

## RED RIVER OF THE NORTH BASIN--Continued

05067500 MARSH RIVER NEAR SHELLY, MN

LOCATION.--Lat 47°24'45", long 96°45'50", in NE<sup>1/4</sup>NW<sup>1/4</sup> 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 mi<sup>2</sup>.

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 ft<sup>3</sup>/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 2004 TO SEPTEMBER 2005  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.84	1,310	---	---	---	e2.9	e975	15	39	20	0.56	23
2	0.65	977	---	---	---	e2.9	702	15	34	18	0.53	16
3	0.91	653	---	---	---	e3.0	628	14	27	15	0.51	13
4	0.66	448	---	---	---	e3.1	438	13	26	14	0.40	10
5	0.51	343	---	---	---	e3.2	301	13	28	14	0.23	10
6	0.47	283	---	---	---	e3.1	225	12	46	13	0.18	17
7	0.41	243	---	---	---	e3.0	167	12	80	9.9	0.12	175
8	0.27	201	---	---	---	e3.0	132	13	119	8.4	0.06	151
9	0.19	142	---	---	---	e3.2	106	14	130	7.0	0.01	125
10	0.12	90	---	---	---	e3.1	93	14	144	6.2	0.00	516
11	0.13	64	---	---	---	e3.0	81	14	147	5.1	0.12	751
12	0.26	45	---	---	---	e3.0	90	14	443	4.3	0.14	571
13	0.52	37	---	---	---	e2.9	181	14	741	3.6	0.06	353
14	0.78	35	---	---	---	e2.9	258	15	899	3.3	0.01	216
15	1.0	32	---	---	---	e2.9	204	18	1,160	3.1	0.00	114
16	1.2	30	---	---	---	e3.0	148	18	875	2.5	0.00	60
17	1.2	29	---	---	---	e3.0	108	18	499	2.1	0.22	32
18	1.6	29	---	---	---	e3.1	80	18	269	1.9	19	22
19	1.7	28	---	---	---	e3.2	59	18	152	1.8	26	18
20	1.3	27	---	---	---	e3.3	47	19	81	1.9	50	16
21	1.1	26	---	---	---	e3.2	36	19	41	1.8	38	14
22	0.83	25	---	---	---	e3.4	30	19	25	1.5	18	11
23	1.3	24	---	---	---	e4.0	27	19	17	1.1	11	10
24	3.2	23	---	---	---	e7.0	24	18	13	0.93	7.2	8.9
25	4.9	23	---	---	---	e21	23	18	11	1.0	6.9	7.5
26	4.9	24	---	---	---	e61	21	18	9.3	1.1	285	7.0
27	4.3	23	---	---	---	e254	19	18	8.7	1.0	493	6.5
28	4.3	22	---	---	---	492	17	19	8.8	0.84	335	5.6
29	5.6	20	---	---	---	705	16	20	11	0.68	196	5.0
30	438	21	---	---	---	1,070	15	25	17	0.64	109	4.7
31	1,310	---	---	---	---	e1,280	---	34	---	0.59	46	---
TOTAL	1,793.15	5,277	---	---	---	3,961.4	5,251	528	6,100.8	166.28	1,643.25	3,289.2
MEAN	57.8	176	---	---	---	128	175	17.0	203	5.36	53.0	110
MAX	1,310	1,310	---	---	---	1,280	975	34	1,160	20	493	751
MIN	0.12	20	---	---	---	2.9	15	12	8.7	0.59	0.00	4.7
AC-FT	3,560	10,470	---	---	---	7,860	10,420	1,050	12,100	330	3,260	6,520
CFSM	0.26	0.80	---	---	---	0.58	0.80	0.08	0.92	0.02	0.24	0.50
IN.	0.30	0.89	---	---	---	0.67	0.89	0.09	1.03	0.03	0.28	0.56

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1944 - 2005, BY WATER YEAR (WY)

MEAN	13.6	14.6	5.60	3.79	3.29	80.0	290	120	113	77.3	18.6	13.8
(WY)	(1952)	(2005)	(1951)	(1951)	(1951)	(1945)	(1945)	(1950)	(1950)	(1950)	(1949)	(1944)
MAX	130	176	77.1	64.5	62.1	437	1,537	2,617	1,644	820	363	144
(WY)	(1955)	(1956)	(1956)	(1946)	(1946)	(1964)	(1981)	(1980)	(1980)	(1961)	(1959)	(1954)
MIN	0.00	0.00	0.00	0.00	0.00	0.08	0.87	0.00	0.00	0.00	0.00	0.00
(WY)	(1955)	(1956)	(1956)	(1946)	(1946)	(1964)	(1981)	(1980)	(1980)	(1961)	(1959)	(1954)

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SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR	FOR 2005 WATER YEAR	WATER YEARS 1944 - 2005
ANNUAL MEAN			63.3
HIGHEST ANNUAL MEAN			a543
LOWEST ANNUAL MEAN			1.24
HIGHEST DAILY MEAN	1,690	Mar 29	5,290
LOWEST DAILY MEAN	b0.00	Jul 27	c0.00
ANNUAL SEVEN-DAY MINIMUM	0.04	Mar 1	0.00
MAXIMUM PEAK FLOW	1,730	Mar 29	d5,530
MAXIMUM PEAK STAGE	15.98	Mar 29	f25.45
ANNUAL RUNOFF (AC-FT)		45,850	45,850
ANNUAL RUNOFF (CFSM)		0.288	0.288
ANNUAL RUNOFF (INCHES)		3.91	3.91
10 PERCENT EXCEEDS		106	106
50 PERCENT EXCEEDS		0.80	0.80
90 PERCENT EXCEEDS		0.00	0.00

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

b Many days.

c Many days, most years.

d Gage-height, 24.35 ft.

e Estimated.

f From floodmark.

