



Water-Data Report 2007

07194880 OSAGE CREEK NEAR CAVE SPRINGS, AR

Robert S. Kerr Reservoir Basin
Illinois Subbasin

LOCATION.--Lat 36°16'53", long 94°13'40" referenced to North American Datum of 1927, in NE ¼ NE ¼ sec.36, T.19 N., R.31 W., Benton County, AR, Hydrologic Unit 11110103, at bridge on State Hwy 112, 1.4 mi north of Cave Springs.

DRAINAGE AREA.--34.7 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--Oct 1990 to Oct 1993, May 2000 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,131.59 ft above NGVD of 1929.

REMARKS.—Water-discharge records are poor including estimated daily discharges. Some regulation and diversions by the City of Rogers sewage treatment facility, 1.5 mi upstream. Satellite telemeter at station.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,000 ft³/s and (or) maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov 30	0730	*2,510	*9.10

Minimum discharge, 0.32 ft³/s, Sep 3, gage height, 1.35 ft.

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007
DAILY MEAN VALUES

[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	35	30	199	94	e47	39	23	25	151	135	10	0.87
2	32	30	111	77	e46	37	23	54	288	273	9.6	0.65
3	32	29	63	77	e45	35	22	33	49	210	18	0.48
4	33	29	41	70	e44	33	21	29	38	72	9.8	0.50
5	32	32	37	69	e43	33	23	28	36	55	7.0	4.8
6	31	33	39	62	e42	32	22	26	30	69	6.5	108
7	31	32	36	54	e40	31	22	33	29	47	5.7	189
8	30	32	33	56	e39	31	21	31	53	37	4.8	409
9	30	30	29	59	e38	30	22	26	34	33	3.9	405
10	30	29	26	63	e37	29	22	24	28	33	3.7	63
11	30	29	25	61	e35	29	24	28	33	34	3.2	59
12	30	30	26	92	e150	29	24	26	32	215	2.6	35
13	29	31	25	830	e450	29	57	24	29	139	2.3	35
14	28	31	23	618	e172	28	176	22	27	56	2.1	31
15	30	166	21	334	e117	26	40	41	25	44	1.9	27
16	105	105	21	137	e88	26	33	36	23	41	1.6	26
17	47	57	19	76	e70	26	30	27	23	34	1.3	30
18	38	45	19	53	e60	25	29	24	23	33	1.1	25
19	37	39	17	e40	e50	25	29	23	23	31	0.91	20
20	35	37	26	e30	e45	26	25	22	23	29	1.0	14
21	33	36	57	e200	e42	25	24	22	23	29	0.98	12
22	32	34	37	e100	e41	24	24	22	32	24	0.80	10
23	31	33	32	e66	42	24	24	21	102	24	0.63	8.9
24	31	33	27	e60	50	24	37	21	54	25	0.92	7.3
25	31	29	25	e58	44	22	106	21	33	23	338	20
26	31	29	26	e57	40	22	35	21	44	22	33	30
27	31	31	26	e55	38	22	30	21	128	18	7.1	16
28	30	31	26	e54	39	23	28	21	136	17	3.4	12
29	30	115	25	e52	---	23	26	24	56	14	2.3	8.4
30	30	1,590	208	e50	---	23	25	22	45	13	2.0	13
31	30	---	142	e49	---	22	---	22	---	12	1.2	---
Total	1,065	2,837	1,467	3,753	1,994	853	1,047	820	1,650	1,841	487.34	1,620.90
Mean	34.4	94.6	47.3	121	71.2	27.5	34.9	26.5	55.0	59.4	15.7	54.0
Max	105	1,590	208	830	450	39	176	54	288	273	338	409
Min	28	29	17	30	35	22	21	21	23	12	0.63	0.48
Ac-ft	2,110	5,630	2,910	7,440	3,960	1,690	2,080	1,630	3,270	3,650	967	3,220
Cfsm	0.99	2.73	1.36	3.49	2.05	0.79	1.01	0.76	1.59	1.71	0.45	1.56
In.	1.14	3.04	1.57	4.02	2.14	0.91	1.12	0.88	1.77	1.97	0.52	1.74

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 2007, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	26.7	50.8	59.5	68.2	48.9	43.8	59.4	58.1	62.9	45.7	22.3	33.5
Max	43.5	113	160	172	108	75.8	96.3	120	217	147	37.1	98.4
(WY)	(1991)	(2005)	(1993)	(2005)	(2001)	(1993)	(2002)	(2002)	(2000)	(2004)	(2004)	(1993)
Min	16.6	16.6	13.7	18.0	21.6	22.8	26.6	26.5	21.0	15.8	13.9	16.7
(WY)	(2006)	(2006)	(2006)	(2006)	(2006)	(1992)	(2001)	(2007)	(1991)	(1991)	(1991)	(2005)

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SUMMARY STATISTICS

	Calendar Year 2006		Water Year 2007		Water Years 1991 - 2007	
Annual total	14,246		19,435.24			
Annual mean	39.0		53.2		47.0	
Highest annual mean					77.0	1993
Lowest annual mean					28.3	2006
Highest daily mean	1,590	Nov 30	1,590	Nov 30	1,940	Jul 3, 2004
Lowest daily mean	11	Jan 4	0.48	Sep 3	0.48	Sep 3, 2007
Annual seven-day minimum	12	Jan 1	0.91	Aug 18	0.91	Aug 18, 2007
Maximum peak flow			2,510 Nov 30		a	
Maximum peak stage			9.11 Nov 30		13.04 Jul 3, 2004	
Instantaneous low flow			0.32 Sep 3		0.32 Sep 3, 2007 ^b	
Annual runoff (ac-ft)	28,260		38,550		34,060	
Annual runoff (cfsm)	1.12		1.53		1.35	
Annual runoff (inches)	15.27		20.84		18.41	
10 percent exceeds	51		96		77	
50 percent exceeds	24		30		27	
90 percent exceeds	16		10		16	

^a Undetermined

^b Also Oct 11-12, 18, 20-22, 1991

