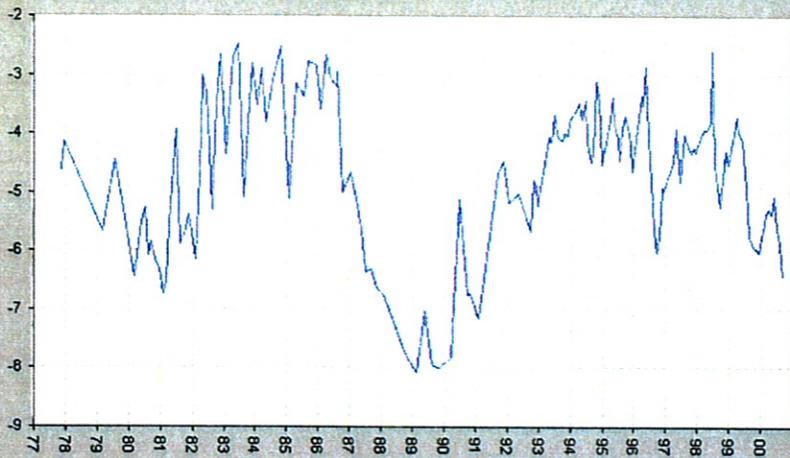


Appendix E

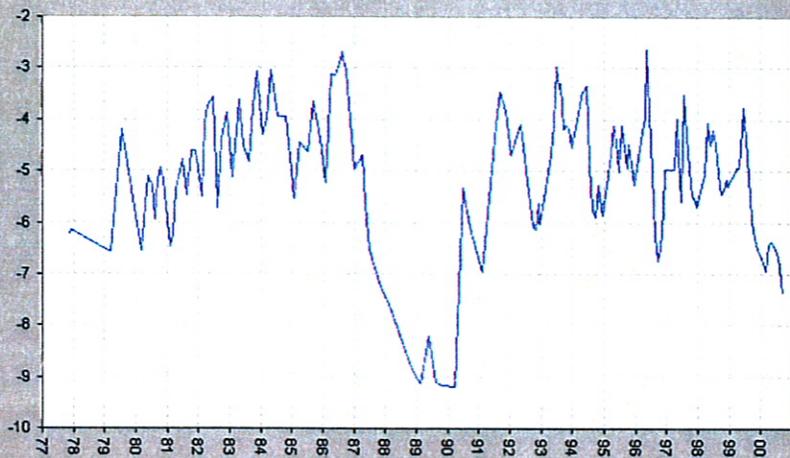
DNR Observation Well Data

Well 47000



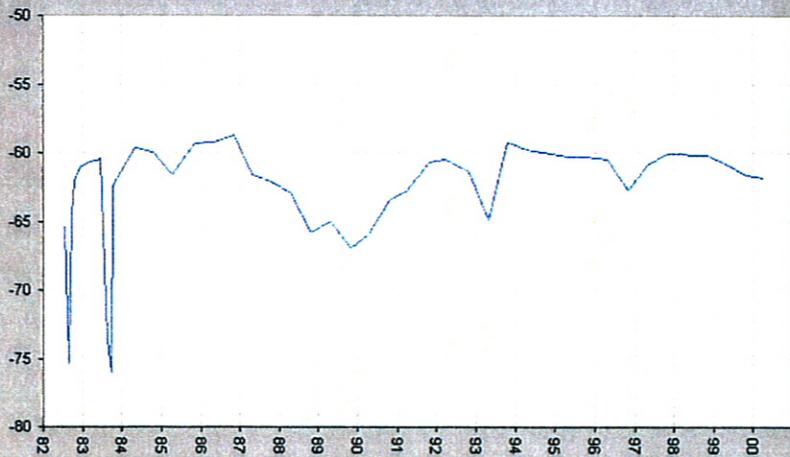
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Well 47001



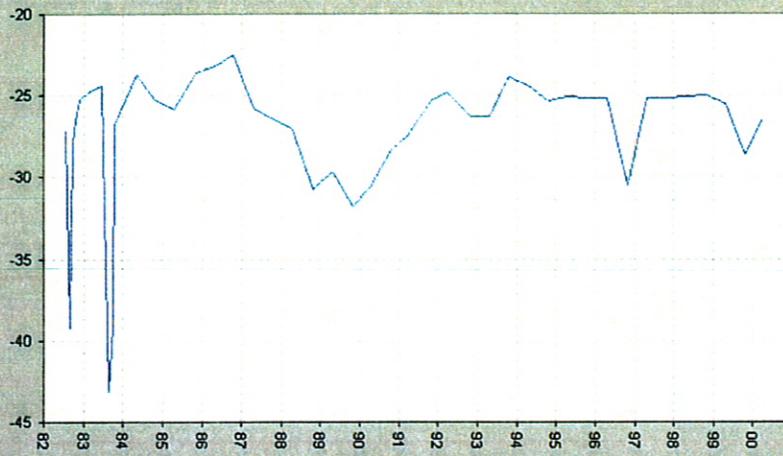
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Well 47002



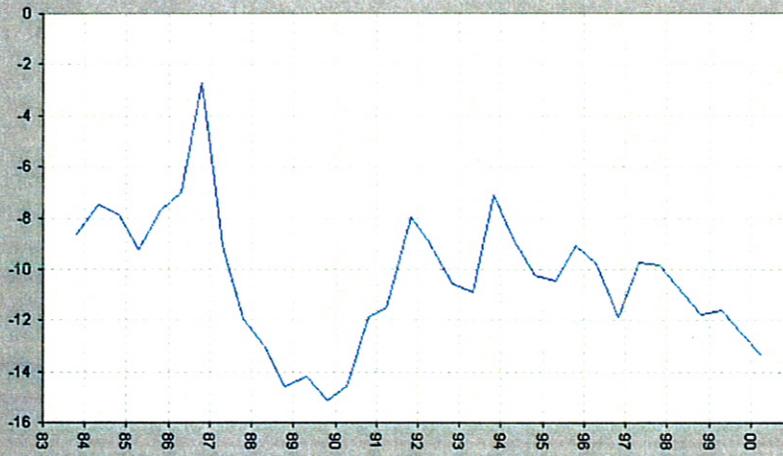
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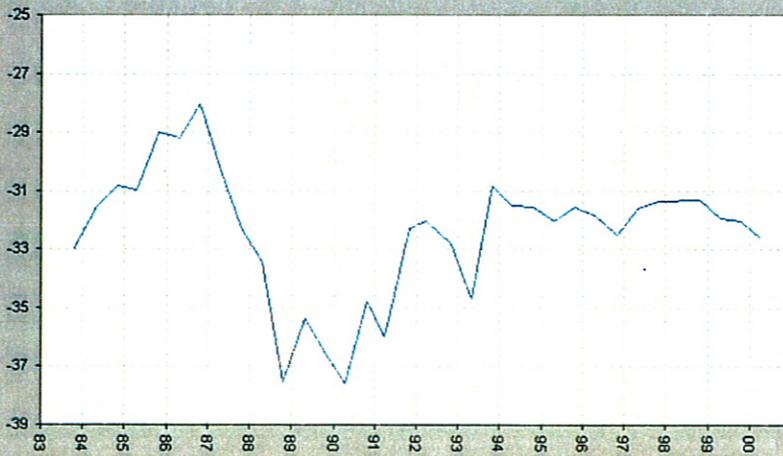
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Well 47004



