

05311000 MINNESOTA RIVER AT MONTEVIDEO, MN

LOCATION.--Lat 44°56'00", long 95°44'00", in NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 19, T.117 N., R.40 W., Yellow Medicine County, Hydrologic Unit 07020004, on right bank 20 ft upstream from bridge on U.S. Highway 212, at Montevideo, and 480 ft downstream from Chippewa River.

DRAINAGE AREA.--6,180 mi² (approximately).

PERIOD OF RECORD.--July 1909 to September 1917, October 1917 to September 1929 (no winter records), October 1929 to current year. Prior to October 1939, published as "near Montevideo." Monthly discharge only for some periods, published in WSP 1308.

REVISED RECORDS.--WSP 1035: 1919(M). WSP 1085: 1935-36. WSP 1508: 1912, 1925(M), 1929(M), WDR MN-2000-1; 1995, 1996.

GAGE.--Water-stage recorder. Datum of gage is 909.12 ft above sea level (NGVD of 1929). July 22, 1909 to Feb. 4, 1932, nonrecording gage at bridge 600 ft downstream at present datum. Feb. 5, 1932 to Nov. 26, 1934, nonrecording gage at bridge 100 ft downstream at present datum.

REMARKS.--Records good except those for estimated daily discharges, which are fair to poor. Flow regulated by Big Stone Lake since Apr. 17, 1937, Lac qui Parle since Jan. 1938, and Marsh Lake since Nov. 1, 1939.

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	632	e427	e310	e233	e259	847	1,050	1,200	1,880	1,040	156
2	229	599	e425	e310	e233	e260	569	1,050	1,190	2,090	983	154
3	289	592	e373	e318	e249	e285	570	1,040	1,070	2,100	971	140
4	351	593	e318	e328	e282	e527	569	1,040	796	1,880	936	124
5	360	588	e281	e332	e324	e654	630	1,040	738	1,840	765	122
6	335	546	e280	e332	e324	e647	647	966	785	2,000	615	118
7	360	538	e276	e332	e324	e624	682	876	990	2,240	515	116
8	611	539	e275	e332	e322	e527	685	855	1,050	2,230	500	114
9	768	538	e273	e324	e322	e522	684	984	1,060	2,280	495	84
10	771	539	e272	e314	e322	e501	740	1,150	1,180	2,300	497	111
11	757	552	e272	e314	e291	e417	624	1,230	1,200	2,270	501	107
12	760	534	e272	e314	e261	e369	542	1,430	1,200	2,280	569	92
13	758	535	e273	e314	e259	e363	530	1,720	1,180	e2,280	571	137
14	751	533	e273	e314	e258	e363	503	1,990	1,030	e2,290	519	145
15	731	532	e275	e310	e224	e365	439	2,300	990	e2,340	492	142
16	389	e511	e301	e300	e199	e367	428	2,490	967	e2,310	484	103
17	307	e527	e365	e282	e199	e450	445	2,510	830	e2,190	481	87
18	323	e525	e456	e246	e199	915	670	2,330	731	2,090	476	84
19	500	453	e513	e197	e199	1,390	881	2,290	628	1,820	484	81
20	516	435	e539	e195	e198	1,600	936	2,280	523	1,790	468	79
21	514	435	e532	e194	e237	1,550	1,410	2,230	359	1,730	339	81
22	518	430	e530	e194	e262	1,310	1,720	2,080	328	1,660	308	78
23	515	430	e525	e194	e263	1,230	1,810	1,700	339	1,650	307	79
24	522	427	e525	e194	e260	1,240	1,740	1,600	552	1,370	305	78
25	518	e346	e523	e194	e259	1,230	1,330	1,590	1,130	1,350	305	84
26	516	e429	e521	e194	e259	1,250	1,210	1,570	1,870	1,350	304	82
27	516	e427	e450	e194	e259	1,390	1,190	1,540	1,760	1,280	296	69
28	517	e429	e310	e194	e259	1,570	1,170	1,420	1,710	1,230	191	63
29	520	e427	e310	e213	---	1,460	1,050	1,260	1,700	1,040	157	57
30	530	e427	e310	e236	---	1,480	1,020	1,220	1,700	991	156	51
31	620	---	e310	e235	---	1,430	---	1,220	---	992	156	---
TOTAL	15,844	15,048	11,585	8,254	7,280	26,545	26,271	48,051	30,786	57,143	15,186	3,018
MEAN	511	502	374	266	260	856	876	1,550	1,026	1,843	490	101
MAX	771	632	539	332	324	1,600	1,810	2,510	1,870	2,340	1,040	156
MIN	172	346	272	194	198	259	428	855	328	991	156	51
AC-FT	31,430	29,850	22,980	16,370	14,440	52,650	52,110	95,310	61,060	113,300	30,120	5,990
CFSM	0.08	0.08	0.06	0.04	0.04	0.14	0.14	0.25	0.17	0.30	0.08	0.02
IN.	0.10	0.09	0.07	0.05	0.04	0.16	0.16	0.29	0.19	0.34	0.09	0.02

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1909 - 2003, BY WATER YEAR (WY)

MEAN	363	386	286	183	210	943	2,931	1,658	1,342	1,155	592	341
MAX	3,675	3,797	1,572	760	864	5,363	22,320	7,315	5,088	7,853	7,084	2,613
(WY)	(1996)	(1996)	(1996)	(1987)	(1998)	(1994)	(1997)	(1986)	(1984)	(1993)	(1993)	(1986)
MIN	0.76	1.61	2.35	1.57	1.06	5.06	7.82	3.13	1.40	1.89	0.60	0.57
(WY)	(1934)	(1935)	(1935)	(1934)	(1937)	(1934)	(1934)	(1934)	(1934)	(1933)	(1933)	(1933)

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SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1909 - 2003	
ANNUAL TOTAL	330,930		265,011		a913	
ANNUAL MEAN	907		726		3,166 1997	
HIGHEST ANNUAL MEAN					4.43 1934	
LOWEST ANNUAL MEAN					46,800 Apr 7, 1997	
HIGHEST DAILY MEAN	3,600	Apr 11	2,510	May 17	47,500	Apr 6, 1997
LOWEST DAILY MEAN	172	Oct 1	51	Sep 30	b0.00	Aug 14, 1933
ANNUAL SEVEN-DAY MINIMUM	185	Sep 25	69	Sep 24	0.00	Jul 5, 1934
MAXIMUM PEAK FLOW			c2,540	May 17	23.90	Apr 6, 1997
MAXIMUM PEAK STAGE			9.16	May 17	b0.00	Aug 14, 1933
INSTANTANEOUS LOW FLOW			cd50	Sep 30		
ANNUAL RUNOFF (AC-FT)	656,400		525,600		661,500	
ANNUAL RUNOFF (CFSM)	0.15		0.12		0.15	
ANNUAL RUNOFF (INCHES)	1.99		1.60		2.01	
10 PERCENT EXCEEDS	2,200		1,710		2,320	
50 PERCENT EXCEEDS	611		517		280	
90 PERCENT EXCEEDS	292		194		34	

- a Median of annual mean discharges is 680 ft³/s.
- b Many days in 1933, 34, and 36.
- c Due in part to regulation.
- d Falling stage.
- e Estimated.

