

## RED RIVER OF THE NORTH BASIN--Continued

05104500 ROSEAU RIVER BELOW SOUTH FORK NEAR MALUNG, MN

LOCATION.--Lat 48°47'30", long 95°44'40", in NW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec. 6, T.161 N., R.39 W., Roseau County, Hydrologic Unit 09020314, on left bank 0.3 mi downstream from South Fork and 1.5 mi northwest of Malung.

DRAINAGE AREA.--430 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1946 to current year.

REVISED RECORDS.--WSP 2113: 1948, 1950, 1951, 1956(M), 1957(M), 1962(M). WRIR 97-4249: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,029.67 ft above sea level (NGVD of 1912).

REMARKS.--Records good except those for estimated daily discharges, which are fair. Some flow bypasses the gaging station through a natural overflow channel 0.8 mi. upstream and returns to river 0.5 mi downstream. Overflow begins at stage of about 13.0 ft, discharge, 1,800 ft<sup>3</sup>/s. These records include any flow in the overflow channel.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e30	256	e120	e14	13	e7.5	e90	511	876	124	1950	64
2	e29	826	e105	e15	12	8.1	e160	491	803	109	3760	59
3	e28	1060	e94	e16	12	8.2	e290	473	810	98	3940	54
4	27	1100	e86	e18	12	7.9	e500	e460	801	91	3490	51
5	23	1020	e78	19	12	7.4	e960	e440	749	83	2910	46
6	22	1020	e73	19	12	7.5	e1300	e400	661	76	2290	44
7	25	e1460	e65	18	e12	8.2	e1700	e360	566	70	1710	64
8	21	e2070	e58	e18	e11	8.5	e2100	369	498	63	1280	81
9	23	2340	e53	18	11	8.2	2370	410	442	61	978	87
10	23	2180	e47	17	e10	8.2	1960	455	369	54	761	98
11	22	1800	e43	16	e9.9	8.3	1620	444	313	47	611	95
12	22	1510	e37	17	e9.8	8.2	1650	397	275	40	522	89
13	22	1300	e34	17	e9.7	8.4	1780	348	246	35	454	76
14	21	1130	e32	18	e9.5	8.7	2030	311	227	33	369	67
15	22	959	e30	18	e9.4	8.8	e1990	280	221	31	309	61
16	19	803	e28	17	e9.3	8.6	e1740	269	242	29	272	56
17	19	653	e27	17	e9.0	8.7	e1540	314	266	32	257	53
18	20	562	e25	16	e8.8	9.0	1370	361	255	33	236	51
19	19	e500	e24	16	e8.6	11	1200	358	336	85	218	46
20	19	e450	e23	16	e8.4	12	1120	317	490	199	196	42
21	18	e400	e22	16	e8.2	17	1140	278	563	421	176	39
22	19	363	e21	16	e8.1	e20	1070	279	548	505	158	37
23	18	e315	e20	16	e8.0	e50	1010	432	500	488	142	38
24	18	e280	e19	16	e7.8	e80	962	697	445	363	130	38
25	20	249	e18	15	e7.8	e67	891	891	355	233	120	38
26	28	195	e17	14	e7.7	e57	795	1050	286	165	111	37
27	85	177	e17	14	e7.6	e49	713	1280	238	127	101	38
28	137	163	e16	14	e7.5	e44	641	1400	200	115	92	37
29	148	151	e16	14	---	e43	582	1350	169	112	83	39
30	146	141	e15	14	---	e46	539	1210	145	120	77	27
31	133	---	e15	14	---	e60	---	1040	---	209	69	---
TOTAL	1226	25433	1278	503	272.1	704.4	35813	17675	12895	4251	27772	1652
MEAN	39.5	848	41.2	16.2	9.72	22.7	1194	570	430	137	896	55.1
MAX	148	2340	120	19	13	80	2370	1400	876	505	3940	98
MIN	18	141	15	14	7.5	7.4	90	269	145	29	69	27
AC-FT	2430	50450	2530	998	540	1400	71040	35060	25580	8430	55090	3280
CFSM	.09	1.97	.10	.04	.02	.05	2.78	1.33	1.00	.32	2.08	.13
IN.	.11	2.20	.11	.04	.02	.06	3.10	1.53	1.12	.37	2.40	.14

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STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1947 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	66.6	64.7	17.1	7.85	8.72	67.6	618	332	232	160	75.5	81.5
MAX	351	848	65.6	22.2	102	524	2035	1589	1140	1152	896	710
(WY)	1983	2001	1995	1997	1998	1995	1966	1950	1968	1968	2001	1957
MIN	.029	.16	.013	.000	.000	.83	5.60	8.77	4.16	.092	.000	.025
(WY)	1991	1991	1977	1977	1977	1977	1991	1990	1980	1980	1961	1988

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1947 - 2001
ANNUAL TOTAL	61796.5	129474.5	
ANNUAL MEAN	169	355	144a
HIGHEST ANNUAL MEAN			355
LOWEST ANNUAL MEAN			7.28
HIGHEST DAILY MEAN	2340	Nov 9	3940
LOWEST DAILY MEAN	5.8	Aug 19	7.4
ANNUAL SEVEN-DAY MINIMUM	7.4	Feb 16	7.7
MAXIMUM PEAK FLOW			4090
MAXIMUM PEAK STAGE			19.59
ANNUAL RUNOFF (AC-FT)	122600	256800	104500
ANNUAL RUNOFF (CFSM)	.39	.82	.34
ANNUAL RUNOFF (INCHES)	5.35	11.20	4.56
10 PERCENT EXCEEDS	448	1110	336
50 PERCENT EXCEEDS	54	80	20
90 PERCENT EXCEEDS	7.9	10	1.9

- a Median of annual mean discharges is 120 ft<sup>3</sup>/s.
- b Many days, several years.
- c Gage-height, 23.16 ft.
- d From highwater mark, backwater from ice.
- e Estimated.

