

STREAMS TRIBUTARY TO LAKE SUPERIOR--Continued

04024000 ST. LOUIS RIVER AT SCANLON, MN

LOCATION.--Lat 46°42'12", long 92°25'07", in NW¼ sec. 30, T.49 N., R.16 W., Carlton County, Hydrologic Unit 04010201, on right bank 80 ft downstream from lower bridge on U.S. Highway 61 at Scanlon, 0.6 mi downstream from Minnesota Power Co. power plant, 3 mi upstream from Thomson Reservoir, and 3.2 mi upstream from Midway River.

DRAINAGE AREA.--3,430 mi² (approximately).

PERIOD OF RECORD.--January 1908 to current year. Monthly discharge only for some periods published in WSP 1307. Published as "near Thomson" 1908-50.

REVISED RECORDS.--WSP 1337: 1911-12.

GAGE.--Water-stage recorder. Datum of gage is 1,101.23 ft above sea level (NGVD of 1929). Oct. 5, 1909 to Sept. 5, 1914, nonrecording gage 3 mi downstream and 50 ft below power plant at datum about 420 ft lower. Sept. 6, 1914 to Aug. 4, 1953, power plant record at Thomson hydroelectric plant.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Diurnal fluctuation caused by power plant upstream. Flow regulated by Whiteface Reservoir and Boulder, Island, Rice and Fish Lakes, combined capacity, 332,160 acre-ft; the water-discharge table shows the monthly change in contents (+).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	583	2830	1590	e1130	e1100	e1100	1250	18200	7650	1230	962	848		
2	613	3140	1390	e1110	e1000	e1120	1200	17300	6930	1170	970	824		
3	610	3400	1290	e1090	e1050	e1130	1230	15800	6700	1150	876	777		
4	599	3340	1250	e1070	e1120	e1110	1300	14000	6090	1060	864	670		
5	545	3150	e1200	e1100	e1070	e1130	1320	12600	5380	998	842	731		
6	561	3190	e1160	e1180	e1100	e1160	1490	11700	4640	971	779	687		
7	579	3850	e1120	e1230	e1120	e1160	3550	11500	3930	887	824	622		
8	560	5160	e1080	e1150	e1140	e1140	10300	11100	3580	853	834	672		
9	584	5800	e1340	e1090	e1130	e1140	13300	9950	3240	748	891	760		
10	567	5530	e1400	e1090	e1060	e1140	14800	9330	3120	832	856	651		
11	561	4940	e930	e1110	e1140	e1130	e16500	9460	2950	663	892	679		
12	562	4630	e1200	e1100	e1170	e1150	e20700	8880	2900	641	935	566		
13	571	4490	e1450	e1080	e1050	e1180	23700	8050	2830	652	883	612		
14	674	4650	e1350	e1080	e1080	e1200	25400	7600	3870	604	909	630		
15	726	4510	e1330	e1080	e1090	e1200	25200	7470	5030	635	944	625		
16	1020	3930	e1320	e1090	e1100	e1200	23300	6880	5080	605	1030	635		
17	1260	3570	e1300	e1090	e1140	e1200	20900	6520	4600	575	1050	578		
18	1290	3230	e1180	e1080	e1160	e1200	18900	5780	4440	644	1390	576		
19	1300	2600	e1150	e1080	e1180	e1200	17100	5040	4120	672	1480	606		
20	1300	2030	e1180	e1070	e1220	1300	15500	4470	4110	601	1380	624		
21	1170	2150	e1180	e1070	e1200	1230	14500	4680	3660	718	1250	578		
22	1190	2090	e1200	e1070	e1180	1310	13700	8100	3330	744	1280	569		
23	1250	2020	e1220	e1080	e1170	1290	21400	12200	3050	761	1220	569		
24	1140	1980	e1230	e1080	e1210	1260	26500	13200	2780	773	1110	692		
25	1110	1970	e1220	e1080	e1220	1270	27100	12900	2550	722	1140	628		
26	1250	1940	e1200	e1090	e1180	1300	25700	13100	2140	718	1060	577		
27	1560	1900	e1170	e1100	e1130	1270	24400	13800	1740	717	906	642		
28	2060	1830	e1250	e1090	e1100	1230	23600	13500	1640	788	882	614		
29	2660	1680	e1120	e1080	---	1160	22100	12500	1420	797	890	606		
30	2650	1770	e1150	e1120	---	1210	20000	11100	1430	753	956	597		
31	2640	---	e1160	e1060	---	1230	---	9430	---	724	857	---		
TOTAL	33745	97300	38310	34020	31610	37050	475940	326140	114930	24406	31142	19445		
MEAN	1089	3243	1236	1097	1129	1195	15860	10520	3831	787	1005	648		
MAX	2660	5800	1590	1230	1220	1310	27100	18200	7650	1230	1480	848		
MIN	545	1680	930	1060	1000	1100	1200	4470	1420	575	779	566		
AC-FT	66930	193000	75990	67480	62700	73490	944000	646900	228000	48410	61770	38570		
CFSM	.32	.95	.36	.32	.33	.35	4.63	3.07	1.12	.23	.29	.19		
IN.	.37	1.06	.42	.37	.34	.40	5.16	3.54	1.25	.26	.34	.21		
+	74.2	143	-539	-547	-545	-530	2623	-261	-198	-247	7.08	-229		
‡MEAN	1163	3386	697	550	584	665	18490	10260	3633	540	1012	419		
‡CFSM	.34	.99	.20	.16	.17	.19	5.39	2.99	1.06	.16	.30	.12		
‡IN	.39	1.10	.23	.18	.18	.22	6.01	3.45	1.18	.18	.35	.13		
CAL YR 00	TOTAL	720740	MEAN	1969	MAX	9980	MIN	545	‡MEAN	1967	‡CFSM	0.57	‡IN	7.79
WTR YR 01	TOTAL	1264028	MEAN	3463	MAX	27100	MIN	545	‡MEAN	3440	‡CFSM	1.00	‡IN	13.52

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STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1908 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	2046	1761	1290	1077	1064	1466	5749	5135	3550	2489	1666	1767
MAX	7508	8518	2993	2272	2200	6026	15860	22210	16480	12630	9197	7594
(WY)	1974	1972	1972	1966	1966	1945	2001	1950	1908	1999	1953	1928
MIN	407	473	282	265	249	301	667	593	458	199	377	402
(WY)	1935	1935	1911	1911	1924	1924	1977	1977	1988	1988	1977	1934

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1908 - 2001
ANNUAL TOTAL	720740	1264038	
ANNUAL MEAN	1969	3463	2410
HIGHEST ANNUAL MEAN			4276
LOWEST ANNUAL MEAN			945
HIGHEST DAILY MEAN	9980	May 10	27100
LOWEST DAILY MEAN	545	Oct 5	545
ANNUAL SEVEN-DAY MINIMUM	565	Oct 5	565
MAXIMUM PEAK FLOW			27300
MAXIMUM PEAK STAGE			12.19
ANNUAL RUNOFF (AC-FT)	1430000	2507000	1746000
ANNUAL RUNOFF (CFSM)		.57	.70
ANNUAL RUNOFF (INCHES)	7.82	13.71	9.54
10 PERCENT EXCEEDS	3670	11300	5360
50 PERCENT EXCEEDS	1460	1180	1400
90 PERCENT EXCEEDS	776	639	649

+ Change in contents, equivalent in cubic feet per second, in Whiteface Reservoir, and Boulder, Island, Rice and Fish Lakes; records furnished by Minnesota Power Co.
 † Adjusted for change in reservoir contents.
 e Estimated.

