

ARKANSAS RIVER BASIN

07176000 VERDIGRIS RIVER NEAR CLAREMORE, OKLA.

LOCATION. – Lat 36°18'26", long 95°41'52", referenced to North American Datum of 1927, in NE ¼ NW ¼ sec. 15, T.21 N., R.15 E., Rogers County, Okla., Hydrologic Unit 11070105, on left bank on downstream side of bridge on State Highway 20, 2.3 mi downstream from Caney River, 4.5 mi west of Claremore, 12.4 mi upstream from Bird Creek, and at mile 76.0.

DRAINAGE AREA. – 6,534 mi².

PERIOD OF RECORD. – October 1935 to current year. Monthly discharge only for some periods, published in WSP 1311.

REMARKS. – Some regulation since 1949 by dams in Kansas, and since February 1950 by Hulah Lake (station 07172500). Flow regulated since May 1963 by Oologah Lake (station 07171300), 14.3 mi upstream from station, and since April 1983 by Copan Lake (station 07174300).

UNREGULATED STREAMFLOW PERIOD

[ft³/s, cubic feet per second; %, percent; monthly values may not add to 100]

Monthly and annual mean, median, maximum and minimum discharges, and average percent of annual runoff, based on period of record, 1936-1962

Month	Maximum	Minimum	Mean	Median	Average % of Annual Runoff
Oct.	25,840	0.00	4,047	817	9.1
Nov.	17,910	0.00	2,342	502	5.2
Dec.	7,478	0.00	1,324	307	3.0
Jan.	8,755	1.62	1,532	535	3.4
Feb.	13,150	9.95	1,866	1,193	4.2
Mar.	15,220	6.83	3,510	1,963	7.9
Apr.	25,510	104	6,350	2,704	14.2
May	52,410	160	8,609	5,030	19.3
Jun.	32,590	332	6,035	2,982	13.5
Jul.	34,050	20.3	4,846	902	10.9
Aug.	9,674	0.03	1,339	632	3.0
Sep.	20,460	0.00	2,797	1,129	6.3
Annual	8,381	249	3,723	3,580	–

Magnitude and probability of annual instantaneous peak flow based on 28 years of record, 1935-1962

Discharge, in ft ³ /s, for indicated recurrence interval, in years, and exceedence probability, in percent						
2	5	10	25	50	100	500
50%	20%	10%	4%	2%	1%	0.2%
43,900	73,900	96,400	127,000	152,000	179,000	243,000

Water Resources Council weighted skew = -0.117

Duration table of daily mean flow for period of record, 1936-1962

Discharge, in ft³/s, which was equaled or exceeded for indicated percent of time

1%	2%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%
42,400	35,800	22,000	10,600	6,320	3,850	1,800	1,050	577	301	137	56.3	18.6	6.23	0.04	0.02

Magnitude and probability of annual low flow based on period of record, 1937-1962				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	18.8	2.19	0.00	0.00
3	19.6	2.60	0.00	0.00
7	21.6	2.93	0.00	0.00
10	24.0	3.22	0.00	0.00
30	41.5	6.19	0.00	0.00
60	103	10.6	1.34	0.00

Magnitude and probability of annual low flow based on period of record, 1936-1962 spring season, April 1 through May 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	313	58.2	18.3	6.03
3	332	68.6	24.0	8.90
7	462	94.3	32.9	12.2
10	529	111	40.7	16.0
30	1,880	610	313	173
60	5,350	1,870	977	541

Magnitude and probability of annual low flow based on period of record, 1936-1961 summer season, June 1 through October 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	20.8	2.94	0.00	0.00
3	21.7	3.08	0.00	0.00
7	24.7	3.64	0.00	0.00
10	28.1	4.04	0.00	0.00
30	57.1	9.40	0.00	0.00
60	210	21.6	4.29	0.39

Magnitude and probability of annual low flow based on period of record, 1936-1962 winter season, November 1 through March 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	62.8	8.43	1.51	0.00
3	68.1	9.05	1.58	0.00
7	72.2	10.0	1.85	0.00
10	76.4	11.1	2.15	0.00
30	135	26.9	9.54	2.40
60	224	45.8	16.8	4.52

ARKANSAS RIVER BASIN

07176000 VERDIGRIS RIVER NEAR CLAREMORE, OKLA.—Continued

REGULATED STREAMFLOW PERIOD

[ft³/s, cubic feet per second; %, percent; monthly values may not add to 100]

Monthly and annual mean, median, maximum and minimum discharges and average percent of annual runoff, based on period of record, 1964-2007					
Month	Maximum	Minimum	Mean	Median	Average % of Annual Runoff
Oct.	47,570	17.2	2,844	334	5.3
Nov.	23,150	17.3	3,956	950	7.3
Dec.	16,250	13.2	3,359	1,633	6.2
Jan.	15,850	19.7	3,230	928	6.0
Feb.	11,470	22.3	3,277	2,050	6.1
Mar.	23,920	23.2	6,528	4,612	12.1
Apr.	25,200	107	7,269	6,537	13.5
May	23,480	87.2	7,528	5,422	13.9
Jun.	25,370	84.0	7,967	6,451	14.8
Jul.	39,900	42.5	5,247	2,748	9.7
Aug.	13,150	52.7	1,445	514	2.7
Sep.	7,538	53.3	1,370	425	2.5
Annual	10,940	234	4,504	4,216	—

Magnitude and probability of annual instantaneous peak flow based on 44 years of record, 1964-2007						
Discharge, in ft ³ /s, for indicated recurrence interval, in years, and exceedence probability, in percent						
2	5	10	25	50	100	500
15%	5%	10%	4%	2%	1%	0.2%
23,800	34,100	41,200	50,400	57,500	64,700	82,300

station skew = 0.026

Duration table of daily mean flow for period of record, 1964-2007															
Discharge, in ft ³ /s, which was equaled or exceeded for indicated percent of time															
1%	2%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%
31,400	26,200	20,200	14,400	11,000	8,650	5,060	2,360	919	355	167	91.6	55.5	37.8	21.3	15.7

Magnitude and probability of annual low flow based on period of record, 1965-2007				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	38.1	18.5	11.9	7.94
3	40.1	20.5	13.8	9.71
7	46.0	23.9	16.4	11.8
10	48.8	26.0	18.3	13.6
30	74.2	37.5	27.0	21.0
60	132	51.8	33.5	24.1

Magnitude and probability of annual low flow based on period of record, 1964-2007 spring season, April 1 through May 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	350	88.5	42.6	23.2
3	405	97.6	45.6	24.1
7	546	128	58.8	30.7
10	700	160	71.1	35.8
30	2,390	645	301	154
60	5,930	1,960	938	470

Magnitude and probability of annual low flow based on period of record, 1964-2006 summer season, June 1 through October 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	43.4	20.4	12.8	8.39
3	45.7	22.7	15.0	10.3
7	51.9	26.3	17.9	12.7
10	54.5	28.3	20.0	14.9
30	89.7	43.7	32.6	26.5
60	223	85.7	56.1	41.1

Magnitude and probability of annual low flow based on period of record, 1964-2007 winter season, November 1 through March 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	77.4	28.0	17.7	12.6
3	80.7	28.8	18.3	13.1
7	92.1	30.9	19.3	13.8
10	104	34.1	21.0	14.8
30	274	62.8	29.6	16.1
60	562	115	48.5	23.4

ARKANSAS RIVER BASIN

07176465 BIRCH CREEK BELOW BIRCH LAKE NEAR BARNSDALL, OKLA.

LOCATION. – Lat 36°32'00", long 96°09'43", referenced to North American Datum of 1927, in NW ¼ NE ¼ sec. 30, T.24 N., R.11 E., Osage County, Okla., Hydrologic Unit 11070107, on right bank 300 ft downstream from Birch Dam, 1.5 mi south of Barnsdall, and at mile 0.7.

DRAINAGE AREA. – 66 mi².

PERIOD OF RECORD. – February 1977 to September 1992.

REMARKS. – Flow completely regulated since March 1977 by Birch Lake (station 07176460).

REGULATED STREAMFLOW PERIOD

[ft³/s, cubic feet per second; %, percent; monthly values may not add to 100]

Monthly and annual mean, median, maximum and minimum discharges, and average percent of annual runoff, based on period of record, 1978-1992					
Month	Maximum	Minimum	Mean	Median	Average % of Annual Runoff
Oct.	484	1.18	47.1	6.79	8.6
Nov.	205	0.27	25.9	4.38	4.7
Dec.	122	0.09	27.9	4.89	5.1
Jan.	93.9	0.17	19.3	4.78	3.5
Feb.	153	0.16	36.6	9.69	6.7
Mar.	420	1.00	92.6	32.5	17.0
Apr.	243	2.55	67.2	51.3	12.3
May	209	2.34	95.6	92.8	17.5
Jun.	502	5.27	90.8	46.9	16.6
Jul.	86.1	0.97	18.4	14.1	3.4
Aug.	57.7	1.04	10.3	4.98	1.9
Sep.	127	1.29	13.9	5.75	2.6
Annual	118	3.86	45.5	35.9	—

Magnitude and probability of annual instantaneous peak flow based on 15 years of record, 1978-1992						
Discharge, in ft ³ /s, for indicated recurrence interval, in years, and exceedence probability, in percent						
2	5	10	25	50	100	500
50%	20%	10%	4%	2%	1%	0.2%
846	1,460	1,860	2,330	2,660	2,960	3,590

station skew = -0.664

Duration table of daily mean flow for period of record, 1978-1992															
Discharge, in ft ³ /s, which was equaled or exceeded for indicated percent of time															
1%	2%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%
680	446	272	123	49.2	21.1	12.7	8.23	5.63	4.65	3.67	2.27	1.37	0.84	0.15	0.07

Magnitude and probability of annual low flow based on period of record, 1979-1992				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	0.61	0.00	0.00	0.00
3	0.65	0.02	0.00	0.00
7	0.84	0.19	0.08	0.04
10	1.06	0.25	0.10	0.04
30	2.31	0.77	0.34	0.15
60	2.74	0.94	0.43	0.20

Magnitude and probability of annual low flow based on period of record, 1978-1992 spring season, April 1 through May 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	3.06	1.00	0.47	0.23
3	3.15	1.04	0.49	0.24
7	4.11	1.32	0.60	0.28
10	5.76	2.24	1.07	0.50
30	20.1	5.36	2.48	1.25
60	66.7	21.0	9.60	4.56

Magnitude and probability of annual low flow based on period of record, 1978-1991 summer season, June 1 through October 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	2.23	1.23	0.91	0.72
3	2.71	1.40	0.98	0.72
7	3.16	1.57	1.05	0.74
10	3.32	1.65	1.10	0.78
30	4.35	2.24	1.48	1.00
60	4.88	2.39	1.57	1.08

Magnitude and probability of annual low flow based on period of record, 1978-1992 winter season, November 1 through March 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	1.25	0.00	0.00	0.00
3	1.30	0.03	0.00	0.00
7	1.32	0.28	0.11	0.04
10	1.64	0.37	0.14	0.06
30	3.05	0.88	0.38	0.17
60	4.70	1.02	0.43	0.20

ARKANSAS RIVER BASIN

07176500 BIRD CREEK AT AVANT, OKLA.

LOCATION. – Lat 36°29'06", long 96°03'36", referenced to North American Datum of 1927, in SW ¼ NW ¼ sec. 7, T.23 N., R.12 E., Osage County, Okla., Hydrologic Unit 11070107, on right downstream side of Shafer bridge 2.2 mi. upstream from Candy Creek, and at mile 54.0.

DRAINAGE AREA. – 364 mi².

PERIOD OF RECORD. – August 1945 to current year, published as "Bird Creek near Avant" October 1973 to September 1993.

REMARKS. – Flow slightly regulated since 1958 by Bluestem Lake (capacity 17,000 acre-ft). Flow regulated since March 1977 by Birch Lake (capacity 19,200 acre-ft), located on Birch Creek, 12.1 mi upstream. Small diversions upstream for municipal water supply for the cities of Pawhuska and Barnsdall.

UNREGULATED STREAMFLOW PERIOD

[ft³/s, cubic feet per second; %, percent; monthly values may not add to 100]

Monthly and annual mean, median, maximum and minimum discharges, and average percent of annual runoff, based on period of record, 1946-1976

Month	Maximum	Minimum	Mean	Median	Average % of Annual Runoff
Oct.	1,910	0.00	178	26.9	7.4
Nov.	1,677	0.00	177	11.9	7.4
Dec.	863	0.00	108	7.54	4.5
Jan.	827	0.00	99.3	17.0	4.1
Feb.	761	0.00	99.8	14.6	4.2
Mar.	2,063	0.00	285	110	11.9
Apr.	1,235	0.00	275	170	11.4
May	2,266	0.00	436	247	18.2
Jun.	2,648	1.07	309	107	12.9
Jul.	832	0.00	176	23.6	7.4
Aug.	980	0.00	90.4	7.06	3.8
Sep.	1,585	0.00	164	27.7	6.8
Annual	639	5.50	200	161	–

Magnitude and probability of annual instantaneous peak flow based on 31 years of record, 1946-1976

Discharge, in ft³/s, for indicated recurrence interval, in years, and exceedence probability, in percent

2	5	10	25	50	100	500
50%	20%	10%	4%	2%	1%	0.2%
12,100	19,800	25,300	32,800	38,600	44,700	59,500

Oklahoma weighted skew = -0.146

Duration table of daily mean flow for period of record, 1945-1976

Discharge, in ft³/s, which was equaled or exceeded for indicated percent of time

1%	2%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%
4,380	2,200	749	281	165	110	52.6	25.0	12.1	5.32	2.01	0.41	0.00	0.00	0.00	0.00

Magnitude and probability of annual low flow based on period of record, 1947-1976				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00
30	0.00	0.00	0.00	0.00
60	2.02	0.00	0.00	0.00

Magnitude and probability of annual low flow based on period of record, 1946-1976 spring season, April 1 through May 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	5.78	1.06	0.26	0.00
3	6.74	1.08	0.28	0.05
7	10.2	2.08	0.68	0.17
10	12.9	2.49	0.80	0.19
30	79.7	22.4	9.42	3.23
60	282	96.4	44.3	16.4

Magnitude and probability of annual low flow based on period of record, 1946-1975 summer season, June 1 through October 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00
30	0.06	0.00	0.00	0.00
60	6.01	0.07	0.00	0.00

Magnitude and probability of annual low flow based on period of record, 1946-1976 winter season, November 1 through March 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	1.27	0.00	0.00	0.00
3	1.42	0.00	0.00	0.00
7	1.50	0.00	0.00	0.00
10	1.72	0.00	0.00	0.00
30	2.89	0.01	0.00	0.00
60	5.46	0.27	0.00	0.00

ARKANSAS RIVER BASIN

07176500 BIRD CREEK AT AVANT, OKLA.—Continued

REGULATED STREAMFLOW PERIOD

[ft³/s, cubic feet per second; %, percent; monthly values may not add to 100]

Monthly and annual mean, median, maximum and minimum discharges and average percent of annual runoff, based on period of record, 1978-2007					
Month	Maximum	Minimum	Mean	Median	Average % of Annual Runoff
Oct.	1,940	3.94	151	40.0	4.1
Nov.	1,319	4.19	233	73.5	6.4
Dec.	753	3.76	182	76.4	5.0
Jan.	749	3.61	170	68.0	4.7
Feb.	1,376	4.87	295	154	8.1
Mar.	2,264	8.69	562	399	15.4
Apr.	1,214	6.95	485	395	13.3
May	2,177	12.4	620	458	17.0
Jun.	2,642	6.58	574	281	15.7
Jul.	1,174	10.3	175	79.3	4.8
Aug.	400	6.07	68.4	30.4	1.9
Sep.	1,059	5.20	135	39.8	3.7
Annual	673	27.6	304	274	—

Magnitude and probability of annual instantaneous peak flow based on 30 years of record, 1978-2007						
Discharge, in ft ³ /s, for indicated recurrence interval, in years, and exceedence probability, in percent						
2	5	10	25	50	100	500
15%	5%	10%	4%	2%	1%	0.2%
15,700	22,100	26,200	31,200	34,900	38,400	46,500

station skew = -0.210

Duration table of daily mean flow for period of record, 1978-2007															
Discharge, in ft ³ /s, which was equaled or exceeded for indicated percent of time															
1%	2%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%
4,460	2,640	1,330	686	424	265	128	70.0	43.3	27.9	20.0	14.0	7.39	5.14	3.83	3.38

Magnitude and probability of annual low flow based on period of record, 1979-2007				
Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent				
Period (consecutive days)	2	5	10	20
	50%	20%	10%	5%
1	7.60	2.86	1.23	0.51
3	7.79	2.97	1.48	0.75
7	7.96	3.31	1.84	1.06
10	8.28	3.58	2.10	1.28
30	10.0	5.27	3.72	2.78
60	14.7	7.40	5.09	3.70

Magnitude and probability of annual low flow based on period of record, 1978-2007 spring season, April 1 through May 31				
Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent				
Period (consecutive days)	2	5	10	20
	50%	20%	10%	5%
1	34.2	13.7	7.91	4.81
3	37.8	14.9	8.49	5.13
7	45.0	17.3	9.82	5.93
10	54.6	20.1	11.0	6.44
30	186	54.3	25.8	13.2
60	444	196	120	77.4

Magnitude and probability of annual low flow based on period of record, 1978-2006 summer season, June 1 through October 31				
Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent				
Period (consecutive days)	2	5	10	20
	50%	20%	10%	5%
1	9.00	3.15	1.30	0.53
3	9.11	3.32	1.60	0.78
7	9.64	3.80	2.01	1.10
10	10.2	4.14	2.30	1.32
30	13.0	6.26	4.20	3.00
60	20.1	9.78	6.73	4.95

Magnitude and probability of annual low flow based on period of record, 1978-2007 winter season, November 1 through March 31				
Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent				
Period (consecutive days)	2	5	10	20
	50%	20%	10%	5%
1	9.31	4.78	3.45	2.67
3	9.95	5.18	3.76	2.93
7	10.9	5.67	4.11	3.19
10	11.7	6.06	4.40	3.42
30	22.1	8.79	5.69	4.07
60	37.3	12.0	6.74	4.23

ARKANSAS RIVER BASIN

07176800 CANDY CREEK NEAR WOLCO, OKLA.

LOCATION. — Lat 36°32'06", long 96°02'54", referenced to North American Datum of 1927, in NW ¼ NW ¼ sec. 29, T.29 N., R.12 E., Osage County, Okla., Hydrologic Unit 11070107, 1.3 mi east of Wolco, 3.3 mi northeast of Avant, and at mile 5.6.

DRAINAGE AREA. — 30.6 mi².

PERIOD OF RECORD.—October 1969 to May 1981.

UNREGULATED STREAMFLOW PERIOD

[ft³/s, cubic feet per second; %, percent; monthly values may not add to 100]

Monthly and annual mean, median, maximum and minimum discharges, and average percent of annual runoff, based on period of record, 1970-1981					
Month	Maximum	Minimum	Mean	Median	Average % of Annual Runoff
Oct.	142	0.00	33.3	7.72	11.1
Nov.	151	0.00	36.3	3.42	12.1
Dec.	96.0	0.00	19.4	1.46	6.5
Jan.	63.4	0.00	13.3	4.14	4.4
Feb.	61.4	0.00	15.6	9.41	5.2
Mar.	196	0.08	58.1	36.1	19.3
Apr.	131	0.45	34.1	21.9	11.3
May	87.1	1.23	36.6	33.7	12.2
Jun.	69.7	0.00	20.8	5.73	6.9
Jul.	40.6	0.00	6.73	0.29	2.2
Aug.	77.3	0.00	8.85	0.00	3.0
Sep.	63.8	0.00	17.3	1.67	5.8
Annual	58.6	8.66	26.7	18.6	—

Magnitude and probability of annual instantaneous peak flow based on 12 years of record, 1970-1981						
Discharge, in ft ³ /s, for indicated recurrence interval, in years, and exceedence probability, in percent						
2	5	10	25	50	100	500
50%	20%	10%	4%	2%	1%	0.2%
5,080	7,870	9,860	12,500	14,500	16,600	21,700

Oklahoma weighted skew = -0.482

Duration table of daily mean flow for period of record, 1970-1981															
Discharge, in ft ³ /s, which was equaled or exceeded for indicated percent of time															
1%	2%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%
585	321	91.3	30.9	15.8	9.69	4.41	2.26	1.00	0.44	0.13	0.00	0.00	0.00	0.00	0.00

Magnitude and probability of annual low flow based on period of record, 1971-1981				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00
30	0.00	0.00	0.00	0.00
60	0.03	0.00	0.00	0.00

Magnitude and probability of annual low flow based on period of record, 1970-1981 spring season, April 1 through May 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	0.92	0.07	0.00	0.00
3	1.00	0.07	0.00	0.00
7	1.10	0.26	0.11	0.05
10	1.17	0.33	0.15	0.07
30	8.63	2.39	1.09	0.54
60	35.8	11.3	4.83	2.08

Magnitude and probability of annual low flow based on period of record, 1970-1980 summer season, June 1 through October 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00
30	0.00	0.00	0.00	0.00
60	0.04	0.00	0.00	0.00

Magnitude and probability of annual low flow based on period of record, 1970-1981 winter season, November 1 through March 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	0.20	0.00	0.00	0.00
3	0.20	0.00	0.00	0.00
7	0.21	0.00	0.00	0.00
10	0.22	0.00	0.00	0.00
30	0.44	0.04	0.00	0.00
60	0.98	0.11	0.02	0.00

ARKANSAS RIVER BASIN

07177000 HOMINY CREEK NEAR SKIATOOK, OKLA.

LOCATION. — Lat 36°20'55", long 96°06'35", referenced to North American Datum of 1927, in SW ¼ SE ¼ sec. 27, T.22 N., R.11 E., Osage County, Okla., Hydrologic Unit 11070107, near left bank on downstream side of pier of bridge on State Highway 20, 1.0 mi upstream from Tall Chief Creek, 6.0 mi west of Skiatook, and at mile 16.7.

DRAINAGE AREA. — 340 mi².

PERIOD OF RECORD.—March 1944 to September 1980.

UNREGULATED STREAMFLOW PERIOD

[ft³/s, cubic feet per second; %, percent; monthly values may not add to 100]

Monthly and annual mean, median, maximum and minimum discharges, and average percent of annual runoff, based on period of record, 1944-1980					
Month	Maximum	Minimum	Mean	Median	Average % of Annual Runoff
Oct.	2,318	0.00	161	13.8	7.5
Nov.	2,213	0.00	154	13.8	7.1
Dec.	797	0.00	74.8	6.12	3.4
Jan.	651	0.00	79.2	15.8	3.7
Feb.	690	0.00	81.7	20.1	3.8
Mar.	1,639	0.00	248	122	11.5
Apr.	1,099	2.66	262	167	12.1
May	2,087	0.00	390	227	18.0
Jun.	2,022	0.99	271	118	12.5
Jul.	904	0.00	173	40.2	8.0
Aug.	580	0.00	63.3	9.63	2.9
Sep.	1,609	0.00	205	34.4	9.5
Annual	609	6.36	181	151	—

Magnitude and probability of annual instantaneous peak flow based on 38 years of record, 1943-1980						
Discharge, in ft ³ /s, for indicated recurrence interval, in years, and exceedence probability, in percent						
2	5	10	25	50	100	500
50%	20%	10%	4%	2%	1%	0.2%
8,400	12,900	16,300	21,400	25,600	30,200	43,000

Oklahoma weighted skew = 0.350

Duration table of daily mean flow for period of record, 1944-1980																
Discharge, in ft ³ /s, which was equaled or exceeded for indicated percent of time																
1%	2%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	
3,960	2,330	745	237	115	72.6	36.0	19.3	10.9	5.70	2.99	1.20	0.14	0.00	0.00	0.00	

Magnitude and probability of annual low flow based on period of record, 1945-1980				
Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent				
Period (consecutive days)	2	5	10	20
	50%	20%	10%	5%
1	0.18	0.00	0.00	0.00
3	0.21	0.00	0.00	0.00
7	0.24	0.00	0.00	0.00
10	0.28	0.00	0.00	0.00
30	0.72	0.00	0.00	0.00
60	2.45	0.20	0.01	0.00

Magnitude and probability of annual low flow based on period of record, 1944-1980 spring season, April 1 through May 31				
Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent				
Period (consecutive days)	2	5	10	20
	50%	20%	10%	5%
1	6.42	1.73	0.70	0.25
3	6.86	1.92	0.80	0.31
7	9.40	2.85	1.27	0.52
10	11.2	3.34	1.49	0.61
30	75.8	23.5	11.0	4.91
60	304	94.4	38.9	16.0

Magnitude and probability of annual low flow based on period of record, 1944-1979 summer season, June 1 through October 31				
Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent				
Period (consecutive days)	2	5	10	20
	50%	20%	10%	5%
1	0.19	0.00	0.00	0.00
3	0.21	0.00	0.00	0.00
7	0.25	0.00	0.00	0.00
10	0.28	0.00	0.00	0.00
30	0.79	0.00	0.00	0.00
60	5.84	0.45	0.06	0.00

Magnitude and probability of annual low flow based on period of record, 1944-1980 winter season, November 1 through March 31				
Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent				
Period (consecutive days)	2	5	10	20
	50%	20%	10%	5%
1	1.38	0.10	0.00	0.00
3	1.66	0.10	0.00	0.00
7	1.67	0.23	0.06	0.00
10	1.86	0.28	0.08	0.00
30	3.19	0.53	0.17	0.00
60	5.30	0.84	0.26	0.00

ARKANSAS RIVER BASIN

07177500 BIRD CREEK NEAR SPERRY, OKLA.

LOCATION. – Lat 36°16'42", long 95°57'14", referenced to North American Datum of 1927, in NW ¼ NW ¼ sec. 29, T.21 N., R.13 E., Tulsa County, Okla., Hydrologic Unit 11070107, near downstream side of right abutment of county road bridge, 1.5 mi upstream from Delaware Creek, 2.4 mi downstream from Hominy Creek, 2.5 mi southeast of Sperry, and at mile 25.0.

