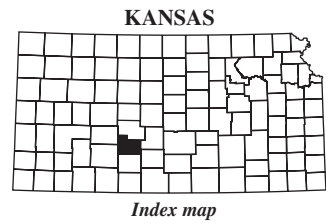


**EXPLANATION**

- ◀ 4157 Location of streamflow-statistics determination site (small triangle) and associated identification number—small triangle points in downstream direction
- ▲ 07140000 U.S. Geological Survey streamflow-gaging station and number used for estimates of flow duration
- △ 07140000 U.S. Geological Survey streamflow-gaging station and number used for estimates of peak-discharge frequency values
- 2330 Lake and determination site identification number



**Figure 34.** Location of streamflow-statistics determination sites, associated identification numbers, and U.S. Geological Survey streamflow-gaging stations used in the flow-duration and peak-discharge frequency analyses for Edwards County.

**200 Estimates of Flow Duration, Mean Flow, and Peak-Discharge Frequency Values for Kansas Stream Locations**

**Table 30.** Estimated flow-duration values, mean flow values, and peak-discharge frequency values for controlled and uncontrolled flow stream segments on the 1999 Kansas Surface Water Register for Edwards County.

[KSWR, Kansas Surface Water Register; CUSEGA, catalog unit segment number alpha; mi<sup>2</sup>, square miles; ft<sup>3</sup>/s, cubic feet per second; HYDRO, lake or other hydrologic structure; NA, not applicable; NRDitch, irrigation ditch; NRTribal, tribal stream]

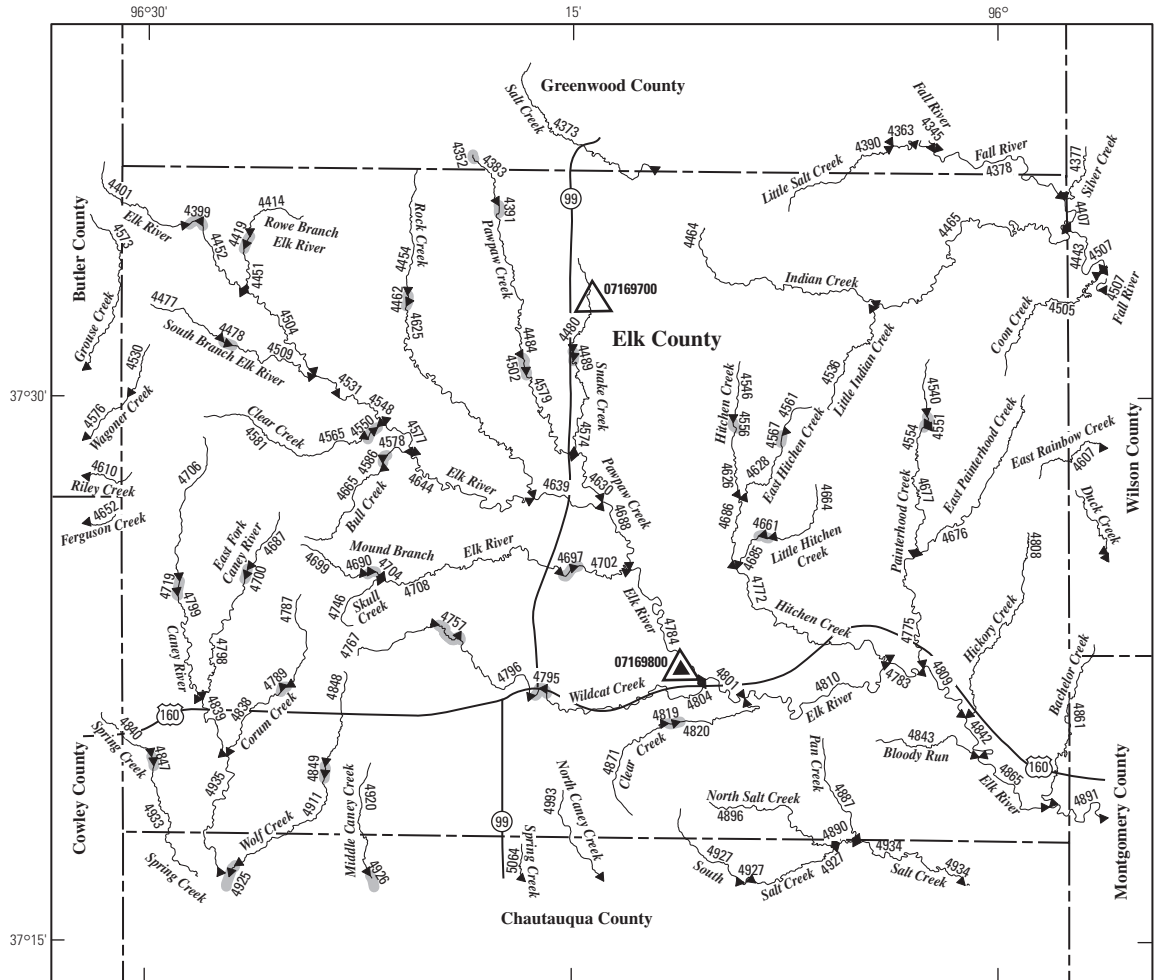
Determination site identification number (fig. 34)	KSWR CUSEGA number	Stream segment by county (table 112)				Stream name	Contributing drainage area (mi <sup>2</sup> )	Estimated flow-duration values (ft <sup>3</sup> /s) for indicated percentage of time flow equaled or exceeded				
		1st	2nd	3rd	4th			90 percent	75 percent	50 percent	25 percent	10 percent
		3601	110300047	ED	PN					Coon Creek	436	0.18
3673	110300047	ED				Coon Creek	384	0	1.27	3.15	7.80	20.1
3687	110300092	ED				Wildhorse Creek	51.6	0	0	0	0	.06
3725	110300048	ED	HG			Little Coon Creek	117	0	0	0	.08	2.23
3728	110300048	ED				Little Coon Creek	161	0	0	.17	1.18	5.04
3738	110300048	ED				Little Coon Creek	175	0	0	.48	1.81	6.32
3849	110300049	ED				Coon Creek	188	0	.21	1.15	2.82	7.60
3870	1103000410	ED	PN			Arkansas River	28,100	.71	2.60	32.0	104	203
3920	110300093	ED	SF			Rattlesnake Creek	705	1.20	6.50	15.0	28.0	40.0
3951	110300049	ED	FO			Coon Creek	167	0	0	.76	2.03	5.97
4078	110300093	ED	KW			Rattlesnake Creek	622	1.00	5.60	12.9	24.7	37.5
4157	1103000410	ED	FO			Arkansas River	28,000	.58	2.11	27.6	97.8	198

**Table 30.** Estimated flow-duration values, mean flow values, and peak-discharge frequency values for controlled and uncontrolled flow stream segments on the 1999 Kansas Surface Water Register for Edwards County.—Continued

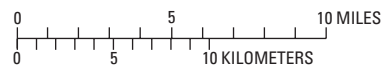
[KSWR, Kansas Surface Water Register; CUSEGA, catalog unit segment number alpha; mi<sup>2</sup>, square miles; ft<sup>3</sup>/s, cubic feet per second; HYDRO, lake or other hydrologic structure; NA, not applicable; NRDitch, irrigation ditch; NRTribal, tribal stream]

Determination site identification number (fig. 34)	Estimated mean flow (ft <sup>3</sup> /s)	Estimated peak discharge (ft <sup>3</sup> /s) for indicated peak-discharge frequency					
		2-year	5-year	10-year	25-year	50-year	100-year
3601	23.0	761	2,270	3,980	7,140	10,300	14,400
3673	20.0	734	2,180	3,830	6,850	9,920	13,800
3687	2.32	431	1,190	1,960	3,220	4,390	5,730
3725	5.05	368	1,240	2,300	4,350	6,520	9,330
3728	7.71	404	1,370	2,550	4,820	7,230	10,300
3738	8.71	376	1,280	2,380	4,530	6,810	9,760
3849	9.28	641	1,880	3,210	5,510	7,690	10,300
3870	101	606	3,090	8,500	16,000	25,500	39,000
3920	25.9	400	1,340	2,490	4,770	7,230	10,500
3951	7.94	621	1,830	3,140	5,410	7,570	10,100
4078	25.6	438	1,430	2,600	4,880	7,290	10,500
4157	97.9	635	3,120	9,030	17,100	27,100	41,100



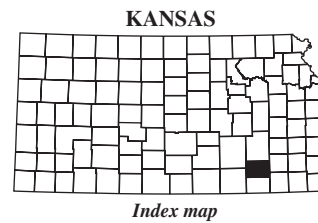


Base map from U.S. Geological Survey digital data, 1:2,000,000, 1994  
 Albers Conic Equal-Area Projection  
 Standard parallels 29°30' and 45°30', central meridian 96°  
 Horizontal coordinate information is referenced to the  
 North American Datum of 1983 (NAD 83)



**EXPLANATION**

- ◀ 4933 Location of streamflow-statistics determination site (small triangle) and associated identification number—small triangle points in downstream direction
- ▲ 07169800 U.S. Geological Survey streamflow-gaging station and number used for estimates of flow duration
- △ 07169700 U.S. Geological Survey streamflow-gaging station and number used for estimates of peak-discharge frequency values
- 4925 Lake and determination site identification number



**Figure 35.** Location of streamflow-statistics determination sites, associated identification numbers, and U.S. Geological Survey streamflow-gaging stations used in the flow-duration and peak-discharge frequency analyses for Elk County.

**Table 31.** Estimated flow-duration values, mean flow values, and peak-discharge frequency values for controlled and uncontrolled flow stream segments on the 1999 Kansas Surface Water Register for Elk County.

[KSWR, Kansas Surface Water Register; CUSEGA, catalog unit segment number alpha; mi<sup>2</sup>, square miles; ft<sup>3</sup>/s, cubic feet per second; HYDRO, lake or other hydrologic structure; NA, not applicable; NRDitch, irrigation ditch; NRTribal, tribal stream]

Determination site identification number (fig. 35)	KSWR CUSEGA number	Stream segment by county (table 112)				Stream name	Contributing drainage area (mi <sup>2</sup> )	Estimated flow-duration values (ft <sup>3</sup> /s) for indicated percentage of time flow equaled or exceeded				
		1st	2nd	3rd	4th			90 percent	75 percent	50 percent	25 percent	10 percent
		4377	1107010233	EK	GW			WL	Silver Creek	19.0	36	2.22
4378	110701022	EK	GW		Fall River	590	7.80	15.6	67.5	353	1,310	
4383	1107010411	EK	GW		Pawpaw Creek	8.32	0	0	.49	2.01	6.66	
4390	1107010235	EK	GW		Little Salt Creek	12.2	0	.15	1.59	4.53	11.9	
4391	HYDRO	EK			HYDRO	8.67	NA	NA	NA	NA	NA	
4399	HYDRO	EK			HYDRO	11.5	NA	NA	NA	NA	NA	
4407	110701022	EK	WL		Fall River	610	8.19	16.1	70.5	370	1,370	
4414	1107010439	EK			Rowe Branch Elk River	10.6	0	0	.94	3.52	10.6	
4419	HYDRO	EK			HYDRO	11.0	SNA	NA	NA	NA	NA	
4451	1107010439	EK			Rowe Branch Elk River	12.9	0	0	1.22	4.47	13.2	
4452	1107010414	EK			Elk River	15.2	0	.02	1.96	6.36	17.3	
4454	1107010413	EK	GW		Rock Creek	15.8	0	0	.75	3.40	11.4	
4462	HYDRO	EK			HYDRO	17.0	NA	NA	NA	NA	NA	
4464	1107010215	EK			Indian Creek	25.2	0	.06	2.12	7.35	21.5	
4465	1107010215	EK	WL		Indian Creek	53.9	0	1.64	6.93	21.1	56.3	
4477	1107010438	EK			South Branch Elk River	6.14	0	0	.63	2.01	5.93	
4478	HYDRO	EK			HYDRO	6.86	NA	NA	NA	NA	NA	
4480	1107010434	EK			Snake Creek	14.5	0	0	.43	2.78	10.5	
4484	1107010411	EK			Pawpaw Creek	21.9	0	0	1.47	6.00	18.8	
4489	HYDRO	EK			HYDRO	14.7	NA	NA	NA	NA	NA	
4502	HYDRO	EK			HYDRO	22.8	NA	NA	NA	NA	NA	
4504	1107010414	EK			Elk River	35.9	.01	.24	3.46	12.6	36.7	
4505	1107010236	EK	WL		Coon Creek	12.7	0	.79	3.19	8.39	19.7	
4509	1107010438	EK			South Branch Elk River	11.6	0	0	1.36	4.52	12.6	
4530	1106000136	EK			Wagoner Creek	4.81	0	0	.11	.68	3.01	
4531	1107010414	EK			Elk River	49.3	.03	.55	4.86	17.7	51.5	
4536	1107010234	EK			Little Indian Creek	9.79	0	.74	2.40	5.74	13.1	
4540	110701045	EK			Painterhood Creek	6.64	0	.64	1.86	4.15	9.25	
4546	110701047	EK			Hitchen Creek	10.9	0	0	.18	1.61	6.72	
4548	1107010414	EK			Elk River	52.6	.03	.59	5.14	18.9	54.9	
4550	1107010432	EK			Clear Creek	13.1	0	0	1.08	4.10	12.4	
4551	HYDRO	EK			HYDRO	6.80	NA	NA	NA	NA	NA	
4554	110701045	EK			Painterhood Creek	1.36	0	.10	.27	.45	.91	
4556	HYDRO	EK			HYDRO	11.7	NA	NA	NA	NA	NA	
4561	1107010435	EK			East Hitchen Creek	3.86	0	0	.14	.55	2.45	
4565	HYDRO	EK			HYDRO	13.0	NA	NA	NA	NA	NA	
4567	HYDRO	EK			HYDRO	4.03	NA	NA	NA	NA	NA	
4574	1107010434	EK			Snake Creek	23.3	0	0	.95	4.92	17.2	

**Table 31.** Estimated flow-duration values, mean flow values, and peak-discharge frequency values for controlled and uncontrolled flow stream segments on the 1999 Kansas Surface Water Register for Elk County.—Continued

[KSWR, Kansas Surface Water Register; CUSEGA, catalog unit segment number alpha; mi<sup>2</sup>, square miles; ft<sup>3</sup>/s, cubic feet per second; HYDRO, lake or other hydrologic structure; NA, not applicable; NRDitch, irrigation ditch; NRTribal, tribal stream]

Determination site identification number (fig. 35)	Estimated mean flow (ft <sup>3</sup> /s)	Estimated peak discharge (ft <sup>3</sup> /s) for indicated peak-discharge frequency					
		2-year	5-year	10-year	25-year	50-year	100-year
4377	18.1	1,900	4,020	5,850	8,620	10,900	13,500
4378	432	6,120	10,700	13,600	17,000	19,300	21,400
4383	5.97	1,110	2,350	3,410	5,020	6,350	7,860
4390	9.12	1,350	2,890	4,220	6,230	7,910	9,820
4391	NA	NA	NA	NA	NA	NA	NA
4399	NA	NA	NA	NA	NA	NA	NA
4407	446	6,570	11,400	14,600	18,300	20,800	23,100
4414	8.39	1,250	2,680	3,910	5,790	7,340	9,130
4419	NA	NA	NA	NA	NA	NA	NA
4451	10.2	1,400	3,010	4,410	6,540	8,320	10,400
4452	12.4	1,500	3,260	4,800	7,150	9,120	11,400
4454	10.1	1,600	3,440	5,050	7,500	9,540	11,900
4462	NA	NA	NA	NA	NA	NA	NA
4464	17.1	2,130	4,590	6,730	10,000	12,700	15,800
4465	38.6	3,510	7,050	10,100	14,600	18,400	22,600
4477	4.86	890	1,890	2,750	4,040	5,110	6,330
4478	NA	NA	NA	NA	NA	NA	NA
4480	9.69	497	969	1,360	1,920	2,390	2,890
4484	15.2	1,960	4,250	6,260	9,330	11,900	14,900
4489	NA	NA	NA	NA	NA	NA	NA
4502	NA	NA	NA	NA	NA	NA	NA
4504	26.1	5,220	10,100	14,100	20,100	25,100	30,500
4505	12.7	1,520	3,170	4,590	6,730	8,500	10,500
4509	9.43	1,290	2,790	4,080	6,060	7,700	9,580
4530	3.21	771	1,630	2,360	3,460	4,370	5,400
4531	35.4	6,140	11,800	16,500	23,500	29,500	35,800
4536	8.91	1,270	2,660	3,850	5,650	7,130	8,820
4540	6.31	1,030	2,130	3,060	4,460	5,620	6,930
4546	6.92	1,340	2,830	4,100	6,010	7,600	9,410
4548	37.6	5,880	11,500	16,200	23,300	29,300	35,900
4550	9.83	1,400	3,010	4,410	6,550	8,340	10,400
4551	NA	NA	NA	NA	NA	NA	NA
4554	.95	418	834	1,180	1,680	2,090	2,550
4556	NA	NA	NA	NA	NA	NA	NA
4561	2.74	747	1,530	2,190	3,180	3,990	4,900
4565	NA	NA	NA	NA	NA	NA	NA
4567	NA	NA	NA	NA	NA	NA	NA
4574	15.1	1,030	2,300	3,440	5,250	6,830	8,660

**206 Estimates of Flow Duration, Mean Flow, and Peak-Discharge Frequency Values for Kansas Stream Locations**

**Table 31.** Estimated flow-duration values, mean flow values, and peak-discharge frequency values for controlled and uncontrolled flow stream segments on the 1999 Kansas Surface Water Register for Elk County.—Continued

[KSWR, Kansas Surface Water Register; CUSEGA, catalog unit segment number alpha; mi<sup>2</sup>, square miles; ft<sup>3</sup>/s, cubic feet per second; HYDRO, lake or other hydrologic structure; NA, not applicable; NRDitch, irrigation ditch; NRtribal, tribal stream]

Determination site identification number (fig. 35)	KSWR CUSEGA number	Stream segment by county (table 112)				Stream name	Contributing drainage area (mi <sup>2</sup> )	Estimated flow-duration values (ft <sup>3</sup> /s) for indicated percentage of time flow equaled or exceeded				
		1st	2nd	3rd	4th			90 percent	75 percent	50 percent	25 percent	10 percent
4577	1107010414	EK				Elk River	67.8	0.05	0.83	6.46	24.2	71.0
4578	1107010433	EK				Bull Creek	7.81	0	0	.45	1.92	6.45
4579	1107010411	EK				Pawpaw Creek	27.6	0	0	1.93	7.70	23.8
4581	1107010432	EK				Clear Creek	12.7	0	0	1.02	3.90	11.9
4586	HYDRO	EK				HYDRO	7.26	NA	NA	NA	NA	NA
4607	1107010217	EK	WL			East Rainbow Creek	24.1	0	.54	3.55	11.4	30.6
4625	1107010413	EK				Rock Creek	34.1	0	0	2.37	9.39	28.9
4626	110701047	EK				Hitchen Creek	17.7	0	0	.97	4.13	13.5
4628	1107010435	EK				East Hitchen Creek	7.47	0	0	.97	2.75	7.51
4630	1107010411	EK				Pawpaw Creek	54.8	.03	.10	3.61	15.0	47.2
4639	1107010412	EK				Elk River	122	.16	1.61	11.3	44.2	132
4644	1107010414	EK				Elk River	84.4	.08	1.13	8.03	30.4	89.5
4661	HYDRO	EK				HYDRO	10.7	NA	NA	NA	NA	NA
4664	1107010437	EK				Little Hitchen Creek	10.2	.08	1.19	3.24	7.40	16.0
4665	1107010433	EK				Bull Creek	6.98	0	0	.31	1.51	5.43
4676	1107010436	EK				East Painterhood Creek	14.9	0	.64	3.00	8.35	20.6
4677	110701045	EK				Painterhood Creek	17.8	0	.99	3.86	10.4	25.0
4685	1107010437	EK				Little Hitchen Creek	11.6	0	1.17	3.39	8.01	17.7
4686	110701047	EK				Hitchen Creek	30.6	0	.23	2.79	9.71	28.3
4687	1107010652	EK				East Fork Caney River	6.17	0	0	.71	2.20	6.27
4688	1107010410	EK				Elk River	183	.36	2.30	17.2	70.5	211
4690	HYDRO	EK				HYDRO	3.44	NA	NA	NA	NA	NA
4697	HYDRO	EK				HYDRO	23.8	NA	NA	NA	NA	NA
4699	1107010415	EK				Mound Branch Elk River	3.08	0	0	0	.01	1.10
4700	HYDRO	EK				HYDRO	6.86	NA	NA	NA	NA	NA
4702	1107010415	EK				Mound Branch Elk River	27.2	0	0	2.02	7.85	24.0
4704	1107010415	EK				Mound Branch Elk River	4.50	0	0	0	.42	2.46
4706	1107010620	EK				Caney River	12.7	0	0	1.38	4.56	12.8
4708	1107010415	EK				Mound Branch Elk River	21.3	0	0	1.37	5.58	17.6
4719	HYDRO	EK				HYDRO	14.3	NA	NA	NA	NA	NA
4746	1107010431	EK				Skull Creek	3.19	0	0	0	.01	1.19
4757	HYDRO	EK				HYDRO	9.09	NA	NA	NA	NA	NA
4767	1107010416	EK				Wildcat Creek	6.74	0	0	.19	1.19	4.71
4772	110701047	EK				Hitchen Creek	56.6	0	1.84	7.79	23.9	63.9
4775	110701045	EK				Painterhood Creek	41.8	0	1.80	7.29	21.4	54.5
4783	110701046	EK				Elk River	341	1.88	6.27	35.6	134	403
4784	110701049	EK				Elk River	221	.64	2.90	22.0	91.0	271
4787	1107010651	EK				Corum Creek	6.85	0	0	.33	1.54	5.40



**Table 31.** Estimated flow-duration values, mean flow values, and peak-discharge frequency values for controlled and uncontrolled flow stream segments on the 1999 Kansas Surface Water Register for Elk County.—Continued

[KSWR, Kansas Surface Water Register; CUSEGA, catalog unit segment number alpha; mi<sup>2</sup>, square miles; ft<sup>3</sup>/s, cubic feet per second; HYDRO, lake or other hydrologic structure; NA, not applicable; NRDitch, irrigation ditch; NRTribal, tribal stream]

Determination site identification number (fig. 35)	Estimated mean flow (ft <sup>3</sup> /s)	Estimated peak discharge (ft <sup>3</sup> /s) for indicated peak-discharge frequency					
		2-year	5-year	10-year	25-year	50-year	100-year
4577	47.6	6,610	12,900	18,400	26,600	33,600	41,400
4578	5.71	1,040	2,220	3,220	4,750	6,020	7,460
4579	18.8	2,250	4,910	7,250	10,900	13,900	17,400
4581	9.50	1,370	2,950	4,330	6,430	8,180	10,200
4586	NA	NA	NA	NA	NA	NA	NA
4607	21.5	2,350	4,910	7,110	10,400	13,200	16,300
4625	22.5	3,580	7,430	10,800	15,900	20,200	25,000
4626	11.9	1,790	3,800	5,540	8,170	10,400	12,800
4628	6.07	1,100	2,280	3,290	4,800	6,040	7,460
4630	35.4	3,780	8,270	12,400	19,000	25,000	31,800
4639	82.7	7,140	15,100	22,400	33,800	44,100	55,800
4644	58.6	6,130	12,600	18,300	27,100	34,800	43,400
4661	NA	NA	NA	NA	NA	NA	NA
4664	10.2	1,350	2,810	4,050	5,920	7,460	9,210
4665	5.01	975	2,070	3,000	4,420	5,600	6,930
4676	14.0	1,710	3,570	5,160	7,550	9,530	11,800
4677	16.4	1,850	3,890	5,650	8,320	10,500	13,000
4685	11.4	1,460	3,030	4,380	6,410	8,090	9,990
4686	21.8	4,940	9,190	12,700	17,600	21,800	26,000
4687	5.02	895	1,900	2,750	4,050	5,120	6,340
4688	125	8,810	20,000	30,700	48,400	64,800	84,200
4690	NA	NA	NA	NA	NA	NA	NA
4697	NA	NA	NA	NA	NA	NA	NA
4699	1.83	602	1,260	1,810	2,640	3,320	4,090
4700	NA	NA	NA	NA	NA	NA	NA
4702	18.7	2,200	4,820	7,120	10,700	13,700	17,100
4704	2.89	752	1,580	2,290	3,350	4,230	5,230
4706	9.77	1,360	2,920	4,280	6,340	8,060	10,000
4708	14.4	1,890	4,120	6,070	9,060	11,600	14,500
4719	NA	NA	NA	NA	NA	NA	NA
4746	1.89	611	1,280	1,840	2,690	3,390	4,180
4757	NA	NA	NA	NA	NA	NA	NA
4767	4.63	948	2,010	2,920	4,290	5,420	6,720
4772	43.1	4,750	8,990	12,500	17,600	21,900	26,400
4775	35.5	3,840	7,350	10,300	14,500	18,000	21,700
4783	229	10,200	23,400	36,200	57,400	77,100	101,000
4784	154	9,000	21,300	33,300	53,400	72,200	94,600
4787	4.90	933	1,990	2,900	4,270	5,410	6,710

**208 Estimates of Flow Duration, Mean Flow, and Peak-Discharge Frequency Values for Kansas Stream Locations**

**Table 31.** Estimated flow-duration values, mean flow values, and peak-discharge frequency values for controlled and uncontrolled flow stream segments on the 1999 Kansas Surface Water Register for Elk County.—Continued

[KSWR, Kansas Surface Water Register; CUSEGA, catalog unit segment number alpha; mi<sup>2</sup>, square miles; ft<sup>3</sup>/s, cubic feet per second; HYDRO, lake or other hydrologic structure; NA, not applicable; NRDitch, irrigation ditch; NRTribal, tribal stream]

