

05313500 YELLOW MEDICINE RIVER NEAR GRANITE FALLS, MN

LOCATION.--Lat 44°43'18", long 95°31'07", in SW¹/₄ 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. 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 (revised) and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec 1	1800	292	3.51	May 10	0500	527	3.95
Mar 19	1200	472	3.84	Jun 11	1400	936	4.67
Apr 13	0700	*949	*4.70	Jun 24	2200	674	4.21

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.2	40	270	e26	e23	e118	182	309	162	220	23	11
2	4.0	46	275	e25	e24	e122	176	290	154	206	22	13
3	4.4	40	247	e24	e24	e123	169	277	150	189	20	15
4	6.0	35	226	e24	e24	e124	169	270	145	179	19	14
5	13	32	212	e24	e24	e125	175	273	138	211	18	12
6	16	27	195	e24	e25	e122	202	282	129	229	17	11
7	17	26	186	e23	e25	e116	252	338	127	192	16	6.9
8	21	25	179	e23	e26	e106	377	423	201	161	15	7.3
9	18	25	166	e23	e28	e101	492	502	332	134	16	7.4
10	14	34	139	e22	e31	e99	587	522	601	113	15	7.4
11	12	23	130	e22	e36	e98	839	502	900	98	13	8.6
12	8.5	21	139	e22	e41	e98	885	462	841	85	14	8.7
13	7.9	26	142	e22	e42	e98	940	432	634	73	13	6.9
14	9.4	25	117	e22	e43	e100	856	406	481	64	12	7.4
15	8.8	21	119	e22	e45	e105	752	389	403	54	12	6.8
16	9.5	25	112	e22	e56	e125	691	368	350	54	11	5.2
17	17	32	105	e23	e98	e170	638	356	315	52	11	4.9
18	15	33	103	e23	e105	243	580	344	289	59	11	5.1
19	16	36	81	e23	e100	413	527	330	275	56	12	9.6
20	24	29	36	e23	e90	393	485	318	266	50	8.6	7.4
21	22	34	e34	e23	e83	356	449	303	266	51	7.4	7.4
22	20	109	e33	e23	e80	341	411	291	260	49	5.5	7.2
23	21	140	e32	e23	e77	323	385	305	293	52	12	6.2
24	21	133	e31	e23	e76	283	365	289	527	49	13	7.3
25	18	168	e30	e23	e76	231	346	272	562	45	10	8.7
26	17	206	e29	e23	e80	196	325	260	404	41	7.8	7.5
27	17	250	e29	e23	e88	183	313	242	332	39	6.5	8.5
28	17	268	e29	e23	e110	195	311	227	293	35	6.5	6.8
29	17	267	e29	e23	---	188	323	211	265	31	5.9	5.8
30	22	258	e28	e23	---	184	323	190	251	29	9.3	5.0
31	27	---	e27	e23	---	188	---	173	---	25	11	---
TOTAL	464.7	2434	3510	715	1580	5667	13525	10156	10346	2925	393.5	246.0
MEAN	15.0	81.1	113	23.1	56.4	183	451	328	345	94.4	12.7	8.20
MAX	27	268	275	26	110	413	940	522	900	229	23	15
MIN	4.0	21	27	22	23	98	169	173	127	25	5.5	4.9
AC-FT	922	4830	6960	1420	3130	11240	26830	20140	20520	5800	781	488
CFSM	.02	.12	.17	.03	.08	.28	.68	.49	.52	.14	.02	.01
IN.	.03	.14	.20	.04	.09	.32	.76	.57	.58	.16	.02	.01

e Estimated

05313500 YELLOW MEDICINE RIVER NEAR GRANITE FALLS, MN--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1931 - 1999, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	43.8	47.2	30.0	13.9	19.5	227	504	204	278	139	69.3	42.5
MAX	561	392	256	88.3	149	933	3302	1087	2484	1600	510	1005
(WY)	1996	1996	1996	1996	1998	1986	1969	1944	1984	1993	1953	1986
MIN	1.41	1.60	1.39	.90	.12	3.67	2.58	1.18	1.18	.34	.38	.47
(WY)	1937	1938	1936	1948	1959	1975	1934	1934	1934	1933	1934	1976

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR	FOR 1999 WATER YEAR	WATER YEARS 1931 - 1999
ANNUAL TOTAL	58922.7	51962.2	
ANNUAL MEAN	161	142	144 ^a
HIGHEST ANNUAL MEAN			566 1993
LOWEST ANNUAL MEAN			8.32 1959
HIGHEST DAILY MEAN	1640	940	16400 Apr 10 1969
LOWEST DAILY MEAN	3.3	4.0	.00 ^b Jul 26 1931
ANNUAL SEVEN-DAY MINIMUM	3.5	6.4	.00 Jan 21 1948
INSTANTANEOUS PEAK FLOW		949	17200 Apr 10 1969
INSTANTANEOUS PEAK STAGE		4.70	14.90 Apr 10 1969
INSTANTANEOUS LOW FLOW		3.9	.00 ^b Jul 26 1931
ANNUAL RUNOFF (AC-FT)	116900	103100	104200
ANNUAL RUNOFF (CFSM)	.24	.21	.22
ANNUAL RUNOFF (INCHES)	3.30	2.91	2.94
10 PERCENT EXCEEDS	371	366	319
50 PERCENT EXCEEDS	40	52	20
90 PERCENT EXCEEDS	8.6	8.8	2.4

a Median of annual mean discharges is 87 ft³/s.
 b Many days, several years.

