance and illustrates the depletion on the fund in FY 2018 and FY 2019.



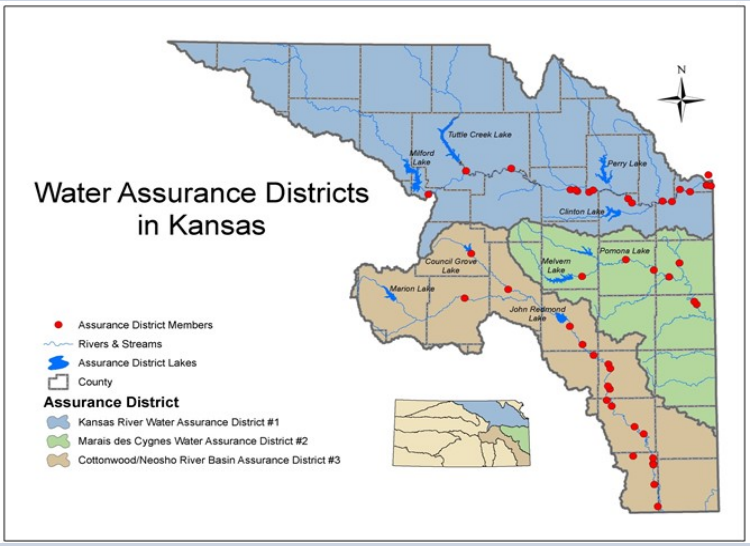
Kansas Water Office - Public Water Supply-Water Assurance

Water Assurance Program Description:

The purpose of the Water Assurance Program is to allow for coordinated operation of water storage space in federal reservoirs to satisfy downstream municipal and industrial water rights during drought conditions. The state operates the reservoirs in a region as a system for increased efficiency in water delivery. Water right holders that are members of the districts receive enhanced flow during times of drought.

The districts are charged for the costs incurred by the state for both principal and interest associated with storage construction and operation and maintenance of the storage dedicated to the use of the districts.

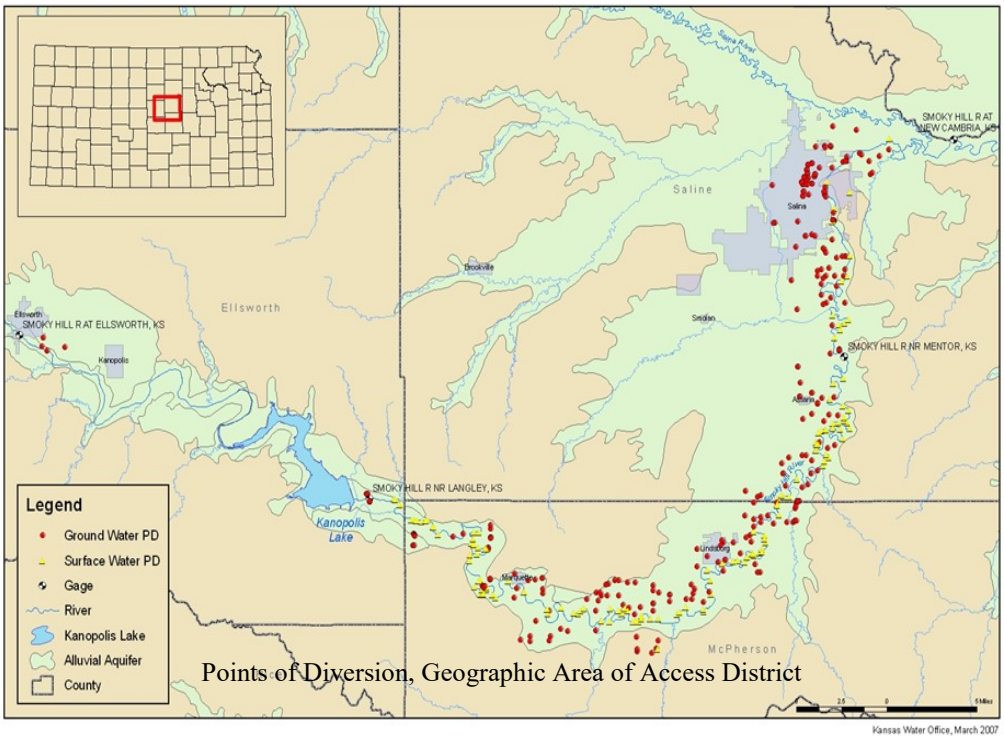
Payments from the assurance districts are passed through to the Corps of Engineers for these costs. In addition, the districts are charged for the cost to administer and enforce the program. These funds are transferred to the Water Marketing Fund to cover these administration and enforcement costs. A small amount is also transferred to the SGF to repay Kansas Department of Agriculture for the Division of Water Resource's cost to assist in the program's administration.



Lower Smoky Hill Water Supply Access District:

In 2006, a group of irrigators along the Smoky Hill River downstream of Kanopolis Reservoir, the city of Salina, state agencies and others came together during a period of drought and low water levels in Kanopolis to discuss what steps could be taken to help ensure water was available for use during future drought conditions. Over the next several years these conversations among stakeholders progressed and eventually help lead to development of legislation which opened the door for the recently incorporated Lower Smoky Hill Water Supply Access District (Access District) to become a reality. The purpose of the access district is to allow the irrigation community to join with others to purchase water storage in Kanopolis. This water will then be available to be released to meet downstream needs by those participating.

The geographic area included within the Access District is the Smoky Hill River below Kanopolis to the confluence of the Smoky Hill and Saline Rivers near New Cambria. On December 5, 2016, the Access District was formally incorporated at a special work session of the Salina City Commission, and on December 15, 2016, the Kansas Water Authority approved the Director of the KWO to negotiate a contract with the Access District for purchase of storage space in Kanopolis, which was signed on December 29, 2016.



