

05320000 BLUE EARTH RIVER NEAR RAPIDAN, MN

LOCATION.--Lat 44°05'44", long 94°06'33", in SE $\frac{1}{4}$ SE $\frac{1}{4}$ 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.--2,410 mi².

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. Annual maximums only, 1912 to 1939.

REVISED RECORDS.-- WSP 1508: 1910.

GAGE.--Water-stage recorder. Datum of gage is 807.83 ft above sea level (NGVD of 1929). 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 daily discharge, which are fair.

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	4,820	1,170	834	450	180	530	2,990	1,780	3,210	1,450	604	533
2	4,340	1,120	841	440	199	496	2,940	1,770	2,970	1,480	532	433
3	4,070	1,120	958	408	194	476	2,970	1,560	2,790	1,310	494	378
4	3,980	1,040	1,030	412	231	422	2,580	1,520	2,660	1,270	386	298
5	3,770	1,060	876	473	295	438	2,310	1,410	2,540	1,300	331	288
6	3,360	1,070	748	e529	326	516	2,200	1,370	2,940	1,590	289	254
7	3,050	1,060	838	e405	374	527	2,130	1,410	2,960	1,500	265	239
8	2,880	1,050	831	e384	384	526	1,980	1,540	2,940	1,270	232	307
9	2,890	1,010	787	363	444	487	1,960	2,350	3,020	1,160	184	285
10	3,010	933	824	351	422	469	1,840	3,150	3,400	1,020	202	418
11	2,700	915	847	343	406	475	1,770	3,940	3,520	936	245	510
12	2,550	926	800	296	404	470	2,520	4,630	3,490	877	260	510
13	2,390	911	671	264	388	406	4,550	6,640	3,500	824	221	543
14	2,270	860	456	304	490	382	5,850	9,170	3,470	732	196	515
15	2,160	764	340	266	674	377	6,310	9,670	3,150	700	194	451
16	2,040	772	439	239	1,050	396	6,450	10,100	2,950	684	226	454
17	1,990	819	571	224	1,290	435	5,870	9,930	2,600	592	198	418
18	1,800	765	e780	202	1,340	408	5,260	8,970	2,430	488	652	392
19	1,740	836	e633	156	1,240	301	4,990	7,840	2,250	469	1,340	361
20	1,680	853	e433	169	e917	230	4,650	6,930	2,040	457	1,940	347
21	1,590	898	e468	253	e863	400	4,210	6,470	2,530	444	1,870	347
22	1,510	1,010	e468	194	e808	465	3,950	6,310	2,920	489	1,780	314
23	1,490	1,070	e466	176	e690	425	3,580	6,040	2,700	540	1,470	263
24	1,460	1,050	e464	165	e817	435	3,220	5,760	2,460	449	1,210	263
25	1,440	1,040	467	164	e668	531	3,020	5,620	2,130	430	1,040	2,140
26	1,360	1,030	464	161	e620	609	2,750	5,020	1,980	437	952	7,290
27	1,250	977	462	154	613	639	2,560	4,630	1,800	524	843	9,490
28	1,230	973	460	183	564	1,420	2,320	4,270	1,690	808	728	10,200
29	1,200	980	483	195	---	2,140	2,080	4,040	1,590	1,130	643	10,400
30	1,190	872	540	202	---	3,130	1,970	3,780	1,530	944	603	9,380
31	1,210	---	495	171	---	3,240	---	3,480	---	773	585	---
TOTAL	72,420	28,954	19,774	8,696	16,891	22,201	101,780	151,100	80,160	27,077	20,715	58,021
MEAN	2,336	965	638	281	603	716	3,393	4,874	2,672	873	668	1,934
MAX	4,820	1,170	1,030	529	1,340	3,240	6,450	10,100	3,520	1,590	1,940	10,400
MIN	1,190	764	340	154	180	230	1,770	1,370	1,530	430	184	239
AC-FT	143,600	57,430	39,220	17,250	33,500	44,040	201,900	299,700	159,000	53,710	41,090	115,100
CFSM	0.96	0.40	0.26	0.12	0.25	0.29	1.40	2.01	1.10	0.36	0.27	0.80
IN.	1.11	0.44	0.30	0.13	0.26	0.34	1.56	2.31	1.23	0.41	0.32	0.89

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

MEAN	577	555	348	200	262	1,339	2,728	1,850	2,230	1,368	684	577
MAX	5,121	2,878	1,724	1,093	1,793	6,277	13,230	5,775	11,700	8,540	5,541	4,313
(WY)	(1969)	(1993)	(1992)	(1992)	(1983)	(1983)	(1965)	(1991)	(1993)	(1993)	(1979)	(1993)
MIN	22.5	26.7	16.0	14.8	14.2	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)

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SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1909 - 2005	
ANNUAL TOTAL	504,351		607,789		1,076	
ANNUAL MEAN	1,378		1,665		4,518	
HIGHEST ANNUAL MEAN					105	
LOWEST ANNUAL MEAN					1940	
HIGHEST DAILY MEAN	11,700	Sep 20	10,400	Sep 29	42,500	Apr 9, 1965
LOWEST DAILY MEAN	24	Feb 24	154	Jan 27	7.4	Oct 28, 1955
ANNUAL SEVEN-DAY MINIMUM	25	Feb 20	171	Jan 22	8.1	Oct 24, 1955
MAXIMUM PEAK FLOW			a10,600	Sep 29	43,100	Apr 9, 1965
MAXIMUM PEAK STAGE			9.02	Sep 29	b21.36	Apr 9, 1965
INSTANTANEOUS LOW FLOW			a45	Oct 26	6.9	Oct 12, 1955
ANNUAL RUNOFF (AC-FT)	1,000,000		1,206,000		779,600	
ANNUAL RUNOFF (CFSM)	0.567		0.685		0.443	
ANNUAL RUNOFF (INCHES)	7.72		9.30		6.02	
10 PERCENT EXCEEDS	4,010		3,960		2,910	
50 PERCENT EXCEEDS	726		877		371	
90 PERCENT EXCEEDS	37		265		46	

a Due in part to regulation.
 b From floodmark.
 c Estimated.

