Supplemental Information

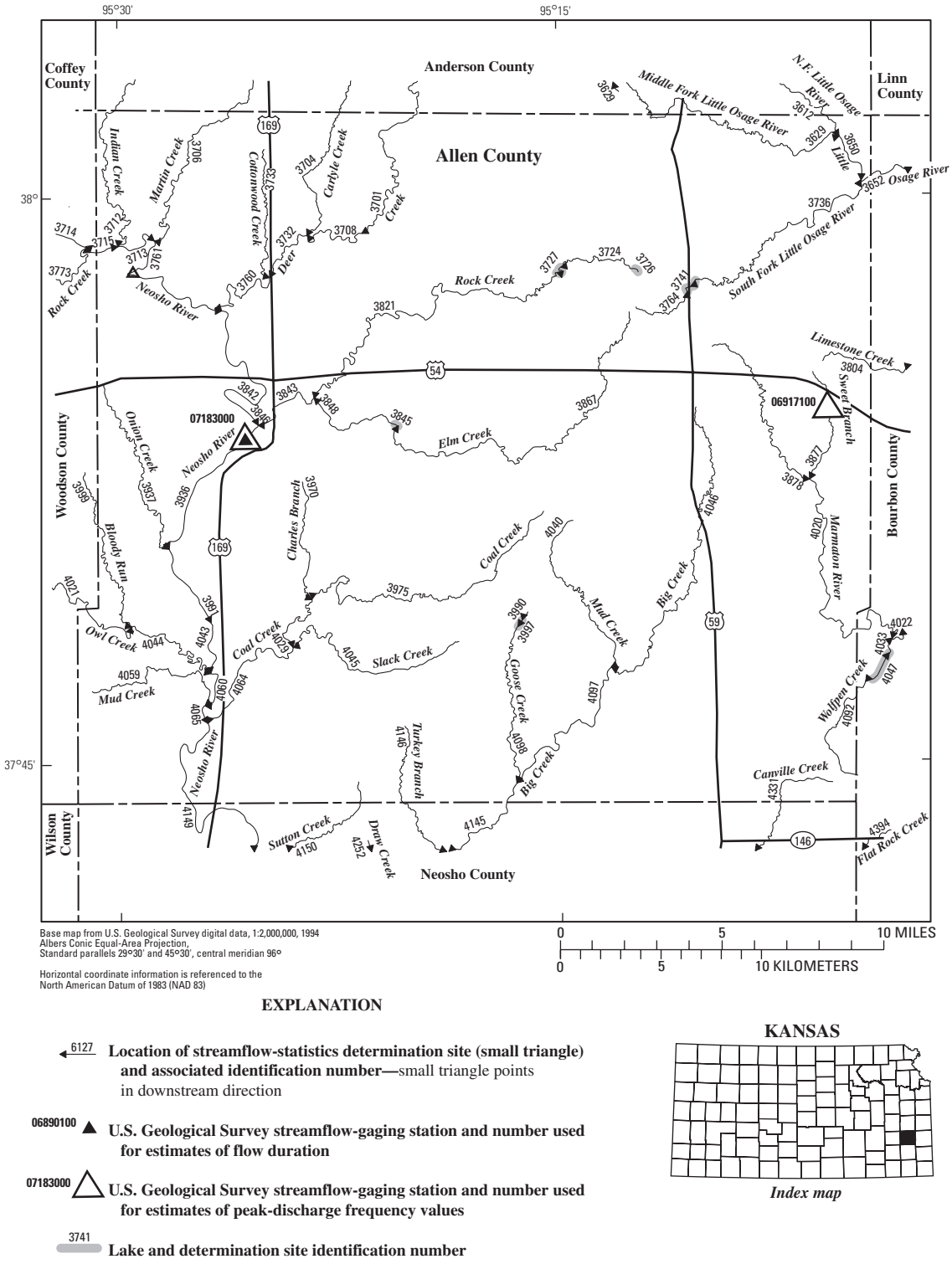

Figure 11. Location of streamflow-statistics determination sites, associated identification numbers, and U.S. Geological Survey streamflow-gaging stations used in the flow-duration and peak-discharge frequency analyses for Allen County.

Table 7. 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 Allen County.

[KSWR, Kansas Surface Water Register; CUSEGA, catalog unit segment number alpha; mi^2, square miles; ft^3/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. 11)	KSWR CUSEGA number	Stream segment by county (table 112)				Stream name	Contributing drainage area (mi^2)	Estimated flow-duration values (ft^3/s) for indicated percentage of time flow equaled or exceeded				
		1st	2nd	3rd	4th			90 percent	75 percent	50 percent	25 percent	10 percent
3612	10290103220	AL	AN			North Fork Little Osage River	22.8	0	0	2.28	8.72	25.9
3629	1029010336	AL	AN			Middle Fork Little Osage River	33.3	0	.31	3.25	11.9	34.8
3650	102901033	AL				Little Osage River	58.2	0	.74	5.55	20.8	62.3
3652	102901033	AL	BB			Little Osage River	92.6	0	1.31	9.00	34.3	103
3701	110702049	AL	AN			Deer Creek	64.4	0	.71	5.16	19.8	61.7
3704	1107020447	AL	AN			Carlyle Creek	12.3	0	0	.90	3.79	12.1
3706	1107020449	AL	AN			Martin Creek	32.3	0	0	1.76	8.12	27.5
3708	110702049	AL				Deer Creek	68.3	0	.81	5.53	21.1	65.8
3712	11070204924	AL	AN			Indian Creek	46.9	0	0	2.57	10.9	36.4
3713	1107020410	AL				Neosho River	3,520	37.7	103	525	2,170	6,720
3715	1107020410	AL	WO			Neosho River	3,480	36.9	100	514	2,120	6,610
3724	110702047	AL				Rock Creek	16.1	0	0	1.01	4.52	14.8
3726	HYDRO	AL				HYDRO	1.83	NA	NA	NA	NA	NA
3727	HYDRO	AL				HYDRO	16.7	NA	NA	NA	NA	NA
3732	110702049	AL				Deer Creek	82.8	0	1.08	6.67	25.4	79.6
3733	1107020448	AL				Cottonwood Creek	8.15	0	0	.92	3.18	9.22
3736	10290103249	AL				South Fork Little Osage River	26.5	0	.19	2.93	10.8	31.3
3741	HYDRO	AL				HYDRO	4.07	NA	NA	NA	NA	NA
3760	110702049	AL				Deer Creek	96.0	0	1.41	7.94	29.9	93.4
3761	1107020410	AL				Neosho River	3,570	38.4	106	534	2,210	6,820
3764	10290103249	AL				South Fork Little Osage River	3.39	0	0	.04	.55	2.67
3804	102901035	AL	BB			Limestone Creek	34.1	0	.43	4.19	15.5	45.0
3821	110702047	AL				Rock Creek	47.8	0	.03	3.24	14.1	46.4
3842	110702048	AL				Neosho River	3,670	40.2	112	558	2,310	7,060
3843	110702047	AL				Rock Creek	94.1	0	1.08	7.35	29.4	94.8
3845	HYDRO	AL				HYDRO	37.3	NA	NA	NA	NA	NA
3846	110702048	AL				Neosho River	3,770	41.1	101	378	1,090	3,570
3848	110702041050	AL				Elm Creek	43.1	0	.38	3.94	15.2	46.4
3867	110702041050	AL				Elm Creek	36.5	0	.21	3.26	12.7	38.9
3877	1029010430	AL				Sweet Branch	8.41	0	0	.81	2.99	9.01
3878	1029010412	AL				Marmaton River	13.6	0	0	1.13	4.55	14.0
3936	110702046	AL				Neosho River	3,780	42.0	119	581	2,410	7,300
3937	1107020424	AL				Onion Creek	17.8	0	0	1.29	5.61	18.0
3970	1107020427	AL				Charles Branch	12.3	0	0	.94	4.33	14.0
3975	110702044	AL				Coal Creek	21.7	0	0	2.33	8.94	26.6
3990	1107020429	AL				Goose Creek	1.65	0	.05	.14	.14	.93
3991	110702046	AL				Neosho River	3,800	42.3	121	588	2,440	7,360

Table 7. 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 Allen County.—Continued

[KSWR, Kansas Surface Water Register; CUSEGA, catalog unit segment number alpha; mi^2, square miles; ft^3/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. 11)	Estimated mean flow (ft^3/s)	Estimated peak discharge (ft^3/s) for indicated peak-discharge frequency					
		2-year	5-year	10-year	25-year	50-year	100-year
3612	20.2	2,590	5,230	7,460	10,800	13,500	16,600
3629	27.0	3,930	7,420	10,300	14,500	17,900	21,500
3650	46.2	5,420	10,000	13,800	19,300	23,900	28,700
3652	73.0	7,410	13,200	18,000	24,800	30,500	36,500
3701	47.8	5,040	9,710	13,700	19,500	24,400	29,600
3704	10.4	1,770	3,560	5,050	7,280	9,100	11,200
3706	23.8	4,470	8,650	12,200	17,300	21,600	26,200
3708	50.6	5,070	9,790	13,800	19,700	24,700	30,000
3712	31.3	4,760	9,230	13,000	18,500	23,200	28,200
3713	2,050	18,600	26,000	28,300	53,500	81,400	123,000
3715	2,010	17,900	25,000	27,300	52,400	80,500	123,000
3724	13.1	2,150	4,300	6,100	8,780	11,000	13,500
3726	NA	NA	NA	NA	NA	NA	NA
3727	NA	NA	NA	NA	NA	NA	NA
3732	60.4	5,510	10,600	15,000	21,300	26,700	32,500
3733	7.60	1,400	2,780	3,930	5,640	7,040	8,610
3736	23.7	2,870	5,780	8,240	11,900	14,900	18,400
3741	NA	NA	NA	NA	NA	NA	NA
3760	69.8	5,730	11,000	15,600	22,300	27,900	34,000
3761	2,070	19,200	26,900	29,200	54,500	82,100	123,000
3764	2.98	875	1,690	2,360	3,340	4,130	5,020
3804	32.5	6,040	10,600	14,300	19,400	23,500	27,800
3821	37.5	4,710	9,250	13,100	18,900	23,700	28,900
3842	2,150	20,600	29,100	31,500	57,000	84,100	123,000
3843	71.4	6,590	12,500	17,500	24,900	31,100	37,800
3845	NA	NA	NA	NA	NA	NA	NA
3846	1,750	23,200	44,900	64,000	93,100	118,000	147,000
3848	35.7	4,030	7,890	11,200	16,000	20,000	24,300
3867	30.4	3,530	7,000	9,980	14,400	18,100	22,000
3877	7.73	204	349	455	597	707	820
3878	11.9	1,970	3,910	5,540	7,950	9,920	12,200
3936	2,220	22,000	31,300	33,800	59,500	86,000	122,000
3937	15.1	2,220	4,480	6,380	9,220	11,500	14,200
3970	11.6	1,820	3,630	5,140	7,390	9,230	11,300
3975	20.4	2,570	5,170	7,360	10,600	13,300	16,300
3990	1.35	586	1,110	1,540	2,150	2,650	3,210
3991	2,240	22,200	31,600	34,200	59,500	86,000	122,000

Table 7. 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 Allen County.—Continued

[KSWR, Kansas Surface Water Register; CUSEGA, catalog unit segment number alpha; mi^2, square miles; ft^3/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. 11)	KSWR CUSEGA number	Stream segment by county (table 112)				Stream name	Contributing drainage area (mi^2)	Estimated flow-duration values (ft^3/s) for indicated percentage of time flow equaled or exceeded				
		1st	2nd	3rd	4th			90 percent	75 percent	50 percent	25 percent	10 percent
3997	HYDRO	AL				HYDRO	2.21	NA	NA	NA	NA	NA
3999	1107020425	AL	WO			Bloody Run	12.2	0	0	1.11	4.33	13.2
4020	1029010412	AL	BB			Marmaton River	46.4	0	.88	5.76	20.3	58.0
4021	1107020419	AL	WO			Owl Creek	178	0	.57	4.00	21.0	115
4029	110702044	AL				Coal Creek	36.3	0	.24	3.57	13.9	42.4
4040	1107020431	AL				Mud Creek	14.0	0	0	1.41	5.19	15.3
4043	110702045	AL				Neosho River	3,800	42.3	121	588	2,440	7,360
4044	1107020419	AL				Owl Creek	194	.13	.87	5.27	25.7	130
4045	1107020430	AL				Slack Creek	13.5	0	0	1.70	5.97	16.9
4046	110702042	AL				Big Creek	37.6	0	.22	3.03	11.7	36.0
4059	1107020426	AL				Mud Creek	15.2	0	0	.80	4.24	14.7
4060	110702045	AL				Neosho River	4,000	44.6	133	641	2,660	7,840
4064	110702044	AL				Coal Creek	59.0	0	.90	6.09	22.9	69.1
4065	110702045	AL				Neosho River	4,010	44.8	134	645	2,680	7,880
4092	1029010437	AL	BB			Wolfpen Creek	11.8	0	0	1.63	5.71	16.0
4097	110702042	AL				Big Creek	68.5	0	.80	5.49	21.2	66.5
4098	1107020429	AL				Goose Creek	12.8	0	.30	2.35	7.38	19.3
4145	110702042	AL	NO			Big Creek	92.5	0	1.47	8.30	31.5	97.7
4146	1107020428	AL	NO			Turkey Branch	11.9	0	.24	2.18	6.91	18.1
4149	110702043	AL	NO			Neosho River	4,090	45.8	139	666	2,770	8,070
4150	1107020435	AL	NO			Sutton Creek	11.2	0	.15	1.90	6.11	16.3
4331	1107020516	AL	NO			Canville Creek	48.6	0	.51	4.73	18.6	57.1

Table 7. 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 Allen County.—Continued

[KSWR, Kansas Surface Water Register; CUSEGA, catalog unit segment number alpha; mi^2, square miles; ft^3/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. 11)	Estimated mean flow (ft^3/s)	Estimated peak discharge (ft^3/s) for indicated peak-discharge frequency					
		2-year	5-year	10-year	25-year	50-year	100-year
3997	NA	NA	NA	NA	NA	NA	NA
3999	11.0	1,820	3,620	5,130	7,370	9,200	11,300
4020	42.0	3,750	6,750	9,190	12,700	15,700	18,700
4021	122	11,100	21,500	30,400	44,200	56,100	69,600
4029	32.1	4,230	8,160	11,500	16,300	20,300	24,600
4040	12.5	2,020	4,020	5,680	8,150	10,200	12,500
4043	2,240	22,200	31,600	34,200	59,500	86,000	122,000
4044	132	10,900	21,300	30,300	44,200	56,200	69,800
4045	13.1	1,980	3,930	5,550	7,960	9,930	12,200
4046	29.2	4,110	7,830	10,900	15,400	19,100	23,100
4059	13.1	2,140	4,240	6,000	8,610	10,700	13,200
4060	2,410	23,600	33,700	37,500	59,600	86,000	122,000
4064	50.5	5,010	9,550	13,400	19,000	23,600	28,600
4065	2,430	23,700	33,900	37,700	59,600	86,000	122,000
4092	12.3	1,900	3,720	5,230	7,470	9,290	11,300
4097	51.8	6,000	11,100	15,400	21,500	26,500	32,000
4098	13.8	1,940	3,830	5,410	7,740	9,650	11,800
4145	72.2	6,880	12,600	17,400	24,300	30,100	36,200
4146	13.0	1,880	3,710	5,220	7,460	9,280	11,300
4149	2,500	24,300	34,700	39,000	59,700	86,000	122,000
4150	12.0	1,830	3,600	5,060	7,220	8,980	11,000
4331	43.1	5,250	9,760	13,500	18,900	23,400	28,100

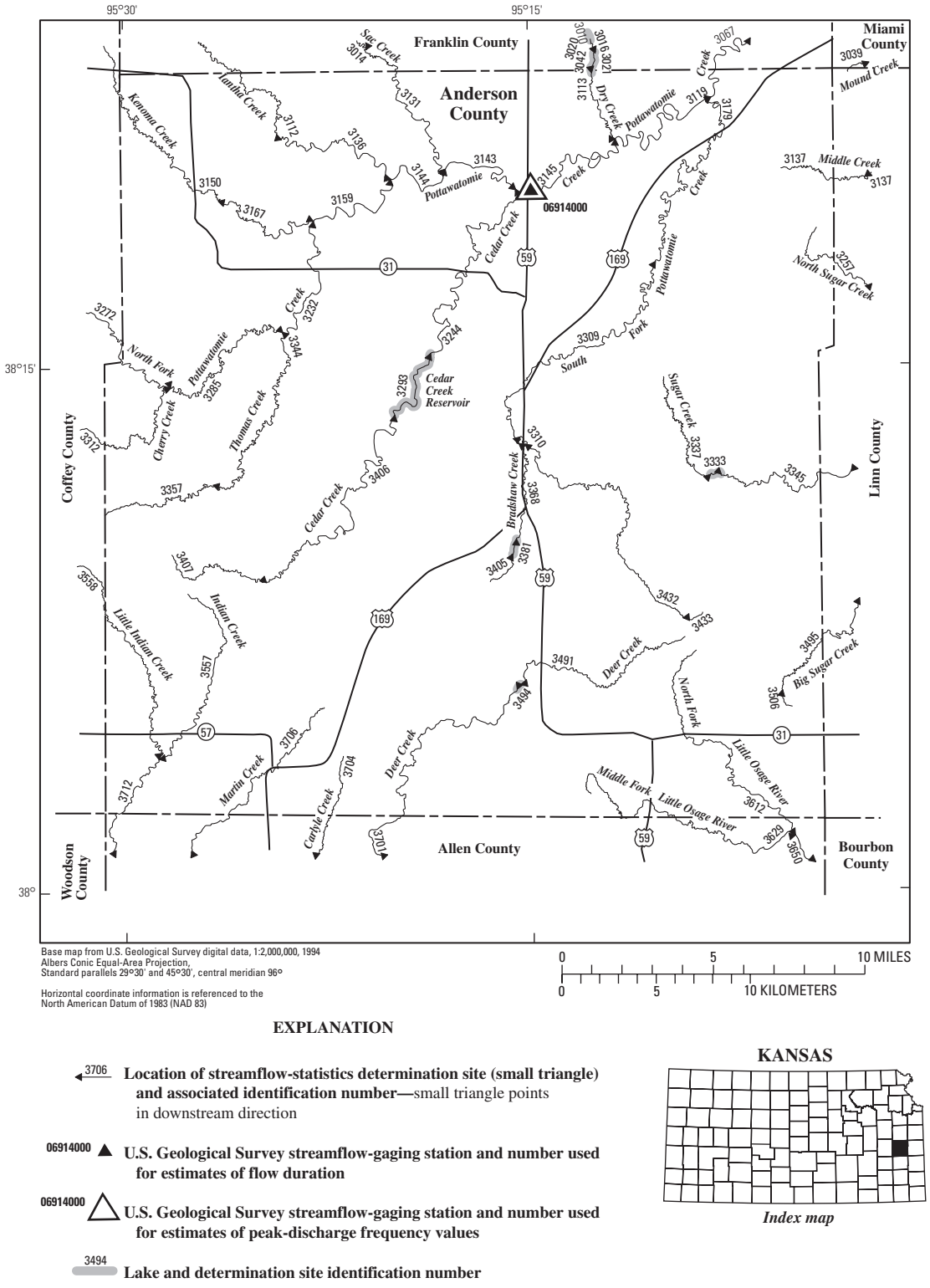

Figure 12. Location of streamflow-statistics determination sites, associated identification numbers, and U.S. Geological Survey streamflow-gaging stations used in the flow-duration and peak-discharge frequency analyses for Anderson County.

Table 8. 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 Anderson County.—Continued

[KSWR, Kansas Surface Water Register; CUSEGA, catalog unit segment number alpha; mi^2, square miles; ft^3/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. 12)	KSWR CUSEGA number	Stream segment by county (table 112)				Stream name	Contributing drainage area (mi^2)	Estimated flow-duration values (ft^3/s) for indicated percentage of time flow equaled or exceeded				
		1st	2nd	3rd	4th			90 percent	75 percent	50 percent	25 percent	10 percent
3067	1029010155	AN	FR			Pottawatomie Creek	475	1.24	4.97	34.4	139	527
3112	1029010162	AN	CF	FR		Iantha Creek	24.6	0	.07	2.05	7.13	21.4
3113	1029010157	AN	FR			Dry Creek	22.7	0	0	1.80	7.10	22.0
3119	1029010156	AN				Pottawatomie Creek	353	.33	2.58	23.5	99.1	392
3131	1029010160	AN	FR			Sac Creek	46.0	0	.25	3.23	12.3	39.2
3136	1029010162	AN				Iantha Creek	33.8	0	.10	2.41	8.95	28.0
3137	1029010230	AN	LN	MI		Middle Creek	30.3	0	.46	3.73	13.0	37.0
3143	1029010159	AN				Pottawatomie Creek	234	.08	2.02	15.3	62.1	234
3144	1029010161	AN				Pottawatomie Creek	181	0	1.70	11.8	47.0	171
3145	1029010158	AN				Pottawatomie Creek	323	.10	2.00	21.0	90.0	361
3150	1029010164	AN	CF			Kenoma Creek	26.6	0	0	1.57	6.38	20.9
3159	1029010163	AN				Pottawatomie Creek	144	0	1.37	9.35	36.9	131
3167	1029010164	AN				Kenoma Creek	36.1	0	0	1.94	8.16	27.5
3179	1029010167	AN				South Fork Pottawatomie Creek	110	0	1.58	9.24	35.7	113
3232	1029010165	AN				North Fork Pottawatomie Creek	100	0	1.09	7.04	26.8	89.6
3244	1029010166	AN				Cedar Creek	77.0	0	.35	4.87	20.8	72.2
3257	1029010239	AN	LN			North Sugar Creek	45.8	0	.61	4.88	19.0	55.2
3272	1029010165	AN	CF			North Fork Pottawatomie Creek	34.3	0	.25	2.83	10.0	30.2
3285	1029010165	AN				North Fork Pottawatomie Creek	59.8	0	.76	4.93	17.6	54.6
3293	HYDRO	AN				HYDRO	54.5	NA	NA	NA	NA	NA
3309	1029010167	AN				South Fork Pottawatomie Creek	90.5	0	1.05	7.14	28.2	90.3
3310	1029010167	AN				South Fork Pottawatomie Creek	57.1	0	.26	3.98	16.6	54.0
3312	1029010174	AN	CF			Cherry Creek	11.9	0	.07	1.47	4.55	12.6
3333	HYDRO	AN				HYDRO	22.0	NA	NA	NA	NA	NA
3337	1029010242	AN				Sugar Creek	20.9	0	0	1.50	6.84	21.8
3344	1029010172	AN				Thomas Creek	29.1	0	0	1.72	7.05	23.2
3345	1029010242	AN	LN			Sugar Creek	57.7	0	.46	4.65	19.9	60.5
3357	1029010172	AN	CF			Thomas Creek	11.8	0	0	.97	3.55	10.9
3368	1029010175	AN				Bradshaw Creek	23.7	0	0	1.20	5.97	20.6
3381	HYDRO	AN				HYDRO	15.8	NA	NA	NA	NA	NA
3405	1029010175	AN				Bradshaw Creek	14.1	0	0	.39	2.85	11.0
3406	1029010166	AN				Cedar Creek	44.8	0	0	2.19	10.3	36.5
3407	1029010166	AN				Cedar Creek	9.22	0	0	.23	1.67	6.66
3432	1029010167	AN				South Fork Pottawatomie Creek	32.5	0	0	2.63	10.7	33.7
3433	1029010167	AN				South Fork Pottawatomie Creek	6.63	0	0	.17	1.50	5.93
3491	110702049	AN				Deer Creek	19.3	0	0	1.19	5.17	16.8
3494	HYDRO	AN				HYDRO	19.6	NA	NA	NA	NA	NA

Table 8. 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 Anderson County.—Continued

[KSWR, Kansas Surface Water Register; CUSEGA, catalog unit segment number alpha; mi^2, square miles; ft^3/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. 12)	Estimated mean flow (ft^3/s)	Estimated peak discharge (ft^3/s) for indicated peak-discharge frequency					
		2-year	5-year	10-year	25-year	50-year	100-year
3067	335	13,100	24,600	34,600	49,700	63,100	78,200
3112	17.2	2,260	4,780	6,950	10,200	13,000	16,100
3113	18.0	2,410	4,960	7,130	10,400	13,100	16,100
3119	254	11,100	20,100	27,400	38,200	47,500	57,700
3131	31.2	3,430	6,990	10,100	14,700	18,600	22,900
3136	22.7	2,550	5,380	7,880	11,600	14,900	18,400
3137	27.0	4,350	8,120	11,200	15,700	19,300	23,200
3143	159	8,810	16,300	22,400	31,500	39,100	47,400
3144	120	7,150	13,600	19,100	27,200	34,100	41,700
3145	235	11,300	20,100	27,100	37,200	45,700	54,900
3150	17.6	2,320	4,930	7,180	10,600	13,500	16,700
3159	94.3	6,170	12,000	17,000	24,400	30,700	37,700
3167	23.2	3,080	6,450	9,430	13,900	17,800	22,000
3179	82.8	6,700	12,800	18,100	25,700	32,300	39,400
3232	66.4	4,960	9,820	14,000	20,200	25,600	31,400
3244	55.9	4,500	9,130	13,200	19,300	24,500	30,300
3257	39.8	5,580	10,300	14,200	19,800	24,400	29,400
3272	23.6	3,330	6,680	9,550	13,800	17,400	21,200
3285	40.9	3,870	7,770	11,100	16,100	20,400	25,000
3293	NA	NA	NA	NA	NA	NA	NA
3309	67.8	7,170	13,400	18,700	26,300	32,700	39,600
3310	43.0	6,660	12,300	17,100	23,900	29,500	35,600
3312	9.89	1,560	3,210	4,610	6,710	8,430	10,400
3333	NA	NA	NA	NA	NA	NA	NA
3337	17.9	2,370	4,840	6,930	10,100	12,700	15,600
3344	19.9	2,740	5,680	8,190	12,000	15,100	18,700
3345	45.6	5,730	10,800	15,000	21,200	26,400	32,000
3357	9.31	1,610	3,280	4,690	6,800	8,540	10,500
3368	18.2	2,570	5,250	7,510	10,900	13,700	16,900
3381	NA	NA	NA	NA	NA	NA	NA
3405	10.7	1,900	3,830	5,460	7,880	9,870	12,100
3406	31.1	3,080	6,570	9,700	14,500	18,600	23,200
3407	6.75	1,430	2,880	4,100	5,910	7,400	9,080
3432	26.8	4,710	8,910	12,400	17,400	21,600	26,100
3433	5.80	1,260	2,480	3,500	5,000	6,220	7,600
3491	14.8	2,310	4,670	6,660	9,640	12,100	14,900
3494	NA	NA	NA	NA	NA	NA	NA

Table 8. 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 Anderson County.—Continued

[KSWR, Kansas Surface Water Register; CUSEGA, catalog unit segment number alpha; mi^2, square miles; ft^3/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. 12)	KSWR CUSEGA number	Stream segment by county (table 112)				Stream name	Contributing drainage area (mi^2)	Estimated flow-duration values (ft^3/s) for indicated percentage of time flow equaled or exceeded				
		1st	2nd	3rd	4th			90 percent	75 percent	50 percent	25 percent	10 percent
3495	1029010232	AN	LN			Big Sugar Creek	36.7	0	0.31	3.35	13.1	38.6
3506	1029010232	AN				Big Sugar Creek	5.55	0	0	.59	2.03	6.09
3557	11070204924	AN				Indian Creek	17.5	0	0	.52	3.23	12.2
3558	11070204939	AN	CF			Little Indian Creek	17.6	0	0	1.03	4.43	14.5