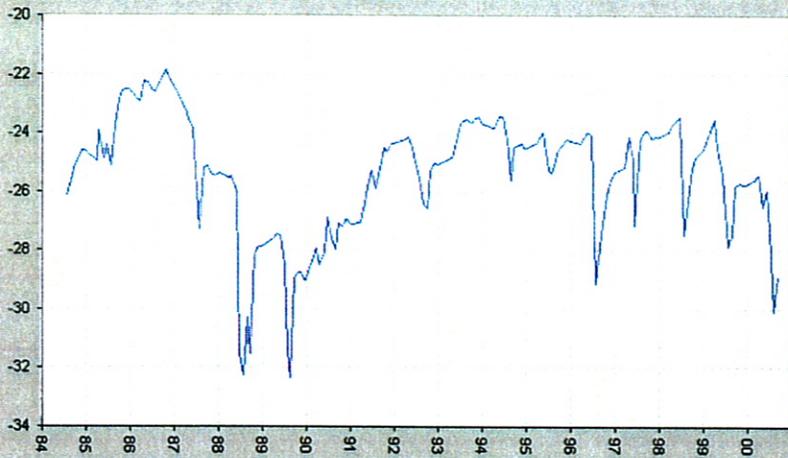
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Well 47005



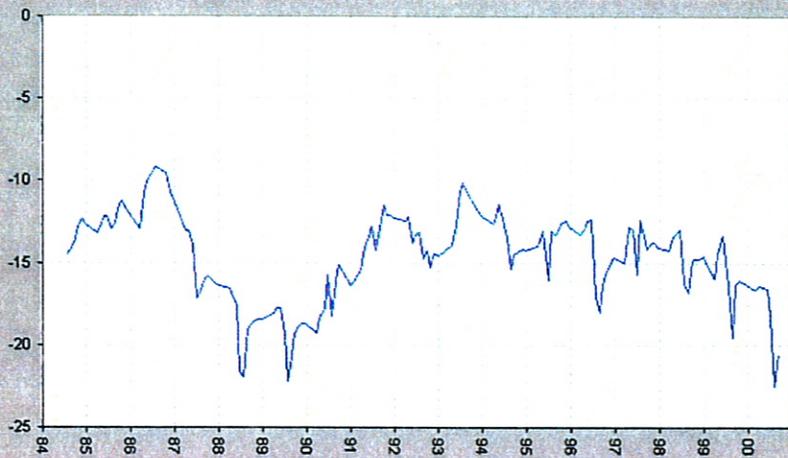
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Well 47006



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Well 47007



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Appendix F

Water Quality Data

**Clearwater River
Watershed District**

TABLE 1

YEARLY PRECIPITATION AND RUNOFF TOTALS

Clearwater River Watershed District

YEAR	Precipitation (inches of water)				Area-Weighted Average	Runoff (inches)
	Watkins	Kingston	Maine Prairie	Corinna		
1981	--	--	--	--	19.76	(1) 3.6
1982	--	--	--	--	24.58	(1) 6.8
1983	46.54	--	42.32	35.02	41.78	17.4
1984	32.23	30.13	32.37	36.07	32.95	13.3
1985	40.72	39.49	45.28	--	42.22	12.0
1986	40.02	35.63	39.68	33.40	37.26	16.0
1987	18.97	15.40	19.41	16.16	17.52	1.4
1988	16.57	18.98	15.96	15.01	16.48	0.7
1989	22.13	22.68	21.80	16.96	20.68	3.0
1990	40.35	39.18	41.36	32.18	37.94	11.7
1991	41.30	45.11	43.41	36.28	41.01	20.7
1992	23.06	18.41	20.47	24.35	22.01	12.9
1993	40.17	35.27 (2)	37.54 (2)	33.33	36.71	15.5
1994	34.77	--	30.13	30.26	31.98	9.0
1995	33.80	--	33.65	28.66	32.21	8.8
1996	31.31	--	24.32 (2)	26.13 (2)	27.59	4.8
1997	24.18	--	21.90	27.37	24.43	6.3
1998	30.03	--	29.39	27.43 (2)	29.05	5.5
1999	22.08	--	22.31 (2)	27.71	23.84	3.9
2000	23.83	--	20.56	19.91	21.22	1.0
2001	31.00	--	33.56	29.57	31.28	2.8
Mean					29.17	8.4
Std. Dev.					8.2	5.9

NOTES:

Whole watershed runoff is based on time-weighted average flow at Clearwater Lake outlet (station CR 10.5), and total drainage area of 155 square miles.

- (1) Data for single gauge in east-central part of watershed (Camp Heritage on Lake Caroline).
- (2) Average values of other stations in District were used to fill in missing data.