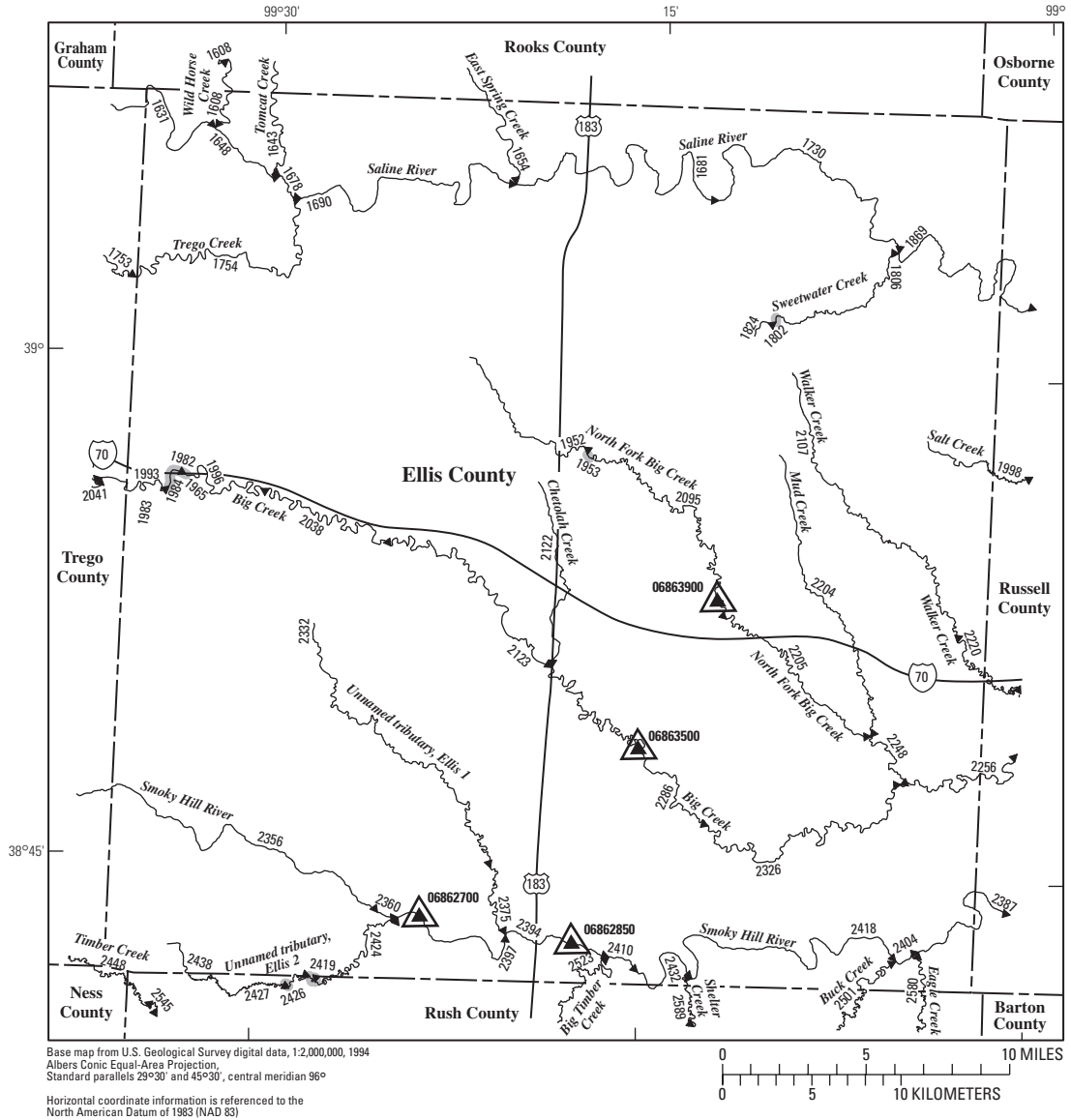
Determination site identification number (fig. 35)	KSWR CUSEGA number	Stream segment by county (table 112)				Stream name	Contributing drainage area (mi <sup>2</sup> )	Estimated flow-duration values (ft <sup>3</sup> /s) for indicated percentage of time flow equaled or exceeded					
		1st	2nd	3rd	4th			90 percent	75 percent	50 percent	25 percent	10 percent	
4789	HYDRO	EK				HYDRO	7.42	NA	NA	NA	NA	NA	NA
4795	HYDRO	EK				HYDRO	25.3	NA	NA	NA	NA	NA	NA
4796	1107010416	EK				Wildcat Creek	23.5	0	0	1.17	5.13	17.1	
4798	1107010652	EK				East Fork Caney River	13.8	0	0	1.49	5.07	14.4	
4799	1107010620	EK				Caney River	21.5	0	.07	2.30	7.79	21.9	
4801	110701048	EK				Elk River	259	.90	3.60	25.0	101	305	
4804	1107010416	EK				Wildcat Creek	35.9	0	.06	2.66	10.0	30.7	
4808	1107010428	EK				Hickory Creek	17.6	0	1.15	4.28	11.4	27.1	
4809	110701044	EK				Elk River	385	2.43	7.86	42.1	154	461	
4810	110701048	EK				Elk River	283	1.20	4.44	28.3	112	335	
4819	HYDRO	EK				HYDRO	9.81	NA	NA	NA	NA	NA	NA
4820	1107010430	EK				Clear Creek	14.4	0	.49	2.68	7.64	19.2	
4838	1107010651	EK				Corum Creek	12.6	0	0	.55	2.68	9.23	
4839	1107010620	EK				Caney River	38.3	0	.38	3.79	13.3	38.3	
4842	110701044	EK				Elk River	405	2.70	8.67	45.4	164	489	
4843	1107010426	EK				Bloody Run	8.35	0	.88	2.61	6.12	13.6	
4847	HYDRO	EK				HYDRO	7.61	NA	NA	NA	NA	NA	NA
4848	1107010650	EK				Wolf Creek	7.55	0	0	.15	1.05	4.40	
4849	HYDRO	EK				HYDRO	7.99	NA	NA	NA	NA	NA	NA
4861	1107010425	EK	MG	WL		Bachelor Creek	14.4	0	.98	3.97	10.8	25.3	
4865	110701044	EK				Elk River	420	2.95	9.41	48.4	173	514	
4871	1107010430	EK				Clear Creek	9.03	0	0	1.15	3.68	10.3	
4887	1107010427	EK				Pan Creek	7.46	0	.49	1.85	4.55	10.7	
4890	1107010417	EK				Salt Creek	26.5	0	1.22	5.03	14.4	35.8	
4891	110701044	EK	MG			Elk River	442	3.21	10.2	52.0	184	546	

**Table 31.** Estimated flow-duration values, mean flow values, and peak-discharge frequency values for controlled and uncontrolled flow stream segments on the 1999 Kansas Surface Water Register for Elk County.—Continued

[KSWR, Kansas Surface Water Register; CUSEGA, catalog unit segment number alpha; mi<sup>2</sup>, square miles; ft<sup>3</sup>/s, cubic feet per second; HYDRO, lake or other hydrologic structure; NA, not applicable; NRDitch, irrigation ditch; NRTribal, tribal stream]

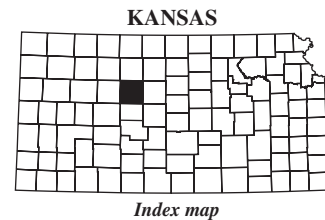
Determination site identification number (fig. 35)	Estimated mean flow (ft <sup>3</sup> /s)	Estimated peak discharge (ft <sup>3</sup> /s) for indicated peak-discharge frequency					
		2-year	5-year	10-year	25-year	50-year	100-year
4789	NA	NA	NA	NA	NA	NA	NA
4795	NA	NA	NA	NA	NA	NA	NA
4796	14.8	2,000	4,320	6,350	9,440	12,000	15,000
4798	10.8	1,410	3,050	4,480	6,650	8,450	10,500
4799	16.0	1,820	3,980	5,870	8,760	11,200	13,900
4801	175	9,740	22,600	35,100	56,000	75,400	98,500
4804	24.1	3,930	7,910	11,300	16,400	20,700	25,300
4808	17.4	1,920	4,010	5,790	8,490	10,700	13,200
4809	260	10,800	24,400	37,400	59,000	79,100	103,000
4810	192	9,220	21,800	34,100	54,700	73,900	96,900
4819	NA	NA	NA	NA	NA	NA	NA
4820	13.2	1,650	3,450	4,990	7,330	9,250	11,500
4838	8.23	1,320	2,860	4,200	6,230	7,930	9,860
4839	27.2	4,570	8,980	12,700	18,100	22,800	27,600
4842	274	11,000	24,600	37,800	59,500	79,600	103,000
4843	8.79	1,250	2,570	3,680	5,340	6,710	8,260
4847	NA	NA	NA	NA	NA	NA	NA
4848	4.61	993	2,120	3,090	4,560	5,780	7,160
4849	NA	NA	NA	NA	NA	NA	NA
4861	15.8	1,740	3,600	5,180	7,560	9,510	11,700
4865	286	10,900	24,500	37,600	59,300	79,400	103,000
4871	7.91	1,250	2,590	3,730	5,450	6,870	8,480
4887	7.39	1,170	2,390	3,420	4,960	6,230	7,670
4890	23.7	2,380	5,040	7,330	10,800	13,700	17,000
4891	303	10,800	24,400	37,500	59,200	79,300	103,000





**EXPLANATION**

- ← 2545 Location of streamflow-statistics determination site (small triangle) and associated identification number—small triangle points in downstream direction
- 06862700 ▲ U.S. Geological Survey streamflow-gaging station and number used for estimates of flow duration
- 06862850 ▲ U.S. Geological Survey streamflow-gaging station and number used for estimates of peak-discharge frequency values
- 1984 Lake and determination site identification number



**Figure 36.** Location of streamflow-statistics determination sites, associated identification numbers, and U.S. Geological Survey streamflow-gaging stations used in the flow-duration and peak-discharge frequency analyses for Ellis County.

**212 Estimates of Flow Duration, Mean Flow, and Peak-Discharge Frequency Values for Kansas Stream Locations**

**Table 32.** Estimated flow-duration values, mean flow values, and peak-discharge frequency values for controlled and uncontrolled flow stream segments on the 1999 Kansas Surface Water Register for Ellis County.

[KSWR, Kansas Surface Water Register; CUSEGA, catalog unit segment number alpha; mi<sup>2</sup>, square miles; ft<sup>3</sup>/s, cubic feet per second; HYDRO, lake or other hydrologic structure; NA, not applicable; NRDitch, irrigation ditch; NRTribal, tribal stream]

Determination site identification number (fig. 36)	KSWR CUSEGA number	Stream segment by county (table 112)				Stream name	Contributing drainage area (mi <sup>2</sup> )	Estimated flow-duration values (ft <sup>3</sup> /s) for indicated percentage of time flow equaled or exceeded				
		1st	2nd	3rd	4th			90 percent	75 percent	50 percent	25 percent	10 percent
		1608	1026000927	EL	RO					Wild Horse Creek	39.3	0
1631	1026000912	EL	RO	TR		Saline River	963	1.11	3.13	9.92	27.5	59.6
1643	1026000928	EL	RO			Tomcat Creek	32.0	0	0	.01	.02	.03
1648	1026000912	EL				Saline River	1,010	1.30	3.72	11.3	30.5	66.5
1654	1026000910	EL	RO			East Spring Creek	54.2	0	.01	.02	.05	.84
1678	1026000912	EL				Saline River	1,040	1.45	4.16	12.3	32.7	71.4
1681	102600099	EL				Saline River	1,260	2.68	7.41	20.0	49.2	109
1690	1026000911	EL				Saline River	1,150	1.94	5.77	16.1	40.8	90.0
1730	102600099	EL				Saline River	1,300	3.05	8.22	22.0	53.4	119
1754	1026000919	EL	TR			Trego Creek	75.9	.01	.02	.04	.36	1.94
1802	HYDRO	EL				HYDRO	16.5	NA	NA	NA	NA	NA
1806	1026000929	EL				Sweetwater Creek	36.3	0	0	.01	.16	1.08
1824	1026000929	EL				Sweetwater Creek	16.5	0	0	0	0	.01
1869	102600099	EL	RS			Saline River	1,400	3.84	9.90	25.9	62.0	139
1952	102600074	EL				North Fork Big Creek	50.9	0	0	0	0	0
1953	HYDRO	EL				HYDRO	51.0	NA	NA	NA	NA	NA
1965	102600075	EL				Big Creek	436	.99	2.00	5.17	12.2	25.7
1982	HYDRO	EL				HYDRO	436	NA	NA	NA	NA	NA
1983	102600075	EL				Big Creek	432	.97	1.97	5.11	12.1	25.4
1984	HYDRO	EL				HYDRO	432	NA	NA	NA	NA	NA
1993	102600075	EL	TR			Big Creek	432	.97	1.97	5.11	12.1	25.4
1996	102600075	EL				Big Creek	460	1.13	2.24	5.59	13.3	27.7
1998	1026000920	EL	RS			Salt Creek	35.1	0	0	.01	.22	1.54
2038	102600075	EL				Big Creek	489	1.31	2.53	6.13	14.7	30.2
2095	102600074	EL				North Fork Big Creek	9.3	0	0	0	0	.90
2107	102600072	EL				Walker Creek	40.4	0	0	0	0	.31
2122	102600078	EL				Chetolah Creek	23.0	0	0	.01	.02	.02
2123	102600075	EL				Big Creek	521	1.50	2.83	6.70	16.1	32.7
2204	102600079	EL				Mud Creek	31.6	0	0	0	0	0
2205	102600074	EL				North Fork Big Creek	113	0	0	.17	.60	2.38
2220	102600072	EL	RS			Walker Creek	59.4	0	0	0	.34	2.17
2248	102600074	EL				North Fork Big Creek	149	0	0	.56	1.65	4.99
2256	102600073	EL	RS			Big Creek	788	1.90	4.67	10.4	25.3	53.9
2286	102600075	EL				Big Creek	589	1.90	3.50	7.90	19.0	38.0
2326	102600075	EL				Big Creek	620	1.90	3.69	8.29	20.0	40.6
2332	1026000620	EL				Unnamed tributary, Ellis 1	74.1	0	0	0	0	0.41
2356	1026000622	EL	TR			Smoky Hill River	5,670	.24	1.77	7.32	12.1	21.3
2360	1026000622	EL				Smoky Hill River	5,670	.24	1.77	7.32	12.1	21.3

**Table 32.** Estimated flow-duration values, mean flow values, and peak-discharge frequency values for controlled and uncontrolled flow stream segments on the 1999 Kansas Surface Water Register for Ellis County.—Continued

[KSWR, Kansas Surface Water Register; CUSEGA, catalog unit segment number alpha; mi<sup>2</sup>, square miles; ft<sup>3</sup>/s, cubic feet per second; HYDRO, lake or other hydrologic structure; NA, not applicable; NRDitch, irrigation ditch; NRTribal, tribal stream]

Determination site identification number (fig. 36)	Estimated mean flow (ft <sup>3</sup> /s)	Estimated peak discharge (ft <sup>3</sup> /s) for indicated peak-discharge frequency					
		2-year	5-year	10-year	25-year	50-year	100-year
1608	1.13	405	1,220	2,090	3,580	5,010	6,670
1631	40.9	2,520	7,600	13,200	23,500	33,700	46,500
1643	.65	397	1,170	2,000	3,400	4,730	6,270
1648	44.7	2,490	7,510	13,100	23,200	33,400	46,000
1654	2.72	629	1,770	2,950	4,940	6,790	8,940
1678	47.4	2,480	7,450	12,900	23,000	33,100	45,700
1681	68.2	2,360	7,030	12,200	21,800	31,400	43,600
1690	57.6	2,420	7,230	12,600	22,400	32,300	44,600
1730	73.5	2,330	6,920	12,000	21,500	31,000	43,100
1754	3.69	664	1,900	3,200	5,400	7,480	9,900
1802	NA	NA	NA	NA	NA	NA	NA
1806	2.53	828	2,130	3,400	5,440	7,290	9,360
1824	.23	456	1,330	2,230	3,730	5,090	6,700
1869	84.5	2,290	6,760	11,700	21,000	30,300	42,200
1952	1.52	401	1,330	2,430	4,480	6,560	9,140
1953	NA	NA	NA	NA	NA	NA	NA
1965	26.8	1,340	3,930	6,780	12,000	17,200	23,700
1982	NA	NA	NA	NA	NA	NA	NA
1983	26.7	1,340	3,940	6,820	12,100	17,300	23,900
1984	NA	NA	NA	NA	NA	NA	NA
1993	26.7	1,340	3,940	6,820	12,100	17,300	23,900
1996	27.9	1,340	3,850	6,570	11,400	16,300	22,300
1998	3.01	760	2,030	3,310	5,390	7,310	9,480
2038	29.2	1,340	3,730	6,270	10,700	15,100	20,400
2095	3.10	263	1,250	2,640	5,570	8,770	13,000
2107	2.37	486	1,420	2,410	4,090	5,680	7,530
2122	.02	487	1,480	2,510	4,270	5,880	7,800
2123	30.5	1,310	3,540	5,850	9,810	13,600	18,200
2204	1.00	417	1,240	2,120	3,630	5,070	6,740
2205	4.47	326	1,430	2,950	6,100	9,520	14,000
2220	4.07	543	1,600	2,720	4,660	6,490	8,660
2248	6.77	482	1,840	3,610	7,190	11,000	16,000
2256	45.0	1,610	4,060	6,430	10,200	13,700	17,700
2286	33.3	1,280	3,210	5,050	7,990	10,600	13,600
2326	35.2	1,320	3,320	5,240	8,300	11,000	14,200
2332	2.82	625	1,850	3,160	5,430	7,600	10,100
2356	18.3	982	4,650	9,080	16,700	23,700	31,200
2360	18.3	982	4,650	9,080	16,700	23,700	31,200

**Table 32.** Estimated flow-duration values, mean flow values, and peak-discharge frequency values for controlled and uncontrolled flow stream segments on the 1999 Kansas Surface Water Register for Ellis County.

[KSWR, Kansas Surface Water Register; CUSEGA, catalog unit segment number alpha; mi<sup>2</sup>, square miles; ft<sup>3</sup>/s, cubic feet per second; HYDRO, lake or other hydrologic structure; NA, not applicable; NRDitch, irrigation ditch; NRTribal, tribal stream]

Determination site identification number (fig. 36)	KSWR CUSEGA number	Stream segment by county (table 112)				Stream name	Contributing drainage area (mi <sup>2</sup> )	Estimated flow-duration values (ft <sup>3</sup> /s) for indicated percentage of time flow equaled or exceeded					
		1st	2nd	3rd	4th			90 percent	75 percent	50 percent	25 percent	10 percent	
		2375	1026000620	EL						Unnamed tributary, Ellis 1	82.4	0	0
2387	1026000616	EL	RS			Smoky Hill River	6,250	5.25	7.22	12.7	32.0	84.4	
2394	1026000619	EL				Smoky Hill River	5,820	0	0	1.80	11.0	25.0	
2397	1026000621	EL				Smoky Hill River	5,730	.37	2.70	11.0	18.0	29.0	
2404	1026000617	EL				Smoky Hill River	6,150	4.06	5.58	10.2	27.2	70.9	
2410	1026000618	EL				Smoky Hill River	6,040	2.69	3.70	7.39	21.8	55.5	
2418	1026000618	EL				Smoky Hill River	6,110	3.59	4.94	9.25	25.4	65.6	
2419	HYDRO	EL	RH			HYDRO	28.1	NA	NA	NA	NA	NA	
2424	1026000623	EL	RH			Unnamed tributary, Ellis 2	42.1	0	0	0	0	0	
2427	1026000623	EL	RH			Unnamed tributary, Ellis 2	27.9	0	0	0	0	0	
2432	1026000618	EL				Smoky Hill River	6,050	2.75	3.79	7.52	22.0	56.2	
2438	1026000623	EL	RH			Unnamed tributary, Ellis 2	24.2	0	0	0	0	0	
2448	1026000626	EL	NS	RH	TR	Timber Creek	39.9	0	0	0	0	0	
2501	1026000629	EL	RH			Buck Creek	36.5	0	0	0	0	0	
2523	1026000624	EL	RH			Big Timber Creek	216	0	0	.61	2.33	7.36	
2580	1026000630	EL	RH			Eagle Creek	53.8	0	0	0	0	1.26	
2589	1026000643	EL	RH			Shelter Creek	40.5	0	0	0	0	0	

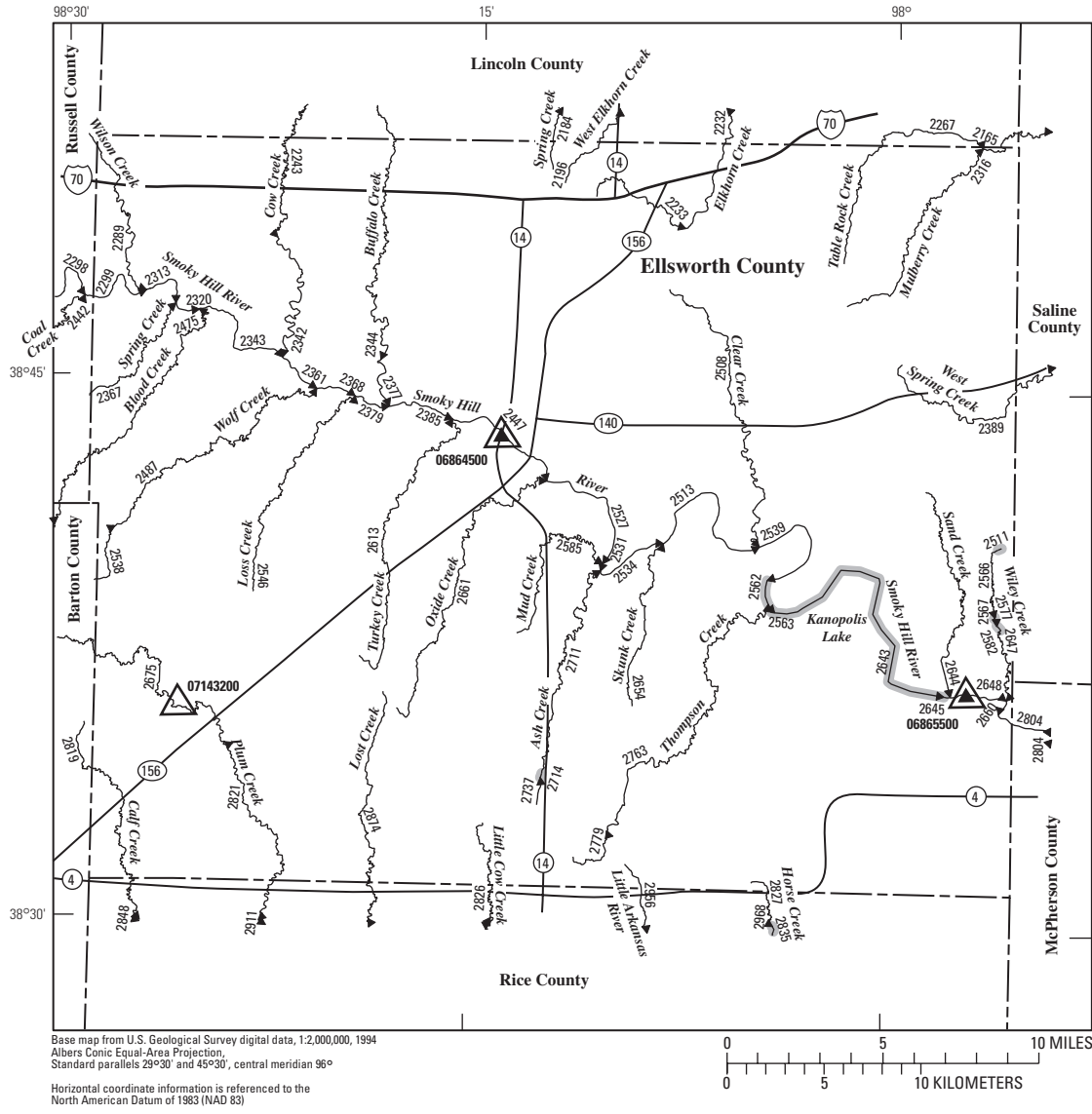


**Table 32.** Estimated flow-duration values, mean flow values, and peak-discharge frequency values for controlled and uncontrolled flow stream segments on the 1999 Kansas Surface Water Register for Ellis County.—Continued

[KSWR, Kansas Surface Water Register; CUSEGA, catalog unit segment number alpha; mi<sup>2</sup>, square miles; ft<sup>3</sup>/s, cubic feet per second; HYDRO, lake or other hydrologic structure; NA, not applicable; NRDitch, irrigation ditch; NRTribal, tribal stream]

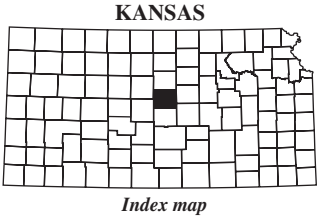
Determination site identification number (fig. 36)	Estimated mean flow (ft <sup>3</sup> /s)	Estimated peak discharge (ft <sup>3</sup> /s) for indicated peak-discharge frequency					
		2-year	5-year	10-year	25-year	50-year	100-year
2375	3.30	666	1,960	3,350	5,730	8,000	10,700
2387	61.8	3,080	7,880	12,700	20,500	27,300	34,700
2394	19.7	992	4,700	9,170	16,900	23,900	31,500
2397	23.7	992	4,700	9,170	16,900	23,900	31,500
2404	52.2	2,600	7,160	11,900	19,700	26,500	33,900
2410	41.3	2,060	6,330	11,000	18,800	25,700	33,100
2418	48.5	2,420	6,880	11,600	19,400	26,200	33,700
2419	NA	NA	NA	NA	NA	NA	NA
2424	1.02	381	1,180	2,070	3,620	5,110	6,880
2427	.28	527	1,620	2,770	4,740	6,540	8,700
2432	41.8	2,080	6,370	11,000	18,800	25,700	33,200
2438	.10	485	1,490	2,540	4,330	5,970	7,940
2448	.73	343	1,080	1,890	3,320	4,690	6,330
2501	1.93	467	1,370	2,330	3,960	5,510	7,310
2523	9.19	714	2,190	3,840	6,750	9,590	13,000
2580	3.40	558	1,630	2,770	4,730	6,580	8,750
2589	2.09	499	1,460	2,480	4,230	5,880	7,810





**EXPLANATION**

- ← 2911 Location of streamflow-statistics determination site (small triangle) and associated identification number—small triangle points in downstream direction
- 06865500 ▲ U.S. Geological Survey streamflow-gaging station and number used for estimates of flow duration
- 06864500 △ U.S. Geological Survey streamflow-gaging station and number used for estimates of peak-discharge frequency values
- 2643 Lake and determination site identification number



**Figure 37.** Location of streamflow-statistics determination sites, associated identification numbers, and U.S. Geological Survey streamflow-gaging stations used in the flow-duration and peak-discharge frequency analyses for Ellsworth County.

**218 Estimates of Flow Duration, Mean Flow, and Peak-Discharge Frequency Values for Kansas Stream Locations**

**Table 33.** Estimated flow-duration values, mean flow values, and peak-discharge frequency values for controlled and uncontrolled flow stream segments on the 1999 Kansas Surface Water Register for Ellsworth County.