Points of Diversion, Geographic Area of Access District

Kansas Water Office - Kansas Water Authority

Purpose:

- Development of comprehensive State Water Plan
- Coordinate the water resource operations of agencies at all levels of government
- Ensure adequate quantities of good quality water to meet future needs
- Efficiently operate state owned storage in federal reservoirs

Statutory Authority

74-2622 Kansas Water Authority established

82a-901 et seq. State Water Resources Planning Act

82a-1301 et seq. State Water Plan Storage Act

82a-1330 et seq. Water Assurance Program Act

82a-1401 et seq. Weather Modification Act

82a-2301 et seq. Lower Smoky Hill Supply Access Program

Total Positions:

13 Appointed Board Members

Budget

Program	FY2016	FY2017	FY2018	FY2019
Kansas Water Authority	$ 35,270	$ 28,695	$ 28,699	$ 28,700

FY2016 Actual Revenue and Expenditure by Fund

Fund	Revenue or	Expended	Carryover	Budget %
State General Fund	$ 29,214	$ 29,214	$ 0	82 %
General Fee Fund	$ 6,056	$ 6,056	$ 0	18 %
Total Funds	$ 35,270	$ 35,270	$ 0	100 %

Major Expenditures

Expenditure Category	FY2016 Actual	FY2017 Budget	FY2018 Budget	FY2019 Budget
Salary	$3,648	$4,942	$4,946	$4,946
Contractual Services	$30,202	$23,753	$23,753	$23,754
Commodities	$1,420	**$0**	**$0**	**$0**
Total	**$35,270**	**$28,695**	**$28,699**	**$28,700**

Kansas Water Office - Kansas Water Authority

The Kansas Water Authority is comprised of 24 members (13 voting and 11 ex officio) that are informed of water related issues representing water users, water interests, environmental interests, and the general public. The KWA conducts meetings throughout Kansas 4-5 times a year to allow legislators, stakeholders and the general public to participate in meetings. Meeting around the state also gives Authority members the opportunity to learn first-hand about the unique water resource issues that exist in Kansas.

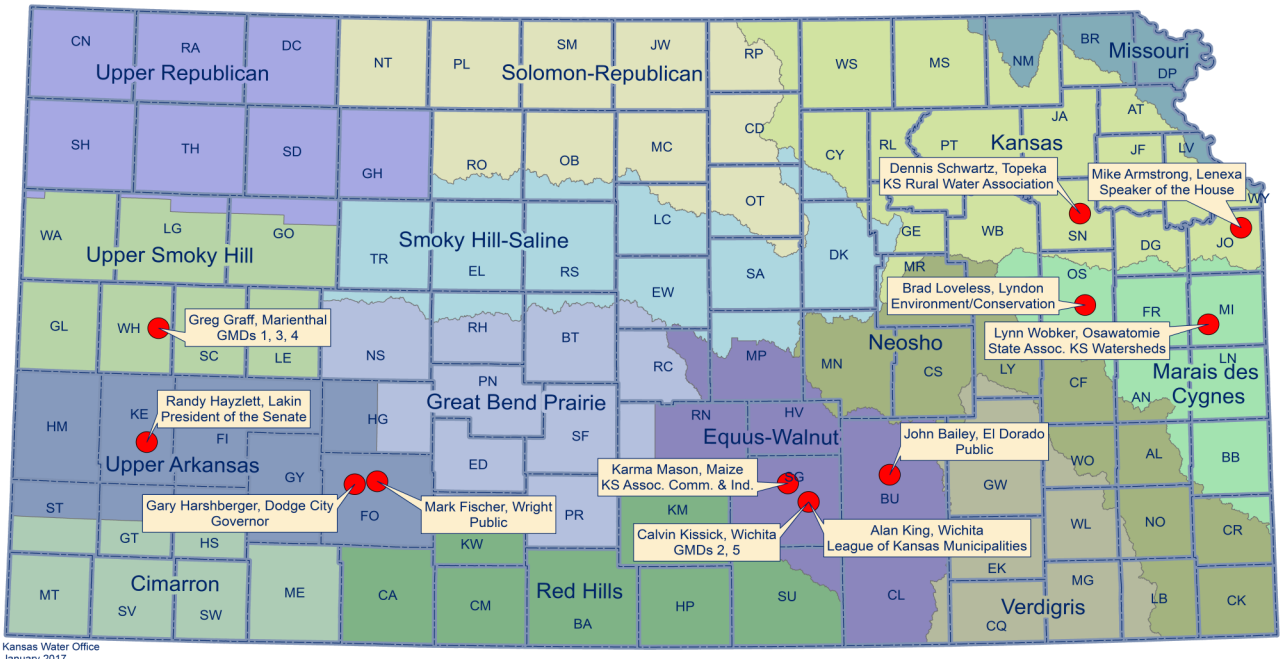
The KWA has several sub-committees to study and address issues:

Regional Advisory Committee
Budget Committee
Kansas Aqueduct Stakeholder Committee
Ogallala Aquifer Advisory Committee
Public Water Supply Committee
Reservoir Advisory Committee

The Kansas Water Authority is responsible for advising the Governor, the Legislature, and the Director of the Kansas Water Office on water policy issues, approves the *Kansas Water Plan* and revisions, the annual report, federal and state contracts, public water supply contracts, and public water supply rates. Additionally, the KWA produces and approves administrative, statutory and State Water Plan Fund recommendations to be proposed by the Kansas Water Office.

A map detailing the membership of the Kansas Water Authority, and whom they represent, is included on the following page.

