

06918060 MARMATON RIVER NEAR NEVADA, MO

Lower Missouri Basin
Osage Subbasin

LOCATION.--Lat 37°51'43.3", long 94°23'57.3" referenced to North American Datum of 1983, in NW ¼ SW ¼ NW ¼ sec.31, T.36 N., R.31 W., Vernon County, MO, Hydrologic Unit 10290104, on left downstream wingwall of Old Pumphouse Bridge, 26 mi above Osage River, and 2.0 mi northwest of Nevada.

DRAINAGE AREA.--1,074 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--October 2003 to current year. October 2000 to September 2003, records collected at site 5 mi downstream, published as Marmaton River below Nevada (06918065).

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage 729.23 ft above North American Vertical Datum of 1988.

REMARKS.--Records good except for estimated daily discharges, which are poor

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of October 1986 reached a stage of 62.2 ft (by U.S. Army Corps of Engineers), at former site.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 8,000 ft³/s and (or) maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Apr 2	1100	10,400	23.06
Apr 20	0515	11,000	23.62
Apr 25	0915	8,780	22.22
Apr 28	1645	8,530	22.05
May 22	0400	8,990	21.80
Jun 2	0730	15,800	*27.26
Aug 1	1915	9,820	21.99
Aug 7	0915	*16,500	26.63
Aug 10	1715	10,300	22.82

Maximum gage height, 27.26 ft, June 2. Minimum discharge, 6.6 ft³/s, Oct. 12, gage height, 2.09 ft.

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013
DAILY MEAN VALUES
[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	31	17	11	12	1,170	1,800	9,170	1,640	13,000	182	9,350	36
2	21	16	11	11	492	1,310	10,100	1,010	15,400	128	8,050	33
3	16	17	11	11	310	921	7,310	1,720	12,100	99	4,090	31
4	13	17	e11	11	234	2,030	3,720	4,340	7,720	86	8,140	28
5	11	17	11	12	197	3,730	1,640	5,290	5,230	67	11,900	26
6	10	17	11	13	165	2,540	830	3,310	6,520	60	14,300	23
7	8.9	15	13	12	144	1,230	695	1,840	7,090	61	15,900	22
8	8.0	14	17	12	143	730	3,110	1,180	5,620	51	14,000	21
9	7.8	14	19	11	203	546	3,110	991	3,880	46	12,200	20
10	7.6	14	18	12	235	1,220	1,720	1,110	4,880	42	10,600	18
11	7.2	21	15	12	209	2,480	4,440	1,010	3,630	37	8,350	17
12	8.8	40	12	12	211	1,620	4,370	737	1,920	31	4,860	17
13	426	58	16	14	193	856	2,200	548	916	26	3,000	15
14	2,420	79	16	15	164	571	1,120	456	551	24	1,700	13
15	2,750	67	18	16	144	445	787	389	595	20	974	13
16	1,020	46	16	e16	128	379	690	321	4,110	18	494	14
17	408	35	16	16	111	734	924	273	5,510	16	328	14
18	220	29	15	14	97	4,180	4,650	264	5,620	16	258	13
19	148	27	16	14	86	2,910	9,440	249	5,970	18	221	13
20	95	24	17	13	77	1,130	10,800	3,150	3,880	18	185	18
21	69	19	17	13	77	650	8,480	8,020	2,080	108	160	22
22	52	16	16	12	85	501	4,640	8,780	1,010	75	137	19
23	41	19	16	12	101	457	4,280	6,160	557	31	119	19
24	33	18	15	11	122	543	8,070	2,910	399	19	102	18
25	28	16	15	12	218	1,400	8,480	1,100	294	15	86	16
26	24	15	13	11	1,060	1,610	6,090	622	233	222	72	14
27	22	14	12	12	2,040	1,670	6,740	463	195	493	62	13
28	23	12	13	12	1,970	1,920	8,290	368	165	187	54	13
29	22	12	12	79	---	3,340	6,680	295	220	105	50	13
30	20	11	11	2,360	---	5,660	3,510	3,340	280	3,420	46	13
31	19	---	12	3,030	---	7,640	---	9,020	---	8,370	40	---
Mean	258	24.5	14.3	188	371	1,831	4,870	2,287	3,986	455	4,188	18.8
Max	2,750	79	19	3,030	2,040	7,640	10,800	9,020	15,400	8,370	15,900	36
Min	7.2	11	11	11	77	379	690	249	165	15	40	13
In.	0.28	0.03	0.02	0.20	0.36	1.97	5.06	2.46	4.14	0.49	4.50	0.02