Table 8. 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 Anderson County.—Continued

[KSWR, Kansas Surface Water Register; CUSEGA, catalog unit segment number alpha; mi^2, square miles; ft^3/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. 12)	Estimated mean flow (ft^3/s)	Estimated peak discharge (ft^3/s) for indicated peak-discharge frequency					
		2-year	5-year	10-year	25-year	50-year	100-year
3495	29.9	3,750	7,290	10,300	14,700	18,400	22,300
3506	5.29	1,160	2,260	3,170	4,520	5,620	6,850
3557	12.0	2,120	4,320	6,170	8,940	11,200	13,800
3558	12.9	2,100	4,280	6,120	8,890	11,200	13,800

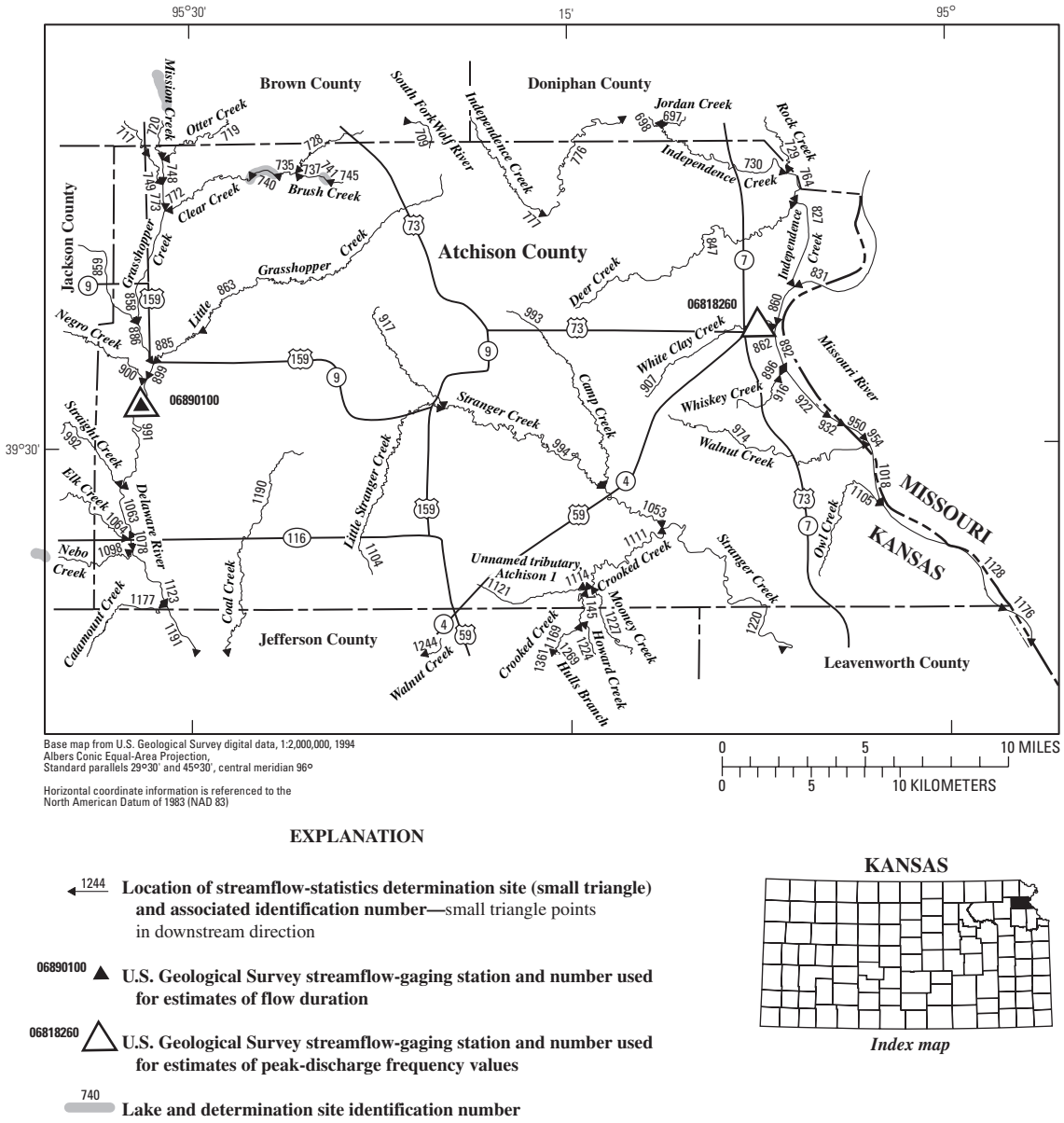

Figure 13. Location of streamflow-statistics determination sites, associated identification numbers, and U.S. Geological Survey streamflow-gaging stations used in the flow-duration and peak-discharge frequency analyses for Atchison County.

Table 9. 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 Atchison County.

[KSWR, Kansas Surface Water Register; CUSEGA, catalog unit segment number alpha; mi^2, square miles; ft^3/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. 13)	KSWR CUSEGA number	Stream segment by county (table 112)				Stream name	Contributing drainage area (mi^2)	Estimated flow-duration values (ft^3/s) for indicated percentage of time flow equaled or exceeded				
		1st	2nd	3rd	4th			90 percent	75 percent	50 percent	25 percent	10 percent
717	1027010320	AT	BR			Grasshopper Creek	37.0	0.03	0.06	2.72	10.7	33.6
719	1027010341	AT	BR			Otter Creek	21.1	.01	.02	1.31	5.65	18.4
720	1027010340	AT	BR			Mission Creek	12.0	0	.01	.85	3.55	11.3
728	1027010319	AT	BR			Clear Creek	8.31	0	0	.04	1.23	5.67
730	1024001122	AT	DP			Independence Creek	83.4	.35	4.17	16.1	45.6	115
735	1027010319	AT				Clear Creek	15.6	.01	.01	.64	3.47	12.4
737	1027010344	AT				Brush Creek	5.56	0	0	0	.60	3.58
740	HYDRO	AT				HYDRO	17.3	NA	NA	NA	NA	NA
741	HYDRO	AT				HYDRO	3.43	NA	NA	NA	NA	NA
745	1027010344	AT				Brush Creek	3.36	0	0	0	0	1.23
748	1027010341	AT				Otter Creek	33.5	.02	.05	2.45	9.63	30.2
749	1027010320	AT				Grasshopper Creek	38.7	.03	.07	2.87	11.2	35.2
764	1024001120	AT	DP			Independence Creek	108	.69	5.37	20.9	59.5	151
772	1027010319	AT				Clear Creek	25.1	.01	.03	1.50	6.55	21.5
773	1027010320	AT				Grasshopper Creek	73.2	.12	.78	5.54	20.7	65.2
776	1024001122	AT	DP			Independence Creek	31.9	0	1.71	6.67	18.4	44.8
777	1024001122	AT	BR	DP		Independence Creek	15.7	0	.82	3.39	9.00	21.5
827	1024001120	AT				Independence Creek	142	1.02	6.45	25.5	73.8	191
831	1024001113	AT	DP			Missouri River	421,000	23,600	34,500	43,300	57,600	75,100
847	1024001132	AT				Deer Creek	28.7	0	1.33	5.46	15.4	38.0
858	1027010318	AT				Grasshopper Creek	106	.24	1.61	8.30	30.0	94.6
859	1027010321	AT	JA			Delaware River	280	2.04	8.14	26.8	82.7	254
860	1024001111	AT				Missouri River	421,000	23,600	34,500	43,300	57,700	75,100
862	102400119031	AT				White Clay Creek	14.9	0	.97	3.61	9.31	21.7
863	1027010316	AT				Little Grasshopper Creek	40.3	.03	.14	3.32	12.6	38.7
885	1027010316	AT				Little Grasshopper Creek	45.4	.04	.34	3.95	14.6	44.2
886	1027010317	AT				Delaware River	388	4.18	13.2	39.5	117	361
892	1024001111	AT				Missouri River	421,000	23,600	34,500	43,300	57,700	75,100
896	102400119235	AT				Whiskey Creek	4.99	.13	.95	2.16	4.32	8.76
899	1027010315	AT				Delaware River	434	5.26	15.8	45.8	133	412
900	1027010343	AT	JA			Negro Creek	23.9	.01	.03	1.67	6.72	21.2
907	1024001131	AT				White Clay Creek	13.9	0	.92	3.42	8.76	20.4
916	10240011235	AT				Whiskey Creek	4.82	.15	.93	2.08	4.14	8.38
917	102701049	AT				Stranger Creek	18.7	0	0	1.16	5.06	16.5
922	1024001111	AT				Missouri River	421,000	23,600	34,500	43,300	57,700	75,100
932	102400119	AT				Missouri River	421,000	23,600	34,500	43,300	57,700	75,100
950	102400119	AT				Missouri River	421,000	23,600	34,500	43,300	57,700	75,100

Table 9. 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 Atchison County.—Continued

[KSWR, Kansas Surface Water Register; CUSEGA, catalog unit segment number alpha; mi^2, square miles; ft^3/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. 13)	Estimated mean flow (ft^3/s)	Estimated peak discharge (ft^3/s) for indicated peak-discharge frequency					
		2-year	5-year	10-year	25-year	50-year	100-year
717	26.0	3,190	6,830	10,100	15,000	19,300	24,000
719	15.1	1,900	4,070	5,960	8,830	11,200	14,000
720	9.30	1,370	2,910	4,230	6,240	7,900	9,800
728	5.73	1,100	2,330	3,380	4,960	6,270	7,760
730	68.1	4,650	8,960	12,600	17,900	22,400	27,200
735	10.9	1,580	3,380	4,940	7,300	9,270	11,500
737	3.91	867	1,820	2,630	3,850	4,860	6,000
740	NA	NA	NA	NA	NA	NA	NA
741	NA	NA	NA	NA	NA	NA	NA
745	2.10	648	1,350	1,940	2,820	3,550	4,370
748	23.6	3,520	7,320	10,700	15,700	20,000	24,700
749	27.2	3,350	7,110	10,500	15,500	20,000	24,800
764	87.5	5,380	10,200	14,400	20,300	25,300	30,700
772	17.6	2,080	4,490	6,590	9,800	12,500	15,500
773	48.5	5,000	10,200	14,700	21,500	27,400	33,900
776	28.0	3,090	6,080	8,610	12,300	15,400	18,600
777	14.1	1,610	3,440	5,020	7,420	9,410	11,700
827	111	6,150	11,700	16,300	23,100	28,800	34,900
831	48,100	109,000	147,000	174,000	199,000	233,000	261,000
847	24.6	2,320	5,000	7,330	10,900	13,900	17,300
858	68.5	5,950	11,900	17,000	24,800	31,400	38,800
859	165	9,010	16,000	21,700	30,100	37,200	45,000
860	48,200	109,000	147,000	174,000	199,000	234,000	262,000
862	14.0	1,100	2,180	3,120	4,610	5,950	7,490
863	29.0	3,160	6,800	10,100	15,100	19,400	24,200
885	32.5	3,280	7,020	10,400	15,500	20,000	24,900
886	229	11,400	18,400	23,800	31,300	37,400	44,000
892	48,200	109,000	147,000	174,000	200,000	234,000	262,000
896	5.38	852	1,760	2,540	3,690	4,650	5,720
899	258	12,300	19,000	24,000	30,700	36,000	41,700
900	17.0	2,040	4,390	6,430	9,540	12,100	15,100
907	13.1	1,100	2,200	3,150	4,650	5,990	7,520
916	5.17	835	1,730	2,480	3,620	4,550	5,600
917	13.4	1,710	3,700	5,430	8,070	10,300	12,800
922	48,200	109,000	147,000	174,000	200,000	234,000	262,000
932	48,200	109,000	147,000	174,000	200,000	234,000	262,000
950	48,200	109,000	147,000	174,000	200,000	234,000	262,000

Table 9. 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 Atchison County.—Continued

[KSWR, Kansas Surface Water Register; CUSEGA, catalog unit segment number alpha; mi^2, square miles; ft^3/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. 13)	KSWR CUSEGA number	Stream segment by county (table 112)				Stream name	Contributing drainage area (mi^2)	Estimated flow-duration values (ft^3/s) for indicated percentage of time flow equaled or exceeded				
		1st	2nd	3rd	4th			90 percent	75 percent	50 percent	25 percent	10 percent
954	102400117	AT				Missouri River	421,000	23,600	34,500	43,300	57,700	75,100
974	1024001123	AT				Walnut Creek	18.4	0	1.47	5.21	13.4	30.7
991	1027010315	AT				Delaware River	470	6.20	18.0	51.0	146	450
992	1027010328	AT	JA			Straight Creek	113	.02	1.99	10.3	35.6	106
993	1027010441	AT				Camp Creek	24.8	0	.33	2.96	9.58	26.4
994	102701049	AT				Stranger Creek	71.3	.01	.62	5.26	19.9	62.3
1018	102400117	AT				Missouri River	421,000	23,600	34,500	43,400	57,700	75,200
1053	102701049	AT				Stranger Creek	102	.02	1.51	8.44	30.1	92.0
1063	1027010314	AT				Delaware River	587	6.14	18.0	54.4	157	485
1064	1027010329	AT	JA			Elk Creek	134	.03	2.10	10.9	38.7	119
1078	1027010313	AT				Delaware River	722	6.02	17.8	57.8	167	523
1098	1027010348	AT	JA			Nebo Creek	15.4	0	0	1.12	4.58	14.4
1104	10270104959	AT				Little Stranger Creek	30.6	0	0	1.89	7.93	25.6
1105	1024001133	AT				Owl Creek	16.0	0	1.23	4.72	12.5	28.9
1111	1027010410	AT				Crooked Creek	75.3	.01	.57	5.36	21.3	68.8
1114	1027010410	AT				Crooked Creek	57.3	.01	.14	3.74	15.5	50.9
1121	1027010411	AT				Unnamed tributary, Atchison 1	17.5	0	0	1.14	5.02	16.3
1123	1027010313	AT				Delaware River	742	6.01	17.8	58.3	169	529
1128	102400115	AT				Missouri River	421,000	23,600	34,500	43,400	57,700	75,200
1145	1027010412	AT	JF			Crooked Creek	39.7	0	0	2.51	10.9	35.8
1177	1027010349	AT	JF			Catamount Creek	12.3	0	0	1.19	4.20	12.4
1190	1027010350	AT	JF			Coal Creek	40.1	0	.13	3.17	12.0	36.6
1191	1027010313	AT	JF			Delaware River	761	6.03	17.8	59.1	171	536
1220	102701048	AT	LV			Stranger Creek	216	.26	3.99	18.7	65.5	205
1227	102701041011	AT	JF			Mooney Creek	10.1	0	0	.61	2.98	10.0

Table 9. 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 Atchison County.—Continued

[KSWR, Kansas Surface Water Register; CUSEGA, catalog unit segment number alpha; mi^2, square miles; ft^3/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. 13)	Estimated mean flow (ft^3/s)	Estimated peak discharge (ft^3/s) for indicated peak-discharge frequency					
		2-year	5-year	10-year	25-year	50-year	100-year
954	48,200	109,000	147,000	174,000	200,000	234,000	262,000
974	18.6	1,840	3,900	5,680	8,380	10,600	13,200
991	280	12,500	18,700	23,000	28,600	32,900	37,400
992	73.4	3,690	7,480	11,300	17,100	22,600	28,500
993	19.1	2,110	4,540	6,650	9,860	12,500	15,600
994	45.9	3,540	7,700	11,500	17,300	22,400	28,100
1018	48,200	109,000	147,000	175,000	200,000	234,000	262,000
1053	64.3	4,040	8,580	12,700	19,000	24,400	30,500
1063	308	12,100	18,300	23,500	29,700	34,700	39,200
1064	83.6	6,610	13,100	18,900	27,400	34,700	42,600
1078	338	11,800	18,100	24,400	31,500	37,300	41,900
1098	11.7	1,600	3,410	4,980	7,360	9,330	11,600
1104	20.7	2,940	6,340	9,390	14,000	18,000	22,400
1105	17.6	1,780	3,720	5,380	7,890	9,970	12,300
1111	51.3	5,050	10,300	14,900	21,800	27,700	34,200
1114	39.4	4,880	9,890	14,300	20,800	26,400	32,500
1121	13.3	1,770	3,760	5,480	8,080	10,200	12,700
1123	342	11,400	17,600	24,000	31,000	36,800	41,300
1128	48,200	109,000	147,000	175,000	200,000	234,000	262,000
1145	28.6	3,970	8,190	11,900	17,400	22,200	27,400
1177	9.82	1,430	3,030	4,400	6,480	8,190	10,100
1190	28.0	3,760	7,770	11,300	16,600	21,100	26,000
1191	347	11,000	16,900	23,300	30,200	35,900	40,200
1220	132	5,650	11,400	16,500	24,100	30,800	38,200
1227	8.46	1,350	2,790	4,030	5,880	7,400	9,130

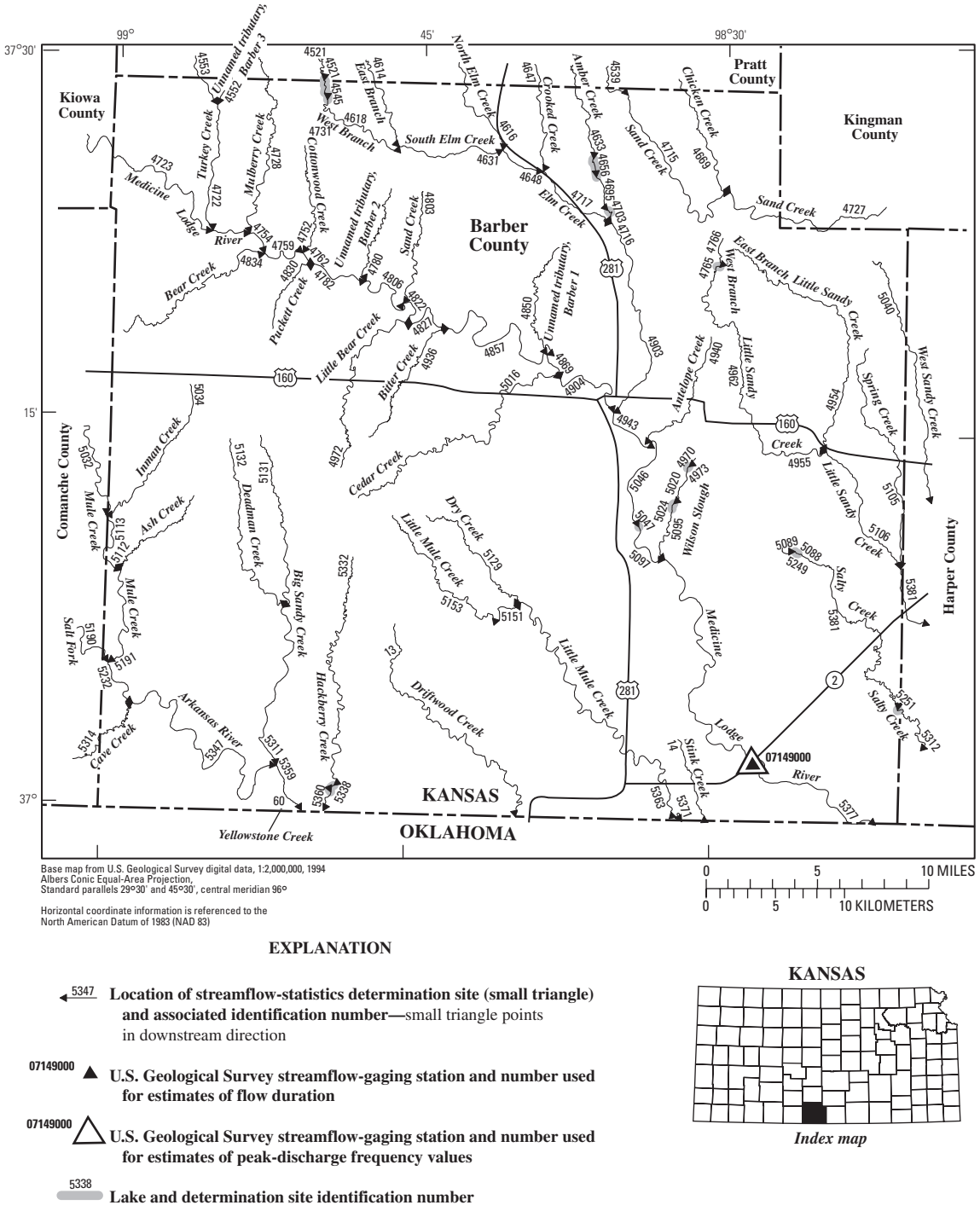

Figure 14. Location of streamflow-statistics determination sites, associated identification numbers, and U.S. Geological Survey streamflow-gaging stations used in the flow-duration and peak-discharge frequency analyses for Barber County.

Table 10. 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 Barber County.

[KSWR, Kansas Surface Water Register; CUSEGA, catalog unit segment number alpha; $mi^{2,}$ square miles; ft^3/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. 14)	KSWR CUSEGA number	Stream segment by county (table 112)				Stream name	Contributing drainage area (mi^2)	Estimated flow-duration values (ft^3/s) for indicated percentage of time flow equaled or exceeded				
		1st	2nd	3rd	4th			90 percent	75 percent	50 percent	25 percent	10 percent
13	11060003905	BA				Driftwood Creek	30.6	0	0	0.32	0.82	2.73
14	1106000328	BA				Stink Creek	2.68	0	0	0	0	0
60	1106000217	BA				Yellowstone Creek	55.0	0	.03	1.39	3.32	7.68
4539	1106000511	BA	PR			Sand Creek	47.7	.02	.13	.72	1.35	3.75
4545	HYDRO	BA	PR			HYDRO	27.1	NA	NA	NA	NA	NA
4552	11060003452	BA				Unnamed tributary, Barber 3	1.91	0	0	0	0	0
4553	110600037	BA	PR			Turkey Creek	45.5	.01	.32	1.11	1.91	4.15
4614	1106000310	BA	PR			East Branch South Elm Creek	28.1	0	.02	.39	.50	1.54
4616	110600034	BA	PR			North Elm Creek	34.8	0	.52	1.25	2.00	4.12
4618	110600039005	BA				West Branch South Elm Creek	36.7	.01	.09	.69	1.16	2.88
4631	110600035	BA				South Elm Creek	75.5	.02	1.24	2.72	5.16	10.8
4633	1106000312	BA	PR			Amber Creek	10.6	0	0	0	0	.01
4647	1106000311	BA	PR			Crooked Creek	15.2	0	.20	.30	.37	.68
4648	110600033	BA				Elm Creek	116	.29	2.60	5.20	9.89	20.1
4656	HYDRO	BA				HYDRO	12.4	NA	NA	NA	NA	NA
4669	1106000536	BA	PR			Chicken Creek	22.5	.40	.50	.70	.78	1.56
4695	1106000312	BA				Amber Creek	15.4	0	.78	1.13	1.19	1.81
4703	HYDRO	BA				HYDRO	15.5	NA	NA	NA	NA	NA
4715	1106000511	BA				Sand Creek	66.7	.04	.77	1.86	3.73	8.72
4716	1106000312	BA				Amber Creek	17.0	0	.91	1.36	1.58	2.47
4717	110600033	BA				Elm Creek	139	.70	3.66	7.13	13.4	26.7
4722	110600037	BA				Turkey Creek	58.6	.01	.80	2.03	3.75	7.62
4723	110600038	BA	KW			Medicine Lodge River	314	1.32	7.58	14.9	27.6	54.2
4727	1106000511	BA	KM			Sand Creek	108	.67	2.45	4.62	9.09	19.7
4728	1106000314	BA	PR			Mulberry Creek	22.1	0	.16	.70	.87	1.76
4731	110600036	BA				Medicine Lodge River	374	1.99	9.83	18.9	34.6	67.7
4752	1106000316	BA				Cottonwood Creek	13.2	0	0	0	.01	.01
4754	110600036	BA				Medicine Lodge River	398	2.30	10.9	20.7	37.7	73.8
4759	110600036	BA				Medicine Lodge River	436	2.70	12.5	23.9	43.2	84.4
4762	110600036	BA				Medicine Lodge River	450	2.86	13.1	25.0	45.1	88.1
4765	HYDRO	BA				HYDRO	2.86	NA	NA	NA	NA	NA
4766	110600049039	BA				West Branch Little Sandy Creek	2.83	0	0	0	0	0
4780	11060003415	BA				Unnamed tributary, Barber 2	10.6	0	0	0	0	.01
4782	110600036	BA				Medicine Lodge River	472	3.08	14.1	26.8	48.2	94.5
4803	1106000317	BA				Sand Creek	16.1	0	.01	.44	.55	1.35
4806	110600036	BA				Medicine Lodge River	486	3.28	14.8	28.1	50.5	98.9
4822	110600036	BA				Medicine Lodge River	503	3.50	15.6	29.7	53.2	104
4827	110600036	BA				Medicine Lodge River	531	3.83	17.0	32.4	57.8	113

Table 10. 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 Barber County.—Continued

[KSWR, Kansas Surface Water Register; CUSEGA, catalog unit segment number alpha; mi^2, square miles; ft^3/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. 14)	Estimated mean flow (ft^3/s)	Estimated peak discharge (ft^3/s) for indicated peak-discharge frequency					
		2-year	5-year	10-year	25-year	50-year	100-year
13	3.82	803	2,070	3,300	5,290	7,090	9,110
14	0	251	633	989	1,550	2,040	2,610
60	6.98	976	2,520	4,030	6,480	8,710	11,200
4539	4.99	461	1,290	2,160	3,590	4,930	6,480
4545	NA	NA	NA	NA	NA	NA	NA
4552	0	170	447	709	1,130	1,500	1,930
4553	4.76	786	1,970	3,100	4,890	6,500	8,290
4614	2.88	836	2,300	3,740	6,130	8,240	10,700
4616	4.49	683	1,710	2,700	4,260	5,650	7,200
4618	3.93	551	1,470	2,380	3,870	5,220	6,760
4631	9.59	967	2,400	3,780	5,970	7,930	10,100
4633	1.07	505	1,340	2,150	3,460	4,620	5,970
4647	1.76	611	1,640	2,650	4,290	5,730	7,430
4648	15.7	1,330	3,150	4,880	7,580	9,990	12,700
4656	NA	NA	NA	NA	NA	NA	NA
4669	2.69	832	2,210	3,550	5,720	7,640	9,890
4695	2.27	629	1,680	2,700	4,370	5,840	7,560
4703	NA	NA	NA	NA	NA	NA	NA
4715	8.52	607	1,650	2,720	4,490	6,120	8,000
4716	2.67	667	1,790	2,870	4,650	6,210	8,050
4717	19.8	1,500	3,510	5,380	8,290	10,900	13,700
4722	7.02	949	2,330	3,650	5,720	7,570	9,630
4723	36.6	1,880	4,370	6,720	10,400	13,700	17,400
4727	16.0	927	2,380	3,800	6,090	8,170	10,500
4728	2.59	708	1,950	3,180	5,200	7,000	9,120
4731	44.7	2,130	4,850	7,360	11,300	14,800	18,700
4752	1.29	532	1,450	2,340	3,800	5,090	6,610
4754	48.2	2,250	5,060	7,640	11,700	15,200	19,200
4759	54.2	2,400	5,340	8,020	12,200	15,800	19,900
4762	56.4	2,470	5,460	8,170	12,400	16,100	20,200
4765	NA	NA	NA	NA	NA	NA	NA
4766	0	251	638	1,000	1,580	2,080	2,660
4780	1.03	477	1,290	2,070	3,350	4,480	5,810
4782	59.9	2,560	5,620	8,390	12,700	16,400	20,600
4803	2.22	625	1,690	2,720	4,420	5,910	7,670
4806	62.4	2,590	5,670	8,440	12,700	16,500	20,700
4822	65.4	2,660	5,780	8,590	12,900	16,700	20,900
4827	70.3	2,740	5,920	8,760	13,100	16,900	21,200

