

Water-Data Report 2009

**07191500 NEOSHO RIVER NEAR CHOUTEAU, OK**

Neosho Basin  
Lower Neosho Subbasin

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, OK, 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 mi<sup>2</sup>.

**SURFACE-WATER RECORDS**

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

REVISED RECORDS.--WSP 1117: Drainage area. WDR OK-86-1: 1979.

GAGE.--Water-stage recorder. Datum of gage is 554.00 ft above NGVD of 1929 (levels by U.S. Army Corps of Engineers). Prior to Apr. 3, 1941, nonrecording gage at bridge on State Highway 33, 8.2 mi downstream, at datum 17.63 ft lower. Apr. 3, 1941 to Sept. 30, 1950, and Oct. 1963 to Apr. 6, 1964, at site 2.5 mi downstream, at datum 2.17 ft lower. Supplemental water-stage recorder Oct. 4, 1963, to July 10, 1973, at site 8.2 mi downstream.

REMARKS.--Records fair except for estimated periods which are poor. Some regulation since 1940 by Lake O' The Cherokees (station 07190000), and completely regulated since 1963 by Lake Hudson (station 07191400).

## 07191500 NEOSHO RIVER NEAR CHOUTEAU, OK—Continued

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

[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	16,300	4,030	1,910	14,800	2,890	3,060	22,000	45,800	22,700	9,950	413	5,710
2	15,700	2,900	2,490	14,500	2,550	3,490	21,400	e62,400	17,400	9,210	385	3,560
3	16,100	2,250	1,940	9,550	2,240	3,500	18,700	e67,200	14,300	9,340	5,860	3,530
4	16,100	2,730	3,210	7,520	4,100	3,360	17,400	e61,900	14,600	8,550	7,470	9,890
5	16,300	2,240	2,500	9,890	3,490	2,810	18,100	e50,600	16,500	8,260	905	12,400
6	16,100	4,340	1,500	5,140	2,950	2,990	19,200	e37,000	15,800	10,700	757	9,130
7	16,700	12,100	2,260	5,390	2,990	3,090	14,000	e30,100	15,200	12,800	4,320	8,080
8	14,100	16,200	2,030	6,430	2,920	2,460	14,400	e40,200	13,200	8,040	3,760	6,570
9	14,400	13,700	1,160	6,890	3,260	3,590	9,940	e50,300	10,100	7,640	671	12,100
10	13,300	5,090	3,540	7,570	3,750	1,730	14,200	e50,400	10,700	7,860	2,700	19,000
11	14,100	6,380	1,690	8,100	13,000	4,160	14,200	e50,400	14,000	6,800	2,300	22,700
12	14,600	3,650	2,410	5,130	15,900	8,600	13,500	e50,000	13,900	5,880	2,950	22,600
13	3,980	5,350	2,130	4,680	15,600	8,270	14,500	e53,800	13,700	5,780	2,930	21,500
14	2,360	5,180	1,940	1,810	15,600	5,660	17,900	e47,900	13,900	5,540	2,560	25,400
15	2,970	5,650	3,500	3,320	15,400	4,990	17,800	e40,400	13,600	3,990	3,390	28,100
16	4,920	5,180	2,510	1,640	15,300	4,830	17,300	e36,900	19,000	5,040	4,680	28,300
17	6,660	5,140	2,000	2,220	15,200	5,130	17,700	e36,300	16,900	2,710	2,110	28,400
18	9,010	4,390	1,830	1,770	15,100	5,080	15,700	e35,800	17,400	2,560	5,650	21,800
19	4,560	2,940	2,060	3,600	15,200	5,430	16,000	e35,300	17,700	3,610	5,590	17,800
20	3,350	4,930	3,010	3,760	15,100	3,180	23,400	e30,600	14,200	2,760	5,590	12,400
21	2,880	4,110	2,480	2,960	15,100	3,850	31,600	e24,200	14,100	4,920	12,200	17,700
22	1,670	2,560	2,150	2,730	15,100	4,620	31,900	e22,000	19,000	12,000	12,700	25,500
23	8,310	1,770	1,880	2,310	11,800	3,580	32,000	e17,300	19,500	14,900	12,500	29,300
24	13,000	1,620	460	2,590	4,670	5,430	26,400	e16,900	19,700	15,700	13,000	26,000
25	15,600	2,310	2,550	2,870	5,120	11,000	22,500	e16,800	20,000	13,600	14,500	21,500
26	15,100	2,380	1,150	2,270	5,100	15,000	23,200	e16,900	20,400	16,200	14,300	15,300
27	6,510	3,130	3,680	3,680	4,940	15,100	16,900	19,800	14,000	8,010	14,300	14,900
28	3,590	2,000	11,800	2,480	3,710	15,400	15,100	21,700	13,700	8,040	14,200	15,500
29	3,640	3,300	11,000	1,670	---	15,200	19,800	21,800	13,700	8,100	14,500	17,000
30	2,460	2,920	11,300	2,090	---	15,000	26,900	20,700	13,800	7,870	14,500	18,200
31	2,660	---	14,000	2,940	---	17,300	---	22,000	---	918	14,600	---
<b>Total</b>	297,030	140,470	108,070	152,300	248,080	206,890	583,640	1,133,400	472,700	247,278	216,291	519,870
<b>Mean</b>	9,582	4,682	3,486	4,913	8,860	6,674	19,450	36,560	15,760	7,977	6,977	17,330
<b>Max</b>	16,700	16,200	14,000	14,800	15,900	17,300	32,000	67,200	22,700	16,200	14,600	29,300
<b>Min</b>	1,670	1,620	460	1,640	2,240	1,730	9,940	16,800	10,100	918	385	3,530
<b>Ac-ft</b>	589,200	278,600	214,400	302,100	492,100	410,400	1,158,000	2,248,000	937,600	490,500	429,000	1,031,000