Kansas Water Authority Members



Kansas Water Authority Ex Officio Members

David Barfield
Division of Water Resources
KS Dept. of Agriculture

John Floros
Ag Experiment Station
KS State University

Rob Reschke
Division of Conservation
KS Dept. of Agriculture

Rolfe Mandel
KS Geological Survey

Robin Jennison
KS Dept. of Wildlife, Parks & Tourism

Antonio Soave
KS Dept. of Commerce

Edward Martinko
KS Biological Survey

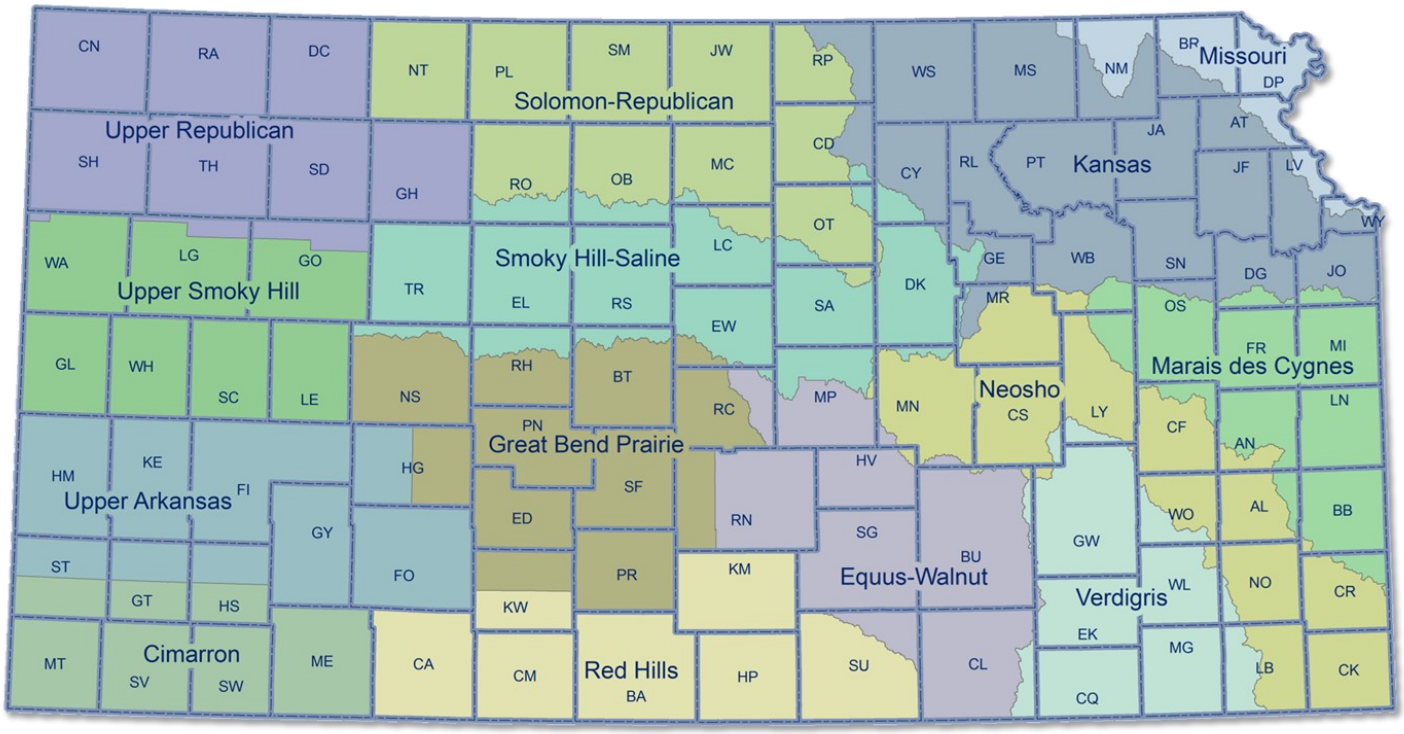
John Mitchell
KS Dept. of Health & Environment

Jackie McClaskey
KS Dept. of Agriculture

Tracy Streeter
KS Water Office

Pat Apple
KS Corporation Commission

Kansas Water Office - Regional Advisory Committees



Regional Advisory Committee Overview

The Kansas Water Office (KWO) and the Kansas Water Authority (KWA) seek advice from the general public and from committees consisting of individuals with knowledge of and interest in water issues in the water planning areas as determined by the KWO for the development of sections of the comprehensive state water plan (K.S.A.82a-903).

Fourteen Regional Planning Areas were established in December 2014 by the KWA in conjunction with the Long-Term Vision for the Future of Water Supply in Kansas. At that time, the previously existing 12 water resource planning basins transitioned to the current 14 regional planning areas in conjunction with the integration of the Vision and the State Water Plan. Since the formation of the 14 Regional Advisory Committees (RAC) at the August 2015 meeting of the KWA, the KWO has been working with all RACs across Kansas to gather input and develop action plans for Vision Regional Water Supply Goals for groundwater and surface water-related issues.

The purpose of RACs through coordination provided by KWO water resource planners, in addition to Vision Action Plan development and implementation, includes advising the Kansas Water Office and the Kansas Water Authority on topics such as the identification of water-related problems, issues and concerns within their regions as well as region-specific information within the *Kansas Water Plan.* The RACs also serve as a link between the KWO and KWA and regional citizens through various groups and individuals and communicate information on concerns and issues to citizens in the region.

KWO - Regional Advisory Committee Highlights

- From Fall 2015 through Fall 2016, KWO coordinated and worked with 14 Regional Advisory Committees (RAC) to develop Vision Regional Goal Action Plans in support of 62 Vision Regional Goals
- From Fall 2015 through today, KWO has coordinated facilitated at least 92 RAC meetings for Vision Regional Goal Action Plan development and implementation.
- KWO is currently working with RACs to identify means to move Vision Action Plan implementation forward with limited financial resources.

