

MINNESOTA RIVER BASIN

05290000 LITTLE MINNESOTA RIVER NEAR PEEVER, SD

LOCATION.--Lat 45° 36'05", long 96° 52'18", in SW1/4 sec. 13, T.125 N., R.50 W., Roberts County, Hydrologic Unit 07020001, on Sisseton Indian Reservation, on right bank 2 mi northwest of town of Browns Valley, MN, 5.3 mi northeast of Peever, 7.2 mi downstream from Jorgenson River, and 8 mi upstream from Big Stone Lake.

DRAINAGE AREA.--447 mi².

PERIOD OF RECORD.--October 1939 to September 1981, October 1989 to current year.

REVISED RECORDS.--WSP 1308: 1943(M).

GAGE.--Water-stage recorder. Datum of gage is 1,002.20 ft above sea level. Oct. 1, 1939 to Mar. 20, 1940, nonrecording gage at site 4.5 mi downstream at different datum. Mar. 21 to Apr. 12, 1940, nonrecording gage at site 100 ft downstream at present datum. April 13 to Aug. 27, 1940, nonrecording gage at present site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are fair.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 450 ft³/s and maximum (*):

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
JUL	AUG	SEP							
1	5.1	69	e9.6	e3.5	e3.1	e4.2	1960	378	94
17	31	3.9							
2	4.3	55	e9.5	e3.5	e3.1	e4.3	2470	352	90
20	30	3.4							
3	3.7	43	e9.5	e3.5	e3.1	e4.4	2410	352	86
19	27	3.1							
4	3.3	35	e9.5	e3.4	e3.2	e4.4	2030	342	83
20	24	3.1							
5	3.3	32	e9.5	e3.4	e3.2	e4.4	2320	310	79
17	22	3.0							
6	3.2	31	e9.6	e3.4	e3.2	e4.5	2700	291	72
15	24	2.7							
7	3.0	31	e9.6	e3.4	e3.3	e4.6	1120	272	65
14	19	2.6							
8	3.4	29	e9.7	e3.3	e3.3	e4.6	1070	273	59
14	16	2.5							

9	4.3	27	e9.8	e3.3	e3.3	e4.6	1090	272	53
16	14	2.4							
10	4.1	20	e9.9	e3.3	e3.3	e4.7	1060	256	47
15	11	2.3							
11	4.3	18	e9.9	e3.3	e3.4	e4.7	935	241	42
14	8.7	2.2							
12	4.8	e17	e9.9	e3.2	e3.4	e4.8	894	223	38
12	7.3	2.2							
13	4.8	e16	e9.9	e3.2	e3.5	e4.8	955	202	34
11	6.2	2.0							
14	4.8	15	e9.9	e3.1	e3.5	e4.9	1150	188	30
11	7.6	2.2							
15	4.9	16	e9.9	e3.1	e3.5	e5.0	1340	175	28
9.7	8.5	3.1							
16	4.8	15	e9.2	e3.1	e3.6	e5.1	1210	161	26
9.5	8.9	3.1							
17	9.1	14	e8.2	e3.1	e3.6	e5.2	1010	150	26
8.8	9.4	2.9							
18	18	14	e7.2	e3.1	e3.7	e5.2	930	142	22
8.7	8.2	3.0							
19	25	e14	e6.2	e3.1	e3.7	e5.3	959	135	19
8.7	9.4	3.0							
20	21	e13	e5.6	e3.1	e3.7	e6.0	913	125	19
11	9.6	2.7							
21	16	e13	e5.1	e3.1	e3.8	e40	851	113	18
13	11	2.2							
22	14	e12	e4.8	e3.1	e3.8	e200	801	104	18
19	11	2.2							
23	13	e11	e4.5	e3.1	e3.8	e450	740	101	18
16	9.2	2.2							
24	12	e11	e4.2	e3.1	e3.9	e800	671	111	20
13	7.6	2.1							
25	11	e11	e4.1	e3.1	e4.0	e1200	607	130	18
14	6.5	2.0							
26	12	e10	e3.8	e3.1	e4.1	e2000	548	127	15
13	5.7	1.9							
27	13	e10	e3.7	e3.1	e4.2	e3300	505	118	15
13	5.1	1.9							
28	15	e10	e3.6	e3.1	e4.2	3420	474	114	14
11	4.5	1.8							
29	18	e9.8	e3.6	e3.1	---	2850	440	108	13
20	4.2	1.4							
30	40	e9.6	e3.6	e3.1	---	2420	415	103	14
30	4.3	1.4							
31	74	---	e3.5	e3.1	---	1930	---	99	---
31	3.9	---							
TOTAL	377.2	631.4	226.6	99.5	99.5	18705.7	34578	6068	1175
464.4	374.8	74.5							
MEAN	12.2	21.0	7.31	3.21	3.55	603	1153	196	39.2
15.0	12.1	2.48							

MAX	74	69	9.9	3.5	4.2	3420	2700	378	94
31	31	3.9							
MIN	3.0	9.6	3.5	3.1	3.1	4.2	415	99	13
8.7	3.9	1.4							
AC-FT	748	1250	449	197	197	37100	68590	12040	2330
921	743	148							
CFSM	.03	.05	.02	.01	.01	1.35	2.58	.44	.09
.03	.03	.01							
IN.	.03	.05	.02	.01	.01	1.56	2.88	.50	.10
.04	.03	.01							

o e Estimated

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 1997, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
JUL	AUG	SEP							
MEAN	5.57	5.78	3.01	1.51	2.69	118	225	96.6	74.3
55.0	13.0	4.42							
MAX	73.9	36.6	18.2	11.4	21.8	603	1321	531	355
865	235	43.3							
(WY)	1996	1996	1994	1994	1976	1997	1952	1962	1942
1993	1993	1993							
MIN	.21	.25	.10	.000	.000	.51	2.89	2.20	.41
.041	.059	.074							
(WY)	1940	1940	1940	1940	1940	1956	1981	1981	1976
1976	1976	1976							

<i>SUMMARY STATISTICS</i>	<i>FOR 1996 CALENDAR YEAR</i>	<i>FOR 1997 WATER YEAR</i>	<i>WATER YEARS 1940 - 1997</i>	
ANNUAL TOTAL	27443.8	62874.6		
ANNUAL MEAN	75.0	172		50.5a
HIGHEST ANNUAL MEAN				
172	1997			
LOWEST ANNUAL MEAN				
1.37	1981			
HIGHEST DAILY MEAN	807	Apr 12	3420	Mar 28
Jul 25 1993				5400
LOWEST DAILY MEAN	1.1	Sep 16	1.4	Sep 29
Jan 1 1940				.00b
ANNUAL SEVEN-DAY MINIMUM	1.2	Sep 12	1.8	Sep 24
Jan 1 1940				.00
INSTANTANEOUS PEAK FLOW			3590	Mar 28
Jul 25 1993				8900
INSTANTANEOUS PEAK STAGE			14.40c	Mar 27
Mar 27 1997				14.40c
INSTANTANEOUS LOW FLOW			1.2	Sep 29
Jan 1 1940				.00
ANNUAL RUNOFF (AC-FT)	54430	124700		36600
ANNUAL RUNOFF (CFSM)	.17	.39		.11
ANNUAL RUNOFF (INCHES)	2.28	5.23		1.54
10 PERCENT EXCEEDS	207	460		111
50 PERCENT EXCEEDS	13	9.9		3.4
90 PERCENT EXCEEDS	3.3	3.1		.30

○ a Median of annual mean discharges is 36.3 ft³/s.

b Many days, several years.

c Backwater from ice.