

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 good 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 (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Oct 8	0700	2,950	5.77	May 15	0900	*3,980	*6.81
Apr 21	2200	1,630	4.24				

Minimum discharge, 13 ft³/s, Sept. 25, 26, 30, gage height, 0.69 ft.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	172	474	e170	157	e43	e52	739	751	634	793	90	22
2	269	458	e160	e135	e45	e53	637	704	581	714	80	22
3	351	441	e155	e119	e47	e53	562	659	549	635	72	20
4	452	424	e153	e106	e48	e51	500	629	532	581	66	20
5	1,180	407	e150	e104	e47	e50	461	643	508	506	67	19
6	2,180	393	e150	e109	e46	e49	428	674	508	458	67	18
7	2,820	382	e153	e115	e44	e49	406	1,010	534	402	61	16
8	2,930	368	e158	123	e44	e49	406	1,210	689	370	57	16
9	2,690	356	e162	128	e44	e50	389	1,390	882	393	53	15
10	2,360	354	e166	141	e44	e52	407	1,670	1,070	820	51	15
11	2,080	353	e171	e110	e44	e54	457	2,470	1,110	910	48	18
12	1,810	333	179	e82	e44	e58	559	2,880	1,100	1,070	43	38
13	1,590	314	193	e69	e45	e66	655	3,080	1,060	1,030	39	32
14	1,380	300	195	e64	e46	e90	686	3,250	978	901	37	27
15	1,200	290	181	e59	e49	e130	693	3,790	891	803	38	26
16	1,080	296	195	e52	e48	e170	768	3,210	794	698	36	22
17	972	287	177	e49	e47	e250	1,130	2,870	742	607	34	20
18	894	279	169	e47	e47	e310	1,400	2,420	755	522	30	18
19	827	277	169	e47	e48	e325	1,540	2,090	668	431	31	17
20	762	275	189	e46	e50	351	1,560	1,850	583	364	34	16
21	692	268	189	e45	e56	313	1,620	1,640	517	326	38	15
22	639	266	171	e45	e64	292	1,610	1,480	469	289	35	16
23	597	253	150	e47	e66	275	1,530	1,350	456	257	30	15
24	562	247	135	e45	e60	310	1,420	1,230	478	223	27	14
25	547	e180	e123	e43	e57	273	1,290	1,110	491	197	29	13
26	566	e130	e120	e42	e55	243	1,170	1,010	508	171	32	15
27	570	e125	e123	e42	e54	244	1,070	924	607	154	28	16
28	556	e200	e128	e41	e53	391	970	843	780	140	25	15
29	527	e230	132	e41	---	622	885	787	791	123	23	14
30	508	e200	138	e41	---	967	812	737	821	109	22	14
31	493	---	172	e42	---	858	---	681	---	98	21	---
TOTAL	34,256	9,160	4,976	2,336	1,385	7,100	26,760	49,042	21,086	15,095	1,344	564
MEAN	1,105	305	161	75.4	49.5	229	892	1,582	703	487	43.4	18.8
MAX	2,930	474	195	157	66	967	1,620	3,790	1,110	1,070	90	38
MIN	172	125	120	41	43	49	389	629	456	98	21	13
AC-FT	67,950	18,170	9,870	4,630	2,750	14,080	53,080	97,270	41,820	29,940	2,670	1,120
CFSM	1.00	0.28	0.14	0.07	0.04	0.21	0.80	1.43	0.63	0.44	0.04	0.02
IN.	1.15	0.31	0.17	0.08	0.05	0.24	0.90	1.64	0.71	0.51	0.05	0.02

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2003, BY WATER YEAR (WY)

MEAN	326	270	149	83.1	138	780	1,422	983	1,072	651	399	235
MAX	3,300	1,561	698	493	1,299	3,465	6,563	3,706	3,913	2,760	3,656	1,526
(WY)	(1969)	(1993)	(1992)	(1992)	(1984)	(1983)	(1965)	(1960)	(1993)	(1993)	(1993)	(1993)
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)

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SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1940 - 2003	
ANNUAL TOTAL	168,205		173,104		544	
ANNUAL MEAN	461		474		51.4	
HIGHEST ANNUAL MEAN					2,035	1993
LOWEST ANNUAL MEAN					51.4	1977
HIGHEST DAILY MEAN	2,930	Oct 8	3,790	May 15	23,400	Apr 8, 1965
LOWEST DAILY MEAN	53	Jan 2	13	Sep 25	1.6	Feb 9, 1959
ANNUAL SEVEN-DAY MINIMUM	54	Jan 1	14	Sep 24	1.6	Feb 9, 1959
MAXIMUM PEAK FLOW			3,980	May 15	24,700	Apr 8, 1965
MAXIMUM PEAK STAGE			6.81	May 15	a22.72	May 22, 1960
INSTANTANEOUS LOW FLOW			13	Sep 25	1.6	Feb 9, 1959
ANNUAL RUNOFF (AC-FT)	333,600		343,400		394,000	
ANNUAL RUNOFF (CFSM)	0.42		0.43		0.49	
ANNUAL RUNOFF (INCHES)	5.64		5.80		6.66	
10 PERCENT EXCEEDS	1,260		1,170		1,510	
50 PERCENT EXCEEDS	266		243		155	
90 PERCENT EXCEEDS	62		30		18	

a From highwater mark.
 e Estimated.

