

Water-Data Report 2007

**05278020 MIDDLE FORK CROW RIVER AT CROW RIVER, MN**

Upper Mississippi-Crow-Rum Basin  
Crow Subbasin

LOCATION.--Lat 45°13'37", long 94°43'35" referenced to North American Datum of 1983, Meeker County, MN, Hydrologic Unit 07010204, three miles west of State Highway 4 and 500 feet south of the town of Crow River. Gage is located about 50 feet upstream of the bridge on the left bank.

**SURFACE-WATER RECORDS**

PERIOD OF RECORD.--Water years 2007 to current year.

GAGE.--May 2007 to current year.

REMARKS.--Gage-height records considered fair to poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 5.12, May 9, 2007; minimum gage height, 3.10, September 9, 2007.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 5.12, May 9; minimum gage height, 3.10, September 9.

05278020 MIDDLE FORK CROW RIVER AT CROW RIVER, MN—Continued

GAGE HEIGHT, FEET  
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	October			November			December			January		
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
Month	---	---	---	---	---	---	---	---	---	---	---	---

05278020 MIDDLE FORK CROW RIVER AT CROW RIVER, MN—Continued

GAGE HEIGHT, FEET  
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	February			March			April			May		
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	5.12	5.02	5.08
10	---	---	---	---	---	---	---	---	---	5.08	5.01	5.05
11	---	---	---	---	---	---	---	---	---	5.10	4.95	5.05
12	---	---	---	---	---	---	---	---	---	5.07	4.93	5.00
13	---	---	---	---	---	---	---	---	---	4.99	4.89	4.94
14	---	---	---	---	---	---	---	---	---	5.00	4.84	4.91
15	---	---	---	---	---	---	---	---	---	5.03	4.86	4.94
16	---	---	---	---	---	---	---	---	---	4.94	4.82	4.89
17	---	---	---	---	---	---	---	---	---	4.87	4.80	4.83
18	---	---	---	---	---	---	---	---	---	4.82	4.72	4.77
19	---	---	---	---	---	---	---	---	---	4.80	4.63	4.71
20	---	---	---	---	---	---	---	---	---	4.71	4.57	4.64
21	---	---	---	---	---	---	---	---	---	4.60	4.45	4.55
22	---	---	---	---	---	---	---	---	---	4.55	4.40	4.50
23	---	---	---	---	---	---	---	---	---	4.51	4.43	4.48
24	---	---	---	---	---	---	---	---	---	4.51	4.47	4.50
25	---	---	---	---	---	---	---	---	---	4.50	4.38	4.45
26	---	---	---	---	---	---	---	---	---	4.42	4.34	4.40
27	---	---	---	---	---	---	---	---	---	4.43	4.33	4.38
28	---	---	---	---	---	---	---	---	---	4.35	4.21	4.29
29	---	---	---	---	---	---	---	---	---	4.29	4.18	4.26
30	---	---	---	---	---	---	---	---	---	4.48	4.17	4.32
31	---	---	---	---	---	---	---	---	---	4.49	4.30	4.42
Month	---	---	---	---	---	---	---	---	---	---	---	---

