07185000 NEOSHO RIVER NEAR COMMERCE, OK

Neosho Basin
Lake O' Cherokees Subbasin

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, OK, 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 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--June 1939 to current year.

REVISED RECORDS.--WSP 1117: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 748.97 ft above NGVD of 1929 (U.S. Army Corps of Engineers' datum). Since February 1989, supplementary water-stage recorder 1000 ft to the left at same datum used when flow exceeds 21 ft GH.

REMARKS.--Records fair except for estimated periods which are poor. Flow regulated to some extent since 1963 by John Redmond Reservoir in Kansas, 190 mi upstream. U.S. Army Corps of Engineers' satellite telemeter at station.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 20,000 ft^3/s and (or) maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Mar 19	2100	24,800	16.53
Apr 2	0200	24,900	16.60
Apr 12	0300	33,900	19.38
Apr 25	0600	25,000	16.67
May 10	0300	*39,200	*20.21
May 29	1300	36,700	19.87
Jun 2	2200	26,700	17.37
Jun 7	1200	21,600	14.96
Jun 12	1100	38,900	20.17
Jun 30	1600	22,400	15.34
Sep 16	1500	34,700	19.51

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008
DAILY MEAN VALUES
[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	266	295	57	1,060	1,390	6,520	21,100	9,360	8,650	14,400	5,040	1,460
2	209	290	58	1,020	1,380	5,760	22,000	8,490	24,200	7,450	4,670	887
3	408	245	59	931	1,370	10,600	8,560	11,000	20,400	6,430	4,330	727
4	185	188	50	758	1,450	15,500	6,780	12,300	5,790	5,850	4,340	1,820
5	148	169	50	948	1,600	16,500	3,450	4,470	3,480	5,540	4,190	4,380
6	122	167	54	1,090	3,010	9,460	1,990	4,560	9,290	5,450	3,860	3,160
7	124	152	63	1,060	6,710	8,190	3,650	8,450	20,300	5,200	3,630	2,200
8	409	126	66	1,130	6,750	8,080	5,840	32,200	10,100	5,030	6,000	2,210
9	308	104	415	1,370	3,480	7,800	7,750	36,300	17,900	5,050	5,490	1,610
10	165	85	665	1,410	2,650	7,460	27,200	37,700	32,800	5,340	9,650	1,220
11	117	78	1,780	1,530	2,380	7,060	32,500	28,600	36,200	5,710	15,300	977
12	94	80	4,510	1,430	2,400	6,700	32,500	14,900	37,900	4,280	14,600	1,490
13	79	76	2,830	1,230	2,230	5,870	19,600	6,700	31,900	4,930	6,480	11,900
14	65	70	1,230	1,130	2,420	4,510	e5,210	6,010	32,700	5,590	7,880	28,100
15	64	69	750	1,070	2,530	3,900	e3,040	7,890	34,300	5,730	4,870	32,000
16	61	68	684	1,030	2,280	2,790	e6,020	6,910	32,800	5,440	5,050	34,000
17	57	69	459	1,040	6,670	2,260	e6,150	6,250	17,900	6,470	5,860	30,100
18	684	68	365	1,060	8,180	7,340	e7,330	5,860	7,770	6,490	6,900	11,900
19	949	63	349	1,270	9,130	23,100	e7,410	5,540	4,290	6,350	6,920	8,660
20	702	62	301	1,510	6,160	21,500	e6,720	5,250	6,780	6,200	6,640	9,880
21	546	69	248	1,470	3,550	e8,740	e6,060	5,250	4,790	6,040	6,220	9,830
22	757	67	231	1,410	7,700	e4,750	5,850	6,730	4,600	5,890	5,750	9,520
23	1,590	58	224	1,400	8,080	e3,920	5,190	6,980	11,700	5,790	4,770	9,250
24	2,050	56	275	1,310	8,250	8,210	18,000	7,170	13,300	5,570	2,830	9,000
25	1,750	55	318	1,320	9,690	8,360	23,800	8,970	8,650	5,380	1,650	8,780
26	1,150	61	353	1,460	9,370	7,930	16,100	10,200	6,910	5,230	1,070	8,580
27	608	63	349	1,600	10,100	7,470	11,300	27,800	5,780	5,130	913	8,370
28	410	57	335	1,530	9,690	5,950	10,300	34,500	e6,300	4,990	814	8,180
29	432	57	341	1,510	7,440	3,280	9,950	36,000	e17,400	4,840	766	7,980
30	302	56	798	1,430	---	2,740	9,740	26,700	e21,900	4,760	3,780	7,740
31	261	---	1,080	1,420	---	5,340	---	8,020	---	4,960	3,900	---
Total	15,072	3,123	19,347	38,937	148,040	247,590	351,090	437,060	496,780	181,510	164,163	275,911
Mean	486	104	624	1,256	5,105	7,987	11,700	14,100	16,560	5,855	5,296	9,197
Max	2,050	295	4,510	1,600	10,100	23,100	32,500	37,700	37,900	14,400	15,300	34,000
Min	57	55	50	758	1,370	2,260	1,990	4,470	3,480	4,280	766	727
Ac-ft	29,900	6,190	38,370	77,230	293,600	491,100	696,400	866,900	985,400	360,000	325,600	547,300

