

05313500 YELLOW MEDICINE RIVER NEAR GRANITE FALLS, MN

LOCATION.--Lat 44°43'18", long 95°31'07", in NW¼SW¼ sec. 35, T.115 N., R.39 W., Yellow Medicine County, Hydrologic Unit 07020004, on right bank 50 ft downstream from highway bridge, 6 mi upstream from mouth, and 8 mi south of town of Granite Falls.

DRAINAGE AREA.--664 mi².

PERIOD OF RECORD.--March 1931 to September 1935 (no winter records), October 1935 to September 1938, October 1939 to current year. Monthly discharge only for some periods, published in WSP 1308.

REVISED RECORDS.--WSP 1508: 1931, 1934(M), 1937(M), 1946(M), 1950(M).

GAGE.--Water-stage recorder. Datum of gage is 960.64 ft above sea level (NGVD of 1929). Mar. 16, 1931 to June 13, 1938, nonrecording gage, on bridge 50 ft upstream at present datum. Oct. 12, 1939 to Nov. 30, 1952, nonrecording gage 500 ft downstream at present datum.

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

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in June 1919 reached a stage of 17.5 ft, from information by local residents, discharge, 25,200 ft³/s.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 260 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 26	2300	434	3.78	Jun 13	1100	859	4.61
Jun 1	1200	*1,140	*5.02	Aug 26	1000	452	3.87

Minimum discharge, 1.8 ft³/s, Jan. 25 (estimated daily, backwater from ice).

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	3.0	12	7.0	e8.2	e2.1	e20	67	34	1,110	145	19	180
2	3.3	10	7.0	e8.6	e2.2	e34	61	31	943	133	18	150
3	3.4	10	7.5	e8.4	e2.3	e35	55	27	751	136	17	125
4	3.5	12	8.3	e6.2	e2.4	e38	53	25	628	150	18	104
5	3.4	11	9.8	e4.8	e2.5	e39	48	24	525	158	17	86
6	3.3	10	9.2	e4.5	e2.5	e40	44	23	450	145	15	73
7	3.5	10	9.3	e4.4	e2.5	e41	41	21	387	136	23	62
8	4.2	9.4	9.7	e3.9	e2.5	e47	39	19	379	132	23	60
9	4.7	9.3	e8.9	e3.6	e2.5	e55	37	18	403	127	19	57
10	4.6	9.5	e6.6	e3.7	e2.5	e64	36	17	497	116	19	50
11	5.7	11	e5.6	e3.9	e2.5	e64	34	17	756	108	18	46
12	6.5	11	e3.9	e4.0	e2.5	e56	32	16	771	100	16	41
13	6.1	11	e3.6	e4.2	e2.5	e81	30	15	835	95	13	36
14	6.2	10	e4.3	e4.2	e2.5	e87	29	15	730	86	12	33
15	6.0	10	e5.6	e4.0	e2.5	e69	27	15	614	e81	11	36
16	5.7	13	e6.7	e3.9	e2.3	e73	26	17	597	75	13	40
17	14	12	e6.3	e4.1	e2.4	e73	26	26	541	68	11	72
18	8.7	12	e6.1	e3.7	e2.6	e72	25	26	508	61	9.9	121
19	7.5	11	e5.8	e2.9	e2.8	e71	25	138	478	60	8.6	119
20	6.9	11	e5.6	e2.5	e3.2	e96	25	151	427	56	8.1	98
21	6.0	11	e5.9	e2.5	e3.5	e83	29	128	387	51	9.5	90
22	5.1	9.9	e6.2	e2.2	e3.8	e85	30	110	344	48	8.5	83
23	6.8	11	e6.5	e1.9	e4.3	e96	43	114	305	39	7.4	94
24	7.1	9.8	e5.7	e1.9	e4.5	e91	58	162	273	36	11	120
25	6.5	8.1	e5.1	e1.8	e4.6	80	56	300	243	33	91	133
26	6.2	6.7	e5.4	e1.8	e5.1	77	51	408	222	29	428	130
27	6.7	8.0	e6.8	e1.8	e5.7	78	45	420	203	25	401	116
28	6.8	8.6	e7.7	e1.9	e6.6	81	42	354	187	23	384	101
29	6.8	7.7	e8.0	e1.9	e9.4	77	40	320	173	25	324	88
30	7.7	7.4	e7.9	e2.0	---	76	35	529	159	22	261	78
31	9.9	---	e8.1	e2.0	---	73	---	918	---	20	219	---
TOTAL	185.8	303.4	210.1	115.4	97.3	2,052	1,189	4,438	14,826	2,519	2,453.0	2,622
MEAN	5.99	10.1	6.78	3.72	3.36	66.2	39.6	143	494	81.3	79.1	87.4
MAX	14	13	9.8	8.6	9.4	96	67	918	1,110	158	428	180
MIN	3.0	6.7	3.6	1.8	2.1	20	25	15	159	20	7.4	33
AC-FT	369	602	417	229	193	4,070	2,360	8,800	29,410	5,000	4,870	5,200
CFSM	0.01	0.02	0.01	0.01	0.01	0.10	0.06	0.22	0.74	0.12	0.12	0.13
IN.	0.01	0.02	0.01	0.01	0.01	0.11	0.07	0.25	0.83	0.14	0.14	0.15

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1931 - 2004, BY WATER YEAR (WY)

MEAN	41.7	45.2	29.3	14.2	19.2	215	515	210	276	136	66.9	41.3
MAX	561	392	256	88.3	149	933	3,302	1,087	2,484	1,600	510	1,005
(WY)	(1996)	(1996)	(1996)	(1996)	(1998)	(1986)	(1969)	(1944)	(1984)	(1993)	(1953)	(1986)
MIN	1.41	1.60	1.39	0.90	0.13	3.67	2.58	1.18	1.18	0.34	0.38	0.47
(WY)	(1937)	(1938)	(1936)	(1948)	(1959)	(1975)	(1934)	(1934)	(1934)	(1933)	(1934)	(1976)

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SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1931 - 2004	
ANNUAL TOTAL	22,748.8		31,011.0			
ANNUAL MEAN	62.3		84.7		a142	
HIGHEST ANNUAL MEAN					566	1993
LOWEST ANNUAL MEAN					8.32	1959
HIGHEST DAILY MEAN	504	Apr 21	1,110	Jun 1	16,400	Apr 10, 1969
LOWEST DAILY MEAN	3.0	Oct 1	1.8	Jan 25-27	b0.00	Jul 26, 1931
ANNUAL SEVEN-DAY MINIMUM	3.3	Sep 2	1.9	Jan 23	0.00	Jan 21, 1948
MAXIMUM PEAK FLOW			1,140	Jun 1	17,200	Apr 10, 1969
MAXIMUM PEAK STAGE			5.02	Jun 1	14.90	Apr 10, 1969
INSTANTANEOUS LOW FLOW			c1.8	Jan 25	b0.00	Jul 26, 1931
ANNUAL RUNOFF (AC-FT)	45,120		61,510		103,100	
ANNUAL RUNOFF (CFSM)	0.094		0.128		0.214	
ANNUAL RUNOFF (INCHES)	1.27		1.74		2.91	
10 PERCENT EXCEEDS	204		248		330	
50 PERCENT EXCEEDS	10		20		22	
90 PERCENT EXCEEDS	4.3		3.4		2.7	

- a Median of annual mean discharges is 87 ft³/s.
- b Many days, several years.
- c Estimated daily-mean discharge, backwater from ice.
- e Estimated

