

RED RIVER OF THE NORTH BASIN--Continued

05067500 MARSH RIVER NEAR SHELLY, MN

LOCATION.--Lat 47°24'45", long 96°45'50", in NE $\frac{1}{4}$ NW $\frac{1}{4}$ 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 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, in CFS, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e0.34	e11	---	---	---	---	e20	16	14	1050	29	73
2	e0.34	e13	---	---	---	---	e19	16	7.4	e400	25	55
3	e0.30	e19	---	---	---	---	e17	15	4.6	e300	20	37
4	e0.28	e23	---	---	---	---	e15	12	2.8	e200	17	24
5	e0.26	e30	---	---	---	---	e15	11	2.2	e140	15	16
6	e0.24	e34	---	---	---	---	e16	12	2.9	e90	15	8.9
7	e0.22	e32	---	---	---	---	e19	14	2.4	e55	14	5.7
8	e0.20	e26	---	---	---	---	e28	16	1.7	45	12	3.4
9	e0.20	e23	---	---	---	---	34	25	661	41	10	2.6
10	e0.28	e21	---	---	---	---	36	48	2420	950	9.1	2.4
11	e0.30	e17	---	---	---	---	35	67	3480	2110	11	2.1
12	e0.21	e14	---	---	---	---	32	71	4580	2070	14	1.6
13	e0.18	e12	---	---	---	---	32	58	4370	1580	15	1.4
14	e0.16	e9.0	---	---	---	---	32	47	3260	1180	13	1.2
15	e0.13	e7.0	---	---	---	---	28	38	2260	783	11	0.93
16	e0.12	6.6	---	---	---	---	23	35	1400	383	9.3	0.82
17	e0.10	5.9	---	---	---	---	17	31	692	257	11	0.71
18	e0.03	5.4	---	---	---	---	15	26	378	222	14	0.71
19	e0.03	4.2	---	---	---	---	15	22	296	171	11	0.83
20	e0.03	4.1	---	---	---	---	16	18	275	144	8.4	0.64
21	e0.08	3.7	---	---	---	---	13	15	281	134	6.7	0.54
22	e0.08	3.2	---	---	---	---	14	11	237	330	5.9	0.49
23	e0.11	3.6	---	---	---	---	14	7.4	708	218	5.6	0.70
24	e2.0	3.0	---	---	---	---	13	8.4	1680	117	5.1	0.72
25	e4.8	2.7	---	---	---	---	16	9.0	2880	74	4.1	0.79
26	e6.5	1.9	---	---	---	---	15	7.3	5190	125	3.5	0.83
27	e6.0	1.7	---	---	---	---	11	5.8	5290	144	4.0	0.82
28	e3.5	1.5	---	---	---	---	10	6.5	4140	95	16	0.84
29	e5.0	1.7	---	---	---	---	14	12	2870	61	20	0.83
30	e7.0	2.5	---	---	---	---	16	22	1930	42	40	0.87
31	e9.0	---	---	---	---	---	---	19	---	34	70	---
TOTAL	48.02	342.7	---	---	---	---	600	721.4	49316.0	13545	464.7	246.37
MEAN	1.549	11.42	---	---	---	---	20.00	23.27	1644	436.9	14.99	8.212
MAX	9.0	34	---	---	---	---	36	71	5290	2110	70	73
MIN	0.03	1.5	---	---	---	---	10	5.8	1.7	34	3.5	0.49
AC-FT	95	680	---	---	---	---	1190	1430	97820	26870	922	489
CFSM	0.01	0.05	---	---	---	---	0.09	0.11	7.47	1.99	0.07	0.04
IN.	0.01	0.06	---	---	---	---	0.10	0.12	8.34	2.29	0.08	0.04

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STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1944 - 2002, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	13.22	10.99	5.602	3.793	3.294	77.47	301.1	122.9	112.5	80.71	18.58	12.52
MAX	130	102	77.1	64.5	62.1	437	1537	2617	1644	820	363	144
(WY)	1952	1952	1951	1951	1951	1945	1950	1950	2002	1950	1949	1944
MIN	0.000	0.000	0.000	0.000	0.000	0.000	0.078	0.87	0.000	0.000	0.000	0.000
(WY)	1955	1956	1956	1946	1946	1964	1981	1980	1980	1961	1959	1954

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1944 - 2002

ANNUAL MEAN										63.28		
HIGHEST ANNUAL MEAN										543a		1950
LOWEST ANNUAL MEAN										1.24		1977
HIGHEST DAILY MEAN				2350	Apr 10		5290	Jun 27		5290	Jun 27	2002
LOWEST DAILY MEAN				0.00	Aug 22		0.03	Oct 18-20		0.00b	Sep 4	1945
ANNUAL SEVEN-DAY MINIMUM				0.00	Aug 22		0.07	Oct 17		0.00	Sep 12	1945
MAXIMUM PEAK FLOW							5530	Jun 26c		5530c	Jun 26	2002
MAXIMUM PEAK STAGE							24.90	Jun 12		25.45d	Apr 18	1997
ANNUAL RUNOFF (AC-FT)										45850		
ANNUAL RUNOFF (CFSM)										0.29		
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.