TABLE 2
SUMMARY OF STREAM FLOWS

Clearwater River Watershed District

	Flow Values (cubic feet per second)		
	WR 0.2	CR 28.2	CR 10.5
10-May	10.20	30.28	112.11
12-Jul	0.57	3.41	8.96
16-Aug	0.39	2.20	1.22
22-Oct	0.34	1.93	4.56
Arithmetic Average:	2.88	9.46	31.71

TABLE 3A
2001 STREAM WATER QUALITY - TOTAL PHOSPHORUS

Clearwater River Watershed District

	Total Phosphorus (mg/L)		
	WR 0.2	CR 28.2	CR 10.5
10-May	0.086	0.16	0.044
12-Jul	0.13	0.90	0.023
16-Aug	0.098	0.77	0.026
22-Oct	0.066	0.22	0.026
2001 Arithmetic Average	0.10	0.51	0.03
2001 Flow Weighted Mean	0.09	0.27	0.04
2000 Flow Weighted Mean	0.07	0.30	0.04

TABLE 3B
2001 STREAM WATER QUALITY - FECAL COLIFORM AND FECAL STREPTOCOCCUS

Clearwater River Watershed District

Fecal Coliform (cfu/100 mL)						
	WR 0.2	CR 32.5	CR 30.0	CR 28.2	CR 23.8	CR 10.5
Notes	1			1	1	
7-May	2	12	180	410	460	Not Sampled
6-Jun	18	56	150	56	16	Not Sampled
11-Jul	280	Not Sampled	Not Sampled	34	Not Sampled	4
15-Oct	410	26	12	140	72	Not Sampled
Geometric Mean	45	26	69	102	81	4
2001 Average	178	31	114	160	183	4
2000 Average	624	134	225	489	343	Not Sampled
Fecal Coliform (cfu/100 mL)						
	WC-1	WC-2	WC-3	WC-4	WC-5	WC-6
Notes	1 and 2	1	1	1	1	1
16-Jul	52	22	360	24	240	130
1-Aug	2300	3400	5000	1100	1300	40
30-Aug	720	1400	360	100	200	230
12-Sep	8	200	270	20	34	360
10-Oct	2	10	240	180	540	400
17-Oct	< 2	4	2	28	36	360
Geometric Mean	67	97	209	80	186	199
2001 Average	514	839	1039	242	392	253
Fecal Streptococcus (cfu/100 mL)						
	WC-1	WC-2	WC-3	WC-4	WC-5	WC-6
Notes	2	2	2	2	2	2
1-Aug	< 2	< 2	< 2	< 2	< 2	< 2
30-Aug	< 2	< 2	< 2	< 2	< 2	< 2
12-Sep	< 2	< 2	< 2	< 2	< 2	< 2
10-Oct	< 2	< 2	< 2	< 2	< 2	< 2
17-Oct	< 2	< 2	< 2	< 2	< 2	< 2
Geometric Mean	1	1	1	1	1	1
2001 Average	1	1	1	1	1	1

Notes: 1. Exceeds State Standard of 200 cfu/100 mL.
 2. Used 1 cfu/100 mL for lab value of < 2 cfu/100 mL.

TABLE 4
HISTORICAL SUMMARY OF STREAM FLOWS, PHOSPHORUS CONCENTRATIONS, AND LOADINGS

Clearwater River Watershed District

Station	Year	Average Stream Flow		Average Total	Total Phosphorus Load	
		(cu m/sec)	(cfs)	Phosphorus Concentration (mg/l)	(kg)	(lb)
Main Stem:						
CR 28.2	1981 (1)	--	--	1.40	--	--
	1982 (1)	0.93	32.8	0.74	19,700	43,500
	1983	2.62	92.6	0.92	76,000	168,000
	1984	1.49	52.6	0.76	35,700	78,800
	1985	2.32	81.9	0.90	65,500	144,000
	1986	3.20	113	0.78	55,200	122,000
	1987	0.11	3.90	0.13	460	1,020
	1988	0.09	3.12	0.66	1,850	4,080
	1989	0.02	0.72	0.19	120	260
	1990	0.51	18.0	0.44	7,040	15,500
	1991	1.11	39.1	0.29	10,200	22,500
	1992	0.26	9.30	0.20	1,660	3,650
	1993	1.28	45.2	0.29	11,600	25,600
	1994	1.17	41.2	0.28	10,100	22,300
	1995	1.15	40.4	0.29	10,400	22,900
	1996	0.33	11.7	0.27	2,860	6,300
	1997	0.27	9.36	0.26	2,170	4,790
	1998	0.41	14.4	0.25	3,190	7,020
	1999	0.08	2.78	0.16	400	870
	2000	0.02	0.72	0.38	240	530
2001 (4),(5)	0.27	9.46	0.51	4,309	9,500	
CR 10.5	1981 (1)	1.15	40.6	0.05	2,060	4,550
	1982 (1)	2.20	77.8	0.07	4,990	11,000
	1983	5.64	199	0.10	18,500	40,800
	1984	4.28	151	0.05	6,620	14,600
	1985	3.88	137	0.14	16,700	36,800
	1986	5.52	195	0.15	23,700	52,300
	1987	0.46	16.2	0.04	600	1,320
	1988	0.23	7.95	0.04	260	580
	1989	0.97	34.2	0.08	2,340	5,150
	1990	3.77	133	0.03	3,060	6,750
	1991	6.68	236	0.05	10,500	23,200
	1992	4.16	147	0.06	8,090	17,800
	1993	5.01	177	0.04	6,330	14,000
	1994	2.92	103	0.03	2,850	6,290
	1995	2.83	100	0.03	3,040	6,710
	1996	1.53	54.2	0.04	1,970	4,350
1997	2.06	72.8	0.04	2,690	5,940	
1998	1.78	63.0	0.04	2,330	5,120	
1999	1.25	44.1	0.04	1,520	3,350	
2000	0.31	10.8	0.03	280	610	
2001 (4),(5)	0.90	31.7	0.03	850	1,873	

TABLE 4
 HISTORICAL SUMMARY OF STREAM FLOWS, PHOSPHORUS CONCENTRATIONS, AND LOADINGS

Clearwater River Watershed District

Station	Year	Average Stream Flow		Average Total Phosphorus Concentration (mg/l)	Total Phosphorus Load	
		(cu m/sec)	(cfs)		(kg)	(lb)
Tributaries:						
WR 0.2 (2)	1981 (1)	0.07	2.60	0.17	390	860
	1982 (1)	0.23	8.20	0.16	780	1,720
	1983	0.47	16.50	0.09	1,270	2,800
	1984	0.60	21.20	0.05	950	2,100
	1985	0.48	17.10	0.14	2,130	4,700
	1986	0.86	30.40	0.20	4,630	10,200
	1987	0.04	1.50	0.07	100	230
	1988	0.01	0.40	0.17	60	130
	1989	0.03	1.19	0.14	80	180
	1990	0.06	2.28	0.37	750	1,660
	1991	0.26	9.22	0.11	860	1,900
	1992	0.11	4.02	0.05	170	370
	1993	0.24	8.59	0.10	760	1,670
	1994	0.18	6.34	0.06	320	700
	1995	0.12	4.27	0.05	210	460
	1996	0.05	1.78	0.11	180	380
	1997	0.09	3.15	0.08	220	480
1998	0.09	3.11	0.11	290	650	
1999	0.06	2.03	0.07	130	280	
2000 (3)	0.01	0.44	0.06	25	56	
2001 (4),(5)	0.08	2.88	0.10	257	567	

NOTES:

Flow values are time-weighted averages unless otherwise noted.

