

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 (*):

	Time	Discharge (ft ³ /s)	Gage height (ft)	Time	Discharge (ft ³ /s)	Gage height (ft)
Apr 14	1200	697	4.42	0600	*933	*4.84
May 15	0700	527	4.07			

Minimum discharge, 6.3 ft³/s, Jan. 19, (estimated daily-mean discharge).

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	74	135	56	e17	e10	e17	e141	147	246	182	18	11
2	67	129	65	e17	e10	e18	138	140	231	162	17	9.8
3	61	119	64	e16	e11	e17	122	133	224	150	16	8.8
4	61	112	67	e16	e12	e18	110	126	219	137	15	8.2
5	60	108	53	e15	e13	e19	101	120	234	127	14	7.3
6	58	108	59	e14	e14	e21	94	114	357	112	42	9.2
7	54	108	66	e13	e13	e21	92	116	642	100	44	10
8	50	106	62	e13	e12	e22	90	124	682	97	31	12
9	46	104	55	e13	e12	e22	87	138	654	96	25	12
10	45	103	63	e13	e12	e19	88	161	615	e90	20	11
11	44	103	48	e12	e13	e18	116	170	584	e83	18	10
12	39	96	e46	e12	e13	e20	259	220	568	e77	16	25
13	37	89	e31	e11	e14	e19	543	355	559	71	15	41
14	35	86	e35	e11	e20	e19	687	475	563	74	14	33
15	37	82	e39	e9.3	e22	e18	656	524	720	78	13	44
16	37	79	e39	e7.7	e23	e18	561	501	908	68	13	66
17	36	77	e38	e7.0	e23	e18	490	479	806	61	13	59
18	39	74	e38	e6.5	e22	e17	448	475	694	53	15	47
19	39	75	e30	e6.3	e22	e19	417	456	603	48	15	43
20	37	75	e27	e7.0	e23	e17	380	403	527	46	14	36
21	39	73	e28	e7.0	e22	e16	339	362	465	41	17	67
22	38	77	e25	e7.0	e21	e17	303	326	419	37	22	91
23	37	80	e22	e7.4	e20	e20	270	303	378	33	18	78
24	38	77	e19	e7.7	e19	e26	242	282	345	31	15	73
25	39	65	e18	e10	e19	e37	223	278	308	29	13	70
26	41	76	e18	e9.7	e19	e50	204	307	279	27	14	62
27	40	79	e19	e9.2	e19	e63	188	318	252	25	14	69
28	51	55	e18	e8.1	e18	e77	176	322	233	27	13	98
29	55	58	e17	e8.4	---	e99	164	321	217	26	12	94
30	62	58	e17	e9.4	---	e123	155	294	201	23	12	84
31	117	---	e17	e9.9	---	e134	---	267	---	20	12	---
TOTAL	1,513	2,666	1,199	330.6	471	1,039	7,884	8,757	13,733	2,231	550	1,289.3
MEAN	48.8	88.9	38.7	10.7	16.8	33.5	263	282	458	72.0	17.7	43.0
MAX	117	135	67	17	23	134	687	524	908	182	44	98
MIN	35	55	17	6.3	10	16	87	114	201	20	12	7.3
AC-FT	3,000	5,290	2,380	656	934	2,060	15,640	17,370	27,240	4,430	1,090	2,560
CFSM	0.07	0.13	0.06	0.02	0.03	0.05	0.40	0.43	0.69	0.11	0.03	0.06
IN.	0.08	0.15	0.07	0.02	0.03	0.06	0.44	0.49	0.77	0.12	0.03	0.07

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1931 - 2005, BY WATER YEAR (WY)

MEAN	41.8	45.8	29.4	14.1	19.2	212	511	211	278	135	66.2	41.4
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 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1931 - 2005	
ANNUAL TOTAL	35,689.7		41,662.9			
ANNUAL MEAN	97.5		114		a142	
HIGHEST ANNUAL MEAN					566	1993
LOWEST ANNUAL MEAN					8.32	1959
HIGHEST DAILY MEAN	1,110	Jun 1	908	Jun 16	16,400	Apr 10, 1969
LOWEST DAILY MEAN	1.8	Jan 25	c6.3	Jan 19	b0.00	Jul 26, 1931
ANNUAL SEVEN-DAY MINIMUM	1.9	Jan 23	6.9	Jan 17	0.00	Jan 21, 1948
MAXIMUM PEAK FLOW			933	Jun 16	17,200	Apr 10, 1969
MAXIMUM PEAK STAGE			4.84	Jun 16	14.90	Apr 10, 1969
INSTANTANEOUS LOW FLOW			c6.3	Jan 19	b0.00	Jul 26, 1931
ANNUAL RUNOFF (AC-FT)	70,790		82,640		102,800	
ANNUAL RUNOFF (CFSM)	0.147		0.172		0.214	
ANNUAL RUNOFF (INCHES)	2.00		2.33		2.90	
10 PERCENT EXCEEDS	248		341		330	
50 PERCENT EXCEEDS	46		46		23	
90 PERCENT EXCEEDS	3.7		12		2.8	

- 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