Table 10. 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 Barber County.—Continued

[KSWR, Kansas Surface Water Register; CUSEGA, catalog unit segment number alpha; mi^2, square miles; ft^3/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. 14)	KSWR CUSEGA number	Stream segment by county (table 112)				Stream name	Contributing drainage area (mi^2)	Estimated flow-duration values (ft^3/s) for indicated percentage of time flow equaled or exceeded				
		1st	2nd	3rd	4th			90 percent	75 percent	50 percent	25 percent	10 percent
4830	1106000315	BA				Puckett Creek	16.0	0	0.01	0.01	0.01	0.52
4834	1106000313	BA				Bear Creek	36.0	.01	.36	1.48	2.68	5.21
4850	11060003370	BA				Unnamed tributary, Barber 1	21.3	0	.32	1.04	1.63	3.24
4857	110600036	BA				Medicine Lodge River	560	4.31	18.7	35.6	63.2	123
4869	110600036	BA				Medicine Lodge River	582	4.64	20.0	37.9	67.1	131
4903	110600033	BA				Elm Creek	183	1.42	5.71	11.1	20.4	40.2
4904	110600036	BA				Medicine Lodge River	632	5.34	22.9	43.3	76.3	149
4936	1106000318	BA				Bitter Creek	14.1	0	0	0	.01	.67
4940	1106000322	BA				Antelope Creek	12.4	0	0	0	.01	.01
4943	110600032	BA				Medicine Lodge River	822	8.80	35.5	65.2	110	213
4954	1106000465	BA				East Branch Little Sandy Creek	31.0	.21	1.61	2.73	4.35	7.92
4955	1106000439	BA				East Branch Little Sandy Creek	31.0	.21	1.61	2.73	4.35	7.92
4962	1106000049039	BA				West Branch Little Sandy Creek	41.5	0	1.23	2.42	4.23	8.41
4970	1106000323	BA				Wilson Slough	3.82	0	0	0	0	0
4972	1106000319	BA				Little Bear Creek	25.3	0	.02	.77	1.52	3.49
4973	HYDRO	BA				HYDRO	4.19	NA	NA	NA	NA	NA
5016	1106000320	BA				Cedar Creek	39.8	.01	.49	1.98	4.06	8.53
5020	1106000323	BA				Wilson Slough	9.96	0	0	0	0	0
5024	HYDRO	BA				HYDRO	10.5	NA	NA	NA	NA	NA
5032	110600027	BA	CM			Mule Creek	155	.01	2.71	6.89	14.2	29.1
5034	1106000221	BA	CM			Inman Creek	25.7	0	.11	.91	1.47	2.88
5040	1106000467	BA	HP			West Sandy Creek	25.5	1.14	2.45	3.19	4.36	7.12
5046	110600032	BA				Medicine Lodge River	850	9.38	37.6	68.9	116	224
5047	HYDRO	BA				HYDRO	850	NA	NA	NA	NA	NA
5088	HYDRO	BA				HYDRO	13.0	NA	NA	NA	NA	NA
5089	1106000440	BA				Salty Creek	12.9	0	0	.53	.76	1.85
5095	1106000323	BA				Wilson Slough	15.7	0	.01	.10	.17	.94
5097	110600032	BA				Medicine Lodge River	861	9.60	38.5	70.3	118	228
5105	1106000466	BA	HP			Spring Creek	18.2	.21	.59	.83	.93	2.00
5106	1106000439	BA				Little Sandy Creek	86.3	1.08	3.61	6.63	11.9	23.0
5112	1106000220	BA				Ash Creek	14.3	0	0	.01	.02	.04
5113	110600027	BA	CM			Mule Creek	187	.19	3.54	9.02	18.6	38.2
5129	1106000321	BA				Dry Creek	23.4	0	0	.56	1.23	3.25
5131	110600025	BA				Big Sandy Creek	24.9	0	.01	.70	1.22	2.67
5132	1106000222	BA				Deadman Creek	25.8	0	.01	.38	.70	1.89
5151	110600039	BA				Little Mule Creek	23.7	0	.01	.54	1.05	2.69
5153	110600039	BA				Little Mule Creek	22.6	0	0	.50	.94	2.46
5190	110600028	BA	CM			Salt Fork Arkansas River	378	2.04	8.85	22.4	45.8	94.6

Table 10. 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 Barber County.—Continued

[KSWR, Kansas Surface Water Register; CUSEGA, catalog unit segment number alpha; mi^2, square miles; ft^3/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. 14)	Estimated mean flow (ft^3/s)	Estimated peak discharge (ft^3/s) for indicated peak-discharge frequency					
		2-year	5-year	10-year	25-year	50-year	100-year
4830	1.84	580	1,590	2,590	4,230	5,680	7,390
4834	4.79	787	1,970	3,110	4,900	6,510	8,290
4850	3.43	756	2,040	3,290	5,340	7,140	9,270
4857	75.7	2,720	5,850	8,620	12,900	16,600	20,700
4869	79.9	2,800	5,970	8,770	13,000	16,800	20,900
4903	27.7	1,850	4,180	6,320	9,600	12,500	15,700
4904	89.6	3,000	6,280	9,140	13,500	17,200	21,300
4936	1.81	566	1,530	2,470	4,020	5,380	6,980
4940	1.13	572	1,510	2,420	3,880	5,170	6,680
4943	124	3,740	7,290	10,100	14,200	17,700	21,300
4954	6.38	959	2,190	3,310	5,010	6,480	8,060
4955	6.38	958	2,190	3,310	5,000	6,470	8,060
4962	7.23	1,030	2,410	3,680	5,620	7,330	9,190
4970	0	294	756	1,190	1,890	2,490	3,200
4972	3.73	766	2,120	3,450	5,660	7,620	9,930
4973	NA	NA	NA	NA	NA	NA	NA
5016	7.05	837	2,130	3,390	5,410	7,240	9,290
5020	1.00	513	1,340	2,140	3,430	4,550	5,870
5024	NA	NA	NA	NA	NA	NA	NA
5032	20.9	1,110	2,840	4,540	7,300	9,810	12,700
5034	3.21	719	2,020	3,330	5,490	7,420	9,710
5040	5.60	997	2,590	4,110	6,580	8,730	11,300
5046	129	3,790	7,310	10,100	14,100	17,400	20,900
5047	NA	NA	NA	NA	NA	NA	NA
5088	NA	NA	NA	NA	NA	NA	NA
5089	2.43	625	1,630	2,590	4,130	5,490	7,070
5095	2.16	668	1,770	2,830	4,550	6,060	7,830
5097	131	3,790	7,290	10,100	14,000	17,300	20,700
5105	2.91	820	2,110	3,350	5,330	7,060	9,090
5106	16.4	1,510	3,370	5,050	7,600	9,810	12,200
5112	1.00	499	1,400	2,290	3,760	5,070	6,620
5113	26.4	1,260	3,180	5,070	8,110	10,900	14,000
5129	3.71	783	2,130	3,440	5,600	7,510	9,760
5131	3.17	723	2,020	3,310	5,450	7,360	9,620
5132	2.82	713	2,010	3,310	5,470	7,400	9,690
5151	3.34	765	2,090	3,400	5,550	7,460	9,710
5153	3.16	743	2,030	3,300	5,390	7,230	9,410
5190	60.4	1,760	4,300	6,780	10,700	14,300	18,400

Table 10. 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 Barber County.—Continued

[KSWR, Kansas Surface Water Register; CUSEGA, catalog unit segment number alpha; mi^2, square miles; ft^3/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. 14)	KSWR CUSEGA number	Stream segment by county (table 112)				Stream name	Contributing drainage area (mi^2)	Estimated flow-duration values (ft^3/s) for indicated percentage of time flow equaled or exceeded				
		1st	2nd	3rd	4th			90 percent	75 percent	50 percent	25 percent	10 percent
5191	110600027	BA				Mule Creek	215	0.41	4.24	10.8	22.3	45.9
5232	110600026	BA				Salt Fork Arkansas River	597	3.81	15.6	42.8	88.5	186
5249	1106000440	BA				Salty Creek	50.6	0	.46	1.88	4.39	10.7
5251	HYDRO	BA				HYDRO	52.7	NA	NA	NA	NA	NA
5311	110600025	BA				Big Sandy Creek	72.6	0	.71	2.69	5.79	12.3
5312	1106000440	BA	HP			Salty Creek	63.8	0	.60	2.23	5.36	13.3
5314	1106000228	BA	CM			Cave Creek	24.4	0	.01	.09	.22	1.11
5332	1106000223	BA				Hackberry Creek	37.5	0	.01	.60	1.50	4.00
5338	HYDRO	BA				HYDRO	38.1	NA	NA	NA	NA	NA
5347	110600026	BA				Salt Fork Arkansas River	653	4.29	17.5	49.0	101	213
5359	110600024	BA				Salt Fork Arkansas River	729	4.87	20.2	57.8	120	254
5360	1106000223	BA				Hackberry Creek	40.7	0	.02	.66	1.68	4.48
5363	110600039	BA				Little Mule Creek	105	0	1.26	4.13	9.86	23.4
5371	110600039	BA				Little Mule Creek	105	0	1.26	4.15	9.90	23.5
5377	110600032	BA				Medicine Lodge River	965	12.0	47.0	85.0	141	271
5381	1106000439	BA	HP			Little Sandy Creek	141	3.21	7.25	12.4	21.3	40.3

Table 10. 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 Barber County.—Continued

[KSWR, Kansas Surface Water Register; CUSEGA, catalog unit segment number alpha; mi^2, square miles; ft^3/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. 14)	Estimated mean flow (ft^3/s)	Estimated peak discharge (ft^3/s) for indicated peak-discharge frequency					
		2-year	5-year	10-year	25-year	50-year	100-year
5191	31.1	1,380	3,460	5,490	8,750	11,700	15,100
5232	113	2,610	6,120	9,480	14,800	19,600	25,000
5249	9.61	1,170	2,870	4,490	7,060	9,360	11,900
5251	NA	NA	NA	NA	NA	NA	NA
5311	9.91	1,090	2,730	4,310	6,830	9,110	11,700
5312	11.8	1,140	2,860	4,530	7,220	9,640	12,400
5314	2.32	655	1,870	3,090	5,130	6,960	9,140
5332	4.56	773	2,040	3,300	5,340	7,220	9,340
5338	NA	NA	NA	NA	NA	NA	NA
5347	129	2,640	6,230	9,660	15,100	20,000	25,600
5359	152	2,850	6,700	10,400	16,200	21,500	27,400
5360	4.97	788	2,090	3,390	5,500	7,450	9,660
5363	18.0	1,320	3,350	5,350	8,580	11,500	14,900
5371	18.1	1,320	3,350	5,350	8,590	11,500	14,900
5377	154	4,030	7,450	10,000	13,500	16,300	19,100
5381	26.9	1,730	3,790	5,630	8,410	10,800	13,400

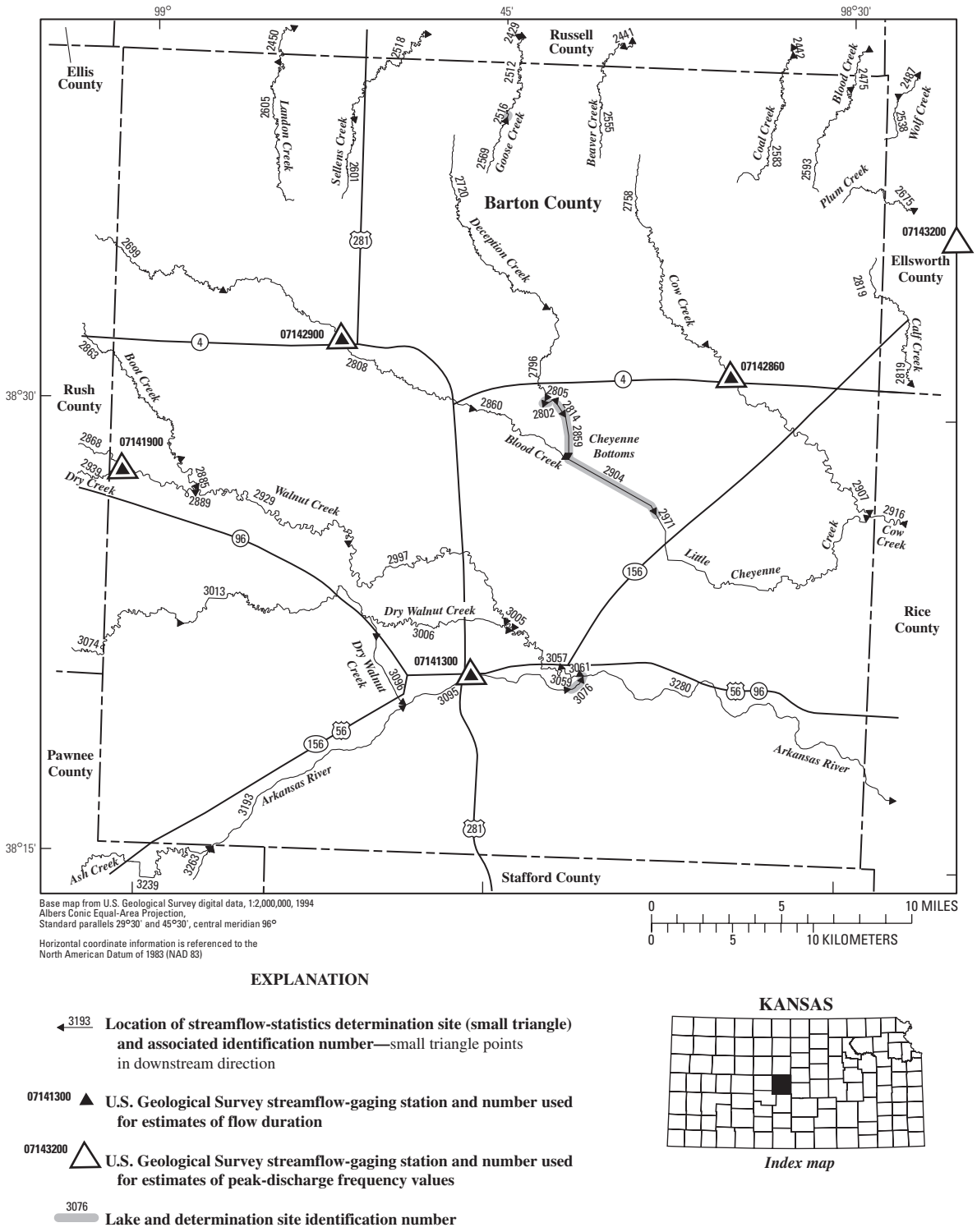

Figure 15. Location of streamflow-statistics determination sites, associated identification numbers, and U.S. Geological Survey streamflow-gaging stations used in the flow-duration and peak-discharge frequency analyses for Barton County.

Table 11. 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 Barton County.

[KSWR, Kansas Surface Water Register; CUSEGA, catalog unit segment number alpha; mi^2, square miles; ft^3/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. 15)	KSWR CUSEGA number	Stream segment by county (table 112)				Stream name	Contributing drainage area (mi^2)	Estimated flow-duration values (ft^3/s) for indicated percentage of time flow equaled or exceeded				
		1st	2nd	3rd	4th			90 percent	75 percent	50 percent	25 percent	10 percent
2450	1026000631	BT	RS			Landon Creek	62.3	0	0	0.32	1.20	4.27
2475	1026000635	BT	EW	RS		Blood Creek	29.1	0	0	.64	1.56	4.29
2512	1026000639	BT	RS			Goose Creek	21.0	0	0	0	0	0
2516	HYDRO	BT				HYDRO	10.1	NA	NA	NA	NA	NA
2518	1026000632	BT	RS			Sellens Creek	37.0	0	0	0	.09	1.58
2538	1026000636	BT	EW			Wolf Creek	7.78	0	0	0	0	0
2555	1026000633	BT	RS			Beaver Creek	20.5	0	0	0	0	0
2569	1026000639	BT				Goose Creek	10.1	0	0	0	0	0
2583	1026000634	BT	RS			Coal Creek	30.2	0	0	.20	.65	2.61
2593	1026000635	BT				Blood Creek	13.2	0	0	0	0	0
2601	1026000632	BT				Sellens Creek	17.3	0	0	0	0	0
2605	1026000631	BT				Landon Creek	36.1	0	0	0	0	.19
2675	110300114	BT	EW			Plum Creek	30.5	0	0	0	.24	2.07
2699	1103001115	BT	RH			Blood Creek	32.4	0	0	0	0	0
2720	1103001113	BT				Deception Creek	40.3	0	0	.16	.61	2.76
2758	110300116	BT				Cow Creek	44.9	0	0	0	.17	2.17
2796	1103001113	BT				Deception Creek	55.1	0	0	.49	1.44	4.90
2802	HYDRO	BT				HYDRO	55.8	NA	NA	NA	NA	NA
2805	1103001113	BT				Deception Creek	57.0	0	0	.50	1.49	5.07
2808	1103001115	BT				Blood Creek	94.3	0	.10	.48	1.20	4.40
2814	HYDRO	BT				HYDRO	60.0	NA	NA	NA	NA	NA
2819	1103001116	BT	EW	RC		Calf Creek	36.6	0	0	0	.01	1.70
2859	HYDRO	BT				HYDRO	63.7	NA	NA	NA	NA	NA
2860	1103001115	BT				Blood Creek	109	0	.08	.62	1.61	6.79
2863	1103000815	BT	RH			Boot Creek	31.7	0	0	0	0	0
2868	110300082	BT	RH			Walnut Creek	1,640	0	0	1.88	20.4	53.4
2885	1103000815	BT				Boot Creek	34.2	0	0	0	0	0
2889	110300082	BT				Walnut Creek	1,690	0	0	2.30	23.0	61.4
2904	HYDRO	BT				HYDRO	195	NA	NA	NA	NA	NA
2907	110300116	BT				Cow Creek	90.8	0	0	.13	.80	4.40
2916	110300115	BT	RC			Cow Creek	349	.45	2.33	4.45	11.4	52.4
2929	110300082	BT				Walnut Creek	1,760	.30	.55	3.39	25.6	68.2
2939	1103000814	BT	RH			Dry Creek	44.9	0	0	0	0	.57
2971	110300117	BT				Little Cheyenne Creek	251	.03	1.17	2.44	6.55	31.9
2997	110300082	BT				Walnut Creek	1,790	.47	.86	4.01	27.1	71.9
3005	110300082	BT				Walnut Creek	1,790	.47	.86	4.02	27.1	71.9
3006	1103000813	BT				Dry Walnut Creek	9.94	0	0	0	0	0
3013	110300049013	BT				Dry Walnut Creek	132	0	0	.83	2.62	7.97

Table 11. 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 Barton County.—Continued

[KSWR, Kansas Surface Water Register; CUSEGA, catalog unit segment number alpha; mi^2, square miles; ft^3/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. 15)	Estimated mean flow (ft^3/s)	Estimated peak discharge (ft^3/s) for indicated peak-discharge frequency					
		2-year	5-year	10-year	25-year	50-year	100-year
2450	5.75	777	2,150	3,570	5,930	8,150	10,700
2475	4.77	946	2,540	4,100	6,640	8,880	11,500
2512	1.70	703	1,930	3,130	5,110	6,860	8,930
2516	NA	NA	NA	NA	NA	NA	NA
2518	3.39	532	1,530	2,580	4,360	6,030	7,980
2538	.41	445	1,160	1,840	2,940	3,900	5,020
2555	1.69	705	1,920	3,110	5,070	6,810	8,850
2569	.25	457	1,240	1,990	3,230	4,320	5,600
2583	3.87	789	2,060	3,310	5,330	7,180	9,260
2593	1.18	579	1,540	2,470	3,990	5,320	6,880
2601	.86	587	1,630	2,660	4,350	5,860	7,650
2605	2.41	515	1,490	2,520	4,260	5,910	7,830
2675	3.69	657	1,230	1,690	2,370	2,950	3,580
2699	1.62	495	1,400	2,340	3,920	5,400	7,110
2720	4.15	595	1,660	2,770	4,610	6,330	8,320
2758	4.23	548	1,570	2,650	4,500	6,250	8,320
2796	5.92	642	1,800	3,020	5,050	6,960	9,180
2802	NA	NA	NA	NA	NA	NA	NA
2805	6.08	658	1,840	3,080	5,150	7,090	9,360
2808	7.09	955	2,320	3,570	5,540	7,270	9,220
2814	NA	NA	NA	NA	NA	NA	NA
2819	3.61	693	1,880	3,090	5,090	6,940	9,070
2859	NA	NA	NA	NA	NA	NA	NA
2860	8.58	976	2,380	3,680	5,750	7,580	9,660
2863	1.50	420	1,250	2,150	3,690	5,150	6,870
2868	42.9	1,230	2,720	4,040	6,080	7,850	9,840
2885	1.70	404	1,220	2,100	3,620	5,080	6,790
2889	48.9	1,310	2,850	4,200	6,250	8,010	9,970
2904	NA	NA	NA	NA	NA	NA	NA
2907	7.02	556	1,580	2,680	4,610	6,480	8,760
2916	34.8	1,400	3,460	5,460	8,770	11,900	15,500
2929	53.5	1,360	2,980	4,420	6,610	8,510	10,600
2939	2.65	543	1,570	2,660	4,510	6,250	8,280
2971	23.4	1,220	3,030	4,790	7,670	10,300	13,500
2997	56.0	1,340	2,940	4,360	6,540	8,420	10,600
3005	56.0	1,330	2,920	4,330	6,490	8,360	10,500
3006	0	461	1,240	1,990	3,230	4,310	5,580
3013	9.37	783	2,270	3,860	6,590	9,200	12,300

Table 11. 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 Barton County.—Continued

[KSWR, Kansas Surface Water Register; CUSEGA, catalog unit segment number alpha; mi^2, square miles; ft^3/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. 15)	KSWR CUSEGA number	Stream segment by county (table 112)				Stream name	Contributing drainage area (mi^2)	Estimated flow-duration values (ft^3/s) for indicated percentage of time flow equaled or exceeded				
		1st	2nd	3rd	4th			90 percent	75 percent	50 percent	25 percent	10 percent
3057	110300081	BT				Walnut Creek	1,810	0.61	1.10	4.47	28.1	74.3
3059	110300042	BT				Arkansas River	31,700	30.6	41.6	55.3	117	274
3061	110300081	BT				Walnut Creek	1,810	.62	1.12	4.51	28.1	74.5
3074	110300049013	BT	PN	RH		Dry Walnut Creek	98.4	0	0	.32	1.36	4.81
3076	HYDRO	BT				HYDRO	31,700	NA	NA	NA	NA	NA
3095	110300042	BT				Arkansas River	31,700	2.60	6.90	41.0	150	356
3096	110300049013	BT				Dry Walnut Creek	140	0	0	1.11	3.18	9.05
3193	110300042	BT				Arkansas River	31,500	2.50	6.68	40.5	148	348
3239	110300043	BT	PN			Ash Creek	136	0	0	.82	2.20	6.29
3263	110300044	BT	PN			Arkansas River	31,200	2.38	6.39	39.9	145	337
3280	110300041	BT	RC			Arkansas River	33,600	41.7	68.7	140	303	681

Table 11. 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 Barton County.—Continued

[KSWR, Kansas Surface Water Register; CUSEGA, catalog unit segment number alpha; mi^2, square miles; ft^3/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. 15)	Estimated mean flow (ft^3/s)	Estimated peak discharge (ft^3/s) for indicated peak-discharge frequency					
		2-year	5-year	10-year	25-year	50-year	100-year
3057	57.6	1,330	2,920	4,320	6,470	8,340	10,400
3059	178	5,510	13,300	21,200	34,500	47,200	62,700
3061	57.7	1,330	2,900	4,300	6,440	8,300	10,400
3074	6.57	721	2,090	3,550	6,060	8,440	11,300
3076	NA	NA	NA	NA	NA	NA	NA
3095	172	2,960	7,570	15,000	22,500	29,500	36,900
3096	10.1	774	2,230	3,790	6,450	8,990	12,000
3193	168	2,840	7,340	14,700	22,200	29,300	37,000
3239	7.87	567	1,700	2,930	5,060	7,100	9,540
3263	163	2,680	7,040	14,200	21,700	29,000	37,100
3280	328	3,550	8,060	15,200	22,300	29,100	36,300

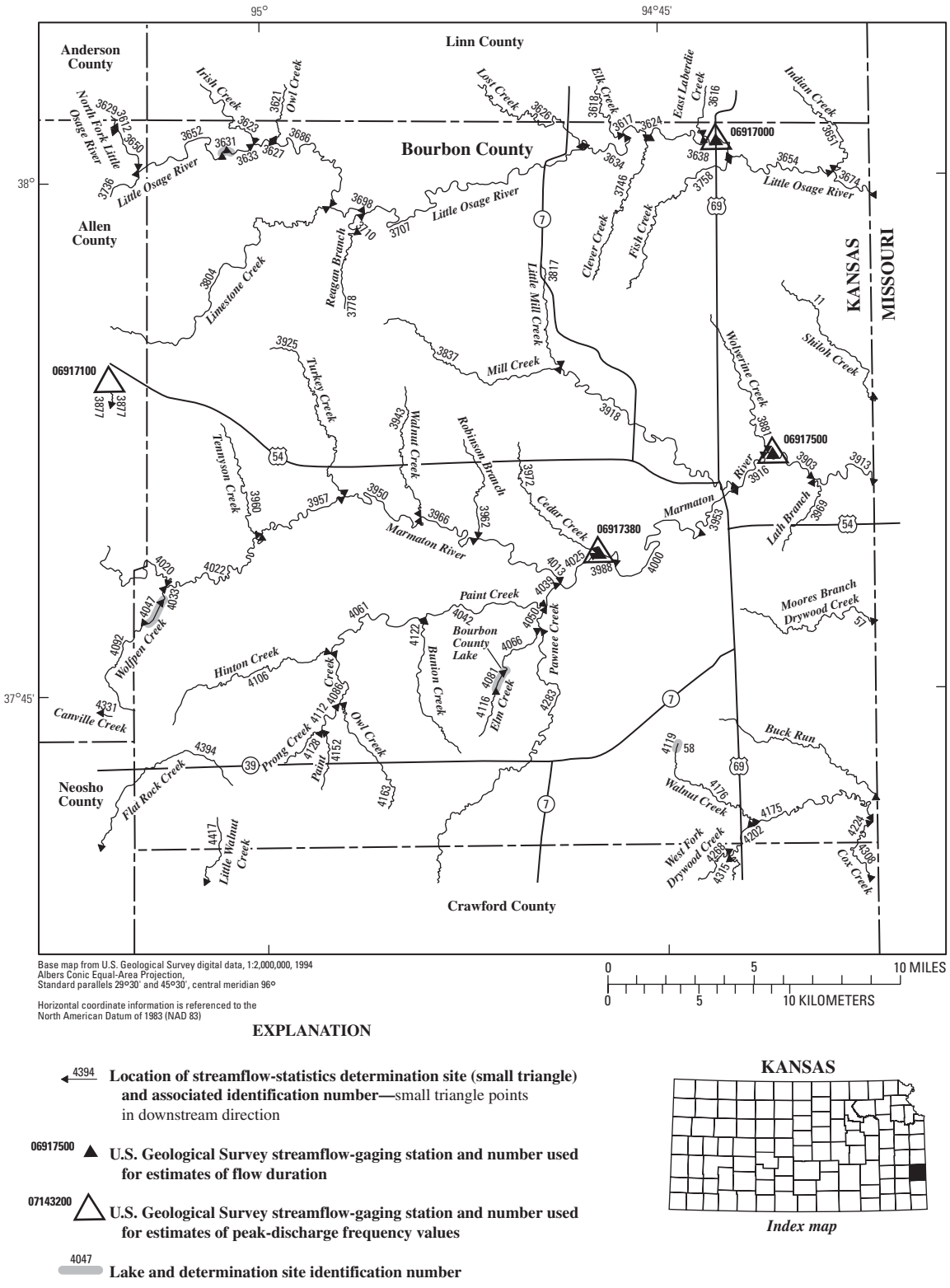

Figure 16. Location of streamflow-statistics determination sites, associated identification numbers, and U.S. Geological Survey streamflow-gaging stations used in the flow-duration and peak-discharge frequency analyses for Bourbon County.