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2004 - 2013, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	361	513	656	731	877	1,620	2,069	2,327	1,572	662	526	699
Max	2,722	2,204	2,519	3,776	1,828	3,269	4,870	4,684	4,384	3,270	4,188	3,521
(WY)	(2010)	(2005)	(2004)	(2005)	(2010)	(2012)	(2013)	(2009)	(2008)	(2007)	(2013)	(2010)
Min	5.31	6.42	11.4	14.5	10.0	24.9	520	317	39.2	3.97	3.70	3.30
(WY)	(2012)	(2007)	(2006)	(2006)	(2006)	(2006)	(2010)	(2005)	(2006)	(2012)	(2012)	(2006)

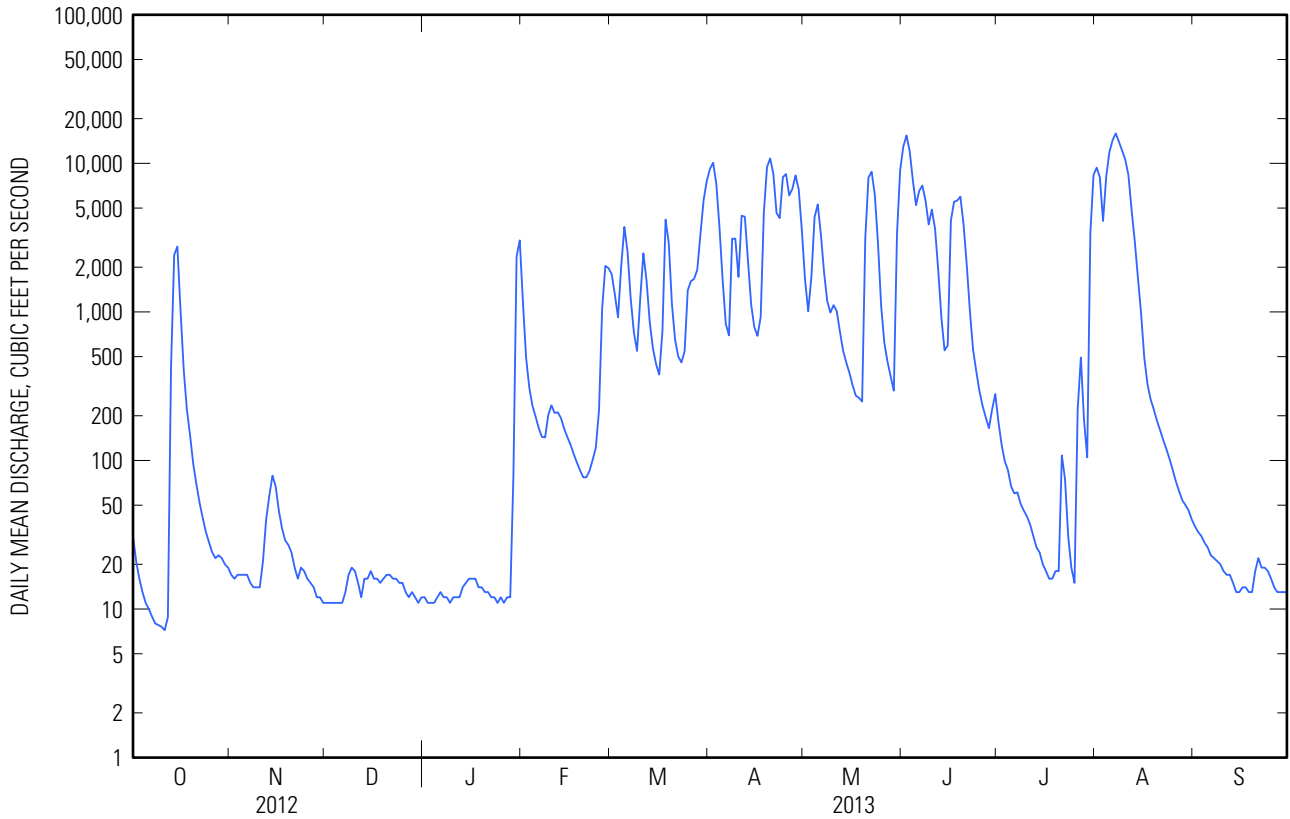
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SUMMARY STATISTICS

	Calendar Year 2012		Water Year 2013		Water Years 2004 - 2013	
Annual mean	605		1,543		1,051	
Highest annual mean					1,608	2010
Lowest annual mean					251	2006
Highest daily mean	15,200	Mar 22 ^a	15,900	Aug 7	33,800	Jul 2, 2007
Lowest daily mean	0.03	Aug 1	7.2	Oct 11	0.03	Aug 1, 2012
Annual seven-day minimum	0.53	Aug 18	8.3	Oct 6	0.53	Aug 18, 2012
Maximum peak flow			16,500	Aug 7	34,900	Jul 2, 2007
Maximum peak stage			27.26	Jun 2	33.17	Jul 2, 2007
Instantaneous low flow			6.6	Oct 12	0.01	Aug 1, 2012 ^b
Annual runoff (inches)	7.67		19.51		13.29	
10 percent exceeds	637		5,640		3,580	
50 percent exceeds	36		111		151	
90 percent exceeds	3.0		12		9.2	

