

Water-Data Report 2013

## 06893000 MISSOURI RIVER AT KANSAS CITY, MO

Missouri River Main Stem

LOCATION.--Lat 39°06'42.2", long 94°35'17.3" referenced to North American Datum of 1983, in sec.32, T.50 N., R.33 W., Jackson County, MO, Hydrologic Unit 10300101, near right bank on downstream side of pier of Chicago, Burlington and Quincy Railroad Bridge at Kansas City, 1.4 mi downstream from Kansas River, and at mile 366.1.

DRAINAGE AREA.--484,100 mi<sup>2</sup>, the 3,959 mi<sup>2</sup> in Great Divide basin are not included.

### **SURFACE-WATER RECORDS**

PERIOD OF RECORD.--October 1897 to current year. Prior to August 1928 monthly discharge only, published in WSP 1310. Gage-height records collected at same site 1873-99 are contained in reports of the Missouri River Commission; those since 1900 are contained in reports of the National Weather Service.

REVISED RECORDS.--WSP WDR MO-76-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 706.68 ft above North American Vertical Datum of 1988. Prior to May 4, 1931, nonrecording gage; May 4, 1931, to Aug. 23, 1934, water-stage recorder, at present site and datum; Aug. 24, 1934, to May 15, 1947, water-stage recorder at site 200 ft upstream at same datum; May 16, 1947, to Feb. 28, 1948, nonrecording gage at present site; Feb. 29, 1948, to Oct. 1, 1989, at datum 10.00 ft higher.

REMARKS.--No estimated daily discharges. Water-discharge records good. Some regulation from many upstream reservoirs.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 573,000 ft<sup>3</sup>/s, July 14, 1951; gage height, 36.2 ft.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 16, 1844, reached a stage of 48.0 ft, present datum; discharge, about 625,000 ft<sup>3</sup>/s, computed by the U.S. Army Corps of Engineers.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 172,000 ft<sup>3</sup>/s, June 1, gage height, 26.60 ft; minimum discharge, 18,500 ft<sup>3</sup>/s, Feb. 25, gage height, 4.36 ft.

## 06893000 MISSOURI RIVER AT KANSAS CITY, MO—Continued

**DISCHARGE, CUBIC FEET PER SECOND**  
**WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013**  
**DAILY MEAN VALUES**