DRAINAGE AREA. – 905 mi².

PERIOD OF RECORD. – October 1938 to current year. Monthly discharge only for some periods, published in WSP 1311.

REMARKS. – Flow slightly regulated since 1958 by Bluestem Lake (capacity 17,000 acre-ft) and since 1977 by Birch Lake (capacity 19,200 acre-ft). Flow regulated since October 1984 by Skiatook Lake (capacity 322,300 acre-ft).

UNREGULATED STREAMFLOW PERIOD

[ft³/s, cubic feet per second; %, percent; monthly values may not add to 100]

Monthly and annual mean, median, maximum and minimum discharges, and average percent of annual runoff, based on period of record, 1939-1984					
Month	Maximum	Minimum	Mean	Median	Average % of Annual Runoff
Oct.	5,913	0.00	488	49.4	8.4
Nov.	5,412	0.00	389	38.9	6.7
Dec.	1,782	0.06	197	34.6	3.4
Jan.	1,705	0.10	180	57.6	3.1
Feb.	2,088	0.96	246	92.7	4.2
Mar.	4,479	1.37	644	288	11.1
Apr.	4,971	11.6	784	479	13.5
May	9,862	2.39	1,250	719	21.6
Jun.	5,870	7.27	721	347	12.4
Jul.	1,903	0.02	337	86.9	5.8
Aug.	1,810	0.00	152	29.7	2.6
Sep.	3,106	0.00	403	77.7	7.0
Annual	1,481	15.2	484	412	—

Magnitude and probability of annual instantaneous peak flow based on 46 years of record, 1939-1984						
Discharge, in ft ³ /s, for indicated recurrence interval, in years, and exceedence probability, in percent						
2	5	10	25	50	100	500
50%	20%	10%	4%	2%	1%	0.2%
14,500	25,600	35,700	51,900	67,100	85,200	142,000

Oklahoma weighted skew = 0.488

Duration table of daily mean flow for period of record, 1939-1984																
Discharge, in ft ³ /s, which was equaled or exceeded for indicated percent of time																
1%	2%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	
9,210	5,970	2,300	740	385	248	127	71.6	40.1	24.3	13.8	7.09	2.55	0.70	0.04	0.02	

Magnitude and probability of annual low flow based on period of record, 1940-1984				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	1.74	0.18	0.00	0.00
3	1.95	0.23	0.00	0.00
7	2.38	0.31	0.00	0.00
10	2.86	0.40	0.00	0.00
30	6.31	0.94	0.16	0.00
60	11.7	2.07	0.59	0.05

Magnitude and probability of annual low flow based on period of record, 1939-1984 spring season, April 1 through May 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	25.8	6.97	2.82	1.08
3	27.1	7.90	3.49	1.50
7	34.8	10.7	5.02	2.32
10	40.6	12.3	5.78	2.69
30	257	59.0	20.9	7.66
60	830	273	128	62.3

Magnitude and probability of annual low flow based on period of record, 1939-1983 summer season, June 1 through October 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	1.88	0.19	0.00	0.00
3	2.06	0.24	0.00	0.00
7	2.48	0.31	0.00	0.00
10	2.97	0.40	0.00	0.00
30	5.55	1.34	0.51	0.00
60	21.3	3.94	1.25	0.16

Magnitude and probability of annual low flow based on period of record, 1939-1984 winter season, November 1 through March 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	6.94	1.30	0.43	0.06
3	7.43	1.39	0.45	0.07
7	8.59	1.75	0.61	0.10
10	9.47	1.97	0.70	0.12
30	19.8	3.06	0.81	0.20
60	29.4	4.45	1.38	0.47

ARKANSAS RIVER BASIN

07177500 BIRD CREEK NEAR SPERRY, OKLA.—Continued

REGULATED STREAMFLOW PERIOD

[ft³/s, cubic feet per second; %, percent; monthly values may not add to 100]

Monthly and annual mean, median, maximum and minimum discharges and average percent of annual runoff, based on period of record, 1985-2007					
Month	Maximum	Minimum	Mean	Median	Average % of Annual Runoff
Oct.	5,145	112	470	159	5.2
Nov.	2,602	47.4	563	128	6.3
Dec.	1,664	61.9	474	209	5.3
Jan.	2,208	52.8	507	191	5.6
Feb.	2,837	39.9	627	251	7.0
Mar.	4,949	59.7	1,335	759	14.9
Apr.	3,564	183	1,119	584	12.5
May	4,824	151	1,372	637	15.3
Jun.	4,890	167	1,302	512	14.5
Jul.	3,421	117	586	336	6.5
Aug.	1,267	14.6	307	176	3.4
Sep.	1,377	49.0	312	215	3.5
Annual	1,669	168	748	685	—

Magnitude and probability of annual instantaneous peak flow based on 23 years of record, 1985-2007						
Discharge, in ft ³ /s, for indicated recurrence interval, in years, and exceedence probability, in percent						
2	5	10	25	50	100	500
15%	5%	10%	4%	2%	1%	0.2%
14,600	21,200	25,900	32,200	37,000	42,000	54,500

station skew = 0.070

Duration table of daily mean flow for period of record, 1985-2007															
Discharge, in ft ³ /s, which was equaled or exceeded for indicated percent of time															
1%	2%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%
8,490	5,730	3,670	2,200	1,310	830	323	203	178	155	118	80.9	61.3	50.4	24.8	15.8

Magnitude and probability of annual low flow based on period of record, 1986-2007				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	46.5	25.1	16.0	10.0
3	51.4	28.6	18.1	11.4
7	55.4	30.7	19.3	12.1
10	58.0	32.1	20.2	12.6
30	67.2	38.6	26.6	18.6
60	79.9	49.7	37.8	29.7

Magnitude and probability of annual low flow based on period of record, 1985-2007 spring season, April 1 through May 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	124	79.8	62.0	49.8
3	134	86.3	69.0	57.6
7	143	92.3	77.0	67.8
10	168	101	80.9	69.2
30	411	175	116	83.6
60	870	398	263	186

Magnitude and probability of annual low flow based on period of record, 1985-2006 summer season, June 1 through October 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	53.2	26.2	16.0	10.0
3	59.9	30.4	18.5	11.4
7	67.2	33.6	20.1	12.1
10	71.7	35.6	21.2	12.7
30	134	67.9	39.4	22.6
60	165	89.8	57.5	37.0

Magnitude and probability of annual low flow based on period of record, 1985-2007 winter season, November 1 through March 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	56.8	37.1	25.8	17.6
3	59.4	38.8	26.9	18.2
7	62.8	41.2	28.9	19.9
10	64.4	42.0	30.3	21.8
30	82.0	52.7	44.7	40.1
60	136	62.6	43.9	33.5

ARKANSAS RIVER BASIN

07177650 FLAT ROCK CREEK AT CINCINNATI AVENUE AT TULSA, OKLA.

LOCATION. – Lat 36°12'55", long 95°59'42", referenced to North American Datum of 1927, in NW ¼ NW ¼ sec. 29, T.21 N., R.13 E., Tulsa County, Okla., Hydrologic Unit 11070107, near downstream side of right abutment of county road bridge, 1.5 mi upstream from Delaware Creek, 2.4 mi downstream from Hominy Creek, 2.5 mi southeast of Sperry, and at mile 25.0.

DRAINAGE AREA. – 8.2 mi².

PERIOD OF RECORD. – December 1987 to current year.

REMARKS. – Urban watershed in the city of Tulsa, Okla..

UNREGULATED URBAN STREAMFLOW PERIOD

[ft³/s, cubic feet per second; %, percent; monthly values may not add to 100]

Monthly and annual mean, median, maximum and minimum discharges, and average percent of annual runoff, based on period of record, 1988-2007					
Month	Maximum	Minimum	Mean	Median	Average % of Annual Runoff
Oct.	19.2	0.12	2.74	0.56	3.5
Nov.	31.1	0.01	5.36	2.27	6.8
Dec.	23.0	0.07	5.45	2.31	6.9
Jan.	33.0	0.04	5.51	3.44	7.0
Feb.	16.1	0.01	5.43	3.79	6.9
Mar.	47.8	0.07	13.0	8.43	16.5
Apr.	39.6	0.16	10.8	7.55	13.8
May	59.2	0.21	15.7	3.81	19.9
Jun.	55.7	0.00	8.62	2.08	11.0
Jul.	12.0	0.04	2.27	0.56	2.9
Aug.	17.7	0.01	2.09	0.25	2.7
Sep.	9.78	0.00	1.74	0.58	2.2
Annual	15.3	0.56	6.46	5.45	—

Magnitude and probability of annual instantaneous peak flow based on 19 years of record, 1989-2007						
Discharge, in ft ³ /s, for indicated recurrence interval, in years, and exceedence probability, in percent						
2	5	10	25	50	100	500
50%	20%	10%	4%	2%	1%	0.2%
1,570	3,130	4,510	6,680	8,630	10,900	17,400

station skew = 0.062

Duration table of daily mean flow for period of record, 1988-2007															
Discharge, in ft ³ /s, which was equaled or exceeded for indicated percent of time															
1%	2%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%
138	68.0	20.0	7.86	4.89	3.33	1.68	1.00	0.59	0.34	0.18	0.08	0.02	0.00	0.00	0.00

Magnitude and probability of annual low flow based on period of record, 1989-2007				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00
30	0.04	0.01	0.00	0.00
60	0.10	0.03	0.01	0.01

Magnitude and probability of annual low flow based on period of record, 1988-2007 spring season, April 1 through May 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	0.20	0.00	0.00	0.00
3	0.23	0.01	0.00	0.00
7	0.31	0.08	0.03	0.00
10	0.42	0.12	0.06	0.03
30	1.99	0.44	0.20	0.10
60	7.45	1.99	0.90	0.44

Magnitude and probability of annual low flow based on period of record, 1988-2006 summer season, June 1 through October 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00
30	0.05	0.01	0.00	0.00
60	0.15	0.05	0.02	0.01

Magnitude and probability of annual low flow based on period of record, 1988-2007 winter season, November 1 through March 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	0.08	0.00	0.00	0.00
3	0.10	0.01	0.00	0.00
7	0.13	0.02	0.00	0.00
10	0.18	0.03	0.01	0.00
30	0.66	0.09	0.02	0.00
60	1.06	0.23	0.09	0.04

ARKANSAS RIVER BASIN

07177800 COAL CREEK AT TULSA, OKLA.

LOCATION. – Lat 36°11'40", long 95°54'50", referenced to North American Datum of 1927, in SE ¼ SW ¼ sec. 22, T.20 N., R.13 E., Tulsa County, Okla., Hydrologic Unit 11070107, near right downstream abutment of bridge on State Highway 11, .2 mile Northwest of intersection of SH 11 and Apache Street in Tulsa, and at mile 4.1.

DRAINAGE AREA. – 7.53 mi².

PERIOD OF RECORD. – January 1988 to current year.

REMARKS. – Urban watershed in the city of Tulsa, Okla..

UNREGULATED URBAN STREAMFLOW PERIOD

[ft³/s, cubic feet per second; %, percent; monthly values may not add to 100]

Monthly and annual mean, median, maximum and minimum discharges, and average percent of annual runoff, based on period of record, 1988-2007					
Month	Maximum	Minimum	Mean	Median	Average % of Annual Runoff
Oct.	33.6	1.11	7.55	5.32	7.2
Nov.	24.9	0.55	7.69	5.44	7.4
Dec.	20.3	0.37	7.43	5.46	7.1
Jan.	13.3	0.32	6.09	6.47	5.8
Feb.	15.2	0.96	5.94	4.86	5.7
Mar.	33.2	1.71	11.1	8.03	10.6
Apr.	34.9	1.62	11.4	9.96	10.9
May	46.3	2.86	15.3	10.9	14.7
Jun.	42.1	1.79	11.4	9.59	10.9
Jul.	24.8	0.29	7.88	5.57	7.5
Aug.	23.9	0.76	5.96	3.40	5.7
Sep.	21.3	1.81	6.87	5.31	6.6
Annual	15.8	3.60	8.77	8.93	—

Magnitude and probability of annual instantaneous peak flow based on 19 years of record, 1989-2007						
Discharge, in ft ³ /s, for indicated recurrence interval, in years, and exceedence probability, in percent						
2	5	10	25	50	100	500
50%	20%	10%	4%	2%	1%	0.2%
2,150	3,340	4,300	5,720	6,940	8,300	12,200

station skew = 0.436

Duration table of daily mean flow for period of record, 1988-2007															
Discharge, in ft ³ /s, which was equaled or exceeded for indicated percent of time															
1%	2%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%
133	86.4	39.2	16.6	9.19	6.33	4.13	3.04	2.33	1.76	1.21	0.79	0.39	0.22	0.12	0.04

Magnitude and probability of annual low flow based on period of record, 1990-2007				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	0.17	0.07	0.00	0.00
3	0.20	0.08	0.00	0.00
7	0.25	0.09	0.00	0.00
10	0.35	0.09	0.02	0.00
30	0.82	0.40	0.26	0.18
60	1.51	0.69	0.42	0.27

Magnitude and probability of annual low flow based on period of record, 1989-2007 spring season, April 1 through May 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	0.99	0.51	0.34	0.24
3	1.15	0.62	0.43	0.31
7	1.47	0.84	0.61	0.47
10	1.89	1.08	0.78	0.60
30	6.20	3.32	2.43	1.89
60	11.6	6.88	5.21	4.13

Magnitude and probability of annual low flow based on period of record, 1989-2006 summer season, June 1 through October 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	0.18	0.07	0.00	0.00
3	0.20	0.08	0.00	0.00
7	0.26	0.09	0.00	0.00
10	0.37	0.09	0.03	0.00
30	0.95	0.46	0.30	0.21
60	2.46	1.16	0.71	0.44

Magnitude and probability of annual low flow based on period of record, 1989-2007 winter season, November 1 through March 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	0.75	0.30	0.17	0.10
3	0.82	0.32	0.18	0.11
7	0.91	0.36	0.20	0.12
10	1.17	0.49	0.28	0.17
30	2.32	1.09	0.67	0.42
60	3.65	1.70	1.00	0.59

ARKANSAS RIVER BASIN

07178000 BIRD CREEK NEAR OWASSO, OKLA.

LOCATION. – Lat 36°14'55", long 95°52'06", referenced to North American Datum of 1927, in NW ¼ NW ¼ sec. 6, T.20 N., R.14 E., Tulsa County, Okla., Hydrologic Unit 11070107, at bridge on Mingo Road 1.4 mi upstream from Mingo Creek, 1.5 mi downstream from Coal Creek, 2 mi southwest of Owasso, and at mile 14.1.

DRAINAGE AREA. – 1,022 mi².

PERIOD OF RECORD. – October 1935 to March 1939, April 1987 to current year.

REMARKS. – Flow slightly regulated since 1958 by Bluestem Lake (capacity 17,000 acre-ft) and since March 1977 by Birch Lake (capacity 19,200 acre-ft). Flow regulated since October 1984 by Skiatook Lake (capacity 322,300 acre-ft).

REGULATED STREAMFLOW PERIOD

[ft³/s, cubic feet per second; %, percent; monthly values may not add to 100]

Monthly and annual mean, median, maximum and minimum discharges, and average percent of annual runoff, based on period of record, 1988-2007					
Month	Maximum	Minimum	Mean	Median	Average % of Annual Runoff
Oct.	1,873	131	324	198	3.3
Nov.	2,362	74.0	530	174	5.4
Dec.	1,599	78.9	510	228	5.2
Jan.	2,464	79.5	554	256	5.7
Feb.	1,618	81.6	570	312	5.9
Mar.	5,861	91.9	1,393	847	14.3
Apr.	3,794	222	1,371	707	14.1
May	5,565	160	1,652	812	17.0
Jun.	5,579	166	1,371	578	14.1
Jul.	3,195	181	709	366	7.3
Aug.	1,317	162	393	229	4.0
Sep.	1,376	160	361	265	3.7
Annual	1,906	202	812	747	–

Magnitude and probability of annual instantaneous peak flow based on 20 years of record, 1988-2007						
Discharge, in ft ³ /s, for indicated recurrence interval, in years, and exceedence probability, in percent						
2	5	10	25	50	100	500
50%	20%	10%	4%	2%	1%	0.2%
14,700	19,900	23,100	26,800	29,300	31,700	36,800

station skew = -0.354

Duration table of daily mean flow for period of record, 1987-2007																
Discharge, in ft ³ /s, which was equaled or exceeded for indicated percent of time																
1%	2%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	
9,770	6,470	3,440	2,220	1,390	880	371	241	201	176	155	115	84.8	73.2	66.5	56.1	

Magnitude and probability of annual low flow based on period of record, 1989-2007				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	63.2	55.3	52.6	51.0
3	65.6	60.4	58.6	55.7
7	70.0	62.9	60.7	57.9
10	73.6	64.3	61.1	59.0
30	88.8	72.4	67.0	63.7
60	109	84.1	75.3	69.6

Magnitude and probability of annual low flow based on period of record, 1988-2007 spring season, April 1 through May 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	150	112	99.2	91.3
3	158	124	115	111
7	170	132	124	120
10	196	142	129	123
30	520	234	160	118
60	1,060	476	309	215

Magnitude and probability of annual low flow based on period of record, 1988-2006 summer season, June 1 through October 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	69.4	57.3	53.5	51.3
3	76.9	63.2	58.6	55.7
7	87.5	69.1	62.4	57.9
10	96.5	74.0	65.2	59.0
30	161	140	131	126
60	201	168	156	148

Magnitude and probability of annual low flow based on period of record, 1988-2007 winter season, November 1 through March 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	68.7	58.8	54.9	52.2
3	70.7	62.2	59.2	57.3
7	74.8	64.7	61.1	58.0
10	79.4	66.3	61.3	58.8
30	106	73.5	64.9	60.2
60	158	83.2	63.6	52.6

ARKANSAS RIVER BASIN

07178040 MINGO CREEK AT 46TH STREET NORTH AT TULSA, OKLA.

LOCATION. – Lat 36°13'14", long 95°51'30", referenced to North American Datum of 1927, in SW ¼ SE ¼ sec. 7, T.20 N., R.14 E., Tulsa County, Okla., Hydrologic Unit 11070107, near left downstream abutment of 46th Street North bridge, 0.1 mi downstream from small left bank tributary, 0.2 mi upstream from small right bank tributary, 9.0 mi northeast of downtown Tulsa post office, and at mile 1.9.

DRAINAGE AREA. – 59.9 mi².

PERIOD OF RECORD. – April 1987 to June 1998.

REMARKS. – Urban watershed in the city of Tulsa, Okla..

UNREGULATED URBAN STREAMFLOW PERIOD

[ft³/s, cubic feet per second; %, percent; monthly values may not add to 100]

Monthly and annual mean, median, maximum and minimum discharges, and average percent of annual runoff, based on period of record, 1988-1997					
Month	Maximum	Minimum	Mean	Median	Average % of Annual Runoff
Oct.	124	13.0	45.3	24.4	4.5
Nov.	295	4.47	109	87.5	10.9
Dec.	302	4.31	91.3	39.0	9.1
Jan.	101	10.2	49.0	43.4	4.9
Feb.	128	4.54	59.6	45.5	5.9
Mar.	288	16.4	108	81.9	10.7
Apr.	280	16.0	126	120	12.5
May	399	20.3	135	92.2	13.4
Jun.	353	6.23	100	59.6	10.0
Jul.	195	4.69	60.4	40.0	6.0
Aug.	166	5.80	48.3	27.1	4.8
Sep.	134	23.1	72.1	69.2	7.2
Annual	132	27.7	83.7	84.2	–

Magnitude and probability of annual instantaneous peak flow based on 14 historic years of record, 1984-1997						
Discharge, in ft ³ /s, for indicated recurrence interval, in years, and exceedence probability, in percent						
2	5	10	25	50	100	500
50%	20%	10%	4%	2%	1%	0.2%
6,360	8,200	9,390	10,900	12,000	13,100	15,600

station skew = 0.114

Duration table of daily mean flow for period of record, 1987-1998																
Discharge, in ft ³ /s, which was equaled or exceeded for indicated percent of time																
1%	2%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	
1,460	941	412	168	86.8	55.4	32.6	21.2	14.4	9.50	6.08	3.90	2.52	1.90	1.41	0.92	

Magnitude and probability of annual low flow based on period of record, 1989-1998				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	1.36	0.82	0.58	0.41
3	1.47	0.91	0.66	0.49
7	1.74	1.04	0.76	0.57
10	1.94	1.25	0.97	0.77
30	4.41	2.88	2.40	2.11
60	9.95	5.57	4.05	3.08

Magnitude and probability of annual low flow based on period of record, 1988-1998 spring season, April 1 through May 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	5.09	2.50	1.59	1.05
3	5.67	2.71	1.70	1.11
7	6.66	3.33	2.22	1.56
10	8.38	3.93	2.66	1.93
30	46.6	17.2	9.98	6.30
60	102	49.7	33.7	24.3

Magnitude and probability of annual low flow based on period of record, 1988-1997 summer season, June 1 through October 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	1.41	0.85	0.59	0.42
3	1.52	0.94	0.68	0.50
7	1.80	1.07	0.78	0.58
10	2.09	1.31	1.00	0.79
30	6.03	3.36	2.60	2.15
60	21.2	9.98	6.46	4.41

Magnitude and probability of annual low flow based on period of record, 1988-1998 winter season, November 1 through March 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	3.00	1.85	1.42	1.13
3	3.51	2.17	1.64	1.30
7	4.45	2.63	1.93	1.48
10	6.64	3.15	2.08	1.45
30	13.5	5.74	3.57	2.38
60	21.5	9.36	5.98	4.10

ARKANSAS RIVER BASIN

07178200 BIRD CREEK AT STATE HIGHWAY 266 NEAR CATOOSA, OKLA.

LOCATION. – Lat 36°13'23", long 95°49'09", referenced to North American Datum of 1927, in SE ¼ SE ¼ sec. 9, T.20 N., R.14 E., Tulsa County, Okla., Hydrologic Unit 11070107, near left downstream abutment of bridge, 2.3 mi downstream from Elm Creek, 5 mi northwest of Catoosa High School, and at mile 9.5.

DRAINAGE AREA. – 1,103 mi².

PERIOD OF RECORD. – August 1988 to current year.

REMARKS. – Flow slightly regulated since 1958 by Bluestem Lake (capacity 17,000 acre-ft) and since March 1977 by Birch Lake (capacity 19,200 acre-ft). Flow regulated since October 1984 by Skiatook Lake (capacity 322,300 acre-ft).

REGULATED STREAMFLOW PERIOD

[ft³/s, cubic feet per second; %, percent; monthly values may not add to 100]

Monthly and annual mean, median, maximum and minimum discharges, and average percent of annual runoff, based on period of record, 1989-2007					
Month	Maximum	Minimum	Mean	Median	Average % of Annual Runoff
Oct.	2,329	168	456	267	3.8
Nov.	2,603	106	660	268	5.5
Dec.	1,854	115	605	380	5.1
Jan.	2,881	115	715	398	6.0
Feb.	2,213	109	771	520	6.4
Mar.	6,393	149	1,608	1,036	13.4
Apr.	3,646	288	1,473	927	12.3
May	5,724	228	2,036	1,176	17.0
Jun.	5,658	268	1,697	826	14.2
Jul.	3,195	212	900	472	7.5
Aug.	1,735	208	528	340	4.4
Sep.	1,758	216	504	357	4.2
Annual	2,127	278	997	856	–

Magnitude and probability of annual instantaneous peak flow based on 19 years of record, 1989-2007						
Discharge, in ft ³ /s, for indicated recurrence interval, in years, and exceedence probability, in percent						
2	5	10	25	50	100	500
50%	20%	10%	4%	2%	1%	0.2%
15,800	20,300	22,900	25,800	27,700	29,500	33,300

station skew = -0.367

Duration table of daily mean flow for period of record, 1988-2007																
Discharge, in ft ³ /s, which was equaled or exceeded for indicated percent of time																
1%	2%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	
10,900	7,640	4,270	2,640	1,690	1,160	583	370	291	246	209	177	137	113	97.4	90.4	

Magnitude and probability of annual low flow based on period of record, 1990-2007				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	93.6	77.8	70.6	65.1
3	101	85.6	78.6	73.4
7	108	88.7	80.8	75.1
10	114	91.4	82.0	75.3
30	147	117	104	94.1
60	179	141	125	114

Magnitude and probability of annual low flow based on period of record, 1989-2007 spring season, April 1 through May 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	211	167	154	146
3	221	182	172	168
7	245	189	176	170
10	283	202	181	170
30	745	359	250	187
60	1,310	635	429	308

Magnitude and probability of annual low flow based on period of record, 1989-2006 summer season, June 1 through October 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	106	83.6	74.4	67.9
3	119	93.6	82.6	74.6
7	135	102	87.6	77.5
10	144	107	91.0	79.7
30	217	184	172	164
60	273	217	196	182

Magnitude and probability of annual low flow based on period of record, 1989-2007 winter season, November 1 through March 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	102	83.3	75.2	69.3
3	106	88.1	81.0	75.9
7	114	94.7	87.0	81.6
10	126	101	90.5	82.8
30	168	119	105	96.9
60	248	144	114	95.9

ARKANSAS RIVER BASIN

07178600 VERDIGRIS RIVER NEAR INOLA, OKLA.

LOCATION. – Lat 36°09'51", long 95°37'11", referenced to North American Datum of 1927, in northwest corner of sec. 4, T. 19 N., R. 16 E., Rogers County, Okla., Hydrologic Unit 11070105, near right bank on downstream side of pier of bridge on State Highway 33, 1.0 mi upstream from Salt Creek, 6.0 mi west of Inola, and at mile 48.8.

DRAINAGE AREA. – 7,911 mi².

PERIOD OF RECORD. – October 1944 to September 1970.

REMARKS. – Some regulation since 1949 by Elk River Reservoir in Kansas; further regulation since 1951 by Hulah Lake, and since 1958 by Bluestem Lake. Flow regulated since 1963 by Oologah Lake.

