

Water-Data Report 2009

**07194500 ARKANSAS RIVER NEAR MUSKOGEE, OK**

Robert S. Kerr Reservoir Basin  
Dirty-Greenleaf Subbasin

LOCATION.--Lat 35°46'10", long 95°17'49" referenced to North American Datum of 1927, Muskogee County, OK, 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 mi<sup>2</sup> of which 12,541 mi<sup>2</sup> probably is noncontributing.

**SURFACE-WATER RECORDS**

PERIOD OF RECORD.--October 1926 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.

REVISED RECORDS.--WSP 1341: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 471.38 ft above NGVD of 1929. See WSP 1921 for history of changes prior to Feb. 21, 1931.

REMARKS.--No estimated daily discharge. Records good except for discharges less than 1000 ft<sup>3</sup>/s which are poor. 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). Flow regulated by Chouteau Lock and Dam upstream and Webbers Falls Lock and Dam downstream since 1970.

## 07194500 ARKANSAS RIVER NEAR MUSKOGEE, OK—Continued

**DISCHARGE, CUBIC FEET PER SECOND**  
**WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009**  
**DAILY MEAN VALUES**

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	53,200	21,700	7,160	21,900	5,030	13,100	83,000	117,000	64,400	25,300	13,300	16,000
2	48,500	17,700	4,520	23,200	7,550	13,400	82,400	115,000	57,800	22,800	10,700	17,900
3	37,400	16,900	10,400	21,800	6,180	9,150	65,100	108,000	55,600	22,000	15,900	17,000
4	36,800	10,200	7,380	22,200	8,450	7,180	59,700	115,000	50,300	20,700	16,300	19,100
5	33,900	12,300	7,380	22,800	7,010	6,600	61,200	112,000	49,600	20,300	16,700	17,600
6	32,000	16,000	5,930	18,500	4,720	7,210	56,600	112,000	51,100	15,600	17,200	16,400
7	36,100	28,900	5,840	17,200	3,690	5,450	49,100	109,000	52,100	18,200	17,400	12,100
8	32,500	35,100	3,310	16,200	2,840	4,850	45,500	109,000	49,200	18,300	16,700	9,810
9	31,300	30,800	6,150	16,100	2,360	7,580	48,800	106,000	41,900	20,500	14,100	16,600
10	27,700	31,200	6,900	15,100	3,580	11,000	48,400	106,000	34,500	23,800	17,500	39,100
11	26,100	35,100	7,650	14,900	34,000	13,500	46,100	105,000	33,400	18,900	14,300	49,000
12	24,200	33,300	7,390	16,500	45,300	12,500	41,800	107,000	37,500	16,800	12,500	42,000
13	21,500	24,400	3,660	14,000	39,400	15,600	54,200	107,000	39,900	15,100	9,430	41,100
14	19,100	18,000	5,250	10,200	34,200	12,000	53,500	98,100	35,700	15,800	8,260	41,000
15	16,800	19,500	7,390	10,500	33,900	11,300	43,900	101,000	29,700	16,200	7,010	36,500
16	18,700	23,300	7,530	9,230	29,700	13,500	42,500	105,000	29,300	15,100	7,400	40,700
17	19,700	23,500	12,500	7,580	30,500	11,100	45,800	111,000	33,300	11,400	9,430	45,700
18	24,500	13,500	12,100	6,310	23,800	8,320	49,600	103,000	37,200	11,500	10,500	45,600
19	25,100	12,200	4,850	7,200	22,800	9,570	58,800	108,000	44,200	11,200	10,900	46,000
20	25,700	13,400	3,640	8,460	24,800	8,540	61,300	113,000	43,800	10,800	21,100	44,400
21	25,800	13,300	4,610	7,790	24,100	6,880	70,500	110,000	39,500	9,020	32,800	47,100
22	28,200	8,980	5,840	9,550	22,800	6,360	80,900	110,000	35,900	13,600	43,000	84,300
23	32,600	10,600	7,130	8,970	17,900	8,000	89,900	108,000	32,200	14,100	49,000	65,900
24	38,000	7,910	5,960	5,640	12,100	8,460	83,000	106,000	34,100	22,800	46,600	55,000
25	33,900	8,720	6,620	5,040	15,500	15,700	56,400	105,000	32,600	26,600	41,800	52,000
26	34,000	11,300	5,320	8,560	17,100	16,800	54,600	104,000	29,600	23,800	30,100	46,800
27	33,300	8,550	4,850	6,880	16,200	22,500	55,500	103,000	27,200	25,900	27,100	44,400
28	22,700	7,560	9,700	6,160	13,300	24,300	61,400	103,000	26,800	25,200	21,200	41,800
29	23,000	3,350	10,800	7,870	---	28,600	80,400	101,000	26,800	25,500	18,500	40,100
30	20,700	4,560	15,600	9,480	---	49,300	101,000	95,800	26,200	24,700	16,700	40,200
31	23,100	---	23,400	7,130	---	68,600	---	80,200	---	22,600	15,600	---
<b>Total</b>	906,100	521,830	236,760	382,950	508,810	456,950	1,830,900	3,293,100	1,181,400	584,120	609,030	1,131,210
<b>Mean</b>	29,230	17,390	7,637	12,350	18,170	14,740	61,030	106,200	39,380	18,840	19,650	37,710
<b>Max</b>	53,200	35,100	23,400	23,200	45,300	68,600	101,000	117,000	64,400	26,600	49,000	84,300
<b>Min</b>	16,800	3,350	3,310	5,040	2,360	4,850	41,800	80,200	26,200	9,020	7,010	9,810
<b>Ac-ft</b>	1,797,000	1,035,000	469,600	759,600	1,009,000	906,400	3,632,000	6,532,000	2,343,000	1,159,000	1,208,000	2,244,000