## 05278020 MIDDLE FORK CROW RIVER AT CROW RIVER, MN—Continued

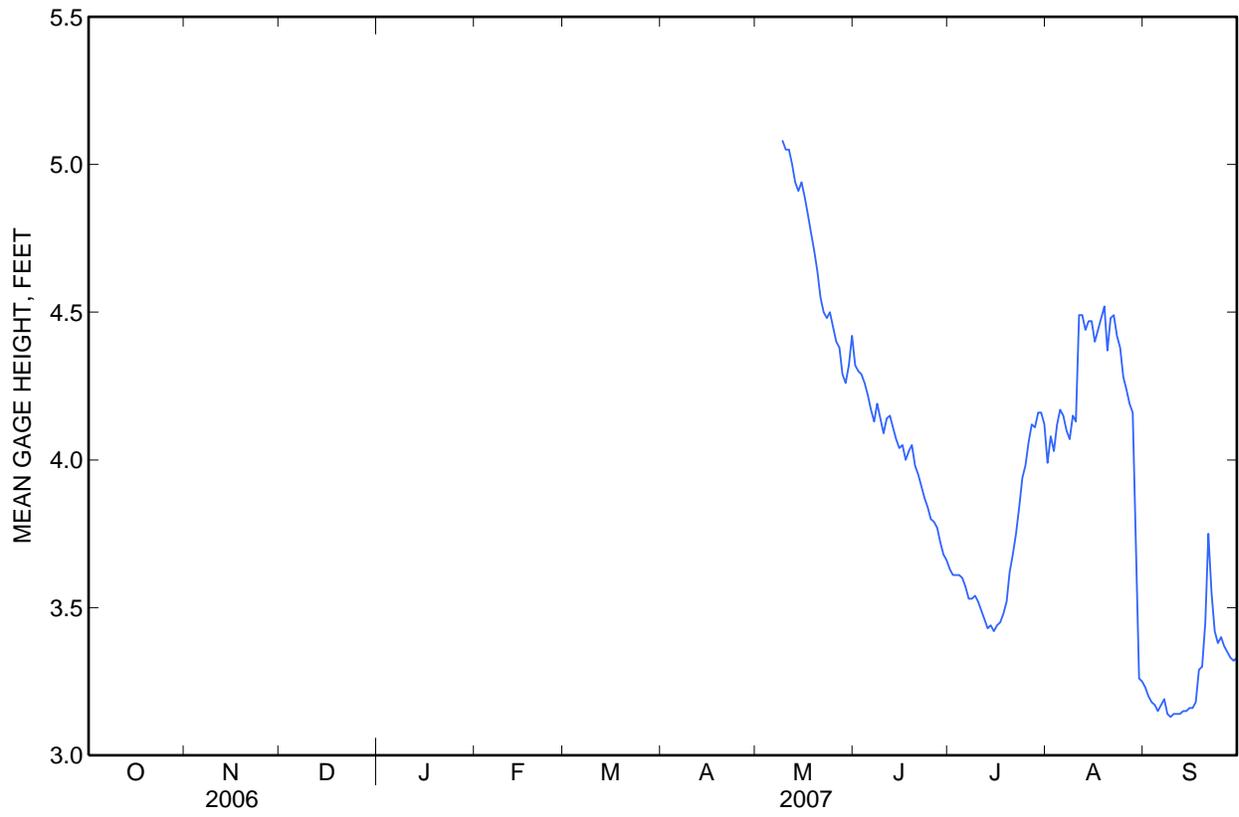
**GAGE HEIGHT, FEET**  
**WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007**

