

MINNESOTA RIVER BASIN--Continued

05313500 YELLOW MEDICINE RIVER NEAR GRANITE FALLS, MN

LOCATION.--Lat 44°43'18", long 95°31'07", in NW¹/₄SW¹/₄ 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 (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)
Apr 3	1700	*1,460	*5.65	May 11	0100	1,170	5.06
May 1	0200	571	4.07	Jun 23	1900	622	4.17

Minimum discharge, 6.1 ft³/s, Oct. 7, 8, 9, gage height, 2.31 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.9	13	e45	e52	e41	e59	e830	562	237	106	12	27
2	8.0	13	e44	e51	e40	e56	e1140	506	235	89	11	26
3	8.0	13	e44	e52	e39	e53	e1310	450	228	78	12	27
4	7.5	14	e46	e53	e38	e49	e1240	402	227	71	17	24
5	7.3	13	e49	e54	e38	e46	e1140	356	222	99	17	22
6	6.7	13	e51	e53	e39	e43	e1060	322	211	80	24	21
7	6.4	13	e54	e54	e39	e42	e952	298	198	65	34	19
8	6.3	13	e56	e55	e38	e40	865	303	182	55	28	18
9	6.9	13	e59	e60	e38	e39	887	452	174	49	29	17
10	8.0	16	e63	e63	e37	e38	796	1010	164	44	33	16
11	7.2	18	e65	e66	e38	e37	704	1100	152	43	25	14
12	9.4	18	e64	e68	e39	e37	679	901	139	42	25	12
13	11	20	e63	e68	e40	e37	691	870	127	46	20	12
14	12	18	e61	e68	e42	e37	672	897	117	47	18	11
15	11	16	e55	e68	e44	e37	640	778	112	41	15	10
16	11	13	e64	e68	e47	e37	627	658	104	35	14	9.4
17	13	14	e70	e65	e51	e36	583	568	97	30	13	8.5
18	13	23	e74	e63	60	e36	599	501	90	28	12	7.7
19	12	20	e73	e63	67	e36	621	451	85	24	10	7.1
20	13	17	e69	e60	76	e36	547	411	80	23	11	7.0
21	11	14	e66	e58	83	e35	480	374	84	21	27	6.8
22	12	13	e61	e57	88	e34	442	343	138	19	27	6.5
23	12	13	e54	e57	84	e34	437	317	532	16	26	6.8
24	12	25	e44	e54	e77	e34	437	295	520	15	54	6.4
25	12	37	e42	e54	e68	e35	423	277	380	18	51	6.7
26	12	e42	e48	e55	e64	e36	383	261	279	17	48	7.1
27	12	e47	e50	e52	e61	e40	347	250	221	17	42	7.1
28	14	e43	e52	e49	e63	e72	340	242	179	15	37	6.9
29	13	e47	e52	e45	---	e134	410	242	149	13	33	7.3
30	24	e47	e51	e44	---	e268	525	239	124	13	44	9.1
31	14	---	e51	e42	---	e521	---	234	---	12	33	---
TOTAL	333.6	639	1740	1771	1479	2074	20807	14870	5787	1271	802	386.4
MEAN	10.8	21.3	56.1	57.1	52.8	66.9	694	480	193	41.0	25.9	12.9
MAX	24	47	74	68	88	521	1310	1100	532	106	54	27
MIN	6.3	13	42	42	37	34	340	234	80	12	10	6.4
AC-FT	662	1270	3450	3510	2930	4110	41270	29490	11480	2520	1590	766
CFSM	0.02	0.03	0.08	0.09	0.08	0.10	1.04	0.72	0.29	0.06	0.04	0.02
IN.	0.02	0.04	0.10	0.10	0.08	0.12	1.17	0.83	0.32	0.07	0.04	0.02

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STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1931 - 2002, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	42.3	45.9	29.7	14.4	19.6	218	526	211	275	139	67.6	41.2
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	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

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1931 - 2002

ANNUAL TOTAL	107040.1	51960.0	
ANNUAL MEAN	293	142	144a
HIGHEST ANNUAL MEAN			566 1993
LOWEST ANNUAL MEAN			8.32 1959
HIGHEST DAILY MEAN	3800	Apr 26	1310 Apr 3 16400 Apr 10 1969
LOWEST DAILY MEAN	3.8	Jan 3	6.3 Oct 8 0.00b Jul 26 1931
ANNUAL SEVEN-DAY MINIMUM	4.0	Jan 1	6.8 Sep 19 0.00 Jan 21 1948
MAXIMUM PEAK FLOW			1460c Apr 3 17200 Apr 10 1969
MAXIMUM PEAK STAGE			5.65d Apr 3 14.90 Apr 10 1969
INSTANTANEOUS LOW FLOW			6.1 Oct 7 0.00b Jul 26 1931
ANNUAL RUNOFF (AC-FT)	212300	103100	104500
ANNUAL RUNOFF (CFSM)	0.44	0.21	0.22
ANNUAL RUNOFF (INCHES)	6.00	2.91	2.95
10 PERCENT EXCEEDS	772	463	335
50 PERCENT EXCEEDS	22	46	22
90 PERCENT EXCEEDS	4.4	12	2.7

- a Median of annual mean discharges is 93.2 ft³/s.
- b Many days, several years.
- c Measurement of flow.
- d Backwater from ice.
- e Estimated

