

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 mi², the 3,959 mi² 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 706.40 ft above National Geodetic Vertical Datum of 1929. 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.--Water-discharge records good. Some regulation from many upstream reservoirs.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 573,000 ft³/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 ft³/s, computed by the U.S. Army Corps of Engineers.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 169,000 ft³/s, Apr. 28, gage height, 25.11 ft; minimum discharge, 25,600 ft³/s, Dec. 22, gage height, 5.30 ft.

06893000 MISSOURI RIVER AT KANSAS CITY, MO—Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009
DAILY MEAN VALUES

[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	36,800	59,800	34,100	43,100	27,100	35,100	50,800	121,000	51,400	73,600	51,600	52,000
2	36,300	56,600	33,700	40,600	26,900	34,800	48,500	110,000	53,000	71,000	50,300	50,100
3	36,100	52,100	33,600	40,500	26,700	32,500	47,100	93,600	66,900	67,400	50,600	49,600
4	36,300	50,300	33,500	39,300	26,300	28,100	47,000	79,000	69,500	69,200	51,200	49,500
5	36,100	48,200	32,900	38,100	26,600	25,900	46,500	74,000	62,800	68,200	51,300	48,400
6	36,100	45,500	32,000	35,900	27,200	27,300	46,900	72,000	55,000	75,500	52,900	51,600
7	37,600	42,900	31,300	35,300	27,900	30,500	46,100	71,100	54,800	75,100	51,800	51,300
8	39,500	41,700	31,400	34,500	28,200	43,900	44,900	71,100	62,600	65,100	49,600	48,300
9	42,600	39,900	32,000	33,000	28,300	58,200	45,500	70,700	86,200	63,400	49,500	48,800
10	40,800	38,800	32,600	32,100	29,800	67,400	50,600	69,500	93,400	66,300	51,500	47,700
11	39,500	38,900	32,500	32,600	38,200	57,900	55,500	68,900	98,400	72,000	53,300	46,900
12	40,700	38,800	31,700	32,500	53,700	48,500	53,300	67,400	84,900	75,900	52,000	45,400
13	40,900	38,700	31,700	31,100	67,200	43,100	51,100	66,900	79,000	74,600	49,600	44,000
14	40,000	39,900	32,500	30,100	59,800	39,500	53,800	67,800	71,900	74,100	48,400	45,100
15	41,500	41,300	32,400	28,500	54,100	35,300	56,400	71,800	74,200	78,100	47,900	46,300
16	44,200	40,900	e31,300	27,800	49,600	31,900	53,100	109,000	113,000	73,900	50,800	46,900
17	50,400	40,500	e31,600	28,100	45,800	30,600	51,100	101,000	121,000	70,300	67,700	45,300
18	51,400	40,400	e31,100	27,800	43,800	35,800	50,800	80,100	97,500	67,000	86,800	44,400
19	52,700	39,700	30,600	28,100	42,900	40,200	55,300	71,800	91,400	64,300	76,000	44,200
20	54,100	38,800	32,000	28,600	41,800	38,800	52,900	70,600	88,300	62,300	69,600	44,000
21	52,800	38,000	28,800	30,100	41,000	36,200	49,800	66,800	89,100	63,700	61,100	45,000
22	56,200	37,700	26,500	30,900	39,600	35,200	48,800	59,100	99,500	66,500	60,800	46,300
23	75,500	37,100	29,200	30,900	37,500	34,600	49,000	55,600	104,000	62,900	55,800	45,100
24	88,400	36,600	30,000	29,200	36,100	38,500	48,300	56,400	97,000	62,400	51,900	45,000
25	89,600	36,300	29,200	28,400	35,500	55,900	47,800	56,600	93,400	60,900	50,300	46,500
26	83,800	36,000	30,600	27,700	33,900	64,800	54,900	56,700	94,500	57,500	50,000	49,400
27	79,100	35,900	37,500	27,100	33,400	60,800	103,000	58,500	88,100	55,900	52,300	48,500
28	70,900	35,400	51,200	26,900	34,500	57,700	163,000	58,900	81,300	55,600	57,000	47,100
29	68,000	34,400	54,300	27,100	---	53,000	141,000	55,200	77,200	56,800	56,800	46,200
30	65,900	34,100	52,200	26,900	---	51,500	124,000	53,400	75,100	57,700	56,500	45,600
31	62,900	---	48,500	26,700	---	50,800	---	51,500	---	54,100	53,200	---
Mean	52,470	41,170	34,270	31,600	37,980	42,720	61,230	72,130	82,480	66,490	55,420	47,150
Max	89,600	59,800	54,300	43,100	67,200	67,400	163,000	121,000	121,000	78,100	86,800	52,000
Min	36,100	34,100	26,500	26,700	26,300	25,900	44,900	51,500	51,400	54,100	47,900	44,000
In.	0.13	0.09	0.08	0.08	0.08	0.10	0.14	0.17	0.19	0.16	0.13	0.11

