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INTRODUCTION

Water use in Kansas is regulated by the Kansas Department of Agriculture, Division of Water Resources (DWR). The DWR requires annual Water Use Reports from all public water suppliers with active water rights, as a condition of the Water Appropriations Act. The DWR also requests annual water use reports from water suppliers purchasing water from State-owned storage in Federal reservoirs through the Kansas Water Office (KWO) Water Marketing Program, and from water suppliers purchasing water wholesale from entities that have water rights or marketing contracts.

The information shown in this publication was collected from 768 public water suppliers that filed 2003 Municipal Water Use Reports. This number includes cities and towns, rural water districts, and housing subdivisions. These public water suppliers provide information on quantity of water diverted, water purchased from and sold to other suppliers, sales to retail customers, metered free and unaccounted for water, population served, and current water rates. Annual water use reports for 2003 also were submitted by public wholesale water supply districts, mobile home parks or systems that serve predominantly mobile homes, and rural systems that serve fewer than 10 residential connections, seasonal customers, or predominantly commercial users. The information from these reports is not included in this publication.

The DWR, KWO, and U.S. Geological Survey-Water Resources Division (USGS) review the water use data to ensure that the information is as accurate and complete as possible, and to derive the statistics on per capita usage, percent metered free, percent unaccounted for water, and water rates that are published in this report. The review process is also important for documenting atypical water use among certain suppliers, as well as for identifying problems with meter accuracy, bookkeeping, and water loss that may warrant special assistance. The Kansas Water Plan provides some of the funding used to review annual water use reports and offer technical assistance when needed.

The Kansas Municipal Water Use publication has been prepared each year since 1987. The efforts of every water supplier completing annual water use reports are greatly appreciated. The data collected are valuable in administering water rights and marketing contracts, preparing population and water demand projections, and assessing progress toward meeting State conservation objectives. The information provided in this annual publication can also be useful in evaluating individual systems' needs for metering improvements, water loss reduction, water rate adjustments, and implementation of cost-effective, long-term water conservation measures.

REGIONAL PER CAPITA WATER USE

Water usage in gallons per capita per day (gpcd) is calculated for each water system from reported data on water use and population served. Gpcd usage for individual suppliers is based on amounts of water sold for residential and commercial uses, free uses, and unaccounted for water. Gpcd figures generally do not include sales to other suppliers, industries, bulk uses, or farmsteads using over 200,000 gallons per year.

Average gpcd figures are calculated for water suppliers in eight regions of the State so that usage for individual suppliers can be compared to average usage for similar geographic areas. These regions, shown in Figure 1, correspond to general patterns of per capita water use and precipitation. Gpcd usage increases from eastern to western Kansas, primarily due to greater outdoor water use in the drier, more arid parts of the state. Another factor contributing to higher gpcd usage in western Kansas is that average water rates are lower in the western regions of the State where ground water is the predominant source of supply. Average gpcd usage by Kansas public water suppliers by region and size is shown in Table 1 (p. 8) for the years 1999-2003. Average gpcd usage in 2003 ranged from a high of 278 in Region 1 in westernmost Kansas to a low of 87 in Region 8 among small public water suppliers in easternmost Kansas.

WATER USE STATISTICS BY REGION AND STATE

The tables in the following sections of this publication are organized by region and size category. Regions 6, 7, and 8 in central and eastern Kansas include many more public water suppliers than do the western Kansas regions, and were subdivided by population size. Small public water suppliers serve fewer than 500 people, medium public water suppliers serve between 500 and 9,999 people, and large public water suppliers serve 10,000 people or more.

Water use statistics for each supplier within each regional category are provided in Tables 2-14 on pp. 9-33. These tables rank each water supplier by gpcd usage, and show the percent difference from the respective 2003 regional average gpcd. The tables also show the monthly cost for 10,000 gallons of water, the percentage of metered free water, and the percentage of unaccounted for water. These data are useful in evaluating the gpcd figures. Comparison of an individual supplier's gpcd, water rates, and percentages of metered free and unaccounted for water to regional averages may indicate opportunities for more cost-effective and efficient use of water. Lower gpcd figures may be indicative of conservation efforts by public water suppliers. These efforts include reductions in unaccounted for water, more accurate metering of raw water, and reduced usage due to higher prices.

Per capita usage by a particular water supplier can be affected by circumstances such as customer use habits, water rates, amount of water needed for water treatment or

other free uses, and system losses. Inexpensive water rates, lack of metering, hot dry weather, frequent line breaks, water line replacement, tower repairs, or large amounts of water used for treatment and flushing can all contribute to a high gpcd. High water rates, cool rainy weather, a system with few leaks, lack of significant free uses, or minimal need for water treatment can contribute to a low gpcd.

Accuracy of the measurement of total water diverted also can influence a utility's gpcd. Public water suppliers typically determine total diversions using flowmeters, calculation of hours pumped times pump rates, or a combination of these methods. A higher than expected gpcd may result if master meters are overregistering, actual pump rates are lower than reported, or check valves are malfunctioning. A lower than expected gpcd may result if meters are underregistering or actual pump rates are higher than reported. Inaccurate measurements of total water diverted also produce unreliable calculations of unaccounted for water.

The percentage of unaccounted for water is a good indicator of meter accuracy and system efficiency. Large percentages of unaccounted for water often result from over-reported total diversions, substantial amounts of unmetered use, or system losses. In publications of *Kansas Municipal Water Use* prior to1998, the percent unaccounted for water applied only to systems that meter customer use. Beginning with the 1998 data, the percent unaccounted for water has indicated all water that is not metered. Consequently, all unmetered water used by systems with flat water rates or by systems that were unable to provide data on customer sales is considered unaccounted for.

For 2003, gpcd values ranged from a high of 494 (for the City of Englewood) to a low of 35 (for Marion Co. RWD No. 2). However, to evaluate the water conservation efforts of any public water supplier, each gpcd should be compared to usage by other utilities of similar size in the same geographic area. Table 15 (p. 35) ranks the 20 public water suppliers with the highest gpcd usage in 2003 relative to their respective regional averages. These suppliers tend to have large percentages of unaccounted for water due to system leaks or lack of metering. Thirteen had 20 percent or greater unaccounted for water, including three that used a flat rate structure. Many are very small systems, where leaks can represent a large percentage of total water withdrawals. The City of Lorraine had high per capita usage because of the large amount of metered free water used to fill a sewer pond. Table 16 (p. 36) ranks the 20 public water suppliers with the lowest gpcd usage in 2003 relative to their respective regional averages. Most of these suppliers are very small towns, housing subdivisions, or rural water districts with little or no public use. Many charge high rates for water service.

WATER RATES

Four basic types of water rate structures in Kansas are described as flat rate, decreasing block rate, uniform block rate, and increasing block rate. Utilities with a flat rate charge each customer a fixed amount per month regardless of the amount of water used. With a decreasing block rate, the unit cost of water decreases as usage increases. The unit cost of water is the same for all levels of usage with a uniform block

rate. With an increasing block rate, the unit cost of water rises as usage increases. Some utilities attach a surcharge to their regular water rates for excessive summer usage, usually defined as a certain percentage above average winter use.

The type of rate structure can affect gpcd usage. Systems with flat rates tend to use considerably more water per capita than systems that meter customer use. The number of public water suppliers in Kansas that used flat rate structures declined from 29 in 1990 to 10 in 2003. Table 17 (p. 37) lists the water suppliers that charged a flat rate for water service in 2003, and shows the percent difference between each gpcd and the respective regional average gpcd. Public water suppliers with flat rate structures used an average of 49 percent more water per person than their peer communities in 2003.

The other three types of rate structures, in which cost depends on amount of water used, have a less dramatic effect on gpcd. Decreasing block rates are assumed to discourage conservation because customers are charged lower rates for high-volume usage. Increasing block rates are considered an effective way to promote conservation among high-volume users while keeping the cost of moderate use affordable. However, the use of these types of rate structures does not appear to influence usage by individual customers as much as does the total monthly water cost and the geographic area in which they live.

Table 18 (p. 38) shows 2003 regional average cost for residential customer water use at five levels from 5,000 to 100,000 gallons per month. In general, water rates increase from west to east across the state. Average water rates tend to be higher in eastern Kansas due to the costs associated with operating, building, or rehabilitating surface water treatment facilities, and the costs associated with wholesale water distribution.

METERED FREE AND UNACCOUNTED FOR WATER

Percentages of metered free and unaccounted for water indicate the proportion of total water produced or purchased that is not sold through customer meters. Metered free water typically includes public services (for example, golf courses, parks, pools and city buildings) plus any water given to nonpaying customers (for example, churches or owners of easements). Metered free water often includes water treatment uses such as backwashing, lube line flows, draining of known quantities from a water tower prior to repair, and measured hydrant flushing. Metering as much 'free' water use as possible helps to identify actual system losses. Metering of nonpaying services also helps a utility notice and correct any water leaks or excessive use at these connections.

The number of public water suppliers in Kansas that meter free water has steadily increased each year since 1992, when amounts of metered free water were first shown on annual Municipal Water Use reports. A total of 448 utilities reported some metered free use for 2003. Average percent free water by regional category varied from four to nine percent; the state average was five percent.

Unaccounted for water includes any unmetered uses plus water loss in the distribution system. The percent unaccounted for water may be high if a system has major line breaks, has many underregistering customer meters, or has many unmetered uses. Water taken from bulk outlets and hydrants for firefighting or road construction is often unaccounted for. Unaccounted for water also may represent a large percentage of total water pumped due to distribution system replacement, water plant renovations, water tower repairs, faulty metering of raw water, or inadequate accounting of customer use.

Unaccounted for water reported by public water suppliers for 2003 ranged from less than three percent to 100 percent. The average unaccounted for water among the systems that provided adequate information on metered customer use in 2003 was 14 percent statewide. Average unaccounted for water for these systems by regional category ranged from 11 to 20 percent.

ASSISTANCE WITH EXCESSIVE UNACCOUNTED FOR WATER

The Kansas Water Plan includes a year 2010 objective that states: "By 2010, reduce the number of public water supply systems with excessive unaccounted for water by first targeting those with 30 percent or more unaccounted for water." To meet the 2010 objective of reducing the number of public water supply systems with excessive unaccounted for water, suppliers are referred to the Kansas Rural Water Association for technical assistance in reducing apparent excess use shown on the previous year's water use report. As part of this ongoing contract, the KRWA visits these water suppliers on a quarterly basis, collects data on water withdrawals and sales, tests meters, makes recommendations, and monitors unaccounted for water until it is below 20 percent for two consecutive quarters. In addition, each of these suppliers is encouraged to prepare a water conservation plan, or to review their plan if one has already been done. The Kansas Rural Water Association may be contacted at (785) 336-3760.

Free on-site assistance in preparing water conservation plans is available through the KWO. Conservation plans can help suppliers improve short-term and long-term management of their utility, and are often a requirement for obtaining water rights or loans for water supply system improvements. Water conservation plans also are recommended for suppliers that are drought vulnerable or that have excessive unaccounted for water. The documents entitled 1990 Municipal Water Conservation Plan Guidelines and Water Conservation Measures for Kansas Communities emphasize cost-effective approaches to water conservation, and may be obtained by contacting the DWR or the KWO at the phone numbers listed on the front cover of this publication.

The 37 water suppliers whose water use reports showed at least 30 percent unaccounted for water in 2003 are listed in Table 19 (p. 39). This table does not include systems with flat rates or those who were unable to provide information on metered customer sales. Table 19 also shows the amount of water in thousands of gallons that would have been saved if only 15 percent of the water had been unaccounted for. This

number can be used along with the production costs per thousand gallons to estimate potential savings from decreases in unaccounted for water. Table 19 also indicates the water conservation plan approval date for systems that have completed such plans.

