

05320500 LE SUEUR RIVER NEAR RAPIDAN, MN

LOCATION.--Lat 44°06'40", long 94°02'28", in SW¹/₄ sec. 35, T.108 N., R.27 W., Blue Earth County, Hydrologic Unit 07020011, on right bank 600 ft downstream from highway bridge, 1.8 mi northeast of Rapidan, and 2.3 mi upstream from mouth.

DRAINAGE AREA.--1,110 mi².

PERIOD OF RECORD.--October 1939 to September 1945, July 1949 to current year.

GAGE.--Water-stage recorder. Datum of gage is 775.76 ft above sea level (NGVD of 1929). Prior to Nov. 15, 1939, nonrecording gage at same site and datum.

REMARKS.--Records fair except those for estimated daily discharges, which are fair to poor.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,600 ft³/s and maximum (*):

	Time	Discharge (ft ³ /s)	Gage height (ft)	Time	Discharge (ft ³ /s)	Gage height (ft)
	Apr 2 2000	3,600	5.95	2000	*7,370	*9.01
	Apr 14 1900	3,880	6.21	1100	6,540	8.41

Minimum discharge, 21 ft³/s, Dec. 14, gage height, 0.97 ft, (result of freezeup).

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	1,090	428	246	e156	e117	e165	3,230	791	1,240	892	123	101
2	1,020	445	335	e159	e119	e161	3,460	742	1,150	816	106	83
3	1,070	432	298	e152	e122	e160	3,260	688	1,070	740	94	71
4	1,070	433	348	e139	e132	e165	2,780	652	1,000	774	84	64
5	1,040	426	318	e126	e150	e175	2,390	625	944	678	72	60
6	976	411	303	e117	e164	e204	1,990	623	854	587	63	61
7	915	395	288	e109	e166	e250	1,730	624	759	509	56	70
8	992	381	287	e104	e163	e300	1,520	657	938	442	52	82
9	1,340	346	297	e99	e159	e315	1,360	1,050	1,240	387	53	75
10	1,270	326	309	e96	e158	e330	1,190	1,270	1,390	346	62	70
11	1,110	306	317	e93	e158	e323	1,120	1,320	1,400	307	92	67
12	1,000	301	300	e91	e162	e305	2,410	1,590	1,290	275	172	73
13	925	293	250	e89	e176	e305	3,460	5,120	1,210	247	132	81
14	834	276	e71	e88	e212	e293	3,770	7,080	1,130	223	112	74
15	799	265	e176	e87	e265	e267	3,570	6,750	1,050	203	93	68
16	757	263	e220	e87	e312	e243	3,160	5,680	949	184	79	62
17	715	268	e225	e87	e334	e217	3,190	4,730	857	165	68	57
18	668	275	e214	e86	e327	e191	2,950	4,050	786	163	164	53
19	628	288	e195	e86	e304	e172	2,650	3,720	703	150	274	60
20	595	315	e181	e88	e280	e160	2,450	3,450	651	155	361	53
21	568	339	e177	e94	e255	e156	2,220	3,290	780	166	312	46
22	548	359	e154	e103	e239	e158	2,040	3,060	915	179	228	42
23	534	373	e127	e113	e223	e164	1,790	2,750	1,000	191	157	39
24	490	370	e95	e115	e209	e178	1,550	2,490	889	184	117	40
25	477	358	e94	e116	e196	e230	1,410	2,210	773	178	96	1,520
26	452	341	e102	e116	e186	e360	1,290	2,010	692	176	128	3,530
27	431	344	e108	e117	e177	e667	1,180	1,760	639	151	135	5,560
28	425	338	e117	e117	e171	e1,660	1,050	1,690	619	207	153	6,340
29	411	316	e134	e117	---	e2,310	958	1,600	694	215	205	6,310
30	416	267	e147	e117	---	e2,680	860	1,480	698	180	164	5,860
31	413	---	e151	e117	---	3,040	---	1,330	---	148	128	---
TOTAL	23,979	10,278	6,584	3,381	5,636	16,304	65,988	74,882	28,310	10,218	4,135	30,672
MEAN	774	343	212	109	201	526	2,200	2,416	944	330	133	1,022
MAX	1,340	445	348	159	334	3,040	3,770	7,080	1,400	892	361	6,340
MIN	411	263	71	86	117	156	860	623	619	148	52	39
AC-FT	47,560	20,390	13,060	6,710	11,180	32,340	130,900	148,500	56,150	20,270	8,200	60,840
CFSM	0.70	0.31	0.19	0.10	0.18	0.47	1.98	2.18	0.85	0.30	0.12	0.92
IN.	0.80	0.34	0.22	0.11	0.19	0.55	2.21	2.51	0.95	0.34	0.14	1.03

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2005, BY WATER YEAR (WY)

MEAN	328	267	148	82.4	137	766	1,413	1,000	1,087	653	405	288
MAX	3,300	1,561	698	493	1,299	3,465	6,563	3,706	3,913	2,760	3,656	2,754
(WY)	(1969)	(1993)	(1992)	(1992)	(1984)	(1983)	(1965)	(1960)	(1993)	(1993)	(1993)	(2004)
MIN	7.41	11.1	5.04	2.96	1.68	33.0	48.3	18.8	40.4	20.6	8.20	7.55
(WY)	(1990)	(1956)	(1959)	(1957)	(1959)	(1964)	(1957)	(1940)	(1950)	(1988)	(1989)	(1976)

05320500 LE SUEUR RIVER NEAR RAPIDAN, MN—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1940 - 2005	
ANNUAL TOTAL	282,535.7		280,367		549	
ANNUAL MEAN	772		768		2,035	
HIGHEST ANNUAL MEAN					1993	
LOWEST ANNUAL MEAN					1977	
HIGHEST DAILY MEAN	10,800	Sep 18	7,080	May 14	23,400	Apr 8, 1965
LOWEST DAILY MEAN	8.9	Jan 30	39	Sep 23	1.6	Feb 9, 1959
ANNUAL SEVEN-DAY MINIMUM	9.6	Jan 28	48	Sep 18	1.6	Feb 9, 1959
MAXIMUM PEAK FLOW			7,370	May 14	24,700	Apr 8, 1965
MAXIMUM PEAK STAGE			9.01	May 14	a22.72	May 22, 1960
INSTANTANEOUS LOW FLOW			b21	Dec 14	1.6	Feb 9, 1959
ANNUAL RUNOFF (AC-FT)	560,400		556,100		398,100	
ANNUAL RUNOFF (CFSM)	0.695		0.692		0.495	
ANNUAL RUNOFF (INCHES)	9.47		9.40		6.73	
10 PERCENT EXCEEDS	1,850		2,110		1,520	
50 PERCENT EXCEEDS	304		303		158	
90 PERCENT EXCEEDS	13		87		18	

- a From highwater mark.
- b Result of freezeup.
- e Estimated.