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 2009^a, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	54,560	49,690	35,510	29,150	37,610	54,070	67,840	72,150	78,290	67,860	55,080	55,570
Max	135,200	103,200	75,370	60,980	77,690	133,700	148,900	145,800	173,800	288,300	144,300	115,600
(WY)	(1974)	(1999)	(1987)	(1973)	(1973)	(1979)	(1984)	(1995)	(1984)	(1993)	(1993)	(1993)
Min	29,810	20,420	12,970	13,800	16,610	20,190	36,370	37,230	37,470	33,690	32,980	34,510
(WY)	(2007)	(2007)	(1964)	(1963)	(1964)	(1964)	(1990)	(1989)	(2006)	(2002)	(2003)	(1991)

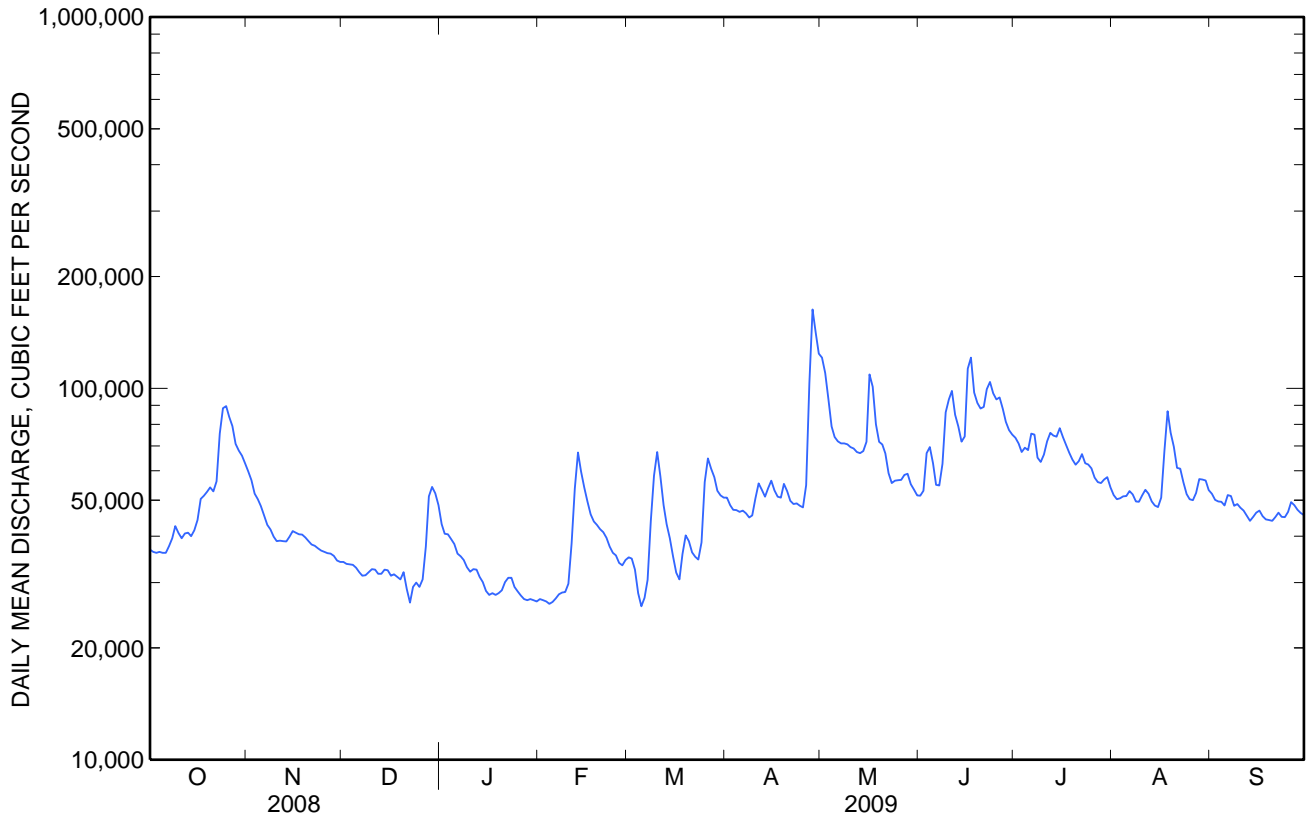
06893000 MISSOURI RIVER AT KANSAS CITY, MO—Continued