CONSERVATION PRACTICES TO REDUCE UNACCOUNTED FOR WATER

Public water suppliers with large amounts of unaccounted for water have opportunities to save money if there is loss caused by system leaks, unmetered use, excessive use for public services, or underregistering customer meters. Leak detection, additional metering, and regular service meter replacement can result in savings greater than the cost of implementing these conservation measures. In some cases, curbing large water losses may serve to postpone acquisition of additional water supplies.

There are many management practices that promote water conservation for public water suppliers by reducing their amount of unaccounted for water. These practices include:

- ✓ Measure raw or purchased water accurately. If possible, install water meters at each intake, and test these meters for accuracy every three years.
- ✓ Meter any water treatment use or lube line flows, so that these uses are not considered unaccounted for water.
- ✓ Install meters at all service connections if possible, including free services and bulk outlets.
- ✓ Read all meters on a regular basis. If possible, compare production and use for corresponding time periods each month and calculate unaccounted for water.
- ✓ Review meter readings and billing information promptly if there is an unexplained, large difference between water produced and water metered at service connections for any given month.
- ✓ Replace service meters on a regular schedule to avoid losing water through old, underregistering meters.
- ✓ If reliable records of water pumped, water sold, and free water indicate that unaccounted for water exceeds 15 percent, do leak detection.

5-YEAR AVERAGE GPCD AND PERCENT UNACCOUNTED FOR WATER

Annual and average GPCD figures for 816 active public water suppliers that completed water use reports during any years from 1999-2003 are listed in Table 20 (p. 40). This table includes all cities, rural water districts, and subdivisions listed in Tables 2-14, plus systems that are still active but did not complete a 2003 water use report.

Table 21 (p. 58) provides information on reported percent unaccounted for water for 816 active public water suppliers that completed water use reports during any years from 1999-2003. Percentages are shown for each year that data were available, and for the average of this time period.

FIGURE 1 REGIONS USED FOR GALLONS PER CAPITA PER DAY (GPCD) ANALYSIS

CO	enworth	Johnson	Miami	Lin	Bourbon	Crawford	Cherokee
O on ip han S	Leave	- \	Franklin	Anderson	Allen	Neosho	Labette
Brown	Jackson	Shawnee	Osage	Coffey	Woodson	Wilson	Montgomery
Nemaha		W ab auns ee		Lyon		Greenwood	e non
Marshall	Riley Pottawatomie	Ge ary W	Morris	Chase		Butler	Cowley
Washington	Clay	Dick ins on		Marion	à		
Republic	Cloud	Ottawa	Saline	McPherson	Harvey	Sedgwick	Sumner
	Mitchell	Time of the state	Elsworth	E CONTROL OF THE CONT	A STATE OF THE STA	CASTACATA CASTACATAC CASTACATA CASTACATA CASTACATAC CASTACATA	Harper
Sam #h	Osborne			Barton (1)	Stafford Co.	Frank Constitution	2000 100 100 100 100 100 100 100 100 100
a siller			ž Š	Pawne .	Edwards	Kiowa	Comanche
Norton	Graham			F ess	lodgeman	P	¥ FIS
Decatur	Sheridan				Hod	Gray	Meade
		9,00		Scott Lane		Gr Haskell	Seward
Rawlins	Thomas	Logan	Mr. in the s		Kearny	Grant Ha	Stevens S
Cheyenne	Sherman	W allace	ial a series	4/1//	Hamilton 7	Stanton	Morton Ss

Region 1 Region 3 Region 5 Region 7 Region 7 Region 7 Region 8

7

AVERAGE	SPCD USE E	OR PUBLI	TABLE 1 C WATER S	SUPPLIERS	BY REGIO	N AND SIZE						
AVENAGE	AVERAGE GPCD USE FOR PUBLIC WATER SUPPLIERS BY REGION A KANSAS, 1999-2003											
			Year									
Region ^{a/}	1999	2000	2001	2002	2003	Average						
1	252	306	264	321	278	284						
2	234	271	239	273	248	253						
3	218	269	249	269	243	250						
4	163	197	189	211	198	192						
5	145	164	159	178	164	162						
6-ML	148	166	159	153	150	155						
6-S	133	138	132	133	130	133						
7-L	144	153	152	150	150	150						
7-M	114	115	111	111	108	112						
7-S	105	106	104	107	101	105						
8-L	132	130	130	130	144	133						
8-M	105	105	102	101	103	103						
8-S	88	95	90	91	87	90						
Kansas	130	133	128	133	128	130						

^{a/} Refer to Figure 1 for map regions. For this analysis, utilities in Regions 6, 7, and 8 were subdivided into size categories. Large (L) utilities are those serving 10,000 people or more. Medium (M) utilities are those serving 500 to 9,999 people. Small (S) utilities are those serving fewer than 500 people.

TABLE 2 WATER USE STATISTICS FOR PUBLIC WATER SUPPLIERS REGION 1, 2003										
				Cost per	Percent	Percent				
		Regional Average	Percent	10,000	Metered	Unacc.				
Public Water Supplier	GPCD ^{a/}	GPCD	Difference	gal/month ^{b/}	Free	For ^{c/}				
Wallace Co. RWD #01	419	278	+51	\$6.00	0	4				
Elkhart	354	278	+27	\$17.75	9	- 17				
Johnson City	335	278	+21	\$15.50	10	11				
Bird City	329	278	+18	\$22.10	2 .	15				
Syracuse	325	278	+17	\$12.50	2	5				
Coolidge	310	278	+11	\$13.00	3	26				
Manter	305	278	+10	\$19.50	<1	15				
Goodland	294	278	+6	\$15.45	0	19				
Wallace	294	278	+6	\$19.50	0	38				
St. Francis	285	278	+3	\$18.00	5	5				
Tribune	284	278	+2	\$23.10	1 .	15				
Sharon Springs	271	278	-3	\$24.00	4	26				
Kanorado	243	278	-13	\$18.50	7	• 9				
Rolla	187	278	-33	\$26.88	5	9				
Horace	122	278	-56	\$24.30	0	3				
Hamilton Co. RWD #01	97	278	-65	\$57.00	5	5				
Average	278	278		\$20.82	4	14				

The figures for gallons per capita per day do not include water supplied for industry, bulk sales, stockwatering, or farmsteads using more than 200,000 gallons per year.

^{b/} Cost for water according to rates in effect during 2003, or as recently as rates provided.

^{c/} Unaccounted for water includes distribution system losses, unmetered water provided to customers, and unmetered water provided free for public services, treatment processes, etc.

TABLE 3 WATER USE STATISTICS FOR PUBLIC WATER SUPPLIERS									
REGION 2, 2003									
		Regional		Cost per	Percent	Percent			
		Average	Percent	10,000	Metered	Unacc.			
Public Water Supplier	GPCD ^{a/}	GPCD	Difference	gal/month ^{b/}	Free	For ^{c/}			
Herndon	469	248	+89	\$22.50	4	20			
Brewster	378	248	+52	\$11.90	3	15			
McDonald	356	248	+44	\$19.61	<1	23			
Rexford	354	248	+43	\$17.50	0	8			
Winona	336	248	+36	\$14.50	7	17			
Colby	302	248	+22	\$14.90	4	5			
Oakley	300	248	+21	\$11.45	2	10			
Hugoton	299	248	+21	\$10.80	1	7			
Sublette	287	248	+16	\$14.00	14	5			
Moscow	286	248	+15	\$22.00	; O	100			
Scott City	278	248	+12	\$16.98	11	NA			
Satanta	260	248	+5	\$12.95	5	3 .			
Lakin	253	248	+2	\$25.75	20	7			
Leoti	239	248	-4	\$23.74	4	10			
Ulysses	233	248	-6	\$20.35	3	7			
Atwood	219	248	-12	\$22.20	3	9			
Kismet	206	248	-17	\$16.25	27	18			
Garden City	186	248	-25	\$18.50	10	7			
Liberal	174	248	-30	\$24.90	21	. 7			
Deerfield	168	248	-32	\$24.35	3	8			
Holcomb	155	248	-37	\$21.45	0	5			
Finney Co. RWD #01	80	248	-68	\$46.50	0	20			
Farr Subdivision	68	248	-72	None	0	100			
Garden Spot Rentals	66	248	-73	None	0	100			
Average	248	248		\$19.69	8	11			

The figures for gallons per capita per day do not include water supplied for industry, bulk sales, stockwatering, or farmsteads using more than 200,000 gallons per year.

^{b/} Cost for water according to rates in effect during 2003, or as recently as rates provided. "None" indicates no charge for water service.

For suppliers that meter customer usage, unaccounted for water includes distribution system losses, unmetered water provided to customers, and unmetered water provided free for public services, treatment processes, etc. For suppliers that do not meter any customer usage or did not provide sufficient information on customer sales, the percent unaccounted for water is 100. "NA" is shown for suppliers reporting a percent unaccounted for water of less than 3.0.

WATERU	TABLE 4 WATER USE STATISTICS FOR PUBLIC WATER SUPPLIERS									
REGION 3, 2003										
		Regional		Cost per	Percent	Percent				
		Average	Percent	10,000	Metered	Unacç.				
Public Water Supplier	GPCD ^{a/}	GPCD	Difference	gal/month ^{b/}	Free	For ^{c/}				
Jennings	424	243	+74	\$14.00	5	59				
Hoxie	307	243	+26	\$14.00	0	19				
Grainfield	280	243	+15	\$7.70	0	9				
Dighton	276	243	+13	\$18.16	5	13				
Grinnell	266	243	+10	\$13.00	7	9				
Meade	259	243	+7	\$17.55	7	15				
Montezuma	258	243	+6	\$19.20	4	9				
Copeland	249	243	+3	\$25.00*	0	58				
Plains	244	243	0	\$12.90	9	17				
Oberlin	242	243	-1	\$15.04	0	25				
Cimarron	240	243	-1	\$26.38	0	6				
Quinter	230	243	-5	\$20.00	4	5				
Ensign	218	243	-10	\$28.50	0	23				
Selden	208	243	-14	\$15.00	7	4				
Lane Co. RWD #01	200	243	-18	\$18.50	<1	15				
Norcatur	196	243	-19	\$25.00	6	22				
Ingalis	194	243	-20	\$35.00	<1	10				
Gove	192	243	-21	\$12.80	1	NA				
Park	187	243	-23	\$14.00	0	3				
Fowler	186	243	-23	\$14.80	5	14				
Average	243	243		\$18.33	5	18				

^{a/} The figures for gallons per capita per day do not include water supplied for industry, bulk sales, stockwatering, or farmsteads using more than 200,000 gallons per year.

^{b/} Cost for water according to rates in effect during 2003, or as recently as rates provided. "*" after cost indicates flat monthly rate for any amount of water used.

For suppliers that meter customer usage, unaccounted for water includes distribution system losses, unmetered water provided to customers, and unmetered water provided free for public services, treatment processes, etc. For suppliers that do not meter any customer usage or did not provide sufficient information on customer sales, the percent unaccounted for water is 100. For suppliers that meter only certain water uses, unaccounted for water includes all unmetered water. "NA" is shown for suppliers reporting a percent unaccounted for water of less than 3.0.