Total phosphorus values are flow- and time-weighted averages unless otherwise noted.

- (1) Values in 1981 and 1982 are arithmetic means
- (2) Station WR 0.2 was designated Station WC 0.2 in 1981-1983
- (3) Phosphorus values in 2000 are flow-weighted and adjusted per log-log regression on flow so as to correspond to annual mean flows.
- (4) 2001 Flow and total phosphorus values are arithmetic averages.
- (5) 2001 total phosphorus loads estimated from arithmetic averages of flow and total phosphorus values.

TABLE 5
2001 SUMMARY OF LAKE SURFACE WATER QUALITY

Clearwater River Watershed District

	Total Phosphorus (micrograms/liter)			
	July 18 and 19	August 27 and 28	Mean	Std. Dev.
Lake Augusta	52	44	48	6
Bass Lake	27	22	25	4
Lake Betsy	680	160	420	368
Lake Caroline (SWCD) (1)	---	---	43	18
Cedar Lake	29	22	26	5
Clearwater Lake East	22	58	40	25
Clearwater Lake West	34	49	42	11
Lake Louisa	54	11	33	30
Nixon Lake	22	20	21	1
Otter Lake	13	41	27	22

	Chlorophyll-a (micrograms/liter)			
	July 18 and 19	August 27 and 28	Mean	Std. Dev.
Lake Augusta	6.4	6.4	6.4	0
Bass Lake	2.1	3.2	2.7	1
Lake Betsy	5.3	3.2	4.3	1
Lake Caroline (SWCD) (1)	---	---	12	10
Cedar Lake	5.3	6.4	5.9	1
Clearwater Lake East	6.4	6.9	6.7	0
Clearwater Lake West	8.5	6.4	7.5	1
Lake Louisa	2.5	7.6	5.1	4
Nixon Lake	3.7	7.5	5.6	3
Otter Lake	4.8	3.2	4.0	1

	Secchi Depth (feet)			
	July 18 and 19	August 27 and 28	Mean	Std. Dev.
Lake Augusta	6	6	6.0	0.0
Bass Lake	15	12.5	13.8	1.8
Lake Betsy	1.5	1.5	1.5	0.0
Lake Caroline (SWCD) (1)	---	---	5.8	2.7
Cedar Lake	5	7	6.0	1.4
Clearwater Lake East	8.5	7.5	8.0	0.7
Clearwater Lake West	4.5	4.5	4.5	0.0
Nixon Lake	10.5		10.5	
Otter Lake	9	9.5	9.3	0.4

TABLE 5
2001 SUMMARY OF LAKE SURFACE WATER QUALITY

Clearwater River Watershed District

	Trophic Status Index			Average
	TP	Chl- <i>a</i>	Secchi Depth	
Lake Augusta	22.4	42.2	43.8	36.1
Bass Lake	21.8	41.4	42.9	35.4
Lake Betsy	24.6	41.8	45.2	37.2
Lake Caroline (SWCD) (1)	22.3	42.9	43.8	36.3
Cedar Lake	21.8	42.1	43.8	35.9
Clearwater Lake East	22.3	42.3	43.5	36.0
Clearwater Lake West	22.3	42.4	44.1	36.3
Lake Louisa	22.1	42.0	Not Sampled	32.0
Nixon Lake	21.6	42.1	43.2	35.6
Otter Lake	22.0	41.8	43.3	35.7

(1) Five sampling events

TABLE 6
HISTORICAL SUMMARY OF LAKE WATER QUALITY DATA
Summer (June-September) Epilimnetic Means

Clearwater River Watershed District

LAKE/ Year	Number of Samples	Total Phosphorous (ug/l)		Chlorophyll-a (ug/l)		Secchi Disk Transparency (m)	
		Mean (3)	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.
<u>AUGUSTA</u>							
1981	7	260	400	25	14	1.4	0.3
1982	7	140	120	34	21	1.4	0.6
1983	7	300	90	4	3	1.8	1.0
1984	7	90	30	4	2	1.6	0.8
1985	7	120	120	23	12	1.2	0.2
1986	6	90	40	69	91	1.9	0.5
1987	7	30	10	20	12	1.3	0.3
1988	5	40	10	19	6	1.4	0.3
1989	6	80	30	26	40	1.5	0.4
1990	5	90	20	73	105	1.7	0.7
1991	3	80	40	56	73	1.1	0.4
1992	8	30	20	19	6	1.6	0.7
1993	4 (1)	68	20	42	19	1.2	0.4
1995	4 (2)	28	(4) 15	21	12	1.8	0.7
1997	4	46	(4) 13	20	(5) 1	1.7	0.2
1999	4(6)	37	4	8.5	2.7	1.6	0.2
2001	2	48	6	6.4	0.0	1.8	0.0
Mean		93	58	28	25	1.5	0.4
<u>BASS</u>							
1994	4	13	(4) 14	4.8	0.8	3.2	0.4
1998	4	28	11	2.0	1.0	3.1	0.6
1999	3	22	5	2.9	1.4	3.1	0.7
2001	2	25	4	2.7	1.0	4.2	1.8
Mean		22	9	3.1	1.1	3.4	0.9
<u>BETSY</u>							
1981	7	700	190	7.7	5.6	2.4	1.1
1982	7	650	90	59	50	1.3	0.7
1983	7	560	270	5	4	1.1	1.3
1984	7	350	160	7	5	0.8	0.2
1985	7	280	230	30	26	1.1	0.6
1987	2	120	0	74	35	0.87	0.41
1995	4 (2)	290	183	18	13	1.0	0.34
1997	4	245	108	100	(5) 98	0.83	0.05
1999	3(8)	247	110	170	85	0.8	0.2
2001	2	420	368	4.3	1	0.46	0.0
Mean		386	171	47	32	1.1	0.5
<u>CAROLINE</u>							
1981	7	220	100	39	33	1.3	0.3
1982	7	260	140	54	35	1.4	0.8
1983	7	300	140	3	3	1.8	1.1
1984	7	140	50	5	2	1.3	0.3
1985	7	170	150	41	46	1.5	0.6
1987	2	50	10	46	30	1.1	0.4
1994	4	40	18	55	16	0.8	0.2
1996	4	88	33	36	12	1.2	0.2
1998	4	86	24	55	43	1.2	0.1
2001	(SCWD) 5	43	18	12	10	1.8	0.8
Mean		140	68	35	23	1.3	0.5