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2003 - 2009, BY WATER YEAR (WY)**

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>Mean</b>	10,460	9,894	10,380	20,020	20,670	31,160	43,290	63,180	59,670	50,940	21,840	21,810
<b>Max</b>	29,230	27,040	25,550	62,800	36,520	71,520	86,100	106,200	120,900	129,900	52,780	45,920
<b>(WY)</b>	(2009)	(2005)	(2005)	(2005)	(2008)	(2004)	(2008)	(2009)	(2008)	(2007)	(2007)	(2008)
<b>Min</b>	1,020	693	1,993	1,779	3,001	1,821	3,059	14,030	6,028	4,916	4,439	2,648
<b>(WY)</b>	(2007)	(2007)	(2006)	(2006)	(2006)	(2006)	(2006)	(2005)	(2006)	(2006)	(2006)	(2006)

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SUMMARY STATISTICS

	Calendar Year 2008		Water Year 2009		Water Years 2003 - 2009	
<b>Annual total</b>	18,650,560		11,643,160			
<b>Annual mean</b>	50,960		31,900		<sup>a</sup> 30,490	
<b>Highest annual mean</b>					48,890 2008	
<b>Lowest annual mean</b>					6,025 2006	
<b>Highest daily mean</b>	139,000	Jun 10	117,000	May 1	<sup>e</sup> 176,000	Jul 7, 2007
<b>Lowest daily mean</b>	3,310	Dec 8	2,360	Feb 9	<sup>b</sup> 260	Nov 14, 2006
<b>Annual seven-day minimum</b>	5,520	Dec 19	4,660	Feb 4	343	Nov 21, 2006
<b>Maximum peak flow</b>			124,000	May 2	<sup>c,e</sup> 176,000	Jul 7, 2007
<b>Maximum peak stage</b>			28.40	May 6	<sup>d</sup> 31.62	Jul 6,7, 2007
<b>Annual runoff (ac-ft)</b>	36,990,000		23,090,000		22,090,000	
<b>10 percent exceeds</b>	110,000		81,500		85,300	
<b>50 percent exceeds</b>	34,200		22,600		17,500	
<b>90 percent exceeds</b>	10,300		7,010		2,120	

- <sup>a</sup> Prior gage operation, water years 1926-70, 19,520 ft<sup>3</sup>/s.
- <sup>b</sup> Minimum daily prior to regulation, 66 ft<sup>3</sup>/s. Oct. 9, 1956.
- <sup>c</sup> Maximum discharge for period of record, 700,000 ft<sup>3</sup>/s, May 21, 1943.
- <sup>d</sup> Maximum gage height for period of record, 48.20 ft, May 21, 1943.
- <sup>e</sup> Estimated.