UNREGULATED STREAMFLOW PERIOD

[ft³/s, cubic feet per second; %, percent; monthly values may not add to 100]

Monthly and annual mean, median, maximum and minimum discharges, and average percent of annual runoff, based on period of record, 1945-1962					
Month	Maximum	Minimum	Mean	Median	Average % of Annual Runoff
Oct.	32,020	23.4	4,657	806	8.7
Nov.	19,980	36.4	2,366	562	4.4
Dec.	8,726	33.7	1,596	291	3.0
Jan.	9,674	27.1	1,828	570	3.4
Feb.	14,920	55.4	2,402	1,025	4.5
Mar.	17,390	38.9	4,918	3,374	9.2
Apr.	28,760	140	6,833	3,141	12.7
May	41,670	355	9,531	6,712	17.8
Jun.	41,400	487	6,629	3,420	12.4
Jul.	35,300	34.0	7,682	3,892	14.3
Aug.	11,780	21.0	2,018	298	3.8
Sep.	24,050	11.0	3,181	411	5.9
Annual	9,387	297	4,483	4,366	–

Magnitude and probability of annual instantaneous peak flow based on 23 years of record, 1940-1962						
Discharge, in ft ³ /s, for indicated recurrence interval, in years, and exceedence probability, in percent						
2	5	10	25	50	100	500
50%	20%	10%	4%	2%	1%	0.2%
50,800	89,300	120,000	163,000	198,000	237,000	338,000

Water Resources Council weighted skew = -0.055

Duration table of daily mean flow for period of record, 1945-1962															
Discharge, in ft ³ /s, which was equaled or exceeded for indicated percent of time															
1%	2%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%
47,700	39,400	25,700	13,800	8,230	5,240	2,370	1,290	687	365	192	98.4	50.8	33.8	17.8	13.0

Magnitude and probability of annual low flow based on period of record, 1946-1962				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	50.4	16.8	9.52	5.82
3	51.9	17.4	9.84	6.10
7	56.6	19.0	11.0	7.05
10	60.0	20.6	12.5	8.27
30	89.4	28.6	17.2	11.0
60	154	41.6	22.2	13.6

Magnitude and probability of annual low flow based on period of record, 1945-1962 spring season, April 1 through May 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	426	136	70.7	39.7
3	461	147	75.7	42.4
7	667	199	96.9	50.8
10	813	244	119	63.3
30	2,630	823	407	217
60	6,440	2,380	1,260	699

Magnitude and probability of annual low flow based on period of record, 1945-1961 summer season, June 1 through October 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	52.4	17.0	9.45	5.82
3	54.0	17.6	9.84	6.10
7	59.4	19.3	11.0	7.05
10	64.0	21.3	12.5	8.27
30	114	31.7	17.4	11.0
60	290	62.6	28.5	15.0

Magnitude and probability of annual low flow based on period of record, 1945-1962 winter season, November 1 through March 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	113	35.8	19.7	12.1
3	124	38.8	21.2	12.9
7	128	40.4	22.3	13.7
10	135	42.3	23.3	14.3
30	188	60.9	34.3	21.5
60	265	85.8	49.3	31.8

ARKANSAS RIVER BASIN

07184000 LIGHTNING CREEK NEAR MCCUNE, KANS.

LOCATION. – Lat 37°16'52", long 95°01'57", referenced to North American Datum of 1927, in SE ¼ SE ¼ sec. 7, T.32 S., R.22 E., Cherokee County, Kans., Hydrologic Unit 11070205, on right bank at downstream side of county highway bridge, 5.0 mi south of McCune, 13.0 mi southeast of Parsons, and at mile 12.6.

DRAINAGE AREA. – 197 mi².

PERIOD OF RECORD. – October 1938 to September 1946, October 1959 to current year.

UNREGULATED STREAMFLOW PERIOD

[ft³/s, cubic feet per second; %, percent; monthly values may not add to 100]

Monthly and annual mean, median, maximum and minimum discharges, and average percent of annual runoff, based on period of record, 1939-2007					
Month	Maximum	Minimum	Mean	Median	Average % of Annual Runoff
Oct.	2,924	0.00	168	26.9	8.4
Nov.	907	0.00	165	27.9	8.2
Dec.	751	0.00	112	34.0	5.6
Jan.	625	0.00	106	42.1	5.3
Feb.	1,033	0.00	131	73.0	6.6
Mar.	1,091	0.00	204	102	10.2
Apr.	1,700	0.18	245	96.1	12.2
May	2,227	7.58	285	126	14.2
Jun.	1,612	0.56	299	182	15.0
Jul.	1,418	0.00	110	27.4	5.5
Aug.	488	0.00	37.4	5.62	1.9
Sep.	2,102	0.00	137	10.3	6.8
Annual	498	10.7	166	132	–

Magnitude and probability of annual instantaneous peak flow based on 57 years of record, 1938-2007						
Discharge, in ft ³ /s, for indicated recurrence interval, in years, and exceedence probability, in percent						
2	5	10	25	50	100	500
50%	20%	10%	4%	2%	1%	0.2%
6,920	16,300	26,000	43,500	61,200	83,800	161,000

Oklahoma weighted skew = 0.222

Duration table of daily mean flow for period of record, 1939-2007															
Discharge, in ft ³ /s, which was equaled or exceeded for indicated percent of time															
1%	2%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%
3,070	2,010	803	264	122	75.4	36.9	20.1	11.5	5.57	2.31	0.56	0.00	0.00	0.00	0.00

Magnitude and probability of annual low flow based on period of record, 1940-2007				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00
30	0.08	0.00	0.00	0.00
60	0.96	0.01	0.00	0.00

Magnitude and probability of annual low flow based on period of record, 1939-2007 spring season, April 1 through May 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	4.46	0.71	0.10	0.00
3	4.68	0.77	0.17	0.00
7	5.88	1.09	0.31	0.05
10	6.80	1.35	0.46	0.16
30	44.6	11.3	4.91	2.31
60	160	55.3	30.2	17.8

Magnitude and probability of annual low flow based on period of record, 1939-2006 summer season, June 1 through October 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00
30	0.12	0.00	0.00	0.00
60	1.90	0.09	0.01	0.00

Magnitude and probability of annual low flow based on period of record, 1939-2007 winter season, November 1 through March 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	1.34	0.00	0.00	0.00
3	1.56	0.00	0.00	0.00
7	1.97	0.00	0.00	0.00
10	2.17	0.00	0.00	0.00
30	8.12	0.18	0.00	0.00
60	17.0	1.55	0.06	0.00

ARKANSAS RIVER BASIN

07185000 NEOSHO RIVER NEAR COMMERCE, OKLA.

LOCATION. – Lat 36°55'43", long 94°57'26", referenced to North American Datum of 1927, in SW ¼ SE ¼ sec. 5, T.28 N., R.22 E., Ottawa County, Okla., Hydrologic Unit 11070206, on downstream side of right pier of county road bridge, 1.3 mi upstream from Mud Creek, 2.2 mi downstream from Four Mile Creek, 4.5 mi west of Commerce, and at mile 153.4.

DRAINAGE AREA. – 5,876 mi².

PERIOD OF RECORD. – October 1939 to current year.

REMARKS. – Flow regulated to some extent since 1963 by John Redmond Reservoir in Kansas, 190 mi upstream.

UNREGULATED STREAMFLOW PERIOD

[ft³/s, cubic feet per second; %, percent; monthly values may not add to 100]

Monthly and annual mean, median, maximum and minimum discharges, and average percent of annual runoff, based on period of record, 1940-1962					
Month	Maximum	Minimum	Mean	Median	Average % of Annual Runoff
Oct.	25,000	0.00	3,262	1,026	7.5
Nov.	14,010	1.60	2,075	696	4.7
Dec.	10,080	6.33	1,348	400	3.1
Jan.	8,696	8.60	1,644	656	3.8
Feb.	11,660	24.9	1,968	1,582	4.5
Mar.	11,130	11.9	3,558	2,303	8.1
Apr.	23,270	149	5,561	2,707	12.7
May	29,560	395	6,681	3,655	15.3
Jun.	14,780	408	5,778	4,645	13.2
Jul.	53,350	21.1	6,436	1,716	14.7
Aug.	9,435	0.00	1,695	678	3.9
Sep.	16,930	1.52	3,749	1,481	8.6
Annual	8,827	246	3,652	3,653	–

Magnitude and probability of annual instantaneous peak flow based on 59 historic years of record, 1904-1962						
Discharge, in ft ³ /s, for indicated recurrence interval, in years, and exceedence probability, in percent						
2	5	10	25	50	100	500
50%	20%	10%	4%	2%	1%	0.2%
34,100	59,800	82,100	118,000	150,000	187,000	309,000

Water Resources Council weighted skew = 0.401

Duration table of daily mean flow for period of record, 1940-1962															
Discharge, in ft ³ /s, which was equaled or exceeded for indicated percent of time															
1%	2%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%
39,200	31,300	20,500	10,900	6,170	3,860	2,020	1,260	788	457	259	134	21.9	6.90	0.34	0.03

Magnitude and probability of annual low flow based on period of record, 1941-1962				
Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent				
Period (consecutive days)	2	5	10	20
	50%	20%	10%	5%
1	75.3	6.28	0.00	0.00
3	80.4	7.37	0.00	0.00
7	89.2	7.70	0.00	0.00
10	110	8.50	0.02	0.00
30	136	12.1	0.37	0.00
60	259	22.6	0.52	0.00

Magnitude and probability of annual low flow based on period of record, 1940-1962 spring season, April 1 through May 31				
Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent				
Period (consecutive days)	2	5	10	20
	50%	20%	10%	5%
1	442	93.4	33.1	12.4
3	486	108	40.3	15.9
7	598	133	49.3	19.5
10	629	177	84.7	44.4
30	1,900	687	385	232
60	4,220	1,640	952	591

Magnitude and probability of annual low flow based on period of record, 1940-1961 summer season, June 1 through October 31				
Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent				
Period (consecutive days)	2	5	10	20
	50%	20%	10%	5%
1	82.2	8.80	0.00	0.00
3	87.5	9.87	0.00	0.00
7	97.4	11.0	0.00	0.00
10	135	12.5	0.03	0.00
30	220	19.8	0.52	0.00
60	564	41.6	4.64	0.03

Magnitude and probability of annual low flow based on period of record, 1940-1962 winter season, November 1 through March 31				
Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent				
Period (consecutive days)	2	5	10	20
	50%	20%	10%	5%
1	98.0	9.07	1.52	0.05
3	105	10.2	1.77	0.06
7	118	11.8	2.09	0.08
10	122	12.9	2.42	0.10
30	195	31.9	10.3	3.67
60	297	51.6	17.3	6.34

ARKANSAS RIVER BASIN

07185000 NEOSHO RIVER NEAR COMMERCE, OKLA.—Continued

REGULATED STREAMFLOW PERIOD

[ft³/s, cubic feet per second; %, percent; monthly values may not add to 100]

Monthly and annual mean, median, maximum and minimum discharges and average percent of annual runoff, based on period of record, 1964-2007					
Month	Maximum	Minimum	Mean	Median	Average % of Annual Runoff
Oct.	33,400	15.0	2,907	728	6.2
Nov.	22,280	22.9	3,760	1,272	8.1
Dec.	17,280	32.2	2,593	1,384	5.6
Jan.	10,090	27.0	2,120	992	4.5
Feb.	13,980	41.7	2,903	1,547	6.2
Mar.	21,630	30.2	4,880	2,840	10.5
Apr.	18,820	62.6	5,460	3,412	11.7
May	22,400	760	6,138	4,760	13.2
Jun.	27,950	290	7,563	6,679	16.2
Jul.	21,410	89.8	4,513	2,918	9.7
Aug.	11,680	52.1	1,762	885	3.8
Sep.	13,800	30.9	2,054	656	4.4
Annual	11,140	508	3,886	3,437	—

Magnitude and probability of annual instantaneous peak flow based on 44 years of record, 1964-2007						
Discharge, in ft ³ /s, for indicated recurrence interval, in years, and exceedence probability, in percent						
2	5	10	25	50	100	500
15%	5%	10%	4%	2%	1%	0.2%
37,300	59,200	74,800	95,400	111,000	129,000	168,000

station skew = -0.138

Duration table of daily mean flow for period of record, 1964-2007															
Discharge, in ft ³ /s, which was equaled or exceeded for indicated percent of time															
1%	2%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%
33,400	27,500	17,600	11,400	8,220	5,950	3,270	1,840	1,030	587	317	144	69.1	43.1	26.7	20.2

Magnitude and probability of annual low flow based on period of record, 1965-2007				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	46.6	21.3	14.3	10.3
3	50.7	23.0	15.3	10.9
7	56.1	25.3	16.9	12.2
10	59.9	26.8	17.9	13.0
30	100	40.9	26.0	18.0
60	216	73.4	41.3	25.6

Magnitude and probability of annual low flow based on period of record, 1964-2007 spring season, April 1 through May 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	418	124	61.4	33.0
3	465	139	69.7	38.3
7	567	163	81.0	44.2
10	670	185	89.3	47.4
30	2,010	681	361	206
60	4,520	2,110	1,360	930

Magnitude and probability of annual low flow based on period of record, 1964-2006 summer season, June 1 through October 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	58.8	26.6	17.9	13.0
3	62.6	28.1	18.8	13.7
7	70.6	31.5	21.2	15.4
10	76.3	33.5	22.5	16.4
30	151	56.2	34.2	22.9
60	384	119	64.7	39.1

Magnitude and probability of annual low flow based on period of record, 1964-2007 winter season, November 1 through March 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	123	37.7	20.0	11.7
3	134	40.6	21.4	12.6
7	154	47.0	25.0	14.7
10	166	50.4	26.8	15.8
30	338	92.7	46.2	25.8
60	594	154	72.8	38.2

ARKANSAS RIVER BASIN

07185095 TAR CREEK AT 22ND STREET BRIDGE AT MIAMI, OKLA.

LOCATION. – Lat 36°54'00", long 94°52'05", referenced to North American Datum of 1927, in NW ¼ NE ¼ sec. 19, T.28 N., R.23 E., Ottawa County, Okla., Hydrologic Unit 11070206, near downstream left abutment of 22nd Street bridge in Miami, 0.5 mi east of intersection of Main and 22nd Street, 0.8 mi upstream from unnamed tributary, 1.7 mi downstream of Garrett Creek, and at mile 3.8.

DRAINAGE AREA. – 44.7 mi².

PERIOD OF RECORD. – January 1984 to September 1993, May 2004 to current year.

REMARKS. – Urban watershed in the city of Miami, Okla..

UNREGULATED URBAN STREAMFLOW PERIOD

[ft³/s, cubic feet per second; %, percent; monthly values may not add to 100]

Monthly and annual mean, median, maximum and minimum discharges, and average percent of annual runoff, based on period of record, 1984-2007					
Month	Maximum	Minimum	Mean	Median	Average % of Annual Runoff
Oct.	241	0.46	33.8	6.23	4.7
Nov.	372	1.52	95.2	41.8	13.3
Dec.	299	0.95	71.3	38.9	10.0
Jan.	119	1.13	50.2	36.8	7.0
Feb.	240	0.69	66.7	49.4	9.3
Mar.	284	1.22	89.7	92.6	12.5
Apr.	128	16.1	62.8	57.3	8.8
May	292	4.13	86.0	48.2	12.0
Jun.	208	3.24	55.5	35.2	7.7
Jul.	123	0.39	32.7	11.6	4.6
Aug.	59.8	0.46	12.2	4.67	1.7
Sep.	508	0.88	60.5	8.31	8.4
Annual	167	13.4	60.2	61.2	–

Magnitude and probability of annual instantaneous peak flow based on 13 years of record, 1984-2007						
Discharge, in ft ³ /s, for indicated recurrence interval, in years, and exceedence probability, in percent						
2	5	10	25	50	100	500
50%	20%	10%	4%	2%	1%	0.2%
2,640	4,870	7,070	11,000	14,900	19,900	37,700

station skew = 0.782

Duration table of daily mean flow for period of record, 1984-2007															
Discharge, in ft ³ /s, which was equaled or exceeded for indicated percent of time															
1%	2%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%
935	595	262	109	57.8	36.8	22.3	14.8	10.2	6.35	4.32	2.83	1.54	0.82	0.47	0.36

Magnitude and probability of annual low flow based on period of record, 1986-2007				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	1.00	0.49	0.34	0.25
3	1.07	0.53	0.37	0.27
7	1.20	0.63	0.45	0.34
10	1.28	0.68	0.48	0.36
30	1.99	1.02	0.68	0.47
60	3.32	1.34	0.82	0.54

Magnitude and probability of annual low flow based on period of record, 1985-2007 spring season, April 1 through May 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	5.89	2.24	1.16	0.62
3	6.40	2.44	1.24	0.65
7	7.24	2.66	1.36	0.71
10	8.11	2.88	1.45	0.76
30	19.4	7.88	5.00	3.47
60	56.3	32.9	25.5	21.0

Magnitude and probability of annual low flow based on period of record, 1985-2006 summer season, June 1 through October 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	1.16	0.61	0.42	0.31
3	1.22	0.65	0.46	0.34
7	1.34	0.76	0.56	0.42
10	1.41	0.81	0.60	0.46
30	2.16	1.20	0.82	0.58
60	4.37	1.92	1.26	0.90

Magnitude and probability of annual low flow based on period of record, 1985-2007 winter season, November 1 through March 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	3.65	1.40	0.76	0.43
3	3.93	1.50	0.81	0.46
7	4.19	1.57	0.84	0.47
10	4.44	1.66	0.88	0.48
30	8.91	3.06	1.64	0.95
60	21.5	6.58	3.01	1.45

ARKANSAS RIVER BASIN

07185500 STAHL CREEK NEAR MILLER, MO.

LOCATION. – Lat 37°11'35.54", long 93°50'41.86", referenced to North American Datum of 1983, in SE 1/4 sec. 26, T.29N., R.27W., Lawrence County, Mo., Hydrologic Unit 11070207, on left downstream wingwall of bridge on State Highway 39, 1.5 mi (2.4 km) south of Miller and 6.4 mi (10.3 km) upstream from mouth.

DRAINAGE AREA. – 3.86 mi².

PERIOD OF RECORD. – June 1950 to September 1976.

UNREGULATED STREAMFLOW PERIOD

[ft³/s, cubic feet per second; %, percent; monthly values may not add to 100]

Monthly and annual mean, median, maximum and minimum discharges, and average percent of annual runoff, based on period of record, 1951-1976					
Month	Maximum	Minimum	Mean	Median	Average % of Annual Runoff
Oct.	22.2	0.00	3.07	0.82	8.9
Nov.	21.6	0.00	3.51	0.46	10.2
Dec.	10.4	0.00	2.23	0.83	6.5
Jan.	9.15	0.00	2.10	1.01	6.1
Feb.	11.8	0.00	3.18	1.67	9.2
Mar.	19.5	0.00	4.78	3.36	13.9
Apr.	23.0	0.00	4.46	2.76	13.0
May	37.6	0.19	3.79	1.32	11.0
Jun.	25.9	0.04	4.13	1.31	12.0
Jul.	13.1	0.00	1.86	0.25	5.4
Aug.	1.39	0.00	0.20	0.06	0.6
Sep.	7.06	0.00	1.09	0.08	3.2
Annual	7.30	0.24	2.86	2.53	–

Magnitude and probability of annual instantaneous peak flow based on 34 years of record, 1951-1984						
Discharge, in ft ³ /s, for indicated recurrence interval, in years, and exceedence probability, in percent						
2	5	10	25	50	100	500
50%	20%	10%	4%	2%	1%	0.2%
612	1,020	1,310	1,700	2,000	2,320	3,090

Oklahoma weighted skew = -0.197

Duration table of daily mean flow for period of record, 1950-1976															
Discharge, in ft ³ /s, which was equaled or exceeded for indicated percent of time															
1%	2%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%
52.3	23.2	7.77	4.51	3.18	2.42	1.46	0.82	0.42	0.22	0.12	0.00	0.00	0.00	0.00	0.00

Magnitude and probability of annual low flow based on period of record, 1952-1976				
Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent				
Period (consecutive days)	2	5	10	20
	50%	20%	10%	5%
1	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00
30	0.00	0.00	0.00	0.00
60	0.02	0.00	0.00	0.00

Magnitude and probability of annual low flow based on period of record, 1951-1976 spring season, April 1 through May 31				
Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent				
Period (consecutive days)	2	5	10	20
	50%	20%	10%	5%
1	0.28	0.08	0.00	0.00
3	0.32	0.09	0.00	0.00
7	0.39	0.10	0.02	0.00
10	0.47	0.13	0.04	0.00
30	1.03	0.36	0.17	0.06
60	3.27	0.94	0.38	0.16

Magnitude and probability of annual low flow based on period of record, 1951-1975 summer season, June 1 through October 31				
Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent				
Period (consecutive days)	2	5	10	20
	50%	20%	10%	5%
1	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00
30	0.00	0.00	0.00	0.00
60	0.03	0.00	0.00	0.00

Magnitude and probability of annual low flow based on period of record, 1951-1976 winter season, November 1 through March 31				
Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent				
Period (consecutive days)	2	5	10	20
	50%	20%	10%	5%
1	0.11	0.00	0.00	0.00
3	0.12	0.00	0.00	0.00
7	0.14	0.00	0.00	0.00
10	0.14	0.00	0.00	0.00
30	0.26	0.00	0.00	0.00
60	0.52	0.06	0.00	0.00

ARKANSAS RIVER BASIN

07185700 SPRING RIVER AT LARUSSELL, MO.

LOCATION. – Lat 37°09'01", long 94°03'41", referenced to North American Datum of 1983, in SW 1/4 SW 1/4 sec. 12, T.28 S., R.29 W., Jasper County, Mo., Hydrologic Unit 11070207, on right bank on upstream side of Bower Mills Bridge, three-quarters of a mile north of LaRussell, and 2.5 mi upstream from Cave Spring Branch.

DRAINAGE AREA. – 306 mi².

PERIOD OF RECORD. – April 1957 to current year.

UNREGULATED STREAMFLOW PERIOD

[ft³/s, cubic feet per second; %, percent; monthly values may not add to 100]

Monthly and annual mean, median, maximum and minimum discharges, and average percent of annual runoff, based on period of record, 1958-1981					
Month	Maximum	Minimum	Mean	Median	Average % of Annual Runoff
Oct.	865	31.4	162	96.0	5.6
Nov.	1,443	33.7	270	84.6	9.2
Dec.	1,003	27.3	213	113	7.3
Jan.	595	21.5	184	107	6.3
Feb.	753	24.9	226	127	7.7
Mar.	1,270	42.8	385	243	13.2
Apr.	1,087	58.1	368	312	12.6
May	1,523	102	360	273	12.3
Jun.	1,014	57.2	311	271	10.7
Jul.	749	39.2	188	165	6.4
Aug.	270	39.5	110	99.6	3.8
Sep.	493	37.4	143	108	4.9
Annual	590	87.2	243	217	–

Magnitude and probability of annual instantaneous peak flow based on 25 years of record, 1957-1981						
Discharge, in ft ³ /s, for indicated recurrence interval, in years, and exceedence probability, in percent						
2	5	10	25	50	100	500
50%	20%	10%	4%	2%	1%	0.2%
5,650	10,800	15,200	22,000	28,000	34,900	54,500

Oklahoma weighted skew = 0.070

Duration table of daily mean flow for period of record, 1957-1980															
Discharge, in ft ³ /s, which was equaled or exceeded for indicated percent of time															
1%	2%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%
1,820	1,160	719	484	380	314	224	170	130	98.7	79.6	63.5	46.6	37.6	30.3	26.9

Magnitude and probability of annual low flow based on period of record, 1959-1981				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	37.6	27.7	23.8	21.2
3	38.4	28.6	24.7	22.1
7	40.0	29.7	25.8	23.0
10	40.8	30.2	26.1	23.3
30	46.7	34.0	29.2	25.8
60	55.9	39.2	32.6	28.0

Magnitude and probability of annual low flow based on period of record, 1958-1981 spring season, April 1 through May 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	117	64.1	46.3	35.1
3	123	66.2	47.2	35.4
7	132	71.8	51.7	39.2
10	138	74.2	53.4	40.5
30	206	120	88.8	69.0
60	275	160	124	102

Magnitude and probability of annual low flow based on period of record, 1958-1980 summer season, June 1 through October 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	40.3	29.2	24.9	22.0
3	41.1	30.1	25.9	23.0
7	42.6	31.4	27.2	24.4
10	43.8	32.2	27.9	24.9
30	54.0	38.7	32.7	28.5
60	66.6	46.1	38.1	32.6

Magnitude and probability of annual low flow based on period of record, 1958-1981 winter season, November 1 through March 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	55.4	34.3	27.9	24.1
3	57.6	34.8	28.1	24.2
7	59.9	36.1	29.2	25.1
10	60.6	36.5	29.5	25.3
30	68.4	40.2	32.1	27.4
60	82.9	46.5	36.2	30.2

ARKANSAS RIVER BASIN

07185765 SPRING RIVER AT CARTHAGE, MO.

LOCATION. – Lat 37°11'19.1", long 94°19'33.3", referenced to North American Datum of 1983, in SW ¼ NW ¼ SW ¼ sec. 33, T.29 N., R.31 W., Jasper County, Mo., Hydrologic Unit 11070207, on left downstream wingwall of St. Francis Street bridge 0.8 mi northwest of junction with Highway 96 in Carthage.

DRAINAGE AREA. – 425 mi².

PERIOD OF RECORD. – October 1966 to September 1980, May 2001 to current year.

