Water-Data Report 2008

07185090 TAR CREEK NEAR COMMERCE, OK

Neosho Basin
Lake O' Cherokees Subbasin

LOCATION.--Lat 36°56′37″, long 94°51′11″ referenced to North American Datum of 1927, in NW ¼ NE ¼ NW ¼ sec.5, T.28 N., R.23 E., Ottawa County, OK, Hydrologic Unit 11070206, at Highway 69 bridge, 1.0 mi east of Commerce, Ok, 2.0 mile upstream of Garrett Creek and at mile 7.5.

DRAINAGE AREA.--35.3 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1999-2000, 2002-2004, July 2004 to current year.

GAGE.--Water-stage recorder. Datum of gage is 775.16 ft NAVD of 1988.

REMARKS.--Records fair except for estimated daily discharges, which are poor. U.S. Geological Survey satellite telemeter at station.

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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	3.4	3.8	1.5	6.2	5.5	14	812	13	34	19	3.4	2.5
2	8.3	3.6	1.7	5.3	5.8	15	114	34	28	e12	3.4	2.4
3	21	3.3	1.5	5.1	6.0	968	79	38	21	e8.6	3.2	3.8
4	6.3	2.9	1.5	5.5	5.9	296	76	19	15	e7.9	e2.9	100
5	3.9	2.8	1.5	5.9	8.9	81	51	12	11	7.3	e2.7	111
6	3.2	2.5	1.6	5.7	17	44	38	15	14	6.5	e2.6	39
7	3.5	2.4	1.7	5.5	14	31	30	314	13	5.8	7.4	34
8	41	2.2	1.9	21	12	24	194	2,180	10	5.2	4.5	22
9	18	2.0	114	16	9.7	19	299	414	837	6.1	5.3	13
10	7.4	1.8	73	15	8.0	17	2,790	170	826	7.2	31	8.1
11	5.2	1.8	252	11	17	15	437	127	119	7.1	110	7.3
12	4.3	1.8	261	8.9	53	13	110	69	49	5.5	26	11
13	3.8	1.7	99	7.4	49	12	63	37	787	6.0	13	47
14	3.2	1.8	45	6.7	35	14	e41	27	951	4.8	9.2	932
15	4.6	1.6	30	6.4	21	18	e27	24	130	4.1	7.8	286
16	4.2	6.2	20	6.1	61	17	e18	19	58	3.8	6.3	59
17	4.0	3.9	16	6.9	645	15	e13	14	42	3.4	4.9	28
18	5.4	1.9	13	6.7	224	1,190	198	9.8	31	3.4	4.2	19
19	3.9	1.5	11	6.0	75	1,120	104	7.5	23	3.5	3.8	12
20	3.2	1.7	9.4	5.6	42	179	44	5.9	134	3.6	8.3	7.5
21	3.3	1.8	7.8	5.4	e121	88	28	4.8	51	3.5	5.5	5.2
22	6.6	1.7	8.9	5.5	e220	58	22	4.5	31	3.4	4.4	4.6
23	9.2	1.6	9.8	5.3	e96	43	34	3.8	33	3.4	3.8	3.6
24	8.0	1.8	8.9	5.0	69	35	961	68	29	3.4	3.5	3.3
25	6.6	1.9	8.3	4.9	65	29	294	125	22	3.2	2.8	3.1
26	5.7	2.9	7.8	5.3	38	26	81	252	16	3.1	2.3	2.8
27	5.2	2.3	7.7	5.4	28	25	44	1,610	15	3.5	2.9	2.8
28	4.5	1.9	8.8	5.5	22	20	30	317	28	3.3	2.0	2.8
29	4.3	1.6	8.2	5.5	17	19	21	82	74	3.4	2.2	2.5
30	3.9	1.5	7.4	4.8	---	32	17	42	32	4.0	2.5	2.4
31	3.7	---	6.8	5.2	---	518	---	29	---	3.9	2.2	---
Total	218.8	70.2	1,046.7	220.7	1,990.8	4,995	7,070	6,087.3	4,464	168.9	294.0	1,777.7
Mean	7.06	2.34	33.8	7.12	68.6	161	236	196	149	5.45	9.48	59.3
Max	41	6.2	261	21	645	1,190	2,790	2,180	951	19	110	932
Min	3.2	1.5	1.5	4.8	5.5	12	13	3.8	10	3.1	2.0	2.4
Ac-ft	434	139	2,080	438	3,950	9,910	14,020	12,070	8,850	335	583	3,530