TABLE 6
 HISTORICAL SUMMARY OF LAKE WATER QUALITY DATA
 Summer (June-September) Epilimnetic Means

Clearwater River Watershed District

LAKE/ Year	Number of Samples	Total Phosphorous (ug/l)		Chlorophyll-a (ug/l)		Secchi Disk Transparency (m)	
		Mean (3)	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.
<u>CEDAR</u>							
1993	4	30	10	13.3	5.9	3.0	0.4
1996	4	33	8	12.9	6.5	2.4	0.3
1999	4	31	8	9.5	4.4	1.1	0.2
2001	2	26	5	5.9	1.0	1.8	1.4
Mean		30	8	10	4	2.1	0.6
<u>CLEARWATER EAST</u>							
1981	7	60	20	11	8	2.6	0.7
1982	7	60	30	12	9	2.7	1.6
1983	7	90	50	3	2	2.4	1.8
1984	7	90	40	4	2	1.4	0.2
1985	7	130	60	39	28	1.2	0.3
1986	6	80	40	85	132	2.1	0.8
1987	7	30	10	18	20	2.6	1.2
1988	5	40	10	10	5	2.9	1.8
1989	6	60	20	5	4	3.0	1.9
1990	5	90	100	18	9	2.0	0.6
1991	3	50	20	10	7	1.4	0.2
1992	8	30	10	20	10	2.0	0.6
1993	4 (1)	43	15	42	38	1.5	0.8
1994	4	23	5	14	9	1.4	0.2
1995	4 (2)	30	8	16	10	1.6	0.4
1996	4	33	8	10	3	2.1	0.3
1997	4	52	17	8	(5) 2	1.6	0.2
1998	4 (6)	36	18	11	3	1.9	0.4
1999	4	54	6	9.9	2.1	1.8	0.2
2000	4	33	18	10.3	3.4	2.3	1.0
2001	2	40	25	6.7	0.0	2.4	0.7
Mean		55	25	17.3	14.5	2.0	0.7
<u>CLEARWATER WEST</u>							
1981	7	60	20	45	71	2.6	0.9
1982	7	100	60	29	25	1.7	0.7
1983	7	160	100	4	5	1.8	1.4
1984	7	70	30	4	2	1.4	0.2
1985	7	110	80	24	17	1.9	1.3
1986	6	50	20	77	137	2.6	1.0
1987	7	40	10	20	12	2.0	0.4
1988	5	40	10	17	10	2.6	1.2
1989	6	70	10	8	4	2.3	0.9
1990	5	50	20	31	15	1.9	0.8
1991	3	60	40	18	12	1.5	0.0
1992	8	60	70	29	24	1.9	0.6
1993	4 (1)	40	0	29	6	1.4	0.3
1994	4	33	15	17	8	1.5	0.2
1995	4 (2)	35	11	21	10	1.4	0.3
1996	4	43	11	9	2	2.0	0.3
1997	4	44	3	13	6	1.5	0.1
1998	4 (7)	34	11	14	3	1.5	0.1
1999	4(6)	31	4	10.2	2.0	1.6	0.3
2000	4	41	31	9	2.9	1.9	0.4
2001	2	42	11	8	1.0	1.4	0.0
Mean		58	27	20.7	19.5	1.8	0.6

TABLE 6
 HISTORICAL SUMMARY OF LAKE WATER QUALITY DATA
 Summer (June-September) Epilimnetic Means

Clearwater River Watershed District

LAKE/ Year	Number of Samples	Total Phosphorous (ug/l)		Chlorophyll-a (ug/l)		Secchi Disk Transparency (m)	
		Mean (3)	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.
LOUISA							
1981	7	440	110	39	29	1.4	0.4
1982	7	420	140	68	26	1.5	0.5
1983	7	410	170	4	4	1.4	1.4
1984	7	220	80	8	6	1.0	0.1
1985	7	160	100	26	17	1.1	0.3
1986	6	190	50	96	86	1.1	0.1
1987	7	100	10	70	44	0.8	0.2
1988	5	140	60	101	39	0.6	0.3
1989	6	110	40	69	78	0.8	0.5
1990	5	200	80	55	35	1.3	0.5
1991	3	160	70	31	18	1.5	0.3
1992	8	140	140	46	22	1.1	0.3
1993	4 (1)	170	40	35	13	1.2	0.2
1995	4 (2)	100	36	75	27	0.8	0.2
1997	4	68	7	59 (5)	8	0.9	0.2
1999	4	73	29	37.8	20	1	0.1
2001	2	33	30	5.1	4		
Mean		184	70	48.5	28.0	1.1	0.3
NIXON							
1994	4	25 (4)	25	5.0 (4)	3.4	1.8	0.7
1997	4	30	8	4.7 (5)	1.5	2.8	0.2
1999	4	39	17	7.0	8.7	3.3	0.5
2001	2	21	1	5.6	3.0	3.2 (8)	
Mean		28.8	12.8	5.6	4.2	2.8	0.5
OTTER							
1994	4	13 (4)	4	7.8	1.8	1.9	0.3
1997	4	23	10	3.7 (5)	1.5	2.1	0.3
1999	4	34	5	6.6	4.8	3.0	0.4
2001	2	30	22	4.0	1.0	2.8	0.4
Mean		25	10	6	2	2	0.4

Notes:

- (1) The fourth sample was collected on October 6, 1993.
- (2) The fourth sample was collected on October 2 or 3, 1995
- (3) Starting in 1993, Total phosphorus means are rounded to two significant figures. Prior to 1993, the mean values were rounded to the nearest 10 ug/l.
- (4) Values reported as "Less than" the detection limit were estimated as half of the detection limit.
- (5) Three samples were analyzed for chlorophyll-a.
- (6) Three samples were analyzed for total phosphorus.
- (7) Three secchi disk readings were recorded.
- (8) One secchi disk reading was recorded.