Table 12. 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 Bourbon County.

[KSWR, Kansas Surface Water Register; CUSEGA, catalog unit segment number alpha; mi^2, square miles; ft^3/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. 16)	KSWR CUSEGA number	Stream segment by county (table 112)				Stream name	Contributing drainage area (mi^2)	Estimated flow-duration values (ft^3/s) for indicated percentage of time flow equaled or exceeded				
		1st	2nd	3rd	4th			90 percent	75 percent	50 percent	25 percent	10 percent
11	1029010436	BB				Shiloh Creek	16.6	0	0.14	2.15	7.46	20.9
57	1029010417	BB				Moores Branch Drywood Creek	24.8	0	.25	2.99	10.9	31.5
58	1029010446	BB				Buck Run	23.1	0	.10	2.49	9.40	27.6
3616	1029010313	BB	LN			East Laberdie Creek	17.1	0	0	1.99	7.31	21.1
3617	102901033	BB				Little Osage River	261	.17	2.93	28.6	114	349
3618	1029010311	BB	LN			Elk Creek	25.7	0	.26	3.33	12.2	35.0
3621	102901039	BB	LN			Owl Creek	8.93	0	0	1.35	4.79	13.4
3623	10290103202	BB	LN			Irish Creek	19.1	0	0	1.63	6.74	20.9
3624	102901033	BB				Little Osage River	274	.17	2.89	29.9	120	368
3626	1029010310	BB	LN			Lost Creek	27.8	0	.19	3.25	12.4	36.3
3627	102901033	BB				Little Osage River	114	0	1.51	1.8	42.0	128
3631	HYDRO	BB				HYDRO	92.8	NA	NA	NA	NA	NA
3633	102901033	BB				Little Osage River	94.4	0	1.35	9.22	35.2	106
3634	102901033	BB				Little Osage River	234	.13	2.84	25.4	101	308
3638	102901033	BB				Little Osage River	293	.20	2.90	32.0	129	396
3651	1029010312	BB	LN			Indian Creek	29.9	0	.33	3.31	12.1	35.4
3654	102901033	BB				Little Osage River	319	.43	3.49	34.7	139	429
3674	102901033	BB				Little Osage River	356	.77	4.35	38.7	153	475
3686	102901033	BB				Little Osage River	133	0	1.85	13.3	51.8	158
3698	102901033	BB				Little Osage River	169	0	2.22	17.2	67.5	206
3707	102901033	BB				Little Osage River	204	.08	2.76	22.3	87.1	265
3710	102901036	BB				Reagan Branch	8.87	0	.42	2.44	7.13	17.4
3746	102901037	BB				Clever Creek	1.2	0	0	.82	3.78	12.1
3758	102901038	BB				Fish Creek	17.2	0	0	1.88	7.20	21.2
3778	102901036	BB				Reagan Branch	8.40	0	.43	2.41	6.95	16.8
3817	1029010434	BB				Little Mill Creek	13.6	0	0	1.83	6.83	19.5
3837	102901046	BB				Mill Creek	2.2	0	.18	2.85	10.3	29.2
3881	1029010435	BB				Wolverine Creek	19.7	0	0	2.04	7.83	23.2
3903	102901047	BB				Marmaton River	399	1.00	2.70	31.0	130	446
3913	102901045	BB				Marmaton River	417	1.18	3.18	33.3	138	472
3916	102901047	BB				Marmaton River	376	.88	3.07	34.0	138	454
3918	102901046	BB				Mill Creek	56.5	0	1.07	6.84	25.2	74.0
3925	1029010433	BB				Turkey Creek	19.8	0	.46	3.45	11.5	30.7
3943	1029010432	BB				Walnut Creek	11.0	0	0	1.14	4.70	14.3
3950	1029010412	BB				Marmaton River	123	.03	2.71	17.0	60.9	176
3953	102901047	BB				Marmaton River	317	.59	3.90	41.1	154	467
3957	1029010412	BB				Marmaton River	96.4	0	2.21	13.2	46.9	135
3960	1029010431	BB				Tennyson Creek	16.9	0	.58	3.52	11.0	28.4

Table 12. 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 Bourbon County.—Continued

[KSWR, Kansas Surface Water Register; CUSEGA, catalog unit segment number alpha; mi^2, square miles; ft^3/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. 16)	Estimated mean flow (ft^3/s)	Estimated peak discharge (ft^3/s) for indicated peak-discharge frequency					
		2-year	5-year	10-year	25-year	50-year	100-year
11	16.2	2,390	4,680	6,580	9,400	11,700	14,300
57	23.9	3,050	6,000	8,470	12,100	15,100	18,500
58	21.7	2,980	5,830	8,210	11,700	14,600	17,900
3616	16.4	2,330	4,600	6,500	9,330	11,600	14,200
3617	213	8,860	15,400	20,800	28,700	35,400	42,900
3618	25.6	2,920	5,840	8,290	12,000	14,900	18,400
3621	9.97	1,560	3,060	4,300	6,150	7,650	9,340
3623	17.0	2,390	4,780	6,790	9,790	12,200	15,000
3624	223	8,720	15,100	20,400	28,200	34,900	42,400
3626	26.8	3,040	6,090	8,660	12,500	15,600	19,200
3627	89.0	8,590	15,100	20,400	28,000	34,200	40,900
3631	NA	NA	NA	NA	NA	NA	NA
3633	74.7	7,600	13,500	18,400	25,300	31,000	37,100
3634	191	8,690	15,300	20,700	28,600	35,400	42,800
3638	238	8,560	14,800	19,900	27,500	34,000	41,400
3651	27.0	3,250	6,500	9,240	13,300	16,700	20,500
3654	257	8,870	15,400	20,700	28,600	35,400	43,100
3674	284	9,610	16,600	22,300	30,700	38,000	46,200
3686	106	8,660	15,300	20,700	28,500	35,000	41,900
3698	135	9,420	16,400	22,200	30,400	37,300	44,800
3707	167	8,560	15,100	20,600	28,500	35,100	42,500
3710	11.4	1,590	3,100	4,350	6,200	7,700	9,400
3746	10.2	1,760	3,420	4,800	6,840	8,500	10,400
3758	16.7	2,390	4,720	6,650	9,520	11,900	14,500
3778	11.0	1,540	3,000	4,210	6,000	7,450	9,080
3817	14.7	2,070	4,070	5,730	8,180	10,200	12,400
3837	21.3	2,600	5,160	7,290	10,500	13,100	16,000
3881	18.5	2,610	5,150	7,270	10,400	13,000	15,900
3903	288	11,800	22,900	32,100	45,600	56,900	69,300
3913	302	11,900	23,200	32,500	46,100	57,600	70,100
3916	292	12,800	23,900	33,100	46,500	57,800	70,200
3918	52.4	5,200	9,680	13,400	18,700	23,100	27,800
3925	21.5	2,560	5,080	7,180	10,300	12,900	15,800
3943	11.5	1,840	3,600	5,050	7,200	8,940	10,900
3950	117	8,760	15,100	20,100	27,400	33,500	40,100
3953	300	14,900	26,000	35,000	48,100	59,200	71,300
3957	90.9	7,360	12,700	17,000	23,100	28,300	33,800
3960	19.3	2,320	4,600	6,490	9,320	11,600	14,200

Table 12. 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 Bourbon County.—Continued

[KSWR, Kansas Surface Water Register; CUSEGA, catalog unit segment number alpha; mi^2, square miles; ft^3/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. 16)	KSWR CUSEGA number	Stream segment by county (table 112)				Stream name	Contributing drainage area (mi^2)	Estimated flow-duration values (ft^3/s) for indicated percentage of time flow equaled or exceeded				
		1st	2nd	3rd	4th			90 percent	75 percent	50 percent	25 percent	10 percent
3962	1029010440	BB				Robinson Branch	7.46	0	0	0.35	2.16	7.78
3966	1029010412	BB				Marmaton River	138	.06	2.82	18.7	67.6	197
3969	1029010442	BB				Lath Branch	9.72	0	.15	1.83	5.81	15.2
3972	1029010441	BB				Cedar Creek	13.6	0	0	1.30	5.41	16.5
3988	1029010411	BB				Marmaton River	298	.46	4.08	43.0	159	470
4000	102901048	BB				Marmaton River	313	.56	3.95	41.5	156	469
4013	1029010412	BB				Marmaton River	150	.10	2.92	20.2	73.2	214
4022	1029010412	BB				Marmaton River	72.1	0	1.58	9.48	33.6	96.3
4025	1029010411	BB				Marmaton River	283	.45	4.04	40.6	150	443
4033	1029010437	BB				Wolfpen Creek	14.7	0	.14	2.27	7.74	21.2
4039	1029010413	BB				Paint Creek	129	0	2.06	15.5	58.9	177
4042	1029010414	BB				Paint Creek	75.0	0	.83	7.83	31.1	95.6
4047	HYDRO	BB				HYDRO	14.3	NA	NA	NA	NA	NA
4050	10290104313	BB				Pawnee Creek	53.6	0	1.19	7.33	26.2	74.5
4061	1029010414	BB				Paint Creek	55.9	0	.50	5.73	22.9	70.3
4066	1029010415	BB				Elm Creek	7.99	0	0	.86	3.41	10.2
4081	HYDRO	BB				HYDRO	5.09	NA	NA	NA	NA	NA
4086	1029010414	BB				Paint Creek	27.8	0	0	2.29	10.2	32.6
4106	1029010438	BB				Hinton Creek	17.7	0	.20	2.69	9.42	26.0
4112	1029010414	BB				Paint Creek	13.3	0	0	1.06	5.02	16.2
4116	1029010415	BB				Elm Creek	4.21	0	0	.20	1.30	4.78
4119	HYDRO	BB				HYDRO	6.22	NA	NA	NA	NA	NA
4122	1029010439	BB				Bunion Creek	11.5	0	0	.94	4.53	14.6
4128	1029010444	BB				Prong Creek	5.30	0	0	.34	1.90	6.50
4152	1029010414	BB				Paint Creek	6.54	0	0	.28	1.99	7.32
4163	1029010445	BB				Owl Creek	11.3	0	0	.67	3.68	12.5
4175	1029010419	BB				West Fork Drywood Creek	84.9	0	2.31	11.7	41.8	121
4176	1029010447	BB				Walnut Creek	18.3	0	.21	2.65	9.37	26.0
4202	1029010419	BB	CR			West Fork Drywood Creek	58.6	0	1.74	8.95	31.5	88.4
4224	10290104324	BB	CR			Cox Creek	45.2	.02	1.84	8.10	26.3	69.7
4283	10290104313	BB	CR			Pawnee Creek	44.8	0	1.05	6.44	22.7	63.6
4394	1107020514	BB	NO			Flat Rock Creek	41.2	0	.52	4.30	16.3	48.5
4417	1107020546	BB	CR	NO		Little Walnut Creek	30.0	0	0	2.25	10.0	32.4

Table 12. 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 Bourbon County.—Continued

[KSWR, Kansas Surface Water Register; CUSEGA, catalog unit segment number alpha; mi^2, square miles; ft^3/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. 16)	Estimated mean flow (ft^3/s)	Estimated peak discharge (ft^3/s) for indicated peak-discharge frequency					
		2-year	5-year	10-year	25-year	50-year	100-year
3962	7.18	1,480	2,870	4,000	5,680	7,030	8,560
3966	131	9,440	16,200	21,700	29,600	36,300	43,400
3969	11.1	1,750	3,390	4,740	6,740	8,350	10,200
3972	13.5	2,110	4,120	5,790	8,260	10,300	12,500
3988	302	16,100	27,400	36,400	49,700	60,800	73,000
4000	301	15,300	26,600	35,600	48,800	60,000	72,200
4013	142	9,720	16,800	22,500	30,800	37,800	45,400
4022	66.9	5,960	10,400	13,900	19,000	23,200	27,700
4025	285	16,600	27,900	36,900	50,000	61,100	73,200
4033	15.6	2,170	4,260	6,000	8,590	10,700	13,100
4039	122	10,200	17,600	23,700	32,300	39,400	47,100
4042	69.8	7,270	13,100	17,900	24,900	30,600	36,700
4047	NA	NA	NA	NA	NA	NA	NA
4050	52.7	6,640	11,500	15,400	20,800	25,200	29,800
4061	52.4	7,140	12,700	17,200	23,600	28,900	34,400
4066	8.42	1,590	3,060	4,260	6,020	7,450	9,060
4081	NA	NA	NA	NA	NA	NA	NA
4086	26.3	3,280	6,470	9,140	13,100	16,300	20,000
4106	19.0	2,460	4,830	6,810	9,740	12,100	14,800
4112	13.4	2,120	4,130	5,780	8,230	10,200	12,500
4116	4.47	1,100	2,080	2,880	4,050	4,990	6,040
4119	NA	NA	NA	NA	NA	NA	NA
4122	12.1	1,960	3,790	5,300	7,530	9,340	11,400
4128	5.73	1,240	2,360	3,280	4,630	5,720	6,940
4152	6.72	1,410	2,710	3,760	5,310	6,570	7,980
4163	11.1	1,950	3,770	5,270	7,490	9,280	11,300
4175	81.8	7,510	13,000	17,500	23,700	28,800	34,100
4176	19.3	2,610	5,080	7,130	10,200	12,600	15,400
4202	60.0	8,040	13,300	17,500	23,200	27,800	32,500
4224	47.1	4,310	7,730	10,500	14,400	17,600	20,900
4283	45.0	6,030	10,500	14,000	18,900	22,900	27,100
4394	36.9	5,470	9,810	13,300	18,300	22,300	26,600
4417	26.7	4,590	8,570	11,900	16,600	20,500	24,600

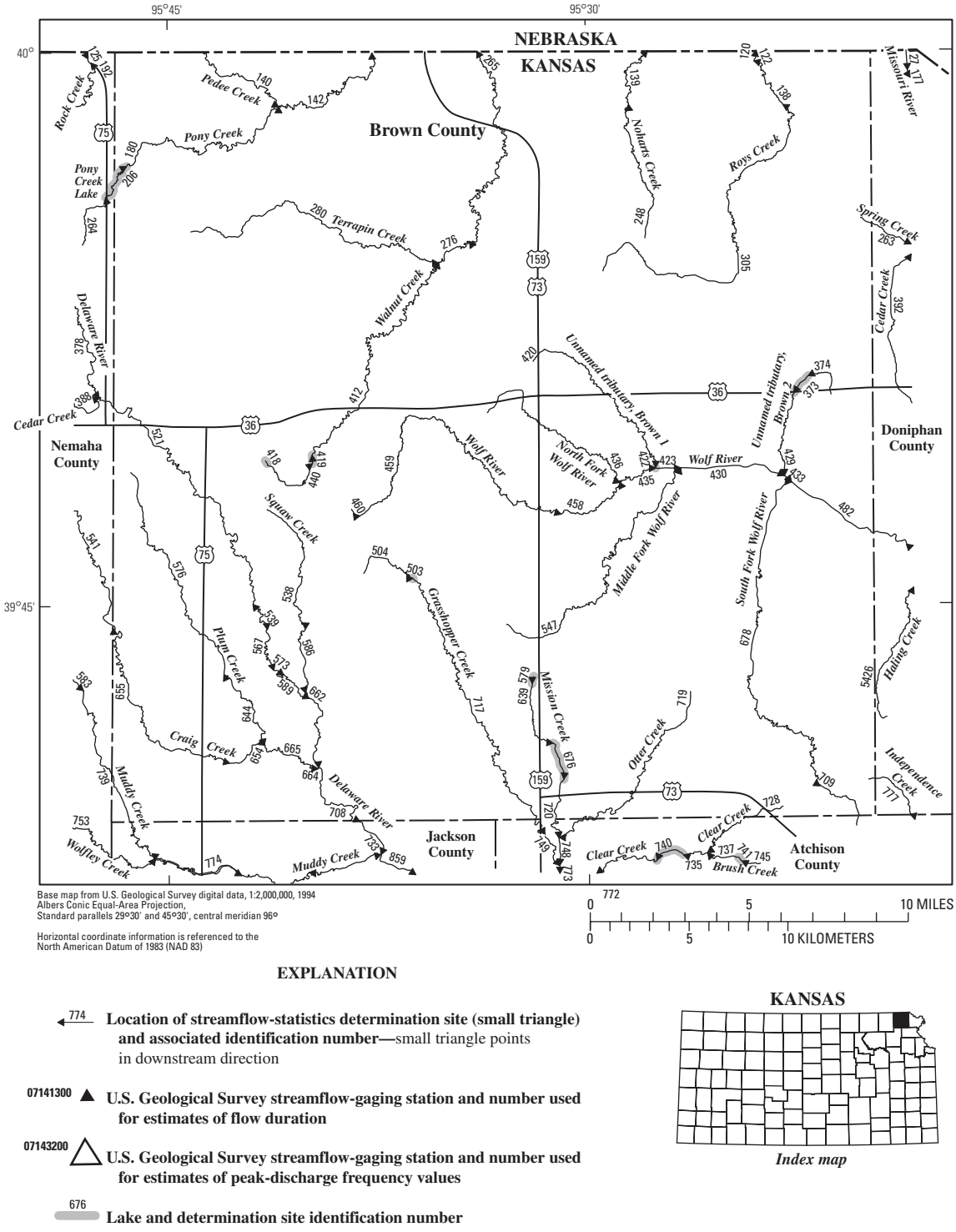

Figure 17. Location of streamflow-statistics determination sites, associated identification numbers, and U.S. Geological Survey streamflow-gaging stations used in the flow-duration and peak-discharge frequency analyses for Brown County.

Table 13. 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 Brown County.

[KSWR, Kansas Surface Water Register; CUSEGA, catalog unit segment number alpha; mi^2, square miles; ft^3/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. 17)	KSWR CUSEGA number	Stream segment by county (table 112)				Stream name	Contributing drainage area (mi^2)	Estimated flow-duration values (ft^3/s) for indicated percentage of time flow equaled or exceeded				
		1st	2nd	3rd	4th			90 percent	75 percent	50 percent	25 percent	10 percent
120	NRTribal	BR				Roys Creek	52.7	0	2.34	8.53	23.6	58.8
122	NRTribal	BR				Roys Creek	52.6	0	2.34	8.52	23.6	58.8
138	NRTribal	BR				Roys Creek	51.1	0	2.27	8.29	23.0	57.3
139	NRTribal	BR				Noharts Creek	22.2	0	1.17	3.95	9.99	23.6
140	1024000841	BR				Pedee Creek	13.2	0	.14	1.47	4.00	10.4
142	1024000838	BR				Pony Creek	52.2	0	.71	4.48	14.7	41.6
180	1024000838	BR				Pony Creek	24.3	0	0	1.59	6.11	18.8
206	HYDRO	BR	NM			HYDRO	10.5	NA	NA	NA	NA	NA
248	1024000842	BR				Noharts Creek	14.3	0	.75	2.65	6.53	15.4
263	1024000565	BR	DP			Spring Creek	9.30	.10	1.03	2.51	5.32	11.4
265	1024000839	BR				Walnut Creek	105	0	1.70	8.66	29.6	88.1
276	1024000839	BR				Walnut Creek	74.6	0	.65	5.27	19.6	60.8
280	10240008308	BR				Terrapin Creek	37.3	0	0	1.91	8.08	26.6
305	1024000840	BR				Roys Creek	46.2	0	2.01	7.43	20.6	51.5
373	HYDRO	BR				HYDRO	9.60	NA	NA	NA	NA	NA
374	1024000555	BR				Unnamed tributary, Brown 2	6.36	.12	.66	1.60	3.29	7.24
412	1024000839	BR				Walnut Creek	35.0	0	.19	3.14	11.2	33.1
418	HYDRO	BR				HYDRO	5.20	NA	NA	NA	NA	NA
419	HYDRO	BR				HYDRO	9.36	NA	NA	NA	NA	NA
420	10240005240	BR				Unnamed tributary, Brown 1	20.5	0	.94	3.86	10.5	25.5
422	HYDRO	BR				HYDRO	20.5	NA	NA	NA	NA	NA
423	1024000556	BR				Wolf River	64.7	0	2.09	8.85	27.0	71.9
429	1024000555	BR				Unnamed tributary, Brown 2	17.3	0	1.16	3.84	9.60	22.2
430	1024000556	BR				Wolf River	99.2	.05	3.10	13.0	40.2	110
433	1024000554	BR				Wolf River	117	.30	3.83	15.6	47.8	130
435	1024000556	BR				Wolf River	43.7	0	1.26	5.87	18.0	48.0
436	1024000566	BR				North Fork Wolf River	12.2	0	.39	2.12	5.75	14.3
440	1024000839	BR				Walnut Creek	9.03	0	0	.26	1.85	7.09
458	1024000556	BR				Wolf River	30.6	0	.76	4.12	12.6	33.6
459	1024000556	BR				Wolf River	27.0	0	.50	3.36	10.6	28.6
460	1024000556	BR				Wolf River	2.06	0	0	0	0	0
482	1024000553	BR	DP			Wolf River	168	.79	5.36	21.9	67.5	187
503	HYDRO	BR				HYDRO	7.08	NA	NA	NA	NA	NA
504	1027010320	BR				Grasshopper Creek	6.99	0	0	0	.75	4.28
521	1027010323	BR	NM			Delaware River	48.3	.05	.30	3.48	12.6	38.5
538	1027010338	BR				Squaw Creek	8.47	0	0	0.16	1.52	6.23
539	1027010323	BR				Delaware River	49.1	.05	.33	3.60	13.0	39.5
541	1027010324	BR	NM			Craig Creek	27.6	.02	.04	1.72	6.76	21.3

Table 13. 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 Brown County.—Continued

[KSWR, Kansas Surface Water Register; CUSEGA, catalog unit segment number alpha; mi^2, square miles; ft^3/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. 17)	Estimated mean flow (ft^3/s)	Estimated peak discharge (ft^3/s) for indicated peak-discharge frequency					
		2-year	5-year	10-year	25-year	50-year	100-year
120	37.9	3,440	6,840	9,750	14,000	17,600	21,500
122	37.8	3,450	6,860	9,770	14,000	17,600	21,500
138	36.9	3,390	6,750	9,630	13,800	17,400	21,200
139	16.0	1,790	3,940	5,830	8,730	11,200	14,000
140	8.16	1,220	2,700	4,010	6,030	7,720	9,650
142	30.4	3,800	7,840	11,400	16,700	21,200	26,100
180	15.0	1,770	3,960	5,910	8,920	11,400	14,400
206	NA	NA	NA	NA	NA	NA	NA
248	10.7	1,410	3,060	4,500	6,710	8,540	10,600
263	7.66	1,130	2,410	3,520	5,210	6,600	8,190
265	62.0	4,080	8,740	13,000	19,400	25,100	31,300
276	45.2	4,430	9,320	13,700	20,300	26,100	32,400
280	21.9	4,460	9,090	13,100	19,100	24,200	29,700
305	33.6	3,380	6,710	9,530	13,700	17,200	20,900
373	NA	NA	NA	NA	NA	NA	NA
374	5.22	935	1,970	2,850	4,180	5,280	6,530
412	24.5	2,940	6,290	9,280	13,800	17,700	22,000
418	NA	NA	NA	NA	NA	NA	NA
419	NA	NA	NA	NA	NA	NA	NA
420	17.0	1,850	3,990	5,850	8,690	11,100	13,800
422	NA	NA	NA	NA	NA	NA	NA
423	47.3	4,220	8,340	11,900	17,000	21,400	26,100
429	14.6	1,670	3,590	5,260	7,800	9,910	12,300
430	70.5	5,310	10,300	14,600	21,000	26,300	32,100
433	82.0	5,860	11,300	15,900	22,600	28,300	34,400
435	32.7	3,340	6,750	9,690	14,000	17,700	21,700
436	10.2	1,380	2,940	4,290	6,320	8,010	9,940
440	6.49	1,110	2,370	3,460	5,110	6,480	8,040
458	23.4	2,740	5,640	8,150	11,900	15,100	18,500
459	20.5	2,190	4,740	6,970	10,400	13,200	16,500
460	.74	484	997	1,430	2,070	2,600	3,190
482	115	6,880	13,200	18,500	26,400	33,100	40,300
503	NA	NA	NA	NA	NA	NA	NA
504	4.69	998	2,100	3,040	4,460	5,630	6,960
521	29.5	3,580	7,560	11,100	16,500	21,100	26,200
538	5.97	1,100	2,320	3,380	4,970	6,290	7,800
539	30.1	3,500	7,420	10,900	16,200	20,800	25,900
541	17.2	1,990	4,400	6,530	9,810	12,600	15,700

Table 13. 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 Brown County.—Continued

[KSWR, Kansas Surface Water Register; CUSEGA, catalog unit segment number alpha; mi^2, square miles; ft^3/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. 17)	KSWR CUSEGA number	Stream segment by county (table 112)				Stream name	Contributing drainage area (mi^2)	Estimated flow-duration values (ft^3/s) for indicated percentage of time flow equaled or exceeded				
		1st	2nd	3rd	4th			90 percent	75 percent	50 percent	25 percent	10 percent
547	1024000567	BR				Middle Fork Wolf River	27.4	0	0.65	3.82	11.8	31.4
567	NRTribal	BR				Delaware River	50.7	.06	.41	3.82	13.6	41.2
573	NRTribal	BR				Delaware River	51.0	.06	.42	3.86	13.7	41.5
576	1027010336	BR				Plum Creek	16.8	.01	.01	1.11	4.48	14.2
579	HYDRO	BR				HYDRO	2.49	NA	NA	NA	NA	NA
586	NRTribal	BR				Squaw Creek	12.8	0	.01	.83	3.55	11.5
589	NRTribal	BR				Delaware River	52.4	.06	.49	4.05	14.3	43.1
639	1027010340	BR				Mission Creek	6.24	0	0	.07	1.15	5.00
644	NRTribal	BR				Plum Creek	2.7	.01	.02	1.67	6.16	18.5
654	NRTribal	BR				Craig Creek	45.3	.04	.25	3.44	12.6	38.4
655	1027010324	BR				Craig Creek	42.7	.04	.16	3.12	11.6	35.6
662	NRTribal	BR				Delaware River	71.9	.11	.99	5.82	20.3	61.2
664	1027010324	BR				Craig Creek	68.6	.10	.86	5.49	19.4	59.1
665	NRTribal	BR				Plum Creek	68.6	.10	.86	5.49	19.4	59.1
676	HYDRO	BR				HYDRO	10.2	NA	NA	NA	NA	NA
678	1024000557	BR				South Fork Wolf River	36.8	0	.97	5.06	15.7	41.9
708	NRTribal	BR				Delaware River	149	.48	3.14	12.7	42.2	129
709	1024000557	BR				South Fork Wolf River	4.63	0	0	0	.27	2.67
733	1027010322	BR	JA			Delaware River	153	.51	3.30	13.2	43.5	133
739	1027010326	BR	JA	NM		Muddy Creek	42.7	.04	.24	3.33	12.1	36.4

