

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 to poor.

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	36	e39	53	51	31	90	492	236	6,790	836	977	419
2	35	101	53	51	29	145	443	236	7,170	791	861	387
3	34	98	53	51	29	152	390	206	6,560	752	722	308
4	33	40	53	51	27	168	350	201	5,270	906	803	289
5	33	e18	55	50	27	291	294	189	3,940	837	1,240	285
6	32	e26	55	48	26	411	267	181	3,120	1,010	1,560	283
7	31	53	55	46	26	360	245	179	2,600	1,970	1,660	266
8	27	47	55	44	27	291	232	165	2,290	2,850	1,650	256
9	25	42	56	42	27	388	223	162	4,810	2,900	1,410	291
10	39	47	51	40	28	670	207	150	6,430	2,480	1,300	245
11	44	51	47	38	28	859	190	150	6,090	2,810	1,260	229
12	40	58	47	36	30	567	169	151	5,610	3,990	1,150	214
13	40	62	47	35	32	682	152	165	4,940	4,300	1,070	198
14	40	61	47	36	32	795	150	159	4,490	4,770	948	241
15	41	60	46	36	32	676	146	133	4,500	4,670	794	666
16	48	59	46	37	33	751	146	124	3,820	3,930	947	4,180
17	80	58	46	37	33	704	146	123	3,020	3,270	885	6,410
18	95	59	38	38	33	575	138	164	2,590	2,630	803	7,500
19	75	58	34	38	29	524	168	197	2,230	2,250	736	10,300
20	49	49	37	38	26	544	174	234	2,160	1,920	744	11,700
21	43	48	37	44	26	466	163	272	1,790	1,730	747	11,200
22	45	50	37	43	26	433	168	346	1,760	1,830	731	10,000
23	46	61	38	48	25	442	190	911	1,550	2,200	676	9,640
24	50	66	29	47	24	450	170	1,780	1,440	2,020	667	9,080
25	50	65	27	44	25	436	162	3,270	1,280	1,750	644	8,500
26	48	62	43	41	25	456	192	4,180	1,150	1,470	635	7,850
27	33	61	51	37	29	444	200	4,380	1,140	1,400	639	7,140
28	19	61	51	35	36	474	247	3,760	967	1,220	595	6,390
29	e19	56	51	33	41	504	256	3,340	860	1,050	534	5,890
30	e18	54	51	32	---	499	236	5,750	843	951	507	5,370
31	e17	---	51	32	---	525	---	6,460	---	856	469	---
TOTAL	1,265	1,670	1,440	1,279	842	14,772	6,706	37,954	101,210	66,349	28,364	125,727
MEAN	40.8	55.7	46.5	41.3	29.0	477	224	1,224	3,374	2,140	915	4,191
MAX	95	101	56	51	41	859	492	6,460	7,170	4,770	1,660	11,700
MIN	17	18	27	32	24	90	138	123	843	752	469	198
AC-FT	2,510	3,310	2,860	2,540	1,670	29,300	13,300	75,280	200,800	131,600	56,260	249,400
CFSM	0.02	0.02	0.02	0.02	0.01	0.20	0.09	0.50	1.39	0.88	0.38	1.72
IN.	0.02	0.03	0.02	0.02	0.01	0.23	0.10	0.58	1.55	1.02	0.43	1.92

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1909 - 2004, BY WATER YEAR (WY)

MEAN	549	548	343	199	257	1,349	2,717	1,801	2,223	1,376	684	556
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 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1909 - 2004	
ANNUAL TOTAL	239,816		387,578		1,066	
ANNUAL MEAN	657		1,059		105	
HIGHEST ANNUAL MEAN					4,518 1993	
LOWEST ANNUAL MEAN					105 1940	
HIGHEST DAILY MEAN	4,740	May 15	11,700	Sep 20	42,500	Apr 9, 1965
LOWEST DAILY MEAN	17	Oct 31	17	Oct 31	7.4	Oct 28, 1955
ANNUAL SEVEN-DAY MINIMUM	28	Oct 26	25	Feb 20	8.1	Oct 24, 1955
MAXIMUM PEAK FLOW			a12,200	Sep 19	43,100	Apr 9, 1965
MAXIMUM PEAK STAGE			9.84	Sep 19	b21.36	Apr 9, 1965
INSTANTANEOUS LOW FLOW			c <10	Nov 1	6.9	Oct 12, 1955
ANNUAL RUNOFF (AC-FT)	475,700		768,800		772,600	
ANNUAL RUNOFF (CFSM)	0.270		0.436		0.439	
ANNUAL RUNOFF (INCHES)	3.67		5.93		5.96	
10 PERCENT EXCEEDS	2,240		3,850		2,870	
50 PERCENT EXCEEDS	108		190		360	
90 PERCENT EXCEEDS	41		32		45	

- a Due in part to regulation.
- b From floodmark.
- c Due to regulation, flow may have been lower than minimum discharge of record. Dam regulation resulted in a minimum recorded stage of 0.70 feet, which is about 0.3 feet lower than previous recorded minimum stage.
- e Estimated.

