

05301000 MINNESOTA RIVER NEAR LAC QUI PARLE, MN

LOCATION.--Lat 45°01'17", long 95°52'05", in NW¹/₄NE¹/₄ 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. 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 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	119	160	119	76	169	376	281	1,410	520	530	205
2	26	119	162	120	76	266	339	277	1,570	425	466	205
3	34	117	161	119	77	404	306	258	1,410	376	280	204
4	28	130	161	119	77	506	309	223	1,080	377	246	208
5	28	122	133	119	78	568	308	202	996	382	247	209
6	28	116	115	118	92	575	306	175	988	497	248	212
7	29	116	115	118	106	562	312	155	907	774	249	156
8	31	115	113	116	107	563	326	156	785	811	248	110
9	45	115	111	116	106	607	345	156	785	806	290	99
10	70	116	114	116	107	650	337	134	1,070	805	375	98
11	86	115	117	115	105	642	324	106	1,480	658	373	99
12	77	127	116	95	106	646	302	241	1,520	484	249	100
13	77	115	116	76	133	650	279	447	1,580	548	143	70
14	108	114	116	76	167	642	278	569	1,980	622	124	46
15	130	116	114	77	172	650	259	569	2,350	574	124	46
16	126	118	112	77	168	652	244	569	2,360	452	124	46
17	126	119	114	76	154	646	244	567	2,320	454	125	46
18	125	125	113	79	122	581	244	491	2,100	504	125	46
19	124	127	113	79	123	415	220	342	1,670	581	121	46
20	129	152	114	78	121	313	203	242	1,620	662	119	47
21	124	154	114	76	123	315	226	164	1,480	709	121	88
22	101	178	114	77	123	377	261	164	1,200	581	120	158
23	78	340	114	77	122	465	275	165	981	440	121	410
24	81	418	114	77	125	547	277	256	821	440	170	705
25	91	195	115	77	126	658	276	396	668	439	209	666
26	78	175	115	78	127	750	276	554	564	439	209	538
27	79	166	116	79	127	800	285	725	562	324	208	477
28	134	163	116	78	126	785	328	798	562	248	209	414
29	76	163	116	78	126	745	320	795	562	283	205	480
30	105	162	118	78	---	655	297	828	561	440	159	538
31	139	---	118	78	---	491	---	1,080	---	530	174	---
TOTAL	2,539	4,527	3,760	2,861	3,398	17,295	8,682	12,085	37,942	16,185	6,711	6,772
MEAN	81.9	151	121	92.3	117	558	289	390	1,265	522	216	226
MAX	139	418	162	120	172	800	376	1,080	2,360	811	530	705
MIN	26	114	111	76	76	169	203	106	561	248	119	46
AC-FT	5,040	8,980	7,460	5,670	6,740	34,300	17,220	23,970	75,260	32,100	13,310	13,430
CFSM	0.02	0.04	0.03	0.02	0.03	0.14	0.07	0.10	0.31	0.13	0.05	0.06
IN.	0.02	0.04	0.03	0.03	0.03	0.16	0.08	0.11	0.35	0.15	0.06	0.06

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1943 - 2004, BY WATER YEAR (WY)

MEAN	270	286	231	156	190	836	2,680	1,429	1,167	986	523	262
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	0.09	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 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1943 - 2004	
ANNUAL TOTAL	172,375		122,757		752	
ANNUAL MEAN	472		335		75.7	
HIGHEST ANNUAL MEAN					2,507	1986
LOWEST ANNUAL MEAN					75.7	1959
HIGHEST DAILY MEAN	2,030	May 16	2,360	Jun 16	29,800	Apr 14, 2001
LOWEST DAILY MEAN	25	Sep 19-21	26	Oct 1,2	a0.00	Oct 19, 1951
ANNUAL SEVEN-DAY MINIMUM	26	Sep 17	28	Oct 1	0.00	Oct 19, 1951
MAXIMUM PEAK FLOW			b2,370	Jun 15	30,100	Apr 14, 2001
MAXIMUM PEAK STAGE			28.67	Jun 15	40.05	Apr 14, 2001
INSTANTANEOUS LOW FLOW			c25	Oct 1	a0.00	Oct 19, 1951
ANNUAL RUNOFF (AC-FT)	341,900		243,500		544,600	
ANNUAL RUNOFF (CFSM)	0.117		0.083		0.186	
ANNUAL RUNOFF (INCHES)	1.58		1.13		2.52	
10 PERCENT EXCEEDS	1,220		731		1,800	
50 PERCENT EXCEEDS	220		170		234	
90 PERCENT EXCEEDS	62		78		28	

- a Many days, several years.
- b Due in part to regulation.
- c Rising stage, result of regulation.