UNREGULATED STREAMFLOW PERIOD

[ft³/s, cubic feet per second; %, percent; monthly values may not add to 100]

Monthly and annual mean, median, maximum and minimum discharges, and average percent of annual runoff, based on period of record, 1967-2007					
Month	Maximum	Minimum	Mean	Median	Average % of Annual Runoff
Oct.	561	26.1	189	142	4.1
Nov.	1,785	40.2	409	130	8.9
Dec.	1,475	41.1	357	262	7.7
Jan.	1,927	43.2	394	251	8.5
Feb.	1,567	37.5	405	320	8.8
Mar.	1,854	37.8	617	411	13.4
Apr.	1,701	26.9	503	468	10.9
May	2,123	174	561	366	12.2
Jun.	2,274	70.8	484	306	10.5
Jul.	1,038	49.1	294	225	6.4
Aug.	704	36.3	153	136	3.3
Sep.	1,418	46.3	243	151	5.3
Annual	836	70.8	387	410	–

Magnitude and probability of annual instantaneous peak flow based on 19 years of record, 1967-2007						
Discharge, in ft ³ /s, for indicated recurrence interval, in years, and exceedence probability, in percent						
2	5	10	25	50	100	500
50%	20%	10%	4%	2%	1%	0.2%
7,910	17,200	25,600	38,700	50,400	63,600	101,000

Oklahoma weighted skew = -0.122

Duration table of daily mean flow for period of record, 1967-2007															
Discharge, in ft ³ /s, which was equaled or exceeded for indicated percent of time															
1%	2%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%
3,300	1,960	1,130	752	590	490	362	268	200	148	115	86.6	56.9	44.7	33.5	27.4

Magnitude and probability of annual low flow based on period of record, 1968-2007				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	58.6	34.8	25.1	18.6
3	60.0	36.0	26.2	19.6
7	61.8	37.5	27.4	20.6
10	62.7	38.4	28.4	21.6
30	70.0	46.7	37.3	30.8
60	85.7	55.2	43.1	34.9

Magnitude and probability of annual low flow based on period of record, 1967-2007 spring season, April 1 through May 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	227	106	59.8	34.0
3	232	108	62.0	35.7
7	244	113	64.8	37.3
10	254	118	68.0	39.4
30	348	172	105	65.8
60	430	257	198	161

Magnitude and probability of annual low flow based on period of record, 1967-2006 summer season, June 1 through October 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	60.5	36.7	26.8	20.2
3	61.2	38.8	29.6	23.3
7	62.9	41.3	32.4	26.2
10	63.8	42.6	33.9	27.9
30	76.9	50.4	39.5	31.9
60	92.8	60.8	48.1	39.3

Magnitude and probability of annual low flow based on period of record, 1967-2007 winter season, November 1 through March 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	93.0	47.6	33.8	25.6
3	99.8	49.5	34.4	25.6
7	103	52.1	36.9	27.9
10	105	53.1	37.7	28.6
30	126	61.5	43.1	32.5
60	170	81.4	55.5	40.5

ARKANSAS RIVER BASIN

07186000 SPRING RIVER NEAR WACO, MO.

LOCATION. – Lat 37°14'44.2", long 94°33'59.1", referenced to North American Datum of 1983, in SE ¼ SW ¼ SE ¼ sec. 7, T.29 N., R.3 W., Jasper County, Mo., Hydrologic Unit 11070207, on downstream side of left pier of county highway bridge, 0.8 mi downstream from Blackberry Creek, 1.5 mi east of Waco, and 47.6 mi upstream from mouth.

DRAINAGE AREA. – 1,164 mi².

PERIOD OF RECORD. – April 1924 to current year.

UNREGULATED STREAMFLOW PERIOD

[ft³/s, cubic feet per second; %, percent; monthly values may not add to 100]

Monthly and annual mean, median, maximum and minimum discharges, and average percent of annual runoff, based on period of record, 1925-2007					
Month	Maximum	Minimum	Mean	Median	Average % of Annual Runoff
Oct.	6,997	21.0	631	197	5.6
Nov.	6,726	30.5	925	260	8.2
Dec.	4,704	33.3	707	449	6.3
Jan.	4,125	29.7	742	502	6.6
Feb.	6,372	31.0	928	683	8.3
Mar.	5,809	33.6	1,204	796	10.7
Apr.	7,542	38.2	1,438	846	12.8
May	11,640	120	1,564	782	13.9
Jun.	8,288	73.4	1,414	835	12.6
Jul.	4,323	15.2	709	345	6.3
Aug.	7,812	7.71	404	170	3.6
Sep.	10,260	22.0	566	185	5.0
Annual	3,093	61.4	934	861	–

Magnitude and probability of annual instantaneous peak flow based on 85 years of record, 1923-2007						
Discharge, in ft ³ /s, for indicated recurrence interval, in years, and exceedence probability, in percent						
2	5	10	25	50	100	500
50%	20%	10%	4%	2%	1%	0.2%
18,600	35,500	49,400	69,700	86,900	106,000	156,000

Oklahoma weighted skew = -0.110

Duration table of daily mean flow for period of record, 1924-2007															
Discharge, in ft ³ /s, which was equaled or exceeded for indicated percent of time															
1%	2%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%
12,700	8,100	3,730	1,880	1,240	941	614	430	301	209	147	99.9	63.1	45.6	31.1	25.0

Magnitude and probability of annual low flow based on period of record, 1925-2007				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	55.4	28.8	19.5	13.8
3	60.5	32.3	22.1	15.7
7	64.4	35.2	24.6	17.8
10	66.2	36.4	25.5	18.6
30	79.2	42.5	29.6	21.6
60	101	51.1	35.4	26.0

Magnitude and probability of annual low flow based on period of record, 1924-2007 spring season, April 1 through May 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	241	113	71.4	47.2
3	253	121	77.2	51.7
7	284	136	87.1	58.6
10	301	140	90.0	60.8
30	544	235	148	100
60	966	437	290	207

Magnitude and probability of annual low flow based on period of record, 1924-2006 summer season, June 1 through October 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	60.6	30.7	20.4	14.1
3	66.4	34.7	23.3	16.2
7	70.5	37.8	25.9	18.4
10	72.5	39.0	26.9	19.3
30	89.0	46.5	32.0	23.0
60	124	60.2	41.1	29.9

Magnitude and probability of annual low flow based on period of record, 1924-2007 winter season, November 1 through March 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	95.0	46.4	32.1	23.7
3	101	50.2	35.3	26.5
7	107	53.9	38.2	29.0
10	111	55.4	39.2	29.8
30	159	72.2	48.7	35.5
60	246	99.3	61.1	40.7

ARKANSAS RIVER BASIN

07186400 CENTER CREEK NEAR CARTERVILLE, MO.

LOCATION. – Lat 37°08'26", long 94°22'57", referenced to North American Datum of 1927, in NW 1/4 NW 1/4 sec. 24, T.28 S., R.32 W., Jasper County, Mo., Hydrologic Unit 11070207, at downstream side of right pier of bridge on State Highway HH, 1.5 mi (2.4 km) downstream from Grove Creek, 3 mi (4.8 km) east of Centerville, and 17 mi (27.4 km) above mouth.

DRAINAGE AREA. – 232 mi².

PERIOD OF RECORD. – June 1962 to September, 1991.

UNREGULATED STREAMFLOW PERIOD

[ft³/s, cubic feet per second; %, percent; monthly values may not add to 100]

Monthly and annual mean, median, maximum and minimum discharges, and average percent of annual runoff, based on period of record, 1963-1991					
Month	Maximum	Minimum	Mean	Median	Average % of Annual Runoff
Oct.	507	19.1	113	73.0	4.6
Nov.	1,318	23.6	258	111	10.5
Dec.	992	21.4	222	122	9.0
Jan.	579	18.6	181	133	7.3
Feb.	782	21.6	218	182	8.8
Mar.	1,189	34.4	354	191	14.4
Apr.	1,154	59.3	333	255	13.5
May	1,504	71.0	272	187	11.0
Jun.	850	35.2	230	174	9.3
Jul.	861	25.7	123	77.6	5.0
Aug.	132	19.2	64.0	53.2	2.6
Sep.	388	17.8	97.7	53.3	4.0
Annual	491	51.4	205	194	–

Magnitude and probability of annual instantaneous peak flow based on 30 years of record, 1962-1991						
Discharge, in ft ³ /s, for indicated recurrence interval, in years, and exceedence probability, in percent						
2	5	10	25	50	100	500
50%	20%	10%	4%	2%	1%	0.2%
5,430	11,000	16,100	24,200	31,700	40,500	66,900

Oklahoma weighted skew = 0.115

Duration table of daily mean flow for period of record, 1962-1991															
Discharge, in ft ³ /s, which was equaled or exceeded for indicated percent of time															
1%	2%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%
1,980	1,180	644	405	308	250	177	132	97.4	72.6	54.1	42.3	32.7	26.5	20.7	19.1

Magnitude and probability of annual low flow based on period of record, 1964-1991				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	26.8	18.5	15.0	12.6
3	27.4	19.0	15.5	13.0
7	28.3	20.1	16.7	14.3
10	29.3	20.9	17.4	14.9
30	34.3	24.6	20.5	17.7
60	40.8	29.3	24.6	21.4

Magnitude and probability of annual low flow based on period of record, 1963-1991 spring season, April 1 through May 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	85.9	49.7	36.8	28.5
3	91.0	52.2	38.3	29.4
7	97.0	56.5	42.1	32.8
10	101	58.8	43.8	34.2
30	147	90.5	71.2	58.8
60	237	131	96.5	74.9

Magnitude and probability of annual low flow based on period of record, 1963-1990 summer season, June 1 through October 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	29.1	19.8	15.7	12.9
3	29.7	20.2	16.2	13.3
7	30.7	21.5	17.5	14.7
10	31.9	22.4	18.3	15.3
30	38.2	26.8	21.8	18.2
60	46.4	32.5	26.7	22.5

Magnitude and probability of annual low flow based on period of record, 1963-1991 winter season, November 1 through March 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	44.0	26.3	20.5	16.9
3	45.8	26.8	20.7	16.8
7	47.5	27.7	21.3	17.4
10	48.9	28.4	21.9	17.9
30	69.1	35.4	25.2	19.0
60	89.7	43.5	29.8	21.8

ARKANSAS RIVER BASIN

07187000 SHOAL CREEK ABOVE JOPLIN, MO.

LOCATION. – Lat 37°01'23.4", long 94°30'59.6", referenced to North American Datum of 1983, in SE ¼ NE ¼ NE ¼ sec. 34, T.27 N., R.33 W., Newton County, Mo., Hydrologic Unit 11070207, on right bank 250 ft upstream from mouth of Spring Creek, 1, 400 ft downstream from bridge on State Highway 86, 0.5 mi south of city limits of Joplin, and 13.2 mi above mouth.

DRAINAGE AREA. – 427 mi².

PERIOD OF RECORD. – October 1941 to current year.

UNREGULATED STREAMFLOW PERIOD

[ft³/s, cubic feet per second; %, percent; monthly values may not add to 100]

Monthly and annual mean, median, maximum and minimum discharges, and average percent of annual runoff, based on period of record, 1942-2007					
Month	Maximum	Minimum	Mean	Median	Average % of Annual Runoff
Oct.	1,709	48.3	276	171	5.5
Nov.	2,034	55.4	386	164	7.7
Dec.	1,993	57.3	351	233	7.0
Jan.	1,695	54.9	343	248	6.8
Feb.	1,233	61.7	386	334	7.7
Mar.	1,961	57.9	552	384	11.0
Apr.	3,281	56.0	635	445	12.7
May	4,691	120	708	490	14.1
Jun.	2,470	81.4	571	423	11.4
Jul.	2,049	47.0	348	245	6.9
Aug.	2,337	37.1	209	166	4.2
Sep.	1,872	47.0	243	163	4.8
Annual	1,221	77.8	417	386	–

Magnitude and probability of annual instantaneous peak flow based on 84 years of record, 1924-2007						
Discharge, in ft ³ /s, for indicated recurrence interval, in years, and exceedence probability, in percent						
2	5	10	25	50	100	500
50%	20%	10%	4%	2%	1%	0.2%
7,150	14,300	20,600	30,400	39,000	48,900	77,000

Oklahoma weighted skew = -0.002

Duration table of daily mean flow for period of record, 1942-2007															
Discharge, in ft ³ /s, which was equaled or exceeded for indicated percent of time															
1%	2%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%
3,080	2,060	1,280	858	648	524	381	296	235	186	145	114	86.0	68.5	55.3	48.4

Magnitude and probability of annual low flow based on period of record, 1943-2007				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	84.0	54.9	42.6	34.0
3	85.6	56.4	44.0	35.4
7	88.9	59.3	46.6	37.7
10	91.2	60.9	47.9	38.7
30	98.8	66.9	53.9	44.8
60	111	76.1	62.5	53.3

Magnitude and probability of annual low flow based on period of record, 1942-2007 spring season, April 1 through May 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	231	131	94.3	70.3
3	240	135	96.8	72.0
7	253	143	102	76.3
10	267	149	106	78.9
30	355	202	151	118
60	499	284	216	174

Magnitude and probability of annual low flow based on period of record, 1942-2006 summer season, June 1 through October 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	91.2	57.6	44.0	34.6
3	92.6	59.0	45.3	36.0
7	95.8	61.9	48.0	38.4
10	98.0	63.4	49.3	39.5
30	109	71.2	56.6	46.6
60	124	82.9	68.7	59.4

Magnitude and probability of annual low flow based on period of record, 1942-2007 winter season, November 1 through March 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	107	69.6	57.0	48.9
3	111	71.1	57.9	49.5
7	115	74.0	60.4	51.8
10	117	75.8	62.0	53.2
30	143	87.0	69.2	58.2
60	176	103	79.2	64.6

ARKANSAS RIVER BASIN

07188000 SPRING RIVER NEAR QUAPAW, OKLA.

LOCATION. — Lat 36°56'04", long 94°44'49", referenced to North American Datum of 1927, in NE ¼ SW ¼ sec. 5, T.28 N., R.24 E., Ottawa County, Okla., Hydrologic Unit 11070207, near downstream right abutment of county road bridge, 0.1 mi upstream from Rock Creek, 3.0 mi southeast of Quapaw, and at mile 13.9. Records include flow of Rock Creek.

DRAINAGE AREA. — 2,510 mi².

PERIOD OF RECORD.—July 1939 to current year.

REMARKS.—Occasional releases from floodgates at old Riverton Hydroelectric plant, 15 miles upstream.

UNREGULATED STREAMFLOW PERIOD

[ft³/s, cubic feet per second; %, percent; monthly values may not add to 100]

Monthly and annual mean, median, maximum and minimum discharges, and average percent of annual runoff, based on period of record, 1940-2007

Month	Maximum	Minimum	Mean	Median	Average % of Annual Runoff
Oct.	14,880	75.8	1,559	607	6.0
Nov.	14,810	111	2,194	596	8.4
Dec.	10,720	116	1,699	928	6.5
Jan.	8,824	116	1,641	1,173	6.3
Feb.	13,300	129	2,116	1,595	8.1
Mar.	12,050	123	2,895	2,068	11.1
Apr.	15,100	169	3,291	2,008	12.6
May	26,940	481	3,673	1,934	14.1
Jun.	15,350	233	3,094	2,112	11.9
Jul.	10,140	34.3	1,789	986	6.9
Aug.	8,622	29.3	758	529	2.9
Sep.	18,390	76.0	1,363	521	5.2
Annual	6,623	192	2,169	2,000	—

Magnitude and probability of annual instantaneous peak flow based on 68 years of record, 1940-2007

Discharge, in ft³/s, for indicated recurrence interval, in years, and exceedence probability, in percent

2	5	10	25	50	100	500
50%	20%	10%	4%	2%	1%	0.2%
35,400	65,700	90,400	127,000	157,000	190,000	280,000

Oklahoma weighted skew = -0.066

Duration table of daily mean flow for period of record, 1939-2007

Discharge, in ft³/s, which was equaled or exceeded for indicated percent of time

1%	2%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%
25,400	16,400	7,900	4,320	3,070	2,430	1,640	1,160	848	606	434	310	207	151	107	82.7

Magnitude and probability of annual low flow based on period of record, 1941-2007				
Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent				
Period (consecutive days)	2	5	10	20
	50%	20%	10%	5%
1	183	96.0	60.1	37.8
3	214	114	70.4	43.7
7	237	128	80.2	50.6
10	245	134	84.6	54.4
30	293	154	98.4	63.8
60	337	178	124	90.2

Magnitude and probability of annual low flow based on period of record, 1940-2007 spring season, April 1 through May 31				
Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent				
Period (consecutive days)	2	5	10	20
	50%	20%	10%	5%
1	636	309	200	135
3	723	370	246	171
7	812	424	288	204
10	865	444	301	213
30	1,480	748	518	380
60	2,420	1,220	862	652

Magnitude and probability of annual low flow based on period of record, 1940-2006 summer season, June 1 through October 31				
Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent				
Period (consecutive days)	2	5	10	20
	50%	20%	10%	5%
1	193	97.8	61.1	38.9
3	224	114	70.4	43.7
7	246	128	80.2	50.6
10	254	134	84.6	54.4
30	317	159	100	65.4
60	402	203	138	99.5

Magnitude and probability of annual low flow based on period of record, 1940-2007 winter season, November 1 through March 31				
Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent				
Period (consecutive days)	2	5	10	20
	50%	20%	10%	5%
1	274	137	95.0	69.8
3	316	167	120	90.9
7	336	186	138	109
10	346	192	143	114
30	472	238	170	130
60	656	302	202	145

ARKANSAS RIVER BASIN

07188500 LOST CREEK AT SENECA, MO.

LOCATION. — Lat 36°50'28", long 94°36'30", referenced to North American Datum of 1927, in SE 1/4 SE 1/4 sec. 35, T.25 N., R.34 W., Newton County, Mo., Hydrologic Unit 11070206, on left bank on downstream side of Seneca Street Bridge in Seneca, half a mile upstream from Little Lost Creek, and 9.5 mi upstream from mouth.

DRAINAGE AREA. — 42 mi².

PERIOD OF RECORD.—October 1948 to September 1959.

UNREGULATED STREAMFLOW PERIOD

[ft³/s, cubic feet per second; %, percent; monthly values may not add to 100]

Monthly and annual mean, median, maximum and minimum discharges, and average percent of annual runoff, based on period of record, 1949-1959					
Month	Maximum	Minimum	Mean	Median	Average % of Annual Runoff
Oct.	53.2	1.27	15.2	10.5	4.5
Nov.	69.6	3.06	14.3	8.88	4.2
Dec.	31.1	3.55	9.66	7.96	2.9
Jan.	56.1	3.01	15.9	8.65	4.7
Feb.	90.9	4.12	28.2	14.5	8.4
Mar.	71.0	3.15	36.2	40.7	10.7
Apr.	151	3.65	40.7	33.7	12.1
May	300	7.40	56.8	34.5	16.8
Jun.	195	5.98	46.4	25.8	13.8
Jul.	94.7	1.55	34.1	25.0	10.1
Aug.	121	1.16	21.2	10.2	6.3
Sep.	92.7	1.02	18.6	8.68	5.5
Annual	62.7	4.48	28.1	27.7	—

Magnitude and probability of annual instantaneous peak flow based on 11 years of record, 1949-1959						
Discharge, in ft ³ /s, for indicated recurrence interval, in years, and exceedence probability, in percent						
2	5	10	25	50	100	500
50%	20%	10%	4%	2%	1%	0.2%
892	3,220	6,290	12,800	20,400	30,800	71,200

station skew = -0.007

Duration table of daily mean flow for period of record, 1949-1959															
Discharge, in ft ³ /s, which was equaled or exceeded for indicated percent of time															
1%	2%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%
247	165	94.1	59.1	44.9	35.9	25.2	17.8	12.6	9.31	6.97	5.14	3.63	2.57	1.30	0.78

Magnitude and probability of annual low flow based on period of record, 1950-1959				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	4.05	1.36	0.66	0.33
3	4.19	1.46	0.74	0.38
7	4.31	1.53	0.78	0.41
10	4.41	1.58	0.82	0.44
30	4.90	1.92	1.07	0.61
60	5.44	2.30	1.38	0.84

Magnitude and probability of annual low flow based on period of record, 1949-1959 spring season, April 1 through May 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	13.1	5.97	3.79	2.55
3	13.6	6.19	3.92	2.63
7	15.3	6.87	4.31	2.86
10	15.9	7.15	4.51	3.02
30	23.0	9.46	5.74	3.74
60	30.7	13.5	8.83	6.24

Magnitude and probability of annual low flow based on period of record, 1949-1958 summer season, June 1 through October 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	4.74	1.45	0.68	0.33
3	5.04	1.59	0.76	0.38
7	5.28	1.67	0.81	0.41
10	5.37	1.72	0.84	0.44
30	5.89	2.02	1.08	0.61
60	6.93	2.47	1.38	0.84

Magnitude and probability of annual low flow based on period of record, 1949-1959 winter season, November 1 through March 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	5.10	3.07	2.38	1.94
3	5.22	3.16	2.46	2.01
7	5.37	3.34	2.65	2.21
10	5.44	3.41	2.72	2.28
30	5.87	3.79	3.13	2.72
60	7.01	4.38	3.51	2.96

ARKANSAS RIVER BASIN

07189000 ELK RIVER NEAR TIFF CITY, MO.

LOCATION. – Lat 36°37'53", long 94°35'12", referenced to North American Datum of 1927, in NE ¼ NE ¼ sec. 22, T.22 N., R.34 W., McDonald County, Mo., Hydrologic Unit 11070208, near right abutment of bridge on State Highway 43, 0.8 mi downstream from Blackfoot Branch, 2.8 mi upstream from Buffalo Creek, 3.0 mi southeast of Tiff City, and at mile 15.8.

DRAINAGE AREA. – 872 mi².

PERIOD OF RECORD.—October 1939 to current year.

UNREGULATED STREAMFLOW PERIOD

[ft³/s, cubic feet per second; %, percent; monthly values may not add to 100]

Monthly and annual mean, median, maximum and minimum discharges, and average percent of annual runoff, based on period of record, 1940-2007					
Month	Maximum	Minimum	Mean	Median	Average % of Annual Runoff
Oct.	2,938	25.7	393	168	4.0
Nov.	4,094	49.8	693	292	7.1
Dec.	3,651	58.5	748	434	7.7
Jan.	4,025	55.9	726	446	7.5
Feb.	2,971	70.7	868	754	8.9
Mar.	5,020	75.7	1,295	974	13.3
Apr.	6,119	145	1,541	1,077	15.9
May	8,964	227	1,492	884	15.4
Jun.	4,245	78.6	946	602	9.7
Jul.	2,565	14.3	479	297	4.9
Aug.	2,418	12.0	251	164	2.6
Sep.	2,164	30.9	285	155	2.9
Annual	1,881	135	809	782	—

Magnitude and probability of annual instantaneous peak flow based on 68 years of record, 1940-2007						
Discharge, in ft ³ /s, for indicated recurrence interval, in years, and exceedence probability, in percent						
2	5	10	25	50	100	500
50%	20%	10%	4%	2%	1%	0.2%
20,100	39,400	54,800	76,500	94,000	112,000	159,000

station skew = -0.302

Duration table of daily mean flow for period of record, 1940-2007															
Discharge, in ft ³ /s, which was equaled or exceeded for indicated percent of time															
1%	2%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%
7,490	5,190	2,830	1,740	1,270	1,000	672	469	339	246	177	127	86.0	66.4	51.1	38.3

Magnitude and probability of annual low flow based on period of record, 1941-2007				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	77.4	43.7	30.3	21.7
3	79.4	44.9	31.2	22.3
7	82.7	47.2	33.0	23.8
10	85.1	48.5	34.0	24.5
30	99.1	55.7	40.0	29.6
60	120	68.7	49.3	36.6

Magnitude and probability of annual low flow based on period of record, 1940-2007 spring season, April 1 through May 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	340	194	140	105
3	354	204	148	111
7	386	221	160	121
10	412	232	168	127
30	683	378	278	216
60	1,190	667	496	389

Magnitude and probability of annual low flow based on period of record, 1940-2006 summer season, June 1 through October 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	77.4	43.7	30.3	21.7
3	79.4	44.9	31.2	22.3
7	82.7	47.2	33.0	23.8
10	85.1	48.5	34.0	24.5
30	99.1	55.7	40.0	29.9
60	124	68.7	50.2	38.7

Magnitude and probability of annual low flow based on period of record, 1940-2007 winter season, November 1 through March 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	127	76.0	59.0	48.2
3	135	80.0	61.8	50.3
7	144	84.6	65.1	52.9
10	150	87.6	67.3	54.6
30	210	110	80.4	62.4
60	296	146	102	75.3

ARKANSAS RIVER BASIN

07189500 NEOSHO RIVER NEAR GROVE, OKLA.

LOCATION. – Lat 36°36'45", long 94°49'25", referenced to North American Datum of 1927, in SE ¼ sec. 27, T.25 N., R.23 E., Delaware County, Okla., Hydrologic Unit 11070206, at bridge on State Highway 25, 3.0 mi downstream from Spring Branch, 3.5 mi northwest of Grove, 8.2 mi downstream from Elk River, and at mile 105.4.

DRAINAGE AREA. – 9,969 mi².

PERIOD OF RECORD. – October 1924 to September 1939.

REMARKS. – Some regulation at low flow by power plants above station.

