

Water-Data Report 2007

05278000 MIDDLE FORK CROW RIVER NEAR SPICER, MN

Upper Mississippi Basin
Crow Subbasin

LOCATION.--Lat 45°15'50", long 94°48'20" referenced to North American Datum of 1927, in SE ¼ NE ¼ sec.27, T.121 N., R.33 W., Kandiyohi County, MN, Hydrologic Unit 07010204, on right bank 75 feet upstream from highway bridge on County State Aid Rd. 2, 1.5 mi downstream from Lake Calhoun, 3 mi downstream from Green Lake, 6.8 miles northeast of Spicer.

DRAINAGE AREA.--179 mi², approximately.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--March 1949 to September 1987, May 2006 to current year.

REVISED RECORDS.--WSP 1508: 1949(M), 1950.

GAGE.--Water-stage recorder and concrete and steel sharp-crested V-notch weir. Datum of gage is 1,147.93 ft. above National Geodetic Vertical Datum of 1929 (Kandiyohi County Highway Department bench mark). Prior to July 20, 1950, nonrecording gage at bridge 75 ft. downstream at same datum.

COOPERATION.--North Fork Crow River Watershed District.

REMARKS.--Records are good except for those estimated daily discharges, which are poor. Some regulation from outlet of Lake Calhoun one mile upstream

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007
DAILY MEAN VALUES

[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	11	2.1	16	26	e13	16	120	133	75	26	3.5	3.0
2	9.4	2.0	15	19	e13	18	130	131	74	24	3.5	2.6
3	9.4	1.9	16	19	e13	e19	134	132	74	24	3.0	2.3
4	12	1.9	15	20	e14	20	138	137	71	23	3.1	2.0
5	11	2.0	15	20	e14	20	e140	140	67	23	4.1	1.9
6	9.9	2.0	14	20	e13	21	e142	142	62	21	3.7	2.0
7	9.3	6.9	14	20	e11	22	e145	151	63	20	3.6	2.3
8	9.7	16	13	21	e11	24	148	154	62	20	3.0	2.0
9	9.3	15	13	21	e11	26	148	152	58	21	2.8	1.9
10	8.6	15	13	21	e9.8	27	143	151	55	19	2.5	1.7
11	11	15	13	21	e8.4	28	142	148	58	17	11	1.6
12	11	15	13	21	e7.2	30	143	142	58	15	9.7	1.4
13	13	15	13	21	e6.2	33	147	139	54	14	7.7	1.4
14	11	15	14	21	e5.6	40	146	140	52	14	7.6	1.4
15	8.2	15	14	21	e5.1	42	142	139	50	13	6.1	1.4
16	6.8	15	14	21	e4.7	43	139	133	48	13	5.2	1.4
17	7.0	15	15	21	e4.4	41	134	127	46	13	4.1	1.4
18	7.1	15	15	19	e4.3	41	128	121	49	12	3.9	2.0
19	6.3	15	15	19	e4.3	43	126	118	48	11	5.0	2.0
20	5.4	15	15	18	e4.3	43	125	108	43	9.4	4.7	2.3
21	4.9	15	16	18	e4.4	48	126	103	40	7.8	7.8	3.0
22	4.3	15	17	18	e4.6	53	136	99	38	7.0	6.8	2.4
23	3.3	15	17	18	e4.8	55	185	97	36	6.9	6.7	2.0
24	2.5	15	17	18	e6.9	60	181	95	35	6.6	6.1	2.4
25	2.3	15	17	18	e10	69	172	90	34	6.5	5.3	3.4
26	2.2	15	17	19	11	66	166	86	34	6.7	5.2	2.6
27	2.2	15	18	e16	12	60	154	84	33	7.5	6.1	2.6
28	2.3	16	18	e16	14	62	135	77	31	5.6	6.4	2.2
29	2.2	15	18	e15	---	68	133	76	29	5.2	5.6	1.8
30	2.2	16	19	e15	---	90	134	80	28	4.7	4.5	2.1
31	2.5	---	21	e14	---	101	---	83	---	4.0	3.8	---
Total	217.3	366.8	480	595	245.0	1,329	4,282	3,708	1,505	420.9	162.1	62.5
Mean	7.01	12.2	15.5	19.2	8.75	42.9	143	120	50.2	13.6	5.23	2.08
Max	13	16	21	26	14	101	185	154	75	26	11	3.4
Min	2.2	1.9	13	14	4.3	16	120	76	28	4.0	2.5	1.4
Ac-ft	431	728	952	1,180	486	2,640	8,490	7,350	2,990	835	322	124
Cfsm	0.04	0.07	0.09	0.11	0.05	0.24	0.80	0.67	0.28	0.08	0.03	0.01
In.	0.05	0.08	0.10	0.12	0.05	0.28	0.89	0.77	0.31	0.09	0.03	0.01

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1949 - 2007, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	41.8	42.7	39.8	32.0	32.2	53.0	114	131	108	82.8	52.5	42.0
Max	331	172	155	114	110	182	330	433	292	418	464	327
(WY)	(1987)	(1987)	(1972)	(1972)	(1984)	(1983)	(1986)	(1986)	(1984)	(1986)	(1986)	(1986)
Min	0.96	0.85	0.54	0.20	0.10	0.40	2.35	1.63	2.62	2.85	1.35	1.30
(WY)	(1977)	(1977)	(1977)	(1968)	(1968)	(1960)	(1977)	(1977)	(1977)	(1977)	(1959)	(1976)

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SUMMARY STATISTICS

	Water Year 2007	Water Years 1949 - 2007
Annual total	13,373.6	
Annual mean	36.6	65.8
Highest annual mean		240 1986
Lowest annual mean		1.53 1977
Highest daily mean	185 Apr 23	569 Jul 28, 1986
Lowest daily mean	1.4 Sep 12-17	^a 0.00 Mar 15, 1949
Annual seven-day minimum	1.4 Sep 11	0.00 Mar 15, 1949
Maximum peak flow	188 Apr 23	^b 571 Jul 28, 1986
Maximum peak stage	4.23 Apr 23	6.67 Jun 25, 1957
Instantaneous low flow	1.4 Sep 12	^a 0.00 Mar 15, 1949
Annual runoff (ac-ft)	26,530	47,670
Annual runoff (cfsm)	0.205	0.368
Annual runoff (inches)	2.78	4.99
10 percent exceeds	133	165
50 percent exceeds	15	38
90 percent exceeds	2.5	1.5

^a Many days, several years.

^b Gage height, 6.47 ft.

