

UPPER MISSISSIPPI RIVER MAIN STEM--Continued

05270500 SAUK RIVER NEAR ST. CLOUD, MN

LOCATION.--Lat 45°33'35", long 94°14'00", in SW¹/₄SW¹/₄ sec. 8, T. 124 N., R. 28 W., Stearns County, Hydrologic Unit 07010203, on right bank 0.5 mi northwest of Waite Park, 3 mi west of St. Cloud, and 5 mi upstream from mouth.

DRAINAGE AREA.--1030 mi².

PERIOD OF RECORD.--July 1909 to December 1912, April to December 1913, May to November 1929, March 1930 to September 1931, April to November 1932, March to November 1933, March 1934 to September 1981, October 1990 to current year. Monthly discharge only for some periods, published in WSP 1308.

REVISED RECORD--WSP 895: Drainage area. WSP 1308: 1912(M), 1932 (M). WSP 1508: 1937(m).

GAGE.--Water-stage recorder. Datum of gage is 1,034.63 ft above sea level (NGVD of 1929). Prior to Nov. 22, 1934, nonrecording gage on highway bridge 1 mi downstream at datum 6.77 ft lower.

REMARKS.--Records good except those for estimated daily discharge, which are fair to poor. Flow regulated in part by power plants and reservoirs above station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	154	260	108	e113	e79	e360	203	181	161	116	199	76
2	135	258	110	e112	e79	402	194	173	169	124	182	65
3	123	232	119	e111	e80	424	195	173	153	106	172	60
4	124	227	124	e110	e81	443	184	176	155	97	166	59
5	123	227	123	e109	e81	472	176	170	162	106	157	49
6	114	217	e110	e107	e81	438	205	169	164	124	150	49
7	105	206	113	e108	e80	447	152	161	157	110	149	48
8	144	196	108	e108	e80	461	150	239	152	109	129	54
9	145	189	108	e107	e79	493	157	214	139	221	128	46
10	144	174	e106	e107	e80	480	139	208	140	215	117	45
11	137	159	e105	e107	e80	478	142	233	130	226	108	39
12	133	160	e104	e106	e78	454	149	255	111	296	102	32
13	129	155	e103	e106	e77	435	139	270	111	342	98	33
14	125	155	e100	e105	e79	413	142	228	131	345	87	30
15	129	141	e98	e105	e80	379	133	217	146	324	86	26
16	122	140	e78	e104	e80	369	139	216	135	322	90	23
17	124	137	e82	e104	e83	345	158	213	125	337	113	21
18	114	135	e85	e103	e83	326	167	195	116	319	123	21
19	118	125	e90	e100	e85	300	156	193	128	318	111	29
20	124	140	e88	e92	e87	273	139	199	113	300	103	28
21	129	135	e86	e88	e93	262	169	197	141	275	101	29
22	144	143	e84	e86	e100	252	175	194	132	259	103	27
23	123	136	e85	e86	e130	244	164	190	122	241	99	22
24	121	142	e88	e85	e170	260	163	182	122	224	96	24
25	142	137	e94	e85	e235	280	171	167	129	236	93	24
26	161	137	e98	e83	e285	255	174	143	122	241	92	25
27	159	135	e100	e81	e315	253	176	138	137	232	85	27
28	178	124	e104	e80	e330	232	170	169	119	232	87	25
29	189	116	e110	e80	e335	217	156	166	118	223	87	25
30	237	114	e115	e80	---	213	167	165	115	213	79	31
31	238	---	e114	e80	---	212	---	168	---	207	74	---
TOTAL	4387	4952	3140	3038	3605	10872	4904	5962	4055	7040	3566	1092
MEAN	142	165	101	98.0	124	351	163	192	135	227	115	36.4
MAX	238	260	124	113	335	493	205	270	169	345	199	76
MIN	105	114	78	80	77	212	133	138	111	97	74	21
AC-FT	8700	9820	6230	6030	7150	21560	9730	11830	8040	13960	7070	2170
CFSM	.14	.16	.10	.10	.12	.34	.16	.19	.13	.22	.11	.04
IN.	.16	.18	.11	.11	.13	.39	.18	.22	.15	.25	.13	.04

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STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1909 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	172	181	137	101	110	318	815	508	412	322	207	180
MAX	1154	1091	528	336	568	1380	2997	1572	1333	1262	1250	1136
(WY)	1996	1972	1972	1980	1966	1966	1997	1975	1957	1993	1972	1957
MIN	6.22	6.18	5.15	3.25	7.61	28.7	16.5	7.84	15.9	10.6	10.5	10.7
(WY)	1934	1934	1935	1935	1935	1940	1934	1934	1934	1934	1933	1933

SUMMARY STATISTICS FOR 1999 CALENDAR YEAR FOR 2000 WATER YEAR WATER YEARS 1909 - 2000

ANNUAL TOTAL		127930		56613						304 ^a		
ANNUAL MEAN		350		155						732		1972
HIGHEST ANNUAL MEAN										51.0		1931
LOWEST ANNUAL MEAN										7940		Apr 14 1965
HIGHEST DAILY MEAN			1590	May 21		493	Mar 9			1.3		Jan 6 1935
LOWEST DAILY MEAN			78	Dec 16		21	Sep 17,18			1.5		Jan 2 1935
ANNUAL SEVEN-DAY MINIMUM			85	Dec 16		25	Sep 23			9100		Apr 13 1965
INSTANTANEOUS PEAK FLOW						509	Mar 9			10.68		Apr 13 1965
INSTANTANEOUS PEAK STAGE						2.42 ^b	Feb 29			.30		Nov 25 1936
INSTANTANEOUS LOW FLOW						15	Sep 16,18					
ANNUAL RUNOFF (AC-FT)			253700			112300				220300		
ANNUAL RUNOFF (CFMS)			.34			.15				.30		
ANNUAL RUNOFF (INCHES)			4.62			2.04				4.01		
10 PERCENT EXCEEDS			850			264				727		
50 PERCENT EXCEEDS			175			132				142		
90 PERCENT EXCEEDS			122			79				37		

^a Median of annual mean discharges is 300 ft³/s.

^b Backwater from ice.

^e Estimated.