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	41,200	42,900	35,900	22,700	22,600	21,900	37,300	35,200	157,000	59,700	43,900	40,100
2	41,400	42,600	34,100	23,000	22,400	21,900	37,700	35,400	126,000	57,500	46,400	40,900
3	41,300	42,500	32,100	23,200	21,800	22,900	38,900	37,700	100,000	54,800	49,300	42,300
4	41,200	42,500	30,600	22,900	21,100	24,300	39,600	54,400	88,700	53,000	57,400	41,700
5	41,200	43,100	29,700	22,700	20,700	25,200	38,900	61,500	82,200	50,300	64,200	40,900
6	41,000	42,400	28,900	22,700	19,900	25,200	37,200	54,600	82,900	48,600	61,300	40,500
7	40,900	41,700	28,400	22,900	20,900	25,100	35,900	49,400	83,900	47,300	58,200	40,500
8	41,500	42,100	28,200	23,100	23,600	25,500	37,600	46,600	77,800	46,300	53,600	40,700
9	41,800	42,300	28,000	22,900	24,900	26,000	36,800	45,100	74,500	45,100	48,000	40,700
10	42,000	42,100	27,300	22,500	24,600	27,600	39,900	44,600	81,500	44,400	46,700	40,200
11	41,900	43,900	26,500	22,800	23,400	26,700	41,600	44,900	87,400	43,900	42,700	40,200
12	41,600	44,200	26,000	23,200	23,500	26,200	42,700	47,500	80,700	43,100	40,600	40,300
13	42,400	44,100	25,400	23,400	25,000	27,500	45,800	47,100	75,600	42,200	40,300	40,700
14	42,700	44,100	24,600	23,500	26,600	30,000	48,300	44,400	75,700	41,100	40,900	41,300
15	43,700	44,100	23,400	23,300	26,100	30,800	43,700	42,800	77,600	40,100	41,500	40,700
16	45,300	44,000	22,800	22,400	24,300	30,600	39,700	41,500	78,400	39,200	39,900	40,900
17	44,800	43,800	22,900	21,900	23,900	31,900	37,700	40,200	88,600	38,300	40,700	41,400
18	43,300	42,800	23,400	21,600	24,300	32,200	42,100	39,500	81,700	37,600	45,300	41,900
19	42,800	41,800	23,700	21,500	23,600	30,900	75,200	38,900	75,300	37,000	48,500	42,800
20	42,400	41,800	24,900	21,900	22,600	31,700	70,400	39,300	70,800	36,500	45,300	46,000
21	42,300	42,000	25,400	22,000	22,000	32,600	61,300	41,200	65,000	36,200	43,800	43,500
22	42,700	42,000	25,000	21,700	21,600	31,500	55,600	45,000	59,600	36,300	41,500	41,700
23	43,000	42,000	24,400	21,200	22,100	30,700	46,900	42,700	56,700	36,800	39,400	40,700
24	42,400	42,500	23,600	20,800	21,300	31,400	42,200	40,000	54,600	37,800	37,600	39,300
25	42,400	42,900	22,700	20,400	19,200	32,500	42,200	38,900	55,200	38,200	36,400	38,500
26	42,700	42,900	22,700	20,300	18,900	33,000	41,200	38,800	58,900	38,500	37,400	38,000
27	43,600	42,400	23,300	20,300	20,100	33,100	40,000	44,000	65,700	38,600	38,700	37,300
28	44,300	41,600	24,100	20,500	21,400	34,900	39,700	58,800	63,800	38,600	39,400	37,300
29	44,100	39,800	23,400	21,600	---	36,300	38,200	119,000	63,300	39,100	39,900	37,300
30	43,500	37,500	22,500	22,400	---	36,600	36,200	133,000	61,800	40,700	39,700	37,100
31	43,300	---	22,400	22,300	---	36,800	---	158,000	---	41,800	39,400	---
<b>Mean</b>	42,540	42,480	26,010	22,180	22,590	29,470	43,680	53,230	78,360	42,860	44,770	40,510
<b>Max</b>	45,300	44,200	35,900	23,500	26,600	36,800	75,200	158,000	157,000	59,700	64,200	46,000
<b>Min</b>	40,900	37,500	22,400	20,300	18,900	21,900	35,900	35,200	54,600	36,200	36,400	37,100
<b>In.</b>	0.10	0.10	0.06	0.05	0.05	0.07	0.10	0.13	0.18	0.10	0.11	0.09

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 2013<sup>a</sup>, BY WATER YEAR (WY)**

