

## 05270500 SAUK RIVER NEAR ST. CLOUD, MN

LOCATION.--Lat 45°33'35", long 94°14'00", in SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> 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.--1,030 mi<sup>2</sup>.

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 to except those for Mar. 21 to June 8, which are fair, and those for estimated daily discharge, which are poor. Flow may be influenced by regulation from power plant and small lakes upstream from gage.

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	324	501	314	e91	e123	e142	622	598	648	721	255	199
2	325	508	302	e91	e131	e144	665	558	652	652	240	199
3	299	500	295	e92	e137	e147	661	511	651	631	235	200
4	289	499	286	e93	e140	e150	636	475	648	606	235	257
5	276	498	275	e93	e145	e157	615	450	702	567	218	257
6	273	503	264	e93	e144	e233	602	450	742	528	200	301
7	263	504	272	e92	e138	e278	595	430	710	502	192	328
8	258	485	270	e92	e133	e297	583	415	755	483	182	346
9	249	463	266	e92	e130	e321	561	410	789	470	184	366
10	235	459	272	e92	e129	e346	546	413	819	452	173	372
11	229	444	272	e91	e132	e346	578	391	888	432	166	379
12	221	436	e228	e91	e137	e336	670	356	965	409	162	466
13	219	431	e136	e84	e141	e325	732	364	933	381	159	668
14	210	423	e103	e81	e143	e312	789	390	977	359	144	622
15	210	414	e126	e77	e140	e305	893	403	994	347	136	600
16	221	413	e123	e78	e138	e299	994	403	980	335	144	598
17	206	407	e120	e80	e132	e291	1,050	397	975	323	129	585
18	187	404	e115	e82	e131	286	1,060	418	961	316	139	571
19	180	402	e103	e85	e130	278	1,050	485	950	284	144	582
20	192	435	e93	e85	e129	269	1,030	494	1,000	284	153	563
21	187	433	e89	e85	e131	256	985	494	1,030	261	153	546
22	184	429	e84	e84	e132	252	956	511	985	245	140	547
23	202	430	e80	e85	e136	256	914	510	972	266	133	501
24	222	408	e82	e94	e137	267	877	485	959	274	135	468
25	220	388	e85	e102	e137	276	844	500	916	263	129	455
26	219	374	e86	e101	e137	288	802	600	880	310	188	453
27	212	369	e87	e101	e138	302	754	627	854	293	202	425
28	296	363	e90	e109	e139	326	710	631	813	281	211	417
29	408	348	e91	e114	---	353	660	635	774	269	209	397
30	487	327	e91	e116	---	425	628	648	772	258	199	373
31	522	---	e91	e118	---	551	---	653	---	259	191	---
TOTAL	8,025	12,998	5,191	2,864	3,790	8,814	23,062	15,105	25,694	12,061	5,480	13,041
MEAN	259	433	167	92.4	135	284	769	487	856	389	177	435
MAX	522	508	314	118	145	551	1,060	653	1,030	721	255	668
MIN	180	327	80	77	123	142	546	356	648	245	129	199
AC-FT	15,920	25,780	10,300	5,680	7,520	17,480	45,740	29,960	50,960	23,920	10,870	25,870
CFSM	0.25	0.42	0.16	0.09	0.13	0.28	0.75	0.47	0.83	0.38	0.17	0.42
IN.	0.29	0.47	0.19	0.10	0.14	0.32	0.83	0.55	0.93	0.44	0.20	0.47

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1909 - 2005, BY WATER YEAR (WY)

MEAN	177	190	138	102	110	309	835	529	427	339	217	189
MAX	1,154	1,091	528	336	568	1,380	2,997	1,862	1,333	1,262	1,250	1,136
(WY)	(1996)	(1972)	(1972)	(1980)	(1966)	(1966)	(1997)	(2001)	(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)

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SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1909 - 2005	
ANNUAL TOTAL	95,105		136,125		a312	
ANNUAL MEAN	260		373		732	
HIGHEST ANNUAL MEAN					51.0 1931	
LOWEST ANNUAL MEAN					7,940 Apr 14, 1965	
HIGHEST DAILY MEAN	755	Jun 14	1,060	Apr 18	1.3	Jan 6, 1935
LOWEST DAILY MEAN	53	Jan 30	77	Jan 15	1.5	Jan 2, 1935
ANNUAL SEVEN-DAY MINIMUM	56	Jan 29	81	Jan 13	9,100	Apr 13, 1965
MAXIMUM PEAK FLOW			1,130 Jun 20		10.68 Apr 13, 1965	
MAXIMUM PEAK STAGE			4.16 Jun 20		0.30 Nov 25, 1936	
INSTANTANEOUS LOW FLOW			b77 Jan 15			
ANNUAL RUNOFF (AC-FT)	188,600		270,000		226,000	
ANNUAL RUNOFF (CFSM)	0.252		0.362		0.303	
ANNUAL RUNOFF (INCHES)	3.43		4.92		4.12	
10 PERCENT EXCEEDS	501		754		775	
50 PERCENT EXCEEDS	219		302		157	
90 PERCENT EXCEEDS	84		98		42	

- a Median of annual mean discharges is 300 ft<sup>3</sup>/s.
- b Daily-mean discharge, backwater from ice.
- e Estimated.