WATER U	TABLE 5 WATER USE STATISTICS FOR PUBLIC WATER SUPPLIERS										
		REGION	1 4, 2003	and the second							
		Regional Average	Pércent	Cost per 10,000	Percent Metered	Percent Unacc.					
Public Water Supplier	GPCD ^{a/}	GPCD	Difference	gal/month ^{b/}	Free	For ^{c/}					
Englewood	494	198	+150	\$25.00*	0	95					
Bucklin	286	198	+45	\$14.00	1	40					
Hanston	285	198	+44	\$11.00	0	25					
Morland	278	198	+40	\$20.50	6	12					
Arnold	270	198	+36	\$12.00*	0	100					
Ashland	260	198	+31	\$17.00	2	6					
Hill City	241	198	+22	\$15.10	12	13					
Norton	239	198	+21	\$15.61	5	16					
Ford	225	198	+14	\$18.00*	0	. 78					
Lenora	224	198	+13	\$31.25	18	17					
Jetmore	215	198	+8	\$18.00	19	NA					
Utica	209	198	+6	\$14.80	18	13					
Dodge City	208	198	+5	\$22.29	4	25					
Wakeeney	207	198	+4	\$20.50	2	17					
Minneola	197	198	-1	\$24.00	0	12					
Bogue	187	198	-6	\$17.00	0	11					
Spearville	172	198	-13	\$32.80	6	8					
Collyer	151	198	-24	\$32.80	0	19					
Ness City	142	198	-28	\$43.50	1	4					
Almena	132	198	-33	\$24.25	1	21					
Ransom	130	198	-34	\$20.60	1	12 .					
Clayton	123	198	-38	\$26.75	<1	NA					
Bazine	122	198	-38	\$21.50	3	8					
Trego Co. RWD #01	117	198	-41	\$51.00	0	13					
Trego Co. RWD #02	91	198	-54	\$63.00	4	7					
Norton Co. RWD #01	69	198	-65	\$34.50	0	11					
Brownell	60	198	-70	\$12.50	0	9					
Average	198	198		\$24.42	6	20					

The figures for gallons per capita per day do not include water supplied for industry, bulk sales, stockwatering, or farmsteads using more than 20,000 gallons per year.

Cost for water according to rates in effect during 2003, or as recently as rates provided. "*" after cost indicates flat monthly rate for any amount of water used.

For suppliers that meter customer usage, unaccounted for water includes distribution system losses, unmetered water provided to customers, and unmetered water provided free for public services, treatment processes, etc. For suppliers that do not meter any customer usage or did not provide sufficient information on customer sales, the percent unaccounted for water is 100. For suppliers that meter only certain water uses, unaccounted for water includes all unmetered water. "NA" is shown for suppliers reporting a percent unaccounted for water less than 3.0.

		TABL	C U		4.1				
WATER USE STATISTICS FOR PUBLIC WATER SUPPLIERS									
Committee of the state of the s		REGION :	5, 2003						
		Regional		Cost per	Percent	Percent			
·		Average	Percent	10,000	Metered	Unacc.			
Public Water Supplier	GPCD ^{a/}	GPCD	Difference	gal/month ^{b/}	Free	For ^{c/}			
Comanche Co. RWD #02	411	164	+151	\$58.00	0	45			
Offerle	308	164	+88	\$16.62	0	33			
	293	164	+79	\$12.00	Ō	4			
Long Island Rush Co. RWD #01	265	164	+62	\$46.00	Ö	27			
	248	164	+51	\$18.50	Ö	19			
Rozel	238	164	+45	\$15.00	14	9			
Larned	235	164	+43	\$20.50	5	23			
Mullinville	233	164	+33	\$15.00*	ő	100			
Belvidere	217	164	+32	\$21.80	<1.	5			
Coldwater		i	+32	\$16.70	<1	9			
Otis	209	164	+27	\$10.70	0	10			
Woodston	200	164		\$20.00	7	4			
Protection	199	164	+21	\$20.00 \$14.20	2	11			
Burdett	193	164	+18	1 '	14	13			
Lewis .	191	164	+16	\$18.75		21			
Phillipsburg	191	164	+16	\$40.61	4				
Haviland	190	164	+16	\$13.00	1 5	14			
Prairie View	189	164	+15	\$25.00	5	20			
Hays City Suburban	179	164	+9	None	0	100			
Logan	178	164	+8	\$29.50	2	10			
Rush Center	168	164	+3	\$10.50	<1	3			
Greensburg	161	164	-2	\$23.15	3	4			
Timken	156	164	-5	\$25.70	9	9			
Rooks Co. RWD #03	153	164	-7	\$41.50	1	11			
Kirwin	142	164	-14	\$18.75	0	17			
Agra	140	164	-14	\$27.40	5	24			
Palco	140	164	-14	\$27.00	0	8			
Alexander	137	164	-17	\$19.00	0	5			
Kinsley	134	164	-18	\$31.50	3	17			
Plainville	131	164	-20	\$16.00	5	18			
Comanche Co. RWD #01	124	164	-25	\$25.50	0	16			
La Crosse	122	164	-25	\$39.25	1	NA			
Belpre	122	164	-25	\$30.50	0	NA.			
McCracken	119	164	-27	\$41.90	8	18			
Ellis Co. RWD #01C	117	164	-29	\$78.00	0	11			
Bison	115	164	-30	\$22.50	0	16			
Ellis Co. RWD #06	115	164	-30	\$43.00	0	. 20			
Glade	112	164	-32	\$31.00	2	23			
Victoria	111	164	-32	\$19.50	0	7			
Speed .	111	164	-33	\$24.50	2	NA			
Stockton	106	164	-35	\$35.70	5	13			
Damar	104	164	-36	\$32.15	Ö	NA			
Ellis	97	164	-30 -41	\$27.50	7	3			
	96	164	-41 -42	\$36.26	3	6			
Hays Rooks Co. RWD #02	93	164	-42 -43	\$25.50	0	6			

WATER US	E STATIS	TABL TICS FOR REGION :	PUBLIC WA	TER SUPPLI	ERS	The second secon
Public Water Supplier	GPCD ^a /	Regional Average GPCD	Percent Difference	Cost per 10,000 gal/month ^{b/}	Percent Metered Free	Percent Unacc. For ^{c/}
Ellis Co. RWD #01	91	164	-45	\$23.20	1	12
Ellis Co. RWD #01	88	164	-46	\$29.40	0	32
Liebenthal	73	164	-56	\$33.00	2	9
Average	164	164		\$27.50	4	14

- The figures for gallons per capita per day do not include water supplied for industry, bulk sales, stockwatering, or farmsteads using more than 200,000 gallons per year.
- Cost for water according to rates in effect during 2003, or as recently as rates provided. "*" after cost indicates flat monthly rate for any amount of water used. "None" indicates no charge for water usage.
- For suppliers that meter customer usage, unaccounted for water includes distribution system losses, unmetered water provided to customers, and unmetered water provided free for public services, treatment processes, etc. For suppliers that do not meter any customer usage or did not provide sufficient information on customer sales, the percent unaccounted for water is 100. "NA" is shown for suppliers reporting a percent unaccounted for water less than 3.0.

TABLE 7 WATER USE STATISTICS FOR MEDIUM AND LARGE PUBLIC WATER SUPPLIERS REGION 6, 2003

	<u> </u>	ALGIC	/N 0, 2003			
		Regional	_	Cost per	D	Percent
	b/	Average	Percent	10,000	Percent	Unacc. For ^{d/}
Public Water Supplier	GPCD ^{b/}	GPCD	Difference	gal/month ^{c/}	Metered Free	
Medicine Lodge	238	150	+58	\$18.24	0	9
Downs	221	150	+47	\$20.88	1	6
Lyons	214	150	+43	\$18.00	8	7
Mitchell Co. RWD #02	200	150	+33	\$54.30	7	13
Osborne	190	150	+27	\$27.46	24	14
Macksville	185	150	+23	\$20.00	12	14
Cunningham	182	150	+21	\$17.60	8	6
Mankato	179	150	+19	\$26.73	10	15
Kensington	168	150	+12	\$21.00	6	28
St. John	166	150	+11	\$22.20	14	15
Attica	166	150	+10	\$19.60	0	15
Smith Center	164	150	+9	\$29.43	1	24
Kiowa	163	150	+8	\$21.30	. <1	6
Pretty Prairie	161	150	+8	\$22.70	4	19
Stafford	161	150	+7	\$13.83	6	6
Haven	160	150	+7	\$14.80	2	20
Little River	158	150	+5	\$33.00	2	11
Anthony	148	150	-1	\$26.58	4	12
Ellsworth	138	150	-8	\$42.30	7	13
Claflin	138	150	-8	\$20.30	8	7
Post Rock RWD	138	150	-8	\$83.10	9	16
Lincoln Center	136	150	-9	\$26.98	3	21
Hutchinson	136	150	-9	\$22.36	4	8
South Hutchinson	136	150	-9	\$18.02	7	NA
Norwich	133	150	-11	\$22.33	0	17
Kingman	133	150	-12	\$35.00	О	9
Russell Co. RWD #03	132	150	-12	\$58.00	О	35
Great Bend	131	150	-12	\$25.86	Ö	8
Cawker City	130	150	-13	\$22.25	1 .	9
Russell	128	150	-14	\$47.75	4	9
Harper	128	150	-15	\$28.00	0	15
Buhler	127	150	-15	\$17.55	3	3
Wilson	127	150	-15	\$20.50	6	12
Chase	126	150	-16	\$27.00	o o	18
Ellinwood	123	150	-18	\$21.25	5	4
Rice Co. RWD #01	120	150	-20	\$18.40	Ö	6
Hoisington	110	150	-27	\$34.00	1	19
Sterling	108	150	-28	\$27.20	14	4

TABLE 7 WATER USE STATISTICS FOR MEDIUM AND LARGE PUBLIC WATER SUPPLIERS* REGION 6, 2003

D. His Mates Complies	GPCD ^{b/}	Regional Average GPCD	Percent Difference	Cost per 10,000 gal/month ^{c/}	Percent Metered Free	Percent Unacc. For ^{d/}
Public Water Supplier Kanopolis	103	150	-31	\$33.72	1	9
Beloit	90	150	-40	\$41.85	<1	10
Nickerson	82	150	-45	\$39.25	2	9
Average	150	150		\$28.02	6	13

- ^{a/} Includes public water suppliers in Region 6 that serve 500 people or more.
- The figures for gallons per capita per day do not include water supplied for industry, bulk sales, stockwatering, or farmsteads using more than 200,000 gallons per year.
- c/ Cost for water according to rates in effect during 2003, or as recently as rates provided.
- Unaccounted for water includes distribution system losses, unmetered water provided to customers, and unmetered water provided free for public services, treatment processes, etc. "NA" is shown for suppliers reporting a percent unaccounted for water of less than 3.0.

