Water-Data Report 2012

07160500 SKELETON CREEK NEAR LOVELL, OK

Lower Cimarron Basin
Lower Cimarron-Skeleton Subbasin

LOCATION.--Lat 36°03′36″, long 97°35′05″ referenced to North American Datum of 1927, in NW ¼ SW ¼ sec.1, T.18 N., R.4 W., Logan County, OK, Hydrologic Unit 11050002, on right bank downstream bridge abutment on State Highway 74, 2 mi upstream from Otter Creek, 2.8 mi east of Lovell, and at mile14.6.

DRAINAGE AREA.--412 mi^2, revised. From automated delineation using 10-meter National Elevation Dataset digital elevation model data dated 10/01/2006 and Watershed Boundary Dataset dated 10/01/2006, using Albers Equal-Area Projection, North American Datum 1983.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--October 1949 to September 1993, October 2001 to current year.

REVISED RECORDS.--WDR 2012: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 899.76 ft above NGVD of 1929 (Oklahoma State Highway Department datum). Prior to Dec. 5, 1949, nonrecording gage at site 60 ft downstream at datum 14.70 ft higher. Prior to Oct. 1, 1979, gage at present site and datum 15.00 ft higher, prior to Oct. 1, 2001, 10 ft higher.

REMARKS.--Records rated poor. U.S. Geological Survey satellite telemeter at station.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,300 ft^3/s and (or) maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec 20	1400	2,780	18.77
Feb 4	1115	*5,570	*24.76
Apr 11	2115	4,920	23.42
Apr 15	0300	2,420	18.01
May 1	0400	3,780	20.96

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012
DAILY MEAN VALUES
[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	e7.2	11	17	26	24	34	40	2,010	21	e16	e8.6	e7.9
2	e7.1	11	15	24	23	34	37	180	21	e16	e8.5	e7.4
3	e7.0	11	18	22	876	32	35	80	23	e16	e8.5	e7.2
4	e6.8	11	88	23	4,480	31	39	51	22	e15	e8.3	e8.8
5	e6.7	12	61	24	383	31	41	40	23	e14	e8.0	e9.8
6	e7.0	11	31	24	126	31	37	35	18	e14	e8.1	e10
7	e7.5	15	22	24	84	32	35	31	19	e13	e8.5	e11
8	9.0	1,030	20	22	68	35	36	28	22	e13	e8.3	e10
9	84	475	19	21	59	61	35	26	17	e13	e7.9	e9.4
10	911	70	18	20	62	58	32	25	14	e12	e7.7	e8.9
11	158	31	17	23	63	45	2,250	24	14	e46	e7.6	e8.8
12	392	21	17	22	47	45	952	23	13	e26	e7.6	e8.5
13	54	17	18	21	45	46	101	24	13	e18	e7.5	e7.8
14	22	15	18	21	52	41	419	23	13	e14	e7.4	e9.3
15	16	15	20	23	63	39	1,240	22	250	e12	e8.4	e27
16	14	14	23	22	82	37	291	21	105	e11	e7.4	e15
17	12	14	19	21	72	35	103	20	e55	e11	e6.8	e11
18	11	14	18	21	56	34	62	20	e38	e11	e11	e8.5
19	11	14	54	21	54	81	48	19	e29	e10	e9.7	e7.1
20	11	14	2,030	21	49	821	40	18	e23	e10	e18	e7.2
21	11	15	462	21	46	446	36	19	e24	e9.5	e11	e7.0
22	11	15	118	21	43	e595	34	20	e20	e9.0	e9.9	e6.9
23	12	29	69	21	39	184	31	20	e28	e9.4	e5.7	e6.7
24	12	21	49	21	38	99	30	18	e21	e9.0	e5.6	e6.2
25	10	16	40	42	35	74	29	17	e19	e8.9	e6.2	e5.9
26	10	16	36	121	34	62	28	17	e18	e8.8	13	e7.3
27	11	87	33	50	33	54	27	16	e18	e8.7	e11	e12
28	11	42	32	33	33	49	25	15	e18	e9.0	e10	22
29	11	23	30	27	31	46	268	15	e18	e8.7	e8.9	17
30	11	19	28	25	---	44	1,490	15	e17	e8.8	e8.6	e11
31	11	---	28	24	---	42	---	17	---	e8.6	e8.4	---
Total	1,875.3	2,109	3,468	852	7,100	3,298	7,871	2,909	954	409.4	272.1	302.6
Mean	60.5	70.3	112	27.5	245	106	262	93.8	31.8	13.2	8.78	10.1
Max	911	1,030	2,030	121	4,480	821	2,250	2,010	250	46	18	27
Min	6.7	11	15	20	23	31	25	15	13	8.6	5.6	5.9
Ac-ft	3,720	4,180	6,880	1,690	14,080	6,540	15,610	5,770	1,890	812	540	600

