

MISSOURI RIVER MAIN STEM

06486000 MISSOURI RIVER AT SIOUX CITY, IA

LOCATION.--Lat. 42°29'09", long 96°24'49", in NW¹/₄ SE¹/₄ sec.16, T.29 N., R.9 E., sixth principal meridian, Dakota County, Nebraska, Hydrologic Unit 10230001, on right bank, upstream side of bridge on U.S. Highway 20 and 77, at South Sioux City, Nebraska, 1.9 mi downstream from Big Sioux River, and 732.2 mi upstream from mouth.

DRAINAGE.--314,600 mi², approximately. The 3,959 mi² in Great Divide basin are not included.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1897 to current year in reports of the U.S. Geological Survey. Prior to October 1928 and October 1931 to September 1938, monthly discharges only, published in WSP 1310. January 1879 to December 1890, monthly discharges only, in House Document 238, 73rd Congress, 2d session, Missouri River. Gage height records collected in this vicinity September 1878 to December 1899 are contained in reports of Missouri River Commission and since July 1889 are contained in reports of U.S. Weather Bureau.

REVISED RECORDS.--WSP 716: 1929-30. WSP 876: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,056.98 ft above NGVD of 1929. Sept. 2, 1878 to Dec. 31, 1905, nonrecording gages at various locations within 1.7 mi of present site and at various datums. Jan. 1, 1906 to Feb. 14, 1935, nonrecording gage, and Feb. 15, 1935 to Sept. 30, 1969, water-stage recorder at site 227 ft downstream at datum 19.98 ft higher, and Oct. 1, 1969 to Sept. 30, 1970 at datum 20.00 ft higher. Oct. 1, 1970 to Jan. 30, 1981, water-stage recorder at site 227 ft downstream at present datum.

REMARKS.--Records are considered good, except for those estimated daily discharges, which are poor. Flow regulated by upstream main-stem reservoirs. Fort Randall Dam was completed in July 1952, with storage beginning in December 1952. Gavins Point Dam was completed in July 1955, with storage beginning in December 1955. U.S. Army Corps of Engineers rain gage and data collection platform with satellite telemetry at station. Precipitation records are available online at the U.S. Army Corps of Engineers website: www2.mvr.usace.army.mil/WaterControl/datamining2.cfm.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 441,000 ft³/s Apr. 14, 1952, gage height, 24.28 ft, datum then in use; minimum, 2,500 ft³/s Dec. 29, 1941; minimum gage height, 7.02 ft Jan. 19, 1996.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24,500	12,100	10,800	12,600	13,300	10,900	24,300	24,400	28,600	27,300	26,400	26,700
2	26,000	12,100	11,400	12,000	12,900	11,100	23,400	23,900	28,000	26,500	26,000	26,700
3	25,900	11,500	12,100	12,700	12,700	10,400	23,600	25,300	27,600	26,000	26,000	26,700
4	25,800	11,500	12,100	13,100	12,200	10,300	23,600	25,000	28,100	25,700	27,100	26,800
5	25,700	11,500	12,000	14,100	11,800	10,300	23,500	23,800	31,800	25,100	26,200	27,000
6	25,500	11,700	11,900	13,900	11,500	10,200	23,600	25,000	38,900	24,700	25,700	27,300
7	25,300	11,800	12,000	14,900	10,300	10,200	24,500	24,800	38,800	24,600	26,000	27,200
8	22,800	11,800	12,500	14,800	9,630	9,980	24,100	24,300	39,700	24,500	26,000	27,200
9	19,900	11,500	13,300	14,900	9,780	9,990	24,000	25,300	40,000	24,500	26,100	27,700
10	17,300	11,300	13,400	15,400	10,400	10,300	24,500	24,400	37,600	24,700	26,400	27,500
11	15,400	11,200	13,300	15,900	10,600	10,300	25,400	23,200	35,100	24,800	26,800	28,100
12	14,800	11,300	13,400	15,800	10,400	10,100	24,800	26,700	32,200	24,900	26,600	29,000
13	14,700	11,200	13,400	15,900	11,300	10,100	23,000	25,800	31,600	24,600	26,200	29,300
14	14,400	11,200	12,700	15,100	12,200	10,100	23,600	22,700	31,900	24,500	26,300	28,800
15	14,400	11,200	13,100	15,300	12,000	10,100	22,900	26,600	32,400	25,300	26,200	28,700
16	13,900	11,100	13,100	16,100	11,700	10,100	22,300	25,100	32,900	25,600	26,100	28,600
17	13,600	11,000	13,000	15,900	11,400	10,100	22,200	21,700	33,000	25,600	26,200	28,800
18	13,600	11,100	14,200	15,300	11,000	10,300	22,400	25,500	32,600	25,600	26,600	29,400
19	13,600	11,400	14,500	16,200	10,900	12,600	24,300	24,700	32,000	25,200	26,400	29,500
20	13,600	11,400	13,500	17,000	11,600	16,400	25,300	22,100	31,300	25,800	26,400	29,200
21	13,300	11,100	e15,400	15,200	11,600	19,400	23,400	26,000	32,000	25,800	26,500	28,500
22	13,200	11,200	e14,500	13,200	11,000	22,500	22,300	25,900	32,400	25,400	26,500	28,300
23	13,200	11,200	14,200	7,850	10,500	24,700	21,300	23,600	30,800	25,300	26,200	28,000
24	13,100	11,100	14,400	12,000	10,500	24,800	21,200	25,700	30,800	25,600	26,100	28,100
25	13,000	11,000	15,400	15,700	10,400	25,200	21,400	27,900	33,200	26,000	26,200	30,700
26	12,900	11,100	17,200	15,800	10,400	24,900	21,500	27,900	32,900	26,100	26,700	30,400
27	12,600	11,400	15,100	14,600	10,400	24,600	21,500	27,300	29,800	27,000	26,700	29,600
28	12,300	11,100	14,700	13,300	10,600	23,800	22,100	27,500	29,600	26,600	26,700	29,700
29	12,400	11,100	14,400	13,700	---	24,200	22,700	27,700	30,300	25,200	26,800	28,900
30	12,400	11,000	13,900	13,200	---	25,100	23,500	27,600	28,700	25,800	26,700	27,900
31	12,200	---	13,700	13,000	---	25,300	---	27,500	---	27,100	26,700	---
TOTAL	521,300	340,200	418,600	444,450	313,010	478,370	696,200	784,900	974,600	791,400	817,500	850,300
MEAN	16,820	11,340	13,500	14,340	11,180	15,430	23,210	25,320	32,490	25,530	26,370	28,340
MAX	26,000	12,100	17,200	17,000	13,300	25,300	25,400	27,900	40,000	27,300	27,100	30,700
MIN	12,200	11,000	10,800	7,850	9,630	9,980	21,200	21,700	27,600	24,500	25,700	26,700
AC-FT	1,034,000	674,800	830,300	881,600	620,900	948,800	1,381,000	1,557,000	1,933,000	1,570,000	1,622,000	1,687,000