WATER USE STA	TISTICS I	TABLE FOR SMAL	L PUBLIC V	ATER SUPF	LIERS*/	
		REGION 6,	2003		*-	
		Regional		Cost per	Percent	Percent
	,	Average	Percent	10,000	Metered	Unacc.
Public Water Supplier	GPCD ^{b/}	GPCD	Difference	gal/month ^{c/}	Free	For ^{d/}
Lorraine	315	130	+142	\$21.00	53	7
West Hills Water Co.	282	130	+117	\$20.00*	0	100
Cullison	218	130	+68	\$17.00	6	26
Osborne Co. RWD #01A	217	130	+67	\$56.00	0	25
Russell Co. RWD #02	207	130	+59	\$20.00	0 .	100
Hardtner	201	130	+55	\$25.50	26	4
Osborne Co. RWD #02	199	130	+53	\$52.50	0	10
Barber Co. RWD #02	192	130	+47	\$25.00	0	26
Russell Co. RWD #04	175	130	+35	\$50.00	0	15
Barber Co. RWD #01	174	130	+34	\$26.75	0	100
	173	130	+33	\$20.90	6	34
Sylvia Smith Co. RWD #01	168	130	+29	\$53.50	0	22
Isabel	163	130	+26	\$18.00	0	20
i .	161	130	+24	\$22.03	7	18
Holyrood Glen Elder	153	130	+18	\$35.90	3	9
	150	130	+15	\$35.00	Ô	25
Sylvan Grove	150	130	+15	\$18.00	8	. 8
Raymond	148	130	+14	\$55.00	- 10	5
Reno Co. RWD #08	145	130	+12	\$26.12	3	24
Gaylord	1	130	+11	\$48.30	3	21
Jewell Co. RWD #01	144	130	+11	\$20.00	<1	15
Bushton	144	130	+11	\$24.50	3	44
Alton	144	1	+10	\$31.65	<1	NA
Spivey	143	130	+10	\$20.50	2	4
Sawyer	143	130	+9	\$20.30	9	5
Coats	142	130	+9	\$8.50	0	21
Abbyville	142	130		\$24.25	0	21
Preston	138	130	+6	\$24.20	2	5
Zenda	136	130	+4	\$24.00	0	32
Esbon	135	130	+4 +3	\$18.50	<1	20
Sharon Sharon	134	130	0	\$10.30	0	7
Reno Co. RWD #01	130	130	-1	\$15.00	0	14
Albert	129	130	-1	\$13.00	0	25
Russell Co. RWD #01	129	130	-3	\$17.50	1	13
Turon	126	130	-3 -9	\$17.30	Ó	22
Hazelton	118	130	I .		0	9
Reno Co. WD #101	117	130	-10	\$18.00 \$20.50	2	11
Arlington	116	130	-11	l '	1	7
Lucas	114	130	-12	\$32.00 \$16.50	0	9
Olmitz	113	130	-13		7	16
Bunker Hill	112	130	-14	\$49.00	ó	12
Burr Oak	112	130	-14	\$27.00		4
Formoso	111	130	-15 16	\$38.00	1	NA
Barton Co. RWD #01	110	130	-16	\$43.50	0	
Geneseo	108	130	-17	\$24.00	1	13 5
Randall	107	130	-18	\$58.25	0 3	15
Natoma	107	130	-18	\$25.00	<u> </u>	10

TABLE 8 WATER USE STATISTICS FOR SMALL PUBLIC WATER SUPPLIERS*									
REGION 6, 2003									
		Regional		Cost per	Percent				
		Average	Percent	10,000	Metered	Unacc.			
Public Water Supplier	GPCD ^b /	GPCD	Difference	gal/month ^{c/}	Free	For ^{d/}			
Portis	105	130	-19	\$25.00	0	34			
Lebanon	100	130	-23	\$39.55	2	15			
Simpson	99	130	-24	\$29.00	1 .	20			
Tipton	98	130	-25	\$45.50	3	8 6			
luka	96	130	-26	\$31.00	0				
Bluff City	93	130	-28	\$20.50	3	17			
Luray	92	130	-29	\$54.50	1	8			
Hunter	90	130	-31	\$40.00	1	13			
Gorham	87	130	-33	\$54.00	<1	10			
Jewell	86	130	-34	\$50.00	·· 1·	· 7			
Beverly	86	130	-34	\$29.50	0	100			
Reno Co. RWD #04	82	130	-37	NA	0	18			
Harper Co. RWD #04	80	130	-39	NA	0	15			
Barton Hills WD	78	130	-40	\$30.00	0	5			
Kingman Co. RWD #01	78	130	-40	\$97.50	0	24			
Dorrance	77	130	-41	\$35.00	1	17			
Barnard	77	130	-41	\$40.00	0	16			
Susank	75	130	-42	\$43.35	0	5			
Barber Co. RWD #03	74	130	-43	\$59.00	0	7			
Paradise	69	130	-47	NA	0	6			
Pawnee Rock	66	130	-49	\$28.50	3	8			
Waldo	48	130	-63	\$46.25	0	NA			
Average	130	130		\$33.21	5	15			

- a/ Includes public water suppliers in Region 6 that serve fewer than 500 people.
- The figures for gallons per capita per day do not include water supplied for industry, bulk sales, stockwatering, or farmsteads using more than 200,000 gallons per year.
- Cost for water according to rates in effect during 2003, or as recently as rates provided. "*" after cost indicates flat monthly rate for any amount of water use. "NA" indicates no information available on current water rate.
- Unaccounted for water includes distribution system losses, unmetered water provided to customers, and unmetered water provided free for public services, treatment processes, etc. "NA" is shown for suppliers reporting a percent unaccounted for water of less than 3.0. For suppliers that do not meter any customer usage or did not provide sufficient information on customer sales, the percent unaccounted for water is 100.

WATER USE STA	ATISTICS:	TABLE FOR LARG	: 9 SE PUBLIC \	NATER SUP	PLIERS"	
1995		REGION 7	7, 2003			
Public Water Supplier	GPCD ^{b/}	Regional Average GPCD	Percent Difference	Cost per 10,000 gal/month ^{c/}	Percent Metered Free	Percent Unacc. For ^{d/}
Coffeyville	215	150	+43	\$36.40	21	24
El Dorado	185	150	+24	\$17.04	4	3
Emporia	182	150	+21	\$24.08	5	18 5
McPherson	173	150	+16	\$12.02	1	
Topeka	151	150	+1	\$27.99	14	15 9
Winfield	146	150	-3	\$21.70	0	ì
Junction City	146	150	-3	\$22.67	12	14
Manhattan	141	150	-6	\$26.34	4	12
Wichita	141 -	150	-6	\$11.81	1	NA 10
Independence	140	150	-7	\$27.87	11	12
Salina	130	150	-13	\$30.83	2	12
Arkansas City	118	150	-21	\$45.71	5	13
Derby (El Paso Water Co.)	116	150	-23	\$33.93	1	7
Newton	112	150	-25	\$31.10	0	11
Average	150	150		\$26.39	7	12

^{a/} Includes public water suppliers in Region 7 that serve 10,000 people or more.

The figures for gallons per capita per day do not include water supplied for industry, bulk sales, stockwatering, or farmsteads using more than 200,000 gallons per year.

^{c/} Cost for water according to rates in effect during 2003, or as recently as rates provided.

^{d/} Unaccounted for water includes distribution system losses, unmetered water provided to customers, and unmetered water provided free for public services, treatment processes, etc. "NA" is shown for suppliers reporting a percent unaccounted for water of less than 3.0.

WATER USE STAT	uction E	TABLE 1	IO W PUBLIC W	VATER SURE	II IERS ^{e/}	
WATER USE STAT	13116376	JR WEDIUI	7. POBLIC V 2003	IAI EN GOIT		
		EGION 1,	2003			
		Dogional		Cost per	Percent	Percent
·		Regional	Percent	10,000	Metered	Unacc.
	0000b/	Average GPCD	Difference	gal/month ^{c/}	Free	For ^{d/}
Public Water Supplier	GPCD ^{b/}			\$18.75	9	24
Hesston	,216	108	+100 +91	\$10.73	1	8
Goddard	206	108	+73	\$9.50	1	7
Moundridge	187	108	+68	\$35.51	0	13
Lyon Co. RWD #02	182	108	i	\$38.00	3	13
Republic Co. RWD #02	180	108	+67 +57	\$22.90	30	3
Cheney	170	108	+57	\$26.90	32	3
St. Marys	167	108		\$20.90	0	17
Washington	160	108	+48	\$22.70 \$15.55	4	8
Seneca	159	108	+47	\$23.50	41	3
Chapman	157	108	+45 +42	\$23.50	1	15
Blue Rapids	154	108			5	10
Minneapolis	153	108	+42	\$23.80	16	17
Holton	151	108	+40	\$45.50	3	15
Clifton	150	108	+39	\$14.30	2	16
Abilene	149	108	+38	\$39.00	0	6
Shawnee Co. RWD #06	148	108	+37	\$34.55	33	7
Caney	146	108	+35	\$42.40	4	10
Belleville	145	108	+34	\$24.14	3	21
Marysville	143	108	+33	\$30.62	4	12
Concordia	142	108	+32	\$32.68	10	9
Canton	142	108	+32	\$16.66	10	17
Alma	141	108	+31	\$48.00	2	9
Morris Co. RWD #01	141	108	+30	\$54.00	4	8
Mount Hope	141	108	+30	\$16.30	16	16
Clyde	140	108	+30	\$26.30	1	1
Inman	140	108	+29	\$22.00	0	8
Waterville	139	108	+29	\$20.50	6	8 7
Augusta	139	108	+29	\$33.50	1	1
Pottawatomie Co. RWD #02	136	108	+26	\$49.50	0	20 20
Fredonia	132	108	+22	\$42.52	2	18
Washington Co. RWD #02	131	108	+22	\$57.30	8	4
Frankfort	131	108	+21	\$22.06	15	6
Neodesha	130	108	+20	\$43.50	15	21
Conway Springs	129	108	+20	\$29.93	7	7
Burlington	129	108	+19	\$39:00	0	15
North Newton	128	108	+19	\$34.14	1	9
Wellington	128	108	+19	\$33.32	12	23
Halstead	127	108	+18	\$44.00	1	
Marquette	126	108	+17	\$34.00	11	9 8
Garden Plain	126	108	+16	\$32.50	5	l .
Pottawatomie Co. RWD #01	125	108	+15	\$31.00	2	21
Hillsboro	124	108	+15	\$41.29	8	7
Wamego	124	108	+14	\$18.95	3	NA

TABLE 10 WATER USE STATISTICS FOR MEDIUM PUBLIC WATER SUPPLIERS REGION 7, 2003								
	F	REGION 7,	2003					
					- ·	D		
		Regional		Cost per	Percent	Percent		
	.,	Average	Percent	10,000	Metered	Unacc. For ^{d/}		
Public Water Supplier	GPCD ^b /	GPCD	Difference	gal/month ^{c/}	Free			
McPherson Co. RWD #04	123	108	+14	\$41.30	0	7		
Sabetha	122	108	+13	\$44.52	3	19		
Galva	122	108	+13	\$20.95	0	14 7		
Council Grove	122	108	+13	\$23.01	11			
Marion Co. RWD #01	121	108	+12	\$30.30	<1	13		
Cowley Co. RWD #03	120	108	+11	\$27.86	1	28		
Sedan	120	108	+11	\$37.80	13	11		
Solomon	120	108	+11	\$20.00	2	10		
Timber Creek Water & Sewer	120	108	+11	\$36.50	0 .	15		
Eureka	119	108	+10	\$36.35	4	8		
Herington	118	108	+10	\$24.36	8	14 7		
Pottawatomie Co. RWD #04	117	108	+8	\$69.00	24			
Argonia	117	108	+8	\$27.50	3	13		
Ottawa Co. RWD #02	116	108	+8	\$52.84	0	6 9		
Nemaha Co. RWD #03	115	108	+7	\$41.30	0	8		
Riley Co. RWD #01	115	108	+7	\$51.25	<1	1		
Strong City	115	108	+7	\$53.50	29	NA 25		
Riley	115	108	+6	\$22.00	0	25		
Kechi	114	108	+6	\$42.00	1	10		
Miltonvale	113	108	+5	\$19.00	1	13		
Park City	113	108	+4	\$37.55	1	3		
Bel Aire	.112	108	+4	\$40.18	<1	10		
Wakefield	112	108	+4	\$25.00	2	10		
Eskridge	112	108	+4	\$56.00	8	9		
Lindsborg	112	108	+3	\$30.00	3	4		
Clay Center	111	108	+2	\$25.37	2	NA 04		
Leon	110	108	+2	\$37.75	3 2	21		
Yates Center	110	108	+2	\$43.75		20		
Burrton	108	108	0	\$28.87	3	7		
Whitewater	108	108	0	\$46.85	1	20		
Marion	108	108	0	\$35.25	<1	9		
Howard	107	108	0	\$43.66	4	11		
Valley Center	107	108	-1	\$31.88	2 .	12		
Lyon Co. RWD #05	107	108	-1	\$42.45	0	NA 6		
Onaga	107	108	-1	\$36.50	2 2 7	6		
Cedar Vale	107	108	-1	\$51.50	4	24		
Burden	107	108	-1	\$30.50	'	21		
Hanover	106	108	-2	\$39.75	2	12		
Carbondale	105	108	-3	\$58.50	3	23		
Belle Plaine	104	108	-3	\$22.00	<1	14		
Pottawatomie Co. RWD #03	104	108	-4	\$34.00	1	11		
Osage Co. RWD #05	104	108	-4	\$54.75	0	21		
Caldwell	103	108	-4	\$43.50	<1	12		