[KSWR, Kansas Surface Water Register; CUSEGA, catalog unit segment number alpha; mi<sup>2</sup>, square miles; ft<sup>3</sup>/s, cubic feet per second; HYDRO, lake or other hydrologic structure; NA, not applicable; NRDitch, irrigation ditch; NRTribal, tribal stream]

Determination site identification number (fig. 37)	KSWR CUSEGA number	Stream segment by county (table 112)				Stream name	Contributing drainage area (mi <sup>2</sup> )	Estimated flow-duration values (ft <sup>3</sup> /s) for indicated percentage of time flow equaled or exceeded				
		1st	2nd	3rd	4th			90 percent	75 percent	50 percent	25 percent	10 percent
		2184	1026001016	EW	LC					Spring Creek	38.8	0
2196	1026001038	EW	LC			West Elkhorn Creek	32.8	0	.30	1.69	3.85	8.98
2232	1026001017	EW	LC			Elkhorn Creek	49.2	0	.74	2.83	6.62	15.2
2233	1026001017	EW				Elkhorn Creek	13.5	0	0	.53	.96	2.51
2243	1026000638	EW	LC			Cow Creek	23.6	0	0	0	.10	1.55
2267	1026001040	EW	LC			Table Rock Creek	22.8	0	.24	1.37	2.90	6.62
2289	1026000640	EW	RS			Wilson Creek	31.3	0	.35	1.61	3.36	7.43
2299	102600069	EW	RS			Smoky Hill River	7,540	13.9	25.7	49.9	108	280
2313	102600069	EW				Smoky Hill River	7,580	14.6	26.8	51.9	112	290
2316	1026001022	EW	LC			Mulberry Creek	26.3	0	.53	2.06	4.36	9.42
2320	102600069	EW				Smoky Hill River	7,590	14.7	27.1	52.4	113	292
2342	1026000638	EW				Cow Creek	33.0	0	.32	1.07	2.03	4.93
2343	102600068	EW				Smoky Hill River	7,620	15.4	28.2	54.4	117	302
2344	102600066	EW	LC			Buffalo Creek	43.5	0	.92	2.30	4.58	10.0
2361	102600068	EW				Smoky Hill River	7,660	16.1	29.2	56.3	121	312
2367	1026000641	EW	RS			Spring Creek	7.80	0	0	0	0	0
2368	102600067	EW				Smoky Hill River	7,680	16.6	30.1	57.8	124	320
2377	102600066	EW				Buffalo Creek	45.9	0	1.19	2.68	5.18	11.0
2379	102600067	EW				Smoky Hill River	7,710	17.2	31.0	59.5	127	329
2385	102600065	EW				Smoky Hill River	7,770	18.1	32.5	62.3	133	343
2389	1026001025	EW	SA			West Spring Creek	51.7	0	1.20	4.02	9.25	20.5
2447	102600065	EW				Smoky Hill River	7,810	19.0	34.0	65.0	138	357
2487	1026000636	EW				Wolf Creek	27.2	0	0	.89	2.03	5.13
2508	1026000642	EW				Clear Creek	45.6	0	.84	2.56	5.54	12.4
2511	HYDRO	EW				HYDRO	3.93	NA	NA	NA	NA	NA
2513	102600065	EW				Smoky Hill River	7,910	19.4	36.4	70.1	160	481
2527	102600065	EW				Smoky Hill River	7,850	19.1	34.9	66.9	146	402
2531	102600065	EW				Smoky Hill River	7,860	19.2	35.2	67.5	149	418
2534	102600065	EW				Smoky Hill River	7,890	19.3	35.8	68.8	154	449
2539	102600065	EW				Smoky Hill River	7,960	19.6	37.7	73.0	172	550
2546	1026000644	EW				Loss Creek	28.4	0	.01	1.04	2.38	5.94
2562	HYDRO	EW				HYDRO	7,970	NA	NA	NA	NA	NA
2563	HYDRO	EW				HYDRO	43.3	NA	NA	NA	NA	NA
2566	1026000847	EW				Wiley Creek	7.87	0	0	.18	.37	.87
2567	HYDRO	EW				HYDRO	7.92	NA	NA	NA	NA	NA
2577	1026000847	EW				Wiley Creek	8.09	0	.05	.25	.46	1.01
2582	HYDRO	EW				HYDRO	8.66	NA	NA	NA	NA	NA
2585	1026000647	EW				Mud Creek	11.9	0	0	.19	.20	1.04

**Table 33.** Estimated flow-duration values, mean flow values, and peak-discharge frequency values for controlled and uncontrolled flow stream segments on the 1999 Kansas Surface Water Register for Ellsworth County.—Continued

[KSWR, Kansas Surface Water Register; CUSEGA, catalog unit segment number alpha; mi<sup>2</sup>, square miles; ft<sup>3</sup>/s, cubic feet per second; HYDRO, lake or other hydrologic structure; NA, not applicable; NRDitch, irrigation ditch; NRTribal, tribal stream]

Determination site identification number (fig. 37)	Estimated mean flow (ft <sup>3</sup> /s)	Estimated peak discharge (ft <sup>3</sup> /s) for indicated peak-discharge frequency					
		2-year	5-year	10-year	25-year	50-year	100-year
2184	8.83	1,150	2,800	4,370	6,860	9,080	11,600
2196	7.58	1,250	2,960	4,560	7,050	9,250	11,700
2232	11.8	1,390	3,320	5,140	7,990	10,500	13,300
2233	2.94	681	1,750	2,760	4,400	5,820	7,480
2243	3.21	901	2,370	3,780	6,070	8,070	10,400
2267	5.74	940	2,420	3,840	6,120	8,110	10,400
2289	6.40	1,060	2,550	3,940	6,130	8,070	10,200
2299	177	6,500	13,200	19,900	27,700	34,800	41,300
2313	183	6,810	13,600	20,600	28,400	35,600	42,200
2316	7.29	1,020	2,640	4,190	6,690	8,870	11,400
2320	184	6,880	13,700	20,700	28,600	35,800	42,400
2342	5.37	634	1,650	2,650	4,260	5,710	7,360
2343	190	7,190	14,100	21,400	29,300	36,700	43,300
2344	8.56	938	2,300	3,600	5,650	7,470	9,510
2361	196	7,490	14,500	22,000	29,900	37,500	44,200
2367	.66	457	1,180	1,870	2,980	3,950	5,080
2368	201	7,730	14,800	22,500	30,500	38,200	44,900
2377	9.11	916	2,240	3,510	5,510	7,280	9,260
2379	206	8,000	15,200	23,000	31,100	38,900	45,700
2385	215	8,430	15,700	23,900	32,000	40,100	47,000
2389	14.5	1,160	2,840	4,450	7,010	9,300	11,900
2447	223	8,850	16,300	24,800	33,000	41,300	48,200
2487	5.16	952	2,520	4,050	6,530	8,710	11,300
2508	10.1	1,110	2,700	4,210	6,590	8,710	11,100
2511	NA	NA	NA	NA	NA	NA	NA
2513	240	6,200	11,800	17,900	24,400	30,900	36,800
2527	229	7,880	14,600	22,300	29,900	37,500	44,000
2531	231	7,550	14,100	21,400	28,800	36,200	42,600
2534	236	6,890	12,900	19,700	26,700	33,600	39,800
2539	250	4,710	9,210	14,000	19,600	25,100	30,400
2546	5.71	999	2,640	4,220	6,790	9,050	11,700
2562	NA	NA	NA	NA	NA	NA	NA
2563	NA	NA	NA	NA	NA	NA	NA
2566	1.54	489	1,250	1,960	3,110	4,100	5,260
2567	NA	NA	NA	NA	NA	NA	NA
2577	1.62	496	1,270	1,990	3,160	4,170	5,350
2582	NA	NA	NA	NA	NA	NA	NA
2585	2.09	628	1,610	2,550	4,050	5,350	6,880

**220 Estimates of Flow Duration, Mean Flow, and Peak-Discharge Frequency Values for Kansas Stream Locations**

**Table 33.** Estimated flow-duration values, mean flow values, and peak-discharge frequency values for controlled and uncontrolled flow stream segments on the 1999 Kansas Surface Water Register for Ellsworth County.—Continued

[KSWR, Kansas Surface Water Register; CUSEGA, catalog unit segment number alpha; mi<sup>2</sup>, square miles; ft<sup>3</sup>/s, cubic feet per second; HYDRO, lake or other hydrologic structure; NA, not applicable; NRDitch, irrigation ditch; NRTribal, tribal stream]

Determination site identification number (fig. 37)	KSWR CUSEGA number	Stream segment by county (table 112)				Stream name	Contributing drainage area (mi <sup>2</sup> )	Estimated flow-duration values (ft <sup>3</sup> /s) for indicated percentage of time flow equaled or exceeded				
		1st	2nd	3rd	4th			90 percent	75 percent	50 percent	25 percent	10 percent
		2613	1026000646	EW						Turkey Creek	28.8	0
2643	HYDRO	EW				HYDRO	8,040	NA	NA	NA	NA	NA
2644	1026000846	EW				Sand Creek	19.0	0	1.54	2.66	3.96	6.58
2645	1026000815	EW				Smoky Hill River	8,040	19.9	39.5	76.9	189	646
2647	1026000847	EW				Wiley Creek	13.3	0	.34	1.07	1.63	3.14
2648	1026000815	EW				Smoky Hill River	8,060	20.0	40.0	78.0	194	672
2654	1026000648	EW				Skunk Creek	13.0	0	0	.19	.24	1.17
2660	1026000815	EW				Smoky Hill River	8,070	20.6	40.9	79.6	197	679
2661	1026000645	EW				Oxide Creek	25.2	0	.15	1.24	2.67	6.26
2711	102600061190	EW				Ash Creek	22.3	0	.01	.92	1.96	4.81
2714	HYDRO	EW				HYDRO	4.48	NA	NA	NA	NA	NA
2737	102600061190	EW				Ash Creek	4.30	0	0	0	0	0
2763	1026000637	EW				Thompson Creek	43.3	0	.37	1.86	4.37	10.4
2779	1026000637	EW				Thompson Creek	7.24	0	0	0	0	0
2804	1026000815	EW	MP			Smoky Hill River	8,140	23.7	45.6	87.9	215	720
2821	110300114	EW	RC			Plum Creek	53.3	0	0	.48	1.56	5.59
2826	110300112	EW	RC			Little Cow Creek	15.6	0	0	0	0	.02
2827	1103001219	EW	RC			Horse Creek	22.8	0	0	.37	.80	2.59
2874	1103001117	EW	RC			Lost Creek	32.6	0	0	0	0	1.54
2956	1103001214	EW	RC			Little Arkansas River	40.0	0	0	.40	1.21	4.32

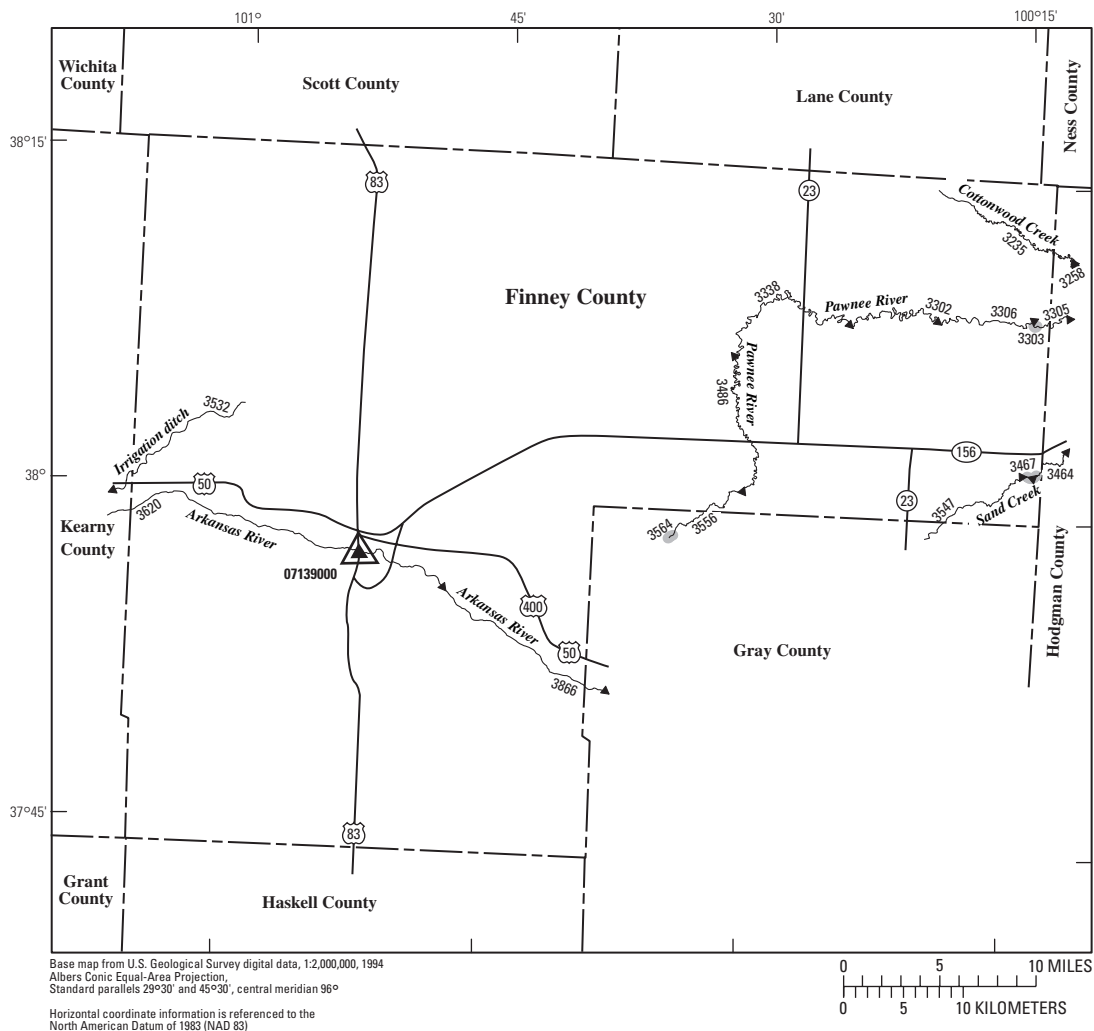
**Table 33.** Estimated flow-duration values, mean flow values, and peak-discharge frequency values for controlled and uncontrolled flow stream segments on the 1999 Kansas Surface Water Register for Ellsworth County—Continued.

[KSWR, Kansas Surface Water Register; CUSEGA, catalog unit segment number alpha; mi<sup>2</sup>, square miles; ft<sup>3</sup>/s, cubic feet per second; HYDRO, lake or other hydrologic structure; NA, not applicable; NRDitch, irrigation ditch; NRTribal, tribal stream]

Determination site identification number (fig. 37)	Estimated mean flow (ft <sup>3</sup> /s)	Estimated peak discharge (ft <sup>3</sup> /s) for indicated peak-discharge frequency					
		2-year	5-year	10-year	25-year	50-year	100-year
2613	5.99	1,030	2,700	4,310	6,930	9,230	11,900
2643	NA	NA	NA	NA	NA	NA	NA
2644	4.82	802	2,090	3,330	5,330	7,080	9,130
2645	264	2,670	5,710	8,670	13,000	17,100	21,600
2647	3.00	644	1,670	2,660	4,240	5,630	7,240
2648	267	2,120	4,760	7,230	11,200	14,900	19,200
2654	2.24	655	1,690	2,670	4,250	5,630	7,240
2660	270	2,180	4,850	7,270	11,300	15,100	19,600
2661	5.67	964	2,520	4,010	6,420	8,540	11,000
2711	4.74	893	2,330	3,710	5,940	7,890	10,200
2714	NA	NA	NA	NA	NA	NA	NA
2737	0	343	865	1,350	2,130	2,800	3,580
2763	8.96	1,160	2,850	4,450	6,990	9,270	11,800
2779	.25	464	1,180	1,860	2,940	3,880	4,980
2804	287	2,510	5,300	7,500	11,900	16,100	21,400
2821	6.73	811	1,640	2,370	3,510	4,520	5,670
2826	1.39	719	1,870	2,960	4,730	6,270	8,080
2827	3.60	879	2,270	3,590	5,740	7,610	9,800
2874	3.62	632	1,730	2,850	4,700	6,420	8,400
2956	5.70	927	1,360	1,630	1,970	2,210	2,440

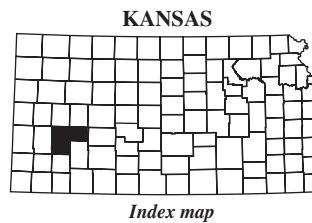






**EXPLANATION**

- ← 3620 Location of streamflow-statistics determination site (small triangle) and associated identification number—small triangle points in downstream direction
- 07139000 ▲ U.S. Geological Survey streamflow-gaging station and number used for estimates of flow duration
- 07139000 △ U.S. Geological Survey streamflow-gaging station and number used for estimates of peak-discharge frequency values
- 3564 Lake and determination site identification number



**Figure 38.** Location of streamflow-statistics determination sites, associated identification numbers, and U.S. Geological Survey streamflow-gaging stations used in the flow-duration and peak-discharge frequency analyses for Finney County.

**224 Estimates of Flow Duration, Mean Flow, and Peak-Discharge Frequency Values for Kansas Stream Locations**

**Table 34.** Estimated flow-duration values, mean flow values, and peak-discharge frequency values for controlled and uncontrolled flow stream segments on the 1999 Kansas Surface Water Register for Finney County.

[KSWR, Kansas Surface Water Register; CUSEGA, catalog unit segment number alpha; mi<sup>2</sup>, square miles; ft<sup>3</sup>/s, cubic feet per second; HYDRO, lake or other hydrologic structure; NA, not applicable; NRDitch, irrigation ditch; NRTribal, tribal stream]

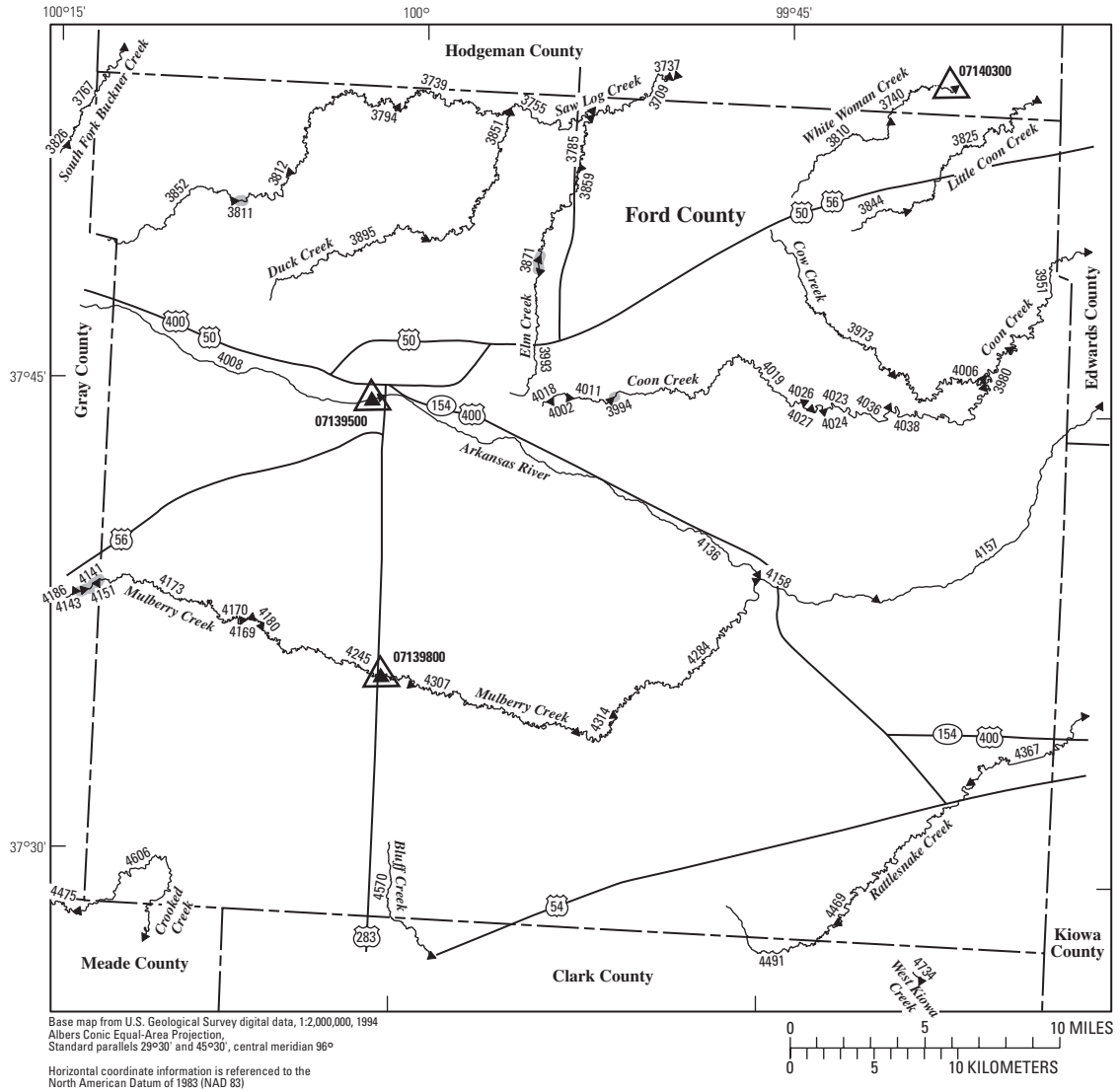
Determination site identification number (fig. 38)	KSWR CUSEGA number	Stream segment by county (table 112)				Stream name	Contributing drainage area (mi <sup>2</sup> )	Estimated flow-duration values (ft <sup>3</sup> /s) for indicated percentage of time flow equaled or exceeded					
		1st	2nd	3rd	4th			90 percent	75 percent	50 percent	25 percent	10 percent	
		3235	110300058	FI	HG					Cottonwood Creek	56.0	0	0
3302	110300055	FI				Pawnee River	401	0	0	0	0	0	.76
3303	HYDRO	FI				HYDRO	434	NA	NA	NA	NA	NA	NA
3305	110300055	FI	HG			Pawnee River	447	0	0	0	0	0	1.46
3306	110300055	FI				Pawnee River	433	0	0	0	0	0	1.25
3338	110300055	FI				Pawnee River	356	0	0	0	0	0	.01
3464	110300059	FI	HG			Sand Creek	85.0	0	0	0	0	0	0
3467	HYDRO	FI				HYDRO	57.7	NA	NA	NA	NA	NA	NA
3486	110300055	FI				Pawnee River	203	0	0	0	0	0	0
3532	NRDitch	FI	KE			NRDitch	185	0	0	0	0	0	0
3547	110300059	FI	GY			Sand Creek	54.8	0	0	0	0	0	0
3556	110300055	FI	GY			Pawnee River	105	0	0	0	0	0	0
3620	110300011	FI	KE			Arkansas River	26,900	0	1.10	32.0	161	314	
3866	110300031	FI	GY			Arkansas River	27,300	0	.34	15.8	98.4	221	

**Table 34.** Estimated flow-duration values, mean flow values, and peak-discharge frequency values for controlled and uncontrolled flow stream segments on the 1999 Kansas Surface Water Register for Finney County.—Continued

[KSWR, Kansas Surface Water Register; CUSEGA, catalog unit segment number alpha; mi<sup>2</sup>, square miles; ft<sup>3</sup>/s, cubic feet per second; HYDRO, lake or other hydrologic structure; NA, not applicable; NRDitch, irrigation ditch; NRTribal, tribal stream]

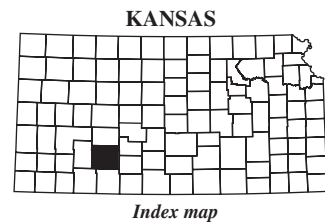
Determination site identification number (fig. 38)	Estimated mean flow (ft <sup>3</sup> /s)	Estimated peak discharge (ft <sup>3</sup> /s) for indicated peak-discharge frequency					
		2-year	5-year	10-year	25-year	50-year	100-year
3235	0.36	371	1,190	2,100	3,720	5,310	7,200
3302	4.42	587	1,960	3,570	6,510	9,470	13,100
3303	NA	NA	NA	NA	NA	NA	NA
3305	5.09	585	1,960	3,570	6,530	9,510	13,200
3306	4.90	573	1,930	3,510	6,440	9,380	13,000
3338	3.70	603	2,000	3,610	6,570	9,530	13,200
3464	.31	381	1,290	2,340	4,280	6,210	8,570
3467	NA	NA	NA	NA	NA	NA	NA
3486	1.46	547	1,810	3,260	5,900	8,540	11,800
3532	.33	253	956	1,840	3,540	5,310	7,550
3547	0	322	1,090	1,990	3,630	5,270	7,270
3556	.08	444	1,470	2,640	4,760	6,860	9,420
3620	163	590	2,780	6,500	17,000	30,000	53,000
3866	110	707	3,110	9,840	20,500	32,900	50,800





**EXPLANATION**

- ← 4606 **Location of streamflow-statistics determination site (small triangle) and associated identification number**—small triangle points in downstream direction
- 07139500 ▲ **U.S. Geological Survey streamflow-gaging station and number used for estimates of flow duration**
- 07139800 △ **U.S. Geological Survey streamflow-gaging station and number used for estimates of peak-discharge frequency values**
- 3994 **Lake and determination site identification number**



**Figure 39.** Location of streamflow-statistics determination sites, associated identification numbers, and U.S. Geological Survey streamflow-gaging stations used in the flow-duration and peak-discharge frequency analyses for Ford County.

**228 Estimates of Flow Duration, Mean Flow, and Peak-Discharge Frequency Values for Kansas Stream Locations**

**Table 35.** Estimated flow-duration values, mean flow values, and peak-discharge frequency values for controlled and uncontrolled flow stream segments on the 1999 Kansas Surface Water Register for Ford County.

