

UPPER MISSISSIPPI RIVER MAIN STEM

05270700 MISSISSIPPI RIVER AT ST. CLOUD, MN

LOCATION.--Lat 4532'50", long 9408'44", in SE 1 / 4 SW 1 / 4 sec. 1, T. 35 N., R. 31 W., Sherburne County, Hydrologic Unit 07010203, on left bank about 250 ft below the left downstream end of the City of St. Cloud hydropower dam and at mile 926.3 upstream from Ohio River.

DRAINAGE AREA.--13,320 mi², approximately.

PERIOD OF RECORD.--October 1988 to current year.

GAGE.--Water-stage recorder. Datum of gage is 958.49 ft above sea level.

REMARKS.--Records good except those for estimated daily discharge, which are fair..
Flow partly regulated by power plants and reservoirs.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4560	6020	6090	3340	4550	10400	7510	5350	5150	14900	5340	2480
2	5110	6160	6440	4350	4440	11100	8120	5260	5850	13800	5280	2400
3	4950	6210	6370	4200	4480	10800	9070	4910	5940	12800	6160	2370
4	4930	6370	6070	3750	4550	10400	9550	4460	5700	11900	4470	2240
5	4960	6150	5680	3370	4310	9820	10200	4350	6200	11400	2920	2340
6	5040	6230	5540	3860	4410	9270	9860	4070	6240	11000	4320	2450
7	4710	6410	5960	4050	4480	8910	10300	4160	6210	10800	4550	2440
8	4820	6550	5810	4340	4490	9190	10800	4410	6130	11200	4010	2120
9	4840	6610	5850	4100	4420	e8000	11000	4010	5510	11000	4020	1840
10	4420	6610	6330	e3900	4290	e7400	12100	3980	5600	10500	3860	2080
11	4810	6650	5710	e3700	4210	e6800	12300	4260	5170	10200	3980	2370
12	5290	6710	5670	e3600	4310	e6200	12100	4690	6220	9230	3620	2100
13	5960	6190	5450	e3500	4140	5910	12900	4750	7020	8830	3650	1920
14	6100	6330	6160	e3700	4140	5980	11900	4200	7120	8310	3440	2370

15	6690	6100	5870	e4000	4430	6470	11800	4900	7690	8840	3060	2470
16	7270	5140	6020	e4100	4470	5950	11300	5840	8590	8300	2960	2030
17	7450	5050	5680	e4200	4410	5450	10500	6920	8380	8010	2800	1950
18	7540	4570	5810	e4200	4990	5800	10100	8640	8730	8050	2800	2510
19	7840	4880	6040	e4300	5060	5550	9930	8770	10600	7870	2570	2870
20	e7700	5740	5570	e4500	5740	5150	9150	9070	11800	7540	3070	2600
21	e7600	5770	5060	e4600	6210	5120	8770	7830	12600	7280	3150	2540
22	e7300	5480	5070	e4500	6320	5680	8620	7800	13000	7240	2680	2090
23	e7000	4800	5660	e4500	7150	5140	7790	6850	13000	6810	3060	2510
24	6690	4440	4640	e4500	8150	4690	7710	6500	13400	6770	3230	2290
25	6750	4430	4560	e4500	8860	4690	7150	6500	13400	6730	3250	2390
26	6410	5640	4830	e4600	9610	4610	6980	6490	13700	6370	2900	2130
27	6480	5580	4190	4650	10300	4720	6430	5420	15300	6620	2910	2900
28	6210	6310	4380	4740	10500	5060	5870	5130	16000	5960	3120	2200
29	6090	6130	4770	4810	---	5540	6090	5000	16200	5110	2750	1960
30	6410	6060	4500	4790	---	5730	5570	5110	15700	5650	2760	2220
31	5960	---	3910	4690	---	6730	---	5600	---	5650	2590	---
TOTAL	187890	175320	169690	129940	157420	212260	281470	175230	282150	274670	109280	69180
MEAN	6061	5844	5474	4192	5622	6847	9382	5653	9405	8860	3525	2306
MAX	7840	6710	6440	4810	10500	11100	12900	9070	16200	14900	6160	2900
MIN	4420	4430	3910	3340	4140	4610	5570	3980	5150	5110	2570	1840
AC-FT	372700	347700	336600	257700	312200	421000	558300	347600	559600	544800	216800	137200
CFSM	.46	.44	.41	.31	.42	.51	.70	.42	.71	.67	.26	.17
IN.	.52	.49	.47	.36	.44	.59	.79	.49	.79	.77	.31	.19

e Estimated

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 1998, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	5752	5548	4526	3948	3926	6679	13630	11030	7579	8328	4609	4574
MAX	15680	9675	7434	5616	5796	10600	29600	17250	12730	16830	9079	7360
(WY)	1996	1996	1997	1997	1997	1995	1997	1996	1993	1993	1993	1988
MIN	3106	2953	2310	1927	1815	3860	6576	5653	3743	3930	1535	2297
(WY)	1993	1989	1991	1991	1990	1989	1990	1998	1992	1989	1989	1990

SUMMARY STATISTICS	FOR 1997 CALENDAR YEAR		FOR 1998 WATER YEAR		WATER YEARS 1988 - 1998		
ANNUAL TOTAL	3269730		2224500				
ANNUAL MEAN	8958		6095		6662		
HIGHEST ANNUAL MEAN					9167		1997
LOWEST ANNUAL MEAN					4615		1990
HIGHEST DAILY MEAN	45100	Apr 9	16200	Jun 29	45100	Apr 9	1997
LOWEST DAILY MEAN	3910	Dec 31	1840	Sep 9	1010	Aug 24	1989
ANNUAL SEVEN-DAY MINIMUM	4450	Dec 25	2110	Sep 8	1250	Aug 13	1989
INSTANTANEOUS PEAK FLOW			16700	Jun 29	46900	Apr 8	1997
INSTANTANEOUS PEAK STAGE			7.27	Jun 29	11.44	Apr 8	1997
INSTANTANEOUS LOW FLOW					484a	Oct 18	1992
ANNUAL RUNOFF (AC-FT)	6486000		4412000		4826000		
ANNUAL RUNOFF (CFSM)	.67		.46		.50		
ANNUAL RUNOFF (INCHES)	9.13		6.21		6.80		
10 PERCENT EXCEEDS	14600		10400		12700		
50 PERCENT EXCEEDS	6020		5650		5500		
90 PERCENT EXCEEDS	4870		2890		2520		

a Result of regulation.