UNREGULATED STREAMFLOW PERIOD

[ft³/s, cubic feet per second; %, percent; monthly values may not add to 100]

Monthly and annual mean, median, maximum and minimum discharges, and average percent of annual runoff, based on period of record, 1925-1939

Month	Maximum	Minimum	Mean	Median	Average % of Annual Runoff
Oct.	24,960	384	4,403	1,756	6.0
Nov.	11,970	450	4,371	3,858	6.0
Dec.	7,977	368	3,490	2,770	4.8
Jan.	14,170	355	4,664	3,376	6.4
Feb.	11,710	732	4,473	3,887	6.1
Mar.	12,410	1,005	4,420	2,719	6.1
Apr.	58,380	1,175	10,877	6,210	14.9
May	36,790	1,348	10,506	6,921	14.4
Jun.	55,420	1,114	15,017	9,734	20.6
Jul.	9,215	236	3,476	2,015	4.8
Aug.	26,590	119	3,594	1,303	4.9
Sep.	22,690	192	3,686	1,814	5.0
Annual	15,750	1,750	6,068	4,374	—

Magnitude and probability of annual instantaneous peak flow based on 15 years of record, 1925-1939

Discharge, in ft³/s, for indicated recurrence interval, in years, and exceedence probability, in percent

2	5	10	25	50	100	500
50%	20%	10%	4%	2%	1%	0.2%
62,200	100,000	126,000	157,000	180,000	202,000	252,000

Water Resources Council weighted skew = -0.412

Duration table of daily mean flow for period of record, 1925-1939

Discharge, in ft³/s, which was equaled or exceeded for indicated percent of time

1%	2%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%
65,800	48,600	28,400	14,400	9,050	6,380	4,380	3,130	2,250	1,640	1,150	848	544	370	230	140

Magnitude and probability of annual low flow based on period of record, 1926-1939				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	390	150	81.0	45.5
3	435	170	92.8	52.7
7	460	185	103	59.9
10	476	192	107	62.8
30	546	257	168	116
60	712	350	239	174

Magnitude and probability of annual low flow based on period of record, 1925-1939 spring season, April 1 through May 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	1,210	715	561	467
3	1,340	797	630	528
7	1,810	1,010	749	588
10	1,940	1,030	774	623
30	3,330	1,770	1,360	1,140
60	6,970	3,440	2,440	1,860

Magnitude and probability of annual low flow based on period of record, 1925-1938 summer season, June 1 through October 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	408	154	81.9	45.5
3	457	175	94.2	52.7
7	486	191	104	59.9
10	506	200	110	63.0
30	584	261	170	118
60	876	386	259	189

Magnitude and probability of annual low flow based on period of record, 1925-1939 winter season, November 1 through March 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	647	414	336	287
3	685	437	358	310
7	729	469	386	335
10	772	486	395	339
30	1,180	604	432	390
60	1,810	902	612	440

ARKANSAS RIVER BASIN

07189540 CAVE SPRINGS BRANCH NEAR SOUTH WEST CITY, MO.

LOCATION. – Lat 36°32'50", long 94°37'04", referenced to North American Datum of 1927, in SE ¼ NE ¼ sec. 22, T.24 N., R.25 E., McDonald County, Mo., Hydrologic Unit 11070206, on right bank of downstream side of bridge on Stateline Highway 5, 2.5 mi northwest of Southwest City, Mo, 4.7 mi upstream from Honey Springs, and at mile 4.7.

DRAINAGE AREA. – 7.9 mi².

PERIOD OF RECORD. – October 1997 to current year.

UNREGULATED STREAMFLOW PERIOD

[ft³/s, cubic feet per second; %, percent; monthly values may not add to 100]

Monthly and annual mean, median, maximum and minimum discharges, and average percent of annual runoff, based on period of record, 1998-2007					
Month	Maximum	Minimum	Mean	Median	Average % of Annual Runoff
Oct.	16.6	2.03	4.32	2.85	6.8
Nov.	13.2	1.91	4.02	2.95	6.3
Dec.	11.1	2.27	4.34	3.58	6.9
Jan.	38.6	2.16	9.10	4.24	14.4
Feb.	19.6	1.98	6.12	4.30	9.7
Mar.	14.5	2.08	6.65	5.05	10.5
Apr.	11.2	2.25	4.67	3.94	7.4
May	16.3	2.20	7.86	6.92	12.4
Jun.	21.7	1.93	5.98	3.88	9.4
Jul.	11.3	1.54	5.20	3.25	8.2
Aug.	3.56	1.67	2.41	2.31	3.8
Sep.	5.36	2.03	2.62	2.35	4.1
Annual	9.25	2.63	5.28	4.97	–

Magnitude and probability of annual instantaneous peak flow based on 10 years of record, 1998-2007						
Discharge, in ft ³ /s, for indicated recurrence interval, in years, and exceedence probability, in percent						
2	5	10	25	50	100	500
50%	20%	10%	4%	2%	1%	0.2%
645	940	1,140	1,380	1,560	1,740	2,160

Oklahoma weighted skew = -0.173

Duration table of daily mean flow for period of record, 1998-2007															
Discharge, in ft ³ /s, which was equaled or exceeded for indicated percent of time															
1%	2%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%
49.5	21.0	9.57	7.05	5.83	5.06	4.16	3.54	3.16	2.79	2.52	2.25	1.95	1.71	1.56	1.50

Magnitude and probability of annual low flow based on period of record, 1999-2007				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	1.30	1.01	0.88	0.78
3	1.51	1.28	1.19	1.12
7	1.72	1.50	1.41	1.35
10	1.75	1.56	1.48	1.43
30	1.98	1.74	1.64	1.55
60	2.08	1.84	1.72	1.61

Magnitude and probability of annual low flow based on period of record, 1998-2007 spring season, April 1 through May 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	2.43	1.77	1.50	1.30
3	2.53	1.89	1.62	1.43
7	2.72	2.05	1.77	1.58
10	2.82	2.13	1.85	1.65
30	3.45	2.42	2.11	1.91
60	5.37	3.31	2.58	2.11

Magnitude and probability of annual low flow based on period of record, 1998-2006 summer season, June 1 through October 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	1.30	1.01	0.88	0.78
3	1.53	1.31	1.22	1.15
7	1.74	1.53	1.44	1.39
10	1.76	1.57	1.50	1.45
30	2.01	1.77	1.65	1.56
60	2.17	1.86	1.72	1.61

Magnitude and probability of annual low flow based on period of record, 1998-2007 winter season, November 1 through March 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	1.87	1.28	1.02	0.83
3	2.09	1.58	1.34	1.17
7	2.30	1.83	1.61	1.44
10	2.39	1.91	1.69	1.52
30	2.77	2.23	1.99	1.81
60	3.15	2.47	2.19	1.99

ARKANSAS RIVER BASIN

07189542 HONEY CREEK NEAR SOUTH WEST CITY, MO.

LOCATION. – Lat 36°32'56", long 94°41'01", referenced to North American Datum of 1983, in SE ¼ NE ¼ sec. 24, T.24 N., R.24 E., Delaware County, Okla., Hydrologic Unit 11070206, on downstream abutment of county road bridge, 0.4 mi downstream from Cave Springs Creek, 2.3 mi southeast of Dodge, Ok, and 5.1 mi above Grand Lake and at mile 5.1.

DRAINAGE AREA. – 48.2 mi².

PERIOD OF RECORD. – October 1997 to current year.

UNREGULATED STREAMFLOW PERIOD

[ft³/s, cubic feet per second; %, percent; monthly values may not add to 100]

Monthly and annual mean, median, maximum and minimum discharges, and average percent of annual runoff, based on period of record, 1998-2007					
Month	Maximum	Minimum	Mean	Median	Average % of Annual Runoff
Oct.	75.9	5.33	18.0	13.2	4.8
Nov.	76.9	8.15	21.0	13.6	5.6
Dec.	65.6	8.56	27.1	21.9	7.2
Jan.	172	8.66	51.1	29.3	13.6
Feb.	139	8.18	40.2	29.4	10.7
Mar.	105	8.71	47.3	35.4	12.6
Apr.	78.4	10.9	35.7	30.1	9.5
May	98.1	17.0	51.4	49.9	13.7
Jun.	124	9.64	33.2	23.9	8.8
Jul.	111	5.68	29.9	14.9	7.9
Aug.	17.7	4.46	10.8	8.91	2.9
Sep.	18.5	4.70	10.5	10.3	2.8
Annual	64.1	10.6	31.4	29.4	–

Magnitude and probability of annual instantaneous peak flow based on 10 years of record, 1998-2007						
Discharge, in ft ³ /s, for indicated recurrence interval, in years, and exceedence probability, in percent						
2	5	10	25	50	100	500
50%	20%	10%	4%	2%	1%	0.2%
1,070	2,490	3,810	5,920	7,820	10,000	16,200

Oklahoma weighted skew = -0.177

Duration table of daily mean flow for period of record, 1998-2007															
Discharge, in ft ³ /s, which was equaled or exceeded for indicated percent of time															
1%	2%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%
232	167	96.4	59.6	44.7	37.4	27.9	22.2	17.7	14.5	12.2	9.45	7.46	6.26	4.75	4.21

Magnitude and probability of annual low flow based on period of record, 1999-2007				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	5.85	4.14	3.43	2.92
3	6.12	4.38	3.64	3.10
7	6.48	4.62	3.82	3.23
10	6.52	4.69	3.90	3.33
30	7.36	5.57	4.80	4.22
60	8.95	6.71	5.64	4.82

Magnitude and probability of annual low flow based on period of record, 1998-2007 spring season, April 1 through May 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	16.4	10.9	8.64	7.05
3	17.0	11.3	8.98	7.32
7	17.8	11.8	9.39	7.74
10	18.5	12.2	9.68	7.92
30	22.8	14.8	12.4	10.9
60	38.0	26.0	21.7	18.9

Magnitude and probability of annual low flow based on period of record, 1998-2006 summer season, June 1 through October 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	5.85	4.14	3.43	2.92
3	6.12	4.38	3.64	3.10
7	6.48	4.62	3.82	3.23
10	6.52	4.69	3.90	3.33
30	7.36	5.57	4.80	4.22
60	8.95	6.71	5.64	4.82

Magnitude and probability of annual low flow based on period of record, 1998-2007 winter season, November 1 through March 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	10.2	7.55	6.61	6.00
3	10.7	8.00	7.02	6.36
7	11.2	8.41	7.38	6.68
10	11.4	8.52	7.45	6.73
30	13.0	9.49	8.23	7.40
60	17.9	12.2	9.95	8.35

ARKANSAS RIVER BASIN

07190500 NEOSHO RIVER NEAR LANGLEY, OKLA.

LOCATION. — Lat 36°26'20", long 95°02'54", referenced to North American Datum of 1927, in SW ¼ SE ¼ sec. 27, T.23 N., R.21 E., Mayes County, Okla., Hydrologic Unit 11070209, in concrete stilling well on left bank, 0.5 mi upstream from bridge on State Highway 82, 1.5 mi south of Langley, 3.6 mi downstream from Pensacola Dam, 6.3 mi upstream from Big Cabin Creek, and at mile 73.4.

DRAINAGE AREA. — 10,335 mi².

PERIOD OF RECORD.—October 1939 to current year.

REMARKS.—Flow regulated since 1940 by Lake O' The Cherokees (station 0719000).

REGULATED STREAMFLOW PERIOD

[ft³/s, cubic feet per second; %, percent; monthly values may not add to 100]

Monthly and annual mean, median, maximum and minimum discharges, and average percent of annual runoff, based on period of record, 1940-2007					
Month	Maximum	Minimum	Mean	Median	Average % of Annual Runoff
Oct.	51,120	37.5	5,700	2,258	6.3
Nov.	38,870	63.0	6,517	2,978	7.2
Dec.	35,580	40.9	5,527	3,342	6.1
Jan.	23,400	144	5,031	3,174	5.6
Feb.	23,460	193	6,046	4,868	6.7
Mar.	33,250	321	8,695	6,296	9.6
Apr.	50,780	38.1	10,902	8,959	12.1
May	77,710	71.4	12,089	7,564	13.4
Jun.	43,540	33.1	11,336	9,979	12.6
Jul.	67,920	26.5	9,056	5,148	10.0
Aug.	20,910	25.6	4,417	3,278	4.9
Sep.	30,350	77.1	4,829	3,014	5.4
Annual	21,710	210	7,513	7,272	—

Magnitude and probability of annual instantaneous peak flow based on 73 historic years of record, 1935-2007						
Discharge, in ft ³ /s, for indicated recurrence interval, in years, and exceedence probability, in percent						
2	5	10	25	50	100	500
50%	20%	10%	4%	2%	1%	0.2%
54,500	106,000	146,000	200,000	244,000	288,000	397,000

station skew = -0.373

Duration table of daily mean flow for period of record, 1940-2007																
Discharge, in ft ³ /s, which was equaled or exceeded for indicated percent of time																
1%	2%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	
58,600	42,700	26,700	16,800	13,200	11,900	8,210	5,650	3,930	2,650	1,570	588	90.7	31.6	23.9	15.7	

Magnitude and probability of annual low flow based on period of record, 1941-2007				
Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent				
Period (consecutive days)	2	5	10	20
	50%	20%	10%	5%
1	37.8	17.3	12.0	8.48
3	60.3	20.4	13.0	9.38
7	141	38.8	20.8	12.8
10	209	61.4	33.0	19.9
30	614	181	88.6	47.2
60	1,190	411	210	114

Magnitude and probability of annual low flow based on period of record, 1940-2007 spring season, April 1 through May 31				
Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent				
Period consecutive days)	2	5	10	20
	50%	20%	10%	5%
1	280	43.0	16.7	7.78
3	739	116	40.6	16.4
7	1,470	268	95.9	38.1
10	1,950	421	165	70.3
30	4,850	1,340	572	258
60	8,690	3,080	1,600	878

Magnitude and probability of annual low flow based on period of record, 1940-2006 summer season, June 1 through October 31				
Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent				
Period (consecutive days)	2	5	10	20
	50%	20%	10%	5%
1	45.3	17.3	12.0	8.48
3	100	27.2	14.9	9.38
7	309	74.7	34.7	18.2
10	462	122	57.3	29.5
30	1,280	389	181	89.0
60	2,430	908	459	239

Magnitude and probability of annual low flow based on period of record, 1940-2007 winter season, November 1 through March 31				
Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent				
Period (consecutive days)	2	5	10	20
	50%	20%	10%	5%
1	76.5	21.8	12.6	8.54
3	157	34.9	16.9	9.58
7	416	92.3	40.8	20.5
10	577	156	76.5	41.8
30	1,400	402	191	98.5
60	2,090	696	365	206

ARKANSAS RIVER BASIN

07191000 BIG CABIN CREEK NEAR BIG CABIN, OKLA.

LOCATION. – Lat 36°34'06", long 95°09'07", referenced to North American Datum of 1927, in NE ¼ NE ¼ sec. 15, T.24 N., R.20 E., Craig County, Okla., Hydrologic Unit 11070209, near downstream side of right bank end of county road bridge, 4.9 mi north-east of Big Cabin, 0.9 mi downstream from White Oak Creek, 6.8 mi upstream from Mustang Creek, and at mile 13.0.

DRAINAGE AREA. – 450 mi².

PERIOD OF RECORD. – October 1947 to current year.

REMARKS. – Low flow sustained in part by sewage effluent from city of Vinita.

UNREGULATED STREAMFLOW PERIOD

[ft³/s, cubic feet per second; %, percent; monthly values may not add to 100]

Monthly and annual mean, median, maximum and minimum discharges, and average percent of annual runoff, based on period of record, 1948-2007					
Month	Maximum	Minimum	Mean	Median	Average % of Annual Runoff
Oct.	4,250	0.22	242	15.8	5.9
Nov.	2,844	0.89	390	68.3	9.4
Dec.	2,552	1.35	282	104	6.8
Jan.	1,157	1.29	247	160	6.0
Feb.	2,940	1.35	318	168	7.7
Mar.	2,621	1.37	558	363	13.5
Apr.	2,285	29.9	481	263	11.7
May	3,580	20.3	642	317	15.6
Jun.	2,817	2.47	486	160	11.8
Jul.	1,947	0.53	208	38.4	5.0
Aug.	1,757	0.41	77.0	11.6	1.9
Sep.	1,891	0.22	194	20.4	4.7
Annual	1,044	37.9	343	325	–

Magnitude and probability of annual instantaneous peak flow based on 73 historic years of record, 1935-2007						
Discharge, in ft ³ /s, for indicated recurrence interval, in years, and exceedence probability, in percent						
2	5	10	25	50	100	500
50%	20%	10%	4%	2%	1%	0.2%
15,900	27,800	36,800	49,600	59,800	70,700	98,600

Oklahoma weighted skew = -0.123

Duration table of daily mean flow for period of record, 1948-2007																
Discharge, in ft ³ /s, which was equaled or exceeded for indicated percent of time																
1%	2%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	
6,730	4,140	1,430	503	281	187	101	56.8	32.1	16.0	7.00	3.07	1.65	1.09	0.70	0.47	

Magnitude and probability of annual low flow based on period of record, 1949-2007				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	0.81	0.38	0.26	0.19
3	0.86	0.42	0.28	0.21
7	0.98	0.50	0.36	0.28
10	1.00	0.55	0.43	0.36
30	1.84	0.87	0.62	0.49
60	4.03	1.38	0.84	0.57

Magnitude and probability of annual low flow based on period of record, 1948-2007 spring season, April 1 through May 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	16.5	6.05	3.29	1.90
3	18.2	6.86	3.80	2.24
7	22.4	8.12	4.44	2.60
10	27.1	9.09	4.91	2.89
30	110	39.0	23.7	16.1
60	343	142	88.7	59.9

Magnitude and probability of annual low flow based on period of record, 1948-2006 summer season, June 1 through October 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	0.82	0.38	0.26	0.20
3	0.87	0.42	0.29	0.22
7	0.99	0.50	0.37	0.30
10	1.03	0.56	0.44	0.37
30	1.84	0.87	0.65	0.54
60	5.63	1.74	1.00	0.65

Magnitude and probability of annual low flow based on period of record, 1948-2007 winter season, November 1 through March 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	4.64	1.30	0.68	0.40
3	5.22	1.44	0.74	0.43
7	6.17	1.68	0.86	0.49
10	6.80	1.85	0.94	0.54
30	16.6	3.64	1.65	0.85
60	40.6	7.66	3.01	1.35

ARKANSAS RIVER BASIN

07191220 SPAVINAW CREEK NEAR SYCAMORE, OKLA.

LOCATION. – Lat 36°20'05", long 94°38'29", referenced to North American Datum of 1983, in NE ¼ NW ¼ sec. 4, T.21 N., R.25 E., Delaware County, Okla., Hydrologic Unit 11070209, on right bank 1.8 mi upstream from Cherokee Creek, 4.8 mi northeast of Row, 6.5 mi southeast of Sycamore, and at mile 35.0.

DRAINAGE AREA. – 133 mi².

PERIOD OF RECORD. – October 1961 to current year.

UNREGULATED STREAMFLOW PERIOD

[ft³/s, cubic feet per second; %, percent; monthly values may not add to 100]

Monthly and annual mean, median, maximum and minimum discharges, and average percent of annual runoff, based on period of record, 1962-2007					
Month	Maximum	Minimum	Mean	Median	Average % of Annual Runoff
Oct.	382	4.84	53.6	29.9	4.0
Nov.	683	8.56	106	52.4	8.0
Dec.	585	10.5	120	73.1	9.0
Jan.	546	9.34	114	72.0	8.6
Feb.	480	12.1	124	93.6	9.4
Mar.	563	12.7	179	122	13.5
Apr.	600	16.0	188	146	14.1
May	550	19.0	148	107	11.2
Jun.	880	14.5	144	72.8	10.8
Jul.	483	5.28	71.9	42.0	5.4
Aug.	106	6.27	31.7	27.5	2.4
Sep.	248	5.75	47.8	26.0	3.6
Annual	265	18.0	110	97.5	–

Magnitude and probability of annual instantaneous peak flow based on 48 years of record, 1960-2007						
Discharge, in ft ³ /s, for indicated recurrence interval, in years, and exceedence probability, in percent						
2	5	10	25	50	100	500
50%	20%	10%	4%	2%	1%	0.2%
3,320	9,270	15,300	25,500	34,900	45,900	77,900

Oklahoma weighted skew = -0.302

Duration table of daily mean flow for period of record, 1962-2007															
Discharge, in ft ³ /s, which was equaled or exceeded for indicated percent of time															
1%	2%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%
935	597	349	229	169	135	95.0	70.9	54.1	41.1	30.5	22.5	14.6	10.9	7.38	5.65

Magnitude and probability of annual low flow based on period of record, 1963-2007				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	14.9	7.55	4.86	3.23
3	15.0	7.71	5.01	3.36
7	15.5	8.11	5.36	3.65
10	15.7	8.35	5.58	3.85
30	17.5	9.95	7.08	5.23
60	21.0	12.0	8.81	6.69

Magnitude and probability of annual low flow based on period of record, 1962-2007 spring season, April 1 through May 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	54.1	31.0	22.2	16.4
3	57.2	32.3	22.8	16.7
7	60.7	34.0	23.9	17.5
10	62.9	35.0	24.7	18.1
30	91.7	47.5	32.9	24.0
60	135	73.1	52.6	39.9

Magnitude and probability of annual low flow based on period of record, 1962-2006 summer season, June 1 through October 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	14.9	7.56	4.86	3.23
3	15.1	7.71	5.01	3.36
7	15.5	8.11	5.36	3.65
10	15.8	8.36	5.58	3.85
30	17.6	9.95	7.08	5.23
60	21.1	12.0	8.81	6.78

Magnitude and probability of annual low flow based on period of record, 1962-2007 winter season, November 1 through March 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	26.5	15.2	11.3	8.85
3	27.2	15.6	11.5	8.95
7	29.1	16.3	11.9	9.16
10	29.9	16.7	12.2	9.31
30	39.1	20.3	14.3	10.7
60	52.7	25.8	17.4	12.4

ARKANSAS RIVER BASIN

07191500 NEOSHO RIVER NEAR CHOUTEAU, OKLA.

LOCATION. – Lat 36°13'46", long 95°10'57", referenced to North American Datum of 1927, in SE ¼ NW ¼ sec. 9, T.20 N., R.20 E., Mayes County, Okla., Hydrologic Unit 11070209, in Robert S. Kerr Dam about 100 ft from left end of dam, 2.2 mi northwest of Locust Grove, 10.0 mi northeast of Chouteau, and at mile 47.2.

DRAINAGE AREA. – 11,534 mi².

PERIOD OF RECORD. – October 1937 to September 1950, October 1963 to current year.

REMARKS. – Some regulation since 1940 by Lake O' The Cherokees (station 07190000), and completely regulated since 1963 by Lake Hudson (station 07191400).

REGULATED STREAMFLOW PERIOD

[ft³/s, cubic feet per second; %, percent; monthly values may not add to 100]

Monthly and annual mean, median, maximum and minimum discharges, and average percent of annual runoff, based on period of record, 1965-2007					
Month	Maximum	Minimum	Mean	Median	Average % of Annual Runoff
Oct.	59,840	302	5,540	2,151	5.2
Nov.	40,780	268	8,378	3,953	7.9
Dec.	40,400	189	7,789	5,476	7.4
Jan.	28,740	189	7,006	4,095	6.6
Feb.	23,640	205	7,590	6,171	7.2
Mar.	39,260	228	12,140	7,982	11.4
Apr.	46,000	160	13,071	11,820	12.3
May	40,650	607	12,909	8,969	12.2
Jun.	48,020	735	13,334	11,770	12.6
Jul.	30,560	571	9,244	5,916	8.7
Aug.	15,140	603	4,621	3,592	4.4
Sep.	28,460	365	4,418	2,834	4.2
Annual	22,240	1,655	8,835	8,374	–

Magnitude and probability of annual instantaneous peak flow based on 43 years of record, 1965-2007						
Discharge, in ft ³ /s, for indicated recurrence interval, in years, and exceedence probability, in percent						
2	5	10	25	50	100	500
50%	20%	10%	4%	2%	1%	0.2%
57,100	89,200	114,000	148,000	177,000	208,000	291,000

station skew = 0.195

Duration table of daily mean flow for period of record, 1965-2007															
Discharge, in ft ³ /s, which was equaled or exceeded for indicated percent of time															
1%	2%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%
57,200	42,900	31,400	21,900	17,100	14,000	11,000	7,710	4,890	2,910	1,350	403	212	162	128	112

Magnitude and probability of annual low flow based on period of record, 1966-2007				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	146	95.8	74.5	59.7
3	165	102	80.3	66.4
7	204	133	116	108
10	250	152	128	115
30	580	281	198	150
60	1,130	543	366	263

Magnitude and probability of annual low flow based on period of record, 1965-2007 spring season, April 1 through May 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	367	136	92.9	71.8
3	850	234	123	74.1
7	1,710	474	237	132
10	2,290	654	323	176
30	5,670	1,770	862	447
60	10,600	4,570	2,740	1,720

Magnitude and probability of annual low flow based on period of record, 1965-2006 summer season, June 1 through October 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	153	101	84.6	74.8
3	173	109	92.0	82.2
7	286	164	134	118
10	372	208	167	144
30	1,080	488	321	226
60	2,050	1,050	734	541

Magnitude and probability of annual low flow based on period of record, 1965-2007 winter season, November 1 through March 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	149	108	91.0	81.0
3	263	129	99.2	83.7
7	527	204	132	94.8
10	671	250	155	107
30	1,670	579	328	203
60	2,690	914	491	285

ARKANSAS RIVER BASIN

07192000 PRYOR CREEK NEAR PRYOR, OKLA.

LOCATION. – Lat 36°16'52", long 95°19'32", referenced to North American Datum of 1927, in SW ¼ sec. 19, T.21 N., R.19 E., Mayes County, Okla., Hydrologic Unit 11070209, on right downstream bank at downstream site of bridge on U.S. Highway 69, 1.8 mi south of Pryor, 2.0 mi downstream from Seminole Creek, and at mile 10.5.

DRAINAGE AREA. – 229 mi².

PERIOD OF RECORD. – October 1947 to December 1963.