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2004 - 2008, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	3.58	10.6	19.7	31.3	38.7	44.8	77.2	106	97.9	12.5	3.40	13.7
Max	7.06	37.0	34.3	98.7	68.6	161	236	196	176	31.5	9.48	59.3
(WY)	(2008)	(2005)	(2005)	(2005)	(2008)	(2008)	(2008)	(2008)	(2007)	(2007)	(2008)	(2008)
Min	0.26	0.65	0.21	0.32	0.32	0.64	11.4	42.5	32.8	3.86	0.82	1.40
(WY)	(2007)	(2006)	(2006)	(2006)	(2006)	(2006)	(2006)	(2005)	(2006)	(2005)	(2006)	(2006)

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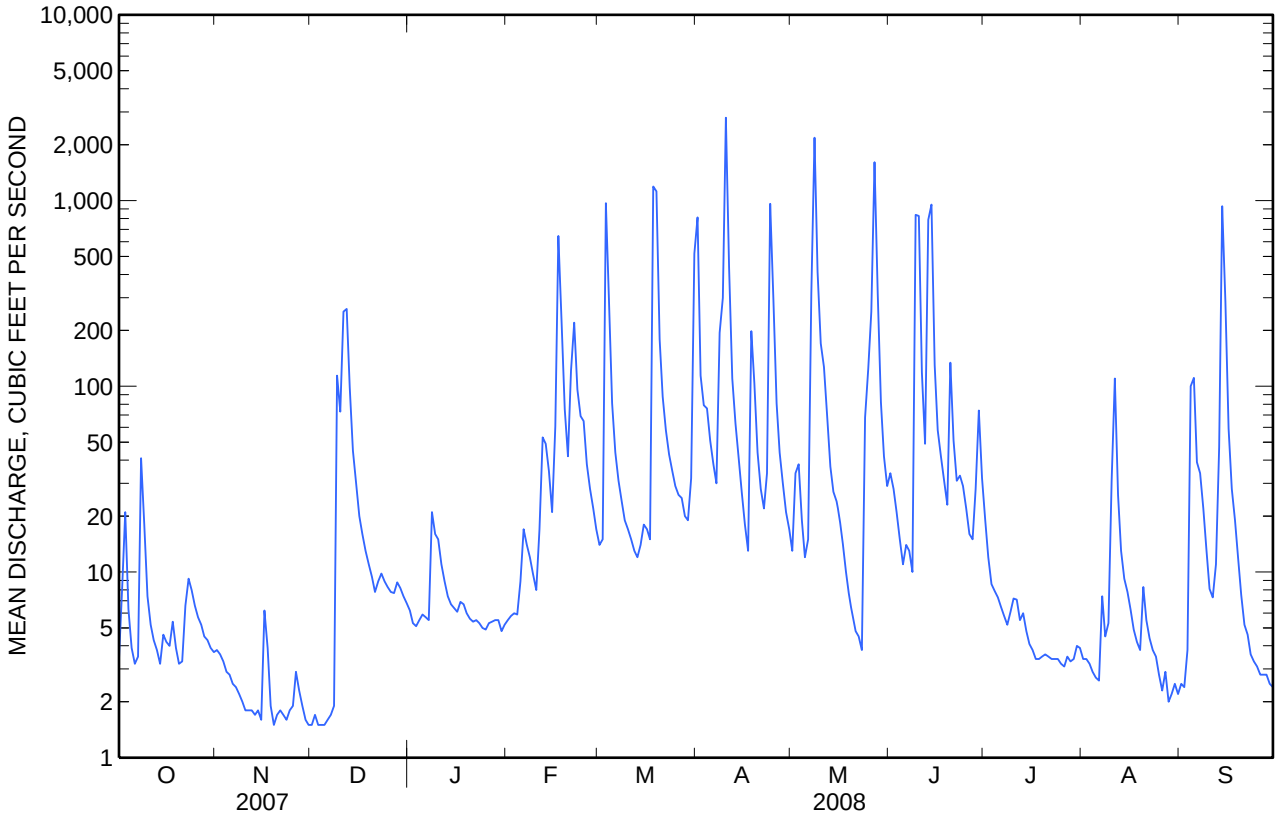
SUMMARY STATISTICS

	Calendar Year 2007		Water Year 2008		Water Years 2004 - 2008	
Annual total	14,965.16		28,404.1			
Annual mean	41.0		77.6		38.4	
Highest annual mean					77.6	2008
Lowest annual mean					9.94	2006
Highest daily mean	1,140	Jun 11	2,790	Apr 10	2,790	Apr 10, 2008
Lowest daily mean	0.89	Sep 3	1.5	At times	0.02	At times
Annual seven-day minimum	0.99	Aug 31	1.5	Nov 29	0.03	Apr 11, 2006
Maximum peak flow			5,020	Apr 10	5,020	Apr 10, 2008
Maximum peak stage			18.13	Apr 10	18.13	Apr 10, 2008
Annual runoff (ac-ft)	29,680		56,340		27,810	
10 percent exceeds	64		122		54	
50 percent exceeds	6.2		8.9		4.5	
90 percent exceeds	1.5		2.5		0.33