[KSWR, Kansas Surface Water Register; CUSEGA, catalog unit segment number alpha; mi<sup>2</sup>, square miles; ft<sup>3</sup>/s, cubic feet per second; HYDRO, lake or other hydrologic structure; NA, not applicable; NRDitch, irrigation ditch; NRTribal, tribal stream]

Determination site identification number (fig. 39)	KSWR CUSEGA number	Stream segment by county (table 112)				Stream name	Contributing drainage area (mi <sup>2</sup> )	Estimated flow-duration values (ft <sup>3</sup> /s) for indicated percentage of time flow equaled or exceeded				
		1st	2nd	3rd	4th			90 percent	75 percent	50 percent	25 percent	10 percent
		3737	110300063	FO	HG					Saw Log Creek	223	0
3739	110300064	FO	HG			Saw Log Creek	86.8	0	0	0	0	0
3740	1103000415	FO	HG			White Woman Creek	69.1	0	0	0	0	0
3755	110300064	FO				Saw Log Creek	157	0	0	0	.21	2.50
3767	110300066	FO	GY	HG		South Fork Buckner Creek	55.5	0	0	0	0	0
3785	110300065	FO				Elm Creek	49.4	0	0	0	0	0
3794	110300064	FO				Saw Log Creek	67.7	0	0	0	0	0
3810	1103000415	FO				White Woman Creek	26.3	0	0	0	0	0
3811	HYDRO	FO				HYDRO	30.1	NA	NA	NA	NA	NA
3812	110300064	FO				Saw Log Creek	37.7	0	0	0	0	0
3825	110300048	FO	HG			Little Coon Creek	38.3	0	0	0	0	0
3844	110300048	FO				Little Coon Creek	13.8	0	0	0	0	0
3851	110300068	FO				Duck Creek	54.5	0	0	0	0	0
3852	110300064	FO				Saw Log Creek	29.9	0	0	0	0	0
3859	110300065	FO				Elm Creek	45.6	0	0	0	0	0
3871	HYDRO	FO				HYDRO	25.3	NA	NA	NA	NA	NA
3895	110300068	FO				Duck Creek	35.8	0	0	0	0	0
3973	1103000414	FO				Cow Creek	37.1	0	0	0	0	0
3980	110300049	FO				Coon Creek	132	0	0	.25	.92	3.52
3993	110300065	FO				Elm Creek	24.2	0	0	0	0	0
3994	HYDRO	FO				HYDRO	8.20	NA	NA	NA	NA	NA
4002	110300049	FO				Coon Creek	3.61	0	0	0	0	0
4006	1103000414	FO				Cow Creek	45.1	0	0	0	0	0
4008	110300031	FO	GY			Arkansas River	27,400	0	0	8.70	71.0	180
4011	110300049	FO				Coon Creek	8.20	0	0	0	0	0
4018	110300049	FO				Coon Creek	1.67	0	0	0	0	0
4019	110300049	FO				Coon Creek	51.1	0	0	0	0	0
4023	110300049	FO				Coon Creek	56.5	0	0	0	0	0
4024	110300049	FO				Coon Creek	56.6	0	0	0	0	0
4026	110300049	FO				Coon Creek	56.5	0	0	0	0	0
4027	110300049	FO				Coon Creek	53.9	0	0	0	0	0
4036	110300049	FO				Coon Creek	68.8	0	0	0	0	0
4038	110300049	FO				Coon Creek	82.9	0	0	0	0	.91
4136	1103000411	FO				Arkansas River	27,500	.09	.33	11.6	75.1	183
4158	1103000410	FO				Arkansas River	27,900	.45	1.65	23.5	91.9	194
4169	1103000412	FO				Mulberry Creek	162	0	0	0	0	0
4170	1103000412	FO				Mulberry Creek	154	0	0	0	0	0
4173	1103000412	FO	GY			Mulberry Creek	154	0	0	0	0	0

**Table 35.** Estimated flow-duration values, mean flow values, and peak-discharge frequency values for controlled and uncontrolled flow stream segments on the 1999 Kansas Surface Water Register for Ford County.—Continued[KSWR, Kansas Surface Water Register; CUSEGA, catalog unit segment number alpha; mi<sup>2</sup>, square miles; ft<sup>3</sup>/s, cubic feet per second; HYDRO, lake or other hydrologic structure; NA, not applicable; NRDitch, irrigation ditch; NRTribal, tribal stream]

Determination site identification number (fig. 39)	Estimated mean flow (ft <sup>3</sup> /s)	Estimated peak discharge (ft <sup>3</sup> /s) for indicated peak-discharge frequency					
		2-year	5-year	10-year	25-year	50-year	100-year
3737	8.29	831	2,470	4,270	7,410	10,400	14,100
3739	2.31	485	1,530	2,710	4,800	6,840	9,300
3740	2.46	179	713	1,420	2,870	4,470	6,590
3755	5.25	673	2,060	3,590	6,290	8,910	12,100
3767	0.63	433	1,410	2,510	4,500	6,460	8,820
3785	1.18	379	1,180	2,060	3,600	5,090	6,850
3794	1.37	434	1,390	2,470	4,390	6,280	8,560
3810	.14	514	1,560	2,660	4,560	6,300	8,420
3811	NA	NA	NA	NA	NA	NA	NA
3812	0	335	1,100	1,980	3,550	5,100	6,960
3825	.97	381	1,180	2,060	3,590	5,060	6,820
3844	0	408	1,190	1,990	3,330	4,530	5,960
3851	1.15	365	1,170	2,060	3,650	5,210	7,070
3852	0	545	1,680	2,870	4,930	6,800	9,060
3859	.94	373	1,160	2,030	3,540	5,000	6,730
3871	NA	NA	NA	NA	NA	NA	NA
3895	.22	303	978	1,740	3,090	4,400	5,980
3973	.69	381	1,180	2,050	3,570	5,040	6,780
3980	5.81	578	1,720	2,950	5,070	7,110	9,530
3993	0	477	1,470	2,510	4,290	5,930	7,880
3994	NA	NA	NA	NA	NA	NA	NA
4002	0	162	478	797	1,330	1,820	2,380
4006	1.25	322	1,020	1,790	3,150	4,460	6,030
4008	86.5	759	3,260	11,300	22,000	34,200	49,900
4011	0	263	786	1,320	2,230	3,050	4,030
4018	0	104	301	499	826	1,120	1,460
4019	1.24	395	1,210	2,110	3,670	5,170	6,950
4023	1.58	413	1,260	2,180	3,780	5,310	7,130
4024	1.58	412	1,260	2,180	3,780	5,310	7,130
4026	1.57	414	1,260	2,190	3,790	5,320	7,140
4027	1.41	406	1,240	2,150	3,730	5,250	7,050
4036	2.38	449	1,350	2,340	4,030	5,650	7,570
4038	3.32	443	1,330	2,290	3,960	5,550	7,430
4136	88.3	740	3,240	10,900	21,200	33,100	48,500
4158	95.4	662	3,150	9,530	18,200	28,700	43,000
4169	1.11	481	1,380	2,330	3,930	5,440	7,220
4170	1.18	489	1,420	2,390	4,060	5,630	7,480
4173	1.15	497	1,440	2,420	4,100	5,690	7,560

**Table 35.** Estimated flow-duration values, mean flow values, and peak-discharge frequency values for controlled and uncontrolled flow stream segments on the 1999 Kansas Surface Water Register for Ford County.—Continued

[KSWR, Kansas Surface Water Register; CUSEGA, catalog unit segment number alpha; mi<sup>2</sup>, square miles; ft<sup>3</sup>/s, cubic feet per second; HYDRO, lake or other hydrologic structure; NA, not applicable; NRDitch, irrigation ditch; NRTribal, tribal stream]

Determination site identification number (fig. 39)	KSWR CUSEGA number	Stream segment by county (table 112)				Stream name	Contributing drainage area (mi <sup>2</sup> )	Estimated flow-duration values (ft <sup>3</sup> /s) for indicated percentage of time flow equaled or exceeded					
		1st	2nd	3rd	4th			90 percent	75 percent	50 percent	25 percent	10 percent	
		4180	1103000412	FO						Mulberry Creek	164	0	0
4245	1103000412	FO				Mulberry Creek	217	0	0	0	0	0	0
4284	1103000412	FO				Mulberry Creek	335	0	.22	1.70	4.13	9.47	
4307	1103000412	FO				Mulberry Creek	263	0	0	.54	1.33	3.04	
4314	1103000412	FO				Mulberry Creek	286	0	0	.90	2.22	5.08	
4367	110300094	FO	KW			Rattlesnake Creek	164	0	.49	2.14	5.34	12.3	
4469	110300094	FO				Rattlesnake Creek	102	0	0	.35	1.62	5.37	
4606	110400072	FO	ME			Crooked Creek	755	.58	1.39	2.91	4.53	9.60	

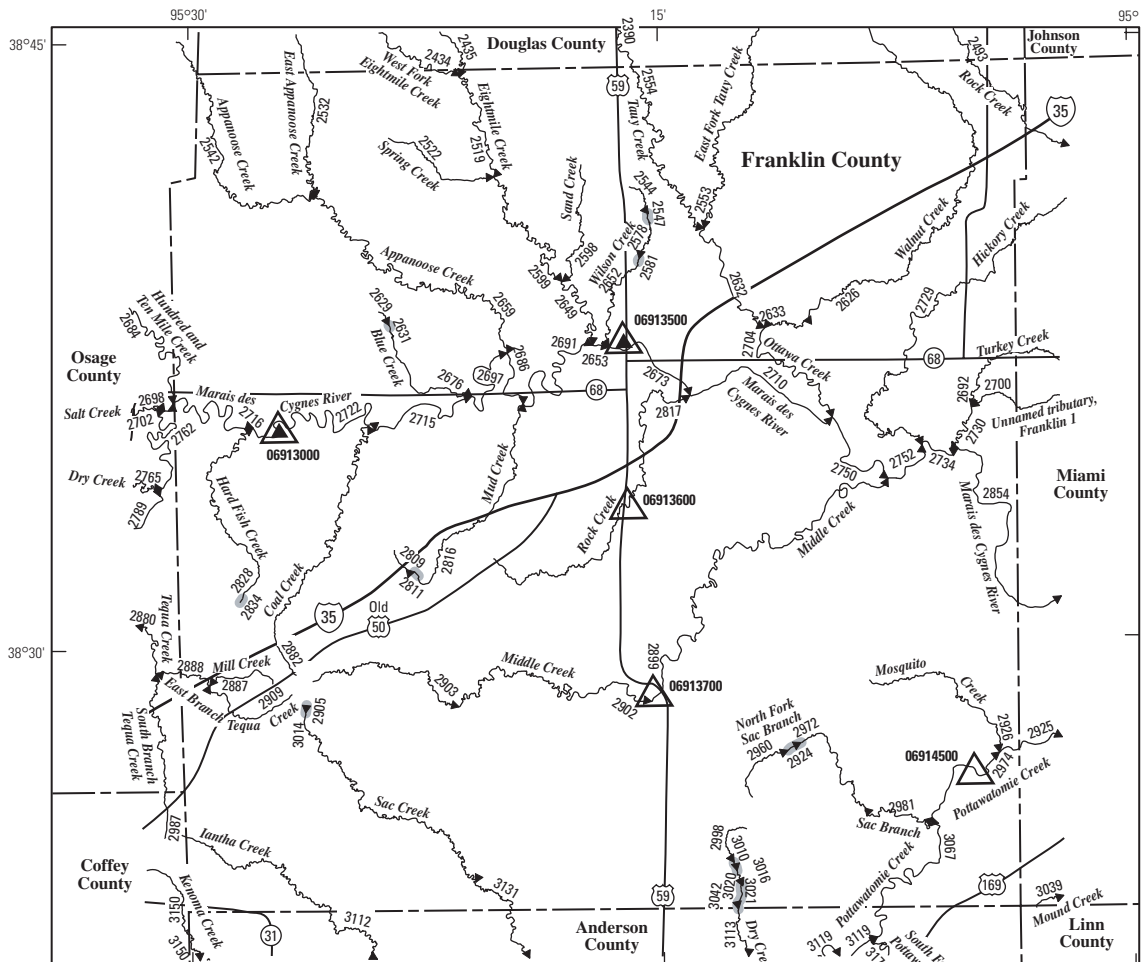


**Table 35.** Estimated flow-duration values, mean flow values, and peak-discharge frequency values for controlled and uncontrolled flow stream segments on the 1999 Kansas Surface Water Register for Ford County.—Continued

[KSWR, Kansas Surface Water Register; CUSEGA, catalog unit segment number alpha; mi<sup>2</sup>, square miles; ft<sup>3</sup>/s, cubic feet per second; HYDRO, lake or other hydrologic structure; NA, not applicable; NRDitch, irrigation ditch; NRTribal, tribal stream]

Determination site identification number (fig. 39)	Estimated mean flow (ft <sup>3</sup> /s)	Estimated peak discharge (ft <sup>3</sup> /s) for indicated peak-discharge frequency					
		2-year	5-year	10-year	25-year	50-year	100-year
4180	1.10	470	1,350	2,270	3,840	5,320	7,060
4245	.64	249	675	1,090	1,770	2,380	3,080
4284	8.15	384	1,030	1,680	2,760	3,740	4,890
4307	3.14	286	774	1,260	2,050	2,770	3,600
4314	4.74	312	846	1,380	2,260	3,060	3,990
4367	12.2	689	1,990	3,390	5,790	8,080	10,800
4469	7.23	600	1,820	3,150	5,480	7,720	10,400
4606	12.9	469	1,830	3,420	6,320	9,170	12,600

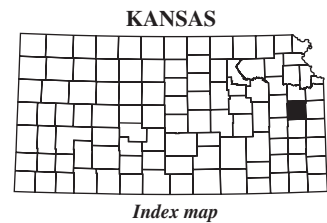
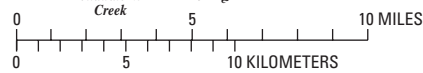




Base map from U.S. Geological Survey digital data, 1:2,000,000, 1994  
 Albers Conic Equal-Area Projection,  
 Standard parallels 29°30' and 45°30', central meridian 96°  
 Horizontal coordinate information is referenced to the  
 North American Datum of 1983 (NAD 83)

**EXPLANATION**

- ◀ 3150 Location of streamflow-statistics determination site (small triangle) and associated identification number—small triangle points in downstream direction
- ▲ 06913500 U.S. Geological Survey streamflow-gaging station and number used for estimates of flow duration
- △ 06913700 U.S. Geological Survey streamflow-gaging station and number used for estimates of peak-discharge frequency values
- 2905 Lake and determination site identification number



**Figure 40.** Location of streamflow-statistics determination sites, associated identification numbers, and U.S. Geological Survey streamflow-gaging stations used in the flow-duration and peak-discharge frequency analyses for Franklin County.

**Table 36.** Estimated flow-duration values, mean flow values, and peak-discharge frequency values for controlled and uncontrolled flow stream segments on the 1999 Kansas Surface Water Register for Franklin County.

[KSWR, Kansas Surface Water Register; CUSEGA, catalog unit segment number alpha; mi<sup>2</sup>, square miles; ft<sup>3</sup>/s, cubic feet per second; HYDRO, lake or other hydrologic structure; NA, not applicable; NRDitch, irrigation ditch; NRTribal, tribal stream]

Determination site identification number (fig. 40)	KSWR CUSEGA number	Stream segment by county (table 112)				Stream name	Contributing drainage area (mi <sup>2</sup> )	Estimated flow-duration values (ft <sup>3</sup> /s) for indicated percentage of time flow equaled or exceeded				
		1st	2nd	3rd	4th			90 percent	75 percent	50 percent	25 percent	10 percent
		2519	1029010113	FR						Eightmile Creek	34.3	0
2522	1029010184	FR				Spring Creek	9.69	0	.19	1.74	5.01	12.8
2544	1029010183	FR				Wilson Creek	2.03	0	.05	.28	.45	1.55
2547	HYDRO	FR				HYDRO	2.09	NA	NA	NA	NA	NA
2578	1029010183	FR				Wilson Creek	4.15	0	0	.14	.81	3.33
2581	HYDRO	FR				HYDRO	4.19	NA	NA	NA	NA	NA
2598	1029010182	FR				Sand Creek	8.29	0	.21	1.54	4.25	10.8
2599	1029010113	FR				Eightmile Creek	51.1	0	1.26	6.24	20.2	56.1
2629	1029010181	FR				Blue Creek	3.85	0	.27	.92	1.96	4.70
2631	HYDRO	FR				HYDRO	3.88	NA	NA	NA	NA	NA
2632	1029010111	FR				Tauy Creek	94.0	0	2.39	10.7	35.3	101
2633	1029010190	FR				Walnut Creek	40.5	0	.27	3.38	12.8	39.0
2649	1029010113	FR				Eightmile Creek	61.7	0	1.60	7.50	24.4	67.9
2652	1029010183	FR				Wilson Creek	8.13	0	0	.31	1.79	6.63
2653	1029010112	FR				Marais des Cygnes River	1,240	39.9	50.8	144	786	2,560
2659	1029010116	FR				Appanoose Creek	75.1	0	1.56	7.97	26.9	77.6
2673	1029010112	FR				Marais des Cygnes River	1,260	40.0	51.0	146	791	2,570
2676	1029010181	FR				Blue Creek	8.98	0	.19	1.39	3.81	9.86
2684	1029010120	FR	OS			Hundred and Ten Mile Creek	320	14.0	16.0	22.0	103	515
2686	1029010115	FR				Marais des Cygnes River	1,150	39.0	49.6	127	753	2,470
2691	1029010114	FR				Marais des Cygnes River	1,180	39.3	49.9	132	763	2,490
2692	102901016	FR	MI			Turkey Creek	13.0	0	0	1.65	5.67	16.0
2697	1029010117	FR				Marais des Cygnes River	1,080	38.3	48.5	112	724	2,390
2700	102901015	FR	MI			Unnamed tributary, Franklin 1	7.67	0	0	1.06	3.47	9.68
2704	102901019011	FR				Ottawa Creek	139	.22	3.11	14.0	48.1	143
2710	1029010112	FR				Marais des Cygnes River	1,290	40.6	52.7	156	826	2,660
2715	1029010117	FR				Marais des Cygnes River	1,070	38.2	48.3	110	720	2,370
2716	1029010119	FR	OS			Marais des Cygnes River	1,020	37.2	46.9	103	691	2,290
2722	1029010118	FR				Marais des Cygnes River	1,040	38.0	48.0	106	712	2,350
2729	102901018	FR	MI			Hickory Creek	26.7	0	.16	2.78	10.1	29.7
2730	102901014	FR				Turkey Creek	22.1	0	.27	2.87	9.82	27.5
2734	102901017	FR				Marais des Cygnes River	1,540	44.9	63.9	220	1,060	3,280
2750	1029010110	FR				Marais des Cygnes River	1,430	43.0	59.0	192	960	3,010
2752	102901019	FR				Marais des Cygnes River	1,510	44.4	62.6	213	1,040	3,210
2762	1029010130	FR	OS			Marais des Cygnes River	552	14.4	25.4	57.6	305	1,040
2809	1029010149	FR				Mud Creek	3.78	0	0	.43	1.06	3.24
2811	HYDRO	FR				HYDRO	3.92	NA	NA	NA	NA	NA
2816	1029010149	FR				Mud Creek	19.8	0	.43	2.63	7.98	21.3

**Table 36.** Estimated flow-duration values, mean flow values, and peak-discharge frequency values for controlled and uncontrolled flow stream segments on the 1999 Kansas Surface Water Register for Franklin County.—Continued[KSWR, Kansas Surface Water Register; CUSEGA, catalog unit segment number alpha; mi<sup>2</sup>, square miles; ft<sup>3</sup>/s, cubic feet per second; HYDRO, lake or other hydrologic structure; NA, not applicable; NRDitch, irrigation ditch; NRTribal, tribal stream]

Determination site identification number (fig. 40)	Estimated mean flow (ft <sup>3</sup> /s)	Estimated peak discharge (ft <sup>3</sup> /s) for indicated peak-discharge frequency					
		2-year	5-year	10-year	25-year	50-year	100-year
2519	26.3	3,550	6,990	9,900	14,100	17,700	21,500
2522	9.19	1,330	2,760	3,970	5,780	7,280	8,980
2544	1.67	572	1,130	1,590	2,260	2,810	3,430
2547	NA	NA	NA	NA	NA	NA	NA
2578	3.41	866	1,730	2,450	3,530	4,400	5,380
2581	NA	NA	NA	NA	NA	NA	NA
2598	7.91	1,270	2,590	3,700	5,370	6,730	8,280
2599	39.1	3,260	6,680	9,670	14,100	17,900	22,000
2629	3.60	777	1,580	2,250	3,250	4,060	4,990
2631	NA	NA	NA	NA	NA	NA	NA
2632	69.0	4,520	9,000	12,900	18,700	23,600	29,000
2633	30.4	3,690	7,420	10,600	15,400	19,400	23,800
2649	46.9	3,310	6,840	9,940	14,600	18,600	22,900
2652	6.36	1,290	2,610	3,720	5,380	6,740	8,280
2653	843	12,300	19,500	23,900	28,900	32,200	35,300
2659	53.7	3,900	8,060	11,700	17,300	22,000	27,300
2673	850	12,400	19,600	24,000	28,900	32,100	35,000
2676	7.62	1,290	2,650	3,810	5,540	6,970	8,590
2684	193	1,920	3,250	4,060	4,980	5,570	6,100
2686	796	11,600	18,700	23,500	29,100	33,200	37,000
2691	810	11,800	19,000	23,600	29,100	32,900	36,500
2692	12.2	1,730	3,530	5,040	7,310	9,160	11,300
2697	756	11,000	18,100	23,100	29,300	34,000	38,500
2700	7.49	1,270	2,560	3,640	5,250	6,560	8,050
2704	97.4	5,660	11,200	16,000	23,100	29,100	35,800
2710	885	12,700	19,900	24,300	29,700	33,300	36,600
2715	749	10,900	18,000	23,000	29,400	34,100	38,800
2716	719	10,400	17,300	22,300	28,600	33,300	38,100
2722	738	10,700	17,800	22,900	29,400	34,300	39,200
2729	22.5	2,620	5,420	7,810	11,400	14,400	17,800
2730	20.1	2,360	4,850	6,970	10,200	12,800	15,800
2734	1,130	14,700	21,600	26,500	34,800	41,100	47,700
2750	1,020	13,800	20,900	25,600	32,600	37,700	42,900
2752	1,100	14,400	21,400	26,300	34,200	40,200	46,500
2762	386	8,280	17,500	25,800	39,000	50,700	64,200
2809	3.05	776	1,570	2,240	3,230	4,040	4,950
2811	NA	NA	NA	NA	NA	NA	NA
2816	15.9	2,060	4,300	6,220	9,120	11,500	14,200

**Table 36.** Estimated flow-duration values, mean flow values, and peak-discharge frequency values for controlled and uncontrolled flow stream segments on the 1999 Kansas Surface Water Register for Franklin County.—Continued

[KSWR, Kansas Surface Water Register; CUSEGA, catalog unit segment number alpha; mi<sup>2</sup>, square miles; ft<sup>3</sup>/s, cubic feet per second; HYDRO, lake or other hydrologic structure; NA, not applicable; NRDitch, irrigation ditch; NRTribal, tribal stream]

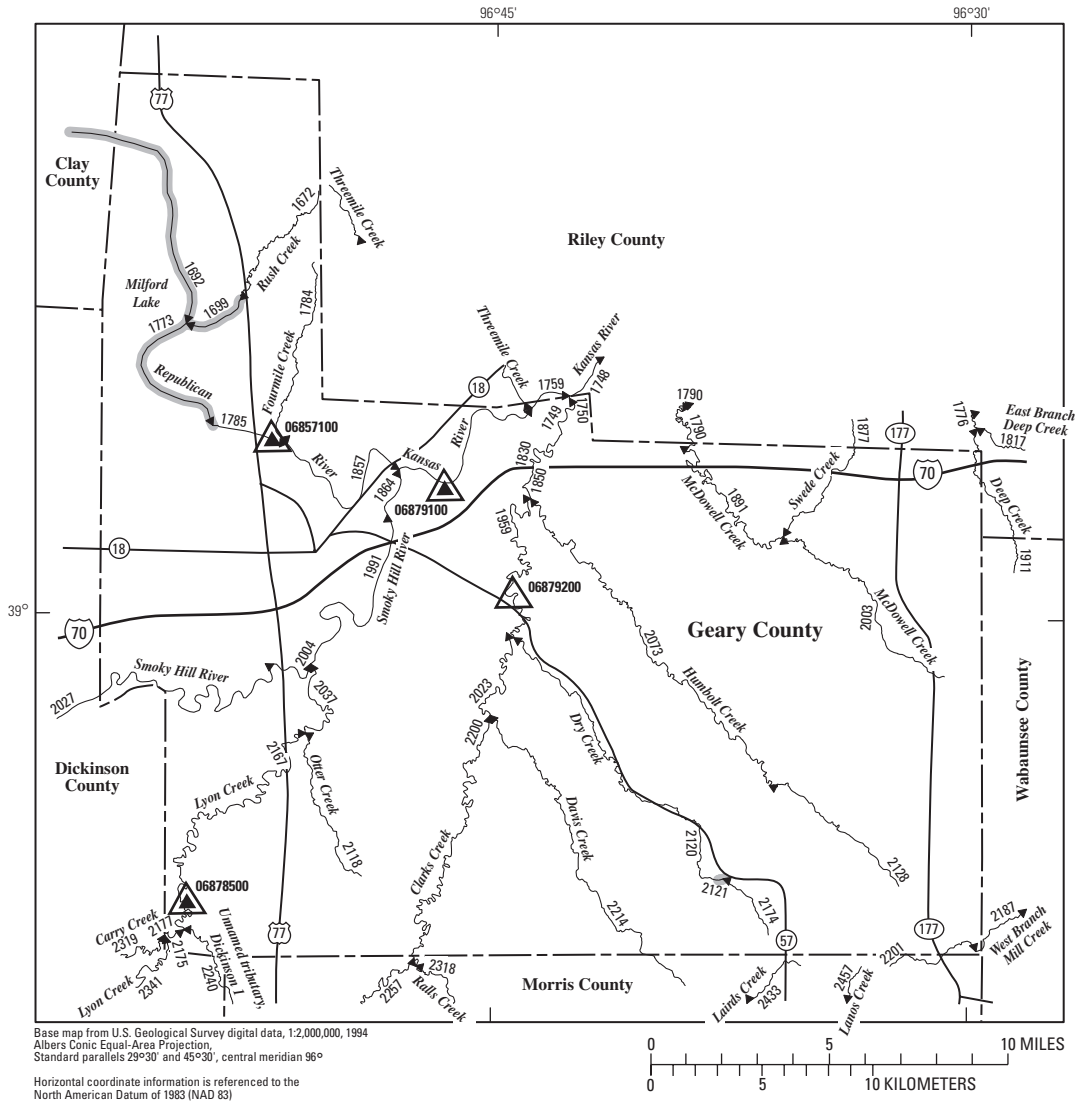
Determination site identification number (fig. 40)	KSWR CUSEGA number	Stream segment by county (table 112)				Stream name	Contributing drainage area (mi <sup>2</sup> )	Estimated flow-duration values (ft <sup>3</sup> /s) for indicated percentage of time flow equaled or exceeded				
		1st	2nd	3rd	4th			90 percent	75 percent	50 percent	25 percent	10 percent
		2817	1029010197	FR						Rock Creek	27.7	0
2828	1029010147	FR				Hard Fish Creek	13.3	0	0	1.12	4.02	12.1
2834	HYDRO	FR				HYDRO	2.16	NA	NA	NA	NA	NA
2854	102901013	FR	MI			Marais des Cygnes River	1,600	45.8	66.4	235	1,120	3,420
2882	1029010148	FR				Coal Creek	15.9	0	.23	2.23	6.91	18.5
2887	102901011589	FR				Mill Creek	2.49	0	0	0	0	.44
2888	1029010146	FR	OS			East Branch Tequa Creek	10.6	0	0	.70	2.81	8.98
2899	1029010150	FR				Middle Creek	79.0	0	1.32	6.95	24.5	73.6
2902	1029010150	FR				Middle Creek	37.6	0	.31	2.98	10.6	31.5
2903	1029010150	FR				Middle Creek	13.5	0	.03	1.34	4.20	11.9
2905	HYDRO	FR				HYDRO	.61	NA	NA	NA	NA	NA
2909	1029010146	FR				East Branch Tequa Creek	6.12	0	0	.22	1.16	4.45
2924	HYDRO	FR				HYDRO	9.60	NA	NA	NA	NA	NA
2925	1029010151	FR	MI			Pottawatomie Creek	552	1.91	6.76	42.2	166	615
2926	1029010152	FR				Mosquito Creek	19.9	0	.06	2.12	7.44	21.5
2960	102901019054	FR				North Fork Sac Branch	8.60	0	0	.20	1.55	6.22
2972	102901019054	FR				North Fork Sac Branch	20.6	0	0	1.69	6.53	20.0
2974	1029010153	FR				Pottawatomie Creek	507	1.50	5.64	37.3	149	561
2981	1029010154	FR				Sac Branch	24.1	0	0	2.10	7.91	23.9
2998	1029010157	FR				Dry Creek	10.8	0	0	.34	2.18	8.22
3010	HYDRO	FR				HYDRO	11.3	NA	NA	NA	NA	NA
3014	1029010160	FR				Sac Creek	25.9	0	.11	2.21	7.76	23.2
3016	1029010157	FR				Dry Creek	13.5	0	0	.67	3.26	11.2
3020	HYDRO	FR				HYDRO	13.8	NA	NA	NA	NA	NA
3021	1029010157	FR				Dry Creek	13.8	0	0	.73	3.44	11.7
3042	HYDRO	FR				HYDRO	16.1	NA	NA	NA	NA	NA