UNREGULATED STREAMFLOW PERIOD

[ft³/s, cubic feet per second; %, percent; monthly values may not add to 100]

Monthly and annual mean, median, maximum and minimum discharges, and average percent of annual runoff, based on period of record, 1948-1963					
Month	Maximum	Minimum	Mean	Median	Average % of Annual Runoff
Oct.	2,172	0.00	172	1.31	11.0
Nov.	374	0.00	54.2	1.28	3.5
Dec.	194	0.00	33.9	2.81	2.2
Jan.	160	0.01	39.1	8.20	2.5
Feb.	618	0.20	87.2	11.4	5.6
Mar.	531	0.00	159	124	10.2
Apr.	797	5.85	146	84.0	9.3
May	2,068	11.1	354	101	22.6
Jun.	1,280	0.78	205	31.2	13.1
Jul.	1,030	0.00	141	28.4	9.0
Aug.	642	0.00	84.0	4.47	5.4
Sep.	845	0.00	89.1	5.69	5.7
Annual	352	12.5	131	97.3	–

Magnitude and probability of annual instantaneous peak flow based on 21 years of record, 1943-1963						
Discharge, in ft ³ /s, for indicated recurrence interval, in years, and exceedence probability, in percent						
2	5	10	25	50	100	500
50%	20%	10%	4%	2%	1%	0.2%
5,300	11,700	17,800	27,800	37,200	48,200	81,700

Oklahoma weighted skew = 0.017

Duration table of daily mean flow for period of record, 1948-1963															
Discharge, in ft ³ /s, which was equaled or exceeded for indicated percent of time															
1%	2%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%
2,620	1,500	584	173	93.9	61.0	28.0	10.9	4.71	1.82	0.53	0.11	0.03	0.01	0.01	0.00

Magnitude and probability of annual low flow based on period of record, 1949-1963				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00
30	0.06	0.00	0.00	0.00
60	0.57	0.00	0.00	0.00

Magnitude and probability of annual low flow based on period of record, 1948-1963 spring season, April 1 through May 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	3.93	0.42	0.00	0.00
3	4.10	0.59	0.00	0.00
7	5.91	0.74	0.13	0.00
10	6.99	0.82	0.14	0.00
30	24.1	6.18	3.18	1.88
60	113	37.3	21.0	13.2

Magnitude and probability of annual low flow based on period of record, 1948-1962 summer season, June 1 through October 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00
30	0.11	0.00	0.00	0.00
60	2.06	0.07	0.00	0.00

Magnitude and probability of annual low flow based on period of record, 1948-1963 winter season, November 1 through March 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	0.16	0.00	0.00	0.00
3	0.16	0.00	0.00	0.00
7	0.20	0.00	0.00	0.00
10	0.26	0.00	0.00	0.00
30	0.50	0.00	0.00	0.00
60	1.51	0.02	0.00	0.00

ARKANSAS RIVER BASIN

07192500 NEOSHO RIVER NEAR WAGONER, OKLA.

LOCATION. – Lat 35°55'44", long 95°16'08", referenced to North American Datum of 1927, on south line sec. 22, T.17 N., R.19 E., Cherokee County, Okla., Hydrologic Unit 11070209, at bridge on State Highway 51, 2.25 mi downstream from Nigger Creek, 5 mi southeast of Wagoner, 6 mi upstream from Fourteen Mile Creek, and at mile 13.7.

DRAINAGE AREA. – 12,307 mi².

PERIOD OF RECORD. – March 1924 to December 1925, October 1937 to September 1949.

REMARKS. – Flow regulated since 1940 by Lake O' The Cherokees (station 0719000).

REGULATED STREAMFLOW PERIOD

[ft³/s, cubic feet per second; %, percent; monthly values may not add to 100]

Monthly and annual mean, median, maximum and minimum discharges, and average percent of annual runoff, based on period of record, 1940-1949

Month	Maximum	Minimum	Mean	Median	Average % of Annual Runoff
Oct.	56,790	129	10,655	3,052	8.5
Nov.	38,330	333	7,151	3,194	5.7
Dec.	14,030	363	4,317	2,677	3.4
Jan.	13,870	328	5,430	4,348	4.3
Feb.	29,180	500	8,087	5,623	6.4
Mar.	28,910	550	8,763	6,539	7.0
Apr.	59,440	1,473	21,573	17,750	17.2
May	97,520	824	22,076	15,270	17.6
Jun.	25,360	674	16,820	18,250	13.4
Jul.	35,080	406	8,925	5,348	7.1
Aug.	21,010	245	5,112	3,312	4.1
Sep.	16,280	660	6,459	3,717	5.2
Annual	16,920	548	10,435	9,663	—

Magnitude and probability of annual instantaneous peak flow based on 10 years of record, 1940-1949

Discharge, in ft³/s, for indicated recurrence interval, in years, and exceedence probability, in percent

2	5	10	25	50	100	500
50%	20%	10%	4%	2%	1%	0.2%
115,000	221,000	285,000	352,000	392,000	424,000	479,000

station skew = -1.106

Duration table of daily mean flow for period of record, 1940-1949

Discharge, in ft³/s, which was equaled or exceeded for indicated percent of time

1%	2%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%
94,600	71,200	43,100	26,400	17,300	12,100	7,380	5,700	4,430	3,340	2,620	1,860	596	301	166	99.4

Magnitude and probability of annual low flow based on period of record, 1941-1949				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	773	292	149	68.5
3	901	306	151	75.3
7	1,220	396	184	88.1
10	1,320	437	202	95.3
30	2,200	869	419	200
60	2,460	1,100	601	331

Magnitude and probability of annual low flow based on period of record, 1940-1949 spring season, April 1 through May 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	2,680	861	415	211
3	3,410	1,070	492	236
7	3,870	1,210	560	273
10	4,330	1,340	631	312
30	8,570	3,270	1,790	1,030
60	18,400	6,400	3,180	1,650

Magnitude and probability of annual low flow based on period of record, 1940-1948 summer season, June 1 through October 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	1,140	425	198	92.0
3	1,460	517	229	100
7	1,860	635	270	112
10	2,040	731	310	127
30	2,640	1,030	476	214
60	3,020	1,360	747	412

Magnitude and probability of annual low flow based on period of record, 1940-1949 winter season, November 1 through March 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	962	299	139	68.5
3	1,180	346	157	75.2
7	1,590	510	240	118
10	1,660	636	345	196
30	2,340	1,130	692	435
60	2,760	1,300	781	478

ARKANSAS RIVER BASIN

07193500 NEOSHO RIVER BELOW FORT GIBSON LAKE NEAR FORT GIBSON, OKLA.

LOCATION. – Lat 35°51'10", long 95°13'44", referenced to North American Datum of 1927, in NW ¼ NW¼ sec. 19, T.16 N., R.20 E., Cherokee County, Okla., Hydrologic Unit 11070209, on left bank 1.1 mi downstream from Fort Gibson Dam, 3.5 mi north of Fort Gibson, and at mile 6.6.

DRAINAGE AREA. – 12,495 mi².

PERIOD OF RECORD. – May 1950 to September 1989. Prior to October 1970, published as "Neosho River below Fort Gibson Reservoir near Fort Gibson".

REMARKS. – Flow completely regulated since September 1953 by Fort Gibson Lake (07193000).

REGULATED STREAMFLOW PERIOD

[ft³/s, cubic feet per second; %, percent; monthly values may not add to 100]

Monthly and annual mean, median, maximum and minimum discharges, and average percent of annual runoff, based on period of record, 1954-1989					
Month	Maximum	Minimum	Mean	Median	Average % of Annual Runoff
Oct.	70,140	128	7,241	3,062	7.1
Nov.	43,320	77.3	8,379	5,019	8.3
Dec.	40,420	58.3	7,570	4,312	7.5
Jan.	25,370	51.3	6,162	3,506	6.1
Feb.	19,260	127	6,833	4,454	6.7
Mar.	44,420	176	11,104	7,276	11.0
Apr.	48,660	347	12,841	11,800	12.7
May	64,800	572	12,155	7,918	12.0
Jun.	48,180	873	11,770	10,280	11.6
Jul.	33,450	1,617	8,648	6,194	8.5
Aug.	9,475	185	3,969	3,068	3.9
Sep.	20,680	173	4,703	3,310	4.6
Annual	20,410	1,158	8,450	8,092	–

Magnitude and probability of annual instantaneous peak flow based on 36 years of record, 1954-1989						
Discharge, in ft ³ /s, for indicated recurrence interval, in years, and exceedence probability, in percent						
2	5	10	25	50	100	500
50%	20%	10%	4%	2%	1%	0.2%
48,000	83,100	110,000	146,000	174,000	204,000	280,000

station skew = -0.183

Duration table of daily mean flow for period of record, 1954-1989																
Discharge, in ft ³ /s, which was equaled or exceeded for indicated percent of time																
1%	2%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	
59,600	49,800	32,200	19,200	15,200	13,200	10,500	6,440	4,270	2,790	1,630	724	153	27.4	14.9	14.0	

Magnitude and probability of annual low flow based on period of record, 1955-1989				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	18.5	13.4	8.34	4.88
3	66.9	20.7	11.8	7.56
7	191	52.4	26.0	14.4
10	253	72.6	36.4	20.2
30	688	261	153	97.3
60	1,310	486	266	154

Magnitude and probability of annual low flow based on period of record, 1954-1989 spring season, April 1 through May 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	98.8	17.5	8.34	4.88
3	753	137	53.6	24.0
7	1,750	387	158	71.6
10	1,970	577	300	174
30	4,480	1,440	754	431
60	8,630	3,150	1,740	1,020

Magnitude and probability of annual low flow based on period of record, 1954-1988 summer season, June 1 through October 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	23.4	13.4	11.3	10.3
3	115	29.4	14.1	7.64
7	407	109	49.9	24.8
10	488	144	70.8	37.8
30	1,240	480	274	166
60	2,460	1,100	645	393

Magnitude and probability of annual low flow based on period of record, 1954-1989 winter season, November 1 through March 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	35.7	13.7	10.1	8.47
3	210	46.6	21.7	11.8
7	664	160	70.4	34.2
10	746	174	74.0	34.8
30	1,810	528	258	137
60	2,640	775	370	191

ARKANSAS RIVER BASIN

07194500 ARKANSAS RIVER NEAR MUSKOGEE, OKLA.

LOCATION. – Lat 35°46'10", long 95°17'49", referenced to North American Datum of 1927, Muskogee County, Okla., Hydrologic Unit 11110102, on downstream side of left pier of bridge on U.S. Highway 62, 1.7 miles downstream from Neosho River, 3.5 miles northeast of Muskogee, and at mile 457.8.

DRAINAGE AREA. – 96,674 mi², of which 12,541 mi² is probably noncontributing.

PERIOD OF RECORD. – October 1925 to September 1970, July 2003 to current year. Published as "at Webbers Falls" October 1933 to February 1935. Monthly discharge only for some periods, published in WSP 1311.

REMARKS. – Some regulation since 1940 by Grand Lake; further regulation since 1941 by Great Salt Plains Lake, and since 1951 by Hulah Lake. Flow regulated since 1953 by Fort Gibson Lake (station 07193000). Flow regulated since September 1964 by Keystone Lake (station 07164200).

UNREGULATED STREAMFLOW PERIOD

[ft³/s, cubic feet per second; %, percent; monthly values may not add to 100]

Monthly and annual mean, median, maximum and minimum discharges, and average percent of annual runoff, based on period of record, 1926-1952					
Month	Maximum	Minimum	Mean	Median	Average % of Annual Runoff
Oct.	114,900	636	19,230	7,531	7.4
Nov.	81,510	674	13,586	9,044	5.2
Dec.	30,780	744	9,962	7,193	3.8
Jan.	30,180	618	11,811	9,095	4.6
Feb.	77,150	1,184	14,067	11,970	5.4
Mar.	61,860	1,378	16,648	11,160	6.4
Apr.	175,700	1,792	38,737	16,850	14.9
May	210,000	4,403	42,339	31,400	16.3
Jun.	156,300	3,410	40,856	34,500	15.8
Jul.	166,900	873	23,494	11,890	9.1
Aug.	77,610	532	14,145	6,572	5.5
Sep.	45,700	1,057	14,375	10,940	5.5
Annual	45,890	4,197	21,603	18,990	–

Magnitude and probability of annual instantaneous peak flow based on 55 historic years of record, 1898-1952						
Discharge, in ft ³ /s, for indicated recurrence interval, in years, and exceedence probability, in percent						
2	5	10	25	50	100	500
50%	20%	10%	4%	2%	1%	0.2%
168,000	265,000	317,000	394,000	452,000	509,000	645,000

Water Resources Council weighted skew = -0.207

Duration table of daily mean flow for period of record, 1926-1952															
Discharge, in ft ³ /s, which was equaled or exceeded for indicated percent of time															
1%	2%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%
188,000	152,000	98,400	55,300	35,000	26,300	16,800	11,800	8,690	6,450	4,780	3,490	2,230	1,340	737	573

Magnitude and probability of annual low flow based on period of record, 1927-1952				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	1,870	868	530	335
3	2,020	905	543	340
7	2,180	950	571	359
10	2,250	968	584	373
30	2,800	1,200	729	469
60	3,400	1,590	1,040	714

Magnitude and probability of annual low flow based on period of record, 1926-1952 spring season, April 1 through May 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	5,310	2,560	1,670	1,140
3	5,920	2,990	2,020	1,430
7	6,930	3,460	2,340	1,660
10	7,880	3,700	2,440	1,720
30	14,200	6,590	4,430	3,190
60	29,300	13,400	8,750	6,100

Magnitude and probability of annual low flow based on period of record, 1926-1951 summer season, June 1 through October 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	2,050	882	531	337
3	2,240	938	553	344
7	2,420	999	589	368
10	2,520	1,040	613	383
30	3,280	1,330	793	503
60	4,800	2,020	1,270	866

Magnitude and probability of annual low flow based on period of record, 1926-1952 winter season, November 1 through March 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	2,510	1,320	932	694
3	2,710	1,400	973	712
7	2,960	1,500	1,020	731
10	3,050	1,540	1,050	758
30	4,450	2,220	1,460	1,010
60	5,810	2,960	1,950	1,340

ARKANSAS RIVER BASIN

07194800 ILLINOIS RIVER AT SAVOY, ARK.

LOCATION. – Lat 36°06'11", long 94°20'40", referenced to North American Datum of 1927, in SE ¼ sec. 36, T.17 N., R.32 W., Washington County, Ark., Hydrologic Unit 11110103, on eastern boundary of Ozark National Forest, on left bank downstream end of State Hwy 16 bridge, 0.3 mi downstream from tributary of Lake Weddington, 0.4 mi upstream from Clear Creek, and 0.9 mi southwest of Savoy.

DRAINAGE AREA. – 167 mi².

PERIOD OF RECORD. – July 1979 to December 1981, October 1985 to September 1986, Aug 1995 to current year.

REMARKS. – Some minor regulation from flood-water retarding structures.

UNREGULATED STREAMFLOW PERIOD

[ft³/s, cubic feet per second; %, percent; monthly values may not add to 100]

Monthly and annual mean, median, maximum and minimum discharges, and average percent of annual runoff, based on period of record, 1980-2007					
Month	Maximum	Minimum	Mean	Median	Average % of Annual Runoff
Oct.	180	6.21	43.2	24.9	2.4
Nov.	981	10.6	196	112	11.1
Dec.	532	10.5	150	115	8.5
Jan.	882	6.68	222	118	12.6
Feb.	720	11.7	194	153	11.0
Mar.	608	16.5	192	140	10.9
Apr.	1,020	34.1	257	195	14.6
May	518	32.7	177	169	10.0
Jun.	1,166	17.6	168	97.5	9.5
Jul.	322	5.43	69.2	27.0	3.9
Aug.	136	2.23	32.4	17.4	1.8
Sep.	392	3.73	63.2	14.5	3.6
Annual	245	33.7	148	165	—

Magnitude and probability of annual instantaneous peak flow based on 12 years of record, 1996-2007						
Discharge, in ft ³ /s, for indicated recurrence interval, in years, and exceedence probability, in percent						
2	5	10	25	50	100	500
50%	20%	10%	4%	2%	1%	0.2%
11,400	20,000	26,600	35,600	42,800	50,400	69,500

Oklahoma weighted skew = -0.174

Duration table of daily mean flow for period of record, 1979-2007																
Discharge, in ft ³ /s, which was equaled or exceeded for indicated percent of time																
1%	2%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	
1,800	1,090	507	289	206	158	97.6	59.6	36.9	24.8	17.0	12.6	9.18	7.37	5.53	3.09	

Magnitude and probability of annual low flow based on period of record, 1981-2007				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	7.13	4.64	3.39	2.48
3	7.32	4.71	3.42	2.49
7	7.76	5.09	3.69	2.68
10	8.13	5.38	3.90	2.81
30	9.72	6.31	4.48	3.16
60	12.0	7.84	5.63	4.03

Magnitude and probability of annual low flow based on period of record, 1980-2007 spring season, April 1 through May 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	25.5	13.1	9.35	7.08
3	27.8	14.3	10.1	7.64
7	33.2	17.0	11.9	8.89
10	36.2	18.2	12.7	9.40
30	70.1	36.2	26.5	20.8
60	165	94.2	71.9	58.1

Magnitude and probability of annual low flow based on period of record, 1980-2006 summer season, June 1 through October 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	7.15	4.75	3.50	2.58
3	7.33	4.81	3.52	2.59
7	7.76	5.17	3.79	2.78
10	8.13	5.46	4.00	2.92
30	9.81	6.50	4.66	3.31
60	12.7	8.14	5.83	4.18

Magnitude and probability of annual low flow based on period of record, 1980-2007 winter season, November 1 through March 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	15.1	9.36	7.21	5.62
3	16.6	9.70	7.26	5.68
7	19.7	10.8	7.75	5.80
10	21.0	11.4	8.01	5.93
30	36.2	15.0	9.08	5.87
60	66.7	25.0	13.9	8.16

ARKANSAS RIVER BASIN

07195000 OSAGE CREEK NEAR ELM SPRINGS, ARK.

LOCATION. – Lat 36°13'19", long 94°17'18", referenced to North American Datum of 1983, in NE ¼ sec. 21, T.18 N., R.31 W., Benton County, Ark., Hydrologic Unit 11110103, on left bank 0.7 mi downstream from Little Osage Creek, and 3.2 mi northwest of Elm Springs.

DRAINAGE AREA. – 130 mi².

PERIOD OF RECORD. – October 1950 to September 1975, Aug 1995 to current year. Monthly discharge only for some periods, published in WSP 1731.

REMARKS. – Numerous anthropogenic alterations within basin (highly altered).

UNREGULATED STREAMFLOW PERIOD

[ft³/s, cubic feet per second; %, percent; monthly values may not add to 100]

Monthly and annual mean, median, maximum and minimum discharges, and average percent of annual runoff, based on period of record, 1951-2007					
Month	Maximum	Minimum	Mean	Median	Average % of Annual Runoff
Oct.	310	13.2	75.2	71.6	5.0
Nov.	474	23.3	119	72.8	8.0
Dec.	390	20.9	106	87.3	7.1
Jan.	495	20.4	118	80.0	7.9
Feb.	458	23.8	138	104	9.3
Mar.	538	24.5	161	133	10.8
Apr.	533	20.8	164	134	11.0
May	972	40.2	192	124	12.9
Jun.	694	25.0	159	113	10.7
Jul.	389	14.2	112	77.5	7.5
Aug.	244	11.3	72.6	68.0	4.9
Sep.	214	12.4	74.6	72.8	5.0
Annual	236	29.1	124	128	–

Magnitude and probability of annual instantaneous peak flow based on 42 years of record, 1950-2007						
Discharge, in ft ³ /s, for indicated recurrence interval, in years, and exceedence probability, in percent						
2	5	10	25	50	100	500
50%	20%	10%	4%	2%	1%	0.2%
5,390	10,100	13,800	18,900	23,000	27,300	37,900

Oklahoma weighted skew = -0.289

Duration table of daily mean flow for period of record, 1951-2007																
Discharge, in ft ³ /s, which was equaled or exceeded for indicated percent of time																
1%	2%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	
862	556	328	222	178	150	117	95.2	79.2	66.6	53.9	41.4	28.7	23.4	19.1	14.4	

Magnitude and probability of annual low flow based on period of record, 1952-2007				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	34.0	20.8	14.8	10.7
3	35.9	21.9	15.6	11.2
7	38.4	23.2	16.5	11.9
10	38.8	23.5	16.8	12.2
30	42.7	25.9	18.8	14.0
60	47.7	28.7	21.0	15.9

Magnitude and probability of annual low flow based on period of record, 1951-2007 spring season, April 1 through May 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	67.2	39.5	29.3	22.6
3	70.7	41.5	30.7	23.7
7	75.8	44.5	32.9	25.3
10	79.2	46.5	34.4	26.5
30	105	61.2	45.2	34.9
60	141	81.9	62.2	49.8

Magnitude and probability of annual low flow based on period of record, 1951-2006 summer season, June 1 through October 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	36.6	21.6	15.2	10.8
3	39.0	23.0	16.1	11.4
7	41.2	24.3	17.0	12.0
10	41.7	24.6	17.3	12.4
30	45.3	26.9	19.3	14.2
60	51.4	30.8	22.3	16.6

Magnitude and probability of annual low flow based on period of record, 1951-2007 winter season, November 1 through March 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	41.2	25.8	20.0	16.1
3	43.9	27.2	20.8	16.6
7	47.0	29.1	22.3	17.8
10	47.9	29.5	22.6	18.0
30	56.2	33.1	24.9	19.7
60	67.8	39.1	29.1	22.7

ARKANSAS RIVER BASIN

07195430 ILLINOIS RIVER SOUTH OF SILOAM SPRINGS, ARK.

LOCATION. – Lat 36°06'31", long 94°32'00", referenced to North American Datum of 1983, in SE ¼ NE ¼ sec. 31, T.17 N., R.33 W., Benton County, Ark., Hydrologic Unit 11110103, at bridge on State Hwy 59, 5.0 mi south of Siloam Springs, and 0.6 mi downstream from mouth of Cincinnati Creek.

DRAINAGE AREA. – 575 mi².

PERIOD OF RECORD. – August 1995 to current year.

UNREGULATED STREAMFLOW PERIOD

[ft³/s, cubic feet per second; %, percent; monthly values may not add to 100]

Monthly and annual mean, median, maximum and minimum discharges, and average percent of annual runoff, based on period of record, 1996-2007					
Month	Maximum	Minimum	Mean	Median	Average % of Annual Runoff
Oct.	482	107	220	183	3.4
Nov.	2,839	119	544	314	8.4
Dec.	1,451	111	550	466	8.5
Jan.	2,256	123	750	426	11.6
Feb.	2,167	114	709	599	11.0
Mar.	1,767	152	727	558	11.3
Apr.	2,134	192	764	675	11.8
May	1,780	311	630	537	9.7
Jun.	3,287	111	649	368	10.0
Jul.	1,161	66.8	412	223	6.4
Aug.	507	125	219	192	3.4
Sep.	887	130	286	197	4.4
Annual	795	182	537	550	–

Magnitude and probability of annual instantaneous peak flow based on 12 years of record, 1996-2007						
Discharge, in ft ³ /s, for indicated recurrence interval, in years, and exceedence probability, in percent						
2	5	10	25	50	100	500
50%	20%	10%	4%	2%	1%	0.2%
22,900	33,900	41,000	49,600	55,800	61,700	74,800

Oklahoma weighted skew = -0.356

Duration table of daily mean flow for period of record, 1995-2006															
Discharge, in ft ³ /s, which was equaled or exceeded for indicated percent of time															
1%	2%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%
5,160	3,040	1,490	937	701	584	429	341	281	230	190	160	126	109	92.6	67.2

Magnitude and probability of annual low flow based on period of record, 1997-2007

Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	110	83.3	69.0	57.8
3	113	85.0	70.3	58.8
7	119	89.4	73.6	61.2
10	122	92.0	75.6	62.5
30	140	106	85.4	68.3
60	153	115	94.8	78.7

**Magnitude and probability of annual low flow based on period of record, 1996-2007
spring season, April 1 through May 31**

Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	240	160	127	104
3	249	165	130	106
7	264	173	136	111
10	277	180	141	115
30	384	257	213	185
60	572	374	308	265

**Magnitude and probability of annual low flow based on period of record, 1996-2006
summer season, June 1 through October 31**

Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	110	83.3	69.0	57.8
3	113	85.0	70.3	58.8
7	119	89.4	73.6	61.2
10	123	92.6	75.9	62.6
30	140	106	85.4	68.3
60	158	119	96.9	79.7

**Magnitude and probability of annual low flow based on period of record, 1996-2007
winter season, November 1 through March 31**

Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	161	123	107	96.3
3	168	127	110	97.4
7	186	139	118	104
10	193	142	120	104
30	253	175	142	118
60	346	222	168	131

ARKANSAS RIVER BASIN

07195500 ILLINOIS RIVER NEAR WATTS, OKLA.

LOCATION. – Lat 36°07'48", long 94°34'19", referenced to North American Datum of 1927, in NW ¼ NE ¼ sec. 18, T.19 N., R.26 E., Adair County, Okla., Hydrologic Unit 11110103, near right bank on downstream side of pier of bridge on U.S. Highway 59, 1.5 mi north of Watts, 4.5 mi downstream from Cincinnati Creek, and at mile 106.2.

DRAINAGE AREA. – 635 mi².

PERIOD OF RECORD. – August 1955 to current year.

REMARKS. – Since July 2, 1957, small diversion for municipal water supply for the city of Siloam Springs, Arkansas, upstream from station.