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	June			July			August			September		
1	4.40	4.24	4.32	3.65	3.61	3.63	4.04	3.91	3.99	3.25	3.21	3.23
2	4.35	4.18	4.30	3.62	3.60	3.61	4.15	3.97	4.08	3.22	3.18	3.20
3	4.33	4.18	4.29	3.63	3.61	3.61	4.13	3.85	4.03	3.20	3.16	3.18
4	4.30	4.18	4.26	3.62	3.60	3.61	4.16	3.92	4.12	3.21	3.15	3.17
5	4.28	4.16	4.22	3.62	3.59	3.60	4.21	4.10	4.17	3.17	3.13	3.15
6	4.22	4.08	4.17	3.60	3.55	3.57	4.22	4.03	4.15	3.25	3.14	3.17
7	4.26	4.08	4.13	3.56	3.47	3.53	4.21	3.91	4.10	3.22	3.16	3.19
8	4.23	4.14	4.19	3.58	3.48	3.53	4.19	3.89	4.07	3.18	3.13	3.14
9	4.21	4.05	4.14	3.58	3.48	3.54	4.24	4.00	4.15	3.14	3.11	3.13
10	4.22	4.02	4.09	3.53	3.51	3.52	4.25	3.91	4.13	3.16	3.12	3.14
11	4.20	4.08	4.14	3.52	3.47	3.49	4.67	3.97	4.49	3.16	3.13	3.14
12	4.19	4.10	4.15	3.48	3.44	3.46	4.54	4.44	4.49	3.16	3.12	3.14
13	4.15	4.03	4.11	3.46	3.40	3.43	4.49	4.36	4.44	3.16	3.13	3.15
14	4.11	4.02	4.07	3.46	3.42	3.44	4.51	4.40	4.47	3.17	3.13	3.15
15	4.11	3.96	4.04	3.45	3.39	3.42	4.53	4.37	4.47	3.18	3.14	3.16
16	4.07	4.00	4.05	3.46	3.40	3.44	4.46	4.30	4.40	3.18	3.15	3.16
17	4.05	3.93	4.00	3.50	3.42	3.45	4.50	4.37	4.44	3.23	3.15	3.18
18	4.08	3.99	4.03	3.51	3.44	3.48	4.51	4.40	4.48	3.34	3.23	3.29
19	4.09	4.01	4.05	3.55	3.49	3.52	4.54	4.50	4.52	3.32	3.27	3.30
20	4.01	3.95	3.98	3.66	3.52	3.62	4.50	4.26	4.37	3.88	3.28	3.45
21	3.97	3.91	3.95	3.71	3.65	3.68	4.55	4.30	4.48	3.81	3.67	3.75
22	3.92	3.88	3.91	3.80	3.68	3.75	4.51	4.45	4.49	3.67	3.47	3.55
23	3.89	3.84	3.87	3.88	3.80	3.84	4.45	4.39	4.42	3.47	3.39	3.42
24	3.87	3.79	3.84	4.00	3.86	3.94	4.41	4.33	4.38	3.41	3.35	3.38
25	3.84	3.75	3.80	4.03	3.90	3.98	4.34	4.21	4.28	3.41	3.38	3.40
26	3.80	3.78	3.79	4.14	3.95	4.06	4.30	4.19	4.24	3.38	3.36	3.37
27	3.80	3.74	3.77	4.16	4.04	4.12	4.31	4.11	4.19	3.36	3.33	3.35
28	3.75	3.69	3.72	4.18	4.02	4.11	4.18	4.13	4.16	3.35	3.31	3.33
29	3.69	3.67	3.68	4.24	4.08	4.16	4.14	3.27	3.71	3.35	3.30	3.32
30	3.68	3.65	3.66	4.23	4.07	4.16	3.27	3.25	3.26	3.34	3.31	3.33
31	---	---	---	4.22	3.93	4.12	3.25	3.24	3.25	---	---	---
Month	4.40	3.65	4.02	4.24	3.39	3.69	4.67	3.24	4.21	3.88	3.11	3.27

**05278020 MIDDLE FORK CROW RIVER AT CROW RIVER, MN—Continued**

THE RETRIEVED PLOT DATA CONSIST ENTIRELY OF MISSING  
VALUES OR, IN THE CASE OF A LOG PLOT, OF NEGATIVE AND  
ZERO VALUES

05278020 MIDDLE FORK CROW RIVER AT CROW RIVER, MN—Continued



## 05278020 MIDDLE FORK CROW RIVER AT CROW RIVER, MN—Continued

## WATER-QUALITY RECORDS

REMARKS.--Upper Mississippi River Basin nutrient enrichment (NEET) study sampling site. The objectives of this study are to determine the transport, chemical transformation, and retention of nutrients in the water column and surrounding sediments, and resulting effects on biological communities in stream reaches. Such cycling differs in different geologic and hydrologic settings, and is controlled, in large part, by ground-water and surface-water interactions. The study will be conducted from 2006 to 2009.

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007**

Part 1 of 4

[Remark codes: &lt;, less than.]