WATER USE STAT	ISTICS E	TABLE 1	IO M PUBLIC V	VATER SUPP	PLIERS ^{a/}	
WAIERUSESIAI	ISTICS F	REGION 7,	2003			
		Regional		Cost per	Percent	Percent
		Average	Percent	10,000	Metered	Unacc.
Dublic Water Supplier	GPCD ^{b/}	GPCD	Difference	gal/month ^{c/}	Free	For ^{d/}
Public Water Supplier	103	108	-5	\$30.25	15	10
Westmoreland	103	108	-5	\$19.38	3	15
Haysville	103	108	-5	\$22.73	<1	3
Grandview Plaza	102	108	-5	\$52.00	0	17.
Greenwood Co. RWD #02	102	108	-5	\$55.50	0	17
Dickinson Co. RWD #02	102	108	-5	\$37.70	0	10
Shawnee Co. RWD #04	101	108	-6	\$45.20	3	4
Washington Co. RWD #01	101	108	-6	\$71.00	6	17
Osage Co. RWD #03	101	108	-6	NA	0	12
Butler Co. RWD #01	1	108	-7	\$33.00	1	14
Oxford	101 101	108	-7	\$31.00	1	12
Shawnee Co. RWD #08		108	-7	\$30.50	2	7
Cowley Co. RWD #01	101	108	-8	\$65.00	0	10
Jackson Co. RWD #01	100	108	-8	\$53.82	Ŏ	NA
Clay Co. RWD #02	99	108	-8	\$53.43	Ö	11
Marshall Co. RWD #03	99		-10	\$27.88	<1	9
Goessel	97	108	-10	\$21.60	1	3
Ogden	97	108	-10	\$59.17	0	9
Jackson Co. RWD #03	97	108	-10	\$37.22	<1	5
Osage City	97	108	-10	\$57.22	0	19
Montgomery Co. RWD #06	97	108		\$17.00		25
White City	97	108	-11	\$17.00	0	12
Saline Co. RWD #04	97	108	-11	1	2	17
Florence	96	108	-11	\$44.00 \$66.00	20	8
Wabaunsee Co. RWD #02	95	108	-12	1 '	4	10
Clearwater	95	108	-12	\$36.00 \$52.00	<1	5
Shawnee Co. RWD #01C	95	108	-12	1	0	7
Lyon Co. RWD #01	94	108	-13	\$51.50 \$72.20	0	NA
Osage Co. RWD #04	94	108	-13	1 '	0	8
Sedgwick Co. RWD #04	93	108	-14	\$68.50	0	20
Sumner Co. RWD #04	92	108	-14	\$63.00	5	12
Bennington	91	108	-16	\$28.60	21	5
Cottonwood Falls	90	108	-16	\$43.00	1	31
Elk Co. RWD #01	90	108	-17	NA ¢61.50	0	11
Cowley Co. RWD #05	90	108	-17	\$61.50	0	9
Coffey Co. RWD #02	89	108	-17	\$72.55	1	NA NA
Silver Lake	89	108	-17	\$26.30	<1	5
Shawnee Co. RWD #03	89	108	-18	\$50.50	1	8
Andale	89	108	-18	\$30.25	0	1
Osage Co. RWD #08	88	108	-18	\$65.00	0	NA 12
Overbrook	88	108	-18	\$60.50	3	1
Butler Co. RWD #08	88	108	-19	\$37.00	0	30
Rossville	87	108	-19	\$33.20	0	6
Enterprise	87	108	-19	\$33.25	5	14

		TABLE	10	VATER OUR	N IEDC ^{a/}	
WATER USE STAT	ISTICS FO	OR MEDIUI REGION 7,	N PUBLIC V	VATER SUFF	LIEKO	
The second section is a second section of the second section of the second section is a second section of the second section of the second section sec	F	EGION 1,	2003			
	-	Damianal		Cost per	Percent	Percent
		Regional	Percent	10,000	Metered	Unacc.
_ •	000b/	Average GPCD	Difference	gal/month ^{c/}	Free	For ^{d/}
Public Water Supplier	GPCD ^{b/}		-19	\$63.25	2	12
Lyndon	87	108	-19	\$73.00	0	16
Butler Co. RWD #06	87	108	\$	\$43.00	0	6
Centralia	87	108	-19	\$70.20	9	14
Burlingame	86	108	-20	\$20.18	<1	19
Cowley Co. RWD #06	86	108	-20	\$52.00	2	14
Madison	86	108	-20	\$52.00 NA	0	NA
Shawnee Co. RWD #05	86	108	-21	\$46.00	0	6
Lyon Co. RWD #04	86	108	-21	\$72.20	<1	12
Montgomery Co. RWD #02	85	108	-22	1	2	15
Cherryvale	84	108	-22	\$62.50	0	9
Udall	84	108	-22	\$32.50	0	11
Marion Co. RWD #04	83	108	-23	\$47.10	2	NA
Rose Hill	83	108	-23	\$41.82	1	NA NA
Geary Co. RWD #04	83	108	-23	\$46.00	1	1
Lebo	83	108	-23	\$61.50	<1	8
Waverly	83	108	-23	\$71.00	4	4
Peabody	83	108	-23	\$51.08	2	8
Shawnee Co. RWD #02C	83	108	-24	\$55.00	<1	1
Olpe	82	108	-24	\$52.00	<1	NA
Colwich	82	108	-24	\$51.50	1	11
Benton	82	108	-24	NA NA	2	5
Towanda	81	108	-25	\$54.60	2	5
Sedgwick Co. RWD #03	81	108	-25	NA	4	NA
Sedgwick Co. RWD #01	81	108	-25	\$51.00	0	10
Douglass	80	108	-26	\$52.55	1	NA
Butler Co. RWD #05	80	108	-26	NA NA	0	10
Butler Co. RWD #02	78	108	-28	\$59.30	0	12
Coffey Co. RWD #03	77	108	-28	\$55.00	- 0	13
Glasco	77	108	-28	\$49.30	0	4
Mulvane	77	108	-29	\$42.20	1	8
Woodson Co. RWD #01	77	108	-29	\$59.50	3	21
LeRoy	76	108	-30	\$63.00	0	18
Sedgwick	75	108	-31	\$35.00	7	NA.
Hartford	74	108	-31	\$40.50	0	8
Milford	73	108	-32	\$46.40	13	NA
Dickinson Co. RWD #01	72	108	-33	\$59.00	<1	26
Montgomery Co. RWD #01C	71	108	-35	\$50.00	<1	14
Assaria	70	108	-35	\$39.05	1	NA
Harvey Co. RWD #01	69	108	-36	\$64.00	0	6
Wilson Co. RWD #11	69	108	-36	\$67.00	0	17
Hoyt	69	108	-37	\$62.15	1	10
Butler Co. RWD #04	68	108	-37	\$51.00	0	NA
Cowley Co. RWD #02	67	108	-38	\$36.00	0	11

TABLE 10 WATER USE STATISTICS FOR MEDIUM PUBLIC WATER SUPPLIERS REGION 7, 2003 Cost per Percent Percent Regional Unacc. Metered 10,000 Percent Average gal/month^{c/} For^{d/} Free Difference GPCD^{b/} **GPCD** Public Water Supplier 13 0 \$81.31 -39 108 66 Montgomery Co. RWD #12 4 0 \$71.50 -39 108 Butler Co. RWD #03 66 6 0 \$65.00 -40 65 108 Butler Co. RWD #07 12 5 \$41.71 108 108 Average

- ^{a/} Includes public water suppliers in Region 7 that serve between 500 and 9,999 people.
- The figure for gallons per capita per day do not include water supplied for industry, bulk sales, stockwatering, or farmsteads using more than 200,000 gallons per year.
- Cost for water according to rates in effect during 2003, or as recently as rates provided. "NA" indicates no information available on current water rate.
- ^{d/} Unaccounted for water includes distribution system losses, unmetered water provided to customers, and unmetered water provided free for public services, treatment processes, etc. "NA" is shown for suppliers reporting a percent unaccounted for water of less than 3.0.

WATER USE ST	ATISTICS	TABLE FOR SMAL	L PUBLIC W	ATER SUPPL	IERS*/	en experimental and a company of the
		REGION 7,	2003			
		Danianal		Cost per	Percent	Percent
		Regional	Doroont	10,000	Metered	Unacc.
	CDCDb/	Average	Percent Difference	gal/month ^{c/}	Free	For ^{d/}
Public Water Supplier	GPCD ^{b/}	GPCD 101	+165	\$19.00	<1	63
Elgin	267	101	+124	\$19.00 \$12.50*	0	100
Byron	226	101 101	+98	\$12.30	1	36
Barnes	200	101	+98	\$8.50	3	10
Scandia	200	101	+97	\$24.00	0	19
Republic Co. RWD #01	199	101	+81	\$47.00	0	9
Howison Heights WD	183	101	+75	\$19.50	9	41
Delphos	176	101	+75	\$26.50	1	53
South Haven	173	101	+61	\$33.00	Ö	40
Elmdale	163 156	101	+54	\$19.00	Ó	NA
Munden	150	101	+48	\$25.50	4	13
Greenleaf	148	101	+47	\$26.00	1	36
Durham	145	101	+44	\$26.00	9	18
Palmer	145	101	+43	\$43.15	5	23
Elk City	143	101	+42	\$14.50	Ö	NA
Morganville	143	101	+41	\$22.50	ő	NA
McPherson Co. RWD #03	143	101	+39	\$38.00	Ö	22
Wilson Co. RWD #06	137	101	+36	\$30.00	Ö	12
Marshall Co. RWD #02	137	101	+34	\$24.18	<1	18
Cuba	135	101	+31	\$24.50	0	13
McPherson Co. RWD #01	132	101	+29	\$32.00	25	7
Vermillion	128	101	+26	\$36.50	0	16
Linn McPherson Co. RWD #02	127	101	+26	\$37.50	0	4
1	127	101	+26	\$35.20	0	100
Tatarrax Hills	127	101	+26	\$15.50	2	18
Republic Saline Co. RWD #02	127	101	+25	\$39.00	0	11
Melvern	126	101	+25	\$64.75	23	22
Blue River Hills Improvement	123	101	+21	\$20.00*	0	100
•	120	101	+19	\$47.50	45	11
Severy Cloud Co. RWD #01	120	101	+18	\$52.50	3	15
Courtland	119	101	+18	\$22.90	2	12
Geary Co. RWD #02	119	101	+18	\$22.20*	0	100
Clay Co. RWD #01	118	101	+17	\$28.75	0	3
Ottawa Co. RWD #01	117	101	+16	\$36.50	0	26
Wilson Co. RWD #01	115	101	+14	NA	0	9
Moline	114	101	+13	\$40.00	0	10
Little Bear Mound	114	101	+13	NA	0	100
Nemaha Co. RWD #04	113	101	+12	\$58.00	0	13
Lehigh	113	101	+12	\$27.50	0	20
Cowley Co. RWD #04	113	101	+12	\$53.50	0	20
Morrowville	113	101	+12	\$36.00	0	28
Buffalo	113	101	+12	\$54.78	10	· 7
Toronto	112	101	+11	\$61.66	7	14
Montgomery Co. RWD #09	112	101	+10	\$66.00	0	28
Sumner Co. RWD #02	111	101	+10	\$59.00	2	13

