

05106000 SPRAGUE CREEK NEAR SPRAGUE, MANITOBA

LOCATION.--Lat 48°59'33", long 95°39'43", in NE¹/₄NE1/4sec. 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 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	102	58	e6.6	e4.5	e3.7	e3.4	e213	201	1,140	95	18	152
2	95	52	6.3	e4.5	3.7	e3.4	e280	183	1,010	86	16	133
3	89	e47	6.0	e4.4	3.7	e3.4	e320	172	786	94	14	116
4	80	40	e5.8	e4.4	3.6	e3.4	375	170	610	98	13	107
5	71	34	e5.6	e4.3	3.6	3.5	395	164	517	92	13	103
6	65	e31	e5.5	4.3	3.6	e3.5	425	197	470	86	11	127
7	58	e29	e5.3	e4.3	3.5	e3.5	543	185	661	78	34	162
8	53	e27	e5.2	e4.2	3.5	e3.6	653	172	862	68	86	149
9	53	25	e5.1	4.2	3.6	e3.6	579	165	646	68	120	131
10	48	24	e5.0	e4.2	3.6	3.7	442	156	512	73	142	114
11	58	25	e4.9	e4.2	3.6	e3.7	375	179	433	104	164	102
12	94	23	e4.9	e4.2	e3.6	3.8	314	1,190	399	95	152	93
13	93	22	e4.8	e4.1	e3.6	e3.8	287	1,990	363	77	134	85
14	91	e21	e4.7	e4.1	3.6	e3.8	269	1,530	326	65	116	108
15	80	21	e4.6	e4.1	3.6	e3.8	258	1,240	297	57	100	108
16	66	20	e4.6	e4.1	3.6	e3.8	285	1,080	274	52	88	104
17	56	23	e4.5	e4.0	e3.6	3.9	300	977	256	47	73	103
18	53	41	e4.5	e4.0	e3.6	e3.9	311	829	243	41	67	97
19	49	49	e4.6	e4.0	e3.6	e4.0	336	685	223	37	86	90
20	47	43	e4.7	e4.0	3.6	4.1	338	821	204	33	69	103
21	46	33	e4.8	e3.9	3.5	e4.1	347	789	187	35	59	273
22	44	25	e4.8	e3.9	3.5	e4.1	348	681	173	31	53	245
23	42	18	e4.8	e3.9	3.5	4.1	325	566	159	28	50	206
24	39	15	e4.8	e3.8	3.5	4.0	304	463	148	25	48	316
25	40	13	e4.8	e3.8	3.5	e4.8	285	469	146	22	56	325
26	38	11	e4.7	e3.8	3.5	e7.0	272	502	142	19	81	282
27	36	9.3	e4.7	e3.8	3.4	e25	254	509	131	18	126	256
28	46	e8.3	e4.7	e3.8	e3.4	e76	244	474	122	18	112	218
29	57	e7.7	e4.6	e3.7	e3.4	e180	232	434	113	18	103	184
30	58	e7.1	e4.6	e3.7	---	e130	215	620	104	17	169	162
31	63	---	e4.6	e3.7	---	e150	---	1,110	---	17	171	---
TOTAL	1,910	802.4	155.1	125.9	103.3	662.7	10,124	18,903	11,657	1,694	2,544	4,754
MEAN	61.6	26.7	5.00	4.06	3.56	21.4	337	610	389	54.6	82.1	158
MAX	102	58	6.6	4.5	3.7	180	653	1,990	1,140	104	171	325
MIN	36	7.1	4.5	3.7	3.4	3.4	213	156	104	17	11	85
AC-FT	3,790	1,590	308	250	205	1,310	20,080	37,490	23,120	3,360	5,050	9,430
CFSM	0.35	0.15	0.03	0.02	0.02	0.12	1.92	3.46	2.21	0.31	0.47	0.90
IN.	0.40	0.17	0.03	0.03	0.02	0.14	2.14	4.00	2.46	0.36	0.54	1.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1929 - 2004, BY WATER YEAR (WY)

MEAN	34.5	30.1	5.62	2.25	1.88	17.0	175	169	131	51.3	27.3	44.4
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	0.03	0.09	0.39
(WY)	(1953)	(1977)	(1977)	(1977)	(1977)	(1964)	(1981)	(1980)	(1980)	(1980)	(1961)	(1934)

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SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1929 - 2004	
ANNUAL TOTAL	16,888.4		53,435.4		62.0	
ANNUAL MEAN	46.3		146		4.07	
HIGHEST ANNUAL MEAN					150	2002
LOWEST ANNUAL MEAN					1980	
HIGHEST DAILY MEAN	366	May 19	1,990	May 13	8,070	Jun 11, 2002
LOWEST DAILY MEAN	1.8	Jan 22	3.4	Feb 27 - Mar 4	a0.00	Apr 1, 1930
ANNUAL SEVEN-DAY MINIMUM	1.9	Jan 20	3.4	Feb 27	0.00	Aug 7, 1936
MAXIMUM PEAK FLOW			2,160	May 13	b8,440	Jun 11, 2002
MAXIMUM PEAK STAGE			14.25	May 13	17.08	Jun 11, 2002
INSTANTANEOUS LOW FLOW			3.4	Feb 7		
ANNUAL RUNOFF (AC-FT)	33,500		106,000		44,950	
ANNUAL RUNOFF (CFSM)	0.263		0.830		0.352	
ANNUAL RUNOFF (INCHES)	3.57		11.29		4.79	
10 PERCENT EXCEEDS	110		407		171	
50 PERCENT EXCEEDS	34		52		9.5	
90 PERCENT EXCEEDS	2.2		3.7		1.1	

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