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1950 - 2012, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	171	94.6	51.1	51.7	77.3	151	141	370	272	114	81.1	124
Max	2,450	1,285	369	357	667	1,320	847	2,850	1,967	992	966	1,046
(WY)	(1987)	(1975)	(1993)	(1993)	(1975)	(2004)	(1988)	(1957)	(2007)	(2007)	(1992)	(1961)
Min	0.40	1.34	2.13	3.23	3.81	2.55	2.80	4.72	8.41	0.34	3.45	0.40
(WY)	(1953)	(1955)	(1955)	(1953)	(1953)	(1955)	(1955)	(1971)	(1959)	(1954)	(1971)	(1956)

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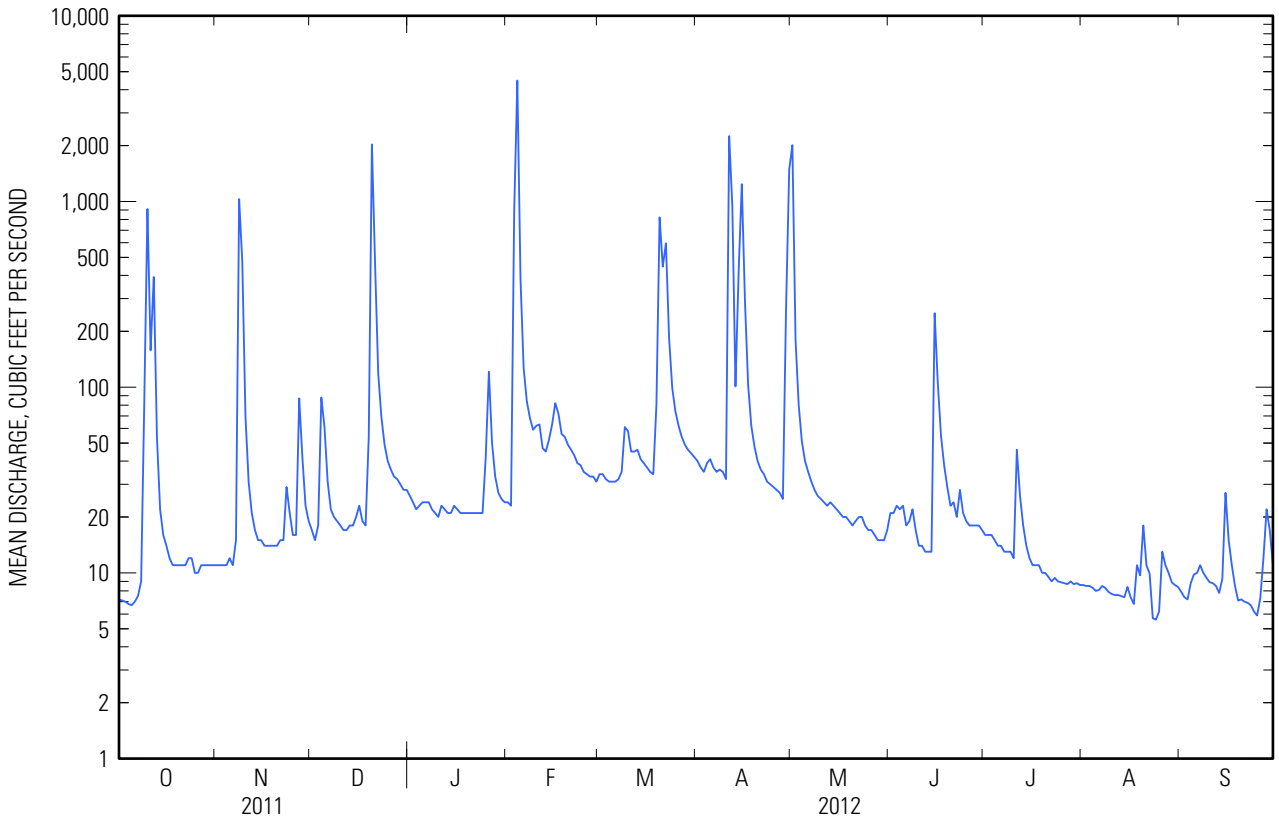
SUMMARY STATISTICS

	Calendar Year 2011		Water Year 2012		Water Years 1950 - 2012	
Annual total	17,867.6		31,420.4			
Annual mean	49.0		85.8		142	
Highest annual mean					501	1987
Lowest annual mean					16.9	1953
Highest daily mean	2,030	Dec 20	4,480	Feb 4	39,200	May 16, 1957
Lowest daily mean	6.4	Several days	5.6	Aug 24	0.00	Sep 23, 1953 [a]
Annual seven-day minimum	6.8	Sep 9	6.7	Sep 19	0.00	Sep 23, 1953
Maximum peak flow			5,570	Feb 4	75,200	May 16, 1957
Maximum peak stage			24.76	Feb 4	[b] 49.58	May 16, 1957
Annual runoff (ac-ft)	35,440		62,320		102,700	
10 percent exceeds	41		81		177	
50 percent exceeds	17		21		18	
90 percent exceeds	7.3		8.5		4.3	

[a] Also at times in 1953, 1954, 1956.
[b] At present datum.