Table 13. 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 Brown County.—Continued

[KSWR, Kansas Surface Water Register; CUSEGA, catalog unit segment number alpha; mi^2, square miles; ft^3/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. 17)	Estimated mean flow (ft^3/s)	Estimated peak discharge (ft^3/s) for indicated peak-discharge frequency					
		2-year	5-year	10-year	25-year	50-year	100-year
547	21.8	2,230	4,810	7,070	10,500	13,400	16,700
567	31.2	3,450	7,320	10,800	16,100	20,600	25,700
573	31.4	3,460	7,350	10,800	16,100	20,700	25,700
576	11.7	1,590	3,440	5,050	7,500	9,550	11,900
579	NA	NA	NA	NA	NA	NA	NA
586	9.55	1,400	2,990	4,360	6,440	8,170	10,100
589	32.4	3,470	7,360	10,800	16,100	20,700	25,800
639	4.81	940	1,970	2,850	4,170	5,260	6,500
644	14.6	1,800	3,910	5,740	8,540	10,900	13,600
654	29.1	3,210	6,910	10,200	15,300	19,800	24,600
655	27.2	3,130	6,760	10,000	15,000	19,400	24,200
662	44.8	4,180	8,690	12,700	18,700	24,000	29,700
664	43.3	4,280	8,870	12,900	19,100	24,400	30,200
665	43.3	4,280	8,860	12,900	19,100	24,400	30,200
676	NA	NA	NA	NA	NA	NA	NA
678	28.6	3,020	6,200	8,960	13,100	16,500	20,300
708	89.5	6,550	12,800	18,100	26,200	33,100	40,600
709	3.21	788	1,640	2,370	3,460	4,360	5,380
733	91.7	6,590	12,800	18,200	26,200	33,000	40,600
739	27.4	3,170	6,810	10,100	15,100	19,400	24,200

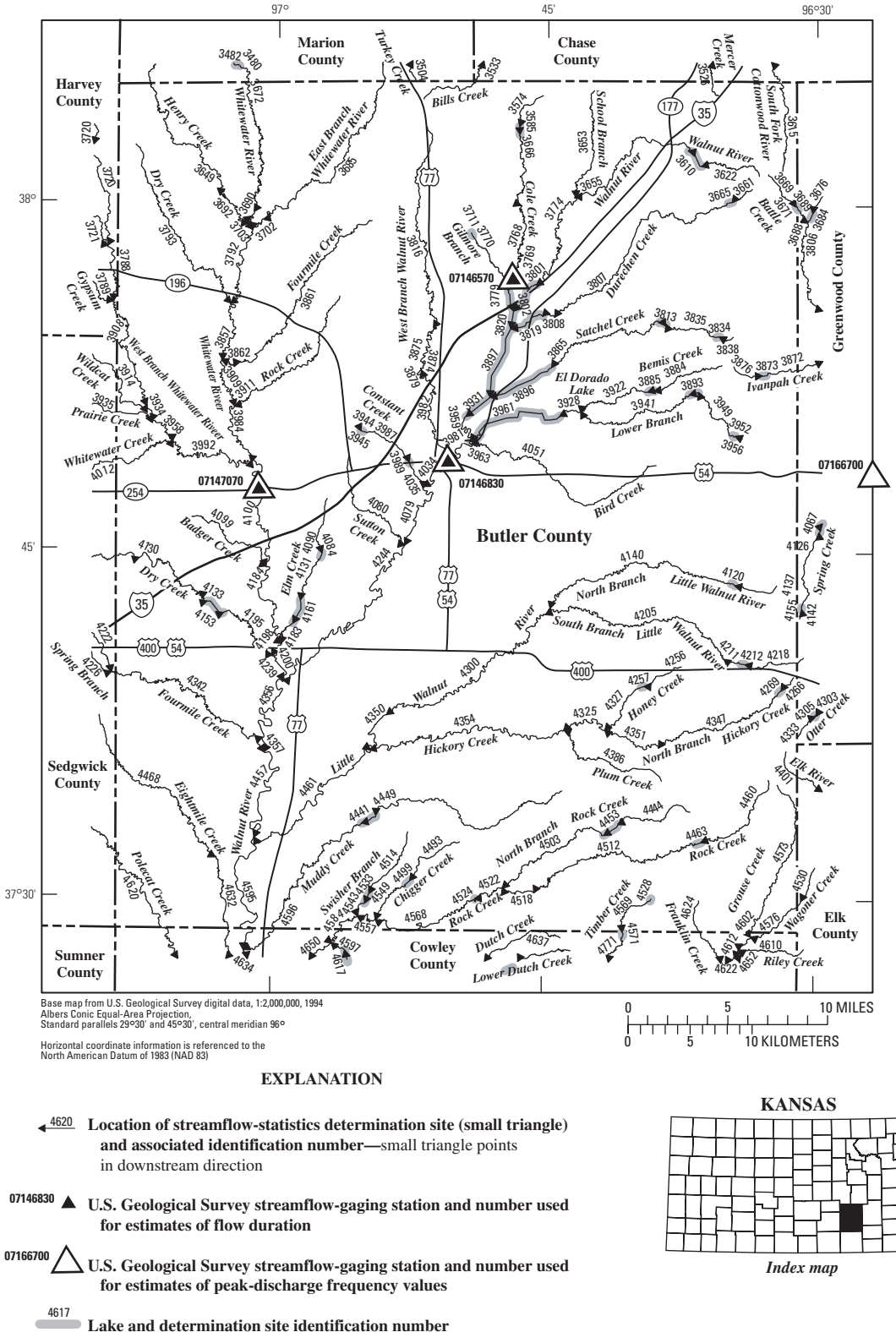

Figure 18. Location of streamflow-statistics determination sites, associated identification numbers, and U.S. Geological Survey streamflow-gaging stations used in the flow-duration and peak-discharge frequency analyses for Butler County.

Table 14. 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 Butler County.

[KSWR, Kansas Surface Water Register; CUSEGA, catalog unit segment number alpha; mi^2, square miles; ft^3/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. 18)	KSWR CUSEGA number	Stream segment by county (table 112)				Stream name	Contributing drainage area (mi^2)	Estimated flow-duration values (ft^3/s) for indicated percentage of time flow equalled or exceeded				
		1st	2nd	3rd	4th			90 percent	75 percent	50 percent	25 percent	10 percent
3526	11070203716	BU	CS			Mercer Creek	20.0	0	0	0.95	3.46	10.9
3533	1107020230	BU	CS			Bills Creek	21.8	.09	.24	1.47	4.41	12.3
3574	1103001715	BU				Cole Creek	10.8	0	.01	.09	.51	3.10
3585	HYDRO	BU				HYDRO	11.9	NA	NA	NA	NA	NA
3610	HYDRO	BU				HYDRO	10.3	NA	NA	NA	NA	NA
3615	1107020310	BU	CS			South Fork Cottonwood River	15.3	0	0	.99	3.43	10.3
3622	1103001714	BU				Walnut River	7.75	0	0	0	0	.80
3649	1103001733	BU	MN			Henry Creek	29.7	.03	.05	.38	2.25	9.23
3653	1103001745	BU				School Branch	16.6	0	0	.02	1.05	5.36
3655	1103001714	BU				Walnut River	30.3	0	0	.48	2.59	10.1
3661	1103001712	BU				Durechen Creek	3.67	0	0	0	0	.75
3665	HYDRO	BU				HYDRO	4.41	NA	NA	NA	NA	NA
3666	1103001715	BU				Cole Creek	26.0	0	.04	1.11	3.33	9.94
3669	1107010218	BU				Battle Creek	4.30	0	0	.18	.62	2.44
3671	HYDRO	BU	GW			HYDRO	4.49	NA	NA	NA	NA	NA
3672	1103001723	BU	MN			Whitewater River	44.7	.06	.12	1.00	4.21	15.2
3685	1103001722	BU	MN			East Branch Whitewater River	37.4	.04	.08	.87	3.83	13.9
3690	1103001723	BU				Whitewater River	45.1	.06	.12	1.03	4.30	15.4
3692	1103001733	BU				Henry Creek	34.6	.04	.07	.71	3.20	11.8
3702	1103001722	BU				East Branch Whitewater River	38.5	.05	.09	.97	4.10	14.6
3703	1103001723	BU				Whitewater River	79.7	.20	.38	2.59	8.91	29.5
3711	HYDRO	BU				HYDRO	4.35	NA	NA	NA	NA	NA
3768	1103001715	BU				Cole Creek	32.7	0	.07	1.80	4.80	13.0
3769	1103001715	BU				Cole Creek	32.7	0	.07	1.80	4.80	13.0
3770	1103001739	BU				Gilmore Branch	11.2	0	0	0	.63	3.77
3774	1103001714	BU				Walnut River	58.6	0	0	1.63	6.61	22.6
3779	1103001715	BU				Cole Creek	44.3	0	.07	2.33	6.65	18.7
3788	1103001725	BU	HV			West Branch Whitewater River	64.3	.13	.40	2.63	8.38	25.6
3792	1103001721	BU				Whitewater River	127	.49	1.51	5.29	16.4	51.8
3793	1103001732	BU				Dry Creek	28.5	.02	.05	.61	2.83	10.5
3801	HYDRO	BU				HYDRO	60.3	NA	NA	NA	NA	NA
3802	HYDRO	BU				HYDRO	46.8	NA	NA	NA	NA	NA
3807	1103001712	BU				Durechen Creek	43.9	0	0	1.47	5.84	19.5
3808	1103001712	BU				Durechen Creek	44.8	0	0	1.54	6.05	20.0
3813	HYDRO	BU				HYDRO	19.8	NA	NA	NA	NA	NA
3816	1103001716	BU				West Branch Walnut River	39.8	0	0	1.43	5.43	17.7
3819	HYDRO	BU				HYDRO	47.4	NA	NA	NA	NA	NA
3820	HYDRO	BU				HYDRO	108	NA	NA	NA	NA	NA

Table 14. 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 Butler County.—Continued

[KSWR, Kansas Surface Water Register; CUSEGA, catalog unit segment number alpha; mi^2, square miles; ft^3/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. 18)	Estimated mean flow (ft^3/s)	Estimated peak discharge (ft^3/s) for indicated peak-discharge frequency					
		2-year	5-year	10-year	25-year	50-year	100-year
3526	9.71	1,450	3,300	4,960	7,530	9,700	12,200
3533	11.0	1,630	3,620	5,370	8,060	10,300	12,900
3574	4.66	1,020	2,290	3,410	5,150	6,610	8,300
3585	NA	NA	NA	NA	NA	NA	NA
3610	NA	NA	NA	NA	NA	NA	NA
3615	8.64	1,260	2,850	4,250	6,420	8,250	10,400
3622	2.52	833	1,860	2,770	4,160	5,330	6,670
3649	10.4	1,750	4,070	6,160	9,430	12,200	15,400
3653	6.42	1,290	2,930	4,390	6,660	8,570	10,800
3655	10.8	1,850	4,310	6,600	10,200	13,400	16,900
3661	1.64	557	1,220	1,790	2,660	3,380	4,210
3665	NA	NA	NA	NA	NA	NA	NA
3666	12.6	1,790	4,000	5,970	9,100	11,800	14,900
3669	2.54	615	1,350	1,980	2,950	3,760	4,690
3671	NA	NA	NA	NA	NA	NA	NA
3672	15.8	1,910	4,610	7,190	11,300	15,000	19,200
3685	14.2	2,190	5,070	7,760	11,900	15,700	19,800
3690	16.0	1,870	4,540	7,090	11,200	14,900	19,000
3692	12.5	1,660	4,020	6,270	9,860	13,100	16,700
3702	14.8	2,220	5,130	7,840	12,100	15,800	20,000
3703	28.4	2,680	6,300	9,740	15,200	20,100	25,600
3711	NA	NA	NA	NA	NA	NA	NA
3768	16.5	1,950	4,420	6,700	10,400	13,700	17,500
3769	16.5	1,950	4,410	6,690	10,400	13,700	17,500
3770	4.78	1,080	2,410	3,580	5,380	6,880	8,610
3774	21.3	2,610	5,980	9,110	14,000	18,400	23,300
3779	21.2	2,300	5,180	7,830	12,100	15,900	20,300
3788	23.3	2,120	5,020	7,770	12,100	16,000	20,500
3792	47.3	3,290	7,710	11,900	18,500	24,500	31,400
3793	10.9	1,740	4,020	6,080	9,280	12,000	15,100
3801	NA	NA	NA	NA	NA	NA	NA
3802	NA	NA	NA	NA	NA	NA	NA
3807	18.0	2,770	6,110	9,150	13,800	17,900	22,400
3808	18.4	2,770	6,110	9,140	13,800	17,900	22,400
3813	NA	NA	NA	NA	NA	NA	NA
3816	16.4	2,700	5,190	8,030	12,000	15,500	19,700
3819	NA	NA	NA	NA	NA	NA	NA
3820	NA	NA	NA	NA	NA	NA	NA

Table 14. 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 Butler County.—Continued

[KSWR, Kansas Surface Water Register; CUSEGA, catalog unit segment number alpha; mi^2, square miles; ft^3/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. 18)	KSWR CUSEGA number	Stream segment by county (table 112)				Stream name	Contributing drainage area (mi^2)	Estimated flow-duration values (ft^3/s) for indicated percentage of time flow equalled or exceeded				
		1st	2nd	3rd	4th			90 percent	75 percent	50 percent	25 percent	10 percent
3834	HYDRO	BU				HYDRO	7.24	NA	NA	NA	NA	NA
3835	1103001710	BU				Satchel Creek	17.4	0	0	0.89	3.50	11.2
3838	1103001710	BU				Satchel Creek	6.85	0	0	.60	1.96	5.86
3857	1103001721	BU				Whitewater River	164	.82	2.62	7.70	22.6	70.0
3861	1103001720	BU				Fourmile Creek	29.5	.03	.05	.85	3.67	12.9
3862	1103001720	BU				Fourmile Creek	30.0	.03	.05	.89	3.79	13.2
3865	1103001710	BU				Satchel Creek	36.2	0	0	1.67	6.42	20.5
3872	1107010219	BU	GW			Ivanpah Creek	21.4	0	.16	2.53	8.09	21.7
3873	HYDRO	BU				HYDRO	5.22	NA	NA	NA	NA	NA
3874	1103001716	BU				West Branch Walnut River	54.0	0	.08	2.20	7.96	25.3
3875	1103001716	BU				West Branch Walnut River	53.6	0	.07	2.17	7.87	25.0
3876	1107010219	BU				Ivanpah Creek	5.08	0	0	.56	1.67	4.85
3879	1103001716	BU				West Branch Walnut River	53.8	0	.07	2.19	7.93	25.2
3884	110300178	BU				Bemis Creek	6.65	0	0	0	0	.66
3885	HYDRO	BU				HYDRO	7.36	NA	NA	NA	NA	NA
3893	HYDRO	BU				HYDRO	23.1	NA	NA	NA	NA	NA
3896	HYDRO	BU				HYDRO	41.9	NA	NA	NA	NA	NA
3897	HYDRO	BU				HYDRO	164	NA	NA	NA	NA	NA
3908	1103001725	BU	HV			West Branch Whitewater River	96.5	.28	1.17	4.52	13.6	40.8
3909	1103001719	BU				Whitewater River	200	1.22	3.88	10.4	29.5	90.1
3911	1103001737	BU				Rock Creek	30.3	.03	.05	.98	4.07	13.9
3914	1103001726	BU	SG			Wildcat Creek	39.3	.05	.09	1.82	5.83	17.4
3922	110300178	BU				Bemis Creek	14.9	0	0	.02	1.08	5.48
3928	110300178	BU				Bemis Creek	53.0	0	.04	2.53	9.73	31.3
3931	HYDRO	BU				HYDRO	208	NA	NA	NA	NA	NA
3934	1103001724	BU				West Branch Whitewater River	137	.57	2.39	7.33	21.0	61.5
3935	1103001735	BU	SG			Prairie Creek	19.8	.01	.02	.56	2.35	8.18
3941	1103001742	BU				Lower Branch	36.1	0	0	1.90	7.34	23.3
3944	1103001741	BU				Constant Creek	6.99	0	0	0	0	1.61
3945	HYDRO	BU				HYDRO	7.24	NA	NA	NA	NA	NA
3949	1103001742	BU				Lower Branch	22.7	0	0	1.22	4.88	15.6
3952	HYDRO	BU				HYDRO	13.9	NA	NA	NA	NA	NA
3956	1103001742	BU				Lower Branch	12.4	0	0	.87	3.24	9.95
3958	1103001724	BU				West Branch Whitewater River	160	.78	3.12	9.03	25.4	74.1
3959	110300173	BU				Walnut River	210	5.95	8.12	13.0	36.9	281
3961	HYDRO	BU				HYDRO	60.8	NA	NA	NA	NA	NA
3963	110300173	BU				Walnut River	271	7.68	10.5	16.8	47.7	363
3981	110300173	BU				Walnut River	322	9.13	12.5	19.9	56.6	431

Table 14. 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 Butler County.—Continued

[KSWR, Kansas Surface Water Register; CUSEGA, catalog unit segment number alpha; mi^2, square miles; ft^3/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. 18)	Estimated mean flow (ft^3/s)	Estimated peak discharge (ft^3/s) for indicated peak-discharge frequency					
		2-year	5-year	10-year	25-year	50-year	100-year
3834	NA	NA	NA	NA	NA	NA	NA
3835	9.81	1,450	3,230	4,800	7,210	9,240	11,600
3838	4.85	852	1,860	2,730	4,060	5,170	6,440
3857	62.6	3,800	8,850	13,600	21,200	28,000	35,800
3861	12.6	1,840	4,220	6,360	9,680	12,500	15,700
3862	12.8	2,090	4,780	7,270	11,100	14,500	18,300
3865	17.8	2,620	5,770	8,610	13,000	16,800	21,000
3872	15.5	1,700	3,810	5,680	8,580	11,000	13,800
3873	NA	NA	NA	NA	NA	NA	NA
3874	22.3	3,240	5,690	8,970	13,300	17,200	21,900
3875	22.1	3,260	5,730	9,020	13,400	17,300	22,000
3876	3.92	738	1,590	2,320	3,440	4,370	5,420
3879	22.2	3,250	5,710	8,990	13,400	17,200	22,000
3884	2.44	852	1,850	2,710	4,030	5,120	6,370
3885	NA	NA	NA	NA	NA	NA	NA
3893	NA	NA	NA	NA	NA	NA	NA
3896	NA	NA	NA	NA	NA	NA	NA
3897	NA	NA	NA	NA	NA	NA	NA
3908	35.7	2,640	6,200	9,550	14,900	19,600	25,100
3909	79.2	4,260	9,900	15,200	23,600	31,200	39,900
3911	13.4	2,520	5,560	8,290	12,500	16,100	20,100
3914	15.5	1,660	3,950	6,130	9,570	12,600	16,100
3922	6.54	1,360	3,000	4,440	6,650	8,500	10,600
3928	26.4	4,230	8,720	12,600	18,500	23,600	29,100
3931	NA	NA	NA	NA	NA	NA	NA
3934	52.1	3,290	7,610	11,700	18,100	23,800	30,300
3935	8.18	1,350	3,130	4,730	7,230	9,350	11,800
3941	19.6	3,380	7,090	10,300	15,200	19,500	24,000
3944	2.91	841	1,850	2,720	4,060	5,170	6,450
3945	NA	NA	NA	NA	NA	NA	NA
3949	13.3	1,780	3,940	5,850	8,780	11,200	14,000
3952	NA	NA	NA	NA	NA	NA	NA
3956	8.31	1,260	2,750	4,050	6,040	7,700	9,590
3958	62.2	3,590	8,300	12,700	19,700	25,900	33,000
3959	86.9	2,050	3,980	4,940	7,280	9,540	12,000
3961	NA	NA	NA	NA	NA	NA	NA
3963	112	2,640	5,140	6,380	9,390	12,300	15,500
3981	133	3,140	6,110	7,580	11,200	14,600	18,400

Table 14. 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 Butler County.—Continued

[KSWR, Kansas Surface Water Register; CUSEGA, catalog unit segment number alpha; mi^2, square miles; ft^3/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. 18)	KSWR CUSEGA number	Stream segment by county (table 112)				Stream name	Contributing drainage area (mi^2)	Estimated flow-duration values (ft^3/s) for indicated percentage of time flow equalled or exceeded				
		1st	2nd	3rd	4th			90 percent	75 percent	50 percent	25 percent	10 percent
3982	1103001716	BU				West Branch Walnut River	63.0	0	0.32	2.87	9.98	30.9
3984	1103001719	BU				Whitewater River	237	1.75	5.34	13.5	37.0	112
3987	1103001741	BU				Constant Creek	14.6	0	0	.13	1.29	5.75
3989	HYDRO	BU				HYDRO	14.6	NA	NA	NA	NA	NA
3992	1103001724	BU				West Branch Whitewater River	195	1.16	4.32	11.7	32.2	93.8
4012	1103001734	BU	SG			Whitewater Creek	24.5	.02	.03	.62	2.79	9.99
4034	110300172	BU				Walnut River	388	11.0	15.0	24.0	68.3	519
4035	1103001741	BU				Constant Creek	17.0	0	0	.30	1.80	7.19
4051	11030017213	BU				Bird Creek	48.3	0	0	1.71	6.93	23.3
4079	110300172	BU				Walnut River	421	12.1	16.9	29.2	85.5	566
4080	1103001740	BU				Sutton Creek	16.2	0	0	.32	1.82	7.11
4084	1103001743	BU				Elm Creek	9.69	0	0	0	.52	3.47
4090	HYDRO	BU				HYDRO	10.6	NA	NA	NA	NA	NA
4091	1103001727	BU	SG			Dry Creek	18.5	0	0	.18	1.50	6.50
4099	1103001736	BU				Badger Creek	15.2	0	0	.34	1.96	7.51
4100	1103001718	BU				Whitewater River	448	7.60	17.0	36.0	85.0	242
4120	HYDRO	BU				HYDRO	11.5	NA	NA	NA	NA	NA
4126	1103001813	BU				North Branch Little Walnut River	9.23	0	0	.56	2.21	7.16
4130	1103001727	BU				Dry Creek	34.6	0	0	1.03	4.49	15.6
4131	1103001743	BU				Elm Creek	16.3	0	0	.27	1.82	7.41
4133	1103001727	BU				Dry Creek	36.6	0	0	1.13	4.88	16.8
4140	1103001813	BU				North Branch Little Walnut River	53.0	0	.22	3.06	11.2	34.9
4153	HYDRO	BU				HYDRO	40.5	NA	NA	NA	NA	NA
4161	HYDRO	BU				HYDRO	18.6	NA	NA	NA	NA	NA
4183	1103001743	BU				Elm Creek	19.8	0	0	.50	2.59	9.63
4184	1103001718	BU				Whitewater River	470	7.75	17.4	37.3	89.3	256
4195	1103001727	BU				Dry Creek	48.5	0	0	1.91	7.56	24.9
4198	1103001718	BU				Whitewater River	490	7.89	17.7	38.4	92.9	268
4200	1103001717	BU				Whitewater River	538	8.19	18.3	40.9	101	297
4205	1103001834	BU				South Branch Little Walnut River	39.9	0	.08	2.60	9.54	29.2
4211	1103001834	BU				South Branch Little Walnut River	13.0	0	0	.77	3.06	9.82
4212	HYDRO	BU				HYDRO	10.1	NA	NA	NA	NA	NA
4218	1103001834	BU	GW			South Branch Little Walnut River	10.0	0	0	.57	2.32	7.62
4239	1103001717	BU				Whitewater River	539	8.20	18.4	40.9	101	298
4244	110300172	BU				Walnut River	476	13.8	20.2	37.8	114	643
4256	1103001833	BU				Honey Creek	8.44	0	0	0	.63	3.73
4257	HYDRO	BU				HYDRO	9.26	NA	NA	NA	NA	NA
4266	110300189012	BU				North Branch Hickory Creek	2.29	0	0	0	0	.72

Table 14. 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 Butler County.—Continued

[KSWR, Kansas Surface Water Register; CUSEGA, catalog unit segment number alpha; mi^2, square miles; ft^3/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. 18)	Estimated mean flow (ft^3/s)	Estimated peak discharge (ft^3/s) for indicated peak-discharge frequency					
		2-year	5-year	10-year	25-year	50-year	100-year
3982	26.4	3,630	5,970	9,500	14,000	18,000	23,000
3984	97.3	4,760	11,000	16,900	26,200	34,600	44,100
3987	6.51	1,300	2,890	4,300	6,450	8,260	10,300
3989	NA	NA	NA	NA	NA	NA	NA
3992	78.1	3,950	9,180	14,100	21,800	28,800	36,700
4012	10.1	1,590	3,660	5,520	8,420	10,900	13,700
4034	161	3,780	7,360	9,130	13,400	17,600	22,200
4035	7.69	1,430	3,180	4,730	7,110	9,110	11,400
4051	21.4	3,770	7,850	11,400	16,800	21,500	26,500
4079	182	4,100	7,980	9,910	14,600	19,100	24,100
4080	7.53	1,410	3,130	4,640	6,970	8,910	11,100
4084	4.49	1,060	2,320	3,420	5,100	6,500	8,100
4090	NA	NA	NA	NA	NA	NA	NA
4091	7.28	1,360	3,110	4,670	7,100	9,150	11,500
4099	7.59	1,340	2,970	4,420	6,630	8,490	10,600
4100	206	7,490	17,300	26,200	40,500	53,300	67,900
4120	NA	NA	NA	NA	NA	NA	NA
4126	6.27	1,080	2,340	3,420	5,070	6,450	8,020
4130	14.7	1,880	4,450	6,870	10,700	14,100	17,900
4131	7.88	1,460	3,210	4,750	7,110	9,080	11,300
4133	15.7	1,960	4,610	7,110	11,000	14,600	18,500
4140	28.2	3,900	8,110	11,800	17,400	22,200	27,400
4153	NA	NA	NA	NA	NA	NA	NA
4161	NA	NA	NA	NA	NA	NA	NA
4183	9.71	1,660	3,650	5,400	8,090	10,300	12,900
4184	215	7,460	17,300	26,200	40,600	53,500	68,300
4195	21.9	2,520	5,740	8,720	13,400	17,500	22,100
4198	223	7,650	17,700	26,800	41,400	54,600	69,600
4200	242	8,170	18,700	28,300	43,600	57,300	73,000
4205	23.3	3,260	6,900	10,100	15,000	19,200	23,700
4211	8.51	1,330	2,890	4,250	6,320	8,040	10,000
4212	NA	NA	NA	NA	NA	NA	NA
4218	6.74	1,150	2,480	3,630	5,380	6,840	8,500
4239	242	8,140	18,600	28,200	43,500	57,200	72,900
4244	218	4,640	9,030	11,200	16,500	21,600	27,300
4256	4.49	1,020	2,210	3,230	4,790	6,080	7,560
4257	NA	NA	NA	NA	NA	NA	NA
4266	1.33	490	1,020	1,470	2,150	2,710	3,330

Table 14. 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 Butler County.—Continued

