

05301000 MINNESOTA RIVER NEAR LAC QUI PARLE, MN

LOCATION.--Lat 45°01'17", long 95°52'05", in NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec.24, T.118 N., R.42 W., Chippewa County, Hydrologic Unit 07020004, on left bank 200 ft downstream from highway bridge and dam, 2.4 mi northeast of city of Lac Qui Parle, and 3.5 mi west of city of Watson.

DRAINAGE AREA.--4,050 mi² (approximately).

PERIOD OF RECORD.--October 1942 to September 1994, October 1998 to present.

REVISED RECORDS.--WDR MN-91-2; 1979

GAGE.--Water-stage recorder. Datum of gage is 900.00 ft above sea level (NGVD or 1929, levels by U.S. Army Corps of Engineers). Prior to Nov. 10, 1944, at datum 0.20 ft. lower.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Part of flow from 2,050 mi², of Chippewa River basin at most times diverted into Minnesota River above station. Some regulation by Big Stone Lake since Apr. 17, 1937, Lac qui Parle since Jan. 1938, Marsh Lake since Nov. 1, 1939, and Odessa Dam since May 1974.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Apr. 1997 reached a discharge of approximately 43,000 ft³/s, combination of measured flow through dam and indirect computation of flow over dam; peak stage occurred Apr. 7, 1997 (from Corps of Engineers).

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	98	446	e280	199	185	184	430	781	822	1,360	790	83
2	144	416	247	200	183	191	349	779	819	1,530	790	76
3	176	417	210	217	206	312	385	778	656	1,410	784	61
4	210	415	185	228	234	e530	429	773	423	1,210	660	62
5	188	379	186	229	236	e529	505	728	437	1,280	465	61
6	211	347	185	230	233	e524	530	639	571	1,520	323	60
7	324	348	183	230	238	489	554	555	747	1,750	296	62
8	548	347	183	227	233	426	552	598	752	1,840	294	48
9	602	347	183	220	235	427	547	758	818	1,930	292	32
10	596	366	183	e220	212	359	506	844	901	1,920	291	32
11	591	347	184	e220	190	261	411	931	900	1,860	334	29
12	605	345	183	e220	194	263	375	1,140	894	1,860	368	29
13	588	345	183	e220	193	263	376	1,310	808	1,870	366	28
14	588	345	183	e220	168	263	338	1,510	724	1,910	353	28
15	383	345	186	e206	142	263	280	1,820	720	1,960	339	29
16	142	348	232	183	144	263	280	2,030	640	1,890	336	29
17	143	349	281	157	145	407	373	1,900	477	1,780	335	27
18	262	313	330	137	142	832	592	1,690	365	1,570	335	26
19	330	284	374	137	142	1,130	656	1,650	260	1,370	334	25
20	325	284	373	137	142	1,230	812	1,630	173	1,370	265	26
21	328	289	377	137	166	1,180	1,220	1,570	137	1,370	186	25
22	326	288	379	137	186	1,050	1,400	1,270	137	1,320	186	29
23	326	298	e378	137	186	1,040	1,440	1,000	246	1,150	186	27
24	325	e289	e378	137	187	1,040	1,200	990	488	971	185	40
25	325	e289	e378	137	188	1,050	891	990	1,010	1,040	183	26
26	328	e289	e316	137	186	1,050	882	988	1,290	1,010	183	30
27	324	e289	204	136	186	1,120	878	956	1,080	961	133	31
28	325	288	202	155	186	1,230	838	881	1,080	864	83	27
29	326	282	201	186	---	1,220	783	823	1,080	713	82	29
30	404	e280	198	187	---	1,210	782	829	1,140	707	83	25
31	468	---	199	186	---	973	---	825	---	748	82	---
TOTAL	10,859	10,014	7,744	5,709	5,268	21,309	19,594	33,966	20,595	44,044	9,922	1,142
MEAN	350	334	250	184	188	687	653	1,096	686	1,421	320	38.1
MAX	605	446	379	230	238	1,230	1,440	2,030	1,290	1,960	790	83
MIN	98	280	183	136	142	184	280	555	137	707	82	25
AC-FT	21,540	19,860	15,360	11,320	10,450	42,270	38,860	67,370	40,850	87,360	19,680	2,270
CFSM	0.09	0.08	0.06	0.05	0.05	0.17	0.16	0.27	0.17	0.35	0.08	0.01
IN.	0.10	0.09	0.07	0.05	0.05	0.20	0.18	0.31	0.19	0.40	0.09	0.01

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1943 - 2003, BY WATER YEAR (WY)

MEAN	273	288	233	157	191	841	2,722	1,447	1,165	994	529	263
MAX	2,924	2,327	1,204	574	644	4,599	14,580	5,837	4,229	7,024	6,012	2,402
(WY)	(1987)	(1985)	(1985)	(1987)	(1999)	(1994)	(2001)	(2001)	(1984)	(1993)	(1993)	(1986)
MIN	4.16	0.46	0.17	0.19	0.094	46.5	151	122	29.5	14.7	11.8	5.59
(WY)	(1977)	(1977)	(1977)	(1977)	(1977)	(1956)	(1961)	(1959)	(1988)	(1988)	(1974)	(1967)

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SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1943 - 2003	
ANNUAL TOTAL	258,077		190,166			
ANNUAL MEAN	707		521		759	
HIGHEST ANNUAL MEAN					2,507	1986
LOWEST ANNUAL MEAN					75.7	1959
HIGHEST DAILY MEAN	3,150	Apr 8	2,030	May 16	29,800	Apr 14, 2001
LOWEST DAILY MEAN	41	Aug 20	25	Sep 19,21,30	a0.00	Oct 19, 1951
ANNUAL SEVEN-DAY MINIMUM	70	Sep 12	26	Sep 17	0.00	Oct 19, 1951
MAXIMUM PEAK FLOW			b2,040	May 16	30,100	Apr 14, 2001
MAXIMUM PEAK STAGE			27.22	May 16	40.05	Apr 14, 2001
INSTANTANEOUS LOW FLOW			b24	Sep 21,30	a0.00	Oct 19, 1951
ANNUAL RUNOFF (AC-FT)	511,900		377,200		549,900	
ANNUAL RUNOFF (CFSM)	0.17		0.13		0.19	
ANNUAL RUNOFF (INCHES)	2.37		1.75		2.55	
10 PERCENT EXCEEDS	1,750		1,220		1,820	
50 PERCENT EXCEEDS	465		335		236	
90 PERCENT EXCEEDS	183		135		27	

a Many days, several years.
 b Result of regulation.
 c Estimated.