State Water Plan Fund Program Description

In 1989, an important step in current water planning was taken with the creation of the State Water Plan Fund (SWPF) (K.S.A. 82a-951). The Fund is used for establishing and implementing water related programs or projects identified in the Kansas Water Plan. Revenue for the SWPF is received from fees assessed to municipal, industrial and agricultural water-related users and includes a demand transfer from the State General Fund and Economic Development Initiatives Fund as shown in the table.

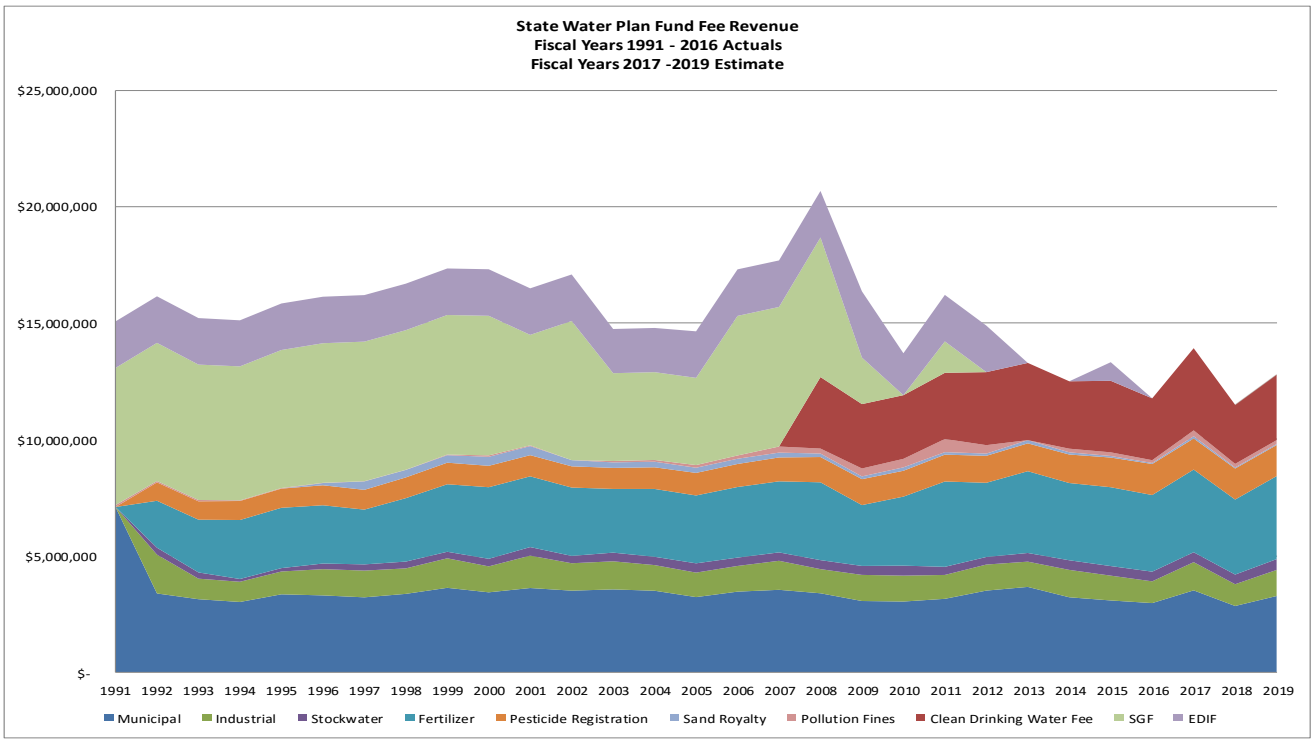
Source	Rate
Municipal Water Use	3 cents/1000 gal
Clean Drinking Water Fee	3 cents/1000 gal
Industrial Water Use	3 cents/1000 gal
Stockwater Use	3 cents/1000 gal
Pesticide Registration	$100/ Registration
Fertilizer Inspections	$1.40/ton
Pollution Fines and Penalties	Est. $150,000
Sand Royalty Receipts	$0.15 / ton
EDIF Transfer - Statutory	$ 2,000,000
State General Fund Transfer	$ 6,000,000

The fee structure that supports the State Water Plan Fund has remained virtually unchanged since the fund has been in place. Sand Royalty Receipts were added to the funding stream in FY 1996 and the Clean Drinking Water Fee began in FY 2008.

The graphic below shows that there was some growth in revenue in the early 1990's and again in the middle portion of the 2000's. The gains were primarily due to increase in water usage and the addition of the two aforementioned fees. These were offset by subsequent declines in revenue. The declines were during times of overall fiscal stress on the state and elimination of a portion or all of the State General Fund transfer and eliminated the transfer of Economic Development Initiative Fund monies to the SWPF. These cuts continued into FY2016, FY2017, and recommended in FY2018 and FY2019.

In FY 2016, fee revenue totals came in below estimates due to wetter conditions across the State of Kansas. The agencies that receive funds from the SWPF and the Kansas Water Authority Budget Committee decided to continue the level funding in FY2017, however, reducing funding in FY2018 and FY2019 to correct the reduced revenue estimates. Projections of cash flow indicate that we will not experience a fund balance issue in FY 2017, but would in future years without reduction of expenditures to match revenues.

The FY2018 and FY2019 revenue estimates are based on historical revenue data of 20 years which will allow for improved accuracy of forecasting. In addition, the new revenue model will correct the anomalies that were seen during the drought, instead of the past approach of using only the last five years and calculating an annual 1% growth. The table below represents the State Water Plan Fund actual fees and estimated fees.



Assessment and Evaluation - Provide the Water Planning and Vision process with the background information necessary to make decisions and improve implementation of projects. KWO contracts with stakeholders for a variety of data collection and studies.