[KSWR, Kansas Surface Water Register; CUSEGA, catalog unit segment number alpha; mi^2, square miles; ft^3/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. 18)	KSWR CUSEGA number	Stream segment by county (table 112)				Stream name	Contributing drainage area (mi^2)	Estimated flow-duration values (ft^3/s) for indicated percentage of time flow equalled or exceeded				
		1st	2nd	3rd	4th			90 percent	75 percent	50 percent	25 percent	10 percent
4269	HYDRO	BU				HYDRO	2.75	NA	NA	NA	NA	NA
4300	1103001813	BU				Little Walnut River	139	0	1.73	8.54	30.1	94.1
4325	1103001812	BU				Hickory Creek	51.3	0	.25	3.23	11.8	36.5
4327	1103001833	BU				Honey Creek	16.2	0	0	.59	2.78	9.74
4333	1107010213	BU	GW			Otter Creek	4.33	0	0	.38	1.19	3.79
4342	1103001816	BU	SG			Fourmile Creek	57.2	0	.18	2.81	10.3	32.3
4347	110300189012	BU				North Branch Hickory Creek	23.3	0	0	1.54	5.74	17.6
4350	1103001813	BU				Little Walnut River	146	0	1.85	8.95	31.6	98.8
4351	1103001812	BU				Hickory Creek	27.3	0	0	1.87	6.88	21.0
4354	1103001812	BU				Hickory Creek	91.9	0	1.16	6.39	22.3	67.6
4356	1103001815	BU				Walnut River	1,030	31.7	52.5	124	402	1,420
4357	1103001816	BU				Fourmile Creek	58.3	0	.21	2.92	10.6	33.2
4386	1103001836	BU				Plum Creek	13.0	0	0	.84	3.21	10.0
4401	1107010414	BU	EK			Elk River	8.84	0	0	1.14	3.61	9.92
4441	HYDRO	BU				HYDRO	33.4	NA	NA	NA	NA	NA
4444	1103001835	BU				North Branch Rock Creek	12.0	0	0	.27	1.71	6.72
4449	110300189	BU				Muddy Creek	31.6	0	0	.85	3.96	14.2
4453	HYDRO	BU				HYDRO	13.1	NA	NA	NA	NA	NA
4457	1103001814	BU				Walnut River	1,100	34.0	56.7	136	440	1,520
4460	110300186	BU				Rock Creek	15.5	0	0	.69	3.01	10.2
4461	1103001811	BU				Little Walnut River	256	.51	3.87	16.7	57.5	181
4463	HYDRO	BU				HYDRO	16.2	NA	NA	NA	NA	NA
4468	1103001830	BU	SG			Eightmile Creek	37.2	0	0	1.57	6.09	19.7
4493	1103001821	BU				Chigger Creek	8.14	0	0	0	0	1.91
4499	HYDRO	BU				HYDRO	8.41	NA	NA	NA	NA	NA
4503	1103001835	BU				North Branch Rock Creek	24.9	0	0	1.23	4.93	16.0
4512	110300186	BU				Rock Creek	35.7	0	0	2.29	8.46	26.0
4514	1103001822	BU				Swisher Branch	8.14	0	0	0	0	1.99
4518	110300186	BU				Rock Creek	38.1	0	.05	2.47	9.09	27.9
4522	110300186	BU				Rock Creek	66.3	0	.49	4.11	15.0	46.3
4524	HYDRO	BU				HYDRO	66.3	NA	NA	NA	NA	NA
4528	HYDRO	BU				HYDRO	2.23	NA	NA	NA	NA	NA
4533	HYDRO	BU				HYDRO	8.59	NA	NA	NA	NA	NA
4543	1103001822	BU				Swisher Branch	10.3	0	0	0	.47	3.55
4549	1103001821	BU				Chigger Creek	11.4	0	0	.02	.87	4.47
4557	110300186	BU				Rock Creek	92.6	0	.95	5.63	20.1	62.0
4568	110300186	BU				Rock Creek	80.1	0	.79	5.08	18.1	55.5
4569	110300183	BU				Timber Creek	9.37	0	0	0	.53	3.65

Table 14. 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 Butler County.—Continued

[KSWR, Kansas Surface Water Register; CUSEGA, catalog unit segment number alpha; mi^2, square miles; ft^3/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. 18)	Estimated mean flow (ft^3/s)	Estimated peak discharge (ft^3/s) for indicated peak-discharge frequency					
		2-year	5-year	10-year	25-year	50-year	100-year
4269	NA	NA	NA	NA	NA	NA	NA
4300	70.2	5,820	11,900	17,300	25,400	32,500	40,200
4325	29.0	3,780	7,890	11,500	17,000	21,700	26,800
4327	9.15	1,490	3,260	4,810	7,180	9,160	11,400
4333	3.33	718	1,520	2,200	3,230	4,090	5,050
4342	26.8	2,700	6,080	9,210	14,100	18,300	23,100
4347	14.5	1,870	4,100	6,060	9,070	11,600	14,500
4350	73.5	5,860	12,000	17,500	25,700	32,800	40,700
4351	16.9	2,040	4,510	6,680	10,000	12,800	16,000
4354	50.4	4,670	9,660	14,100	20,700	26,500	32,800
4356	575	10,000	19,500	24,200	35,600	46,700	58,800
4357	27.5	2,690	6,070	9,190	14,000	18,300	23,100
4386	8.54	1,310	2,860	4,210	6,270	7,980	9,950
4401	7.38	1,090	2,340	3,420	5,060	6,420	7,980
4441	NA	NA	NA	NA	NA	NA	NA
4444	6.82	1,270	2,760	4,050	6,020	7,650	9,530
4449	14.1	2,830	6,040	8,880	13,200	16,900	20,900
4453	NA	NA	NA	NA	NA	NA	NA
4457	622	10,700	20,800	25,900	38,100	49,900	62,900
4460	9.29	1,500	3,250	4,770	7,090	9,030	11,300
4461	127	7,780	15,600	22,600	33,100	42,200	52,200
4463	NA	NA	NA	NA	NA	NA	NA
4468	17.5	2,420	5,410	8,150	12,400	16,100	20,200
4493	3.39	970	2,110	3,100	4,600	5,850	7,280
4499	NA	NA	NA	NA	NA	NA	NA
4503	14.0	1,910	4,210	6,240	9,360	12,000	15,000
4512	21.0	3,080	6,530	9,580	14,200	18,200	22,500
4514	3.46	971	2,110	3,100	4,600	5,860	7,290
4518	22.4	3,150	6,680	9,800	14,500	18,600	23,000
4522	36.2	4,430	9,130	13,300	19,400	24,800	30,600
4524	NA	NA	NA	NA	NA	NA	NA
4528	NA	NA	NA	NA	NA	NA	NA
4533	NA	NA	NA	NA	NA	NA	NA
4543	4.71	1,110	2,430	3,570	5,320	6,790	8,460
4549	5.35	1,170	2,570	3,790	5,650	7,210	8,990
4557	47.8	4,840	10,000	14,600	21,400	27,400	33,900
4568	42.7	4,500	9,320	13,600	20,000	25,600	31,700
4569	4.63	1,070	2,330	3,420	5,070	6,450	8,030

Table 14. 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 Butler County.—Continued

[KSWR, Kansas Surface Water Register; CUSEGA, catalog unit segment number alpha; mi^2, square miles; ft^3/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. 18)	KSWR CUSEGA number	Stream segment by county (table 112)				Stream name	Contributing drainage area (mi^2)	Estimated flow-duration values (ft^3/s) for indicated percentage of time flow equalled or exceeded				
		1st	2nd	3rd	4th			90 percent	75 percent	50 percent	25 percent	10 percent
4571	HYDRO	BU				HYDRO	10.0	NA	NA	NA	NA	NA
4573	1106000116	BU				Grouse Creek	17.3	0	0	1.23	4.61	14.1
4576	1106000136	BU	EK			Wagoner Creek	9.32	0	0	.57	2.26	7.32
4584	110300186	BU	CL			Rock Creek	107	0	1.13	6.25	22.3	69.5
4595	1103001810	BU	CL			Walnut River	1,360	42.6	72.4	177	579	1,900
4596	110300189	BU	CL			Muddy Creek	54.3	0	.22	2.74	9.88	30.9
4602	1106000116	BU	CL			Grouse Creek	27.5	0	0	2.07	7.53	22.6
4620	1103001817	BU	CL	SG		Polecat Creek	35.2	0	0	.97	4.20	14.5
4624	1106000135	BU	CL			Franklin Creek	11.7	0	0	.55	2.40	8.11
4632	1103001830	BU	CL			Eightmile Creek	47.8	0	.09	2.30	8.24	25.6
4637	110300184	BU	CL			Dutch Creek	10.9	0	0	0	.56	3.90
4771	110300183	BU	CL			Timber Creek	37.8	0	0	1.93	7.32	23.2

Table 14. 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 Butler County.—Continued

[KSWR, Kansas Surface Water Register; CUSEGA, catalog unit segment number alpha; mi^2, square miles; ft^3/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. 18)	Estimated mean flow (ft^3/s)	Estimated peak discharge (ft^3/s) for indicated peak-discharge frequency					
		2-year	5-year	10-year	25-year	50-year	100-year
4571	NA	NA	NA	NA	NA	NA	NA
4573	11.6	1,610	3,510	5,150	7,670	9,770	12,200
4576	6.45	1,130	2,410	3,520	5,210	6,610	8,200
4584	53.5	5,160	10,600	15,500	22,800	29,100	36,100
4595	795	13,300	25,900	32,100	47,300	62,000	78,100
4596	26.1	3,350	7,110	10,500	15,500	19,900	24,700
4602	17.9	2,120	4,660	6,880	10,300	13,100	16,400
4620	13.9	2,020	4,710	7,230	11,200	14,700	18,600
4624	7.38	1,260	2,730	4,000	5,940	7,560	9,400
4632	21.8	2,510	5,620	8,470	12,900	16,700	21,000
4637	5.01	1,140	2,490	3,670	5,480	6,990	8,710
4771	19.6	2,950	6,340	9,370	14,000	18,000	22,300

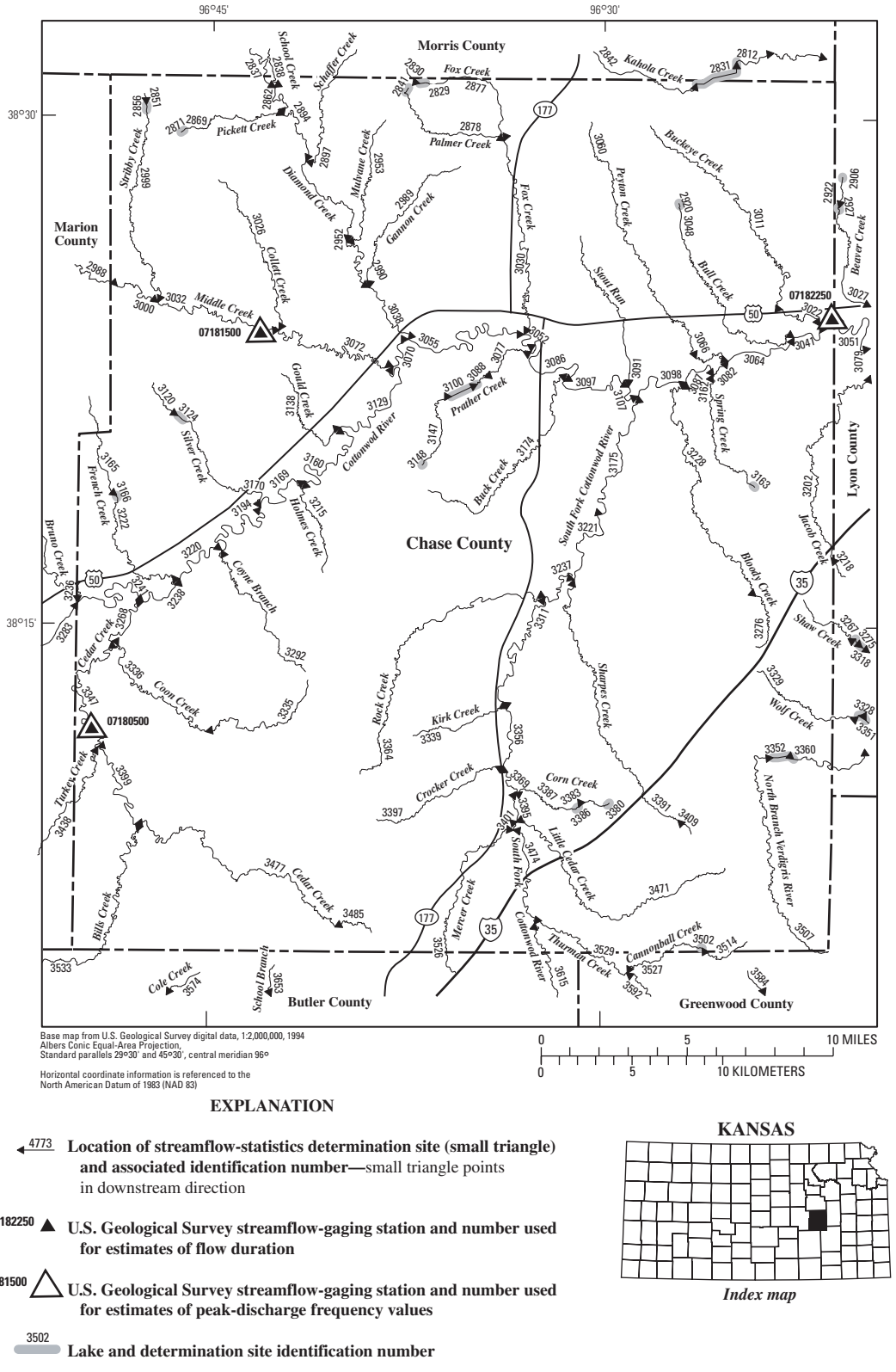

Figure 19. Location of streamflow-statistics determination sites, associated identification numbers, and U.S. Geological Survey streamflow-gaging stations used in the flow-duration and peak-discharge frequency analyses for Chase County.

Table 15. 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 Chase County.

[KSWR, Kansas Surface Water Register; CUSEGA, catalog unit segment number alpha; mi^2, square miles; ft^3/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. 19)	KSWR CUSEGA number	Stream segment by county (table 112)				Stream name	Contributing drainage area (mi^2)	Estimated flow-duration values (ft^3/s) for indicated percentage of time flow equaled or exceeded				
		1st	2nd	3rd	4th			90 percent	75 percent	50 percent	25 percent	10 percent
2837	110702033	CS	MR			Diamond Creek	84.9	0	0.43	3.66	13.1	40.9
2838	1107020316	CS	MR			School Creek	12.6	0	0	.60	2.12	6.67
2841	HYDRO	CS				HYDRO	.49	NA	NA	NA	NA	NA
2842	1107020143	CS	MR			Kahola Creek	10.4	0	0	.65	2.35	7.33
2851	1107020320	CS				Stribby Creek	7.87	0	.02	.02	.17	2.17
2856	HYDRO	CS				HYDRO	8.13	NA	NA	NA	NA	NA
2862	110702033	CS				Diamond Creek	98.4	0	.72	4.61	16.1	49.6
2869	1107020318	CS				Pickett Creek	8.92	0	0	.39	1.39	4.69
2871	HYDRO	CS				HYDRO	1.13	NA	NA	NA	NA	NA
2877	1107020319	CS	MR			Fox Creek	10.9	0	0	.63	2.26	7.08
2878	11070203403	CS				Palmer Creek	6.24	0	0	.26	.94	3.45
2894	110702033	CS				Diamond Creek	109	0	.96	5.42	18.6	57.0
2897	1107020317	CS	MR			Schaffer Creek	13.0	0	0	.87	2.81	8.22
2920	HYDRO	CS				HYDRO	1.46	NA	NA	NA	NA	NA
2952	110702033	CS				Diamond Creek	129	0	1.41	6.97	23.5	71.0
2953	1107020322	CS				Mulvane Creek	7.00	0	0	.36	1.23	4.10
2988	110702035	CS	MN	MR		Middle Creek	41.6	0	.42	2.43	8.41	24.6
2989	1107020324	CS				Gannon Creek	12.8	0	0	1.14	3.54	9.92
2990	110702033	CS				Diamond Creek	140	0	1.64	7.81	26.2	78.9
2999	1107020320	CS				Stribby Creek	25.2	0	.15	1.64	5.61	16.3
3000	110702035	CS				Middle Creek	44.8	0	.49	2.86	9.74	27.9
3011	1107020344	CS				Buckeye Creek	23.0	0	0	1.35	4.76	14.5
3022	1107020344	CS				Buckeye Creek	24.6	0	0	1.46	5.08	15.3
3026	1107020321	CS				Collett Creek	16.9	0	0	1.21	4.04	11.8
3030	1107020319	CS				Fox Creek	33.9	0	.40	3.18	9.98	27.3
3032	110702035	CS				Middle Creek	81.2	0	2.40	7.00	22.0	59.0
3038	110702033	CS				Diamond Creek	157	0	2.05	9.28	30.8	92.4
3041	110702031	CS				Cottonwood River	1,660	47.5	103	292	777	2,040
3048	1107020326	CS				Bull Creek	12.2	0	0	.45	1.83	6.34
3051	110702031	CS	LY			Cottonwood River	1,680	48.0	105	298	794	2,080
3052	110702032	CS				Cottonwood River	1,300	40.5	82.6	215	567	1,550
3055	110702032	CS				Cottonwood River	1,270	39.9	80.6	208	547	1,510
3060	1107020325	CS				Peyton Creek	20.3	0	0	1.38	4.79	14.2
3064	110702031	CS				Cottonwood River	1,640	47.2	103	289	769	2,020
3066	1107020325	CS				Peyton Creek	21.1	0	0	1.45	4.98	14.7
3070	110702034	CS				Cottonwood River	1,100	36.6	70.9	172	448	1,280
3072	110702035	CS				Middle Creek	106	0	2.94	8.91	28.1	76.7
3077	1107020323	CS				Prather Creek	12.3	0	0	.74	2.60	8.01

Table 15. 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 Chase County.—Continued

[KSWR, Kansas Surface Water Register; CUSEGA, catalog unit segment number alpha; mi^2, square miles; ft^3/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. 19)	Estimated mean flow (ft^3/s)	Estimated peak discharge (ft^3/s) for indicated peak-discharge frequency					
		2-year	5-year	10-year	25-year	50-year	100-year
2837	33.6	3,570	7,890	11,900	18,000	23,400	29,400
2838	6.06	1,010	2,340	3,520	5,370	6,930	8,730
2841	NA	NA	NA	NA	NA	NA	NA
2842	6.36	1,060	2,340	3,470	5,190	6,640	8,300
2851	3.20	841	1,900	2,830	4,260	5,480	6,860
2856	NA	NA	NA	NA	NA	NA	NA
2862	39.5	3,750	8,280	12,400	18,900	24,600	30,900
2869	4.50	856	1,950	2,910	4,410	5,670	7,110
2871	NA	NA	NA	NA	NA	NA	NA
2877	6.23	1,040	2,330	3,460	5,210	6,680	8,360
2878	3.47	745	1,650	2,450	3,670	4,690	5,850
2894	44.3	3,860	8,510	12,800	19,400	25,300	31,800
2897	6.94	1,080	2,460	3,690	5,600	7,220	9,070
2920	NA	NA	NA	NA	NA	NA	NA
2952	53.3	4,180	9,160	13,700	20,800	27,000	34,000
2953	3.89	779	1,740	2,590	3,890	4,980	6,230
2988	20.8	3,620	7,920	11,800	17,700	22,900	28,700
2989	7.88	1,150	2,570	3,830	5,770	7,410	9,280
2990	58.5	4,330	9,470	14,200	21,500	27,900	35,100
2999	13.5	1,980	4,480	6,710	10,200	13,100	16,500
3000	23.1	3,850	8,400	12,500	18,700	24,200	30,300
3011	12.3	1,690	3,790	5,650	8,530	11,000	13,700
3022	13.0	1,750	3,940	5,890	8,900	11,400	14,300
3026	9.61	1,330	3,020	4,520	6,830	8,780	11,000
3030	19.9	2,960	6,220	9,080	13,400	17,100	21,100
3032	44.7	6,960	15,000	22,100	33,100	42,700	53,500
3038	67.0	4,550	9,910	14,800	22,400	29,200	36,700
3041	933	14,300	25,200	33,400	52,900	74,800	105,000
3048	6.24	1,160	2,580	3,820	5,730	7,330	9,170
3051	950	14,500	25,400	33,500	53,000	75,000	105,000
3052	713	12,200	22,600	31,500	50,900	72,100	101,000
3055	692	12,000	22,400	31,400	50,700	71,900	100,000
3060	11.6	1,540	3,470	5,180	7,830	10,100	12,600
3064	924	14,300	25,100	33,300	52,800	74,700	105,000
3066	12.0	1,580	3,550	5,310	8,020	10,300	12,900
3070	590	11,000	21,100	30,500	49,800	70,600	98,700
3072	56.4	7,190	15,500	22,900	34,400	44,400	55,800
3077	6.99	1,140	2,540	3,770	5,670	7,270	9,100

Table 15. 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 Chase County.—Continued

[KSWR, Kansas Surface Water Register; CUSEGA, catalog unit segment number alpha; mi^2, square miles; ft^3/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. 19)	KSWR CUSEGA number	Stream segment by county (table 112)				Stream name	Contributing drainage area (mi^2)	Estimated flow-duration values (ft^3/s) for indicated percentage of time flow equaled or exceeded				
		1st	2nd	3rd	4th			90 percent	75 percent	50 percent	25 percent	10 percent
3082	110702031	CS				Cottonwood River	1,620	46.7	101	284	754	1,990
3086	110702032	CS				Cottonwood River	1,320	40.9	83.6	219	577	1,580
3087	110702031	CS				Cottonwood River	1,610	46.5	100	281	748	1,970
3088	1107020323	CS				Prather Creek	10.6	0	0	.61	2.22	7.00
3091	1107020327	CS				Stout Run	11.2	0	0	.74	2.50	7.58
3097	110702032	CS				Cottonwood River	1,340	41.4	85.1	225	592	1,610
3098	110702031	CS				Cottonwood River	1,580	45.9	98.7	275	730	1,930
3100	HYDRO	CS				HYDRO	9.15	NA	NA	NA	NA	NA
3107	110702032	CS				Cottonwood River	1,360	41.6	85.8	227	600	1,630
3120	1107020334	CS				Silver Creek	7.20	0	0	.31	1.25	4.43
3124	HYDRO	CS				HYDRO	7.92	NA	NA	NA	NA	NA
3129	110702036	CS				Cottonwood River	993	34.5	64.6	149	385	1,130
3138	1107020336	CS				Gould Creek	9.38	0	0	.40	1.51	5.17
3147	1107020323	CS				Prather Creek	7.44	0	0	.29	1.18	4.27
3148	HYDRO	CS				HYDRO	1.63	NA	NA	NA	NA	NA
3160	110702036	CS				Cottonwood River	978	34.2	63.7	146	376	1,110
3162	1107020341	CS				Spring Creek	10.3	0	0	.64	2.21	6.88
3163	HYDRO	CS				HYDRO	1.62	NA	NA	NA	NA	NA
3165	1107020332	CS	MN			French Creek	14.1	0	0	.32	1.77	6.75
3166	HYDRO	CS				HYDRO	14.3	NA	NA	NA	NA	NA
3169	110702036	CS				Cottonwood River	960	33.9	62.7	142	365	1,080
3170	1107020334	CS				Silver Creek	19.8	0	0	1.53	5.10	14.6
3174	1107020339	CS				Buck Creek	23.4	0	0	1.51	5.19	15.4
3175	110702039	CS				South Fork Cottonwood River	218	.26	3.81	16.1	52.4	156
3194	110702036	CS				Cottonwood River	938	33.5	61.4	137	352	1,050
3202	1107020328	CS	LY			Jacob Creek	25.6	0	0	1.57	5.67	17.2
3215	1107020335	CS				Holmes Creek	12.5	0	0	.76	2.65	8.12
3218	1107020328	CS	LY			Jacob Creek	1.89	0	0	0	0	0
3220	110702036	CS				Cottonwood River	917	33.1	60.1	133	340	1,020
3221	110702039	CS				South Fork Cottonwood River	209	.18	3.58	15.3	49.9	148
3222	1107020332	CS				French Creek	22.0	0	0	1.12	4.14	12.9
3228	1107020340	CS				Bloody Creek	29.1	0	.23	2.60	8.34	23.3
3236	1107020227	CS	MN			Bruno Creek	45.7	0	.03	2.20	7.87	24.3
3237	110702039	CS				South Fork Cottonwood River	164	0	2.62	11.5	37.8	112
3238	110702036	CS				Cottonwood River	892	32.6	58.7	127	325	989
3241	110702021	CS				Cottonwood River	758	29.9	50.8	98.4	245	804
3267	1107010140	CS	LY			Shaw Creek	6.27	0	0	.24	.97	3.67
3268	1107020222	CS				Cedar Creek	130	1.80	6.43	17.6	41.3	92.6

Table 15. 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 Chase County.—Continued

[KSWR, Kansas Surface Water Register; CUSEGA, catalog unit segment number alpha; mi^2, square miles; ft^3/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. 19)	Estimated mean flow (ft^3/s)	Estimated peak discharge (ft^3/s) for indicated peak-discharge frequency					
		2-year	5-year	10-year	25-year	50-year	100-year
3082	909	14,100	24,900	33,200	52,600	74,500	104,000
3086	724	12,300	22,700	31,600	51,000	72,300	101,000
3087	902	14,000	24,800	33,100	52,600	74,400	104,000
3088	6.18	1,040	2,320	3,450	5,180	6,630	8,300
3091	6.57	1,090	2,420	3,590	5,400	6,910	8,640
3097	740	12,400	22,900	31,800	51,100	72,500	101,000
3098	883	13,900	24,600	32,900	52,400	74,200	104,000
3100	NA	NA	NA	NA	NA	NA	NA
3107	747	12,500	23,000	31,800	51,200	72,500	101,000
3120	4.25	842	1,860	2,740	4,100	5,230	6,520
3124	NA	NA	NA	NA	NA	NA	NA
3129	524	10,300	20,400	30,000	49,200	69,800	97,500
3138	5.00	958	2,140	3,170	4,760	6,100	7,630
3147	4.20	848	1,880	2,780	4,150	5,310	6,620
3148	NA	NA	NA	NA	NA	NA	NA
3160	514	10,200	20,300	29,900	49,100	69,700	97,300
3162	6.11	1,060	2,340	3,460	5,180	6,620	8,270
3163	NA	NA	NA	NA	NA	NA	NA
3165	6.83	1,230	2,750	4,100	6,170	7,920	9,920
3166	NA	NA	NA	NA	NA	NA	NA
3169	503	10,100	20,100	29,800	49,000	69,600	97,100
3170	11.6	1,490	3,360	5,030	7,600	9,770	12,300
3174	12.7	1,650	3,730	5,590	8,470	10,900	13,700
3175	105	6,180	12,900	18,900	28,000	36,000	44,800
3194	489	9,990	20,000	29,700	48,900	69,400	96,900
3202	14.3	1,840	4,110	6,130	9,250	11,900	14,900
3215	7.03	1,120	2,520	3,760	5,670	7,270	9,120
3218	.48	416	876	1,270	1,850	2,340	2,880
3220	477	9,860	19,800	29,600	48,800	69,300	96,700
3221	100	6,310	13,000	19,100	28,200	36,100	45,000
3222	11.2	1,560	3,550	5,330	8,080	10,400	13,100
3228	17.5	1,940	4,380	6,550	9,910	12,700	16,000
3236	20.4	3,320	7,080	10,400	15,400	19,800	24,600
3237	78.1	5,590	11,600	17,100	25,300	32,400	40,300
3238	461	9,710	19,600	29,400	48,600	69,100	96,400
3241	378	8,900	18,700	28,700	47,900	68,100	94,900
3267	3.75	832	1,800	2,640	3,920	4,980	6,190
3268	69.5	6,310	12,000	16,500	22,700	27,900	33,200

Table 15. 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 Chase County.—Continued