C.R.O.W.

- 0.) ~~MetCouncil Rockford station~~. Located in Rockford. Automated station run by MetCouncil and Wright SWCD. We will use information, but do not need to maintain site at all. Is a primary site but will not need DNR services.
- 1.) *North Fork Crow River Site above Rockford. (18-088-001)* Equip. installed by MPCA in 2000. Will be a primary site, so flows will need to be maintained. Located off of Farmington Road in Wright 19-036-001 County.
- 4.) ~~County Ditch 31 (Wright County)~~ (18-075-001) Highway 25 in Wright County, just north of Hwy 25 & 12 crossing Measurement is being taken at cement culvert just north of 12 on deadend street ½ mile east of Hwy 25.
- 2.) ~~Mill Creek~~. (18-074-001) Located south of the City of Buffalo, and Buffalo Lake. County Road 12 crosses Mill Creek, may be a good monitoring location.
- 3.) ~~North Fork at County Road 9 (Wright County)~~. (18-011-001) CR 9 crosses North Fork north of Waverly, between sections 21 and 22 of Marysville Township.
- 5.) *Twelve Mile Creek (Wright County) (18-012-001)* Flows out of Little Waverly Lake, enters North Fork Crow River approx. 1 mile west of CR 9 site. Potential sample location off of CR 107, which runs east/west and crosses 12 mile creek on section line between sections 20 and 29 of Marysville Township
- 7.) ~~Cokato Lake Outlet~~. (18-016-001) Located NE of Cokato Lake. The tributary outlet crosses CR 4 prior to entering NF Crow River. This may be ok for sample site. This site is no longer being measured.
- 6.) ~~CR 4 Site (Wright County)~~. (18-083-001) Located NE of Cokato Lake. CR 4 crosses NF Crow River. Sample site located on CR 4 if possible
- 8.) ~~Big Swan Outlet~~ (Meeker County) (also called Collinwood Creek) - GRAB SAMPLE ONLY – NO FLOW WORK NEEDED
- 9.) Washington Creek (Meeker County) (18-061-002) . Flow Msmts to be taken at first crossing of Hwy 15 upstream from Washington Lake Just south of CR 24.
- 9a) ~~CD 36 (Meeker County) (18-060-001)~~. Located on CR 21, 3/4 mile west of Highway 15.
- 10.) *Kingston at 19 (Meeker County (18-062-001)* - on North Fork Crow River. CR 19 Crosses NF just east of State Highway 15.
- 11.) ~~Forest City Site (NE Meeker County)~~ (18-062-002) - located on North West site of Forest City. CR 2 comes off of State Highway 24 to the north and crosses the NF in Forest City
- 12.) *Jewitts Creek (Meeker County) (18-051-001)* - Dumps into NF 2-3 miles north of Litchfield. Possible sampling sites at 310th street or 300th Street. – Culvert at whichever is farthest south.
- 13.) *CSAH 22 (Meeker County) – (18-063-001)* Crosses NF Crow River about 3 miles east of Manannah. Sampling site located on CSAH 22.
- 15.) ~~Middle Fork~~ at CR 30 (Meeker County) (18-053-001) CR 30 crosses Middle Fork approx ½ mile south of Manannah.
- 16.) ~~Grove Creek~~ (18-054-001) – Potential site location where CR 3 crosses Grove Creek, approx 1 mile SE of Manannah.
- 17.) *Koronis Outlet (18-055-001)* –NF CR watershed District has an existing site at this location. There is currently a CR 10 at this location. They have been monitoring for TSS and TP, and taking some flow measurements. They will be adding a staff gauge at this site as well.
NFWS site is located on gravel road off of Highway 4. From CR 20, go south on Highway 4 Travel 1.5 miles on Hwy 4, take first gravel road to the right (east) Travel 0.2 miles sample site is a wooden bridge located on the right (north) side of the road.
- 14.) *CR 19 Middle Reach of North fork near Georgeville (Stearns County) – (18-066-001)* Possibly located at Stearns County Road 19, east of Belgrade
- 26.) *St. Michael Tributary – (18-086-001)* On Wright County Road 19
- 27.) ~~St. Michael Crow River~~ – Possibly located on Bridge at Wright County 121 and Wright County 22 (Hennepin County road 116) – depends upon construction schedule

Crow River Monitoring Sites – South Fork and Buffalo Creek

- 18.) ~~Delano~~ (19-001-001) – DNR Site
- 19.) *Mayer Site (19-082-001)* – the MetCouncil will be installing automated monitoring equipment at this site in the spring. It is located at the DNR flood gauging station. The DNR will still need to complete primary station tasks at this site.
- 20.) *Lester Prairie on the South Fork* (Carver County) (19-036-001)– Site located east of Lester Prairie. No site has actually been picked out, but I think it makes the most sense to have it UPSTREAM onfluence with Buffalo Creek. CR 9 in McLeod County crosses SF prior to confluence – one draw back may be that Silver Creek empties into SF after this point, and before Buffalo Creek
- 21.) *Glencoe – on Buffalo Creek (19-043-001)*– will be located at current DNR flood warning station
- 22.) *Brownton (19-056-001) – on Buffalo Creek* – located at DNR flood gauging station
- 23.) ~~Hutchinson Outlet~~ (Otter Lake Outlet) (19-049-001) – no definite site location picked out yet. Possibly at the CR7, Adams Street Bridge? (south of CSAH 7)
- 24.) *Hutchinson Inlet (Otter Lake Inlet) (19-027-001)* – again, no particular site picked out. Potential site approximately 1 mile west of Otter Lake on unpaved County Road 59. If not, can be placed where ever you feel is appropriate.
- 25.) *Cosmos (19-024-001)* – located at DNR Flood Gauging site
- 28.) ~~more all Ditch~~ – Renville County – approx 3 miles north of 212, 1 mile west of Preston Lake