WATER USE ST	ATISTICS	TABLE FOR SMAL REGION 7	L PUBLIC W	ATER SUPPL	IERS*/	
Magazines		REGION 1	2003			
		Regional		Cost per	Percent	Percent
		Average	Percent	10,000	Metered	Unacc.
Public Water Supplier	GPCD ^{b/}	GPCD	Difference	gal/month ^{c/}	Free	For ^{d/}
Bern	111	101	+10	\$25.90	<1	13
Nemaha Co. RWD #01	110	101	+9	\$37.50	0	11
Windom	109	101	+8	\$32.00	<1	16
Gypsum	109	101	+8	\$25.25	<1	14
Beattie	109	101	+8	\$36.75	2	18
Gridley	108	101	+7	\$61.00	1	34
Saline Co. RWD #06	108	101	+6	\$47.50	0	8
Aurora	107	101	+6	\$38.00	3	13
Wetmore	107	101	+5	\$45.50	7	15
Montgomery Co. RWD #08	106	101	+5	\$64.63	0	32
New Strawn	106	101	+5	\$45.00	5	6
Saline Co. RWD #08	105	101	+4	\$45.00	O	5
Maple Hill	104	101	+3	\$37.40	<1	3
Belvue	103	101	+2	\$27.00	0	10
Marshall Co. RWD #01	102	101	+1	\$45.50	0	7
Summerfield	102	101	+1	\$20.00	<1	5
Randolph	101	101	o	\$40.00	0	18
Dearing	100	101	-1	\$35.75	Ō	NA
Leonardville	100	101	-1	\$34.00	Ö	10
Altoona	99	101	-2	\$41.00	26	16
Geuda Springs	98	101	-3	\$29.00	1	18
Hope	97	101	-4	\$40.80	<1	8
Tescott	97	101	-4	\$16.55	<1	10
Dexter	96	101	-5	\$16.40	3	7
St. George	96	101	-5	\$19.56	Ö	14
Wabaunsee Co. RWD #01	96	101	-5	\$88.00	<1	25
Newbury Extension	94	101	-7	NA	0	17
Paxico	93	101	-8	\$32.00	1	3
Cassoday	92	101	-8	\$51.15	0	11
Harveyville	92	101	-9	\$85.00	1	14
Jamestown	92	101	-9	\$41.20	0	12
Sumner Co. RWD #03	91	101	-10	NA	0	8
Agenda	91	101	-10	\$30.00	4	15
Matfield Green	91	101	-10	\$27.50	<1	18
Axtell	90	101	-11	\$40.00	<1	6
Oketo	90	101	-11	\$31.25	0	10
Mahaska	89	101	-12	\$16.00	1	4
Osage Co. RWD #06	89	101	-12	\$80.00	0	14
Potwin	89	101	-12	\$53.56	3	5
Montgomery Co. RWD #10	89	101	-12	\$50.35	0	4
Haddam	88	101	-13	\$26.00	8	20
Osage Co. RWD #02	88	101	-13	\$52.00	0	10
Montgomery Co. RWD #01	87	101	-14	NA	0	7
Dwight	87	101	-14	\$18.70	0	NA
Chautaugua Co. RWD #03	87	101	-14	NA	0	22

WATER USE ST	ATISTICS	TABLE FOR SMAL REGION 7,	11 L PUBLIC W. 2003	ATER SUPPL	IERS*/	The state of the s
				Coot nor	Percent	Percent
		Regional	Darsont	Cost per 10,000	Metered	Unacc.
	000b/	Average	Percent Difference	gal/month ^{c/}	Free	For ^d
Public Water Supplier	GPCD ^{b/}	GPCD_	-15	\$44.00	0	42
Havensville	86	101	-15 -15	NA	0	NA
Cowley Co. RWD #08	86	101 101	-15 -15	\$40.75	4	6
Alta Vista	86	101	-16	\$37.50	8	14
Longton	85 85	101	-16	\$45.50	Ö	17
Admire	85 85	101	-16	\$50.00	4	11
Chase Co. RWD #01	85 84	101	-16	\$30.50	Ö	9
Whiting	84	101	-17	\$42.00	Ö	18
Chautauqua Co. RWD #01	84	101	-18	\$30.25	<1	. 8
Olsburg	83	101	-19	\$38.00	9	NA
Goff	82	1	-19	\$60.00	Ö	11
Wilson Co. RWD #04	82	101	-19	\$52.00	0	13
Lyon Co. RWD #03	82	101	-19	NA	0	15
Latham	80	101	-21	\$47.50	2	NA
Longford	80	101	-22	\$31.00	<1	NA
Burns	79	101	-23	\$36.00	2	12
Green	78	101	-23	\$78.00	0	9
Chautauqua Co. RWD #02	· 77	101	-23 -23	\$44.25	2	8
McFarland	77 77	101	-23	\$60.75	. 0	19
Saline Co. RWD #07	77 77	101	-23	\$92.00	2	12
Reading	77	101	-24	\$25.65	0	18
Emmett	77	101	1	\$37.30	0	10
Wilson Co. RWD #12.	76	101	-24	\$99.60	<1	12
Walton	76	101	-25	\$63.00	1	15
Hamilton	75	101	-26 -27	\$119.80	0	14 .
Konza Valley Water District	74	101	-27 -27	\$40.00	0	8
Saline Co. RWD #01	74	101	-27	\$50.50	0	13
University Park Water	74	101	-27	\$40.50	0	9
Sumner Co. RWD #06	73	101	-28	\$66.50	0	14
Wilson Co. RWD #13	73	101 101	-28	\$20.00*	0	100
Rocky Ford Water Company	73	101	-29	\$29.05	Ö	11
Oneida	72 72	101	-29	Ψ29.03 NA	3	21
Netawaka	72	101	-29	\$57.70	1	8
Grenola	71	101	-30	\$30.00	Ö	20
Bremen	71	101	-30	\$42.00	0	8
Viola	70	101	-30	\$87.00	<1	13
Mayetta	70	101	-31	\$88.00	0	19
Montgomery Co. RWD #13	69	101	-31	NA	1 1	NA
Soldier	69	101	-32	\$74.00	9	18
Atlanta	68	101	-32	\$50.00	0	18
Virgil	66	101	-35	\$78.30	0	7
Greenwood Co. RWD #03	65	101	-36	\$41.30	0	NA
Mayfield	63	101	-38	\$73.80	0	9
Cambridge	62	101	-38	\$66.50	<1	11
Circleville Fall River	62	101	-38	\$38.50	0	17

		TABLE	11	ATER CURR	JEDO#/	ng gjeski u V
WATER USE ST	ATISTICS	FOR SMAL REGION 7,	L PUBLIC W. .2003	ATER SUPPL	IERO.	
Dublic Meter Cumplior	GPCD ^{b/}	Regional Average GPCD	Percent Difference	Cost per 10,000 gal/month ^{c/}	Percent Metered Free	Percent Unacc. For ^{d/}
Public Water Supplier Culver	62	101	-39	\$30.50	0	16
Elbing	61	101	-39	\$58.50	0	NA
Allen	58	101	-43	\$58.00	0	8
Quenemo	56	101	-45	\$67.60	2	6
Peru	55	101	-45	\$56.00	1	8
Cedar Point	55	101	-46	\$42.50	0	8
Scotsman Estates	52	101	-48	\$63.00	0	13 1
Wilson Co. RWD #05	47	101	-53	\$80.00	0	NA
Red Bud Lake Improvement	44	101	-56	\$77.72	0	23
Marion Co. RWD #02	35	101	-65	\$37.00	0	NA
Average	101	101		\$43.16	4	15

- Includes public water suppliers in Region 7 that serve fewer than 500 people.
- The figures for gallons per capita per day do not include water supplied for industry, bulk sales, stockwatering, or farmsteads using more than 200,000 gallons per year.
- Cost for water according to rates in effect during 2003, or as recently as rates provided. "*" after cost indicates flat monthly rate for any amount of water use. "NA" indicates no information available on current water rate.
- For suppliers that meter customer usage, unaccounted for water includes distribution system losses, unmetered water provided to customers, and unmetered water provided free for public services, treatment processes, etc. For suppliers that do not meter any customers water usage or did not provide sufficient information on customer sales, the percent unaccounted for water is 100. "NA" is shown for suppliers reporting a percent unaccounted for water of less than 3.0.

TABLE 12 WATER USE STATISTICS FOR LARGE PUBLIC WATER SUPPLIERS*									
		REGION	8, 2003						
Public Water Supplier	GPCD ^Ы	Regional Average GPCD	Percent Difference	Cost per 10,000 gal/month ^{c/}	Percent Metered Free	Percent Unacc. For ^{d/}			
Atchison	234	144	+62	\$40.22	6	24			
WaterOne - Johnson Co.	185	144	+28	\$32.55	14	8 9			
Kansas City BPU	184	144	+28	\$47.28 \$47.82	22 28	17			
Parsons	170 137	144 144	+18 -5	\$27.75	13	6			
Lawrence Pittsburg	1137	144	-21	\$35.65	3	NA			
Gardner	112	144	-23	\$48.10	7	13			
Olathe	111	144	-23	\$30.26	1	12			
Leavenworth	107	144	-25	\$44.12	<1	8			
Ottawa	91	144	-37	\$27.57	<1	7			
Average	144	144		\$38.13	11	9			

^{a/} Includes public water suppliers in Region 8 that serve 10,000 people or more.

The figures for gallons per capita per day do not include water supplied for industry, bulk sales, stockwatering, or farmsteads using more than 200,000 gallons per year.

^{c/} Cost for water according to rates in effect during 2003, or as recently as rates provided.

^{d/} Unaccounted for water includes distribution system losses, unmetered water provided to customers, and unmetered water provided free for public services, treatment processes, etc. "NA" is shown for suppliers reporting a percent unaccounted for water of less than 3.0.