^a Also May 2

^b Also Aug 5, 2012



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GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013
OBSERVATION AT 0800

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	2.48	2.27	2.28	2.28	7.88	9.67	21.99	10.14	25.12	3.45	21.35	2.53
2	2.37	2.25	2.28	2.25	4.92	8.10	23.02	7.03	27.16	3.18	21.12	2.51
3	2.29	2.26	2.28	2.25	4.02	6.55	21.38	8.58	26.11	2.99	15.05	2.49
4	2.24	2.26	---	2.24	3.69	8.42	16.44	16.65	23.60	2.93	19.28	2.45
5	2.20	2.26	---	2.26	3.50	14.96	9.94	19.80	20.88	2.82	23.73	2.43
6	2.17	2.26	2.28	2.29	3.34	12.78	6.52	15.67	22.28	2.75	25.01	2.40
7	2.16	2.24	2.30	2.27	3.21	8.31	5.46	10.55	22.88	2.79	26.52	2.38
8	2.13	2.21	2.36	2.26	3.22	6.07	13.49	7.88	22.12	2.72	25.41	2.36
9	2.13	2.21	2.41	2.25	3.38	5.14	14.84	6.84	18.37	2.63	24.36	2.34
10	2.12	2.21	2.39	2.25	3.69	6.21	9.62	7.29	20.95	2.60	23.29	2.33
11	2.11	2.24	2.36	2.26	3.54	12.32	16.57	7.05	19.08	2.59	21.79	2.32
12	2.14	2.54	2.25	2.25	3.54	9.87	17.91	5.93	12.83	2.50	17.85	2.30
13	2.19	2.68	2.35	2.28	3.50	6.66	11.98	5.06	7.79	2.44	13.48	2.28
14	9.59	2.78	2.35	2.31	3.33	5.30	7.78	4.66	5.49	2.39	9.47	2.25
15	13.17	2.77	2.40	2.32	3.23	4.63	6.29	4.33	4.70	2.36	7.02	2.24
16	7.30	2.62	2.36	---	3.15	4.28	5.64	4.03	18.49	2.34	4.96	2.25
17	4.48	2.53	2.35	2.32	3.07	4.13	6.62	3.81	21.68	2.32	4.03	2.26
18	3.59	2.48	2.33	2.30	2.99	15.87	13.07	3.79	21.54	2.31	3.81	2.25
19	3.23	2.48	2.35	2.28	2.93	14.21	22.28	3.76	22.23	2.32	3.56	2.25
20	2.93	2.45	2.38	2.27	2.87	7.89	23.59	7.97	19.70	2.33	3.45	2.29
21	2.76	2.41	2.35	2.26	2.88	5.71	22.50	20.79	13.57	2.59	3.27	2.38
22	2.64	2.36	2.35	2.25	2.89	4.91	18.92	21.78	7.75	2.90	3.20	2.34
23	2.54	2.40	2.33	2.24	3.01	4.66	14.31	19.99	5.17	2.51	3.12	2.33
24	2.47	2.40	2.33	2.26	3.08	4.80	21.63	13.71	4.41	2.36	2.98	2.32
25	2.40	2.36	2.32	2.24	3.31	7.99	22.15	7.44	4.07	2.30	2.89	2.30
26	2.36	2.35	2.30	2.23	5.99	9.54	20.54	5.42	3.70	2.33	2.82	2.27
27	2.33	2.33	2.27	2.23	10.21	9.09	20.43	4.71	3.56	5.40	2.74	2.25
28	2.34	2.30	2.29	2.24	9.91	10.43	21.89	4.30	3.41	---	2.69	2.24
29	2.33	2.29	2.27	2.31	---	10.71	21.17	3.93	3.40	3.09	2.65	2.25
30	2.31	2.28	2.26	8.75	---	19.10	16.60	4.22	3.95	5.01	2.62	2.25
31	2.29	---	2.26	13.94	---	20.71	---	22.08	---	20.36	2.56	---
Mean	3.22	2.38	---	---	4.08	9.00	15.82	9.33	14.53	---	11.16	2.33
Max	13.17	2.78	---	---	10.21	20.71	23.59	22.08	27.16	---	26.52	2.53
Min	2.11	2.21	---	---	2.87	4.13	5.46	3.76	3.40	---	2.56	2.24