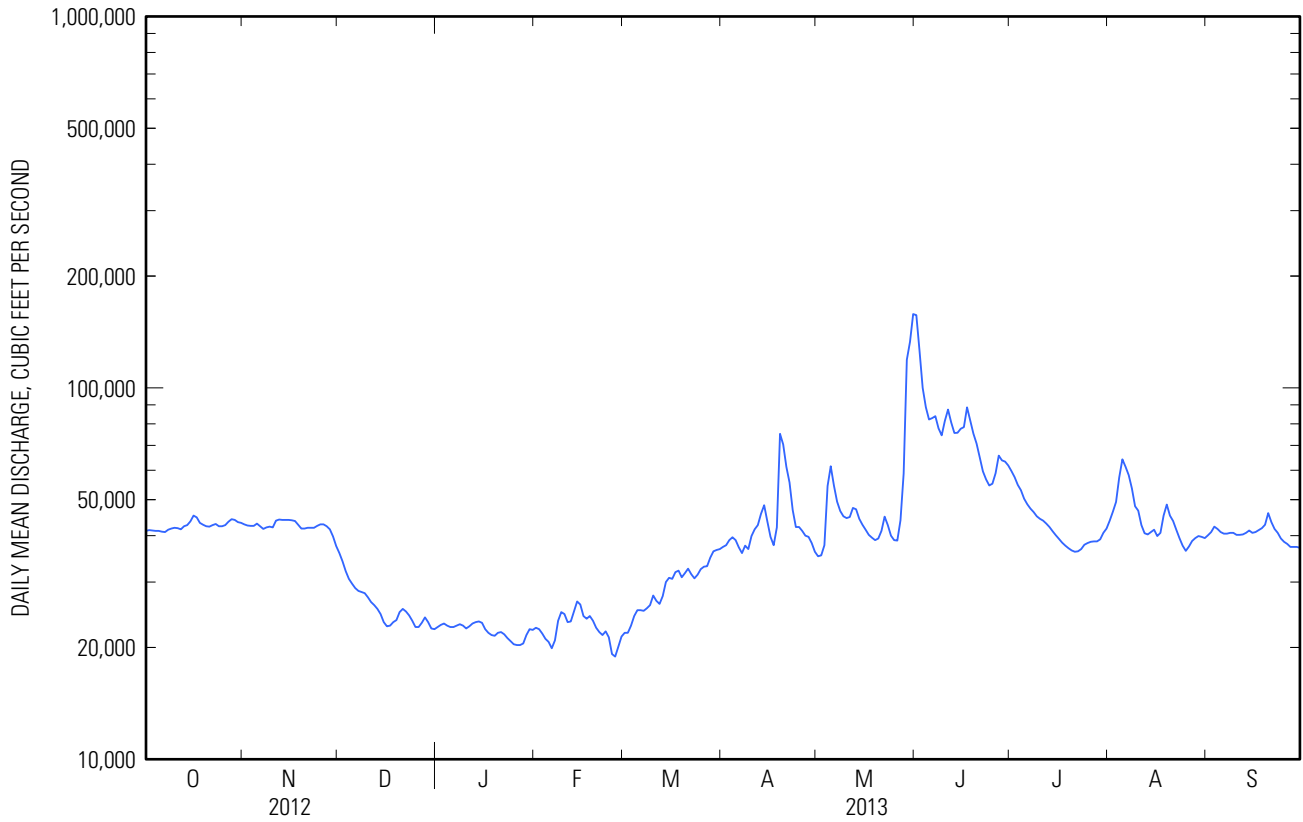
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>Mean</b>	55,090	50,350	36,140	29,790	37,930	54,710	68,110	72,660	80,880	71,070	58,230	57,000
<b>Max</b>	135,200	103,200	75,370	60,980	77,690	133,700	148,900	145,800	176,200	288,300	194,100	129,800
<b>(WY)</b>	(1974)	(1999)	(1987)	(1973)	(1973)	(1979)	(1984)	(1995)	(2011)	(1993)	(2011)	(2011)
<b>Min</b>	29,810	20,420	12,970	13,800	16,610	20,190	36,370	37,230	37,470	33,690	32,980	34,510
<b>(WY)</b>	(2007)	(2007)	(1964)	(1963)	(1964)	(1964)	(1990)	(1989)	(2006)	(2002)	(2003)	(1991)

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SUMMARY STATISTICS

	Calendar Year 2012		Water Year 2013		Water Years 1958 - 2013 <sup>a</sup>	
<b>Annual mean</b>	45,710		40,760		56,040	
<b>Highest annual mean</b>					109,300	2011
<b>Lowest annual mean</b>					34,130	2006
<b>Highest daily mean</b>	98,300	Apr 17	158,000	May 31	529,000	Jul 27, 1993
<b>Lowest daily mean</b>	22,400	Dec 31	18,900	Feb 26	4,730	Dec 18, 1963
<b>Annual seven-day minimum</b>	23,000	Dec 25	20,700	Feb 22	5,480	Dec 17, 1963
<b>Maximum peak flow</b>			172,000	Jun 1	541,000	Jul 27, 1993
<b>Maximum peak stage</b>			26.60	Jun 1	48.87	Jul 27, 1993
<b>Instantaneous low flow</b>			18,500	Feb 25	4,240	Dec 18, 1963
<b>Annual runoff (inches)</b>	1.29		1.14		1.57	
<b>10 percent exceeds</b>	58,400		59,200		94,700	
<b>50 percent exceeds</b>	43,200		40,200		47,300	
<b>90 percent exceeds</b>	37,100		22,600		24,600	