WATER USE ST	ATISTICS	TABLE FOR MEDIU	IM PUBLIC M	VATER SUPP	LIERS®	
		REGION 8	, 2003			
		Designal		Cost per	Percent	Percent
		Regional	Percent	10,000	Metered	Unacc.
	0000b/	Average GPCD	Difference	gal/month ^{c/}	Free	For ^{d/}
Public Water Supplier	GPCD ^{b/}		+70	\$40.00	1	48
Cherokee Co. RWD #01	175	103 103	+69	\$34.50	4	39
Crawford Co. RWD #05	174	103	+61	\$68.25	11	5
Bourbon Co. RWD #04	166 163	103	+59	\$25.75	8	31
Cherokee Co. RWD #03	159	103	+54	\$49.55	5	29
DeSoto	153	103	+49	\$30.23	2	31
Fort Scott	149	103	+44	\$30.50	18	13
Osawatomie	149	103	+36	\$45.74	13	11
Paola	137	103	+33	\$65.76	1	19
Baldwin	137	103	+28	\$52.00	0	22
Allen Co. RWD #08	130	103	+27	\$47.00	Ō	27
Neosho Co. RWD #07	130	103	+27	\$31.50	3	17
Galena	128	103	+24	\$35.85	4	19
Bonner Springs	128	103	+24	\$48.20	15	22
Jefferson Co. RWD #13	128	103	+24	\$30.00	21	13
Girard	126	103	+22	\$28.03	2	10
Chanute Crawford Co. RWD #01C	125	103	+21	\$45.00	0	14
	123	103	+20	\$28.50	0	28
Jefferson Co. RWD #03	123	103	+20	\$41.00	27	16
Highland Jefferson Co. RWD #02	122	103	+19	\$42.40	4	24
ł .	119	103	+16	\$33.96	12	19
Valley Falls Hiawatha	118	103	+14	\$38.20	2	9
Cherokee	118	103	+14	\$45.75	1	25
Jefferson Co. RWD #01	118	103	+14	\$29.60	0	25
Mound City	117	103	+14	\$49.00	14	18
Baxter Springs	116	103	+12	\$33.20	5	4
Thayer	115	103	+12	\$47.00	3	17
Johnson Co. RWD #07	115	103	+11	\$58.25	0	8
Leavenworth Co. RWD #08	114	103	+11	\$59.00	1	18
Humboldt	113	103	+10	\$48.50	16	12
Spring Hill	113	103	+10	\$60.00	22	10
Troy	112	103	+9	\$49.44	21	12
Jefferson Co. RWD #07	111	103	+8	\$36.50	0	15
Louisburg	110	103	+7	\$70.25	3	16
Eudora	109	103	+6	\$50.40	20	11
Scammon	109	103	+6	\$18.25	7	18
Frontenac	109	103	+5	\$31.02	11	9
Franklin Co. RWD #06	108	103	+5	\$70.50	19	15
Douglas Co. RWD #01	108	103	+5	\$50.60	0	17
Oswego	108	103	+5	\$46.25	13	6
Wathena	108	103	+5	\$46.50	1 .	12
Tonganoxie	108	103	+5	\$41.45	3	16
Jefferson Co. RWD #12	107	103	+4	\$62.00	<1	20
Leavenworth Co. RWD #05	107	.103	. +4	\$49.24	0	17
Johnson Co. RWD #06C	107	103	+3	\$62.80	3	15

WATER USE ST.	ATISTICS	TABLE FOR MEDIU REGION 8	IM PUBLIC V	VATER SUPP	LIERS®/	
		REGION 0	, 2003			
		Regional		Cost per	Percent	Percent
		Average	Percent	10,000	Metered	Unacc.
Public Water Supplier	GPCD ^{b/}	GPCD	Difference	gal/month ^{c/}	Free	For ^{d/}
Iola	106	103	+3	\$39.37	<1	9
Cherokee Co. RWD #04	106	103	+3	\$39.50	0	37
Garnett	103	103	0	\$63.50	8	8
Moran	103	103	0	\$42.50	<1	11
La Cygne	· 103	103	0	\$63.25	- 6	5
Suburban Water Company	103	103	0	\$56.67	13	3
Anderson Co. RWD #04	102	103	-1	\$57.30	0 -	15
La Harpe	102	103	-1	\$39.50	2	23
Chetopa	101	103	-2	\$41.90	. 8 .	4
Lansing (Lan-Del WC)	99	103	-4	\$50.39	<1	8
Ozawkie	99	103	-4	\$23.00	0	NA
St. Paul	97	103	-6	\$34.75	0	14
Miami Co. RWD #02	97	103	-6	\$56.00	0	14
Franklin Co. RWD #04	97	103	-6	\$65.00	4	20
Brown Co. RWD #01	96	103	-6	\$30.50	0	20
Erie	96	103	-7	\$42.20	3	7
Douglas Co. RWD #04	96	103	-7	\$76.75	<1	23
Oskaloosa	95	103	-8	\$51.00	1	7
Franklin Co. RWD #05	95	103	-8	\$32.50	0	18
Leavenworth Co. RWD #01C	93	103	-10	\$61.07	1	8
Leavenworth Co. RWD #07	93	103	-10	\$74.00	2	10
Linn Co. RWD #01	. 93	103	-10	NA 110.00	0	14
Columbus	92	103	-10	\$42.00	3	17
Effingham	92	103	-10	\$40.00	3	4
Linn Co. RWD #03	92	103	-11	\$60.00	0	17 16
Leavenworth Co. RWD #09	92	103	-11	\$52.50	0	15
Cherokee Co. RWD #02	91	103	-12	\$29.50	1 7	11
Horton	90	103	-12	\$38.27	1 4	15
Bourbon Co. RWD #02C	90	103	-13	\$35.00	0	7
Brown Co. RWD #02	89	103	-13	\$59.60 \$50.50	0	17
Neosho Co. RWD #04	89	103	-14 -14	\$30.30	<1	15
Nortonville	89	103	-14	\$55.65	1	18
Mulberry	88	103 103	-14	\$59.50	<1	11
Douglas Co. RWD #03	88	103	-15 -15	\$58.00	0	6
Leavenworth Co. RWD #06	88	103	-15	\$23.39	2	6
Pleasanton	88	103	-15	\$65.00	0	23
Labette Co. RWD #08	87 87	103	-15	\$65.50	0	22
Miami Co. RWD #03	86	103	-16	\$49.00	0	6
Crawford Co. RWD #02	86	103	-16	\$60.38	<1	5
Elwood	85	103	-10	\$29.10	0	18
Neosho Co. RWD #02	84	103	-17	\$31.60	0	8
Arma	83	103	-19	\$63.25	8	8
Richmond Douglas Co. RWD #06	83	103	-19	\$33.00	O	8
Miami Co. RWD #01	82	103	-20	\$42.92	1	15

TABLE 13 WATER USE STATISTICS FOR MEDIUM PUBLIC WATER SUPPLIERS®						
WATER USE ST	ATISTICS	FOR MEDIC REGION 8	IM PUBLIC V	VATER SUPP	LIERO	
		KEGION U	, 2003			
		Regional		Cost per	Percent	Percent
· ·		Average	Percent	10,000	Metered	Unacc.
Public Water Supplier	GPCD ^{b/}	GPCD	Difference	gal/month ^{c/}	Free	For ^{d/}
Douglas Co. RWD #05	81	103	-21	\$58.00	0	7
Gas	80	103	-22	\$51.14	0	6
Crawford Co. RWD #04	79	103	-24	\$38.00	6	12
Altamont	78	103	-24	\$60.00	0	NA Ì
Neosho Co. RWD #01C	78	103	-24	\$81.25	0	NA
Linn Co. RWD #02	76	103	-26	\$80.50	10	15
Anderson Co. RWD #05	75	103	-27	\$65.25	0	10
Perry	75	103	-27	\$64.00	<1	11
Winchester	74	103	-28	\$34.50	2 -	9
Lecompton	73	103	-30	\$49.50	3	8
Weir	72	103	-30	\$44.50	0	NA
Pomona	71	103	-31	\$38.90	0	3
Labette Co. RWD #06	70	103	-32	\$33.60	0	NA
Franklin Co. RWD #01	70	103	-32	\$67.29	0	5
Cherokee Co. RWD #08	70	103	-32	\$42.00	3	7
Anderson Co. RWD #01C	66	103	-36	\$98.70	0	. 9
McLouth	65	103	-37	\$73.80	3	NA
Miami Co. RWD #04	63	103	-39	\$97.50	0	12
Average	103	103		\$48.69	6	15

- ^{a/} Includes public water suppliers in Region 8 that serve between 500 and 9,999 people.
- ^{b/} The figures for gallons per capita per day do not include water supplied for industry, bulk sales, stockwatering, or farmsteads using more than 200,000 gallons per year.
- ^{c/} Cost for water according to rates in effect during 2003, or as recently as rates provided. "NA" indicates no information available on current water rate.
- Unaccounted for water includes distribution system losses, unmetered water provided to customers, and unmetered water provided free for public services, treatment processes, etc. "NA" is shown for suppliers reporting a recent unaccounted for water of less than 3.0.

WATER USE STA	TISTICS F	TABLE 1 OR SMALI EGION 8,	_ PUBLIC W	ATÉR SUPP	LIERS".	Br. Co.
	, <u>, </u>	EGION 0,	, 2003			
		Regional		Cost per	Percent	Percent
		Average	Percent	10,000	Metered	Unacc.
Public Water Supplier	GPCD ^{b/}	GPCD	Difference	gal/month ^{c/}	Free	For ^{d/}
Everest	135	87	+56	\$29.25	0 .	11
Neosho Co. RWD #09	132	87	+52	\$39.90	0	39
Franklin Co. RWD #07	129	87	+49	\$25.00	0	57
Allen Co. RWD #16	128	87	+47	\$23.00	0	100
Lakeside Village Improvement	127	87	+46	\$32.00	9	44
Allen Co. RWD #06	121	87	+39	\$30.50	0	7
Allen Co. RWD #03	119	87	+37	\$49.00	0	21
Atchison Co. RWD #04	119	87	+37	\$72.90	0	43
Allen Co. RWD #12	119	87	+36	\$45.00	. 0 .	NA
Neosho Co. RWD #06	116	87	+33	\$48.30	0	36
Crawford Co. RWD #01	113	87	+30	\$38.00	0	32
Robinson	111	87	+27	\$36.00	3	24
Jefferson Co. RWD #10	106	87	+22	\$60.50	11	31
Labette Co. RWD #01	106	87	+22	NA NA	0	12
Walnut	106	87	+22	\$43.50	<1	12
Willis	103	87	+19	NA	0	14
Jefferson Co. RWD #08	103	87	† +18	\$44.00	0	16
Reserve	100	87	+14	\$50.50	0	33
Neosho Co. RWD #03	99	87	+14	\$74.00	0	16
Labette Co. RWD #04	98	87	+12	NA	0	11
Blue Mound	97	87	+12	\$54.75	15	4
Neosho Co. RWD #05	97	87	+11	\$65.00	0	23
Colony	96	87	+10	NA	0	NA
White Cloud	95	87	+9	\$25.00	0	34
Crawford Co. RWD #03	95	87	+9	\$28.75	0	19
Allen Co. RWD #01	93	87	+7	\$42.50	0	100
Allen Co. RWD #04	92	87	+6	\$33.60	0	100
Neosho Co. RWD #12	91	87	+5	\$40.30	0	9
Atchison Co. RWD #01	91	87	+4	\$43.25	1	28
Cherokee Co. RWD #07	90	87	+3	\$48.92	0	17
Atchison Co. RWD #03	90	87	+3	\$61.00	0	18
Arcadia	89	87	+2	\$43.10	. 5	25
Neosho Co. RWD #08	88	87	+2	\$48.00	0	9
Chicopee Water Company	88	87	+2	NA NA	0	19
Anderson Co. RWD #01	87	87	0	NA ¢EC 40	0	19
Labette Co. RWD #02	85	87	-2 -2	\$56.40	0	100
Anderson Co. RWD #03	85	87	-2	\$97.00	0	100
Labette Co. RWD #03	85 05	87	-2	\$54.60 \$57.50	0	12
Cherokee Co. RWD #06	85	87	-3	\$57.50	0	3
Allen Co. RWD #10	84	87	-4	\$66.80		18
Fontana	81	87	-7	\$56.50	0	8
Uniontown	81	87 87	-7	\$62.65	0	12
Prescott	79 76	87 87	-9 12	\$51.50 NA	0	11 -
Franklin Co. RWD #03	76 76	87 87	-13 -13	\$62.50	2	9
Bronson	76	0/	-13	φυ∠.ύ∪		1 3