SUMMARY STATISTICS

	Calendar Year 2008		Water Year 2009		Water Years 1958 - 2009 ^a	
Annual mean	57,210		52,140		54,820	
Highest annual mean					102,100	1993
Lowest annual mean					34,130	2006
Highest daily mean	195,000	Jun 13 ^b	163,000	Apr 28	529,000	Jul 27, 1993
Lowest daily mean	26,500	Dec 22	25,900	Mar 5	4,730	Dec 18, 1963
Annual seven-day minimum	29,500	Dec 19	26,700	Jan 30	5,480	Dec 17, 1963
Maximum peak flow			169,000	Apr 28	541,000	Jul 27, 1993
Maximum peak stage			25.11	Apr 28	48.87	Jul 27, 1993
Instantaneous low flow			25,600	Dec 22	4,240	Dec 18, 1963
Annual runoff (inches)	1.61		1.46		1.54	
10 percent exceeds	93,600		76,500		91,200	
50 percent exceeds	46,200		49,400		46,800	
90 percent exceeds	32,200		30,600		24,200	

^a Period of Regulated Streamflow

^b Also Jun 14



06893000 MISSOURI RIVER AT KANSAS CITY, MO—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Discrete suspended and bed material sediments: October 1947 to current year.

WATER-QUALITY DATA
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

Part 1 of 1

Date	Time	Medium name	Instantaneous discharge, ft ³ /s (00061)	Temperature, deg C (00010)	Suspnd. sediment, falldia, dst wat percent <62.5um (70342)	Suspnd. sediment, falldia, dst wat percent <.125mm (70343)	Suspnd. sediment, falldia, dst wat percent <.5 mm (70345)	Suspnd. sediment sieve diametr <0.0625 mm (70331)	Suspended sediment concentration mg/L (80154)
Oct									
08...	1418	Suspended sediment	38,300	19.0	--	--	--	56	261
29...	1043	Suspended sediment	67,800	9.5	--	--	--	58	511
Nov									
13...	1325	Suspended sediment	38,500	9.0	--	--	--	59	231
Feb									
19...	1427	Suspended sediment	42,800	2.0	--	--	--	57	609
Mar									
02...	1415	Suspended sediment	34,800	3.0	--	--	--	40	427
06...	1443	Suspended sediment	27,500	7.0	--	--	--	39	321
20...	1340	Suspended sediment	38,600	10.0	--	--	--	53	504
Apr									
01...	1411	Suspended sediment	50,700	8.0	--	--	--	72	543
09...	1525	Suspended sediment	45,600	8.0	--	--	--	52	377
14...	1335	Suspended sediment	53,600	10.0	--	--	--	64	458
May									
21...	1445	Suspended sediment	65,900	21.0	--	--	--	82	607
27...	1021	Suspended sediment	58,100	21.0	--	--	--	80	376
Jun									
05...	1325	Suspended sediment	62,000	24.0	--	--	--	87	919
10...	1350	Suspended sediment	92,500	21.0	--	--	--	91	2,920
18...	1445	Suspended sediment	94,200	24.0	--	--	--	92	2,210
Jul									
01...	1250	Suspended sediment	73,500	28.0	--	--	--	78	463
06...	1440	Suspended sediment	77,400	26.0	80	88	100	--	676
23...	1425	Suspended sediment	62,400	26.0	79	89	100	--	405
27...	1525	Suspended sediment	55,500	28.0	--	--	--	61	494
31...	1305	Suspended sediment	53,800	26.0	--	--	--	70	299
Aug									
06...	1415	Suspended sediment	53,000	27.0	--	--	--	66	327
17...	1510	Suspended sediment	75,200	26.0	--	--	--	84	2,600
21...	1105	Suspended sediment	60,100	25.0	--	--	--	71	646
27...	1405	Suspended sediment	52,600	25.0	--	--	--	75	628
Sep									
02...	1315	Suspended sediment	50,000	22.0	--	--	--	69	311
11...	1410	Suspended sediment	47,100	24.0	--	--	--	69	246
22...	1420	Suspended sediment	46,600	23.0	--	--	--	59	248
28...	1340	Suspended sediment	47,100	21.0	--	--	--	64	241