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2008, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	3,017	3,108	2,127	1,939	2,578	4,452	5,513	6,353	7,006	5,118	1,767	2,694
Max	33,400	22,280	17,280	10,090	13,980	21,630	23,270	29,560	27,950	53,350	11,680	16,930
(WY)	(1987)	(1999)	(1993)	(1973)	(1985)	(1973)	(1945)	(1961)	(1995)	(1951)	(1993)	(1951)
Min	0.00	1.60	6.33	8.60	24.9	11.9	62.6	395	290	21.1	0.00	1.52
(WY)	(1957)	(1940)	(1940)	(1957)	(1954)	(1956)	(1981)	(1956)	(1980)	(1954)	(1954)	(1953)

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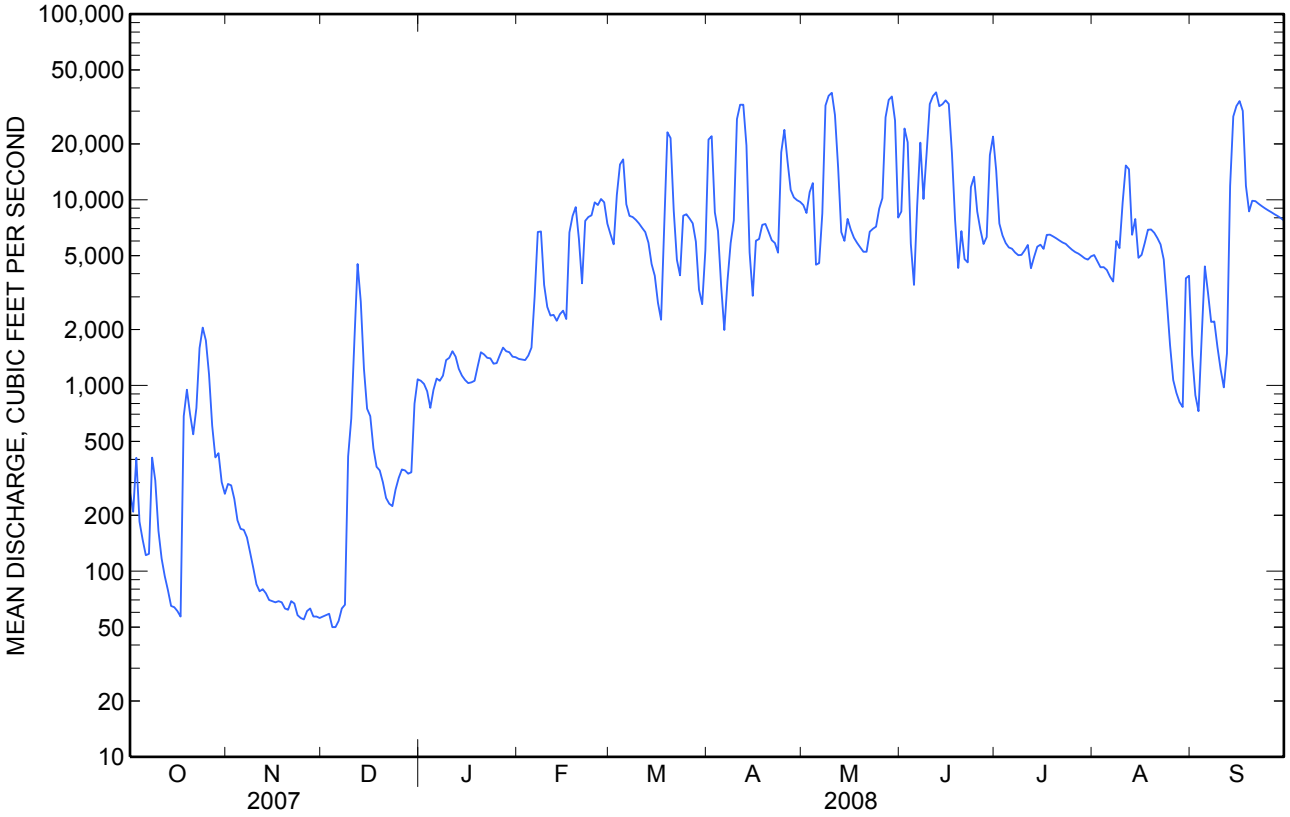
SUMMARY STATISTICS

	Calendar Year 2007		Water Year 2008		Water Years 1940 - 2008	
Annual total	2,010,976		2,378,623			
Annual mean	5,510		6,499		3,807	
Highest annual mean					11,140	1993
Lowest annual mean					246	1953
Highest daily mean	129,000	Jul 3	37,900	Jun 12	251,000	Jul 15, 1951
Lowest daily mean	50	Dec 4,5	50	Dec 4,5	[a]0.00	Aug 21, 1953
Annual seven-day minimum	55	Nov 30	55	Nov 30	0.00	Sep 27, 1953
Maximum peak flow			39,200	May 10	[b]267,000	Jul 15, 1951
Maximum peak stage			20.21	May 10	[c]34.03	Jul 16, 1951
Annual runoff (ac-ft)	3,989,000		4,718,000		2,758,000	
10 percent exceeds	12,600		16,800		11,200	
50 percent exceeds	939		4,760		932	
90 percent exceeds	82		113		59	

[a] In 1953-54 and 1956.

[b] Computed by flood-routing method from hydrograph defined at Miami, mile 144.2, by several discharge measurements, gage height record, and by comparison with computed inflow into Lake O' the Cherokees.

[c] From floodmark.