[KSWR, Kansas Surface Water Register; CUSEGA, catalog unit segment number alpha; mi^2, square miles; ft^3/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. 19)	KSWR CUSEGA number	Stream segment by county (table 112)				Stream name	Contributing drainage area (mi^2)	Estimated flow-duration values (ft^3/s) for indicated percentage of time flow equaled or exceeded				
		1st	2nd	3rd	4th			90 percent	75 percent	50 percent	25 percent	10 percent
3276	1107020340	CS				Bloody Creek	8.53	0	0	0.79	2.46	7.10
3283	110702021	CS	MN			Cottonwood River	710	29.0	48.0	88.0	217	738
3292	1107020333	CS				Coyne Branch	15.4	0	0	.87	3.13	9.64
3311	110702039	CS				South Fork Cottonwood River	129	0	2.04	9.39	30.8	90.4
3329	1107010141	CS	LY			Wolf Creek	13.1	0	.01	1.09	3.62	10.5
3335	1107020232	CS				Coon Creek	16.6	0	0	.25	1.58	6.42
3336	1107020232	CS				Coon Creek	28.7	0	0	1.13	4.37	14.1
3339	1107020348	CS				Kirk Creek	6.97	0	0	.28	.99	3.60
3347	1107020222	CS	MN			Cedar Creek	98.7	1.80	6.00	16.0	36.0	76.0
3352	HYDRO	CS				HYDRO	27.7	NA	NA	NA	NA	NA
3356	110702039	CS				South Fork Cottonwood River	114	0	1.69	8.15	27.0	79.3
3360	1107010115	CS	LY			North Branch Verdigris River	38.6	.02	.61	4.54	14.2	38.3
3364	1107020337	CS				Rock Creek	33.1	0	.01	1.97	6.71	19.9
3369	110702039	CS				South Fork Cottonwood River	94.7	0	1.37	6.97	23.1	67.2
3380	HYDRO	CS				HYDRO	.74	NA	NA	NA	NA	NA
3383	1107020347	CS				Corn Creek	3.96	0	0	0	.17	1.52
3386	HYDRO	CS				HYDRO	4.39	NA	NA	NA	NA	NA
3387	1107020347	CS				Corn Creek	7.80	0	0	.39	1.43	4.82
3391	1107020338	CS				Sharpes Creek	35.6	0	.41	3.36	10.7	29.6
3395	110702039	CS				South Fork Cottonwood River	85.9	0	1.21	6.34	21.0	60.9
3397	1107020346	CS				Crocker Creek	14.4	0	0	.54	2.20	7.47
3399	1107020222	CS				Cedar Creek	65.6	.80	2.49	7.71	18.6	42.6
3401	110702039	CS				South Fork Cottonwood River	66.4	0	.83	4.90	16.2	46.6
3409	1107020338	CS				Sharpes Creek	3.47	0	0	.09	.31	1.70
3438	1107020231	CS	MN			Turkey Creek	22.3	.09	.24	1.87	5.13	13.4
3471	1107020345	CS				Little Cedar Creek	18.6	0	0	1.40	4.76	13.9
3474	110702039	CS				South Fork Cottonwood River	46.3	0	.54	3.84	12.5	35.3
3477	1107020222	CS				Cedar Creek	38.1	.27	.72	2.82	7.60	19.7
3485	1107020222	CS				Cedar Creek	8.46	.01	.03	.07	.12	1.23
3502	HYDRO	CS				HYDRO	5.04	NA	NA	NA	NA	NA
3507	1107010115	CS				North Branch Verdigris River	26.5	.01	.31	3.18	9.97	26.8
3514	11070203745	CS				Cannonball Creek	4.55	0	0	.13	.60	2.61
3527	11070203745	CS	GW			Cannonball Creek	9.30	0	0	.60	2.14	6.72
3529	1107020311	CS	GW			Thurman Creek	25.9	0	.09	2.22	7.27	20.5

Table 15. 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 Chase County.—Continued

[KSWR, Kansas Surface Water Register; CUSEGA, catalog unit segment number alpha; mi^2, square miles; ft^3/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. 19)	Estimated mean flow (ft^3/s)	Estimated peak discharge (ft^3/s) for indicated peak-discharge frequency					
		2-year	5-year	10-year	25-year	50-year	100-year
3276	5.81	971	2,120	3,130	4,660	5,950	7,410
3283	348	8,610	18,300	28,500	47,600	67,700	94,400
3292	8.31	1,250	2,830	4,230	6,400	8,230	10,300
3311	63.6	5,110	10,600	15,600	23,000	29,600	36,700
3329	8.51	1,260	2,790	4,130	6,190	7,920	9,890
3335	6.95	1,300	2,950	4,410	6,690	8,610	10,800
3336	12.8	1,770	4,080	6,160	9,390	12,100	15,300
3339	3.69	798	1,770	2,630	3,940	5,030	6,290
3347	57.6	5,740	10,800	14,700	20,100	24,500	28,900
3352	NA	NA	NA	NA	NA	NA	NA
3356	56.6	5,390	11,000	16,000	23,500	30,000	37,100
3360	26.4	3,810	7,830	11,300	16,500	21,000	25,800
3364	16.3	2,810	5,990	8,800	13,000	16,700	20,700
3369	48.3	5,140	10,500	15,200	22,200	28,300	34,800
3380	NA	NA	NA	NA	NA	NA	NA
3383	2.06	585	1,280	1,880	2,800	3,560	4,430
3386	NA	NA	NA	NA	NA	NA	NA
3387	4.50	860	1,910	2,830	4,250	5,430	6,780
3391	21.5	3,370	6,960	10,100	14,700	18,700	23,000
3395	44.1	5,000	10,200	14,700	21,500	27,300	33,700
3397	7.10	1,210	2,730	4,080	6,170	7,920	9,940
3399	34.3	4,030	8,090	11,500	16,400	20,600	25,100
3401	34.5	4,280	8,820	12,800	18,800	23,900	29,500
3409	2.05	574	1,230	1,800	2,660	3,370	4,180
3438	11.3	1,620	3,630	5,390	8,100	10,400	13,000
3471	11.1	1,460	3,290	4,910	7,410	9,510	11,900
3474	26.0	3,490	7,290	10,600	15,600	19,900	24,600
3477	17.6	2,740	5,840	8,560	12,700	16,200	20,000
3485	2.87	882	1,970	2,920	4,390	5,620	7,020
3502	NA	NA	NA	NA	NA	NA	NA
3507	18.8	1,900	4,290	6,420	9,720	12,500	15,700
3514	2.79	678	1,460	2,140	3,160	4,020	4,980
3527	5.87	1,010	2,220	3,280	4,900	6,250	7,790
3529	15.7	1,800	4,060	6,070	9,180	11,800	14,800

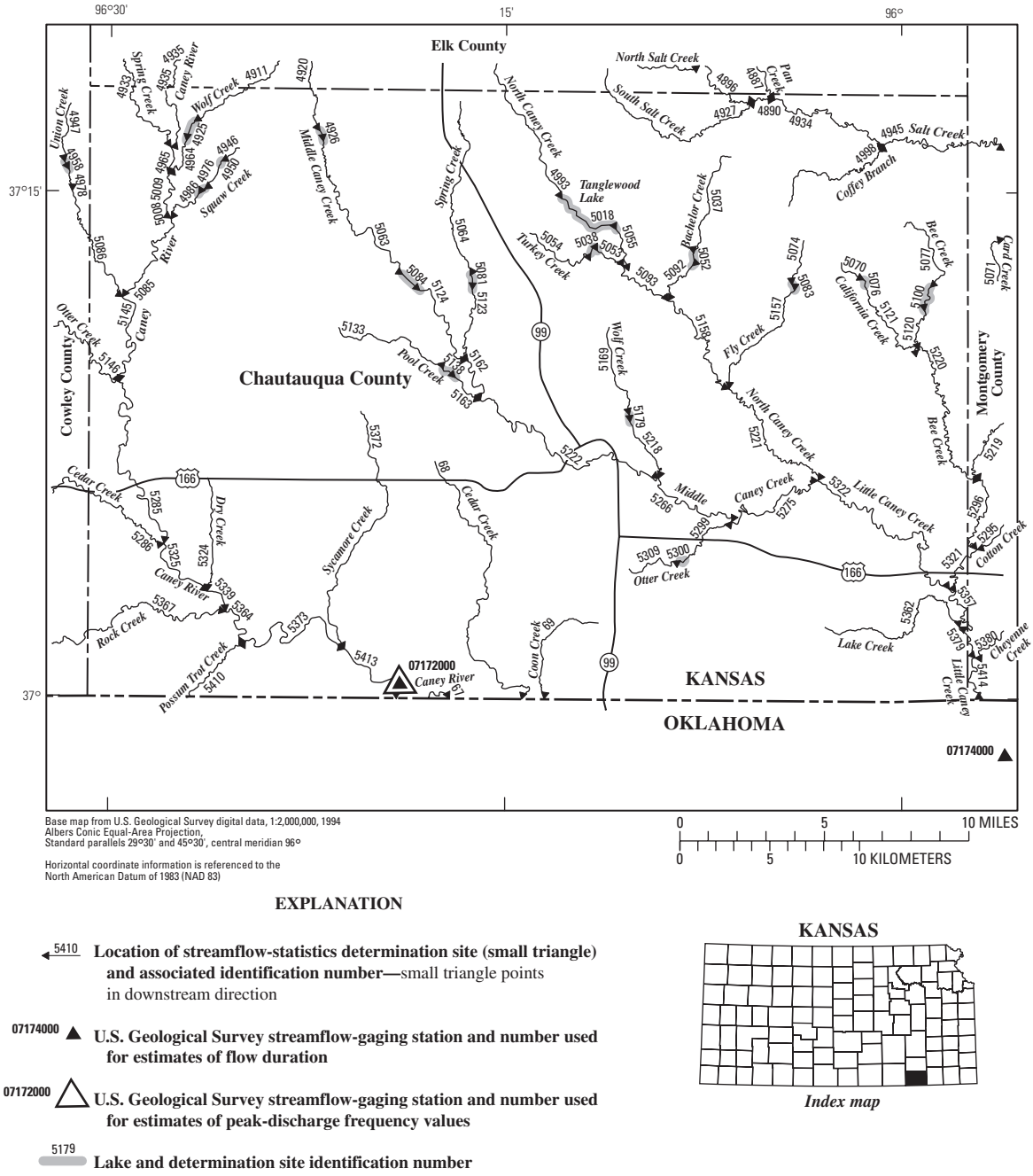

Figure 20. Location of streamflow-statistics determination sites, associated identification numbers, and U.S. Geological Survey streamflow-gaging stations used in the flow-duration and peak-discharge frequency analyses for Chautauqua County.

Table 16. 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 Chautauqua County.

[KSWR, Kansas Surface Water Register; CUSEGA, catalog unit segment number alpha; mi^2, square miles; ft^3/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. 20)	KSWR CUSEGA number	Stream segment by county (table 112)				Stream name	Contributing drainage area (mi^2)	Estimated flow-duration values (ft^3/s) for indicated percentage of time flow equaled or exceeded				
		1st	2nd	3rd	4th			90 percent	75 percent	50 percent	25 percent	10 percent
67	1107010619	CQ				Caney River	428	0.24	5.34	41.5	181	552
68	1107010632	CQ				Cedar Creek	32.3	.01	2.16	7.72	21.6	51.4
69	1107010636	CQ				Coon Creek	19.0	0	1.53	4.98	12.9	29.6
4896	1107010429	CQ	EK			North Salt Creek	9.99	0	.77	2.59	6.37	14.6
4911	1107010650	CQ	EK			Wolf Creek	16.8	0	0	1.01	3.93	12.4
4920	1107010612	CQ	EK			Middle Caney Creek	16.0	0	0	1.04	4.06	12.9
4925	HYDRO	CQ				HYDRO	17.4	NA	NA	NA	NA	NA
4926	HYDRO	CQ				HYDRO	18.3	NA	NA	NA	NA	NA
4927	1107010417	CQ	EK			South Salt Creek	16.1	0	.66	3.12	8.81	21.9
4933	1107010653	CQ	EK			Spring Creek	16.9	0	.05	2.04	6.62	18.1
4934	1107010417	CQ	EK			Salt Creek	44.1	0	2.11	8.16	23.5	59.3
4935	1107010620	CQ	EK			Caney River	57.9	0	.58	4.89	18.1	53.8
4945	1107010417	CQ	MG			Salt Creek	69.0	.25	3.18	12.2	35.7	91.5
4946	1107010642	CQ				Squaw Creek	4.02	0	0	0	.12	1.65
4950	HYDRO	CQ				HYDRO	4.33	NA	NA	NA	NA	NA
4964	1107010650	CQ				Wolf Creek	18.5	0	0	1.22	4.59	14.1
4965	1107010620	CQ				Caney River	76.1	0	.97	6.67	24.6	73.1
4976	1107010642	CQ				Squaw Creek	8.29	0	0	.41	1.69	5.81
4986	HYDRO	CQ				HYDRO	8.53	NA	NA	NA	NA	NA
4993	1107010611	CQ	EK			North Caney Creek	17.7	0	.74	3.33	9.38	23.5
4998	1107010420	CQ				Coffey Branch	12.3	.08	1.27	3.63	8.61	19.0
5008	1107010642	CQ				Squaw Creek	12.2	0	0	.88	3.21	9.84
5009	1107010620	CQ				Caney River	97.4	0	1.27	8.13	30.6	91.8
5018	HYDRO	CQ				HYDRO	23.3	NA	NA	NA	NA	NA
5037	1107010647	CQ				Bachelor Creek	11.7	0	.57	2.66	7.27	17.7
5038	HYDRO	CQ				HYDRO	9.93	NA	NA	NA	NA	NA
5052	HYDRO	CQ				HYDRO	13.3	NA	NA	NA	NA	NA
5053	1107010645	CQ				Turkey Creek	10.7	0	.54	2.47	6.65	16.1
5054	1107010645	CQ				Turkey Creek	9.57	0	.41	2.12	5.75	14.1
5055	1107010611	CQ				North Caney Creek	25.9	0	1.28	5.21	14.8	36.9
5063	1107010612	CQ				Middle Caney Creek	40.7	0	.51	3.80	13.0	38.4
5064	1107010644	CQ				Spring Creek	24.4	0	0	1.77	6.80	21.2
5070	1107010648	CQ				California Creek	4.02	1.07	1.45	2.25	3.87	7.20
5074	1107010646	CQ				Fly Creek	5.30	.58	1.24	2.42	4.71	9.35
5076	HYDRO	CQ				HYDRO	4.56	NA	NA	NA	NA	NA
5077	110701069	CQ				Bee Creek	9.73	0	.58	2.43	6.38	15.2
5081	HYDRO	CQ				HYDRO	25.1	NA	NA	NA	NA	NA
5083	HYDRO	CQ				HYDRO	6.22	NA	NA	NA	NA	NA

Table 16. 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 Chautauqua County.—Continued

[KSWR, Kansas Surface Water Register; CUSEGA, catalog unit segment number alpha; mi^2, square miles; ft^3/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. 20)	Estimated mean flow (ft^3/s)	Estimated peak discharge (ft^3/s) for indicated peak-discharge frequency					
		2-year	5-year	10-year	25-year	50-year	100-year
67	281	14,900	30,100	42,200	59,400	73,000	87,500
68	31.1	4,050	7,400	10,100	13,900	17,000	20,300
69	18.4	1,940	4,090	5,930	8,720	11,000	13,700
4896	9.77	1,360	2,810	4,040	5,890	7,420	9,150
4911	10.6	1,590	3,440	5,060	7,520	9,580	11,900
4920	10.9	1,570	3,390	4,970	7,370	9,370	11,700
4925	NA	NA	NA	NA	NA	NA	NA
4926	NA	NA	NA	NA	NA	NA	NA
4927	14.9	1,780	3,720	5,390	7,900	9,980	12,300
4933	13.1	1,570	3,410	5,020	7,480	9,530	11,900
4934	38.1	4,080	7,680	10,700	14,900	18,500	22,200
4935	38.1	5,040	10,100	14,400	20,700	26,100	32,000
4945	57.6	4,430	8,430	11,800	16,700	20,700	25,000
4946	2.34	698	1,470	2,120	3,100	3,910	4,820
4950	NA	NA	NA	NA	NA	NA	NA
4964	11.8	1,680	3,640	5,360	7,980	10,200	12,700
4965	49.8	5,900	11,700	16,600	23,800	29,900	36,400
4976	5.45	1,060	2,260	3,300	4,860	6,160	7,640
4986	NA	NA	NA	NA	NA	NA	NA
4993	16.0	1,830	3,860	5,610	8,260	10,400	13,000
4998	12.2	1,550	3,210	4,620	6,740	8,490	10,500
5008	8.32	1,330	2,860	4,180	6,200	7,870	9,780
5009	61.7	6,710	13,200	18,700	26,700	33,500	40,800
5018	NA	NA	NA	NA	NA	NA	NA
5037	11.9	1,510	3,130	4,500	6,570	8,270	10,200
5038	NA	NA	NA	NA	NA	NA	NA
5052	NA	NA	NA	NA	NA	NA	NA
5053	10.8	1,430	2,950	4,240	6,180	7,780	9,590
5054	9.65	1,340	2,760	3,970	5,780	7,270	8,960
5055	24.1	2,320	4,910	7,150	10,600	13,400	16,600
5063	28.8	4,500	8,730	12,300	17,400	21,800	26,400
5064	17.3	2,150	4,590	6,710	9,940	12,600	15,700
5070	4.43	812	1,640	2,340	3,370	4,220	5,170
5074	5.83	954	1,940	2,770	4,010	5,020	6,170
5076	NA	NA	NA	NA	NA	NA	NA
5077	10.1	1,370	2,810	4,040	5,870	7,380	9,100
5081	NA	NA	NA	NA	NA	NA	NA
5083	NA	NA	NA	NA	NA	NA	NA

Table 16. 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 Chautauqua County.—Continued

[KSWR, Kansas Surface Water Register; CUSEGA, catalog unit segment number alpha; mi^2, square miles; ft^3/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. 20)	KSWR CUSEGA number	Stream segment by county (table 112)				Stream name	Contributing drainage area (mi^2)	Estimated flow-duration values (ft^3/s) for indicated percentage of time flow equaled or exceeded				
		1st	2nd	3rd	4th			90 percent	75 percent	50 percent	25 percent	10 percent
5084	HYDRO	CQ				HYDRO	42.4	NA	NA	NA	NA	NA
5085	1107010620	CQ				Caney River	121	0	1.60	9.91	37.8	114
5086	1107010641	CQ	CL			Union Creek	19.3	0	.04	2.03	6.72	18.8
5092	1107010647	CQ				Bachelor Creek	15.4	0	1.08	3.98	10.5	24.7
5093	1107010611	CQ				North Caney Creek	39.9	0	1.80	7.49	22.2	57.4
5100	HYDRO	CQ				HYDRO	12.0	NA	NA	NA	NA	NA
5120	110701069	CQ				Bee Creek	13.6	0	.73	3.17	8.67	21.0
5121	1107010648	CQ				California Creek	14.7	0	1.49	4.71	11.6	25.9
5123	1107010644	CQ				Spring Creek	30.7	0	.11	2.70	9.94	30.2
5124	1107010612	CQ				Middle Caney Creek	45.9	0	.68	4.51	15.4	45.5
5133	1107010643	CQ				Pool Creek	22.1	0	.15	2.29	7.58	21.6
5138	HYDRO	CQ				HYDRO	23.2	NA	NA	NA	NA	NA
5145	1107010620	CQ				Caney River	152	0	2.07	12.6	48.7	148
5146	1107010621	CQ	CL			Otter Creek	50.7	0	.77	5.20	17.9	50.5
5157	1107010646	CQ				Fly Creek	17.1	.09	1.82	5.46	13.4	29.6
5158	1107010611	CQ				North Caney Creek	64.7	.09	3.06	12.3	36.9	97.3
5162	1107010612	CQ				Middle Caney Creek	79.4	0	1.35	7.45	26.6	82.2
5163	1107010643	CQ				Pool Creek	25.6	0	.42	3.11	9.93	27.5
5169	1107010635	CQ				Wolf Creek	13.1	0	.72	3.17	8.71	21.1
5179	HYDRO	CQ				HYDRO	13.8	NA	NA	NA	NA	NA
5218	1107010635	CQ				Wolf Creek	19.0	0	1.47	5.11	13.5	31.6
5220	110701069	CQ	MG			Bee Creek	42.8	0	2.49	9.50	27.0	67.4
5221	1107010611	CQ				North Caney Creek	97.8	.68	4.88	19.3	57.3	153
5222	1107010612	CQ				Middle Caney Creek	127	.09	3.12	14.4	49.5	152
5266	1107010612	CQ				Middle Caney Creek	152	.51	4.35	19.2	64.8	198
5275	1107010612	CQ				Middle Caney Creek	183	1.03	5.88	25.2	83.7	255
5285	1107010619	CQ				Caney River	218	0	2.95	18.6	73.9	225
5286	1107010630	CQ	CL			Cedar Creek	41.2	0	.57	4.15	13.8	38.5
5299	1107010633	CQ				Otter Creek	20.9	.01	1.70	5.37	13.6	31.3
5300	HYDRO	CQ				HYDRO	16.2	NA	NA	NA	NA	NA
5309	1107010633	CQ				Otter Creek	11.5	.04	1.07	3.10	7.38	16.6
5321	110701069	CQ	MG			Bee Creek	77.3	.30	3.53	14.1	42.7	114
5322	1107010610	CQ				Little Caney Creek	298	2.56	10.6	46.6	155	490
5324	1107010629	CQ				Dry Creek	21.0	0	.24	2.28	7.09	19.3
5325	1107010619	CQ				Caney River	262	0	3.42	22.5	91.6	280
5339	1107010619	CQ				Caney River	285	0	3.66	24.6	101	309
5357	110701068	CQ	MG			Little Caney Creek	377	3.54	13.7	61.7	209	675
5362	1107010634	CQ				Lake Creek	36.3	.11	2.36	7.79	20.5	49.1

Table 16. 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 Chautauqua County.—Continued

[KSWR, Kansas Surface Water Register; CUSEGA, catalog unit segment number alpha; mi^2, square miles; ft^3/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. 20)	Estimated mean flow (ft^3/s)	Estimated peak discharge (ft^3/s) for indicated peak-discharge frequency					
		2-year	5-year	10-year	25-year	50-year	100-year
5084	NA	NA	NA	NA	NA	NA	NA
5085	75.1	7,280	14,300	20,300	29,100	36,500	44,400
5086	13.9	1,680	3,670	5,420	8,090	10,300	12,900
5092	15.8	1,770	3,690	5,330	7,790	9,830	12,100
5093	37.0	4,850	8,860	12,100	16,700	20,500	24,500
5100	NA	NA	NA	NA	NA	NA	NA
5120	13.9	1,660	3,440	4,950	7,230	9,110	11,200
5121	15.9	1,710	3,570	5,150	7,530	9,500	11,700
5123	23.3	4,650	8,850	12,300	17,400	21,600	26,000
5124	33.3	4,470	8,750	12,400	17,700	22,200	26,900
5133	16.4	1,930	4,170	6,130	9,110	11,600	14,400
5138	NA	NA	NA	NA	NA	NA	NA
5145	93.7	8,020	15,800	22,400	32,100	40,300	49,000
5146	34.5	5,140	10,000	14,200	20,200	25,300	30,700
5157	18.0	1,880	3,920	5,660	8,300	10,500	13,000
5158	60.8	5,130	9,510	13,100	18,300	22,600	27,100
5162	59.0	6,350	12,100	16,900	23,900	29,800	36,200
5163	20.0	2,130	4,610	6,770	10,100	12,800	16,000
5169	13.8	1,660	3,410	4,900	7,140	8,980	11,100
5179	NA	NA	NA	NA	NA	NA	NA
5218	19.9	2,050	4,260	6,140	8,980	11,300	14,000
5220	41.7	3,390	6,570	9,250	13,100	16,400	19,800
5221	93.0	5,620	10,400	14,400	20,200	25,000	30,100
5222	103	7,060	13,400	18,700	26,500	33,100	40,200
5266	129	7,360	13,800	19,300	27,300	34,000	41,300
5275	163	7,560	14,200	19,800	28,000	34,900	42,400
5285	134	9,210	18,400	26,200	37,500	47,000	57,300
5286	26.9	4,590	9,000	12,700	18,100	22,700	27,600
5299	19.9	2,040	4,310	6,260	9,220	11,700	14,500
5300	NA	NA	NA	NA	NA	NA	NA
5309	11.0	1,470	3,050	4,400	6,430	8,100	10,000
5321	71.8	4,320	8,340	11,800	16,700	20,900	25,400
5322	303	9,470	17,400	24,200	34,000	42,200	51,100
5324	14.4	1,780	3,900	5,750	8,590	11,000	13,700
5325	161	10,400	20,800	29,500	42,200	52,600	63,900
5339	175	11,100	22,200	31,400	44,700	55,600	67,400
5357	414	10,700	19,600	27,100	37,900	47,000	56,900
5362	31.0	3,710	6,940	9,580	13,300	16,400	19,700

Table 16. 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 Chautauqua County.—Continued

[KSWR, Kansas Surface Water Register; CUSEGA, catalog unit segment number alpha; mi^2, square miles; ft^3/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. 20)	KSWR CUSEGA number	Stream segment by county (table 112)				Stream name	Contributing drainage area (mi^2)	Estimated flow-duration values (ft^3/s) for indicated percentage of time flow equaled or exceeded				
		1st	2nd	3rd	4th			90 percent	75 percent	50 percent	25 percent	10 percent
5364	1107010619	CQ				Caney River	353	0	4.20	31.3	132	407
5367	1107010628	CQ	CL			Rock Creek	65.8	0	1.24	7.03	24.1	68.0
5372	1107010631	CQ				Sycamore Creek	36.7	0	.74	4.35	14.2	39.0
5373	1107010619	CQ				Caney River	378	.01	4.56	34.5	147	450
5379	110701068	CQ	MG			Little Caney Creek	414	4.09	15.4	69.4	234	765
5410	1107010674	CQ				Possum Trot Creek	15.7	0	.46	2.66	7.58	19.1
5413	1107010619	CQ				Caney River	424	.07	5.00	40.0	172	528

Table 16. 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 Chautauqua County.—Continued

[KSWR, Kansas Surface Water Register; CUSEGA, catalog unit segment number alpha; mi^2, square miles; ft^3/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. 20)	Estimated mean flow (ft^3/s)	Estimated peak discharge (ft^3/s) for indicated peak-discharge frequency					
		2-year	5-year	10-year	25-year	50-year	100-year
5364	220	13,200	26,400	37,200	52,600	65,000	78,400
5367	45.1	5,650	11,000	15,500	22,000	27,500	33,300
5372	27.4	4,910	9,170	12,700	17,600	21,800	26,100
5373	239	13,500	27,300	38,400	54,300	67,100	80,700
5379	468	11,200	20,300	28,000	39,200	48,600	58,800
5410	13.2	1,600	3,420	5,000	7,400	9,390	11,700
5413	273	14,900	30,100	42,200	59,400	73,100	87,600

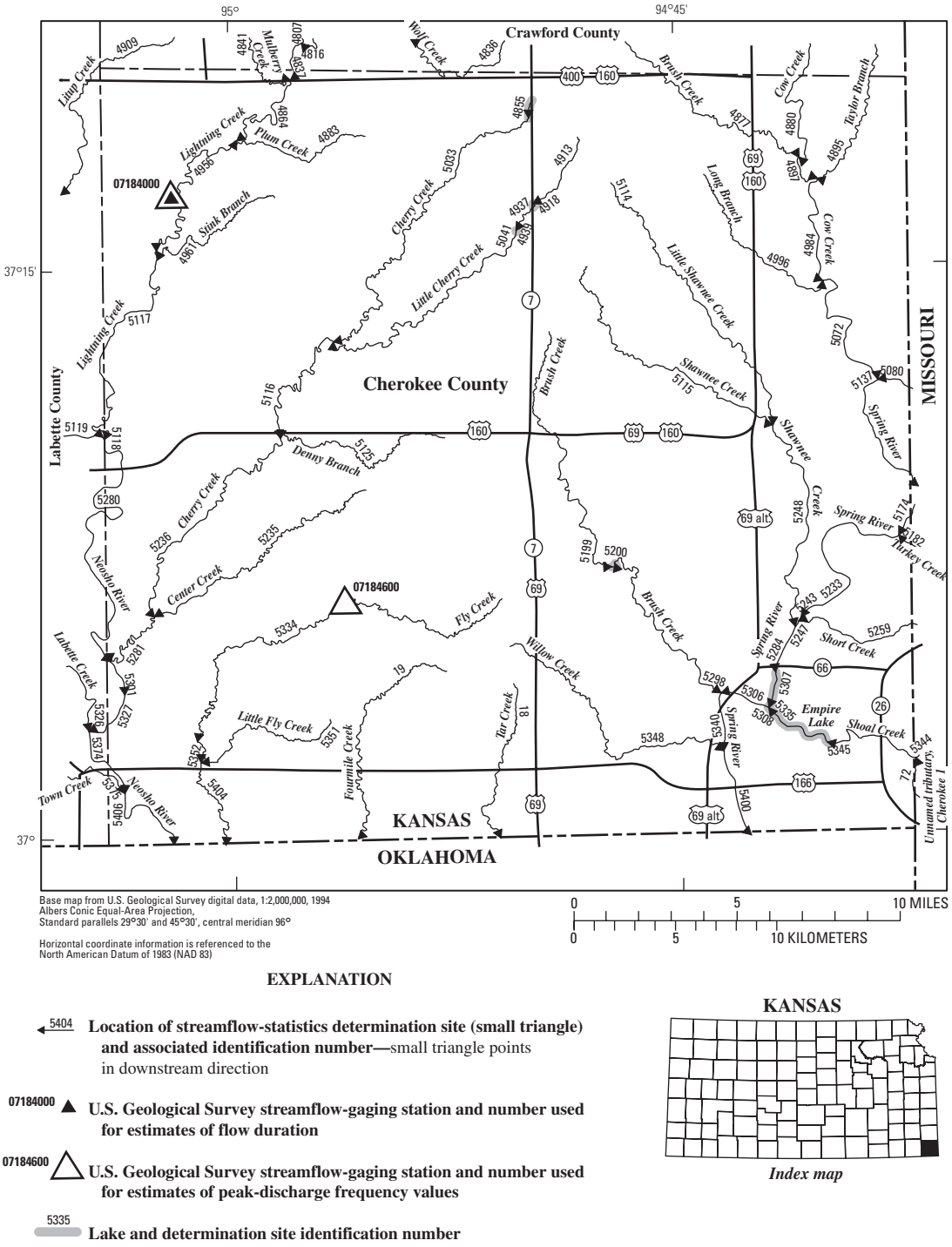

Figure 21. Location of streamflow-statistics determination sites, associated identification numbers, and U.S. Geological Survey streamflow-gaging stations used in the flow-duration and peak-discharge frequency analyses for Cherokee County.