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 2009, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>Mean</b>	5,448	7,951	7,475	6,828	7,565	12,190	13,510	13,590	13,910	9,318	4,780	4,904
<b>Max</b>	59,840	40,780	40,400	28,740	23,640	39,260	46,000	40,650	48,020	30,560	15,140	28,460
<b>(WY)</b>	(1987)	(1986)	(1993)	(2005)	(1985)	(1973)	(1973)	(1995)	(1995)	(2007)	(1993)	(1993)
<b>Min</b>	169	83.3	87.5	189	79.4	75.8	160	122	735	571	603	365
<b>(WY)</b>	(1964)	(1964)	(1964)	(1981)	(1964)	(1964)	(1971)	(1964)	(1972)	(2006)	(1991)	(2006)

07191500 NEOSHO RIVER NEAR CHOUTEAU, OK—Continued

SUMMARY STATISTICS

	Calendar Year 2008		Water Year 2009		Water Years 1964 - 2009	
<b>Annual total</b>	6,829,763		4,326,019			
<b>Annual mean</b>	18,660		11,850		<sup>a</sup> 8,954	
<b>Highest annual mean</b>					22,240	1993
<b>Lowest annual mean</b>					1,655	2006
<b>Highest daily mean</b>	<sup>e</sup> 95,800	Apr 12	<sup>e</sup> 67,200	May 3	154,000	Jun 11, 1995
<b>Lowest daily mean</b>	326	Jan 6	385	Aug 2	<sup>b</sup> 12	Nov 13, 1963
<b>Annual seven-day minimum</b>	1,950	Dec 20	1,950	Dec 20	45	Feb 21, 1964
<b>Maximum peak flow</b>			<sup>e</sup> 67,200	May 3	<sup>c</sup> 164,000	Jun 11, 1995
<b>Maximum peak stage</b>			<sup>d</sup> 24.56	May 4	<sup>d</sup> 36.29	Jun 11, 1995
<b>Annual runoff (ac-ft)</b>	13,550,000		8,581,000		6,487,000	
<b>10 percent exceeds</b>	39,000		22,700		22,100	
<b>50 percent exceeds</b>	15,000		9,130		4,820	
<b>90 percent exceeds</b>	2,510		2,260		203	

<sup>a</sup> Since regulation by Lake Hudson.

<sup>b</sup> Minimum daily for period of record, caused by closure of Robert S. Kerr Dam.

<sup>c</sup> Maximum discharge for period of record, 400,000 ft<sup>3</sup>/s, May 20, 1943, gage height 45.00 ft, site and datum then in use, rating curve extended above 140,000 ft<sup>3</sup>/s on basis of slope-area measurement of peak flow.

<sup>d</sup> Occurred during backwater.

<sup>e</sup> Estimated.