**Table 36.** Estimated flow-duration values, mean flow values, and peak-discharge frequency values for controlled and uncontrolled flow stream segments on the 1999 Kansas Surface Water Register for Franklin County.—Continued[KSWR, Kansas Surface Water Register; CUSEGA, catalog unit segment number alpha; mi<sup>2</sup>, square miles; ft<sup>3</sup>/s, cubic feet per second; HYDRO, lake or other hydrologic structure; NA, not applicable; NRDitch, irrigation ditch; NRTribal, tribal stream]

Determination site identification number (fig. 40)	Estimated mean flow (ft <sup>3</sup> /s)	Estimated peak discharge (ft <sup>3</sup> /s) for indicated peak-discharge frequency					
		2-year	5-year	10-year	25-year	50-year	100-year
2817	18.1	597	1,300	1,960	3,060	4,090	5,310
2828	9.91	1,510	3,180	4,620	6,800	8,600	10,700
2834	NA	NA	NA	NA	NA	NA	NA
2854	1,180	15,100	22,000	27,000	35,900	42,800	50,200
2882	13.5	1,750	3,660	5,310	7,790	9,850	12,200
2887	1.40	579	1,180	1,680	2,420	3,030	3,720
2888	7.84	1,340	2,810	4,070	5,960	7,520	9,310
2899	54.4	3,300	5,310	6,840	8,970	10,700	12,600
2902	25.3	2,930	5,650	7,940	11,300	14,100	17,200
2903	9.84	1,590	3,270	4,690	6,840	8,600	10,600
2905	NA	NA	NA	NA	NA	NA	NA
2909	4.43	979	2,030	2,910	4,240	5,340	6,580
2924	NA	NA	NA	NA	NA	NA	NA
2925	385	13,200	25,300	35,900	52,100	66,700	83,200
2926	16.6	2,170	4,480	6,450	9,420	11,900	14,600
2960	6.34	1,350	2,730	3,890	5,610	7,030	8,640
2972	16.3	2,240	4,620	6,650	9,700	12,200	15,100
2974	355	13,400	25,500	36,000	52,100	66,500	82,800
2981	19.1	2,460	5,080	7,310	10,700	13,500	16,600
2998	8.02	1,550	3,140	4,480	6,490	8,140	10,000
3010	NA	NA	NA	NA	NA	NA	NA
3014	18.5	2,370	5,000	7,250	10,700	13,500	16,700
3016	10.2	1,760	3,590	5,130	7,450	9,350	11,500
3020	NA	NA	NA	NA	NA	NA	NA
3021	10.5	1,790	3,650	5,220	7,580	9,520	11,700
3042	NA	NA	NA	NA	NA	NA	NA

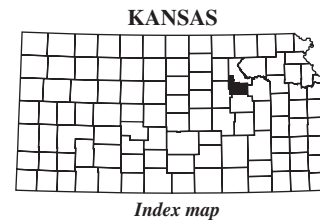






**EXPLANATION**

- ◀ 2341 Location of streamflow-statistics determination site (small triangle) and associated identification number—small triangle points in downstream direction
- 06878500 ▲ U.S. Geological Survey streamflow-gaging station and number used for estimates of flow duration
- 06879200 △ U.S. Geological Survey streamflow-gaging station and number used for estimates of peak-discharge frequency values
- 2121 Lake and determination site identification number



**Figure 41.** Location of streamflow-statistics determination sites, associated identification numbers, and U.S. Geological Survey streamflow-gaging stations used in the flow-duration and peak-discharge frequency analyses for Geary County.

**Table 37.** Estimated flow-duration values, mean flow values, and peak-discharge frequency values for controlled and uncontrolled flow stream segments on the 1999 Kansas Surface Water Register for Geary County.

[KSWR, Kansas Surface Water Register; CUSEGA, catalog unit segment number alpha; mi<sup>2</sup>, square miles; ft<sup>3</sup>/s, cubic feet per second; HYDRO, lake or other hydrologic structure; NA, not applicable; NRDitch, irrigation ditch; NRTribal, tribal stream]

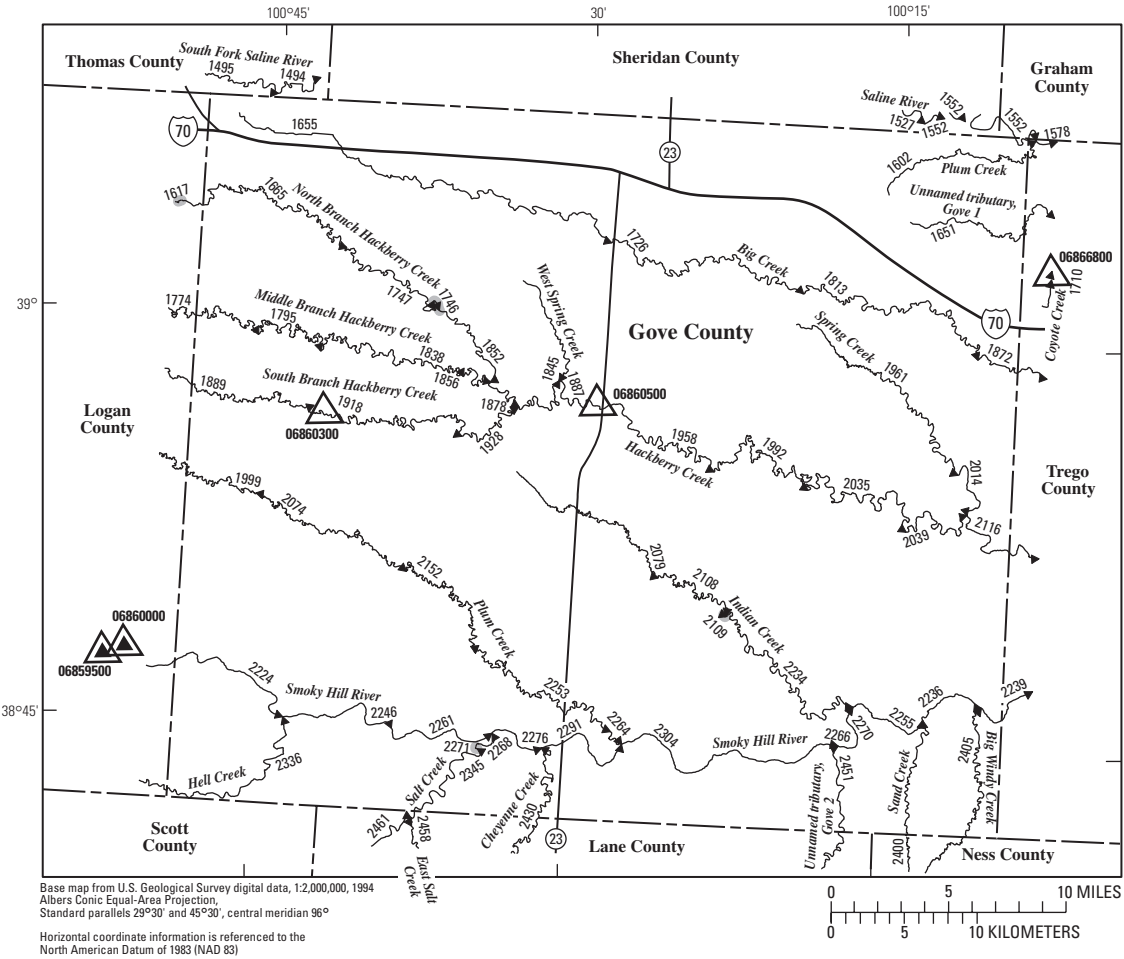
Determination site identification number (fig. 41)	KSWR CUSEGA number	Stream segment by county (table 112)				Stream name	Contributing drainage area (mi <sup>2</sup> )	Estimated flow-duration values (ft <sup>3</sup> /s) for indicated percentage of time flow equaled or exceeded				
		1st	2nd	3rd	4th			90 percent	75 percent	50 percent	25 percent	10 percent
		1672	102500171477	GE						Rush Creek	10.9	0
1699	HYDRO	GE				HYDRO	14.2	NA	NA	NA	NA	NA
1773	HYDRO	GE				HYDRO	23,100	NA	NA	NA	NA	NA
1784	1025001767	GE				Fourmile Creek	13.8	0	.11	1.41	3.68	9.38
1785	102500171	GE				Republican River	23,100	57.0	126	357	1,020	2,400
1830	102701017	GE	RL			Kansas River	43,500	408	637	1,350	3,310	7,450
1850	102701018	GE	RL			Clarks Creek	260	.36	4.29	18.7	62.2	189
1857	102500171	GE				Republican River	23,100	57.5	127	358	1,020	2,410
1864	102600081	GE				Smoky Hill River	20,300	196	309	618	1,530	4,040
1877	1027010117	GE	RL			Swede Creek	17.5	0	0	1.80	5.71	15.6
1891	1027010111	GE	RL			McDowell Creek	69.5	0	1.00	6.09	20.4	58.6
1911	1027010226	GE	RL	WB		Deep Creek	22.7	0	.01	2.13	7.10	20.0
1959	102701019	GE				Clarks Creek	195	0	2.89	12.9	43.5	132
1991	102600081	GE				Smoky Hill River	20,300	196	309	618	1,530	4,040
2003	1027010111	GE				McDowell Creek	35.5	0	.20	2.99	10.3	29.6
2004	102600081	GE				Smoky Hill River	20,000	193	305	608	1,500	3,990
2023	102701019	GE				Clarks Creek	155	0	2.09	9.70	32.8	99.3
2037	1026000831	GE				Lyon Creek	312	3.52	17.4	34.6	70.3	152
2073	1027010110	GE				Humbolt Creek	57.1	0	.69	4.89	16.6	47.8
2118	1026000842	GE				Otter Creek	15.2	0	0	.78	2.97	9.36
2120	1027010119	GE				Dry Creek	29.5	0	.03	2.34	8.07	23.3
2121	HYDRO	GE				HYDRO	7.47	NA	NA	NA	NA	NA
2128	1027010110	GE				Humbolt Creek	22.6	0	0	1.39	5.26	16.3
2167	1026000831	GE				Lyon Creek	290	3.40	17.0	33.0	65.0	135
2174	1027010119	GE				Dry Creek	7.33	0	0	0	.18	2.48
2187	1027010229	GE	WB			West Branch Mill Creek	64.3	.16	1.53	7.01	22.2	58.6
2200	102701019	GE	MR			Clarks Creek	119	0	1.41	6.99	23.7	71.8
2201	1027010229	GE	MR			West Branch Mill Creek	10.2	0	.01	.04	.94	4.55
2214	1027010118	GE	MR			Davis Creek	28.7	0	0	2.07	7.17	20.9

**Table 37.** Estimated flow-duration values, mean flow values, and peak-discharge frequency values for controlled and uncontrolled flow stream segments on the 1999 Kansas Surface Water Register for Geary County.—Continued

[KSWR, Kansas Surface Water Register; CUSEGA, catalog unit segment number alpha; mi<sup>2</sup>, square miles; ft<sup>3</sup>/s, cubic feet per second; HYDRO, lake or other hydrologic structure; NA, not applicable; NRDitch, irrigation ditch; NRTribal, tribal stream]

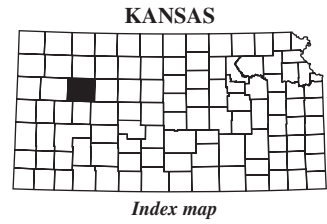
Determination site identification number (fig. 41)	Estimated mean flow (ft <sup>3</sup> /s)	Estimated peak discharge (ft <sup>3</sup> /s) for indicated peak-discharge frequency					
		2-year	5-year	10-year	25-year	50-year	100-year
1672	5.05	929	2,140	3,220	4,890	6,310	7,940
1699	NA	NA	NA	NA	NA	NA	NA
1773	NA	NA	NA	NA	NA	NA	NA
1784	7.35	1,080	2,490	3,760	5,720	7,390	9,300
1785	960	5,130	9,360	15,000	18,000	24,000	37,500
1830	3,010	19,100	31,100	44,000	73,000	102,000	140,000
1850	125	5,290	10,900	15,800	23,300	30,000	37,500
1857	963	5,150	9,390	15,000	18,100	24,100	37,600
1864	1,610	12,600	26,200	35,900	51,700	69,200	87,000
1877	11.5	1,370	3,100	4,640	7,020	9,020	11,300
1891	40.8	4,970	10,100	14,600	21,200	26,900	33,100
1911	14.9	1,660	3,740	5,590	8,440	10,800	13,600
1959	91.9	4,320	8,970	13,100	19,400	25,000	31,300
1991	1,610	12,600	26,200	35,900	51,700	69,100	87,000
2003	21.9	4,680	9,190	13,000	18,600	23,300	28,300
2004	1,590	12,500	26,100	35,700	51,400	68,700	86,200
2023	71.6	4,020	8,530	12,600	18,800	24,300	30,500
2037	118	6,620	18,400	31,000	53,200	74,900	101,000
2073	34.1	4,270	8,810	12,800	18,700	23,900	29,500
2118	8.13	1,220	2,770	4,150	6,290	8,100	10,200
2120	17.7	1,880	4,260	6,390	9,690	12,500	15,700
2121	NA	NA	NA	NA	NA	NA	NA
2128	13.5	1,740	3,870	5,760	8,660	11,100	13,900
2167	108	6,410	18,000	30,300	52,200	73,600	99,800
2174	3.50	882	1,930	2,840	4,220	5,380	6,700
2187	40.5	5,470	10,800	15,300	21,900	27,500	33,500
2200	54.0	3,560	7,710	11,500	17,300	22,400	28,100
2201	5.19	1,100	2,410	3,550	5,280	6,730	8,390
2214	16.3	1,800	4,120	6,190	9,410	12,100	15,300





**EXPLANATION**

- ← 2224 Location of streamflow-statistics determination site (small triangle) and associated identification number—small triangle points in downstream direction
- 07139500 ▲ U.S. Geological Survey streamflow-gaging station and number used for estimates of flow duration
- 07139800 △ U.S. Geological Survey streamflow-gaging station and number used for estimates of peak-discharge frequency values
- 2109 Lake and determination site identification number



**Figure 42.** Location of streamflow-statistics determination sites, associated identification numbers, and U.S. Geological Survey streamflow-gaging stations used in the flow-duration and peak-discharge frequency analyses for Gove County.

**Table 38.** Estimated flow-duration values, mean flow values, and peak-discharge frequency values for controlled and uncontrolled flow stream segments on the 1999 Kansas Surface Water Register for Gove County.

[KSWR, Kansas Surface Water Register; CUSEGA, catalog unit segment number alpha; mi<sup>2</sup>, square miles; ft<sup>3</sup>/s, cubic feet per second; HYDRO, lake or other hydrologic structure; NA, not applicable; NRDitch, irrigation ditch; NRTribal, tribal stream]

Determination site identification number (fig. 42)	KSWR CUSEGA number	Stream segment by county (table 112)				Stream name	Contributing drainage area (mi <sup>2</sup> )	Estimated flow-duration values (ft <sup>3</sup> /s) for indicated percentage of time flow equaled or exceeded				
		1st	2nd	3rd	4th			90 percent	75 percent	50 percent	25 percent	10 percent
		1602	1026000922	GO	GH			TR	Plum Creek	26.3	0	0
1651	102600091061	GO	TR		Unnamed tributary, Gove 1	24.2	0	0	0	.01	.01	
1655	102600077	GO			Big Creek	73.9	.01	.07	.14	.25	.49	
1665	102600055	GO	LG		North Branch Hackberry Creek	81.4	0	0	0	0	0	
1726	102600077	GO			Big Creek	130	.04	.22	.42	.76	1.52	
1746	HYDRO	GO			HYDRO	101	NA	NA	NA	NA	NA	
1747	102600055	GO			North Branch Hackberry Creek	98.8	0	0	0	0	0	
1774	102600056	GO	LG		Middle Branch Hackberry Creek	146	0	0	0	0	0	
1795	102600056	GO			Middle Branch Hackberry Creek	157	0	0	0	0	0	
1813	102600077	GO			Big Creek	164	.06	.35	.67	1.22	3.83	
1838	102600056	GO			Middle Branch Hackberry Creek	175	0	0	0	0	0	
1845	102600058	GO			West Spring Creek	23.0	0	0	0	0	0	
1852	102600055	GO			North Branch Hackberry Creek	111	0	0	0	0	0	
1856	102600056	GO			Middle Branch Hackberry Creek	176	0	0	0	0	0	
1872	102600077	GO	TR		Big Creek	186	.08	.45	.86	1.69	5.26	
1878	102600054	GO			Middle Branch Hackberry Creek	289	0	0	0	0	.82	
1887	102600053	GO			Hackberry Creek	389	0	0	0	.38	2.98	
1889	102600057	GO	LG		South Branch Hackberry Creek	59.5	0	0	0	0	0	
1918	102600057	GO			South Branch Hackberry Creek	87.6	0	0	0	0	0	
1928	102600057	GO			South Branch Hackberry Creek	94.3	0	0	0	0	0	
1958	102600053	GO			Hackberry Creek	446	0	0	0	1.13	4.83	
1961	102600052	GO			Spring Creek	40.2	0	0	0	0	0	
1992	102600053	GO			Hackberry Creek	477	0	0	.16	1.60	5.96	
1999	1026000318	GO	LG		Plum Creek	83.1	0	0	0	0	0	
2014	102600052	GO			Spring Creek	52.0	0	0	0	0	0	
2035	102600053	GO			Hackberry Creek	510	0	0	.35	2.12	7.25	
2039	102600053	GO			Hackberry Creek	520	0	0	.41	2.30	7.66	
2074	1026000318	GO			Plum Creek	123	0	0	0	0	0	
2079	1026000315	GO			Indian Creek	47.7	0	0	0	0	0	
2108	1026000315	GO			Indian Creek	66.5	0	0	0	0	0	
2109	HYDRO	GO			HYDRO	68.3	NA	NA	NA	NA	NA	
2116	102600051	GO	TR		Hackberry Creek	622	0	0	.95	3.83	11.5	
2152	1026000318	GO			Plum Creek	156	0	0	0	0	.14	
2224	1026000321	GO	LG		Smoky Hill River	3,770	0	.11	1.50	6.00	22.0	
2234	1026000315	GO			Indian Creek	105	0	0	0	0	0	
2236	1026000314	GO			Smoky Hill River	4,470	0	.05	1.73	10.1	33.2	
2239	1026000314	GO	TR		Smoky Hill River	4,500	0	.08	1.81	10.4	34.1	
2246	1026000320	GO			Smoky Hill River	3,850	0	.09	1.50	6.41	23.1	

**Table 38.** Estimated flow-duration values, mean flow values, and peak-discharge frequency values for controlled and uncontrolled flow stream segments on the 1999 Kansas Surface Water Register for Gove County.—Continued

[KSWR, Kansas Surface Water Register; CUSEGA, catalog unit segment number alpha; mi<sup>2</sup>, square miles; ft<sup>3</sup>/s, cubic feet per second; HYDRO, lake or other hydrologic structure; NA, not applicable; NRDitch, irrigation ditch; NRTribal, tribal stream]

Determination site identification number (fig. 42)	Estimated mean flow (ft <sup>3</sup> /s)	Estimated peak discharge (ft <sup>3</sup> /s) for indicated peak-discharge frequency					
		2-year	5-year	10-year	25-year	50-year	100-year
1602	0.61	568	1,700	2,870	4,860	6,660	8,820
1651	.36	543	1,620	2,730	4,620	6,340	8,380
1655	1.13	355	1,190	2,170	3,970	5,780	8,010
1665	.23	294	1,030	1,910	3,570	5,280	7,420
1726	4.74	571	1,880	3,400	6,220	9,090	12,600
1746	NA	NA	NA	NA	NA	NA	NA
1747	.73	326	1,140	2,120	3,980	5,910	8,360
1774	.87	295	1,120	2,190	4,320	6,620	9,670
1795	1.14	306	1,170	2,290	4,540	6,990	10,200
1813	7.71	724	2,360	4,260	7,790	11,400	15,900
1838	1.63	332	1,270	2,490	4,950	7,660	11,300
1845	0	403	1,280	2,220	3,860	5,380	7,210
1852	1.11	354	1,230	2,300	4,310	6,410	9,090
1856	1.68	334	1,280	2,510	4,990	7,720	11,400
1872	9.43	811	2,650	4,790	8,790	12,900	18,100
1878	3.98	433	1,760	3,580	7,500	12,000	18,300
1887	6.12	476	2,130	4,590	10,200	17,000	26,900
1889	0	269	868	1,550	2,800	4,050	5,580
1918	.63	397	1,190	2,050	3,590	5,110	6,970
1928	.87	412	1,250	2,170	3,830	5,500	7,570
1958	7.82	508	2,340	5,100	11,500	19,300	30,600
1961	.82	393	1,200	2,090	3,610	5,080	6,810
1992	8.84	546	2,450	5,290	11,800	19,800	31,200
1999	.55	313	1,060	1,930	3,520	5,100	7,030
2014	1.18	451	1,370	2,370	4,090	5,750	7,700
2035	9.95	578	2,550	5,450	12,100	20,200	31,800
2039	10.3	582	2,560	5,490	12,200	20,200	31,900
2074	1.82	403	1,320	2,380	4,290	6,180	8,480
2079	.44	380	1,180	2,060	3,580	5,060	6,800
2108	1.04	400	1,260	2,220	3,900	5,540	7,500
2109	NA	NA	NA	NA	NA	NA	NA
2116	13.6	715	2,940	6,120	13,200	21,700	33,900
2152	2.80	464	1,500	2,690	4,810	6,910	9,460
2224	23.9	1,510	6,400	13,000	26,900	42,200	62,500
2234	2.37	484	1,520	2,670	4,700	6,680	9,060
2236	33.4	1,870	7,030	13,700	27,400	42,300	62,100
2239	34.0	1,880	7,050	13,700	27,400	42,300	62,000
2246	24.9	1,550	6,470	13,100	27,000	42,200	62,400

**Table 38.** Estimated flow-duration values, mean flow values, and peak-discharge frequency values for controlled and uncontrolled flow stream segments on the 1999 Kansas Surface Water Register for Gove County.—Continued

[KSWR, Kansas Surface Water Register; CUSEGA, catalog unit segment number alpha; mi<sup>2</sup>, square miles; ft<sup>3</sup>/s, cubic feet per second; HYDRO, lake or other hydrologic structure; NA, not applicable; NRDitch, irrigation ditch; NRTribal, tribal stream]

Determination site identification number (fig. 42)	KSWR CUSEGA number	Stream segment by county (table 112)				Stream name	Contributing drainage area (mi <sup>2</sup> )	Estimated flow-duration values (ft <sup>3</sup> /s) for indicated percentage of time flow equaled or exceeded					
		1st	2nd	3rd	4th			90 percent	75 percent	50 percent	25 percent	10 percent	
		2253	1026000318	GO						Plum Creek	185	0	0
2255	1026000314	GO				Smoky Hill River	4,440	0	.02	1.65	9.76	32.4	
2261	1026000320	GO				Smoky Hill River	3,860	0	.08	1.49	6.46	23.3	
2264	1026000318	GO				Plum Creek	186	0	0	0	0	1.12	
2266	1026000316	GO				Smoky Hill River	4,290	0	0	1.46	8.54	29.1	
2268	1026000326	GO				Salt Creek	121	0	0	0	0	0	
2270	1026000316	GO				Smoky Hill River	4,320	0	0	1.55	8.95	30.2	
2271	HYDRO	GO				HYDRO	120	NA	NA	NA	NA	NA	
2276	1026000319	GO				Smoky Hill River	3,990	0	.01	1.43	6.94	24.7	
2291	1026000319	GO				Smoky Hill River	4,050	0	.01	1.44	7.31	25.7	
2304	1026000317	GO				Smoky Hill River	4,290	0	0	1.46	8.54	29.1	
2336	1026000325	GO	LG			Hell Creek	54.7	0	0	0	0	0	
2345	1026000326	GO				Salt Creek	120	0	0	0	0	0	
2400	1026000337	GO	NS			Sand Creek	16.0	0	0	0	0	0	
2405	1026000338	GO	NS			Big Windy Creek	20.1	0	0	0	0	0	
2430	1026000336	GO	LE			Cheyenne Creek	50.8	0	0	0	0	0	
2451	1026000327	GO	LE			Unnamed tributary, Gove 2	34.2	0	0	0	0	0	
2458	1026000335	GO	LE			East Salt Creek	20.1	0	0	0	0	0	
2461	1026000326	GO	LE	SC		Salt Creek	87.3	0	0	0	0	0	