DRAFT 2001 SAMPLING DATA-BIG SWAN OUTLET

CROW: Crow River Monitoring Project

SUBJECT TO CHANGE/REVISION Lab Project # 5520-01-01

Location Id	Sampling Point	Sampling Date	Time	Downstream		Tkn mg/L	Tot P mg/L	Chloride mg/L	Tss mg/L	Vss mg/L	N_N mg/L
				measure down ft	WSL DS ft						
NF_TRIB	BIG_SWAN	15-May-01	10:30			1.4	0.09	14	3	2	1.22
NF_TRIB	BIG_SWAN	30-May-01	9:35	2.25	47.75	1.6	0.11	15	1	1	1.43
NF_TRIB	BIG_SWAN	5-Jun-01	12:54	2.88	47.13	1.2	0.07		3	2	0.64
NF_TRIB	BIG_SWAN	25-Jul-01	10:10	5.63	44.38	1.5	0.06	16	8	3	0.025
NF_TRIB	BIG_SWAN	22-Aug-01	12:10	6.52	43.48	9.6	1.2	17	54	48	0.025
NF_TRIB	BIG_SWAN	2-Oct-01	9:52	6.19	43.81	1.9	0.11	17	11	5	0.025

Location Id	Sampling Point	Sampling Date	Time	Ammonia N mg/L	Alkalinity mg/l_CaCO3	Ortho P mg/L	Turbidity NTU	BOD5 mg/l
NF_TRIB	BIG_SWAN	30-May-01	9:35	0.39		0.069		
NF_TRIB	BIG_SWAN	5-Jun-01	12:54	0.28		0.057		
NF_TRIB	BIG_SWAN	25-Jul-01	10:10	0.13		0.0025	4.1	
NF_TRIB	BIG_SWAN	22-Aug-01	12:10	1.43		0.13		41
NF_TRIB	BIG_SWAN	2-Oct-01	9:52	0.38		0.027	5.2	

Location Id	Sampling Point	Date	Time	Temp C	SpCond uS/cm	Cond uS/cm	Salinity ppt	DOSat%	DO Conc mg/L	DO Chg.	pH
NF_TRIB	BIG_SWAN	30-May-01	9:36:35	15.98	375	311	0.18		7.89	39	*
NF_TRIB	BIG_SWAN	5-Jun-01	12:59:40	16.7	380	320	0.18		8.58	40	*
NF_TRIB	BIG_SWAN	25-Jul-01	10:07:43	25.77	368	409		75.7	6.16	46.1	8.54
NF_TRIB	BIG_SWAN		12:08:27	24.98	409	409	0.2	1.8	0.15	40	7.55
NF_TRIB	BIG_SWAN		9:52	15.72	379.0	312.0	0.18	84.1	8.34	44	8.41

DRAFT 2001 SAMPLING DATA-CD 36

CROW: Crow River Monitoring Project

SUBJECT Lab Project # 5520-01-01

Location Id	Sampling Point	DNR ID	Site #	Sampling Date	Time	measure down ft	measure down ft	DS ft	US ft	FLOW cfs	Tkn mg/L
NF_TRIB	CD36	18-060-001	9a	23-May-01	11:00	4.52	8.23	45.48	41.77	17.56	1.5
NF_TRIB	CD36	18-060-001	9a	30-May-01	10:10		8.23		41.77	17.56	1.8
NF_TRIB	CD36	18-060-001	9a	5-Jun-01	13:16	4.85	8.27	45.15	41.73	9.64	1.6
NF_TRIB	CD36	18-060-001	9a	14-Jun-01	9:10		7.92		42.08	38.64	2.6
NF_TRIB	CD36	18-060-001	9a	20-Jun-01	9:25		8.21		41.79	18.92	1.9
NF_TRIB	CD36	18-060-001	9a	26-Jun-01	9:55		8.33		41.67	11.83	1.7
NF_TRIB	CD36	18-060-001	9a	10-Jul-01	10:25		8.54		41.46	2.49	1.5
NF_TRIB	CD36	18-060-001	9a	25-Jul-01	10:45		8.60		41.40	1.20	1.3

Location Id	Sampling Point	DNR ID	Tot P mg/L	Chloride mg/L	Tss mg/L	Ammonia N mg/L	N_N mg/L	Vss mg/L	Ortho P mg/L	Turbidity NTU
NF_TRIB	CD36	18-060-001	0.09	16	14	0.19	5.61	6	0.013	
NF_TRIB	CD36	18-060-001	0.1	16	15	0.02	3.66	6	0.0025	
NF_TRIB	CD36	18-060-001	0.08		33	0.04	2.87	10	0.0025	
NF_TRIB	CD36	18-060-001	0.27		58	0.13	7.07	12	0.072	
NF_TRIB	CD36	18-060-001	0.16		32	0.08	2.49	9	0.036	
NF_TRIB	CD36	18-060-001	0.12		13		2.22	7	0.018	7
NF_TRIB	CD36	18-060-001	0.16	12	87	0.06	2.32	18	0.027	
NF_TRIB	CD36	18-060-001	0.14	8	11	0.2	0.54	3	0.073	5.5

Location Id	Sampling Point	Date	Temp C	SpCond uS/cm	Cond uS/cm	Salinity ppt	DOsat%	DO Conc mg/L	DO Chg	pH	pH mv
NF_TRIB	CD36	23-May-01	8.78	18	13	0.01		9.6	36.9	*	
NF_TRIB	CD36	30-May-01	15.71	571	470	0.28		9.52	41	*	
NF_TRIB	CD36	5-Jun-01	15.03	549	444	0.27		9.72	40	*	
NF_TRIB	CD36	14-Jun-01	18.19	606	527	0.3		5.51	38	*	
NF_TRIB	CD36	20-Jun-01	17.82	526			79.4	7.53	48.2	7.75	-48.5
NF_TRIB	CD36	26-Jun-01	22.76	510			87.6	7.54	49.2	7.91	-58.7
NF_TRIB	CD36	10-Jul-01	21.58	526			71.3	6.27	47.1	7.81	-55.9
NF_TRIB	CD36	25-Jul-01	19.48	505			68.6	6.3	42	7.9	-59.1