<sup>a</sup> Period of Regulated Streamflow



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**GAGE HEIGHT, FEET**  
**WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013**  
**OBSERVATION AT 0800**  
[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	10.24	10.47	8.94	5.45	5.61	5.16	9.09	8.65	25.87	13.47	10.40	9.71
2	10.28	10.42	8.53	5.58	5.56	5.08	9.17	8.60	22.64	13.12	10.79	9.88
3	10.30	10.43	8.03	5.65	5.41	5.22	9.45	8.95	19.43	12.63	11.64	10.22
4	10.25	10.44	7.60	5.61	5.16	5.60	9.66	12.03	17.90	12.36	12.69	10.13
5	10.25	10.55	7.36	5.56	5.09	5.89	9.54	13.94	16.65	11.90	14.24	9.94
6	10.20	10.46	7.09	5.60	4.83	5.94	9.15	12.73	16.89	11.53	13.79	9.83
7	10.18	10.25	6.95	5.65	4.96	5.91	8.75	11.76	17.06	11.31	13.34	9.85
8	10.33	10.38	6.87	5.74	5.79	6.03	9.26	11.19	16.38	11.08	12.55	9.88
9	10.38	10.43	6.86	5.75	6.26	6.11	8.96	10.87	15.77	10.84	11.55	9.89
10	10.42	10.42	6.69	5.56	6.22	6.69	9.74	10.74	16.26	10.67	11.20	9.78
11	10.41	10.68	6.45	5.61	5.85	6.45	10.05	10.66	17.71	10.57	10.48	9.77
12	10.30	10.82	6.32	5.76	5.83	6.27	10.22	11.29	16.81	10.42	9.69	9.77
13	10.40	10.78	6.17	5.84	6.20	6.47	10.78	11.34	15.90	10.26	9.84	9.82
14	10.49	10.77	5.98	5.87	6.66	7.20	11.59	10.73	15.84	10.08	9.75	10.04
15	10.66	10.75	5.65	5.86	6.68	7.51	10.70	10.33	15.99	9.76	10.10	9.90
16	10.97	10.71	5.40	5.60	6.14	7.37	9.75	10.11	16.13	9.59	9.69	9.92
17	10.97	10.67	5.43	5.42	5.97	7.68	9.18	9.80	17.72	9.36	9.78	9.92
18	10.60	10.46	5.54	5.30	6.10	7.89	9.22	9.69	17.00	9.19	10.53	10.20
19	10.47	10.21	5.63	5.27	5.95	7.64	15.95	9.50	15.91	9.05	11.62	10.04
20	10.41	10.17	5.97	5.36	5.65	7.76	15.28	9.51	15.29	8.96	10.89	11.10
21	10.34	10.22	6.14	5.45	5.42	8.10	13.75	9.78	14.44	8.86	10.60	10.56
22	10.43	10.23	6.06	5.37	5.28	7.85	13.02	10.85	13.49	8.86	10.10	10.12
23	10.46	10.22	5.88	5.23	5.46	7.58	11.38	10.43	13.02	8.95	9.65	9.94
24	10.37	10.30	5.70	5.09	5.33	7.71	10.25	9.81	e12.58	9.17	9.25	9.62
25	10.34	10.42	5.40	4.95	4.64	7.93	10.19	9.48	12.57	9.30	8.88	9.38
26	10.38	10.42	5.37	4.92	4.41	8.11	10.11	9.44	13.11	9.35	9.07	9.29
27	10.54	10.33	5.52	4.91	4.65	8.06	9.71	9.45	14.38	9.41	9.39	9.13
28	10.73	10.20	5.78	4.96	5.03	8.49	9.70	11.71	14.17	9.40	9.56	9.03
29	10.70	9.84	5.70	5.07	---	8.86	9.41	21.10	14.05	9.44	9.71	9.13
30	10.58	9.36	5.40	5.55	---	8.98	8.90	22.34	13.86	9.76	9.68	9.08
31	10.53	---	5.34	5.50	---	8.96	---	e24.84	---	10.14	9.56	---
<b>Mean</b>	10.45	10.39	6.31	5.45	5.58	7.11	10.40	11.67	16.16	10.28	10.65	9.83
<b>Max</b>	10.97	10.82	8.94	5.87	6.68	8.98	15.95	24.84	25.87	13.47	14.24	11.10
<b>Min</b>	10.18	9.36	5.34	4.91	4.41	5.08	8.75	8.60	12.57	8.86	8.88	9.03