TABLE 14 WATER USE STATISTICS FOR SMALL PUBLIC WATER SUPPLIERS*							
	R	EGION 8,	2003		18 P. 18		
		Regional		Cost per	Percent	Percent	
		Average	Percent	10,000	Metered	Unacc.	
Public Water Supplier	GPCD ^{b/}	GPCD	Difference	gal/month ^{c/}	Free	For ^{d/}	
Doniphan Co. RWD #03	76	87	-13	\$37.00	0	14	
Labette Co. RWD #07	75	87	-14	\$47.50	0	11	
Muscotah	75	87	-14	\$39.00	0	17	
Easton	75	87	-14	\$35.20	24	3	
Greeley	74	87	-14	\$38.25	1	21	
Cherokee Co. RWD #05	73	87	-16	NA	0	15	
Doniphan Co. RWD #02	72	87	-17	\$76.00	0	11	
Princeton	72	87	-17	\$42.50	<1	8	
Linwood	72	87	-18	\$41.50	.<1	8	
Edna	72	87	-18	\$78.50	1	7	
West Mineral	72	87	-18	\$61.00	<1	15	
Crawford Co. RWD #07	72	87	-18	\$43.00	0	18	
Parker	69	87	21	\$82.00	1	17	
Fulton	66	87	-24	\$50.00	0	18	
Lane	66	87	-24	\$56.00	1	8	
Jefferson Co. RWD #09	65	87	-25	\$63.00	9	20	
Denison	65	87	-26	\$64.25	0	15	
Kincaid	63	87	-27	\$65.50	3	5	
Allen Co. RWD #15	63	87	-27	\$26.80	0	7	
Doniphan Co. RWD #01	61	87	-29	\$31.00	1	11	
Allen Co. RWD #11	61	87	-30	NA	0	3	
Mound Valley	61	87	-30	\$59.30	<1	NA	
Roseland	59	87	-32	NA .	0	100	
Morrill	58	87	-33	\$58.50	. 0	9	
Jefferson Co. RWD #15	58	87	-33	\$39.75	0	9	
Rantoul	57	87	-34	\$49.75	1	3	
Allen Co. RWD #13	56	87	-36	\$39.70	. 0	11	
Average	87	87		\$49.45	4	16	

^{a/} Includes public water suppliers in Region 8 that serve fewer than 500 people.

The figures for gallons per capita per day do not include water supplied for industry, bulk sales, stockwatering, or farmsteads using more than 200,000 gallons per year.

Cost for water according to rates in effect during 2003, or as recently as rates provided. "NA" indicates no information available on current water rate.

Unaccounted for water includes distribution system losses, unmetered water provided to customers, and unmetered water provided free for public services, treatment professes, etc. For suppliers that did not provide sufficient information on customer sales, the percent unaccounted for water is 100. "NA" is shown for suppliers reporting a percent unaccounted for water of less than 3.0.

TABLE 15 PUBLIC WATER SUPPLIERS WITH HIGHEST GPCD'S RELATIVE TO THEIR REGION, RANKED BY PERCENT ABOVE REGIONAL AVERAGE KANSAS, 2003

		Regional Average	Percent	Cost per 10,000	Percent Metered	Percent Unacc.
Public Water Supplier	GPCD ^{a/}	GPCD	Difference	gal/month ^{b/}	Free	For ^{c/}
Elgin	267	101	+165	\$19.00	<1	63
Englewood	494	198	+150	\$25.00*	0	95
Comanche Co. RWD #02	411	166	+148	\$58.00	- 0	45
Lorraine	315	130	+142	\$21.00	53	7
Byron	226	101	+124	\$12.50*	0	100
West Hills Water Co.	282	130	+117	\$20.00*	. 0	100
Hesston	216	108	+100	\$18.75	9	24
Barnes	200	101	+98	\$16.00	1	36
Scandia	200	101	+98	\$8.50	3	10
Republic Co. RWD #01	199	101	+97	\$24.00	0	19
Goddard	206	108	+91	\$10.00	1	8
Herndon	469	248	+89	\$22.50	4	20
Offerle	308	166	+85	\$16.62	0	33
Howison Heights WD	183	101	+81	\$47.00	0 ·	9
Long Island	293	166	+76	\$12.00	. 0	4
Delphos	176	101	+75	\$19.50	9	41
Jennings	424	243	+74	\$14.00	5	59
Moundridge	187	108	+73	\$9.50	1	7
South Haven	173	101	+71	\$26.50	1	53
Cherokee Co. RWD #01	175	103	+70	\$40.00	1	48

^{a/} The figures for gallons per capita per day do not include water supplied for industry, bulk sales, stockwatering, or farmsteads using more than 200,000 gallons per year.

Cost for water according to rates in effect during 2003, or as recently as rates provided. "*" after cost indicates flat monthly rate for any amount of water use.

For suppliers that meter customer usage, unaccounted for water includes distribution system losses, unmetered water provided to customers, and unmetered water provided free for public services, treatment processes, etc. For suppliers that do not meter any customer water usage the percent unaccounted for is 100. For suppliers that meter only certain water uses, the percent unaccounted for includes all unmetered water.

TABLE 16 PUBLIC WATER SUPPLIERS WITH LOWEST GPCD'S RELATIVE TO THEIR REGION, RANKED BY PERCENT BELOW REGIONAL AVERAGE KANSAS, 2003

		Regional		Cost per	Percent	Percent
		Average	Percent	10,000	Metered	Unacc.
Public Water Supplier	GPCD ^{a/}	GPCD	Difference	gal/month ^{b/}	Free	For ^{c/}
Garden Spot Rentals	66	248	-73	None	0	100
Farr Subdivision	68	248	-72	None	0	100
Brownell	60	198	-70	\$12.50	0	9
Finney Co. RWD #01	80	248	-68	\$46.50	0	20
Norton Co. RWD #01	69	198	-65	\$34.50	0	11
Hamilton Co. RWD #01	97	278	-65	\$57.00	5	5
Marion Co. RWD #02	35	.101	-65	\$37.00	0	NA
Waldo	48	130	-63	\$46.25	0	NA
Liebenthal	73	166	-56	\$33.00	2	9
Horace	122	278	-56	\$24.30	0	3
Red Bud Lake Improvement	44	101	-56	\$77.72	Ö	23
Trego Co. RWD #02	91	198	-54	\$63.00	4	7
Wilson Co. RWD #05	47	101	-53	\$80.00	0	NA
Pawnee Rock	66	130	-49	\$28.50	3	8
Scotsman Estates	52	101	-48	\$63.00	0	13
Paradise	69	130	-47	NA NA	0	6
Ellis Co. RWD #03	88	166	-47	\$29.40	0	32
Cedar Point	55	101	-46	\$42.50	0	8
Ellis Co. RWD #01	. 91	166	-45	\$23.20	1	12
Peru	55	101	-45	\$56.00	1	8

The figures for gallons per capita per day do not include water supplied for industry, bulk sales, stockwatering, or farmsteads using more than 200,000 gallons per year.

Cost for water according to rates in effect during 2003, or as recently as rates provided. "NA" indicates no information available on current water rates. "None" indicates system that does not charge for water service.

Unaccounted for water includes distribution system losses, unmetered water provided to customers, and unmetered water provided free for public services, treatment processes, etc. For suppliers that do not meter any customer water usage or did not provide sufficient information on customer sales, the percent unaccounted for water is 100. "NA" is shown for supplier reporting a percent unaccounted for water of less than 3.0.

TABLE 17 WATER USE BY PUBLIC WATER SUPPLIERS WITH FLAT RATES KANSAS, 2003							
Public Water Supplier	Region	Cost per 10,000 gal/month	GPCD	Regional Average GPCD	Percent Difference		
Arnold	4	\$12.00 \$15.00	270 218	198 166	+36 +31		
Belvidere Blue River Hills Improvement	5 7S	\$15.00	123	100	+21		
Byron	7S	\$12.50	226	101	+124 +3		
Copeland Englewood	3 4	\$25.00 \$25.00	249 494	243 198	+150		
Ford	4	\$18.00	225	198	+14		
Geary Co. RWD #02	7S	\$22.20	119 73	101 101	+18 -28		
Rocky Ford Water Company West Hills Water Co.	7S 6S	\$20.00 \$20.00	282	130	+117		
Average							

^{a/} Each customer is charged the same amount each month, regardless of how much water is used.

TABLE 18 AVERAGE MONTHLY CHARGE FOR CUSTOMER WATER USE BY REGION KANSAS, 2003							
	Number of		Gallons of	of Water Use	d Per Montl	<u>n</u>	
Region	Public Water Suppliers	5,000	10,000	25,000	50,000	100,000	
1	16	\$14.23	\$20.82	\$40.93	\$76.27	\$146.09	
2	22	\$14.07	\$19.69	\$37.27	\$67.76	\$128.45	
3	20	\$12.23	\$18.33	\$37.41	\$69.25	\$139.65	
4	27	\$17.91	\$24.42	\$45.22	\$81.57	\$156.62	
5	46	\$18.71	\$27.50	\$55.98	\$107.65	\$211.76	
6	107	\$20.40	\$31.17	\$63.64	\$117.96	\$225.15	
7	318	\$25.97	\$41.65	\$87.73	\$164.82	\$318.21	
8	179	\$28.93	\$48.36	\$105.79	\$201.69	\$391.20	
Kansas	735	\$24.14	\$38.49	\$81.17	\$152.91	\$295.55	

TABLE 19 PUBLIC WATER SUPPLIERS WITH 30 PERCENT OR MORE UNACCOUNTED FOR WATER KANSAS, 2003

	KANSAS, 20	103	
		Potential	
	Percent	Water Gain	
	Unaccounted	(Thousand	Water Conservation Plan
Public Water Supplier	For	Gallons)	Approval Date
Alton	44	2,039	December 18, 2003
Atchison Co. RWD #04	43	4,057	October 8, 2001
Barnes	36	2,500	October 13, 2003
Bucklin	. 40	19,256	March 31, 1997
Butler Co. RWD #08	30	6,248	October 29, 1997
Cherokee Co. RWD #01	48	11,274	February 6, 1997
Cherokee Co. RWD #03	31	18,874	February 3, 1998
Cherokee Co. RWD #04	37	13,265	March 25, 2002
Comanche Co. RWD #02	45	6,211	March 17, 1997
Copeland	- 58	24,274	August 15, 2000
Crawford Co. RWD #01	32	3,380	March 25, 2002
Crawford Co. RWD #05	39	27,602	April 8, 1997
Delphos	41	7,826	March 22, 2000
Durham	36	1,304	
Elgin	63	4,954	April 1, 1997
Elk Co. RWD #01	31	3,866	
Ellis Co. RWD #03	32	1,382	January 7, 2004
Elmdale	40	790	July 1, 1991
Esbon	32	1,161	November 19, 2003
Fort Scott	31	122,753	April 11, 2000
Franklin Co. RWD #07	57	1,736	
Gridley	34	3,080	September 18, 1997
Havensville	42	1,235	July 18, 2002
Jefferson Co. RWD #10	31	1,597	December 18, 2001
Jennings	59	10,638	July 18, 2002
Lakeside Village Improvement	44	4,057	
Montgomery Co. RWD #08	32	1,852	July 22, 2002
Neosho Co. RWD #06	36	3,878	February 26, 2003
Neosho Co. RWD #09	39	2,167	December 27, 1999
Offerle	33	4,482	
Portis	34	986	
Reserve	33	661	January 29, 2002
Russell Co. RWD #03	35	10,842	March 24, 2003
South Haven	53	9,454	June 21, 2004
Sylvia	34	3,749	July 21, 2000
Wallace	38	2,881	October 14, 1999
White Cloud	34	1,516	August 1, 2001

^{a/} Potential water gain is the amount of water that would be saved if only 15 percent of the total was unaccounted for.