06893000 MISSOURI RIVER AT KANSAS CITY, MO—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

Part 1 of 2

Date	Time	Medium name	Instan- taneous dis- charge, ft ³ /s (00061)	Bed	Bed	Bed	Bed
				sedi- ment, dry svd sve dia <16 mm (80172)	sedi- ment, dry svd sve dia <8 mm (80171)	sedi- ment, dry svd sve dia <4 mm (80170)	sedi- ment, dry svd sve dia <2 mm (80169)
May							
27...	1000	Bottom material	58,000	--	--	100	72
27...	1005	Bottom material	58,000	--	100	99	95
27...	1007	Bottom material	58,000	--	--	100	99
27...	1009	Bottom material	58,000	--	--	--	--
27...	1011	Bottom material	58,000	--	--	100	99
Jul							
06...	1410	Bottom material	77,300	100	22	3	.0
06...	1419	Bottom material	77,300	--	--	100	99
06...	1423	Bottom material	77,300	--	--	--	--
06...	1427	Bottom material	77,300	--	--	--	--
06...	1430	Bottom material	77,300	--	--	--	--
23...	1437	Bottom material	62,400	--	--	--	--
23...	1440	Bottom material	62,400	--	--	--	--
23...	1444	Bottom material	62,400	--	--	--	--
23...	1447	Bottom material	62,400	--	--	--	--
23...	1452	Bottom material	62,400	--	--	--	--

06893000 MISSOURI RIVER AT KANSAS CITY, MO—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

Part 2 of 2

Date	Bed sedi- ment, falldia dst wat percent <62.5um (80158)	Bed sedi- ment, falldia dst wat percent <.125mm (80159)	Bed sedi- ment, falldia dst wat percent <.25mm (80160)	Bed sedi- ment, falldia dst wat percent <.5 mm (80161)	Bed sedi- ment, falldia dst wat percent <1 mm (80162)	Bed sedi- ment, falldia dst wat percent <2 mm (80163)
	May					
27...	4	4	4	6	45	72
27...	2	2	6	43	90	95
27...	.0	.0	14	81	99	99
27...	4	6	52	97	100	--
27...	.0	1	38	96	99	99
Jul						
06...	.0	.0	.0	.0	.0	--
06...	.0	.0	11	74	99	99
06...	.0	.0	40	91	100	--
06...	.0	2	94	99	100	--
06...	.0	3	82	100	--	--
23...	.0	.0	41	86	99	100
23...	.0	.0	5	70	99	100
23...	.0	.0	60	99	100	--
23...	.0	.0	1	88	100	--
23...	.0	1	81	100	--	--