- Improved water management in our reservoirs through OASIS surface water modeling.
- Our understanding of the Ogallala Aquifer and the amount of water remaining has been improved through ground water modeling and the High Plains Index Well efforts.
- Economic evaluations associated with the Sheridan County LEMA and Water Conservation Areas show the impact or benefit of water usage changes.
- Efforts are being made to reduce Missouri River bed degradation.
- Through suspended sediment monitoring, we now know that 95% of our sediment arrives in the top 5% of the flows, which allow us to better target practices to slow our sedimentation.

GIS Database Development - Acquire databases that are primary base layers (or enhances existing resources) or address core gaps in the data.

- Developed statewide LiDAR
- GIS Board Priority Projects

MOU - Storage Operation & Maintenance -All of the contracts for state owned storage in the Corps of Engineers reservoirs used for water supply require the payment of a proportional amount of the operation and maintenance costs associated with the storage that is in service.

Stream Gaging - Support the continuous monitoring of streamflow's on key streams and rivers in Kansas. The information serves multiple purposes, public and private entities, and the general public.

- Vital to the reservoirs operating decisions made by KWO and the U.S. Army Corps of Engineers
- National Weather Service River forecast centers to determine flood stages for various streams and to help forecast when and where streams will crest during floods
- KDOT safely and efficiently designs bridges, highways, and culverts that will convey sufficient streamflow so that roadways and bridges remain above water during flooding

Technical Assistance to Water Users - Improve the operations and maintenance of public water supply systems (PWS), as well as water conservation planning and emergency response, through on-site assistance.

Streambank Stabilization - Reduce the amount of sedimentation that's entering the federal reservoirs.

John Redmond Reservoir Bonds - The project will restore and protect John Redmond Reservoir near Burlington in Coffey County and includes dredging and temporary acquisition of land rights including mitigation costs for the disposal of the sediment. In addition Streambank stabilization projects will be funded above the reservoir.

State Water Plan Fund Appropriations	FY 2017	FY2018	FY2019
Assessment and Evaluation	$ 639,755	$ 500,000	$ 450,000
GIS Database Development	$ 112,306	$ 50,000	$ 0
MOU - Storage Operations & Maintenance	$ 289,889	$ 363,699	$ 350,000
Stream Gaging	$ 431,282	$ 350,000	$ 431,282
Technical Assistance to Water Users	$ 486,302	$ 325,000	$ 325,000
Streambank Stabilization	$ 400,000	$ 0	$ 0
John Redmond Reservoir Bonds	$ 916,550	$ 1,260,426	$ 1,260,426
Total--Kansas Water Office	**$ 3,276,084**	**$ 2,849,125**	**$ 2,816,708**

Kansas Water Authority- State Water Plan Fund

The Kansas Water Authority each year recommends restoration of the statutory State General Fund and Economic Development Initiative Fund demand Transfers. The proceeds of the restoration are recommended for the implementation of the following projects to support the Long-Term Vision for the Future of Water Supply in Kansas. This can be found in the Annual Report to the Legislature and Governor. The following table outlines the priority projects for Fiscal Year 2018.

Streambank Stabilization	$2,000,000
Water Conservation Technology Adoption	$1,532,363
Watershed Best Management Practice Implementation	$2,000,000
Less Water Intensive Crop Research	$500,000
Securing Water Leaving the State Study	$200,000
Restore SWPF Revenue Shortfall	$1,767,637
Kansas Health and Environment -$ 250,000	
Kansas Department of Agriculture -$1,171,355	
Kansas Water Office - $391,282	
Total	$8,000,000

Streambank Stabilization

Program Objective

To reduce the amount of sediment entering our federal reservoirs by implementing streambank stabilization projects. Watershed assessments have shown that streambanks are a major sediment contributor to the reservoirs. An interagency team, including the Kansas Department of Health and Environment (KDHE) (Watershed Management Section), the Kansas Department of Agriculture (KDA) (Division of Conservation), and the Kansas Water Office (KWO), have worked to refine a process utilizing the strengths and resources of each agency to accomplish streambank protection work to reduce erosion and sedimentation in the watersheds and waterways above our highest priority reservoirs.

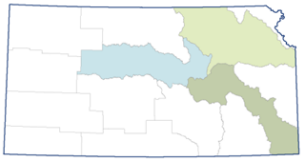
Proposed Activities

- Implementation - Continue to implement streambank stabilization projects through the interagency team responsible for project administration and management, including Technical Assistance and Construction
    - Streambank stabilization efforts will be concentrated in the following watersheds:
        - Big Blue/Little Blue Rivers above Tuttle Creek Reservoir
        - Delaware River above Perry Lake
        - Neosho/Cottonwood Rivers above John Redmond Reservoir

- Prioritization - selection of the highest priority sites using assessment information
    - Sites are ranked highest to lowest based on the following:
        - Erosion Potential – based on the estimated annual soil loss from the site in tons per year
        - Proximity to Reservoir – a review of the highest ranking sites (based on erosion potential) and their location upstream of the reservoir using a reach approach
        - Cost-benefit comparison – comparing the estimated costs for site implementation to the estimated reduction in sedimentation
    - Project site implementation depends on landowner participation and project suitability based on pre-design site visits

- Landowner Contact & Coordination – the interagency team (KDHE, KDA-DOC and KWO) coordinates with WRAPS Coordinators and other local stakeholders in the three priority watersheds for contact and outreach with the landowners of high priority sites
    - Efforts are made to address all landowner concerns and obtain landowner agreements for project implementation and buffer installation to address the highest ranking sites
    - Site implementation depends on landowner participation

