

05106000 SPRAGUE CREEK NEAR SPRAGUE, MANITOBA

LOCATION.--Lat 48°59'33", long 95°39'43", in NE $\frac{1}{4}$ sec. 34, T.164 N., R.39 W., Roseau County, Hydrologic Unit 09020314, on left bank 0.5 mi south of international boundary, 3.5 mi south of Sprague, Manitoba, 8 mi upstream from mouth, and 10.5 mi northeast of Roseau, MN.

DRAINAGE AREA.--176 mi².

PERIOD OF RECORD.--September 1928 to December 1981, October, 1999 to current year.

REVISED RECORDS.--WSP 1055: 1944. WSP 1308: 1931(M). WDR MN-81-1: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,038.40 ft above sea level, 1928 datum, (levels by Geodetic Survey of Canada). Prior to Mar. 15, 1929, nonrecording gage at same site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	22	e6.1	e3.2	e2.8	e2.0	e50	53	104	60	20	27
2	28	20	e5.6	3.2	e2.8	e2.0	e48	51	96	55	21	24
3	28	19	e5.1	3.0	e2.7	e2.0	e46	49	83	77	18	19
4	35	19	e4.7	3.1	e2.7	e2.0	e44	49	70	73	16	18
5	35	18	e4.3	3.1	e2.6	e2.0	e45	49	65	61	15	17
6	33	18	e4.0	3.0	e2.5	e2.0	e49	48	68	55	15	14
7	29	18	e3.7	3.1	e2.4	e2.0	e58	54	80	49	13	12
8	29	18	e3.5	3.2	e2.4	e2.0	e71	55	86	45	12	10
9	30	18	e3.4	3.3	e2.4	e2.0	e61	51	91	39	10	8.7
10	31	18	e3.4	3.1	e2.4	e1.9	58	53	148	37	41	15
11	31	18	e3.5	e3.2	e2.4	e1.9	55	69	167	36	40	20
12	34	17	e3.8	e3.2	e2.3	e1.9	41	67	169	38	22	20
13	36	16	e4.3	e3.1	e2.3	e1.9	40	57	176	40	15	33
14	31	14	e4.9	e3.0	e2.3	e2.0	45	51	160	41	11	52
15	27	13	e4.0	e2.9	e2.2	e2.2	41	47	136	41	8.3	52
16	28	13	e3.7	e2.8	e2.2	e2.6	39	44	133	35	6.9	45
17	28	12	e3.6	e2.6	e2.2	e6.0	36	44	144	30	5.8	64
18	29	12	e3.6	e2.4	e2.1	e60	37	71	127	26	5.4	312
19	30	12	e3.6	e2.2	e2.1	e110	45	366	106	30	5.1	343
20	29	12	e3.7	e2.0	e2.1	e118	68	339	91	35	5.1	265
21	27	12	e3.7	e1.9	e2.1	e117	65	286	72	37	4.7	233
22	25	13	e3.6	e1.8	e2.0	e110	57	265	61	35	4.4	242
23	27	12	e3.6	e1.8	e2.1	e95	59	247	65	30	3.7	225
24	25	11	e3.7	e1.9	e2.0	e64	55	215	62	25	2.9	196
25	22	8.8	e3.8	e2.0	e2.1	e57	60	183	58	23	3.2	179
26	21	7.5	e3.4	e2.1	e2.0	e52	56	156	57	21	3.2	159
27	21	7.4	e3.2	e2.3	e2.0	e48	59	134	55	21	3.0	142
28	22	7.0	e3.2	e2.5	e2.0	e46	64	120	57	19	9.6	128
29	25	7.5	e3.3	e2.7	---	e45	63	107	78	16	17	119
30	27	6.8	e3.3	e2.8	---	e47	57	112	73	18	30	110
31	26	---	e3.3	e2.8	---	e52	---	117	---	20	36	---
TOTAL	878	420.0	120.6	83.3	64.2	1,059.4	1,572	3,609	2,938	1,168	423.3	3,103.7
MEAN	28.3	14.0	3.89	2.69	2.29	34.2	52.4	116	97.9	37.7	13.7	103
MAX	36	22	6.1	3.3	2.8	118	71	366	176	77	41	343
MIN	21	6.8	3.2	1.8	2.0	1.9	36	44	55	16	2.9	8.7
AC-FT	1,740	833	239	165	127	2,100	3,120	7,160	5,830	2,320	840	6,160
CFSM	0.16	0.08	0.02	0.02	0.01	0.19	0.30	0.66	0.56	0.21	0.08	0.59
IN.	0.19	0.09	0.03	0.02	0.01	0.22	0.33	0.76	0.62	0.25	0.09	0.66

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1929 - 2003, BY WATER YEAR (WY)

MEAN	34.1	30.2	5.64	2.21	1.84	16.9	173	161	127	51.2	26.4	42.4
MAX	259	460	30.1	10.3	7.32	193	633	709	1,238	315	160	419
(WY)	(1942)	(2001)	(2001)	(1966)	(2000)	(1945)	(1966)	(1950)	(2002)	(1937)	(1968)	(1941)
MIN	0.95	1.10	0.20	0.23	0.13	0.53	7.16	2.21	0.11	0.032	0.094	0.39
(WY)	(1953)	(1977)	(1977)	(1977)	(1977)	(1964)	(1981)	(1980)	(1980)	(1980)	(1961)	(1934)

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SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1929 - 2003	
ANNUAL TOTAL	54,404.7		15,439.5		60.2	
ANNUAL MEAN	149		42.3		4.07	
HIGHEST ANNUAL MEAN					150	2002
LOWEST ANNUAL MEAN					4.07	1980
HIGHEST DAILY MEAN	8,070	Jun 11	366	May 19	8,070	Jun 11, 2002
LOWEST DAILY MEAN	1.4	Mar 4	1.8	Jan 22,23	a0.00	Apr 1, 1930
ANNUAL SEVEN-DAY MINIMUM	1.4	Mar 4	1.9	Jan 20	0.00	Aug 7, 1936
MAXIMUM PEAK FLOW			405	May 19	b8,440	Jun 11, 2002
MAXIMUM PEAK STAGE			8.31	Apr 19	17.08	Jun 11, 2002
ANNUAL RUNOFF (AC-FT)	107,900		30,620		43,620	
ANNUAL RUNOFF (CFSM)	0.85		0.24		0.34	
ANNUAL RUNOFF (INCHES)	11.50		3.26		4.65	
10 PERCENT EXCEEDS	218		110		168	
50 PERCENT EXCEEDS	27		22		9.1	
90 PERCENT EXCEEDS	2.0		2.2		1.1	

a Many days, several years.
 b From rating curve extended above 2,560 ft³/s.
 c Estimated.