UNREGULATED STREAMFLOW PERIOD

[ft³/s, cubic feet per second; %, percent; monthly values may not add to 100]

Monthly and annual mean, median, maximum and minimum discharges, and average percent of annual runoff, based on period of record, 1956-2007					
Month	Maximum	Minimum	Mean	Median	Average % of Annual Runoff
Oct.	2,734	20.9	344	191	4.6
Nov.	3,087	65.6	645	337	8.6
Dec.	2,786	60.4	672	344	9.0
Jan.	2,396	61.4	620	440	8.3
Feb.	2,361	75.1	699	555	9.4
Mar.	2,934	114	944	711	12.6
Apr.	3,347	176	1,003	859	13.4
May	4,286	144	957	711	12.8
Jun.	3,552	113	679	396	9.1
Jul.	1,807	50.7	371	240	5.0
Aug.	1,172	33.2	237	176	3.2
Sep.	1,393	14.9	290	193	3.9
Annual	1,247	151	621	604	–

Magnitude and probability of annual instantaneous peak flow based on 52 years of record, 1956-2007						
Discharge, in ft ³ /s, for indicated recurrence interval, in years, and exceedence probability, in percent						
2	5	10	25	50	100	500
50%	20%	10%	4%	2%	1%	0.2%
18,400	32,300	42,200	55,000	64,700	74,400	96,800

Oklahoma weighted skew = -0.397

Duration table of daily mean flow for period of record, 1955-2007																
Discharge, in ft ³ /s, which was equaled or exceeded for indicated percent of time																
1%	2%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	
5,700	3,690	2,000	1,250	932	738	517	387	293	226	177	139	103	76.6	56.6	42.0	

Magnitude and probability of annual low flow based on period of record, 1957-2007				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	86.8	49.2	34.2	24.4
3	95.5	55.4	38.4	27.2
7	107	65.6	46.6	33.6
10	112	68.6	48.6	35.0
30	127	76.2	54.4	39.7
60	146	87.8	63.3	46.7

Magnitude and probability of annual low flow based on period of record, 1956-2007 spring season, April 1 through May 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	252	130	84.5	56.1
3	278	146	95.6	64.1
7	311	163	106	70.2
10	312	172	120	87.3
30	504	292	221	177
60	793	466	354	284

Magnitude and probability of annual low flow based on period of record, 1956-2006 summer season, June 1 through October 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	92.7	53.7	37.6	27.0
3	100	58.9	41.1	29.2
7	110	66.3	46.9	33.7
10	113	68.4	48.6	35.0
30	129	76.6	54.5	39.8
60	152	90.9	65.2	47.8

Magnitude and probability of annual low flow based on period of record, 1956-2007 winter season, November 1 through March 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	148	76.6	49.9	33.5
3	155	81.3	53.7	36.6
7	170	92.1	62.7	44.1
10	174	98.1	69.8	51.5
30	222	125	91.8	71.0
60	294	152	107	79.2

ARKANSAS RIVER BASIN

07195800 FLINT CREEK AT SPRINGTOWN, ARK.

LOCATION. – Lat 36°15'21.50", long 94°26'00.80", referenced to North American Datum of 1983, in NE ¼ NW ¼ sec. 7, T.18 N., R.32 W., Benton County, Ark., Hydrologic Unit 11110103, on right bank 20 ft downstream from State Hwy 12, 0.8 mi southwest of Springtown.

DRAINAGE AREA. – 14.2 mi².

PERIOD OF RECORD. – July 1961 to current year.

UNREGULATED STREAMFLOW PERIOD

[ft³/s, cubic feet per second; %, percent; monthly values may not add to 100]

Monthly and annual mean, median, maximum and minimum discharges, and average percent of annual runoff, based on period of record, 1961-2007					
Month	Maximum	Minimum	Mean	Median	Average % of Annual Runoff
Oct.	51.8	2.20	10.0	7.43	5.6
Nov.	83.7	2.56	17.8	11.4	9.9
Dec.	63.0	2.98	17.5	11.7	9.7
Jan.	81.3	2.53	15.6	11.8	8.7
Feb.	45.8	2.95	15.4	11.9	8.6
Mar.	57.7	3.02	19.9	14.0	11.1
Apr.	60.5	3.15	20.1	15.7	11.2
May	107	3.29	18.5	13.8	10.3
Jun.	121	2.79	18.8	9.36	10.5
Jul.	42.5	1.83	9.99	6.87	5.6
Aug.	61.5	0.77	7.54	5.45	4.2
Sep.	38.3	1.85	8.48	5.91	4.7
Annual	34.4	3.80	14.8	13.9	–

Magnitude and probability of annual instantaneous peak flow based on 47 years of record, 1961-2007						
Discharge, in ft ³ /s, for indicated recurrence interval, in years, and exceedence probability, in percent						
2	5	10	25	50	100	500
50%	20%	10%	4%	2%	1%	0.2%
743	1,910	3,100	5,150	7,100	9,460	16,800

Oklahoma weighted skew = -0.108

Duration table of daily mean flow for period of record, 1961-2007															
Discharge, in ft ³ /s, which was equaled or exceeded for indicated percent of time															
1%	2%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%
115	75.2	43.1	28.6	22.2	18.1	13.4	10.5	8.32	6.94	5.73	4.54	3.29	2.55	1.79	1.30

Magnitude and probability of annual low flow based on period of record, 1963-2007				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	2.86	1.27	0.70	0.22
3	3.08	1.34	0.72	0.28
7	3.60	1.59	0.77	0.30
10	4.14	1.80	0.81	0.34
30	4.40	2.31	1.66	1.23
60	4.60	2.89	2.26	1.83

Magnitude and probability of annual low flow based on period of record, 1962-2007 spring season, April 1 through May 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	7.12	3.80	2.47	1.64
3	7.44	4.01	2.63	1.76
7	7.91	4.35	2.93	2.01
10	8.24	4.56	3.10	2.16
30	10.9	6.27	4.66	3.64
60	15.6	9.39	7.25	5.88

Magnitude and probability of annual low flow based on period of record, 1962-2006 summer season, June 1 through October 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	3.00	1.41	0.80	0.29
3	3.28	1.47	0.81	0.42
7	3.60	1.59	0.77	0.33
10	4.34	1.93	0.87	0.36
30	4.40	2.37	1.69	1.24
60	4.61	2.89	2.29	1.89

Magnitude and probability of annual low flow based on period of record, 1962-2007 winter season, November 1 through March 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	5.18	2.81	1.84	1.23
3	5.32	2.94	1.97	1.34
7	5.51	3.17	2.21	1.58
10	5.60	3.32	2.39	1.77
30	7.01	4.47	3.47	2.78
60	8.78	5.51	4.24	3.38

ARKANSAS RIVER BASIN

07195855 FLINT CREEK NEAR WEST SILOAM SPRINGS, OKLA.

LOCATION. – Lat 36°12'58", long 94°36'15", referenced to North American Datum of 1927, in NE ¼ NE ¼ sec. 14, T.20 N., R.25 E., Delaware County, Okla., Hydrologic Unit 11110103, on left bank 800 ft downstream from county bridge, 1.4 mi upstream from Sagar Creek, 2.5 mi from Arkansas-Oklahoma State line, northwest of West Siloam Springs, Oklahoma.

DRAINAGE AREA. – 59.8 mi².

PERIOD OF RECORD. – October 1979 to current year.

REMARKS. – Flow regulated by Lake Siloam Springs and Little Flint Creek Reservoir, 4.5 miles upstream. Flow is also affected by sewage discharge from the city of Gentry.

REGULATED STREAMFLOW PERIOD

[ft³/s, cubic feet per second; %, percent; monthly values may not add to 100]

Monthly and annual mean, median, maximum and minimum discharges, and average percent of annual runoff, based on period of record, 1980-2007					
Month	Maximum	Minimum	Mean	Median	Average % of Annual Runoff
Oct.	198	3.48	52.9	34.2	9.6
Nov.	148	3.86	53.4	47.6	9.6
Dec.	219	6.62	67.6	52.1	12.3
Jan.	233	3.88	60.8	54.0	11.0
Feb.	160	4.37	62.2	37.4	11.2
Mar.	176	7.04	58.6	28.0	10.6
Apr.	143	7.43	30.9	17.2	5.6
May	250	20.7	17.2	13.8	3.1
Jun.	337	8.78	19.0	12.5	3.4
Jul.	164	2.79	25.6	14.5	4.7
Aug.	70.2	0.77	46.8	26.6	8.5
Sep.	132	1.80	58.4	40.5	10.5
Annual	97.9	9.47	46.0	45.3	–

Magnitude and probability of annual instantaneous peak flow based on 28 years of record, 1980-2007						
Discharge, in ft ³ /s, for indicated recurrence interval, in years, and exceedence probability, in percent						
2	5	10	25	50	100	500
50%	20%	10%	4%	2%	1%	0.2%
1,230	3,390	5,560	9,200	12,600	16,500	27,700

station skew = -0.303

Duration table of daily mean flow for period of record, 1980-2007															
Discharge, in ft ³ /s, which was equaled or exceeded for indicated percent of time															
1%	2%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%
336	230	140	99.4	76.2	61.1	43.4	32.9	25.3	19.3	14.8	11.1	6.77	4.72	2.99	1.94

Magnitude and probability of annual low flow based on period of record, 1981-2007				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	5.38	2.16	1.19	0.68
3	5.68	2.36	1.34	0.79
7	6.32	2.74	1.59	0.96
10	6.70	3.10	1.87	1.17
30	8.57	4.40	2.82	1.86
60	10.8	5.82	3.93	2.73

Magnitude and probability of annual low flow based on period of record, 1980-2007 spring season, April 1 through May 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	21.4	11.2	7.47	5.12
3	23.1	12.4	8.26	5.68
7	26.0	13.8	9.21	6.32
10	27.2	14.6	9.84	6.82
30	35.6	18.4	12.5	8.85
60	49.6	28.1	20.8	16.3

Magnitude and probability of annual low flow based on period of record, 1980-2006 summer season, June 1 through October 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	5.64	2.26	1.24	0.70
3	5.93	2.47	1.39	0.81
7	6.59	2.86	1.64	0.98
10	6.97	3.22	1.93	1.20
30	8.95	4.62	2.94	1.91
60	10.9	5.83	3.93	2.73

Magnitude and probability of annual low flow based on period of record, 1980-2007 winter season, November 1 through March 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	13.4	6.82	4.42	2.96
3	13.9	7.30	4.87	3.36
7	15.4	8.00	5.35	3.71
10	15.7	8.20	5.56	3.93
30	21.3	10.6	6.95	4.76
60	26.6	13.0	8.55	5.88

ARKANSAS RIVER BASIN

07195865 SAGER CREEK NEAR WEST SILOAM SPRINGS, OKLA.

LOCATION. – Lat 36°12'06", long 94°36'18", referenced to North American Datum of 1927, in NE ¼ NE ¼ sec. 23, T.20 N., R.25 E., Delaware County, Okla., Hydrologic Unit 11110103, on right bank 1.4 mi upstream from Flint Creek, 2.4 mi northeast of West Siloam Springs.

DRAINAGE AREA. – 18.9 mi².

PERIOD OF RECORD. – October 1996 to current year.

REMARKS. – Low flow sustained in part by sewage effluent from Siloam Springs, Arkansas.

UNREGULATED STREAMFLOW PERIOD

[ft³/s, cubic feet per second; %, percent; monthly values may not add to 100]

Monthly and annual mean, median, maximum and minimum discharges, and average percent of annual runoff, based on period of record, 1997-2007					
Month	Maximum	Minimum	Mean	Median	Average % of Annual Runoff
Oct.	16.2	5.76	8.71	7.86	3.4
Nov.	54.7	5.73	20.3	13.1	7.8
Dec.	35.2	6.01	19.2	15.6	7.4
Jan.	90.4	6.56	27.0	14.4	10.4
Feb.	90.3	6.72	26.4	17.9	10.2
Mar.	44.0	8.31	26.2	23.2	10.1
Apr.	59.1	9.80	23.4	17.4	9.0
May	59.6	10.2	26.9	23.2	10.4
Jun.	198	8.65	36.6	19.2	14.1
Jul.	126	5.70	23.2	9.56	9.0
Aug.	21.3	4.58	10.9	8.79	4.2
Sep.	25.1	5.14	10.3	8.39	4.0
Annual	29.4	10.9	21.6	21.2	–

Magnitude and probability of annual instantaneous peak flow based on 11 years of record, 1997-2007						
Discharge, in ft ³ /s, for indicated recurrence interval, in years, and exceedence probability, in percent						
2	5	10	25	50	100	500
50%	20%	10%	4%	2%	1%	0.2%
1,640	2,720	3,500	4,550	5,360	6,190	8,210

Oklahoma weighted skew = -0.208

Duration table of daily mean flow for period of record, 1997-2007															
Discharge, in ft ³ /s, which was equaled or exceeded for indicated percent of time															
1%	2%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%
192	114	61.9	38.2	27.4	22.2	17.0	14.0	11.7	9.58	8.04	6.91	5.63	4.78	3.98	3.48

Magnitude and probability of annual low flow based on period of record, 1998-2007				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	3.58	2.58	2.14	1.80
3	4.12	3.04	2.54	2.14
7	4.72	3.66	3.14	2.73
10	4.74	3.67	3.17	2.77
30	5.68	4.68	4.16	3.75
60	6.56	5.58	5.16	4.86

Magnitude and probability of annual low flow based on period of record, 1997-2007 spring season, April 1 through May 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	7.83	5.86	5.07	4.50
3	8.52	6.51	5.70	5.13
7	9.31	7.21	6.60	6.25
10	9.88	7.38	6.61	6.16
30	13.6	9.95	8.86	8.21
60	20.4	13.9	11.7	10.4

Magnitude and probability of annual low flow based on period of record, 1997-2006 summer season, June 1 through October 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	3.71	2.63	2.15	1.80
3	4.30	3.12	2.56	2.14
7	4.95	3.77	3.18	2.73
10	4.97	3.78	3.21	2.77
30	5.76	4.72	4.18	3.75
60	6.89	5.85	5.36	4.98

Magnitude and probability of annual low flow based on period of record, 1997-2007 winter season, November 1 through March 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	5.85	4.36	3.75	3.32
3	6.58	5.00	4.37	3.92
7	7.43	5.64	4.88	4.30
10	7.84	5.83	4.95	4.34
30	10.4	7.44	6.07	5.05
60	12.9	9.08	7.34	6.05

ARKANSAS RIVER BASIN

07196000 FLINT CREEK NEAR KANSAS, OKLA.

LOCATION. – Lat 36°11'11", long 94°42'24", referenced to North American Datum of 1927, in SW ¼ NW ¼ sec. 25, T.20 N., R.24 E., Delaware County, Okla., Hydrologic Unit 11110103, upstream from bridge on U.S. Highway 412, at left bank 6.0 mi southeast of Kansas, 6.0 mi downstream from Sager Creek, and at mile 2.2.

DRAINAGE AREA. – 110 mi².

PERIOD OF RECORD. – October 1955 to September 1976, April 1979 to September 1990, October 1992 to current year.

REMARKS. – Some regulation from Lake Siloam Springs and Little Flint Creek Reservoir. Small diversion above station for irrigation.

UNREGULATED STREAMFLOW PERIOD

[ft³/s, cubic feet per second; %, percent; monthly values may not add to 100]

Monthly and annual mean, median, maximum and minimum discharges, and average percent of annual runoff, based on period of record, 1956-2007					
Month	Maximum	Minimum	Mean	Median	Average % of Annual Runoff
Oct.	416	0.73	68.1	32.4	4.9
Nov.	850	9.87	125	48.0	9.0
Dec.	624	11.4	124	73.4	8.9
Jan.	488	10.3	115	79.5	8.3
Feb.	439	16.4	121	88.8	8.8
Mar.	593	11.5	169	106	12.2
Apr.	577	13.0	173	140	12.5
May	783	37.5	176	106	12.7
Jun.	1,066	25.1	145	67.3	10.5
Jul.	339	11.7	66.3	47.2	4.8
Aug.	369	4.84	44.4	31.8	3.2
Sep.	416	1.27	56.8	32.9	4.1
Annual	296	22.3	116	104	—

Magnitude and probability of annual instantaneous peak flow based on 52 years of record, 1956-2007						
Discharge, in ft ³ /s, for indicated recurrence interval, in years, and exceedence probability, in percent						
2	5	10	25	50	100	500
50%	20%	10%	4%	2%	1%	0.2%
3,830	10,000	16,100	26,200	35,400	46,200	77,200

Oklahoma weighted skew = -0.257

Duration table of daily mean flow for period of record, 1956-2007															
Discharge, in ft ³ /s, which was equaled or exceeded for indicated percent of time															
1%	2%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%
986	652	369	232	171	134	96.0	72.2	55.5	42.6	32.8	25.5	18.6	14.4	11.2	8.24

Magnitude and probability of annual low flow based on period of record, 1957-2007				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	19.1	10.0	6.06	3.64
3	19.7	10.4	6.23	3.72
7	20.4	10.7	6.51	3.92
10	21.0	11.2	6.75	4.05
30	24.8	12.9	7.78	4.66
60	29.8	15.8	9.75	6.04

Magnitude and probability of annual low flow based on period of record, 1956-2007 spring season, April 1 through May 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	50.2	31.0	23.6	18.7
3	52.8	32.2	24.4	19.1
7	57.3	34.2	25.4	19.6
10	59.9	35.4	26.1	20.1
30	90.0	48.7	34.6	25.8
60	136	76.1	56.8	44.7

Magnitude and probability of annual low flow based on period of record, 1956-2006 summer season, June 1 through October 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	19.2	10.0	6.06	3.64
3	19.7	10.4	6.23	3.72
7	20.4	10.7	6.51	3.92
10	21.1	11.2	6.75	4.05
30	25.2	13.0	7.78	4.66
60	30.3	15.8	9.75	6.04

Magnitude and probability of annual low flow based on period of record, 1956-2007 winter season, November 1 through March 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	33.0	16.7	10.4	6.66
3	34.4	17.4	10.8	6.82
7	36.5	18.4	11.4	7.24
10	36.7	18.6	12.0	7.99
30	42.9	23.6	17.1	13.0
60	53.5	28.2	20.2	15.2

ARKANSAS RIVER BASIN

07196500 ILLINOIS RIVER NEAR TAHLEQUAH, OKLA.

LOCATION. – Lat 35°55'22", long 94°55'24", referenced to North American Datum of 1927, in SE ¼ NE ¼ sec. 26, T.17 N., R.22 E., Cherokee County, Okla., Hydrologic Unit 11110103, near center of channel on downstream side of pier of bridge, 0.2 mi downstream from U.S. Highway 62, 2.2 mi northeast of Tahlequah, 6.5 mi upstream from Baron Fork, and at mile 55.8.

DRAINAGE AREA. – 959 mi².

PERIOD OF RECORD. – October 1935 to current year. Monthly discharge only for some periods, published in WSP 1311.

UNREGULATED STREAMFLOW PERIOD

[ft³/s, cubic feet per second; %, percent; monthly values may not add to 100]

Monthly and annual mean, median, maximum and minimum discharges, and average percent of annual runoff, based on period of record, 1936-2007					
Month	Maximum	Minimum	Mean	Median	Average % of Annual Runoff
Oct.	5,222	7.05	515	251	4.6
Nov.	4,659	75.3	893	398	8.0
Dec.	4,258	77.5	915	486	8.2
Jan.	3,969	74.0	903	580	8.1
Feb.	4,661	113	1,117	889	10.0
Mar.	6,695	148	1,413	991	12.6
Apr.	6,864	151	1,546	1,249	13.8
May	8,397	189	1,600	1,080	14.3
Jun.	5,993	80.1	1,038	685	9.3
Jul.	2,491	22.9	513	324	4.6
Aug.	3,907	10.5	351	236	3.1
Sep.	1,913	3.15	362	247	3.2
Annual	1,980	193	929	917	–

Magnitude and probability of annual instantaneous peak flow based on 92 historic years of record, 1916-2007						
Discharge, in ft ³ /s, for indicated recurrence interval, in years, and exceedence probability, in percent						
2	5	10	25	50	100	500
50%	20%	10%	4%	2%	1%	0.2%
19,600	38,100	53,200	75,000	93,200	113,000	164,000

Oklahoma weighted skew = -0.192

Duration table of daily mean flow for period of record, 1936-2007															
Discharge, in ft ³ /s, which was equaled or exceeded for indicated percent of time															
1%	2%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%
8,870	5,620	3,140	1,980	1,470	1,150	800	581	422	310	238	180	123	90.2	59.7	39.2

Magnitude and probability of annual low flow based on period of record, 1937-2007				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	135	49.0	21.0	5.50
3	148	59.0	24.5	8.10
7	159	69.5	29.0	10.5
10	169	71.0	31.0	12.5
30	175	79.8	40.3	19.7
60	197	94.9	53.8	30.3

Magnitude and probability of annual low flow based on period of record, 1936-2007 spring season, April 1 through May 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	393	225	160	117
3	409	233	165	120
7	441	248	175	127
10	479	265	185	134
30	782	426	305	230
60	1,270	726	540	423

Magnitude and probability of annual low flow based on period of record, 1936-2006 summer season, June 1 through October 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	135	49.0	21.0	5.50
3	148	59.0	24.5	8.10
7	159	69.5	29.0	10.5
10	169	71.0	31.0	12.5
30	180	79.8	40.3	19.7
60	210	97.5	54.5	30.5

Magnitude and probability of annual low flow based on period of record, 1936-2007 winter season, November 1 through March 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	198	115	85.2	66.0
3	203	119	89.0	69.6
7	212	125	94.2	74.7
10	220	129	97.5	77.4
30	276	154	115	90.1
60	372	195	139	105

ARKANSAS RIVER BASIN

07196900 BARON FORK AT DUTCH MILLS, ARK.

LOCATION. – Lat 35°52'48", long 94°29'11", referenced to North American Datum of 1927, in NE ¼ NE ¼ SE ¼ sec. 21, T.14 N., R.33 W., Washington County, Ark., Hydrologic Unit 11110103, near right bank on downstream side of bridge on State Hwy 59 at Dutch Mills, 2.2 mi downstream from Fly Creek, and 2.9 mi upstream from Arkansas-Oklahoma State line.

DRAINAGE AREA. – 40.6 mi².

PERIOD OF RECORD. – April 1958 to current year. Prior to Oct 1969, published as "Barren Fork at Dutch Mills."

UNREGULATED STREAMFLOW PERIOD

[ft³/s, cubic feet per second; %, percent; monthly values may not add to 100]

Monthly and annual mean, median, maximum and minimum discharges, and average percent of annual runoff, based on period of record, 1958-2007					
Month	Maximum	Minimum	Mean	Median	Average % of Annual Runoff
Oct.	218	0.09	26.8	5.36	5.0
Nov.	347	0.51	57.5	26.3	10.6
Dec.	221	0.56	53.1	32.9	9.8
Jan.	258	0.53	50.8	31.3	9.4
Feb.	163	0.87	55.1	40.3	10.2
Mar.	205	2.35	72.4	55.0	13.4
Apr.	310	5.33	77.3	64.3	14.3
May	307	3.25	65.4	48.8	12.1
Jun.	366	0.35	38.4	19.9	7.1
Jul.	131	0.22	17.4	5.02	3.2
Aug.	62.0	0.00	7.48	2.77	1.4
Sep.	242	0.08	19.0	2.40	3.5
Annual	104	3.99	44.6	43.9	–

Magnitude and probability of annual instantaneous peak flow based on 50 years of record, 1958-2007						
Discharge, in ft ³ /s, for indicated recurrence interval, in years, and exceedence probability, in percent						
2	5	10	25	50	100	500
50%	20%	10%	4%	2%	1%	0.2%
7,040	13,600	18,500	25,000	29,900	34,800	46,300

Oklahoma weighted skew = -0.484

Duration table of daily mean flow for period of record, 1958-2007															
Discharge, in ft ³ /s, which was equaled or exceeded for indicated percent of time															
1%	2%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%
591	335	156	90.5	63.2	47.9	30.9	20.4	12.8	7.13	3.91	2.10	0.92	0.43	0.22	0.10

Magnitude and probability of annual low flow based on period of record, 1959-2007				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	0.32	0.08	0.00	0.00
3	0.38	0.09	0.00	0.00
7	0.60	0.10	0.00	0.00
10	0.58	0.10	0.02	0.00
30	0.97	0.31	0.14	0.06
60	1.64	0.56	0.30	0.18

Magnitude and probability of annual low flow based on period of record, 1958-2007 spring season, April 1 through May 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	8.03	3.88	2.57	1.80
3	8.77	4.23	2.79	1.94
7	10.3	4.95	3.26	2.27
10	11.0	5.42	3.70	2.69
30	25.4	11.7	7.90	5.71
60	59.7	30.7	20.7	14.6

Magnitude and probability of annual low flow based on period of record, 1958-2006 summer season, June 1 through October 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	0.33	0.08	0.00	0.00
3	0.38	0.09	0.00	0.00
7	0.63	0.10	0.00	0.00
10	0.59	0.10	0.02	0.00
30	0.98	0.31	0.14	0.06
60	1.81	0.60	0.32	0.18

Magnitude and probability of annual low flow based on period of record, 1958-2007 winter season, November 1 through March 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	3.29	1.01	0.47	0.22
3	4.09	1.07	0.53	0.29
7	4.20	1.40	0.74	0.42
10	4.64	1.63	0.89	0.53
30	9.74	3.30	1.74	0.99
60	17.4	5.83	2.96	1.60

ARKANSAS RIVER BASIN

07196973 PEACHEATER CREEK AT CHRISTIE, OKLA.

LOCATION. – Lat 35°57'17", long 94°41'46", referenced to North American Datum of 1927, in SW 1/4 NE 1/4 sec. 13, T.17 N., R.24 E., Adair County, Okla., Hydrologic Unit 11110103, on the left downstream wingwall of bridge on U.S. Highway 62, 0.4 mi upstream from Baron Fork, 9.1 mi west of Westville, and 19.3 mi east of Tahlequah.

DRAINAGE AREA. – 25 mi².

PERIOD OF RECORD. – September 1992 to September 2003.

