

RED RIVER OF THE NORTH BASIN--Continued

05067500 MARSH RIVER NEAR SHELLY, MN

LOCATION.--Lat 47°24'45", long 96°45'50", in NE^{1/4}NW^{1/4} sec. 3, T.145 N., R.48W., Norman County, Hydrologic Unit 09020107, on left bank, 10 ft downstream of County Road 129 bridge, 3.8 mi southeast of Shelly and 10 mi upstream from mouth.

DRAINAGE AREA.--220 mi².

PERIOD OF RECORD.--March 1944 to September 1983 and April 1985 to current year (no winter records since 1989). Monthly discharge only for March 1944, published in WSP 1308. Operated as a high-flow partial-record station October 1983 to March 1985.

GAGE.--Water-stage recorder. Datum of gage is 841.14 ft above sea level (NGVD of 1929, levels by U.S. Army Corps of Engineers). Prior to Oct. 1, 1965, nonrecording gage at datum 3.0 ft higher. Oct. 1, 1965 to May 17, 1989, nonrecording gage at present site and datum.

REMARKS.--Records good except those for discharges below 1.0 ft³/s and those for estimated daily discharges, which are poor. Large part of high flow of Wild Rice River diverted into Marsh River Basin at overflow section 4.6 mi east of Ada. Another diversion from Wild Rice River Basin formed in 1947, 1.5 mi southeast of Ada and diverted water at all stages 1947- 51, after which it was closed except for a small regulated flow diverted for abatement of pollution from Ada sewage plant effluent.

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	0.00	---	---	---	---	e0.04	666	5.2	647	1.6	0.23	3.2
2	0.00	---	---	---	---	e0.04	399	4.9	407	1.5	0.21	2.2
3	0.01	---	---	---	---	e0.04	195	4.4	214	1.7	0.22	1.5
4	0.30	---	---	---	---	e0.04	113	4.4	130	2.2	0.17	1.2
5	0.21	---	---	---	---	e0.05	79	3.9	72	2.0	0.08	1.6
6	0.02	---	---	---	---	e0.05	56	3.6	40	3.2	0.08	5.2
7	0.00	---	---	---	---	e0.05	46	3.2	26	4.1	0.59	7.0
8	0.00	---	---	---	---	e0.05	42	3.3	21	4.3	0.66	11
9	0.00	---	---	---	---	e0.05	35	3.5	18	9.5	1.1	13
10	0.00	---	---	---	---	e0.05	33	3.6	15	6.3	0.99	9.9
11	1.1	---	---	---	---	e0.05	e26	7.0	12	12	1.0	6.8
12	1.8	---	---	---	---	e0.06	e20	443	10	16	2.5	5.2
13	1.8	---	---	---	---	e0.06	14	576	9.7	24	2.2	4.4
14	2.0	---	---	---	---	e0.06	13	354	8.8	16	1.7	3.6
15	1.3	---	---	---	---	e0.07	12	248	7.9	12	0.95	2.8
16	0.81	---	---	---	---	e0.08	11	193	7.4	8.5	0.63	2.7
17	0.74	---	---	---	---	e0.09	11	151	6.5	5.8	0.43	3.2
18	0.67	---	---	---	---	e0.11	10	89	6.1	4.1	0.24	3.7
19	0.57	---	---	---	---	e0.14	10	54	5.6	3.1	0.07	3.1
20	0.46	---	---	---	---	e0.21	9.9	36	5.1	2.1	0.00	3.2
21	0.40	---	---	---	---	e0.50	9.5	29	4.3	1.6	0.00	3.5
22	0.41	---	---	---	---	e1.5	10	24	3.9	1.0	0.00	2.8
23	0.37	---	---	---	---	e5.0	9.1	21	3.6	0.71	0.00	3.1
24	0.31	---	---	---	---	e7.5	8.5	21	3.4	0.48	2.2	5.3
25	0.25	---	---	---	---	e20	7.7	20	3.4	0.26	11	9.0
26	0.34	---	---	---	---	e100	6.9	19	3.1	0.10	14	8.5
27	0.51	---	---	---	---	e400	6.9	17	2.7	0.00	10	5.4
28	1.1	---	---	---	---	1,380	6.4	16	2.5	0.25	6.4	3.7
29	3.1	---	---	---	---	1,690	5.8	17	2.2	0.33	3.8	2.5
30	3.2	---	---	---	---	1,300	6.4	240	1.9	0.33	3.4	1.2
31	2.1	---	---	---	---	939	---	837	---	0.32	4.0	---
TOTAL	23.88	---	---	---	---	5,844.89	1,878.1	3,452.0	1,700.1	145.38	68.85	139.5
MEAN	0.77	---	---	---	---	189	62.6	111	56.7	4.69	2.22	4.65
MAX	3.2	---	---	---	---	1,690	666	837	647	24	14	13
MIN	0.00	---	---	---	---	0.04	5.8	3.2	1.9	0.00	0.00	1.2
AC-FT	47	---	---	---	---	11,590	3,730	6,850	3,370	288	137	277
CFSM	0.00	---	---	---	---	0.86	0.28	0.51	0.26	0.02	0.01	0.02
IN.	0.00	---	---	---	---	0.99	0.32	0.58	0.29	0.02	0.01	0.02

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1944 - 2004, BY WATER YEAR (WY)

MEAN	12.8	11.0	5.60	3.79	3.29	79.1	292	122	112	78.5	18.0	12.2
MAX	130	102	77.1	64.5	62.1	437	1,537	2,617	1,644	820	363	144
(WY)	(1952)	(1952)	(1951)	(1951)	(1951)	(1945)	(1950)	(1950)	(2002)	(1950)	(1949)	(1944)
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.87	0.00	0.00	0.00	0.00
(WY)	(1955)	(1956)	(1956)	(1946)	(1946)	(1964)	(1981)	(1980)	(1980)	(1961)	(1959)	(1954)

05067500 MARSH RIVER NEAR SHELLY, MN—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR	FOR 2004 WATER YEAR	WATER YEARS 1944 - 2004
ANNUAL MEAN			63.3
HIGHEST ANNUAL MEAN			a543 1950
LOWEST ANNUAL MEAN			1.24 1977
HIGHEST DAILY MEAN	816 Jun 26	1690 Mar 29	5,290 Jun 27, 2002
LOWEST DAILY MEAN	b0.00 Mar 1	b0.00 Oct 1	c0.00 Sep 4, 1945
ANNUAL SEVEN-DAY MINIMUM	0.00 Mar 1	0.00 Oct 1	0.00 Sep 12, 1945
MAXIMUM PEAK FLOW	882 Jun 26	1730 Mar 29	d5,530 Jun 26, 2002
MAXIMUM PEAK STAGE	12.34 Jun 26	15.98 Mar 29	f25.45 Apr 18, 1997
ANNUAL RUNOFF (AC-FT)			45,850
ANNUAL RUNOFF (CFSM)			0.288
ANNUAL RUNOFF (INCHES)			3.91
10 PERCENT EXCEEDS			106
50 PERCENT EXCEEDS			0.80
90 PERCENT EXCEEDS			0.00

a Based on complete years only, 1945-83, 86-89.

b Many days, most years.

c Gage-height, 24.35 ft.

d From floodmark.

e Estimated.

f Many days.