- Buffer Coordination – contract with the Kansas Forest Service to oversee the enrollment, planting and maintenance of adjacent crop field or pasture acres into a riparian forest buffer program
    - Landowners are invited to meet with local Conservation District staff and/or Farm Service Agency representatives to discuss options for buffer installation
- Monitoring & Assessment - KWO, KDA-DOC, the Kansas Biological Survey (KBS), and Kansas State University have continued to collaborate in order to assess and monitor completed sites



- 24 streambank stabilization sites along the Cottonwood and Neosho rivers upstream of John Redmond Reservoir were assessed in 2016 as part of the development of a Streambank Stabilization Assessment Tool for Kansas Watersheds
- Plans in 2017 to continue assessment efforts of sites along the Big Blue and Little Blue
- Monitor and evaluate projects for continued effectiveness and potential enhancements to mitigation techniques

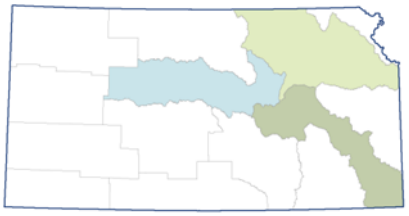
- Leverage funding - Interagency team continues to seek out and secure additional funding sources available for streambank stabilization projects
  - Kansas Water Pollution Control Revolving Fund (KWPCRF) loan in the amount of $1.2 million made available for the implementation of approximately 10-15 sites along the Big Blue and Little Blue Rivers above Tuttle Creek Reservoir
  - Approximately $700,000 of the John Redmond Dredging Bond funding will be utilized to implement approximately 8-10 sites along the Cottonwood River above John Redmond Reservoir in 2017 & 2018

- Coordination with the U.S. Army Corps of Engineers – A collaboration has started with the USACE to assess streambank sites within the USACE property boundary of John Redmond
  - 11 streambank sites along the Neosho river are within this boundary and typically have a higher erosion potential

Recent Success

- Interagency team created in 2015 as a joint effort and have successfully engaged in increased coordination and evaluation of projects

- Recent and continued landowner participation in the program has indicated growth in local awareness and benefits of the program



Water Conservation Technology Adoption

Program Objective

Several of the priority action items contained in the Governor's 50 Year Water Vision focus on the demonstration and adoption of irrigation efficiency and stockwater management technology. Access to this technology is key to successful conservation and reduction in water use. In concert with technology, we must identify dry land cropping systems and limited irrigation strategies that support the livestock industry in western Kansas, maintain a vibrant economy, and preserve both surface and ground water resources for the future.

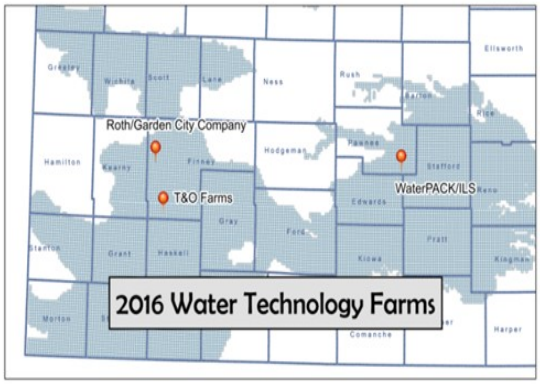
Proposed Activities

- Research and develop wastewater treatment technologies which provide water quality and quantity suitable for livestock consumption to promote reuse of wastewater generated by livestock facilities

- Research and develop sensors, controls, and mechanical devices that will reliably control and limit wintertime overflows from livestock water supply tanks

- Hire two assistant/associate professors (K-State Research & Extension), stationed at the Colby and Garden City Experiment Stations, with responsibilities for increasing adoption of new irrigation technologies

- Demonstrate on a field-scale irrigation and soil moisture management technology. To date, three Water Technology Farms have been deployed in southwest and southcentral Kansas with both private and public funds. These technology farms have received considerable positive attention from local irrigators and have served as excellent opportunities for research.



- Identify the most efficient system technologies for use by Kansas irrigators by working with irrigation system and water management technology manufacturers, Kansas State University (KSU), crop consultants, groundwater management districts (GMDs) and others

- Ensure appropriate irrigation efficiency technology and irrigation management practices are eligible under the Environmental Quality Incentives Program (EQIP) by working with USDA Natural Resource Conservation Service (NRCS). Work with NRCS to ensure eligibility criteria is appropriate in targeted areas and practices

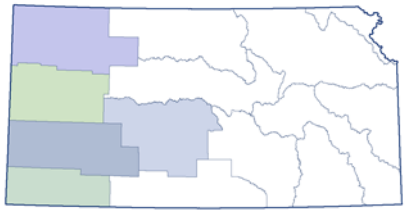
- Ensure appropriate irrigation efficiency technology and irrigation management practices are eligible under the state's Water Resources Cost-Share Program. For emerging irrigation technologies, consider application for USDA's Conservation Innovation Grant funding to accelerate technology transfer and adoption of promising technologies

- Additional of up to seven technology farms will be implemented in southwest, northwest, and west central Kansas

- Determine optimum plant development stages for most efficient water application opportunities by collaborating with the seed industry, KSU, crop consultants and others. Demonstrate various technologies at KSU Agricultural Experiment Stations

Recent Success

- Three Water Technology Farms have been created recently in response to public input and identified in the Kansas Water Vision. They are demonstration farms that allow the installation and testing of the latest irrigation technologies on a whole field scale



Watershed Best Management Practice Implementation

Program Objective

To protect water supply sources and improve water quality across Kansas that provides water to municipal and industrial customers through implementation of watershed best management practices (BMPs) within priority watersheds. BMPs are individual or a combination of practices that are determined to be the most effective and practicable (including technological, economic, and institutional considerations) means of controlling point and non-point sources of pollution at levels compatible with resource and economic goals. BMPs which can be utilized to reduce sediment and nutrient runoff in watersheds above water supply sources in Kansas include but are not limited to terraces, grassed waterways, and buffer strips. Surface water supply is being diminished over time due to reservoir sedimentation and water quality is being impacted by excessive sediment and nutrient as well as other water quality pollutant runoff (potentially exacerbating conditions which promote growth of harmful algae blooms), taste and odor issues with drinking water, and impacts to recreation and aquatic habitat in Kansas. Nutrient loading also contributes to water quality issues present in other downstream waters of importance.