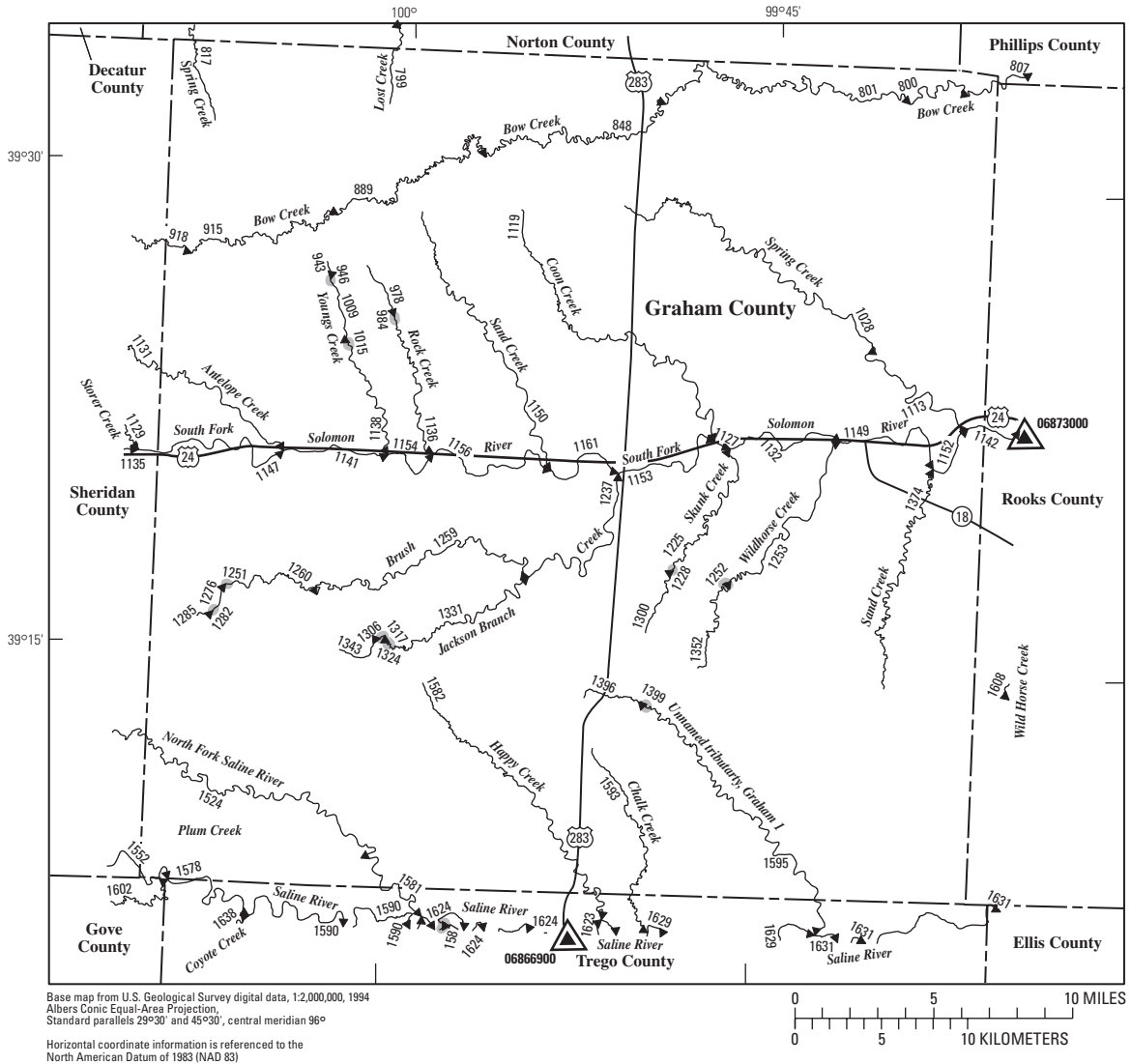


**Table 38.** Estimated flow-duration values, mean flow values, and peak-discharge frequency values for controlled and uncontrolled flow stream segments on the 1999 Kansas Surface Water Register for Gove County.—Continued

[KSWR, Kansas Surface Water Register; CUSEGA, catalog unit segment number alpha; mi<sup>2</sup>, square miles; ft<sup>3</sup>/s, cubic feet per second; HYDRO, lake or other hydrologic structure; NA, not applicable; NRDitch, irrigation ditch; NRTribal, tribal stream]

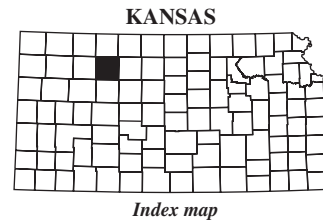
Determination site identification number (fig. 42)	Estimated mean flow (ft <sup>3</sup> /s)	Estimated peak discharge (ft <sup>3</sup> /s) for indicated peak-discharge frequency					
		2-year	5-year	10-year	25-year	50-year	100-year
2253	3.70	522	1,670	2,970	5,290	7,580	10,400
2255	32.8	1,850	7,010	13,700	27,400	42,300	62,100
2261	25.0	1,560	6,490	13,100	27,000	42,200	62,500
2264	3.73	522	1,670	2,970	5,290	7,580	10,400
2266	30.2	1,770	6,850	13,500	27,200	42,300	62,200
2268	2.02	592	1,800	3,120	5,420	7,650	10,300
2270	31.0	1,780	6,880	13,500	27,300	42,300	62,100
2271	NA	NA	NA	NA	NA	NA	NA
2276	26.4	1,630	6,620	13,300	27,100	42,300	62,500
2291	27.3	1,660	6,670	13,300	27,200	42,300	62,400
2304	30.2	1,770	6,860	13,500	27,300	42,300	62,200
2336	.53	408	1,250	2,170	3,760	5,300	7,100
2345	1.98	589	1,790	3,110	5,410	7,630	10,300
2400	0	359	1,110	1,890	3,240	4,470	5,940
2405	0	409	1,270	2,170	3,730	5,150	6,860
2430	.50	357	1,120	1,950	3,410	4,830	6,500
2451	.56	369	1,100	1,880	3,200	4,460	5,920
2458	0	353	1,140	1,980	3,440	4,790	6,420
2461	.96	499	1,540	2,690	4,690	6,640	8,950





**EXPLANATION**

- ◀ 1578 Location of streamflow-statistics determination site (small triangle) and associated identification number—small triangle points in downstream direction
- 06866900 ▲ U.S. Geological Survey streamflow-gaging station and number used for estimates of flow duration
- 06873000 ▲ U.S. Geological Survey streamflow-gaging station and number used for estimates of peak-discharge frequency values
- 1399 Lake and determination site identification number



**Figure 43.** Location of streamflow-statistics determination sites, associated identification numbers, and U.S. Geological Survey streamflow-gaging stations used in the flow-duration and peak-discharge frequency analyses for Graham County.

**250 Estimates of Flow Duration, Mean Flow, and Peak-Discharge Frequency Values for Kansas Stream Locations**

**Table 39.** Estimated flow-duration values, mean flow values, and peak-discharge frequency values for controlled and uncontrolled flow stream segments on the 1999 Kansas Surface Water Register for Graham County.

[KSWR, Kansas Surface Water Register; CUSEGA, catalog unit segment number alpha; mi<sup>2</sup>, square miles; ft<sup>3</sup>/s, cubic feet per second; HYDRO, lake or other hydrologic structure; NA, not applicable; NRDitch, irrigation ditch; NRTribal, tribal stream]

Determination site identification number (fig. 43)	KSWR CUSEGA number	Stream segment by county (table 112)				Stream name	Contributing drainage area (mi <sup>2</sup> )	Estimated flow-duration values (ft <sup>3</sup> /s) for indicated percentage of time flow equaled or exceeded					
		1st	2nd	3rd	4th			90 percent	75 percent	50 percent	25 percent	10 percent	
		799	1026001120	GH	NT					Lost Creek	24.6	0	0
800	1026001115	GH				Bow Creek	331	.23	1.03	2.44	4.45	8.43	
801	1026001115	GH	NT			Bow Creek	314	.21	.93	2.10	3.84	7.38	
807	1026001115	GH	PL	RO		Bow Creek	404	.34	1.74	4.12	7.40	13.5	
817	1026001119	GH	NT			Spring Creek	28.0	0	0	0	0	0	
848	1026001115	GH				Bow Creek	261	.14	.64	1.14	2.10	4.39	
889	1026001115	GH				Bow Creek	232	.11	.51	.68	1.24	2.89	
915	1026001115	GH				Bow Creek	210	.09	.42	.56	.70	1.97	
918	1026001115	GH	SD			Bow Creek	185	.07	.14	.21	.28	1.03	
943	1026001321	GH				Youngs Creek	2.12	0	0	0	0	0	
946	HYDRO	GH				HYDRO	2.21	NA	NA	NA	NA	NA	
978	1026001322	GH				Rock Creek	5.78	0	0	0	0	0	
984	HYDRO	GH				HYDRO	5.83	NA	NA	NA	NA	NA	
1009	1026001321	GH				Youngs Creek	10.6	0	0	0	0	0	
1015	HYDRO	GH				HYDRO	10.7	NA	NA	NA	NA	NA	
1028	102600135	GH				Spring Creek	66.3	0	0	.03	.09	.66	
1113	102600135	GH				Spring Creek	84.1	0	0	.05	.35	1.92	
1119	102600138	GH				Coon Creek	47.3	0	0	.02	.04	.08	
1127	102600137	GH				South Fork Solomon River	784	.02	.16	8.10	22.1	46.6	
1131	1026001313	GH	SD			Antelope Creek	28.7	0	0	.01	.02	.03	
1132	102600137	GH				South Fork Solomon River	816	.02	.28	8.83	23.9	50.4	
1136	1026001322	GH				Rock Creek	16.2	0	0	0	.01	.01	
1138	1026001321	GH				Youngs Creek	20.0	0	0	0	.01	.01	
1141	1026001312	GH				South Fork Solomon River	530	0	0	3.19	9.38	20.6	
1142	102600134	GH	RO			South Fork Solomon River	1,020	.03	1.00	14.0	37.0	77.0	
1147	1026001314	GH	SD			South Fork Solomon River	490	0	0	2.54	7.69	17.1	
1149	102600136	GH				South Fork Solomon River	862	.02	.44	9.92	26.7	55.9	
1150	1026001311	GH				Sand Creek	28.9	0	0	.01	.02	.03	
1152	102600136	GH				South Fork Solomon River	921	.02	.66	11.4	30.5	63.7	
1153	102600139	GH				South Fork Solomon River	736	0	.01	7.03	19.3	41.0	
1154	1026001312	GH				South Fork Solomon River	555	0	0	3.61	10.5	22.9	
1156	1026001312	GH				South Fork Solomon River	581	0	0	4.09	11.7	25.4	
1161	1026001310	GH				South Fork Solomon River	619	0	0	4.78	13.5	29.1	
1225	1026001326	GH				Skunk Creek	20.3	0	0	0	.01	.01	
1228	HYDRO	GH				HYDRO	8.89	NA	NA	NA	NA	NA	
1237	1026001317	GH				Brush Creek	110	0	0	.09	.55	2.36	
1251	HYDRO	GH				HYDRO	24.1	NA	NA	NA	NA	NA	
1252	HYDRO	GH				HYDRO	16.8	NA	NA	NA	NA	NA	

**Table 39.** Estimated flow-duration values, mean flow values, and peak-discharge frequency values for controlled and uncontrolled flow stream segments on the 1999 Kansas Surface Water Register for Graham County.—Continued[KSWR, Kansas Surface Water Register; CUSEGA, catalog unit segment number alpha; mi<sup>2</sup>, square miles; ft<sup>3</sup>/s, cubic feet per second; HYDRO, lake or other hydrologic structure; NA, not applicable; NRDitch, irrigation ditch; NRTribal, tribal stream]

Determination site identification number (fig. 43)	Estimated mean flow (ft <sup>3</sup> /s)	Estimated peak discharge (ft <sup>3</sup> /s) for indicated peak-discharge frequency					
		2-year	5-year	10-year	25-year	50-year	100-year
799	0.05	452	1,410	2,430	4,190	5,800	7,740
800	8.29	694	2,280	4,140	7,610	11,200	15,600
801	7.66	670	2,210	4,000	7,350	10,800	15,000
807	11.2	817	2,650	4,790	8,820	13,000	18,200
817	.14	490	1,530	2,640	4,550	6,310	8,420
848	5.77	602	1,990	3,600	6,600	9,640	13,400
889	4.73	578	1,900	3,440	6,270	9,130	12,700
915	4.08	576	1,880	3,380	6,130	8,890	12,300
918	3.37	556	1,800	3,230	5,830	8,430	11,600
943	0	111	329	551	921	1,260	1,650
946	NA	NA	NA	NA	NA	NA	NA
978	0	200	603	1,020	1,720	2,360	3,120
984	NA	NA	NA	NA	NA	NA	NA
1009	0	283	866	1,470	2,510	3,460	4,580
1015	NA	NA	NA	NA	NA	NA	NA
1028	2.69	576	1,690	2,870	4,900	6,820	9,080
1113	3.76	650	1,890	3,210	5,450	7,590	10,100
1119	1.55	480	1,420	2,410	4,110	5,730	7,610
1127	34.8	2,010	6,070	10,700	19,200	27,800	38,800
1131	.23	493	1,550	2,670	4,610	6,400	8,540
1132	37.2	2,120	6,370	11,200	20,100	29,200	40,700
1136	0	362	1,120	1,910	3,270	4,510	6,000
1138	.01	407	1,260	2,160	3,710	5,140	6,840
1141	17.7	1,260	3,910	6,920	12,500	18,100	25,100
1142	53.8	2,800	8,330	14,600	26,300	38,300	53,600
1147	15.3	1,150	3,580	6,370	11,500	16,700	23,200
1149	40.7	2,260	6,780	11,900	21,400	31,100	43,400
1150	.37	511	1,590	2,740	4,710	6,520	8,700
1152	45.5	2,460	7,350	12,900	23,200	33,700	47,100
1153	31.2	1,870	5,650	9,930	17,800	25,900	36,000
1154	19.3	1,330	4,100	7,260	13,100	19,000	26,300
1156	20.9	1,410	4,340	7,660	13,800	20,000	27,700
1161	23.4	1,530	4,660	8,220	14,800	21,400	29,700
1225	.01	421	1,300	2,220	3,810	5,250	6,990
1228	NA	NA	NA	NA	NA	NA	NA
1237	4.17	640	1,910	3,290	5,670	7,970	10,700
1251	NA	NA	NA	NA	NA	NA	NA
1252	NA	NA	NA	NA	NA	NA	NA

**252 Estimates of Flow Duration, Mean Flow, and Peak-Discharge Frequency Values for Kansas Stream Locations**

**Table 39.** Estimated flow-duration values, mean flow values, and peak-discharge frequency values for controlled and uncontrolled flow stream segments on the 1999 Kansas Surface Water Register for Graham County.—Continued

[KSWR, Kansas Surface Water Register; CUSEGA, catalog unit segment number alpha; mi<sup>2</sup>, square miles; ft<sup>3</sup>/s, cubic feet per second; HYDRO, lake or other hydrologic structure; NA, not applicable; NRDitch, irrigation ditch; NRTribal, tribal stream]

Determination site identification number (fig. 43)	KSWR CUSEGA number	Stream segment by county (table 112)				Stream name	Contributing drainage area (mi <sup>2</sup> )	Estimated flow-duration values (ft <sup>3</sup> /s) for indicated percentage of time flow equaled or exceeded				
		1st	2nd	3rd	4th			90 percent	75 percent	50 percent	25 percent	10 percent
		1253	1026001318	GH						Wildhorse Creek	37.8	0
1259	1026001317	GH				Brush Creek	61.8	0	0	.03	.08	.13
1260	1026001317	GH				Brush Creek	37.4	0	0	.01	.03	.05
1276	1026001317	GH				Brush Creek	24.0	0	0	0	.01	.02
1282	HYDRO	GH				HYDRO	17.8	NA	NA	NA	NA	NA
1285	1026001317	GH				Brush Creek	17.5	0	0	0	.01	.01
1300	1026001326	GH				Skunk Creek	8.89	0	0	0	0	0
1306	HYDRO	GH				HYDRO	14.2	NA	NA	NA	NA	NA
1317	1026001324	GH				Jackson Branch	14.9	0	0	0	0	.01
1324	HYDRO	GH				HYDRO	14.9	NA	NA	NA	NA	NA
1331	1026001324	GH				Jackson Branch	32.0	0	0	.01	.02	.04
1343	1026001324	GH				Jackson Branch	13.8	0	0	0	0	.01
1352	1026001318	GH				Wildhorse Creek	16.4	0	0	0	.01	.01
1374	1026001327	GH				Sand Creek	54.5	0	0	.02	.06	.10
1396	1026000913	GH				Unnamed tributary, Graham 1	12.9	0	0	0	0	.01
1399	HYDRO	GH				HYDRO	12.9	NA	NA	NA	NA	NA
1524	1026000915	GH	SD			North Fork Saline River	122	0	0	.01	.18	1.71
1552	1026000916	GH	SD			Saline River	456	0	0	.42	3.83	8.32
1578	1026000916	GH	TR			Saline River	490	0	0	.73	4.92	10.5
1581	1026000915	GH	TR			North Fork Saline River	130	0	0	.01	.33	2.07
1582	1026000925	GH	TR			Happy Creek	43.5	0	.01	.01	.03	.06
1593	1026000926	GH	TR			Chalk Creek	21.5	0	0	0	.01	.02
1595	1026000913	GH	TR			Unnamed tributary, Graham 1	60.0	.01	.01	.03	.06	.11

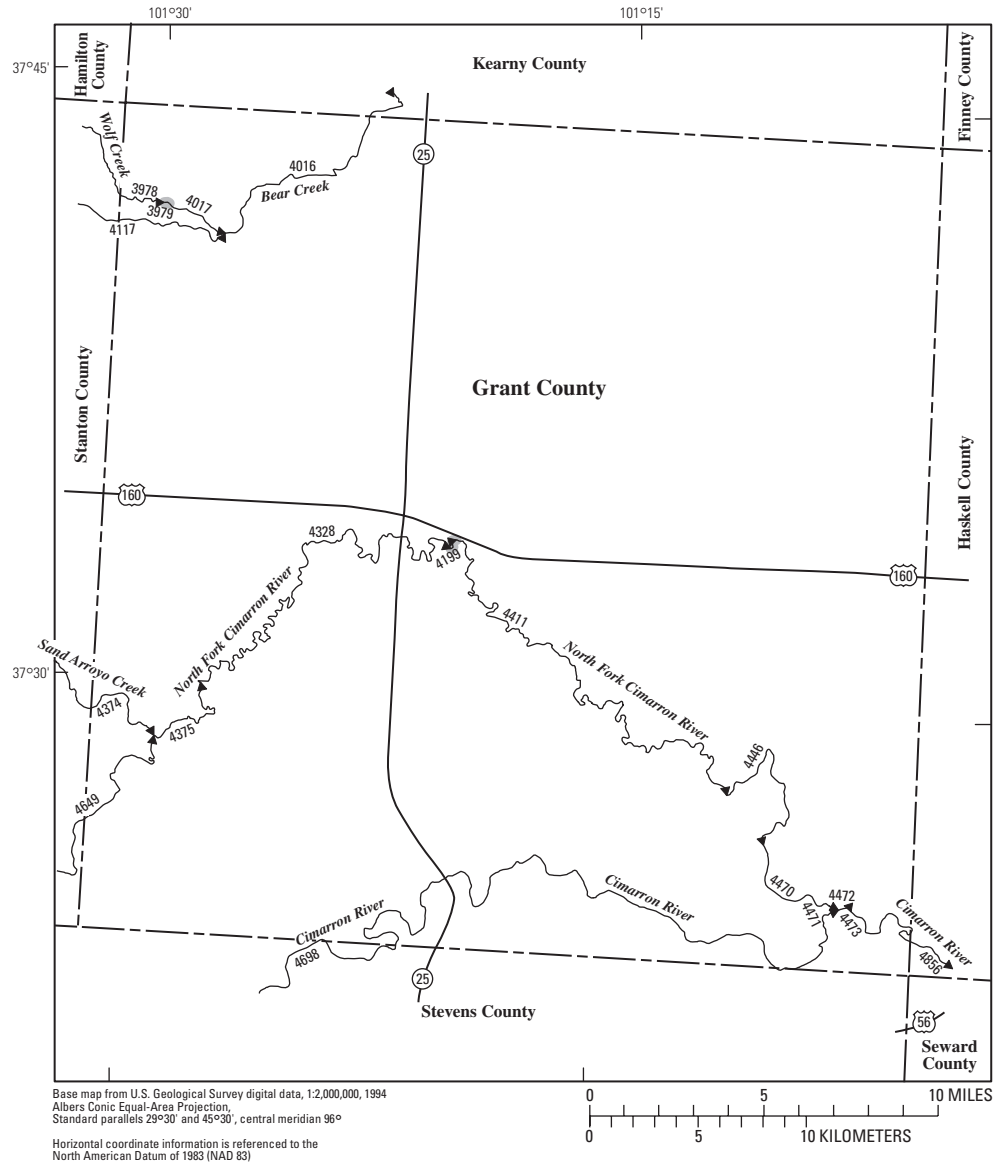
**Table 39.** Estimated flow-duration values, mean flow values, and peak-discharge frequency values for controlled and uncontrolled flow stream segments on the 1999 Kansas Surface Water Register for Graham County.—Continued

[KSWR, Kansas Surface Water Register; CUSEGA, catalog unit segment number alpha; mi<sup>2</sup>, square miles; ft<sup>3</sup>/s, cubic feet per second; HYDRO, lake or other hydrologic structure; NA, not applicable; NRDitch, irrigation ditch; NRTribal, tribal stream]

Determination site identification number (fig. 43)	Estimated mean flow (ft <sup>3</sup> /s)	Estimated peak discharge (ft <sup>3</sup> /s) for indicated peak-discharge frequency					
		2-year	5-year	10-year	25-year	50-year	100-year
1253	0.82	420	1,250	2,130	3,630	5,050	6,710
1259	1.85	438	1,350	2,360	4,120	5,820	7,840
1260	.60	353	1,100	1,920	3,340	4,710	6,330
1276	.01	451	1,410	2,420	4,160	5,750	7,680
1282	NA	NA	NA	NA	NA	NA	NA
1285	.01	375	1,160	1,990	3,410	4,710	6,260
1300	0	253	774	1,320	2,240	3,080	4,080
1306	NA	NA	NA	NA	NA	NA	NA
1317	0	334	1,040	1,770	3,040	4,200	5,600
1324	NA	NA	NA	NA	NA	NA	NA
1331	.30	344	1,060	1,840	3,200	4,500	6,030
1343	0	320	992	1,700	2,910	4,020	5,350
1352	0	364	1,120	1,920	3,290	4,540	6,030
1374	2.11	516	1,510	2,580	4,390	6,110	8,120
1396	0	303	940	1,610	2,760	3,820	5,080
1399	NA	NA	NA	NA	NA	NA	NA
1524	3.98	626	1,920	3,340	5,840	8,260	11,200
1552	9.79	1,440	4,460	7,820	14,000	20,000	27,500
1578	11.5	1,610	4,940	8,640	15,400	22,000	30,200
1581	4.29	650	1,990	3,450	6,040	8,550	11,600
1582	.55	347	1,100	1,920	3,380	4,800	6,480
1593	.01	398	1,260	2,170	3,750	5,200	6,950
1595	1.47	416	1,280	2,230	3,890	5,490	7,380

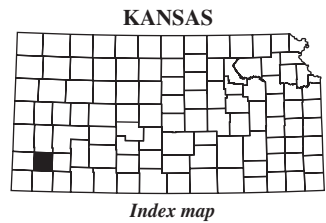






**EXPLANATION**

- ◀ 4698 Location of streamflow-statistics determination site (small triangle) and associated identification number—small triangle points in downstream direction
- 07139500 ▲ U.S. Geological Survey streamflow-gaging station and number used for estimates of flow duration
- 07139800 △ U.S. Geological Survey streamflow-gaging station and number used for estimates of peak-discharge frequency values
- 4199 Lake and determination site identification number



**Figure 44.** Location of streamflow-statistics determination sites, associated identification numbers, and U.S. Geological Survey streamflow-gaging stations used in the flow-duration and peak-discharge frequency analyses for Grant County.

**Table 40.** Estimated flow-duration values, mean flow values, and peak-discharge frequency values for controlled and uncontrolled flow stream segments on the 1999 Kansas Surface Water Register for Grant County.

