

06916600 MARAIS DES CYGNES RIVER NEAR KANSAS-MISSOURI STATE LINE, KS

Osage Basin
Lower Marais Des Cygnes Subbasin

LOCATION.--Lat 38°13'07", long 94°36'46" referenced to North American Datum of 1927, in NE ¼ NE ¼ SW ¼ sec.13, T.21 S., R.25 E., Linn County, KS, Hydrologic Unit 10290102, on left bank 8.5 mi downstream from Big Sugar Creek at the bridge on the Kansas-Missouri State line, and at mile 306.7.

DRAINAGE AREA.--3,250 mi², approximately.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--October 1958 to current year.

GAGE.--Water-stage recorder. Datum of gage is 745.58 ft above NGVD of 1929. Prior to Jan. 15, 1959, nonrecording gage 6.8 mi downstream at datum 15.62 ft lower. Prior to Nov. 19, 2008 gage located 6.8 mi upstream at same datum. Prior to May 17, 2011, datum of gage 11.48 ft higher.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Natural flow slightly affected since 1964 by Pomona Lake (station 06912490), since 1973 by Melvern Lake (station 06910997), and by retention of overbank flow in wildlife refuge ponds, capacity, 5,500 acre-ft, power developments, and by numerous small diversions upstream from station. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of July 14, 1951, reached a stage of 41.2 ft, from floodmark, discharge, 148,000 ft³/s, from rating curve extended above 110,000 ft³/s on basis of velocity-area study. Flood of Nov. 18, 1928, reached a stage about 3.7 ft lower, discharge, 106,000 ft³/s.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 10,000 ft³/s and (or) maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jun 1	0445	*11,600	18.80
Jun 19	0730	11,600	*18.86

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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	66	29	20	e41	313	274	6,730	1,830	11,300	211	135	91
2	45	29	21	e41	211	260	4,530	1,390	7,050	183	175	88
3	31	29	26	42	176	270	2,330	1,830	2,670	152	689	85
4	22	32	31	41	138	466	1,510	3,880	1,930	174	1,490	81
5	21	31	26	41	110	1,510	1,170	4,720	2,790	131	3,150	75
6	26	29	24	43	110	2,390	943	3,870	4,570	112	2,560	70
7	29	29	22	40	141	2,310	795	2,970	3,660	103	3,300	69
8	26	27	21	41	217	2,560	701	2,160	2,370	97	3,710	70
9	24	27	21	40	445	2,980	643	2,020	2,120	92	4,820	77
10	23	28	20	41	461	3,720	769	2,220	2,250	87	5,630	71
11	23	38	19	48	399	5,400	2,190	1,980	1,740	79	2,760	67
12	25	53	18	52	296	3,980	2,830	1,400	1,260	77	2,360	64
13	36	60	20	63	238	2,140	2,030	1,090	1,120	72	5,200	61
14	99	85	32	65	177	1,280	1,560	916	988	68	6,050	58
15	177	71	36	60	139	923	1,270	784	829	65	4,240	57
16	210	46	37	53	115	740	1,230	677	3,510	64	1,580	59
17	122	30	40	47	100	634	1,240	569	3,070	61	896	61
18	84	25	37	41	89	545	5,680	501	4,620	59	632	63
19	66	25	34	39	107	483	5,720	461	10,300	78	481	71
20	60	30	42	42	112	429	2,800	1,770	6,330	69	387	83
21	58	38	48	43	119	385	1,850	8,350	2,960	60	316	375
22	47	38	45	44	121	354	1,420	5,760	1,850	57	265	1,040
23	38	32	49	42	123	332	1,890	2,110	1,130	58	227	380
24	32	33	50	39	128	370	3,990	1,160	753	61	194	207
25	28	34	48	36	135	462	3,960	813	547	68	167	140
26	29	30	46	34	178	513	3,120	632	423	71	148	108
27	20	29	42	34	247	596	2,860	521	345	68	131	90
28	20	25	40	37	293	1,210	3,600	466	299	65	118	86
29	29	23	36	168	---	3,120	3,800	468	256	68	107	87
30	28	21	38	422	---	5,070	2,680	2,460	230	109	98	87
31	27	---	e41	365	---	7,170	---	8,990	---	134	93	---
Mean	50.7	35.2	33.2	70.5	194	1,706	2,528	2,218	2,776	92.0	1,681	134
Max	210	85	50	422	461	7,170	6,730	8,990	11,300	211	6,050	1,040
Min	20	21	18	34	89	260	643	461	230	57	93	57
Ac-ft	3,120	2,090	2,040	4,330	10,790	104,900	150,400	136,400	165,200	5,660	103,400	7,980

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1959 - 2013, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	1,660	1,872	1,371	1,115	1,756	2,914	3,249	3,770	4,405	2,059	723	1,408
Max	15,030	13,830	9,470	5,261	9,357	15,760	12,900	13,560	14,740	20,160	4,392	13,300
(WY)	(1987)	(1999)	(1993)	(2005)	(1985)	(1973)	(1983)	(1995)	(1967)	(2007)	(1968)	(1961)
Min	3.94	5.63	1.56	3.08	9.32	6.73	30.6	165	74.6	21.3	12.6	14.6
(WY)	(1964)	(1964)	(1964)	(1964)	(1964)	(1964)	(1981)	(1965)	(2012)	(1980)	(1963)	(1963)

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SUMMARY STATISTICS

	Calendar Year 2012		Water Year 2013		Water Years 1959 - 2013	
Annual mean	576		962		2,189	
Highest annual mean					6,283	1993
Lowest annual mean					361	1991
Highest daily mean	22,100	Mar 22	11,300	Jun 1	129,000	Jul 2, 2007
Lowest daily mean	18	Sep 12	18	Dec 12	0.00	Oct 12, 1963
Annual seven-day minimum	20	Dec 7	20	Dec 7	0.00	Nov 13, 1963
Maximum peak flow			11,600	Jun 1	137,000	Jul 2, 2007
Maximum peak stage			18.80	Jun 1	40.26	Jul 2, 2007
Instantaneous low flow			17	Oct 28	0.00	many years
Annual runoff (ac-ft)	418,400		696,200		1,586,000	
10 percent exceeds	1,000		3,120		5,880	
50 percent exceeds	66		128		478	
90 percent exceeds	26		29		42	