Buffer strip surrounding crop field

Terraces in place to slow down upland erosion

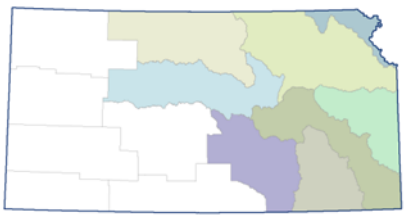
Proposed Activities

- Implement nutrient and sediment reducing BMPs within the Lower Republican (Milford), Lower Big Blue (Tuttle Creek), Little Arkansas (City of Wichita ASR), and Neosho Headwaters (Council Grove and John Redmond) watersheds
  - Watersheds targeted for implementation of specific efficient BMPs have been identified and prioritized within each Kansas Department of Health and Environment (KDHE) Watershed Restoration and Protection Strategy (WRAPS) 9 element plan to address siltation/sedimentation. Therefore any dollars provided for BMPs can be immediately directed to those priorities to insure resources are providing greatest benefit to the state
  - Watersheds targeted for implementation of specific efficient BMPs have been identified and prioritized within each KDHE - WRAPS 9 element plan to reduce watershed nutrient loading as well as identified by KDHE as one of the 16 HUC 8 watersheds to focus point and nonpoint source management strategies to decrease monitored water nutrient levels. Therefore any dollars provided for BMPs can be immediately directed to those priorities to insure resources are providing greatest benefit to the state

- Identify additional entities/organizations which can be utilized to help reach stakeholder groups to help with promotion of BMP implementation

- Funds utilized for BMP implementation will also be leveraged with a Natural Resource Conservation Service (NRCS) Regional Conservation Partnership Program (RCPP) proposal to reduce nutrient loading contributing to harmful algal blooms within Milford Lake as well as a water quality buffer partnership with the United States Department of Agriculture (USDA) Farm Service Agency (FSA) to increase implementation of BMPs such as buffer and filter strips

Recent Success



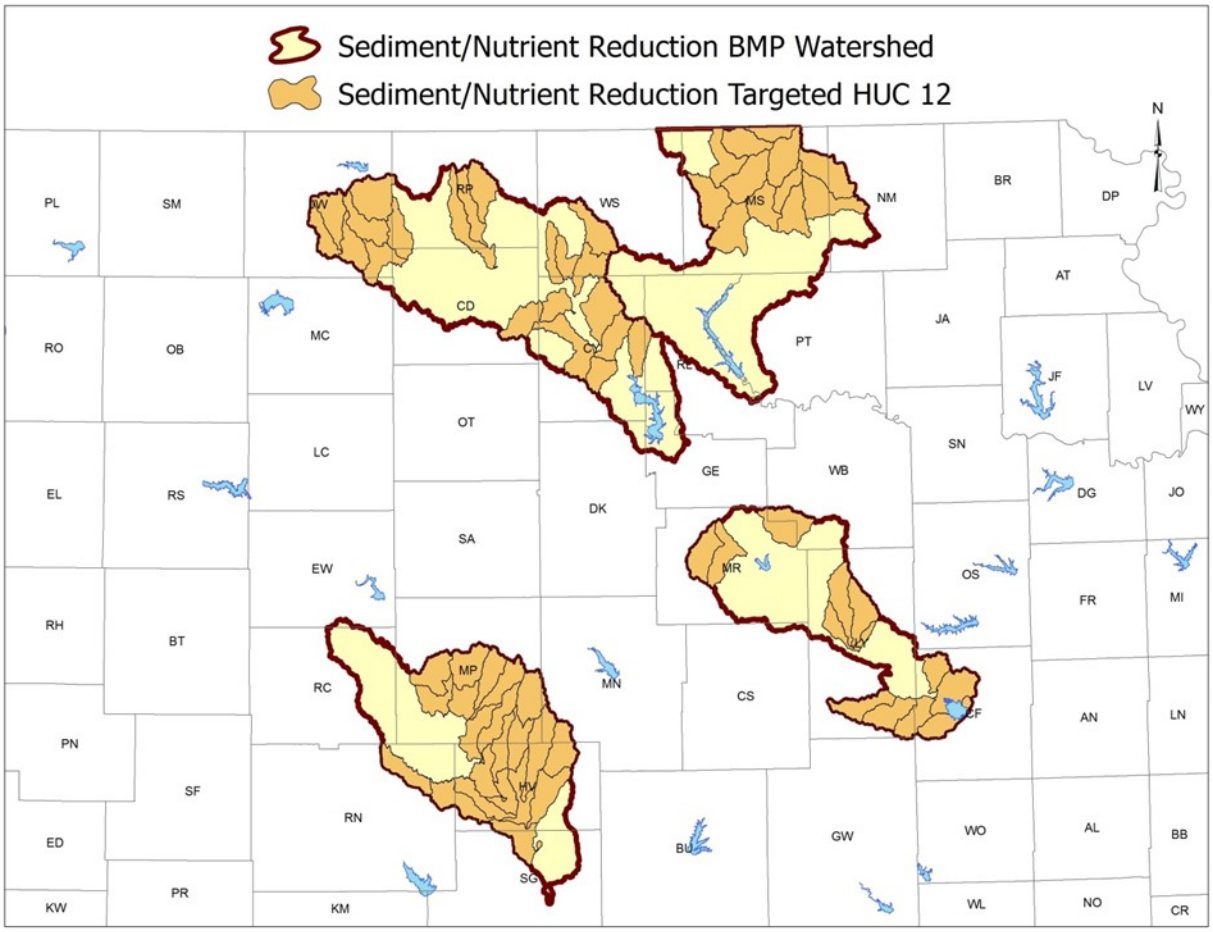
- TMDL Initiative between DOC and KDHE to focus BMP implementation funding in select watersheds identified in WRAPS watershed plans