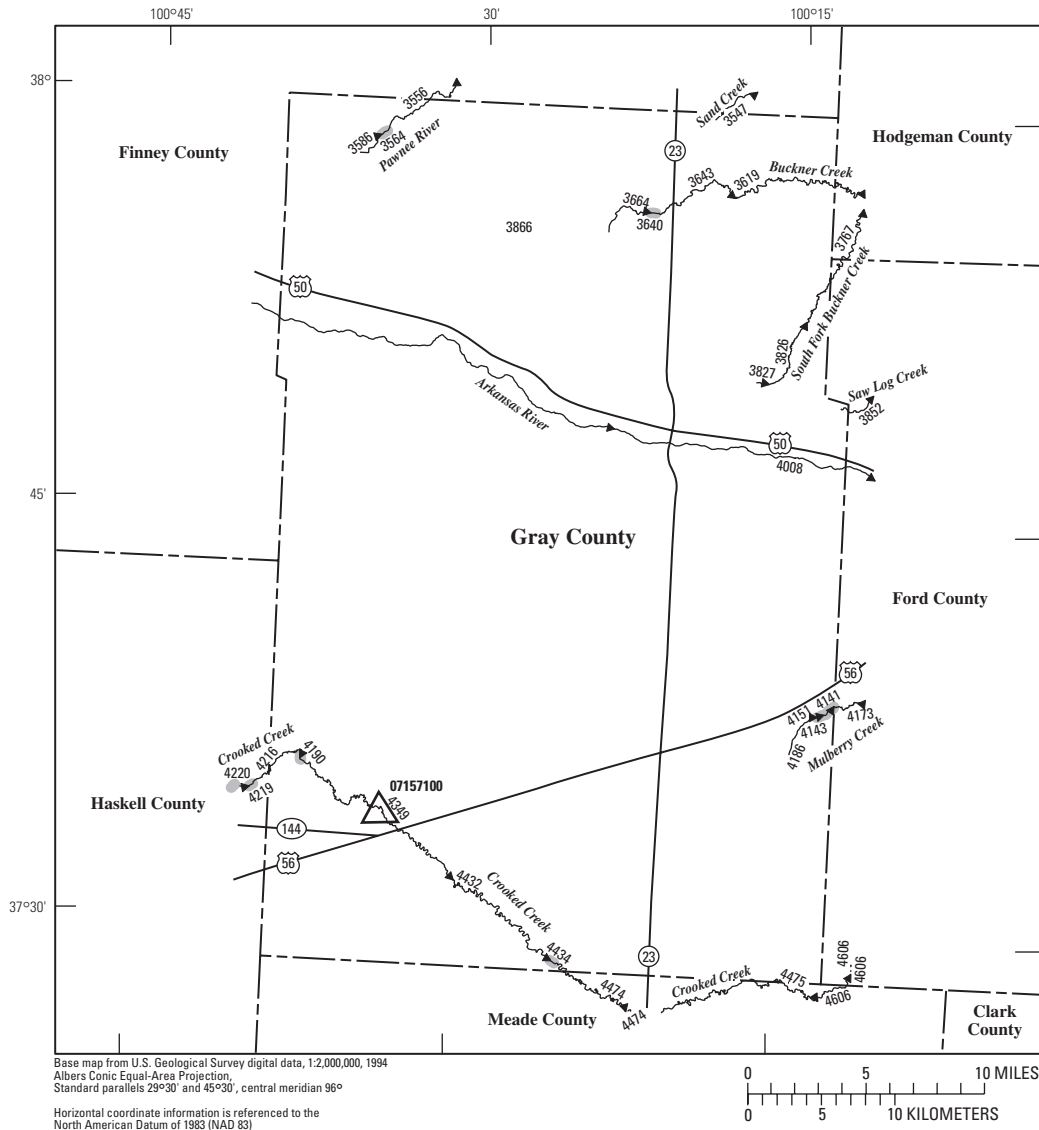
[KSWR, Kansas Surface Water Register; CUSEGA, catalog unit segment number alpha; mi<sup>2</sup>, square miles; ft<sup>3</sup>/s, cubic feet per second; HYDRO, lake or other hydrologic structure; NA, not applicable; NRDitch, irrigation ditch; NRTribal, tribal stream]

Determination site identification number (fig. 44)	KSWR CUSEGA number	Stream segment by county (table 112)				Stream name	Contributing drainage area (mi <sup>2</sup> )	Estimated flow-duration values (ft <sup>3</sup> /s) for indicated percentage of time flow equaled or exceeded				
		1st	2nd	3rd	4th			90 percent	75 percent	50 percent	25 percent	10 percent
		3978	110400052	GT	HM			ST	Wolf Creek	87.0	0	0
3979	HYDRO	GT			HYDRO	87.1	NA	NA	NA	NA	NA	
4016	110400051	GT	KE		Bear Creek	1,420	0	0	0	0	.91	
4017	110400052	GT			Wolf Creek	90.5	0	0	0	0	0	
4117	110400051	GT	ST		Bear Creek	1,090	0	0	0	0	0	
4199	HYDRO	GT			HYDRO	1,720	NA	NA	NA	NA	NA	
4328	110400031	GT			North Fork Cimarron River	1,710	3.96	4.71	5.65	6.10	6.39	
4374	110400041	GT	ST		Sand Arroyo Creek	853	.42	.49	.59	.64	1.28	
4375	110400031	GT			North Fork Cimarron River	1,630	3.63	4.32	5.18	5.59	5.85	
4411	110400031	GT			North Fork Cimarron River	1,860	4.54	5.41	6.48	7.21	7.49	
4446	110400031	GT			North Fork Cimarron River	2,020	5.21	6.21	7.44	8.74	9.45	
4470	110400031	GT			North Fork Cimarron River	2,030	5.24	6.24	7.48	8.82	9.56	
4471	110400031	GT			North Fork Cimarron River	2,030	5.24	6.24	7.48	8.82	9.56	
4472	110400062	GT			Cimarron River	5,750	16.9	21.8	27.6	36.1	43.9	
4473	110400062	GT			Cimarron River	5,750	16.9	21.9	27.7	36.1	43.9	
4649	110400032	GT	MT	ST	SV	North Fork Cimarron River	768	1.08	1.29	1.54	1.67	3.34
4698	110400021	GT	SV			Cimarron River	3,720	2.20	2.97	3.80	5.13	7.88
4856	110400062	GT	HS	SW		Cimarron River	6,260	21.2	27.4	34.9	46.6	58.5

**Table 40.** Estimated flow-duration values, mean flow values, and peak-discharge frequency values for controlled and uncontrolled flow stream segments on the 1999 Kansas Surface Water Register for Grant County.—Continued[KSWR, Kansas Surface Water Register; CUSEGA, catalog unit segment number alpha; mi<sup>2</sup>, square miles; ft<sup>3</sup>/s, cubic feet per second; HYDRO, lake or other hydrologic structure; NA, not applicable; NRDitch, irrigation ditch; NRTribal, tribal stream]

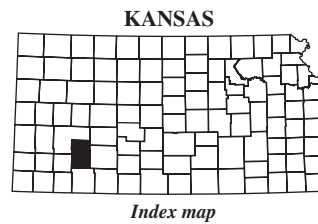
Determination site identification number (fig. 44)	Estimated mean flow (ft <sup>3</sup> /s)	Estimated peak discharge (ft <sup>3</sup> /s) for indicated peak-discharge frequency					
		2-year	5-year	10-year	25-year	50-year	100-year
3978	0	216	802	1,520	2,880	4,280	6,020
3979	NA	NA	NA	NA	NA	NA	NA
4016	5.36	807	3,180	6,140	11,800	17,400	24,300
4017	0	199	753	1,440	2,750	4,110	5,810
4117	3.35	724	3,020	5,940	11,600	17,300	24,400
4199	NA	NA	NA	NA	NA	NA	NA
4328	6.39	511	1,680	3,020	5,480	7,930	10,900
4374	.63	166	626	1,170	2,200	3,220	4,470
4375	5.85	525	1,700	3,040	5,470	7,870	10,800
4411	7.54	533	1,750	3,170	5,760	8,350	11,500
4446	9.16	619	2,000	3,590	6,490	9,380	12,900
4470	9.25	613	1,990	3,570	6,450	9,320	12,900
4471	9.25	613	1,990	3,560	6,450	9,310	12,900
4472	35.3	1,850	5,480	9,340	16,000	22,300	29,900
4473	35.3	1,850	5,480	9,340	16,000	22,300	29,900
4649	7.16	976	4,030	8,040	16,200	24,800	36,100
4698	14.6	1,350	4,080	6,940	11,900	16,400	21,800
4856	44.2	1,980	5,810	9,860	16,900	23,400	31,400





**EXPLANATION**

- ◀ 4432 Location of streamflow-statistics determination site (small triangle) and associated identification number—small triangle points in downstream direction
- ▲ 07139500 U.S. Geological Survey streamflow-gaging station and number used for estimates of flow duration
- △ 07157100 U.S. Geological Survey streamflow-gaging station and number used for estimates of peak-discharge frequency values
- 4434 Lake and determination site identification number



**Figure 45.** Location of streamflow-statistics determination sites, associated identification numbers, and U.S. Geological Survey streamflow-gaging stations used in the flow-duration and peak-discharge frequency analyses for Gray County.

**260 Estimates of Flow Duration, Mean Flow, and Peak-Discharge Frequency Values for Kansas Stream Locations**

**Table 41.** Estimated flow-duration values, mean flow values, and peak-discharge frequency values for controlled and uncontrolled flow stream segments on the 1999 Kansas Surface Water Register for Gray County.

[KSWR, Kansas Surface Water Register; CUSEGA, catalog unit segment number alpha; mi<sup>2</sup>, square miles; ft<sup>3</sup>/s, cubic feet per second; HYDRO, lake or other hydrologic structure; NA, not applicable; NRDitch, irrigation ditch; NRtribal, tribal stream]

Determination site identification number (fig. 45)	KSWR CUSEGA number	Stream segment by county (table 112)				Stream name	Contributing drainage area (mi <sup>2</sup> )	Estimated flow-duration values (ft <sup>3</sup> /s) for indicated percentage of time flow equaled or exceeded					
		1st	2nd	3rd	4th			90 percent	75 percent	50 percent	25 percent	10 percent	
		3564	HYDRO	GY						HYDRO	54.8	NA	NA
3586	110300055	GY				Pawnee River	54.1	0	0	0	0	0	0
3619	110300062	GY	HG			Buckner Creek	94.9	0	0	0	0	0	0
3640	HYDRO	GY				HYDRO	48.5	NA	NA	NA	NA	NA	NA
3643	110300062	GY				Buckner Creek	71.5	0	0	0	0	0	0
3664	110300062	GY				Buckner Creek	47.8	0	0	0	0	0	0
3826	110300066	GY				South Fork Buckner Creek	27.2	0	0	0	0	0	0
3827	110300066	GY				South Fork Buckner Creek	12.9	0	0	0	0	0	0
4141	HYDRO	GY				HYDRO	97.6	NA	NA	NA	NA	NA	NA
4143	1103000412	GY				Mulberry Creek	95.8	0	0	0	0	0	0
4151	HYDRO	GY				HYDRO	95.8	NA	NA	NA	NA	NA	NA
4186	1103000412	GY				Mulberry Creek	94.8	0	0	0	0	0	0
4190	HYDRO	GY				HYDRO	378	NA	NA	NA	NA	NA	NA
4216	110400072	GY	HS			Crooked Creek	378	0	10	20	29	58	
4349	110400072	GY				Crooked Creek	489	24	58	66	74	2.41	
4432	110400072	GY				Crooked Creek	562	32	77	1.11	1.62	4.16	
4434	HYDRO	GY				HYDRO	562	NA	NA	NA	NA	NA	NA
4474	110400072	GY	ME			Crooked Creek	606	37	89	1.46	2.22	5.37	
4475	110400072	GY	ME			Crooked Creek	672	46	1.10	2.02	3.13	7.15	

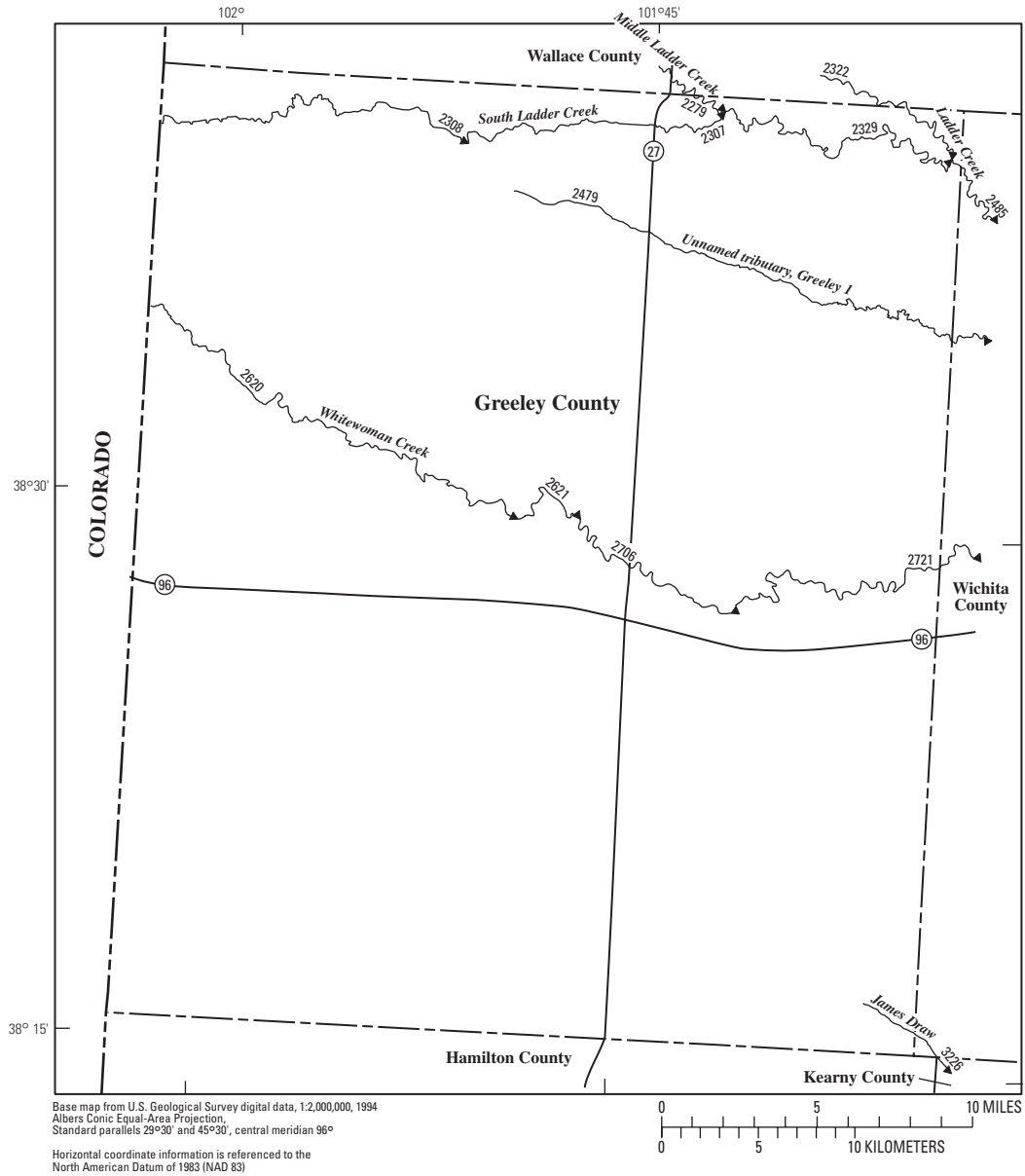
**Table 41.** Estimated flow-duration values, mean flow values, and peak-discharge frequency values for controlled and uncontrolled flow stream segments on the 1999 Kansas Surface Water Register for Gray County.—Continued

[KSWR, Kansas Surface Water Register; CUSEGA, catalog unit segment number alpha; mi<sup>2</sup>, square miles; ft<sup>3</sup>/s, cubic feet per second; HYDRO, lake or other hydrologic structure; NA, not applicable; NRDitch, irrigation ditch; NRTribal, tribal stream]

Determination site identification number (fig. 45)	Estimated mean flow (ft <sup>3</sup> /s)	Estimated peak discharge (ft <sup>3</sup> /s) for indicated peak-discharge frequency					
		2-year	5-year	10-year	25-year	50-year	100-year
3564	NA	NA	NA	NA	NA	NA	NA
3586	0	251	889	1,650	3,060	4,490	6,240
3619	1.11	511	1,660	2,980	5,370	7,730	10,600
3640	NA	NA	NA	NA	NA	NA	NA
3643	.35	460	1,510	2,720	4,900	7,070	9,700
3664	0	310	1,070	1,970	3,640	5,310	7,360
3826	0	545	1,650	2,810	4,780	6,580	8,740
3827	0	361	1,070	1,810	3,040	4,160	5,500
4141	NA	NA	NA	NA	NA	NA	NA
4143	.88	660	1,880	3,150	5,290	7,320	9,660
4151	NA	NA	NA	NA	NA	NA	NA
4186	.86	647	1,850	3,100	5,230	7,230	9,560
4190	NA	NA	NA	NA	NA	NA	NA
4216	3.72	802	2,390	4,060	6,880	9,520	12,500
4349	6.17	488	1,630	2,860	4,960	6,900	9,120
4432	7.93	458	1,640	2,960	5,290	7,500	10,100
4434	NA	NA	NA	NA	NA	NA	NA
4474	9.11	432	1,620	2,990	5,430	7,780	10,600
4475	10.8	447	1,730	3,220	5,920	8,560	11,700

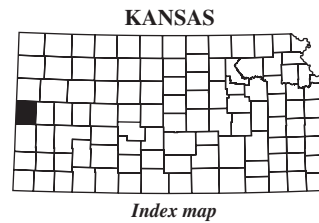






**EXPLANATION**

- ◀ 2341 Location of streamflow-statistics determination site (small triangle) and associated identification number—small triangle points in downstream direction
- 06878500 ▲ U.S. Geological Survey streamflow-gaging station and number used for estimates of flow duration
- 06879200 △ U.S. Geological Survey streamflow-gaging station and number used for estimates of peak-discharge frequency values
- 2121 Lake and determination site identification number



**Figure 46.** Location of streamflow-statistics determination sites, associated identification numbers, and U.S. Geological Survey streamflow-gaging stations used in the flow-duration and peak-discharge frequency analyses for Greeley County.

**Table 42.** Estimated flow-duration values, mean flow values, and peak-discharge frequency values for controlled and uncontrolled flow stream segments on the 1999 Kansas Surface Water Register for Greeley County.

[KSWR, Kansas Surface Water Register; CUSEGA, catalog unit segment number alpha; mi<sup>2</sup>, square miles; ft<sup>3</sup>/s, cubic feet per second; HYDRO, lake or other hydrologic structure; NA, not applicable; NRDitch, irrigation ditch; NRTribal, tribal stream]

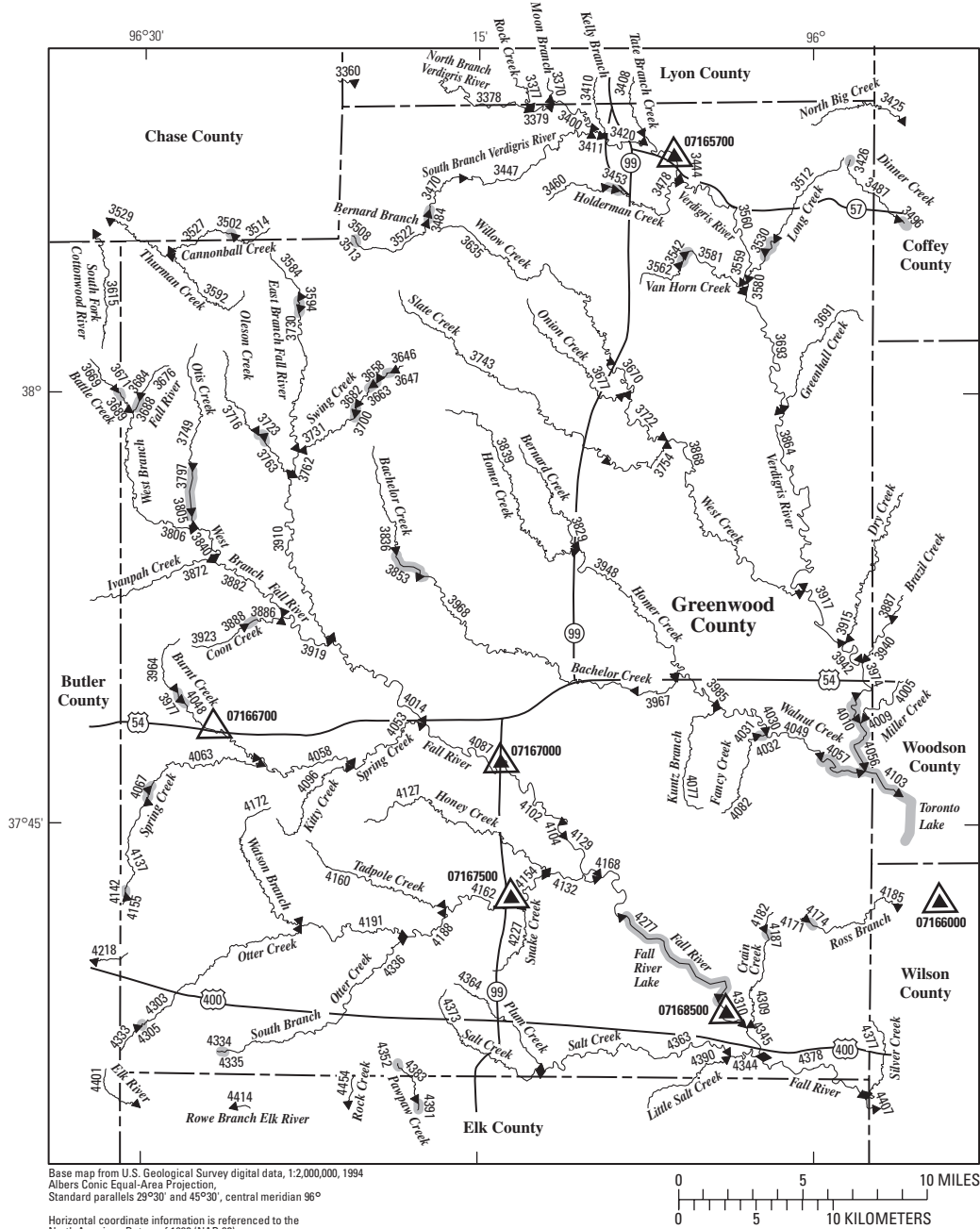
Determination site identification number (fig. 46)	KSWR CUSEGA number	Stream segment by county (table 112)				Stream name	Contributing drainage area (mi <sup>2</sup> )	Estimated flow-duration values (ft <sup>3</sup> /s) for indicated percentage of time flow equaled or exceeded				
		1st	2nd	3rd	4th			90 percent	75 percent	50 percent	25 percent	10 percent
		2279	1026000413	GL	WA					Middle Ladder Creek	82.2	0
2322	102600049	GL	WA			Ladder Creek	269	0	.01	.04	.04	.04
2329	1026000412	GL	WA			South Ladder Creek	350	0	.02	.07	.08	.16
2479	1026000415	GL	WH			Unnamed tributary, Greeley 1	122	0	0	.01	.01	.01
2485	102600048	GL	WH			Ladder Creek	658	0	.06	.26	.27	.54
2721	110300022	GL	WH			Whitewoman Creek	759	0	0	0	0	0
2307	1026000414	GL				South Ladder Creek	244	0	.01	.04	.08	.16
2308	1026000414	GL				South Ladder Creek	220	0	.01	.03	.03	.03
2620	110300022	GL				Whitewoman Creek	517	0	0	0	0	0
2621	110300022	GL				Whitewoman Creek	543	0	0	0	0	0
2706	110300022	GL				Whitewoman Creek	647	0	0	0	0	0
3226	1103000110	GL	HM	KE	WH	James Draw	217	0	0	0	0	0

**Table 42.** Estimated flow-duration values, mean flow values, and peak-discharge frequency values for controlled and uncontrolled flow stream segments on the 1999 Kansas Surface Water Register for Greeley County.—Continued

[KSWR, Kansas Surface Water Register; CUSEGA, catalog unit segment number alpha; mi<sup>2</sup>, square miles; ft<sup>3</sup>/s, cubic feet per second; HYDRO, lake or other hydrologic structure; NA, not applicable; NRDitch, irrigation ditch; NRTribal, tribal stream]

Determination site identification number (fig. 46)	Estimated mean flow (ft <sup>3</sup> /s)	Estimated peak discharge (ft <sup>3</sup> /s) for indicated peak-discharge frequency					
		2-year	5-year	10-year	25-year	50-year	100-year
2279	0	185	702	1,350	2,590	3,870	5,470
2307	.16	279	1,070	2,080	4,040	6,110	8,750
2308	0	254	990	1,930	3,760	5,690	8,150
2322	0	312	1,180	2,270	4,370	6,590	9,410
2329	.16	388	1,440	2,740	5,250	7,880	11,200
2479	0	244	917	1,750	3,360	5,020	7,110
2485	.80	472	1,790	3,460	6,790	10,400	15,100
2620	.13	299	1,370	2,920	6,300	10,200	15,400
2621	.14	291	1,370	2,950	6,440	10,500	16,000
2706	.44	273	1,410	3,160	7,170	11,900	18,400
2721	1.00	232	1,400	3,310	7,870	13,400	21,100
3226	0	305	1,140	2,180	4,180	6,260	8,880



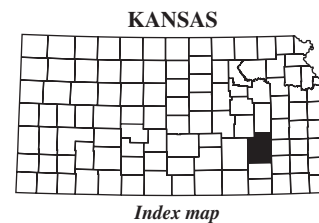


Base map from U.S. Geological Survey digital data, 1:2,000,000, 1994  
 Albers Conic Equal-Area Projection,  
 Standard parallels 29°30' and 45°30', central meridian 96°  
 Horizontal coordinate information is referenced to the  
 North American Datum of 1983 (NAD 83)



**EXPLANATION**

- ◀ 4414 Location of streamflow-statistics determination site (small triangle) and associated identification number—small triangle points in downstream direction
- ▲ 07167500 U.S. Geological Survey streamflow-gaging station and number used for estimates of flow duration
- △ 07166700 U.S. Geological Survey streamflow-gaging station and number used for estimates of peak-discharge frequency values
- 4391 Lake and determination site identification number



**Figure 47.** Location of streamflow-statistics determination sites, associated identification numbers, and U.S. Geological Survey streamflow-gaging stations used in the flow-duration and peak-discharge frequency analyses for Greenwood County.

**Table 43.** Estimated flow-duration values, mean flow values, and peak-discharge frequency values for controlled and uncontrolled flow stream segments on the 1999 Kansas Surface Water Register for Greenwood County.