UNREGULATED STREAMFLOW PERIOD

[ft³/s, cubic feet per second; %, percent; monthly values may not add to 100]

Monthly and annual mean, median, maximum and minimum discharges, and average percent of annual runoff, based on period of record, 1993-2003					
Month	Maximum	Minimum	Mean	Median	Average % of Annual Runoff
Oct.	35.1	0.03	8.58	3.18	2.8
Nov.	90.5	1.31	28.9	11.3	9.6
Dec.	103	4.07	33.2	24.1	11.0
Jan.	82.2	6.20	25.6	13.5	8.5
Feb.	119	4.73	34.5	26.3	11.5
Mar.	65.4	4.85	39.9	41.8	13.3
Apr.	67.1	11.2	35.4	30.8	11.8
May	105	13.4	38.5	21.0	12.8
Jun.	126	6.14	34.3	25.8	11.4
Jul.	41.5	0.24	10.7	9.88	3.6
Aug.	7.73	0.00	3.18	3.50	1.1
Sep.	45.1	0.00	7.79	2.15	2.6
Annual	48.2	7.18	25.0	23.9	–

Magnitude and probability of annual instantaneous peak flow based on 10 years of record, 1994-2003						
Discharge, in ft ³ /s, for indicated recurrence interval, in years, and exceedence probability, in percent						
2	5	10	25	50	100	500
50%	20%	10%	4%	2%	1%	0.2%
1,360	2,370	3,100	4,050	4,770	5,480	7,160

Oklahoma weighted skew = -0.383

Duration table of daily mean flow for period of record, 1992-2003															
Discharge, in ft ³ /s, which was equaled or exceeded for indicated percent of time															
1%	2%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%
217	146	90.2	60.7	45.8	35.2	22.9	15.8	11.3	7.64	4.51	2.45	0.25	0.00	0.00	0.00

Magnitude and probability of annual low flow based on period of record, 1994-2003				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00
30	0.24	0.00	0.00	0.00
60	1.07	0.08	0.01	0.00

Magnitude and probability of annual low flow based on period of record, 1993-2003 spring season, April 1 through May 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	9.16	5.59	4.38	3.61
3	9.68	5.91	4.62	3.79
7	10.3	6.51	5.23	4.42
10	11.0	6.93	5.57	4.71
30	19.4	11.5	9.00	7.46
60	29.4	18.2	14.6	12.4

Magnitude and probability of annual low flow based on period of record, 1993-2002 summer season, June 1 through October 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00
30	0.25	0.00	0.00	0.00
60	1.24	0.09	0.01	0.00

Magnitude and probability of annual low flow based on period of record, 1993-2003 winter season, November 1 through March 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	2.12	0.61	0.26	0.12
3	2.40	0.91	0.51	0.30
7	3.69	1.36	0.72	0.40
10	4.01	1.60	0.92	0.55
30	7.69	3.30	2.05	1.35
60	13.2	6.68	4.63	3.39

ARKANSAS RIVER BASIN

07197000 BARON FORK AT ELDON, OKLA.

LOCATION. – Lat 35°55'16", long 94°50'18", referenced to North American Datum of 1927, in NE ¼ SE ¼ sec. 27, T.17 N., R.23 E., Cherokee County, Okla., Hydrologic Unit 11110103, on downstream left abutment of bridge on State Highway 51, 0.4 mi southeast of Eldon, 6.0 mi downstream from Tyner Creek, and at mile 8.8.

DRAINAGE AREA. – 307 mi².

PERIOD OF RECORD.—October 1948 to current year. Prior to October 1970 published as "Barren Fork at Eldon".

UNREGULATED STREAMFLOW PERIOD

[ft³/s, cubic feet per second; %, percent; monthly values may not add to 100]

Monthly and annual mean, median, maximum and minimum discharges, and average percent of annual runoff, based on period of record, 1949-2007					
Month	Maximum	Minimum	Mean	Median	Average % of Annual Runoff
Oct.	2,077	1.96	164	61.6	4.2
Nov.	1,641	10.4	319	119	8.2
Dec.	1,692	14.0	322	152	8.3
Jan.	1,602	14.6	330	190	8.4
Feb.	1,441	24.6	391	297	10.0
Mar.	1,702	43.3	517	414	13.2
Apr.	2,105	61.9	572	508	14.6
May	2,605	62.5	607	416	15.6
Jun.	2,290	25.0	340	181	8.7
Jul.	903	8.75	154	88.8	3.9
Aug.	437	3.80	75.5	51.5	1.9
Sep.	927	3.10	114	44.0	2.9
Annual	734	55.7	325	325	—

Magnitude and probability of annual instantaneous peak flow based on 60 years of record, 1948-2007						
Discharge, in ft ³ /s, for indicated recurrence interval, in years, and exceedence probability, in percent						
2	5	10	25	50	100	500
50%	20%	10%	4%	2%	1%	0.2%
15,300	26,900	35,600	47,500	56,800	66,500	90,400

Oklahoma weighted skew = -0.233

Duration table of daily mean flow for period of record, 1949-2007															
Discharge, in ft ³ /s, which was equaled or exceeded for indicated percent of time															
1%	2%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%
3,430	2,220	1,160	698	503	390	257	181	125	83.7	57.8	40.0	24.2	16.0	8.82	5.39

Magnitude and probability of annual low flow based on period of record, 1950-2007				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	20.2	9.78	6.22	4.12
3	20.8	10.1	6.40	4.24
7	21.9	10.6	6.72	4.43
10	22.8	11.0	6.98	4.60
30	27.8	13.1	8.14	5.26
60	35.6	16.4	10.1	6.46

Magnitude and probability of annual low flow based on period of record, 1949-2007 spring season, April 1 through May 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	121	71.9	52.8	40.0
3	125	74.4	55.0	42.1
7	136	79.7	58.7	44.9
10	144	83.9	61.8	47.5
30	253	140	105	83.7
60	485	285	215	171

Magnitude and probability of annual low flow based on period of record, 1949-2006 summer season, June 1 through October 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	20.3	9.78	6.22	4.12
3	20.9	10.1	6.40	4.24
7	22.1	10.6	6.72	4.43
10	23.0	11.0	6.98	4.60
30	28.3	13.1	8.14	5.26
60	37.7	17.2	10.5	6.70

Magnitude and probability of annual low flow based on period of record, 1949-2007 winter season, November 1 through March 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	48.2	21.6	13.4	8.73
3	49.8	22.3	13.8	8.96
7	55.0	24.5	15.1	9.83
10	56.1	25.4	16.1	10.8
30	77.9	34.3	22.0	15.2
60	117	48.2	29.6	19.4

ARKANSAS RIVER BASIN

07197360 CANEY CREEK NEAR BARBER, OKLA.

LOCATION. – Lat 35°47'05", long 94°51'21", referenced to North American Datum of 1927, in SE ¼ SW ¼ sec. 10, T.15 N., R.23 E., Cherokee County, Okla., Hydrologic Unit 11110103, on left downstream bank of county road bridge, 0.9 mi below Negro Jake Hollow, 1.9 mi northeast of Barber, and 0.5 mi upstream from Tenkiller Ferry Lake.

DRAINAGE AREA. – 89.6 mi².

PERIOD OF RECORD. – October 1997 to current year.

UNREGULATED STREAMFLOW PERIOD

[ft³/s, cubic feet per second; %, percent; monthly values may not add to 100]

Monthly and annual mean, median, maximum and minimum discharges, and average percent of annual runoff, based on period of record, 1998-2007					
Month	Maximum	Minimum	Mean	Median	Average % of Annual Runoff
Oct.	129	7.77	31.6	23.9	3.2
Nov.	121	9.78	63.0	50.4	6.3
Dec.	218	8.46	85.6	82.6	8.6
Jan.	536	9.14	157	61.2	15.7
Feb.	492	9.43	106	70.9	10.6
Mar.	316	12.0	133	126	13.4
Apr.	346	13.9	123	83.0	12.3
May	195	36.8	90.4	71.5	9.0
Jun.	514	26.0	96.1	53.4	9.6
Jul.	347	11.8	71.4	18.6	7.2
Aug.	68.6	5.81	23.9	16.4	2.4
Sep.	27.9	10.1	18.0	17.9	1.8
Annual	120	28.3	83.1	91.4	–

Magnitude and probability of annual instantaneous peak flow based on 10 years of record, 1998-2007						
Discharge, in ft ³ /s, for indicated recurrence interval, in years, and exceedence probability, in percent						
2	5	10	25	50	100	500
50%	20%	10%	4%	2%	1%	0.2%
4,760	6,570	7,730	9,170	10,200	11,200	13,600

Oklahoma weighted skew = -0.130

Duration table of daily mean flow for period of record, 1998-2007															
Discharge, in ft ³ /s, which was equaled or exceeded for indicated percent of time															
1%	2%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%
1,010	548	265	163	118	93.6	65.4	49.2	37.2	26.9	19.6	14.8	11.0	8.37	6.73	5.18

Magnitude and probability of annual low flow based on period of record, 1999-2007				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	6.39	3.96	3.06	2.48
3	6.66	4.13	3.19	2.57
7	7.06	4.42	3.44	2.78
10	7.31	4.59	3.57	2.88
30	9.70	6.89	5.70	4.84
60	11.8	9.52	8.56	7.86

Magnitude and probability of annual low flow based on period of record, 1998-2007 spring season, April 1 through May 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	26.1	14.7	11.0	8.74
3	27.3	15.6	11.8	9.54
7	29.4	16.6	12.4	9.92
10	30.9	17.4	13.1	10.5
30	43.8	23.0	16.6	12.7
60	88.2	54.0	42.2	34.7

Magnitude and probability of annual low flow based on period of record, 1998-2006 summer season, June 1 through October 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	6.39	3.96	3.06	2.48
3	6.66	4.13	3.19	2.57
7	7.06	4.42	3.44	2.78
10	7.31	4.59	3.57	2.88
30	9.71	6.90	5.70	4.84
60	12.0	9.64	8.66	7.94

Magnitude and probability of annual low flow based on period of record, 1998-2007 winter season, November 1 through March 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	16.6	10.1	7.83	6.33
3	18.6	10.8	8.06	6.30
7	20.5	11.8	8.76	6.78
10	21.7	12.4	9.14	7.01
30	35.6	18.3	12.0	8.16
60	52.6	26.5	16.6	10.5

ARKANSAS RIVER BASIN

07198000 ILLINOIS RIVER NEAR GORE, OKLA.

LOCATION. – Lat 35°34'23", long 95°04'07", referenced to North American Datum of 1927, in NE ¼ SW ¼ sec. 27, T.13 N., R.21 E., Sequoyah County, Okla., Hydrologic Unit 11110103, on right bank 4.2 mi downstream from Tenkiller Ferry Dam, 4.5 mi northeast of Gore, and at mile 8.5.

DRAINAGE AREA. – 1,626 mi².

PERIOD OF RECORD. – March 1924 to April 1926, April 1939 to current year. Monthly discharge only for some periods, published in WSP 1311.

REMARKS. – Except for 16 mi² intervening area, flow completely regulated since July 1952 by Tenkiller Ferry Lake (station 07197500).

UNREGULATED STREAMFLOW PERIOD

[ft³/s, cubic feet per second; %, percent; monthly values may not add to 100]

Monthly and annual mean, median, maximum and minimum discharges, and average percent of annual runoff, based on period of record, 1940-1951					
Month	Maximum	Minimum	Mean	Median	Average % of Annual Runoff
Oct.	3,440	149	793	409	3.4
Nov.	6,845	216	1,554	424	6.6
Dec.	5,700	199	1,311	564	5.6
Jan.	3,829	197	1,550	965	6.6
Feb.	7,030	237	2,515	1,862	10.7
Mar.	12,140	247	2,925	1,629	12.4
Apr.	13,760	1,046	3,510	2,193	14.9
May	12,590	787	4,544	3,437	19.3
Jun.	5,675	378	2,302	1,973	9.8
Jul.	2,272	219	1,064	1,014	4.5
Aug.	5,807	203	940	446	4.0
Sep.	1,493	154	564	466	2.4
Annual	3,654	504	1,959	1,847	–

Magnitude and probability of annual instantaneous peak flow based on 12 years of record, 1940-1951						
Discharge, in ft ³ /s, for indicated recurrence interval, in years, and exceedence probability, in percent						
2	5	10	25	50	100	500
50%	20%	10%	4%	2%	1%	0.2%
42,500	79,500	111,000	158,000	199,000	246,000	377,000

Oklahoma weighted skew = 0.059

Duration table of daily mean flow for period of record, 1939-1951																
Discharge, in ft ³ /s, which was equaled or exceeded for indicated percent of time																
1%	2%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	
19,400	12,900	7,180	4,120	2,960	2,310	1,560	1,100	749	521	382	297	211	172	137	121	

Magnitude and probability of annual low flow based on period of record, 1941-1951				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	183	125	101	85.3
3	186	128	104	87.9
7	194	137	113	96.6
10	201	143	118	101
30	230	175	151	133
60	278	206	178	153

Magnitude and probability of annual low flow based on period of record, 1940-1951 spring season, April 1 through May 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	617	393	308	250
3	629	406	322	266
7	664	469	402	360
10	854	545	437	367
30	1,660	1,080	870	727
60	3,400	1,940	1,430	1,110

Magnitude and probability of annual low flow based on period of record, 1940-1950 summer season, June 1 through October 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	187	125	101	85.3
3	190	128	104	87.9
7	199	137	113	96.6
10	207	143	118	101
30	252	178	151	133
60	357	232	185	153

Magnitude and probability of annual low flow based on period of record, 1940-1951 winter season, November 1 through March 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	242	169	143	126
3	268	183	152	130
7	274	189	157	135
10	280	194	161	139
30	347	240	200	173
60	456	289	229	189

ARKANSAS RIVER BASIN

07198000 ILLINOIS RIVER NEAR GORE, OKLA.—Continued

REGULATED STREAMFLOW PERIOD

[ft³/s, cubic feet per second; %, percent; monthly values may not add to 100]

Monthly and annual mean, median, maximum and minimum discharges and average percent of annual runoff, based on period of record, 1953-2007					
Month	Maximum	Minimum	Mean	Median	Average % of Annual Runoff
Oct.	8,165	39.0	744	427	4.1
Nov.	4,538	30.5	1,161	516	6.4
Dec.	9,652	28.4	1,594	956	8.8
Jan.	6,204	27.7	1,676	1,124	9.3
Feb.	5,740	21.8	1,620	1,451	9.0
Mar.	5,358	34.6	1,962	1,478	10.9
Apr.	8,340	59.3	2,500	2,275	13.9
May	10,940	105	2,166	1,558	12.0
Jun.	7,177	111	1,719	1,176	9.5
Jul.	8,046	84.9	1,390	970	7.7
Aug.	2,358	70.5	877	810	4.9
Sep.	2,174	36.4	626	455	3.5
Annual	3,199	62.6	1,502	1,500	—

Magnitude and probability of annual instantaneous peak flow based on 55 years of record, 1953-2007						
Discharge, in ft ³ /s, for indicated recurrence interval, in years, and exceedence probability, in percent						
2	5	10	25	50	100	500
15%	5%	10%	4%	2%	1%	0.2%
8,200	11,900	14,300	17,200	19,200	21,100	25,400

station skew = -0.361

Duration table of daily mean flow for period of record, 1953-2007															
Discharge, in ft ³ /s, which was equaled or exceeded for indicated percent of time															
1%	2%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%
11,000	8,990	5,310	3,730	2,960	2,320	1,710	1,240	868	516	238	125	72.9	52.4	33.5	24.0

Magnitude and probability of annual low flow based on period of record, 1954-2007				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	26.9	13.4	8.70	5.89
3	45.6	22.3	14.6	9.92
7	81.5	37.0	23.0	15.0
10	94.1	42.6	26.9	17.9
30	182	78.6	48.0	31.0
60	271	134	91.6	66.0

Magnitude and probability of annual low flow based on period of record, 1953-2007 spring season, April 1 through May 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	56.6	25.3	18.8	15.6
3	167	55.1	31.7	20.3
7	359	109	56.3	31.8
10	495	160	83.3	46.9
30	1,170	413	216	119
60	1,880	707	378	211

Magnitude and probability of annual low flow based on period of record, 1953-2006 summer season, June 1 through October 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	37.3	18.7	12.4	8.55
3	59.8	33.6	24.7	19.1
7	98.4	52.7	38.0	29.0
10	115	60.9	44.0	33.8
30	261	142	99.7	73.3
60	433	240	165	117

Magnitude and probability of annual low flow based on period of record, 1953-2007 winter season, November 1 through March 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	36.2	18.8	12.8	9.13
3	73.0	29.4	18.1	12.0
7	149	54.6	30.7	18.6
10	176	63.6	35.1	20.8
30	412	131	64.0	33.4
60	647	237	129	75.2

ARKANSAS RIVER BASIN

07228500 CANADIAN RIVER AT BRIDGEPORT, OKLA.

LOCATION. – Lat 35°32'37", long 98°19'03", referenced to North American Datum of 1927, in SE ¼ NW ¼ sec. 1, T.12 N., R.11 W., Caddo County, Okla., Hydrologic Unit 11090202, on downstream side of bridge on U.S. Highway 281, 3.3 mi east of Bridgeport, 1.6 mi downstream from Lumpmouth Creek, and at mile 263.3.

DRAINAGE AREA. – 25,276 mi², of which 4,801 mi² is probably noncontributing.

PERIOD OF RECORD. – October 1944 to September 1964; October 1969 to current year.

REMARKS. – Flow regulated since October 1964 by Lake Meredith (station 07227900) located in Texas.

UNREGULATED STREAMFLOW PERIOD

[ft³/s, cubic feet per second; %, percent; monthly values may not add to 100]

Monthly and annual mean, median, maximum and minimum discharges, and average percent of annual runoff, based on period of record, 1945-1964					
Month	Maximum	Minimum	Mean	Median	Average % of Annual Runoff
Oct.	3,764	4.45	529	189	9.5
Nov.	1,029	8.83	120	39.5	2.1
Dec.	1,639	10.1	161	43.9	2.9
Jan.	654	14.3	129	78.0	2.3
Feb.	1,115	17.4	235	117	4.2
Mar.	526	15.0	184	150	3.3
Apr.	1,213	13.9	231	85.6	4.1
May	4,958	18.4	1,266	330	22.6
Jun.	2,920	7.21	878	676	15.7
Jul.	4,938	2.26	902	244	16.1
Aug.	2,355	0.00	542	223	9.7
Sep.	1,528	0.27	418	165	7.5
Annual	1,153	63.4	469	439	–

Magnitude and probability of annual instantaneous peak flow based on 20 years of record, 1945-1964						
Discharge, in ft ³ /s, for indicated recurrence interval, in years, and exceedence probability, in percent						
2	5	10	25	50	100	500
50%	20%	10%	4%	2%	1%	0.2%
26,200	45,300	60,000	80,900	97,900	116,000	164,000

Water Resources Council weighted skew = -0.057

Duration table of daily mean flow for period of record, 1945-1964																
Discharge, in ft ³ /s, which was equaled or exceeded for indicated percent of time																
1%	2%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	
8,610	5,010	2,120	878	453	268	135	75.4	47.0	30.5	21.4	15.1	7.50	2.45	0.03	0.01	

Magnitude and probability of annual low flow based on period of record, 1946-1964				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	1.61	0.00	0.00	0.00
3	2.27	0.00	0.00	0.00
7	3.08	0.00	0.00	0.00
10	3.64	0.00	0.00	0.00
30	9.07	1.99	0.00	0.00
60	22.2	8.29	4.65	2.22

Magnitude and probability of annual low flow based on period of record, 1945-1964 spring season, April 1 through May 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	14.2	7.71	5.60	4.30
3	15.9	9.12	6.86	5.44
7	18.2	11.2	8.93	7.52
10	19.8	12.5	10.3	8.97
30	54.7	19.6	12.4	8.78
60	276	71.3	35.1	19.6

Magnitude and probability of annual low flow based on period of record, 1945-1963 summer season, June 1 through October 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	1.63	0.00	0.00	0.00
3	2.28	0.00	0.00	0.00
7	3.08	0.00	0.00	0.00
10	3.64	0.00	0.00	0.00
30	10.6	1.99	0.00	0.00
60	71.6	13.2	5.08	2.22

Magnitude and probability of annual low flow based on period of record, 1945-1964 winter season, November 1 through March 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	12.7	7.20	5.43	4.34
3	14.4	8.83	7.07	5.98
7	17.8	10.6	8.32	6.87
10	18.8	11.4	8.99	7.51
30	24.8	14.7	11.5	9.49
60	35.4	17.2	13.1	10.9

ARKANSAS RIVER BASIN

07228500 CANADIAN RIVER AT BRIDGEPORT, OKLA.—Continued

REGULATED STREAMFLOW PERIOD

[ft³/s, cubic feet per second; %, percent; monthly values may not add to 100]

Monthly and annual mean, median, maximum and minimum discharges and average percent of annual runoff, based on period of record, 1970-2007					
Month	Maximum	Minimum	Mean	Median	Average % of Annual Runoff
Oct.	2,412	7.01	196	70.2	5.2
Nov.	1,525	17.5	227	106	6.0
Dec.	870	16.2	198	108	5.2
Jan.	1,162	22.5	251	199	6.6
Feb.	878	36.8	275	215	7.2
Mar.	1,907	60.8	482	317	12.7
Apr.	1,795	20.5	403	291	10.6
May	4,188	13.4	734	438	19.3
Jun.	2,342	12.9	549	353	14.4
Jul.	500	3.18	128	86.2	3.4
Aug.	2,120	0.14	184	37.8	4.8
Sep.	1,386	1.14	178	37.6	4.7
Annual	1,018	70.2	317	270	—

Magnitude and probability of annual instantaneous peak flow based on 38 years of record, 1970-2007						
Discharge, in ft ³ /s, for indicated recurrence interval, in years, and exceedence probability, in percent						
2	5	10	25	50	100	500
15%	5%	10%	4%	2%	1%	0.2%
15,700	32,800	45,800	62,800	75,600	88,100	116,000

station skew = -0.612

Duration table of daily mean flow for period of record, 1970-2007															
Discharge, in ft ³ /s, which was equaled or exceeded for indicated percent of time															
1%	2%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%
3,620	1,980	941	583	430	359	256	183	130	84.8	49.8	26.7	13.4	6.80	2.54	0.25

Magnitude and probability of annual low flow based on period of record, 1971-2007				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	6.74	1.78	0.00	0.00
3	7.25	1.96	0.00	0.00
7	8.19	2.28	0.00	0.00
10	8.97	2.30	0.00	0.00
30	16.3	2.32	0.48	0.07
60	23.2	7.39	3.90	2.26

Magnitude and probability of annual low flow based on period of record, 1970-2007 spring season, April 1 through May 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	75.2	28.1	15.5	9.15
3	80.2	31.1	17.6	10.5
7	93.3	37.7	21.7	13.2
10	104	42.3	24.2	14.5
30	193	84.1	50.7	32.1
60	419	169	97.9	60.0

Magnitude and probability of annual low flow based on period of record, 1970-2006 summer season, June 1 through October 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	6.74	1.78	0.00	0.00
3	7.25	1.96	0.00	0.00
7	8.19	2.28	0.00	0.00
10	8.97	2.70	0.00	0.00
30	16.3	2.32	0.48	0.07
60	23.5	7.39	3.90	2.26

Magnitude and probability of annual low flow based on period of record, 1970-2007 winter season, November 1 through March 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	49.3	19.4	11.7	7.64
3	53.0	21.4	13.1	8.66
7	57.8	24.0	14.9	9.93
10	59.9	24.8	15.4	10.3
30	83.0	37.9	25.0	17.6
60	115	53.3	35.2	24.8

ARKANSAS RIVER BASIN

07229100 CANADIAN RIVER NEAR NOBLE, OKLA.

LOCATION. – Lat 35°04'55", long 97°22'52", referenced to North American Datum of 1927, in N ½ sec. 14, T.7 N., R.2 W., McClain County, Okla., Hydrologic Unit 11090202, on right bank 80 ft upstream from the Atchinson, Topeka, and Santa Fe Railway Co. bridge, 3.6 mi upstream from Chouteau Creek, 3.8 mi south of Noble, and at mile 190.8.

DRAINAGE AREA. – 25,911 mi², of which 4,801 mi² is probably noncontributing.

PERIOD OF RECORD. – October 1959 to June 1961 (published as "at Purcell"), October 1963 to September 1975.

REMARKS. – Flow regulated since October 1964 by Lake Meredith (station 07227900) located in Texas. Extreme low flow sustained by sewage from city of Norman.

REGULATED STREAMFLOW PERIOD

[ft³/s, cubic feet per second; %, percent; monthly values may not add to 100]

Monthly and annual mean, median, maximum and minimum discharges, and average percent of annual runoff, based on period of record, 1965-1975					
Month	Maximum	Minimum	Mean	Median	Average % of Annual Runoff
Oct.	326	6.01	161	207	3.7
Nov.	1,824	8.76	379	262	8.8
Dec.	580	12.4	177	140	4.1
Jan.	593	28.3	193	148	4.5
Feb.	989	17.3	265	206	6.1
Mar.	2,848	37.4	608	155	14.1
Apr.	2,213	19.8	492	319	11.4
May	2,995	15.1	755	478	17.5
Jun.	2,418	25.0	726	572	16.8
Jul.	974	6.12	148	58.3	3.4
Aug.	483	9.11	122	25.7	2.8
Sep.	1,247	9.10	294	185	6.8
Annual	1,027	128	360	235	–

Magnitude and probability of annual instantaneous peak flow based on 11 years of record, 1965-1975						
Discharge, in ft ³ /s, for indicated recurrence interval, in years, and exceedence probability, in percent						
2	5	10	25	50	100	500
50%	20%	10%	4%	2%	1%	0.2%
15,700	24,100	30,800	40,400	48,400	57,300	81,800

station skew = 0.343

Duration table of daily mean flow for period of record, 1965-1975																
Discharge, in ft ³ /s, which was equaled or exceeded for indicated percent of time																
1%	2%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	
4,990	3,100	1,490	763	480	331	202	136	90.6	57.5	33.7	14.8	6.25	4.78	3.01	2.17	

Magnitude and probability of annual low flow based on period of record, 1966-1975				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	2.96	1.34	0.81	0.51
3	3.14	1.41	0.85	0.53
7	3.37	1.61	1.00	0.65
10	3.44	1.76	1.18	0.83
30	7.70	4.32	3.39	2.85
60	19.7	8.40	5.44	3.80

Magnitude and probability of annual low flow based on period of record, 1965-1975 spring season, April 1 through May 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	17.6	5.97	3.51	2.30
3	19.7	6.72	3.92	2.54
7	24.8	8.32	4.75	3.00
10	31.2	10.4	5.82	3.57
30	184	64.0	33.0	17.9
60	447	128	57.0	26.8

Magnitude and probability of annual low flow based on period of record, 1965-1974 summer season, June 1 through October 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	2.96	1.34	0.81	0.51
3	3.14	1.41	0.85	0.53
7	3.37	1.61	1.00	0.65
10	3.44	1.76	1.18	0.83
30	7.70	4.32	3.39	2.85
60	20.7	8.50	5.44	3.80

Magnitude and probability of annual low flow based on period of record, 1965-1975 winter season, November 1 through March 31				
Period (consecutive days)	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	20.9	9.74	6.72	5.01
3	25.6	11.4	7.57	5.45
7	40.0	17.1	10.4	6.76
10	43.2	18.1	10.8	6.90
30	59.7	24.5	15.1	10.0
60	93.9	39.3	23.2	14.5