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1953 - 2005, BY WATER YEAR (WY)

MEAN	35,560	30,740	18,640	16,060	17,050	22,950	32,870	33,570	35,330	35,620	35,890	36,230
MAX	69,300	71,600	39,880	27,720	31,120	47,020	88,040	78,720	66,400	65,550	65,360	66,400
(WY)	(1998)	(1998)	(1998)	(1987)	(1997)	(1997)	(1997)	(1997)	(1997)	(1997)	(1997)	(1997)
MIN	14,350	6,951	8,271	7,316	6,293	9,135	17,450	23,820	23,270	25,530	24,270	25,790
(WY)	(1962)	(1962)	(1962)	(1964)	(1963)	(1957)	(1957)	(1962)	(1960)	(2005)	(1993)	(1962)

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SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1953 - 2005 a	
ANNUAL TOTAL	7,933,000		7,430,830		29,250	
ANNUAL MEAN	21,670		20,360		19,770	
HIGHEST ANNUAL MEAN					55,890	1997
LOWEST ANNUAL MEAN					19,770	1957
HIGHEST DAILY MEAN	37,900	Jun 6	40,000	Jun 9	105,000	Jun 25, 1953
LOWEST DAILY MEAN	10,800	Dec 1	7,850	Jan 23	3,000	Dec 11, 1961
ANNUAL SEVEN-DAY MINIMUM	11,100	Nov 25	10,100	Mar 8	5,430	Feb 22, 1963
MAXIMUM PEAK FLOW			40,900	Jun 9	101,000	Apr 3, 1960
MAXIMUM PEAK STAGE			17.91	Jun 9	30.65	Feb 19, 1971
ANNUAL RUNOFF (AC-FT)	15,740,000		14,740,000		21,190,000	
10 PERCENT EXCEEDS	32,000		28,800		45,900	
50 PERCENT EXCEEDS	22,900		23,200		29,500	
90 PERCENT EXCEEDS	12,000		11,000		12,000	

a Post regulation.
e Estimated.

