

05311000 MINNESOTA RIVER AT MONTEVIDEO, MN

LOCATION.--Lat 44°56'00", long 95°44'00", in NW¹/₄NW¹/₄ 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 discharge, 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 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	785	2,230	768	e510	e304	e483	1,540	1,590	1,720	4,250	1,030	1,420
2	792	2,000	674	e508	e285	e650	1,420	1,600	1,690	4,170	636	1,290
3	780	1,730	643	e538	e294	e707	1,380	1,690	1,660	4,140	579	1,230
4	793	1,660	656	e645	e327	e699	1,370	1,680	1,640	4,110	579	1,210
5	843	1,630	631	e739	e353	e699	1,200	1,520	1,650	4,070	571	1,190
6	855	1,550	658	e743	e356	e702	951	1,220	1,720	3,950	610	1,210
7	853	1,530	750	e711	e359	e691	946	1,240	2,070	3,740	622	1,340
8	831	1,510	917	e668	e375	e696	1,240	1,250	2,300	3,560	618	1,240
9	814	1,490	1,060	e656	e392	e694	1,310	1,300	2,900	3,390	720	1,050
10	806	1,480	1,070	e573	e401	773	1,320	1,620	3,300	3,240	739	990
11	805	1,470	992	e427	e399	779	1,400	1,760	3,370	3,170	619	816
12	807	1,430	988	e299	e401	780	1,740	1,760	3,410	3,220	585	606
13	814	1,240	938	e220	e398	779	2,500	1,720	3,450	3,220	579	612
14	827	1,170	e935	e216	e437	778	3,100	1,870	3,550	3,190	577	855
15	817	1,130	e923	e219	e531	784	3,290	1,890	3,610	3,160	573	987
16	787	1,060	891	e219	e557	780	3,360	1,910	3,540	3,170	545	998
17	749	1,050	780	e217	e559	778	3,350	2,230	3,600	3,150	524	952
18	737	1,060	821	e244	e529	769	3,160	2,360	3,820	3,090	428	940
19	702	1,130	e871	e256	e508	648	2,850	2,490	4,010	3,060	422	951
20	688	1,210	e944	e258	e508	614	2,800	2,510	4,110	3,060	414	872
21	641	1,220	e1,020	e259	e503	616	2,760	2,490	4,190	2,900	411	853
22	590	1,220	e1,030	e265	e500	621	2,720	2,280	4,260	2,450	416	848
23	590	1,250	e993	e298	e497	627	2,590	1,860	4,290	1,560	468	840
24	596	1,240	e892	e350	e498	631	2,500	1,640	4,320	1,300	471	770
25	610	1,170	e788	e475	e488	670	2,300	1,640	4,350	1,270	468	777
26	744	1,150	e673	e455	e494	747	1,980	1,870	4,340	1,410	526	769
27	764	1,150	e632	e440	e484	756	1,770	2,330	4,300	1,650	1,200	703
28	1,140	1,140	e516	e403	e483	786	1,720	2,410	4,270	1,680	1,610	695
29	2,170	1,090	e449	e381	---	1,050	1,690	2,380	4,240	1,550	1,850	737
30	2,380	882	e494	e362	---	1,250	1,610	2,140	4,270	1,370	1,990	743
31	2,360	---	e504	e328	---	1,420	---	1,880	---	1,290	1,660	---
TOTAL	28,470	40,272	24,901	12,882	12,220	23,457	61,867	58,130	99,950	88,540	23,040	28,494
MEAN	918	1,342	803	416	436	757	2,062	1,875	3,332	2,856	743	950
MAX	2,380	2,230	1,070	743	559	1,420	3,360	2,510	4,350	4,250	1,990	1,420
MIN	590	882	449	216	285	483	946	1,220	1,640	1,270	411	606
AC-FT	56,470	79,880	49,390	25,550	24,240	46,530	122,700	115,300	198,300	175,600	45,700	56,520
CFSM	0.15	0.22	0.13	0.07	0.07	0.12	0.33	0.30	0.54	0.46	0.12	0.15
IN.	0.17	0.24	0.15	0.08	0.07	0.14	0.37	0.35	0.60	0.53	0.14	0.17

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

MEAN	366	394	291	185	212	938	2,895	1,649	1,367	1,169	591	348
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)

05311000 MINNESOTA RIVER AT MONTEVIDEO, MN—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1909 - 2005	
ANNUAL TOTAL	255,212		502,223			
ANNUAL MEAN	697		1,376		a913	
HIGHEST ANNUAL MEAN					3,166	1997
LOWEST ANNUAL MEAN					4.43	1934
HIGHEST DAILY MEAN	3,010	Jun 16	b4,350	Jun 25	46,800	Apr 7, 1997
LOWEST DAILY MEAN	94	Feb 2	216	Jan 14	c0.00	Aug 14, 1933
ANNUAL SEVEN-DAY MINIMUM	96	Jan 30	227	Jan 13	0.00	Jul 5, 1934
MAXIMUM PEAK FLOW			4,400	Jun 25	47,500	Apr 6, 1997
MAXIMUM PEAK STAGE			12.72	Jun 25	23.90	Apr 6, 1997
INSTANTANEOUS LOW FLOW			b,d216	Jan 14	c0.00	Aug 14, 1933
ANNUAL RUNOFF (AC-FT)	506,200		996,200		661,700	
ANNUAL RUNOFF (CFSM)	0.113		0.223		0.148	
ANNUAL RUNOFF (INCHES)	1.54		3.02		2.01	
10 PERCENT EXCEEDS	1,400		3,200		2,320	
50 PERCENT EXCEEDS	624		951		290	
90 PERCENT EXCEEDS	138		433		34	

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