Table 17. 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 Cherokee County.

[KSWR, Kansas Surface Water Register; CUSEGA, catalog unit segment number alpha; mi^2, square miles; ft^3/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. 21)	KSWR CUSEGA number	Stream segment by county (table 112)				Stream name	Contributing drainage area (mi^2)	Estimated flow-duration values (ft^3/s) for indicated percentage of time flow equaled or exceeded				
		1st	2nd	3rd	4th			90 percent	75 percent	50 percent	25 percent	10 percent
18	1107020619	CK				Tar Creek	8.34	0	0	0.74	2.88	8.74
19	1107020618	CK				Fourmile Creek	20.2	0	.21	2.19	7.71	21.9
72	11070207886	CK				Unnamed tributary, Cherokee 1	2.50	.40	.78	1.51	3.13	6.31
4837	110702056	CK	CR			Lightning Creek	157	0	1.60	10.9	44.7	196
4841	1107020535	CK	CR			Mulberry Creek	26.9	0	.28	2.79	10.1	30.6
4855	HYDRO	CK				HYDRO	3.13	NA	NA	NA	NA	NA
4864	110702056	CK				Lightning Creek	188	.01	1.53	11.6	49.1	236
4877	1107020726	CK	CR			Brush Creek	29.1	.02	.46	3.54	12.8	36.5
4880	1107020716	CK	CR			Cow Creek	178	1.45	4.56	18.4	65.6	202
4883	1107020534	CK				Plum Creek	12.2	0	.09	1.69	5.65	15.8
4895	1107020725	CK	CR			Taylor Branch	34.7	.03	.25	2.79	10.6	32.4
4897	1107020716	CK				Cow Creek	209	2.02	5.75	22.5	79.2	243
4913	1107020532	CK				Little Cherry Creek	8.12	0	.02	1.35	4.40	11.8
4918	HYDRO	CK				HYDRO	8.13	NA	NA	NA	NA	NA
4937	1107020532	CK				Little Cherry Creek	10.8	0	.08	1.70	5.66	15.3
4939	HYDRO	CK				HYDRO	10.8	NA	NA	NA	NA	NA
4956	110702056	CK				Lightning Creek	213	0	1.40	12.0	52.0	270
4961	1107020537	CK				Stink Branch	13.2	0	.06	1.72	5.89	16.4
4984	1107020716	CK				Cow Creek	250	2.86	7.30	27.3	94.3	290
4996	1107020721	CK				Long Branch	13.2	0	.01	1.01	4.06	12.6
5033	110702054	CK				Cherry Creek	27.3	0	.58	3.76	12.9	35.7
5041	1107020532	CK				Little Cherry Creek	28.6	0	.52	3.63	12.7	35.9
5072	1107020716	CK				Cow Creek	274	3.43	8.36	30.6	105	321
5080	110702077	CK				Spring River	1,410	83.9	167	493	1,370	3,860
5114	1107020722	CK				Little Shawnee Creek	22.7	.01	.17	2.36	8.57	24.9
5115	1107020717	CK				Shawnee Creek	24.7	.01	.80	3.95	12.7	33.7
5116	110702054	CK				Cherry Creek	70.9	0	1.69	8.32	29.5	85.7
5117	110702056	CK	LB			Lightning Creek	245	.34	2.21	15.4	64.0	308
5125	1107020531	CK				Denny Branch	18.9	0	.20	2.29	7.98	22.5
5137	110702076	CK				Spring River	1,700	114	220	624	1,690	4,700
5174	1107020719	CK				Spring River	1,980	145	279	786	2,110	5,760
5182	1107020718	CK				Turkey Creek	75.0	.52	3.11	13.0	42.7	115
5199	1107020723	CK				Brush Creek	32.8	.13	1.69	6.56	19.8	50.2
5200	HYDRO	CK				HYDRO	32.9	NA	NA	NA	NA	NA
5233	110702074	CK				Spring River	2,070	154	296	834	2,230	6,080
5235	1107020525	CK				Center Creek	19.1	0	0	1.69	6.28	18.7
5236	110702054	CK				Cherry Creek	106	.27	2.44	11.3	40.6	121
5243	110702073	CK				Spring River	2,070	154	296	834	2,230	6,080

Table 17. 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 Cherokee County.—Continued

[KSWR, Kansas Surface Water Register; CUSEGA, catalog unit segment number alpha; mi^2, square miles; ft^3/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. 21)	Estimated mean flow (ft^3/s)	Estimated peak discharge (ft^3/s) for indicated peak-discharge frequency					
		2-year	5-year	10-year	25-year	50-year	100-year
18	7.93	1,790	3,370	4,650	6,520	8,030	9,730
19	18.0	2,920	5,620	7,850	11,100	13,800	16,800
72	3.94	890	1,630	2,220	3,080	3,760	4,520
4837	129	7,520	16,000	24,100	37,500	50,100	65,200
4841	23.7	3,160	6,310	8,960	13,000	16,200	20,000
4855	NA	NA	NA	NA	NA	NA	NA
4864	151	7,440	16,600	25,500	40,500	54,900	72,400
4877	27.8	3,520	6,870	9,660	13,800	17,200	21,000
4880	144	9,810	17,000	22,900	31,200	38,100	45,400
4883	12.3	2,030	3,940	5,530	7,880	9,790	12,000
4895	27.4	4,400	7,920	10,800	14,800	18,100	21,500
4897	170	10,500	18,200	24,400	33,400	40,700	48,500
4913	9.10	1,650	3,150	4,370	6,170	7,630	9,260
4918	NA	NA	NA	NA	NA	NA	NA
4937	11.7	1,940	3,720	5,190	7,350	9,100	11,100
4939	NA	NA	NA	NA	NA	NA	NA
4956	169	7,250	16,800	26,300	42,600	58,300	77,600
4961	12.9	2,100	4,080	5,730	8,160	10,100	12,400
4984	200	11,300	19,500	26,200	35,800	43,600	52,100
4996	11.3	2,200	4,230	5,900	8,370	10,400	12,600
5033	26.5	3,290	6,460	9,100	13,000	16,200	19,900
5041	27.0	3,380	6,640	9,360	13,400	16,700	20,500
5072	219	11,100	19,300	26,100	35,800	43,800	52,400
5080	2,050	29,100	45,800	59,600	78,900	94,600	112,000
5114	20.2	3,000	5,840	8,210	11,700	14,600	17,800
5115	24.5	3,120	6,110	8,600	12,300	15,300	18,700
5116	61.7	4,250	8,120	11,400	16,200	20,100	24,400
5117	193	7,530	17,400	27,100	43,800	59,900	79,600
5125	17.7	2,640	5,160	7,240	10,300	12,900	15,700
5137	2,460	32,000	50,400	65,500	86,700	104,000	123,000
5174	2,940	35,000	54,600	70,800	93,500	112,000	132,000
5182	76.1	10,300	16,100	20,500	26,500	31,200	36,000
5199	34.0	4,020	7,100	9,570	13,000	15,700	18,600
5200	NA	NA	NA	NA	NA	NA	NA
5233	3,080	34,800	54,600	70,900	93,800	113,000	133,000
5235	16.0	2,680	5,220	7,330	10,500	13,000	15,900
5236	86.4	5,610	10,400	14,500	20,300	25,200	30,400
5243	3,080	34,800	54,600	70,900	93,800	113,000	133,000

Table 17. 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 Cherokee County.—Continued

[KSWR, Kansas Surface Water Register; CUSEGA, catalog unit segment number alpha; mi^2, square miles; ft^3/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. 21)	KSWR CUSEGA number	Stream segment by county (table 112)				Stream name	Contributing drainage area (mi^2)	Estimated flow-duration values (ft^3/s) for indicated percentage of time flow equaled or exceeded				
		1st	2nd	3rd	4th			90 percent	75 percent	50 percent	25 percent	10 percent
5247	110702073	CK				Spring River	2,080	156	299	843	2,250	6,130
5248	1107020717	CK				Shawnee Creek	66.6	.20	1.92	8.31	28.2	79.9
5259	11070207881	CK				Short Creek	13.5	.16	1.27	4.27	11.6	26.6
5280	110702055	CK	LB			Neosho River	5,160	62.0	216	952	3,870	10,400
5281	110702054	CK				Cherry Creek	128	.48	2.85	12.9	46.6	140
5284	110702073	CK				Spring River	2,150	163	313	879	2,340	6,360
5298	1107020723	CK				Brush Creek	53.5	.36	2.36	9.30	29.2	77.1
5301	110702053	CK				Neosho River	5,290	64.6	228	985	3,970	10,700
5306	110702071	CK				Spring River	2,740	229	438	1,230	3,230	8,690
5307	HYDRO	CK				HYDRO	2,150	NA	NA	NA	NA	NA
5308	HYDRO	CK				HYDRO	2,730	NA	NA	NA	NA	NA
5327	110702052	CK	LB			Neosho River	5,290	64.7	228	986	3,970	10,700
5334	110702051	CK				Fly Creek	37.1	0	.49	3.43	12.4	36.7
5335	HYDRO	CK				HYDRO	583	NA	NA	NA	NA	NA
5340	110702071	CK				Spring River	2,790	235	450	1,260	3,300	8,900
5344	110702072	CK				Shoal Creek	563	94.7	153	350	823	1,970
5345	110702072	CK				Shoal Creek	578	95.7	155	358	846	2,030
5348	1107020720	CK				Willow Creek	27.0	.02	.46	3.05	10.6	29.9
5351	1107020526	CK				Little Fly Creek	11.2	0	0	1.08	3.94	11.6
5352	110702051	CK				Fly Creek	37.8	0	.49	3.45	12.5	37.1
5374	110702052	CK	LB			Neosho River	5,690	73.0	264	1,090	4,290	11,400
5375	1107020528	CK	LB			Town Creek	23.0	0	.18	2.51	9.17	26.6
5400	110702071	CK				Spring River	2,830	239	457	1,280	3,350	9,020
5404	110702051	CK				Fly Creek	61.2	0	.99	5.33	19.5	58.7
5406	110702052	CK				Neosho River	5,730	73.7	267	1,100	4,320	11,400

Table 17. 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 Cherokee County.—Continued

[KSWR, Kansas Surface Water Register; CUSEGA, catalog unit segment number alpha; mi^2, square miles; ft^3/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. 21)	Estimated mean flow (ft^3/s)	Estimated peak discharge (ft^3/s) for indicated peak-discharge frequency					
		2-year	5-year	10-year	25-year	50-year	100-year
5247	3,110	35,000	54,700	71,100	94,000	113,000	133,000
5248	57.8	5,160	9,300	12,700	17,500	21,400	25,600
5259	17.2	2,300	4,390	6,110	8,640	10,700	13,000
5280	3,430	32,300	47,700	57,000	75,600	104,000	140,000
5281	101	6,060	11,200	15,600	21,900	27,200	32,900
5284	3,210	35,400	55,500	72,100	95,400	114,000	135,000
5298	52.2	4,680	8,320	11,300	15,400	18,700	22,200
5301	3,540	33,200	49,600	59,300	80,800	111,000	146,000
5306	4,220	41,400	63,900	82,400	108,000	130,000	153,000
5307	NA	NA	NA	NA	NA	NA	NA
5308	NA	NA	NA	NA	NA	NA	NA
5327	3,540	33,300	49,600	59,300	80,900	111,000	146,000
5334	29.8	4,190	11,000	17,900	29,700	40,900	54,200
5335	NA	NA	NA	NA	NA	NA	NA
5340	4,310	41,700	64,300	83,000	109,000	131,000	154,000
5344	1,000	24,300	37,000	47,100	61,000	72,200	83,900
5345	1,030	25,400	38,400	48,800	62,900	74,300	86,200
5348	23.9	3,480	6,730	9,430	13,400	16,600	20,300
5351	10.1	2,030	3,880	5,390	7,620	9,420	11,500
5352	30.2	4,330	11,200	18,200	30,000	41,300	54,700
5374	3,870	36,300	55,500	66,200	97,100	130,000	166,000
5375	21.1	2,980	5,820	8,190	11,700	14,600	17,800
5400	4,370	41,500	64,100	82,800	109,000	131,000	154,000
5404	46.8	5,280	12,900	20,500	33,200	45,200	59,300
5406	3,890	36,500	56,000	66,800	98,500	131,000	167,000

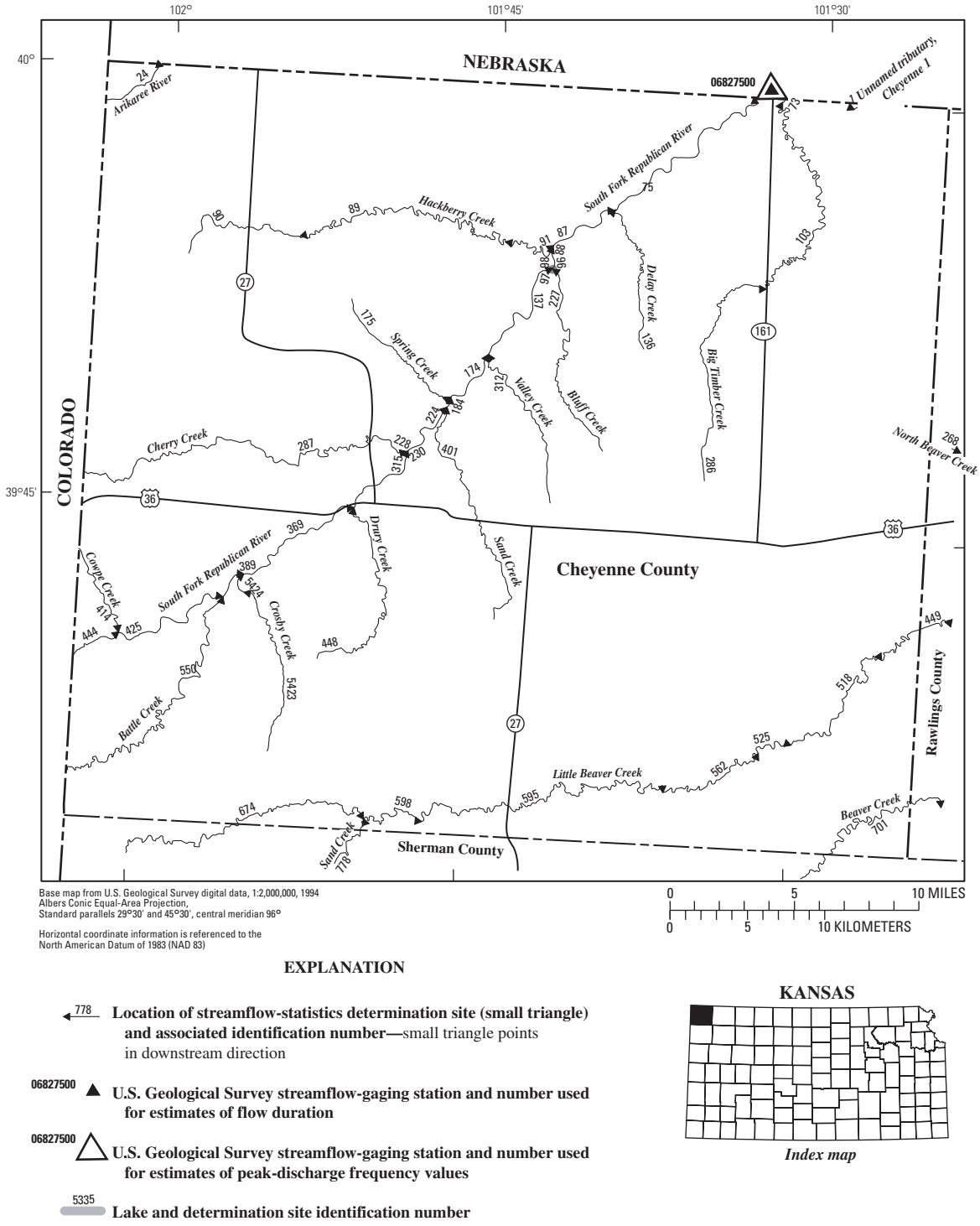

Figure 22. Location of streamflow-statistics determination sites, associated identification numbers, and U.S. Geological Survey streamflow-gaging stations used in the flow-duration and peak-discharge frequency analyses for Cheyenne County.

Table 18. 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 Cheyenne County.

[KSWR, Kansas Surface Water Register; CUSEGA, catalog unit segment number alpha; mi^2, square miles; ft^3/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. 22)	KSWR CUSEGA number	Stream segment by county (table 112)				Stream name	Contributing drainage area (mi^2)	Estimated flow-duration values (ft^3/s) for indicated percentage of time flow equaled or exceeded				
		1st	2nd	3rd	4th			90 percent	75 percent	50 percent	25 percent	10 percent
1	1025000450	CN				Unnamed tributary, Cheyenne 1	11.0	0	0	0	0	0
24	102500011	CN				Arikaree River	1,960	0	0	.67	2.78	7.05
73	1025000361	CN				Big Timber Creek	150	0	0	0	0	0
75	102500032	CN				South Fork Republican River	2,700	.01	.53	16.0	31.0	61.0
87	102500032	CN				South Fork Republican River	2,650	.31	.84	15.4	29.6	59.7
88	102500032	CN				South Fork Republican River	2,530	0	0	.85	3.81	10.5
89	102500033	CN				Hackberry Creek	105	0	0	0	0	0
90	102500033	CN				Hackberry Creek	49.7	0	0	0	0	0
91	102500033	CN				Hackberry Creek	109	0	0	0	0	0
96	102500034	CN				South Fork Republican River	2,530	1.02	1.55	14.1	26.4	56.7
97	HYDRO	CN				HYDRO	28.4	NA	NA	NA	NA	NA
98	1025000370	CN				Bluff Creek	28.4	0	0	0	0	0
103	1025000361	CN				Big Timber Creek	150	0	0	0	0	0
136	1025000366	CN				Delay Creek	22.1	0	0	0	0	0
137	102500034	CN				South Fork Republican River	2,500	1.19	1.72	13.8	25.7	56.0
174	102500034	CN				South Fork Republican River	2,460	1.41	1.95	13.4	24.7	55.1
175	1025000367	CN				Spring Creek	31.7	0	0	0	0	0
184	102500034	CN				South Fork Republican River	2,430	1.62	2.16	13.0	23.7	54.2
224	102500034	CN				South Fork Republican River	2,370	1.96	2.51	12.3	22.2	52.7
227	1025000370	CN				Bluff Creek	28.4	0	0	0	0	0
228	102500035	CN				Cherry Creek	73.8	0	0	0	0	0
230	102500035	CN				Cherry Creek	73.8	0	0	0	0	0
286	1025000361	CN				Big Timber Creek	90.3	0	0	0	0	0
287	102500035	CN				Cherry Creek	73.8	0	0	0	0	0
312	1025000369	CN				Valley Creek	26.4	0	0	0	0	0
315	102500036	CN				South Fork Republican River	2,290	2.41	2.97	11.5	20.2	50.8
369	102500037	CN				South Fork Republican River	2,240	2.67	3.23	11.0	19.0	49.7
389	102500037	CN				South Fork Republican River	2,200	2.92	3.48	10.5	17.9	48.7
401	1025000368	CN				Sand Creek	59.7	0	0	0	0	0
414	102500038	CN				Cowpe Creek	56.5	0	0	0	0	0
425	102500037	CN				South Fork Republican River	2,160	3.17	3.74	10.0	16.7	47.6
444	102500039	CN				South Fork Republican River	2,090	3.58	4.15	9.25	14.9	45.9
448	1025000360	CN				Drury Creek	39.3	0	0	0	0	0
449	102500133	CN	RA			Little Beaver Creek	477	0	0	0	0	0
518	102500133	CN				Little Beaver Creek	420	0	0	0	0	0
525	102500133	CN				Little Beaver Creek	382	0	0	0	0	0
550	1025000371	CN				Battle Creek	39.2	0	0	0	0	0
562	102500133	CN				Little Beaver Creek	366	0	0	0	0	0

Table 18. 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 Cheyenne County.—Continued

[KSWR, Kansas Surface Water Register; CUSEGA, catalog unit segment number alpha; mi^2, square miles; ft^3/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. 22)	Estimated mean flow (ft^3/s)	Estimated peak discharge (ft^3/s) for indicated peak-discharge frequency					
		2-year	5-year	10-year	25-year	50-year	100-year
1	0	227	736	1,280	2,240	3,130	4,190
24	9.51	1,160	3,510	6,110	10,700	15,200	20,600
73	2.15	517	1,660	2,950	5,250	7,530	10,300
75	26.9	999	3,700	7,170	14,400	22,300	32,900
87	26.3	946	3,490	6,770	13,600	21,100	31,100
88	13.1	1,450	4,450	7,820	13,900	19,800	27,200
89	.19	303	1,050	1,930	3,560	5,190	7,190
90	0	278	939	1,700	3,070	4,440	6,080
91	.26	295	1,030	1,890	3,490	5,090	7,060
96	24.9	827	3,030	5,860	11,800	18,300	27,000
97	NA	NA	NA	NA	NA	NA	NA
98	0	321	1,120	2,010	3,610	5,130	6,980
103	2.15	517	1,660	2,950	5,260	7,530	10,300
136	0	288	986	1,760	3,150	4,460	6,050
137	24.5	798	2,910	5,640	11,300	17,600	26,000
174	24.1	760	2,770	5,360	10,800	16,700	24,700
175	0	240	803	1,440	2,590	3,730	5,080
184	23.7	724	2,630	5,090	10,200	15,900	23,500
224	23.0	665	2,400	4,630	9,310	14,500	21,500
227	0	321	1,120	2,010	3,610	5,130	6,980
228	0	287	979	1,780	3,250	4,710	6,480
230	0	286	977	1,780	3,240	4,700	6,470
286	.36	450	1,440	2,540	4,490	6,400	8,690
287	0	287	979	1,780	3,250	4,710	6,480
312	0	298	1,040	1,880	3,390	4,820	6,570
315	22.1	589	2,100	4,050	8,150	12,700	18,900
369	21.6	544	1,930	3,720	7,470	11,700	17,400
389	21.1	502	1,760	3,400	6,840	10,700	16,000
401	0	236	784	1,410	2,530	3,620	4,930
414	0	258	891	1,630	2,980	4,330	5,960
425	20.6	459	1,590	3,070	6,180	9,670	14,500
444	19.8	390	1,320	2,540	5,120	8,050	12,100
448	0	187	639	1,160	2,100	3,030	4,140
449	2.17	498	1,700	3,120	5,750	8,430	11,800
518	1.23	440	1,540	2,850	5,310	7,830	11,000
525	.89	421	1,480	2,750	5,140	7,570	10,600
550	0	146	528	985	1,830	2,680	3,720
562	.80	415	1,460	2,720	5,080	7,490	10,500

Table 18. 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 Cheyenne County.—Continued

[KSWR, Kansas Surface Water Register; CUSEGA, catalog unit segment number alpha; mi^2, square miles; ft^3/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. 22)	KSWR CUSEGA number	Stream segment by county (table 112)				Stream name	Contributing drainage area (mi^2)	Estimated flow-duration values (ft^3/s) for indicated percentage of time flow equaled or exceeded				
		1st	2nd	3rd	4th			90 percent	75 percent	50 percent	25 percent	10 percent
595	102500133	CN				Little Beaver Creek	340	0	0	0	0	0
598	102500133	CN				Little Beaver Creek	256	0	0	0	0	0
674	102500134	CN	SH			Little Beaver Creek	105	0	0	0	0	0
701	102500121	CN	RA	SH		Beaver Creek	571	0	0	0	0	0
778	102500137	CN	SH			Sand Creek	141	0	0	0	0	0
5423	1025000372	CN				Crosby Creek	25.6	0	0	0	0	0
5424	1025000372	CN				Crosby Creek	26.0	0	0	0	0	0

Table 18. 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 Cheyenne County.—Continued

[KSWR, Kansas Surface Water Register; CUSEGA, catalog unit segment number alpha; mi^2, square miles; ft^3/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. 22)	Estimated mean flow (ft^3/s)	Estimated peak discharge (ft^3/s) for indicated peak-discharge frequency					
		2-year	5-year	10-year	25-year	50-year	100-year
595	0.66	409	1,440	2,680	5,000	7,380	10,300
598	.09	359	1,290	2,420	4,540	6,720	9,440
674	0	220	821	1,570	2,980	4,440	6,270
701	1.39	455	1,600	2,980	5,570	8,240	11,600
778	0	254	941	1,790	3,400	5,060	7,140
5423	0	284	999	1,810	3,270	4,650	6,340
5424	0	286	1,010	1,830	3,300	4,700	6,410