

MINNESOTA RIVER BASIN

05320000 BLUE EARTH RIVER NEAR RAPIDAN, MN

LOCATION.--Lat 44° 05'44", long 94° 06'33", in SE¼SE¼ sec. 6, T.107 N., R.27 W., Blue Earth County, Hydrologic Unit 07020009, on left bank 0.2 mi downstream from power plant (reactivated in 1984) operated by Rapidan Redevelopment Limited Partnership, 2 mi west of Rapidan, 3.5 mi downstream from Watonwan River, and 7.8 mi upstream from Le Sueur River.

DRAINAGE AREA.--2,430 mi², approximately.

PERIOD OF RECORD.--July 1909 to November 1910 (published as "at Rapidan Mills," no winter records), October 1939 to September 1945, July 1949 to current year.

REVISED RECORDS.--WSP 895: Drainage area. WSP 1508: 1910.

GAGE.--Water-stage recorder. Datum of gage is 807.83 ft above mean sea level. July 20, 1909 to Apr. 28, 1910, nonrecording gage at site 0.2 mi upstream at different datum. Apr. 29 to Nov. 12, 1910, nonrecording gage at site 800 ft upstream at different datum. Oct. 4 to Nov. 14, 1939, nonrecording gage at present site and datum.

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

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	325	680	1890	551	337	1210	4740	1360	3660
4680	1810	546							
2	265	657	1850	576	335	1250	4230	1390	3280
4440	1890	536							
3	230	545	1790	538	330	1400	3980	1420	3080
4150	1250	420							
4	239	575	1540	582	321	1590	3610	1630	2720
3910	1580	346							
5	245	599	1540	601	317	1880	3540	2150	2570
3330	975	376							
6	220	602	1510	579	317	2050	3780	2290	2370
2780	1060	318							
7	203	590	1390	579	316	2030	4560	2200	2220
2320	1020	318							
8	212	552	1260	567	302	1870	4890	2070	1940
2190	1060	315							
9	206	518	1120	540	305	2150	4530	2230	1870
2580	737	272							

10	183	525	1070	549	317	3030	3790	2550	1710
3160	669	247							
11	183	468	1250	546	318	3560	3550	2410	1680
2940	690	312							
12	178	311	1260	496	318	4240	3270	2260	1480
2430	646	272							
13	175	235	1170	479	318	e4500	2920	2120	1380
2280	658	228							
14	177	333	962	469	294	e5100	2900	1960	1360
2490	644	226							
15	172	484	821	450	284	5140	2730	1820	1220
3090	558	224							
16	175	602	630	e430	301	5170	2590	1690	1190
3000	602	225							
17	188	1060	669	e420	300	5240	2380	1590	1070
2520	609	210							
18	279	2140	e650	e400	360	5090	2310	1530	938
2430	453	179							
19	527	2930	e620	397	293	4820	2240	1470	1080
2130	499	176							
20	649	2970	e600	392	321	5120	2130	1400	954
1910	424	178							
21	672	2610	e580	373	360	6090	2090	1390	981
2150	889	178							
22	546	2220	e640	368	406	6960	2020	1200	876
3630	1470	178							
23	613	1990	e510	367	442	8390	1950	1170	1410
3650	982	177							
24	528	1540	e480	377	701	8350	1980	1460	2810
3750	905	178							
25	637	1220	e460	377	884	7500	1560	2820	3560
3580	799	186							
26	713	947	e430	370	986	6600	1590	3980	3770
3790	715	201							
27	738	795	e460	366	1160	6340	1610	4220	3510
3780	647	202							
28	694	1140	496	365	1170	6320	1550	3940	3080
3330	478	208							
29	661	1660	493	361	---	6140	1510	3620	3660
3520	511	207							
30	640	1840	579	387	---	5790	1410	3800	4140
2910	447	195							
31	681	---	502	349	---	5290	---	3830	---
2440	565	---							
TOTAL	12154	33338	29222	14201	12413	140210	85940	68970	65569
95290	26242	7834							
MEAN	392	1111	943	458	443	4523	2865	2225	2186
3074	847	261							
MAX	738	2970	1890	601	1170	8390	4890	4220	4140
4680	1890	546							
MIN	172	235	430	349	284	1210	1410	1170	876

1910	424	176							
AC-FT	24110	66130	57960	28170	24620	278100	170500	136800	130100
189000	52050	15540							
CFSM	.16	.46	.39	.19	.18	1.86	1.18	.92	.90
1.26	.35	.11							
IN.	.19	.51	.45	.22	.19	2.15	1.32	1.06	1.00
1.46	.40	.12							

o e Estimated

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1909 - 1997, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
JUL	AUG	SEP							
MEAN	561	556	356	208	254	1447	2644	1714	2110
1338	697	535							
MAX	5121	2878	1724	1093	1793	6277	13230	5775	11700
8540	5541	4313							
(WY)	1969	1993	1992	1992	1983	1983	1965	1991	1993
1993	1979	1993							
MIN	22.5	26.7	16.0	14.8	14.3	92.4	142	53.4	110
30.9	37.7	22.1							
(WY)	1940	1940	1956	1977	1959	1968	1977	1940	1976
1940	1976	1976							

SUMMARY STATISTICS FOR 1996 CALENDAR YEAR FOR 1997 WATER YEAR WATER YEARS 1909 - 1997

ANNUAL TOTAL	423918	591383		
ANNUAL MEAN	1158	1620	1053	
HIGHEST ANNUAL MEAN				
4518	1993			
LOWEST ANNUAL MEAN				
105	1940			
HIGHEST DAILY MEAN	8130	Jun 21	8390	Mar 23
Apr 9 1965				
LOWEST DAILY MEAN	96	Feb 2	172	Oct 15
28 1955				
ANNUAL SEVEN-DAY MINIMUM	109	Jan 30	178	Oct 10
24 1955				
INSTANTANEOUS PEAK FLOW			9440	Mar 23
Apr 9 1965				
INSTANTANEOUS PEAK STAGE			8.62	Mar 23
Apr 9 1965				
INSTANTANEOUS LOW FLOW			155b	Oct 15
12 1955				
ANNUAL RUNOFF (AC-FT)	840800	1173000	762900	
ANNUAL RUNOFF (INCHES)	6.49	9.05	5.89	
10 PERCENT EXCEEDS	2280	3790	2770	
50 PERCENT EXCEEDS	791	1060	357	
90 PERCENT EXCEEDS	213	269	41	

a From floodmark.

b Result of regulation.