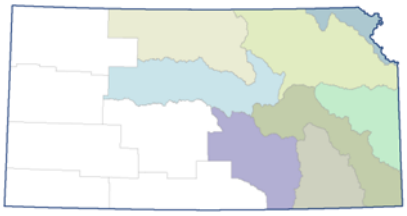
- 11 water bodies removed from the Kansas 303(d) list of impaired waters

Watershed Best Management Practice Implementation

- Nationally-ranked load reductions from BMPs implemented with Natural Resource Conservation Service (NRCS), DOC, & WRAPS/EPA 319 funding sources

Geographic Scope





Less Water Intensive Crop Research

Program Objective

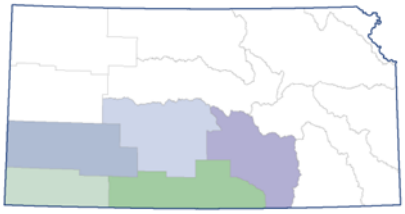
To increase adoption of less water intensive crop varieties in Kansas and support integrated programmatic efforts focused on sorghum and wheat as a part of rotational cropping systems well-suited to dry land and limited irrigation production in the soils and climate of western Kansas.

Proposed Activities

- For 2017, research water use impacts of cover crop use on proposed Lane and Scott County Water Technology Farms
- Form a collaborative stakeholder team to set sorghum research priorities and develop research and funding strategy and present strategy to potential funding partners, including the Kansas Legislature
- Encourage state universities to expand engagement in development of teaching, research and extension programs related to less water intensive crop varieties
- Improve adoptability of feed wheat, along with other alternate crops, through marketing, commodity segregation, research and education
- Develop a strategy that supports research on the role of less water intensive forage and grasses such as triticale
- Provide needed research and education that leads to increased adoption of cover crops
- Evaluate profitability, prices and water use of alternative crops
- Support additional pesticide product and seed variety development that improves opportunities for cotton growth in Kansas
- Develop recommendations based on research related to corn and cotton rotation

Recent Success

- Economic analysis of the Sheridan 6 LEMA indicates irrigated sorghum and wheat acres replacing irrigated corn used less water with minimal impacts to cash flow
- KSU monitoring at water technology farms providing valuable information on cropping options and water use



Securing Water Leaving the State Study

Program Objective

During the 2016 Legislative Session, Senate Substitute for HB 2059 proposed amendments to the Kansas Water Appropriations Act process pertaining to water right applications proposing to transfer waters exiting the state. The original bill passed the Senate and died in conference committee. The Kansas Water Authority opposed the bill and offered to conduct a policy review of the proposal and report back to the Legislature with its' findings and offer any recommendations for legislation.

Proposed Activities

A study team comprised of John Peck, University of Kansas School of Law, David Pope, former Chief Engineer of the Division of Water Resources, Burke Griggs, Professor of Law, Washburn University and Leland Rolfs, former lead attorney for the Division of Water Resources was requested to develop the study proposal. The major tenants of the proposal include:

- 2016 S. Sub. for HB 2059, which sought to amend certain procedures for the appropriation of surface water that would otherwise leave the State of Kansas.
- The effect of large-scale transfers of interstate water supplies on Kansas's relations with the water rights and interests of Native American Tribes within the Missouri River Basin and also in Oklahoma.
- The legal and policy implications of large-scale transfers of interstate water supplies as they relate to the pursuit of effective and optimal methods of securing Kansas's ability to harvest Missouri River Basin flood flows.

Recent Success

The Kansas Water Authority accepted the proposal from the study team and has included $200,000 in its' FY 2018 recommendations to the Governor and Legislature. The source of funding is recommended as part of the restoration of the State General Fund and Economic Development Initiatives Fund demand transfers to the State Water Plan Fund.

MEMO

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DATE: January 31, 2017
TO: Chairman Tom Sloan
FROM: Tracy Streeter, Director
RE: State Water Plan Fund SGF/EDIF Transfers

The table below lists the shortfall in statutory SGF and EDIF Transfers to the State Water Plan Fund as requested by your committee.

History of SGF and EDIF Transfer			
Fiscal Year	SGF Transfer	EDIF Transfer	Transfers Not Completed
FY2006	$ 6,000,000	$ 2,000,000	$ -
FY2007	$ 6,000,000	$ 2,000,000	$ -
FY2008	$ 6,000,000	$ 2,000,000	$ -
FY2009	$ 2,000,000	$ 2,846,126	$ 3,153,874
FY2010	$ -	$ 1,948,884	$ 6,051,116
FY2011	$ 1,348,245	$ 2,000,000	$ 4,651,755
FY2012	$ -	$ 2,000,000	$ 6,000,000
FY2013	$ -	$ 2,000,000	$ 6,000,000
FY2014	$ -	$ -	$ 8,000,000
FY2015	$ -	$ 800,000	$ 7,200,000
FY2016	$ -	$ -	$ 8,000,000
FY2017	$ -	$ -	$ 8,000,000
FY2018	$ -	$ -	$ 8,000,000
FY2019	$ -	$ -	$ 8,000,000
Total Transfers Not Completed			**$73,056,745**

Please feel free to contact me or our office if you have any further questions, or would like additional information.