Date	Time	Sample type	Gage height, feet (00065)	Instantaneous discharge, cfs (00061)	Stream velocity, ft/s (00055)	Velocity at point in stream, ft/s (81904)	Stream width, feet (00004)	Turbidity, water, unfltrd field, NTU (61028)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd std units (00400)
Jun 18...	1530	Environmental	4.04	63	--	2.00	33.0	--	725	6.9	89	8.1
Aug 07...	1030	Plant tissue	--	--	--	--	--	--	--	6.3	--	7.9
07...	1031	Plant tissue	--	--	--	--	--	--	--	6.3	--	7.9
07...	1115	Environmental	4.18	8.6	--	.65	17.0	--	729	6.5	78	7.9
07...	1120	Replicate	4.18	8.6	--	--	17.0	--	729	6.5	78	7.9
23...	0755	Environmental	4.37	14	.80	--	--	6.7	731	5.9	63	7.5

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007**

Part 2 of 4

[Remark codes: &lt;, less than.]

Date	Specific conductance, wat unfltrd 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Carbonate, wat flt incrm. titr., field, mg/L (00452)	Ammonia water, fltrd, mg/L as N (00608)	Nitrate + nitrite water, fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Particulate nitrogen, susp, water, mg/L (49570)	Total nitrogen, wat unfltrd by analysis, mg/L (62855)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, unfltrd mg/L (00665)
Jun 18...	466	26.6	25.7	--	--	--	.061	.602	.025	--	1.68	.011	.108
Aug 07...	728	--	22.1	--	--	--	--	--	--	--	--	--	--
07...	728	--	22.1	--	--	--	--	--	--	--	--	--	--
07...	730	26.6	22.2	234	285	--	.069	.989	.040	.10	1.83	.066	.117
07...	730	26.5	22.2	--	--	--	--	--	--	--	--	--	--
23...	613	19.0	18.8	218	266	.0	.106	1.37	.076	.16	2.40	.091	.152

## 05278020 MIDDLE FORK CROW RIVER AT CROW RIVER, MN—Continued

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007**

Part 3 of 4

[Remark codes: &lt;, less than.]

Date	Total carbon, suspnd sedimnt total, mg/L (00694)	Inorganic carbon, suspnd sedimnt total, mg/L (00688)	Organic carbon, suspnd sedimnt total, mg/L (00689)	Organic carbon, water, fltrd, mg/L (00681)	Biomass phyton, ashfree drymass g/m2 (49954)	Biomass phyton, ashfree DTH, g/m2 (63766)	Biomass phyton, ash weight, g/m2 (63765)	Periphyton biomass ash weight, g/m2 (00572)	Biomass phyton, dry weight, DTH, g/m2 (63767)	Periphyton biomass dry weight, g/m2 (00573)	Chlorophyll a phyton, chromo-fluoro, mg/m2 (70957)	Chlorophyll a phyton, DTH, CF meth mg/m2 (63763)	Chlorophyll a phytoplankton, fluoro, µg/L (70953)
Jun 18...	--	--	--	--	--	--	--	--	--	--	--	--	--
Aug 07...	--	--	--	--	38.5	--	--	1,100	--	1,103	59.7	--	--
07...	--	--	--	--	--	38.0	687	--	725	--	--	61.5	--
07...	.7	<.1	.7	6.4	--	--	--	--	--	--	--	--	4.8
07...	--	--	--	--	--	--	--	--	--	--	--	--	4.7
23...	1.2	<.1	1.2	7.3	--	--	--	--	--	--	--	--	--

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007**

Part 4 of 4

[Remark codes: &lt;, less than.]

Date	Pheophytn a phyton, DTH, CF meth mg/m2 (63764)	Pheophytn a, phyton, mg/m2 (62359)	Pheophytn a, phytoplankton, µg/L (62360)	Number of sampling points, count (00063)	Data base number
Jun 18...	--	--	--	10	01
Aug 07...	--	<.1	--	--	01
07...	62.6	--	--	--	01
07...	--	--	8.6	10	01
07...	--	--	8.4	10	77
23...	--	--	--	10	01