[KSWR, Kansas Surface Water Register; CUSEGA, catalog unit segment number alpha; mi<sup>2</sup>, square miles; ft<sup>3</sup>/s, cubic feet per second; HYDRO, lake or other hydrologic structure; NA, not applicable; NRDitch, irrigation ditch; NRTribal, tribal stream]

Determination site identification number (fig. 47)	KSWR CUSEGA number	Stream segment by county (table 112)				Stream name	Contributing drainage area (mi <sup>2</sup> )	Estimated flow-duration values (ft <sup>3</sup> /s) for indicated percentage of time flow equaled or exceeded				
		1st	2nd	3rd	4th			90 percent	75 percent	50 percent	25 percent	10 percent
		3377	1107010114	GW	LY					Rock Creek	20.7	0
3378	1107010115	GW	LY			North Branch Verdigris River	84.0	.08	1.71	9.77	29.6	80.0
3379	1107010113	GW	LY			North Branch Verdigris River	106	.12	2.24	12.6	37.3	100
3400	1107010113	GW	LY			North Branch Verdigris River	123	.17	2.62	14.8	43.5	117
3408	1107010144	GW	LY			Tate Branch Creek	18.6	0	.01	1.43	5.82	18.2
3410	1107010142	GW	LY			Kelly Branch	9.79	0	0	.45	2.30	8.04
3411	1107010112	GW				Verdigris River	158	.28	3.74	20.9	59.5	157
3420	1107010112	GW				Verdigris River	170	.32	4.09	23.0	65.0	171
3426	HYDRO	GW				HYDRO	1.25	NA	NA	NA	NA	NA
3444	1107010112	GW				Verdigris River	197	.50	4.90	28.0	78.0	204
3447	1107010116	GW				South Branch Verdigris River	34.9	.01	.40	3.81	12.5	34.8
3453	HYDRO	GW				HYDRO	9.47	NA	NA	NA	NA	NA
3460	1107010147	GW				Holderman Creek	8.77	0	0	0	1.01	5.31
3470	1107010116	GW				Bernard Branch	23.1	.01	.14	2.57	8.32	23.0
3478	1107010147	GW				Holderman Creek	17.3	0	0	.66	3.69	13.3
3484	HYDRO	GW				HYDRO	13.4	NA	NA	NA	NA	NA
3508	1107010116	GW				Bernard Branch	3.67	0	0	.31	.86	2.83
3512	1107010145	GW				Long Creek	13.9	0	0	.97	4.07	13.0
3513	HYDRO	GW				HYDRO	3.73	NA	NA	NA	NA	NA
3522	1107010116	GW				Bernard Branch	12.4	0	.01	1.42	4.50	12.4
3530	HYDRO	GW				HYDRO	15.1	NA	NA	NA	NA	NA
3542	HYDRO	GW				HYDRO	11.9	NA	NA	NA	NA	NA
3559	1107010145	GW				Long Creek	17.3	0	0	1.39	5.49	16.9
3560	1107010112	GW				Verdigris River	227	.68	5.37	30.1	86.0	231
3562	1107010146	GW				Van Horn Creek	10.8	0	0	.30	2.21	8.56
3580	1107010112	GW				Verdigris River	244	.79	5.67	31.5	91.1	248
3581	1107010146	GW				Van Horn Creek	17.3	0	0	.83	4.18	14.5
3584	11070102635	GW				East Branch Fall River	6.24	0	0	.48	1.53	4.76
3592	1107020311	GW				Thurman Creek	11.2	0	0	.83	2.83	8.48
3594	HYDRO	GW				HYDRO	7.93	NA	NA	NA	NA	NA
3635	110701019017	GW				Willow Creek	26.5	0	0	1.27	5.95	20.4
3646	11070102989	GW				Swing Creek	3.74	0	0	.08	.34	1.84
3647	HYDRO	GW				HYDRO	4.08	NA	NA	NA	NA	NA
3658	11070102989	GW				Swing Creek	6.29	0	0	.37	1.27	4.27
3663	HYDRO	GW				HYDRO	6.95	NA	NA	NA	NA	NA
3670	110701019017	GW				Willow Creek	33.5	0	0	1.63	7.47	25.4
3676	1107010211	GW				West Branch Fall River	4.88	0	0	.27	.90	3.18
3677	1107010123	GW				Onion Creek	12.6	0	0	.25	2.06	8.28

**Table 43.** Estimated flow-duration values, mean flow values, and peak-discharge frequency values for controlled and uncontrolled flow stream segments on the 1999 Kansas Surface Water Register for Greenwood County.—Continued

[KSWR, Kansas Surface Water Register; CUSEGA, catalog unit segment number alpha; mi<sup>2</sup>, square miles; ft<sup>3</sup>/s, cubic feet per second; HYDRO, lake or other hydrologic structure; NA, not applicable; NRDitch, irrigation ditch; NRTribal, tribal stream]

Determination site identification number (fig. 47)	Estimated mean flow (ft <sup>3</sup> /s)	Estimated peak discharge (ft <sup>3</sup> /s) for indicated peak-discharge frequency					
		2-year	5-year	10-year	25-year	50-year	100-year
3377	13.5	1,800	3,950	5,830	8,720	11,100	13,900
3378	53.0	5,510	11,500	16,700	24,600	31,500	39,100
3379	65.6	6,320	13,200	19,400	28,700	36,900	45,900
3400	75.6	6,660	14,200	21,000	31,300	40,400	50,600
3408	14.7	1,920	4,060	5,900	8,700	11,000	13,700
3410	7.30	1,300	2,710	3,920	5,740	7,250	8,960
3411	97.7	7,610	16,700	24,800	37,500	48,800	61,500
3420	106	7,830	17,400	26,000	39,500	51,500	65,200
3426	NA	NA	NA	NA	NA	NA	NA
3444	123	8,120	18,700	28,400	43,800	57,600	73,400
3447	25.1	4,210	8,350	11,900	17,000	21,400	26,100
3453	NA	NA	NA	NA	NA	NA	NA
3460	5.85	1,230	2,560	3,680	5,370	6,770	8,350
3470	16.8	1,880	4,160	6,160	9,240	11,800	14,800
3478	12.2	1,850	3,880	5,620	8,260	10,400	12,900
3484	NA	NA	NA	NA	NA	NA	NA
3508	2.65	636	1,350	1,950	2,870	3,620	4,480
3512	10.9	1,650	3,430	4,950	7,240	9,120	11,300
3513	NA	NA	NA	NA	NA	NA	NA
3522	9.38	1,290	2,810	4,130	6,160	7,840	9,770
3530	NA	NA	NA	NA	NA	NA	NA
3542	NA	NA	NA	NA	NA	NA	NA
3559	13.7	1,870	3,910	5,660	8,300	10,500	13,000
3560	141	8,440	19,400	29,400	45,400	59,600	76,000
3562	8.03	1,390	2,900	4,180	6,110	7,710	9,520
3580	152	8,980	20,300	30,700	47,100	61,800	78,600
3581	12.7	1,850	3,880	5,620	8,250	10,400	12,900
3584	4.23	830	1,800	2,630	3,910	4,970	6,170
3592	7.08	1,110	2,460	3,650	5,470	6,990	8,730
3594	NA	NA	NA	NA	NA	NA	NA
3635	17.6	2,240	4,800	7,030	10,400	13,300	16,500
3646	2.22	621	1,330	1,930	2,850	3,610	4,470
3647	NA	NA	NA	NA	NA	NA	NA
3658	4.04	838	1,810	2,660	3,940	5,010	6,220
3663	NA	NA	NA	NA	NA	NA	NA
3670	21.7	3,420	7,230	10,600	15,700	20,100	24,900
3676	3.06	677	1,480	2,180	3,240	4,120	5,130
3677	8.13	1,420	3,020	4,400	6,490	8,220	10,200

**270 Estimates of Flow Duration, Mean Flow, and Peak-Discharge Frequency Values for Kansas Stream Locations**

**Table 43.** Estimated flow-duration values, mean flow values, and peak-discharge frequency values for controlled and uncontrolled flow stream segments on the 1999 Kansas Surface Water Register for Greenwood County.—Continued

[KSWR, Kansas Surface Water Register; CUSEGA, catalog unit segment number alpha; mi<sup>2</sup>, square miles; ft<sup>3</sup>/s, cubic feet per second; HYDRO, lake or other hydrologic structure; NA, not applicable; NRDitch, irrigation ditch; NRTribal, tribal stream]

Determination site identification number (fig. 47)	KSWR CUSEGA number	Stream segment by county (table 112)				Stream name	Contributing drainage area (mi <sup>2</sup> )	Estimated flow-duration values (ft <sup>3</sup> /s) for indicated percentage of time flow equaled or exceeded				
		1st	2nd	3rd	4th			90 percent	75 percent	50 percent	25 percent	10 percent
		3682	11070102989	GW						Swing Creek	10.2	0
3684	HYDRO	GW				HYDRO	5.31	NA	NA	NA	NA	NA
3688	1107010211	GW				West Branch Fall River	5.72	0	0	.38	1.23	4.00
3689	1107010218	GW				Battle Creek	5.44	0	0	.31	1.04	3.53
3691	1107010126	GW				Greenhall Creek	22.2	0	.15	2.47	8.47	24.0
3693	1107010112	GW				Verdigris River	278	1.00	6.23	34.0	100	280
3700	HYDRO	GW				HYDRO	11.0	NA	NA	NA	NA	NA
3716	1107010221	GW				Oleson Creek	9.58	0	0	.79	2.56	7.49
3722	110701019017	GW				Willow Creek	50.9	0	0	2.57	11.2	37.7
3723	HYDRO	GW				HYDRO	10.4	NA	NA	NA	NA	NA
3730	11070102635	GW				East Branch Fall River	22.1	0	.06	2.09	6.75	18.6
3731	11070102989	GW				Swing Creek	15.7	0	0	1.40	4.59	12.9
3743	1107010125	GW				Slate Creek	31.4	0	0	1.73	7.12	23.0
3749	1107010220	GW				Otis Creek	12.7	0	0	1.05	3.45	9.88
3754	1107010125	GW				Slate Creek	38.4	0	0	2.19	8.83	28.5
3762	11070102635	GW				East Branch Fall River	39.4	0	.45	3.75	12.3	33.4
3763	1107010221	GW				Oleson Creek	13.7	0	0	1.20	3.91	11.1
3797	HYDRO	GW				HYDRO	16.5	NA	NA	NA	NA	NA
3805	1107010220	GW				Otis Creek	16.9	0	0	1.45	4.74	13.3
3806	1107010211	GW				West Branch Fall River	32.8	0	.34	3.35	10.8	29.1
3829	1107010124	GW				Bernard Creek	9.63	0	0	0	.73	4.50
3836	1107010121	GW				Bachelor Creek	19.6	0	0	.86	3.56	11.7
3839	1107010120	GW				Homer Creek	28.9	0	0	1.10	5.12	17.8
3840	1107010211	GW				West Branch Fall River	53.8	0	.77	5.31	17.4	46.7
3853	HYDRO	GW				HYDRO	26.6	NA	NA	NA	NA	NA
3864	1107010112	GW				Verdigris River	325	1.48	7.54	39.4	118	333
3868	1107010117	GW				West Creek	124	0	1.47	8.51	31.9	102
3882	1107010211	GW				West Branch Fall River	81.3	0	1.43	8.58	28.1	74.5
3886	1107010225	GW				Coon Creek	10.7	0	0	1.18	3.68	10.1
3888	HYDRO	GW				HYDRO	8.99	NA	NA	NA	NA	NA
3910	11070102635	GW				East Branch Fall River	72.9	0	1.11	6.93	22.9	61.4
3915	1107010127	GW	WO			Dry Creek	24.3	0	.91	4.23	12.5	31.8
3917	1107010111	GW				Verdigris River	457	2.33	9.80	49.3	153	452
3919	1107010211	GW				West Branch Fall River	98.3	0	1.77	10.5	34.5	91.0
3923	1107010225	GW				Coon Creek	8.34	0	0	.78	2.56	7.47
3940	1107010131	GW	WO			Brazil Creek	18.1	0	0.65	3.42	10.1	25.7
3942	1107010111	GW				Verdigris River	483	2.64	10.7	53.0	164	486
3948	1107010120	GW				Homer Creek	63.9	0	.22	3.48	13.7	44.6



**Table 43.** Estimated flow-duration values, mean flow values, and peak-discharge frequency values for controlled and uncontrolled flow stream segments on the 1999 Kansas Surface Water Register for Greenwood County.—Continued

[KSWR, Kansas Surface Water Register; CUSEGA, catalog unit segment number alpha; mi<sup>2</sup>, square miles; ft<sup>3</sup>/s, cubic feet per second; HYDRO, lake or other hydrologic structure; NA, not applicable; NRDitch, irrigation ditch; NRTribal, tribal stream]

Determination site identification number (fig. 47)	Estimated mean flow (ft <sup>3</sup> /s)	Estimated peak discharge (ft <sup>3</sup> /s) for indicated peak-discharge frequency					
		2-year	5-year	10-year	25-year	50-year	100-year
3682	6.57	1,100	2,420	3,570	5,330	6,800	8,490
3684	NA	NA	NA	NA	NA	NA	NA
3688	3.65	743	1,630	2,400	3,580	4,560	5,690
3689	3.34	706	1,550	2,290	3,420	4,370	5,450
3691	18.0	2,140	4,520	6,560	9,660	12,200	15,200
3693	171	9,240	20,900	31,600	48,500	63,600	80,900
3700	NA	NA	NA	NA	NA	NA	NA
3716	6.24	1,040	2,280	3,380	5,050	6,450	8,060
3722	31.4	4,030	8,480	12,500	18,500	23,700	29,400
3723	NA	NA	NA	NA	NA	NA	NA
3730	14.2	1,720	3,860	5,770	8,720	11,200	14,100
3731	10.2	1,400	3,120	4,640	6,980	8,950	11,200
3743	19.2	3,540	7,330	10,600	15,600	19,800	24,400
3749	8.02	1,200	2,670	3,970	5,980	7,660	9,590
3754	23.4	3,690	7,680	11,200	16,400	21,000	25,900
3762	24.3	3,620	7,520	10,900	16,100	20,500	25,300
3763	8.82	1,270	2,830	4,210	6,330	8,110	10,200
3797	NA	NA	NA	NA	NA	NA	NA
3805	10.5	1,420	3,190	4,760	7,190	9,230	11,600
3806	20.9	3,490	7,220	10,500	15,300	19,500	24,000
3829	5.37	1,170	2,490	3,630	5,360	6,800	8,430
3836	10.5	1,540	3,440	5,130	7,730	9,910	12,400
3839	16.0	2,120	4,670	6,920	10,400	13,300	16,600
3840	32.7	4,540	9,350	13,600	19,900	25,500	31,500
3853	NA	NA	NA	NA	NA	NA	NA
3864	201	9,110	20,800	31,500	48,500	63,800	81,300
3868	75.0	5,970	12,100	17,600	25,700	32,800	40,500
3882	49.9	5,390	11,300	16,600	24,700	31,900	39,800
3886	7.89	1,180	2,570	3,780	5,630	7,170	8,940
3888	NA	NA	NA	NA	NA	NA	NA
3910	42.9	4,340	9,380	13,900	21,000	27,300	34,300
3915	21.6	2,280	4,810	6,980	10,300	13,000	16,100
3917	273	11,400	24,800	37,100	56,400	73,700	93,400
3919	60.2	5,710	12,200	18,100	27,300	35,400	44,600
3923	6.11	1,020	2,210	3,240	4,800	6,100	7,590
3940	17.4	1,980	4,120	5,950	8,700	11,000	13,600
3942	291	11,500	25,000	37,400	56,800	74,100	94,000
3948	36.2	4,430	9,190	13,400	19,700	25,200	31,200

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**Table 43.** Estimated flow-duration values, mean flow values, and peak-discharge frequency values for controlled and uncontrolled flow stream segments on the 1999 Kansas Surface Water Register for Greenwood County.—Continued

[KSWR, Kansas Surface Water Register; CUSEGA, catalog unit segment number alpha; mi<sup>2</sup>, square miles; ft<sup>3</sup>/s, cubic feet per second; HYDRO, lake or other hydrologic structure; NA, not applicable; NRDitch, irrigation ditch; NRTribal, tribal stream]

Determination site identification number (fig. 47)	KSWR CUSEGA number	Stream segment by county (table 112)				Stream name	Contributing drainage area (mi <sup>2</sup> )	Estimated flow-duration values (ft <sup>3</sup> /s) for indicated percentage of time flow equaled or exceeded				
		1st	2nd	3rd	4th			90 percent	75 percent	50 percent	25 percent	10 percent
		3964	1107010224	GW						Burnt Creek	12.1	0
3967	1107010121	GW				Bachelor Creek	74.6	0	.36	4.09	16.1	52.1
3968	1107010121	GW				Bachelor Creek	71.2	0	.26	3.73	14.8	48.4
3974	1107010111	GW				Verdigris River	504	2.87	11.3	55.8	173	514
3977	HYDRO	GW				HYDRO	13.7	NA	NA	NA	NA	NA
3985	1107010119	GW				Walnut Creek	143	0	1.41	8.16	31.0	101
4005	1107010130	GW	WO			Miller Creek	21.1	0	.16	2.30	7.73	21.9
4009	HYDRO	GW				HYDRO	21.1	NA	NA	NA	NA	NA
4010	HYDRO	GW				HYDRO	506	NA	NA	NA	NA	NA
4014	110701029	GW				Fall River	188	.05	3.34	21.5	71.5	181
4030	1107010119	GW				Walnut Creek	170	0	2.12	10.9	40.2	129
4031	1107010128	GW				Fancy Creek	15.3	0	.44	2.53	7.24	18.4
4032	HYDRO	GW				HYDRO	15.3	NA	NA	NA	NA	NA
4048	1107010224	GW				Burnt Creek	23.2	0	0	2.12	7.28	20.6
4049	1107010119	GW				Walnut Creek	193	.04	2.87	13.7	49.0	155
4053	1107010212	GW				Spring Creek	85.3	0	1.42	8.99	30.6	83.1
4056	HYDRO	GW				HYDRO	530	NA	NA	NA	NA	NA
4057	HYDRO	GW				HYDRO	200	NA	NA	NA	NA	NA
4058	1107010212	GW				Spring Creek	71.2	0	1.14	7.41	25.1	68.4
4063	1107010212	GW				Spring Creek	37.5	0	.54	4.27	14.1	38.2
4067	HYDRO	GW				HYDRO	23.7	NA	NA	NA	NA	NA
4077	1107010129	GW				Kuntz Branch	19.3	0	.02	2.11	7.25	20.6
4082	1107010128	GW				Fancy Creek	15.3	0	.44	2.52	7.21	18.3
4087	110701028	GW				Fall River	301	.70	5.20	40.0	134	324
4096	1107010227	GW				Kitty Creek	7.33	0	0	.31	1.58	5.69
4102	110701028	GW				Fall River	302	.70	5.22	40.1	134	325
4103	HYDRO	GW	WO			HYDRO	745	NA	NA	NA	NA	NA
4104	110701028	GW				Fall River	302	.70	5.22	40.1	134	325
4127	1107010226	GW				Honey Creek	22.9	0	0	1.01	4.96	17.3
4129	110701028	GW				Fall River	306	.75	5.33	40.5	136	329
4132	1107010213	GW				Otter Creek	153	0	1.52	12.3	53.1	152
4137	1107010212	GW				Spring Creek	21.4	0	.13	2.44	7.96	21.7
4142	HYDRO	GW				HYDRO	4.73	NA	NA	NA	NA	NA
4154	1107010213	GW				Otter Creek	127	0	1.19	10.8	47.2	132
4155	1107010212	GW				Spring Creek	4.62	0	0	.42	1.28	3.98
4160	1107010229	GW				Tadpole Creek	14.6	0	0	.44	2.82	10.3
4162	1107010213	GW				Otter Creek	113	0	1.00	9.95	44.0	121
4168	110701027	GW				Fall River	471	1.81	8.34	54.0	183	486

**Table 43.** Estimated flow-duration values, mean flow values, and peak-discharge frequency values for controlled and uncontrolled flow stream segments on the 1999 Kansas Surface Water Register for Greenwood County.—Continued[KSWR, Kansas Surface Water Register; CUSEGA, catalog unit segment number alpha; mi<sup>2</sup>, square miles; ft<sup>3</sup>/s, cubic feet per second; HYDRO, lake or other hydrologic structure; NA, not applicable; NRDitch, irrigation ditch; NRTribal, tribal stream]

Determination site identification number (fig. 47)	Estimated mean flow (ft <sup>3</sup> /s)	Estimated peak discharge (ft <sup>3</sup> /s) for indicated peak-discharge frequency					
		2-year	5-year	10-year	25-year	50-year	100-year
3964	8.69	1,180	2,720	4,140	6,430	8,470	10,900
3967	41.6	4,920	10,200	14,800	21,700	27,700	34,300
3968	39.1	4,940	10,200	14,800	21,700	27,700	34,200
3974	305	11,500	25,100	37,500	57,000	74,300	94,300
3977	NA	NA	NA	NA	NA	NA	NA
3985	76.7	7,460	14,800	21,100	30,600	38,800	47,800
4005	16.8	2,150	4,490	6,500	9,530	12,000	14,900
4009	NA	NA	NA	NA	NA	NA	NA
4010	NA	NA	NA	NA	NA	NA	NA
4014	113	8,350	19,200	29,600	46,600	62,100	80,400
4030	94.1	7,970	15,700	22,300	32,300	40,800	50,100
4031	13.0	1,640	3,480	5,060	7,460	9,440	11,700
4032	NA	NA	NA	NA	NA	NA	NA
4048	15.7	1,630	4,100	6,570	10,800	14,800	19,600
4049	109	8,290	16,100	23,000	33,100	41,800	51,300
4053	56.4	6,230	14,100	21,700	34,100	45,500	58,900
4056	NA	NA	NA	NA	NA	NA	NA
4057	NA	NA	NA	NA	NA	NA	NA
4058	47.0	5,780	12,900	19,700	30,700	40,900	52,800
4063	26.7	4,410	8,760	12,500	18,000	22,700	27,700
4067	NA	NA	NA	NA	NA	NA	NA
4077	15.5	1,880	3,990	5,820	8,600	10,900	13,500
4082	13.0	1,640	3,470	5,050	7,440	9,410	11,700
4087	190	11,700	29,900	48,100	79,100	108,000	143,000
4096	5.32	1,030	2,180	3,150	4,630	5,850	7,250
4102	191	11,600	29,800	48,000	79,000	108,000	143,000
4103	NA	NA	NA	NA	NA	NA	NA
4104	191	11,600	29,800	48,000	79,000	108,000	143,000
4127	15.3	2,080	4,450	6,490	9,600	12,200	15,100
4129	193	11,500	29,600	47,700	78,700	107,000	142,000
4132	104	8,270	19,600	29,700	45,300	58,700	73,300
4137	15.8	1,780	3,940	5,850	8,790	11,300	14,100
4142	NA	NA	NA	NA	NA	NA	NA
4154	89.5	7,640	18,400	28,000	42,800	55,500	69,300
4155	3.49	735	1,560	2,270	3,330	4,220	5,220
4160	9.61	1,560	3,380	4,960	7,360	9,360	11,600
4162	82.0	7,480	18,000	27,400	41,800	54,200	67,600
4168	285	14,600	35,200	55,400	89,300	121,000	159,000

**Table 43.** Estimated flow-duration values, mean flow values, and peak-discharge frequency values for controlled and uncontrolled flow stream segments on the 1999 Kansas Surface Water Register for Greenwood County.—Continued

[KSWR, Kansas Surface Water Register; CUSEGA, catalog unit segment number alpha; mi<sup>2</sup>, square miles; ft<sup>3</sup>/s, cubic feet per second; HYDRO, lake or other hydrologic structure; NA, not applicable; NRDitch, irrigation ditch; NRtribal, tribal stream]

Determination site identification number (fig. 47)	KSWR CUSEGA number	Stream segment by county (table 112)				Stream name	Contributing drainage area (mi <sup>2</sup> )	Estimated flow-duration values (ft <sup>3</sup> /s) for indicated percentage of time flow equaled or exceeded				
		1st	2nd	3rd	4th			90 percent	75 percent	50 percent	25 percent	10 percent
		4171	1107010135	GW						Ross Branch	4.70	0
4172	1107010223	GW				Watson Branch	18.2	0	0	1.53	5.80	17.0
4174	HYDRO	GW				HYDRO	5.05	NA	NA	NA	NA	NA
4182	1107010232	GW				Crain Creek	9.92	0	.34	1.69	4.37	10.8
4185	1107010135	GW	WL			Ross Branch	28.4	0	1.37	5.42	15.2	37.4
4187	HYDRO	GW				HYDRO	9.93	NA	NA	NA	NA	NA
4188	1107010213	GW				Otter Creek	90.8	0	.96	8.43	35.2	97.2
4191	1107010213	GW				Otter Creek	56.1	0	.52	5.19	20.4	57.3
4227	1107010231	GW				Snake Creek	11.9	0	0	.36	2.22	8.35
4277	HYDRO	GW				HYDRO	491	NA	NA	NA	NA	NA
4303	1107010213	GW				Otter Creek	29.4	0	.20	3.13	11.2	31.2
4305	HYDRO	GW				HYDRO	4.43	NA	NA	NA	NA	NA
4309	1107010232	GW				Crain Creek	20.3	0	1.33	4.24	10.6	24.7
4310	110701023	GW				Fall River	493	5.90	13.0	53.0	270	1,060
4334	1107010228	GW				South Branch Otter Creek	3.61	0	0	0	.06	1.44
4335	HYDRO	GW				HYDRO	3.74	NA	NA	NA	NA	NA
4336	1107010228	GW				South Branch Otter Creek	30.6	0	.13	2.87	10.7	30.2
4344	1107010214	GW				Salt Creek	63.6	0	.86	5.25	18.2	54.1
4345	110701023	GW				Fall River	515	6.33	13.6	56.3	289	1,120
4352	HYDRO	GW				HYDRO	2.70	NA	NA	NA	NA	NA
4363	1107010214	GW				Salt Creek	50.0	0	.38	3.70	13.5	41.0
4364	1107010230	GW				Plum Creek	10.7	0	0	.09	1.39	6.25
4373	1107010214	GW				Salt Creek	17.2	0	0	.69	3.46	12.2

**Table 43.** Estimated flow-duration values, mean flow values, and peak-discharge frequency values for controlled and uncontrolled flow stream segments on the 1999 Kansas Surface Water Register for Greenwood County.—Continued[KSWR, Kansas Surface Water Register; CUSEGA, catalog unit segment number alpha; mi<sup>2</sup>, square miles; ft<sup>3</sup>/s, cubic feet per second; HYDRO, lake or other hydrologic structure; NA, not applicable; NRDitch, irrigation ditch; NRTribal, tribal stream]

Determination site identification number (fig. 47)	Estimated mean flow (ft <sup>3</sup> /s)	Estimated peak discharge (ft <sup>3</sup> /s) for indicated peak-discharge frequency					
		2-year	5-year	10-year	25-year	50-year	100-year
4171	4.20	821	1,700	2,440	3,550	4,470	5,510
4172	13.3	1,700	3,760	5,560	8,320	10,600	13,300
4174	NA	NA	NA	NA	NA	NA	NA
4182	7.99	1,240	2,610	3,790	5,580	7,060	8,750
4185	24.4	2,360	5,050	7,390	11,000	13,900	17,300
4187	NA	NA	NA	NA	NA	NA	NA
4188	66.2	7,300	16,200	24,000	35,800	45,900	56,700
4191	40.5	5,860	12,100	17,500	25,600	32,400	39,700
4227	7.93	1,370	2,920	4,240	6,250	7,920	9,820
4277	NA	NA	NA	NA	NA	NA	NA
4303	22.4	2,210	5,080	7,620	11,500	14,800	18,600
4305	NA	NA	NA	NA	NA	NA	NA
4309	16.4	1,840	3,970	5,820	8,640	11,000	13,700
4310	361	3,980	6,910	8,730	10,800	12,100	13,300
4334	2.12	659	1,380	2,000	2,920	3,680	4,550
4335	NA	NA	NA	NA	NA	NA	NA
4336	22.5	4,110	8,320	11,900	17,200	21,600	26,400
4344	40.2	4,660	9,310	13,300	19,300	24,300	29,800
4345	377	4,470	7,760	9,830	12,200	13,700	15,100
4352	NA	NA	NA	NA	NA	NA	NA
4363	31.7	4,170	8,460	12,200	17,700	22,400	27,500
4364	6.58	1,290	2,720	3,960	5,830	7,380	9,150
4373	11.1	1,710	3,650	5,330	7,880	10,000	12,400