DRAFT 2001 SAMPLING DATA-COSMOS

CROW: Crow River Monitoring Project

SUBJECT TO CHANGE/REVISION

Location	Sampling Point	DNR ID	Site #	Sampling Date	Time	measure down ft	measure down ft	FLOW cfs	Tkn mg/L	Tot P mg/L
SF	COSMOS**	19-024-001	25	9-Apr-01	15:10	8.94		90.60	2.33	0.803
SF	COSMOS**	19-024-001	25	18-Apr-01	11:15	10.77		666.00	2.25	0.536
SF	COSMOS	19-024-001	25	25-Apr-01	13:50	9.42		1010.00	1.7	0.48
SF	COSMOS	19-024-001	25	1-May-01	13:00	10.44		707.00	1.6	0.22
SF	COSMOS	19-024-001	25	9-May-01	14:00	11.10		626.00	2.1	0.18
SF	COSMOS	19-024-001	25	15-May-01	13:15	12.10		527.00	1.5	0.15
SF	COSMOS	19-024-001	25	15-May-01	13:15	12.10		527.00	1.5	0.13
SF	COSMOS	19-024-001	25	22-May-01	13:20	13.31		400.00	1.5	0.21
SF	COSMOS	19-024-001	25	29-May-01	11:30	14.69		232.00	1.9	0.18
SF	COSMOS	19-024-001	25	6-Jun-01	10:30	15.92		151.00	1.8	0.16
SF	COSMOS	19-024-001	25	14-Jun-01	11:15	12.26		368.00	1.4	0.22
SF	COSMOS	19-024-001	25	19-Jun-01	11:30	15.56		176.00	1.4	0.18
SF	COSMOS	19-024-001	25	25-Jun-01	12:20	16.83		98.00	1.5	0.16
SF	COSMOS	19-024-001	25	9-Jul-01	11:07	18.10		29.00	1.3	0.2
SF	COSMOS	19-024-001	25	9-Jul-01	11:33	18.10		29.00	1.1	0.25
SF	COSMOS	19-024-001	25	24-Jul-01	13:00			8.20	1.5	0.26
SF	COSMOS	19-024-001	25	6-Aug-01	12:55			2.50	1.7	0.38
SF	COSMOS	19-024-001	25	21-Aug-01	12:55				1.2	0.22
SF	COSMOS	19-024-001	25	4-Sep-01	12:53	19.13		1.64	2	0.27
SF	COSMOS	19-024-001	25	1-Oct-01	13:40	19.08		2.18	1	0.09
SF	COSMOS	19-024-001	25	15-Oct-01	11:55				0.86	0.06
SF	COSMOS	19-024-001	25	5-Nov-01	12:40				0.58	0.09

DRAFT 2001 SAMPLING DATA-COSMOS

CROW: Crow River Monitoring Project

SUBJECT TO CHANGE/REVISION

Location Id	Sampling Point	Chloride mg/L	Tss mg/L	Vss mg/L	N_N mg/L	Alkalinity mg/l_CaCO3	Ammonia N mg/L	Cond umho/cm	Ortho P mg/L	Turbidity NTU
SF	COSMOS**	5.8	57	12	3.1	98	0.5	280	0.622	
SF	COSMOS**	12	30	6	3.8	140	0.42	430	0.41	
SF	COSMOS	12	52	11	4.73	121	0.05		0.295	
SF	COSMOS	15	24	8	2.37		0.02	476	0.088	
SF	COSMOS	17	20	6	1.13				0.062	
SF	COSMOS	18	9	3	1.3	178	0.16		0.083	3.6
SF	COSMOS									
SF	COSMOS	21	15	4	2.01		0.38		0.141	
SF	COSMOS	23	13	2	3.55		0.23		0.119	
SF	COSMOS		23	4	2.84		0.35		0.098	
SF	COSMOS		30	5	12.4		0.21		0.163	
SF	COSMOS		42	5	7.62		0.11		0.098	
SF	COSMOS		25	5	4.45		0.01		0.092	1.3
SF	COSMOS	26	21	5	0.85		0.05		0.138	
SF	COSMOS									
SF	COSMOS	24	34	5	0.17		0.08		0.213	18
SF	COSMOS		48	11	0.07		0.08		0.262	
SF	COSMOS	23	32	5	0.025		0.03		0.151	
SF	COSMOS	22	87	15	0.35		0.03		0.1	
SF	COSMOS	21	28	4	0.025		0.01		0.028	18
SF	COSMOS	21	19	2	0.44		0.01		0.023	
SF	COSMOS	20	13	3	0.025		0.01		0.048	

DRAFT 2001 SAMPLING DATA-COSMOS

CROW: Crow River Monitoring Project

SUBJECT TO CHANGE/REVISION

Location Id	Sampling Point	Date	Temp C	SpCond uS/cm	Cond uS/cm	Salinity ppt	DOSat%	DO Conc mg/L	DO Chg	pH
SF	COSMOS**	9-Apr-01								
SF	COSMOS**	18-Apr-01								
SF	COSMOS	25-Apr-01								
SF	COSMOS	1-May-01								
SF	COSMOS	9-May-01	14.31	402	320	0.19		10.34	42	8.73
SF	COSMOS	15-May-01	20.8	561	516	0.27		5.78	40	8.12
SF	COSMOS									
SF	COSMOS	22-May-01	11.97	647	486	0.32		7.62	36.9	*
SF	COSMOS	29-May-01	17.4	736	629	0.36		6.29	39	*
SF	COSMOS	6-Jun-01	15.21	743	604	0.37		6.43	38	*
SF	COSMOS	14-Jun-01	18.89	8.07	713	0.4		6.11	39	*
SF	COSMOS	19-Jun-01	18.9	815			80.2	7.56	48.2	7.93
SF	COSMOS	25-Jun-01	23.66	774			98.7	8.53	51.2	8.21
SF	COSMOS	9-Jul-01	26.02	761			75.3	6.09	49.2	8.24
SF	COSMOS	9-Jul-01								
SF	COSMOS	24-Jul-01	23.99	747			58.4	4.91	45.1	8.2
SF	COSMOS	6-Aug-01	33.47	808			83.9	5.97	50.2	8.29
SF	COSMOS	21-Aug-01	25.62	929	940	0.46	122.1	9.95	51.2	8.49
SF	COSMOS	9/4/2001	19.39	987	881	0.49	82.2	7.54	45.1	8.32
SF	COSMOS	10/1/2001	16.78	783.0	660.0	0.39	102.7	9.95	46	8.40
SF	COSMOS	10/15/2001	7.16	811.0	534.0	0.40	90.4	10.90	42	8.28
SF	COSMOS	11/5/2001	10.64	950.0	690.0	0.47	128.3	14.22	44	8.46

DRAFT 2001 SAMPLING DATA-CSAH 22

CROW: Crow River Monitoring Project
 SUBJECT TO CHANGE/REVISION

Location	Sampling Point	DNR ID	Site #	Sampling Date	Time	measure down ft	measure down	DS ft	US ft	FLOW cfs	Tkn mg/L
NF	CSAH_22**	18-063-001	13	9-Apr-01	16:20	10.10	10.04	39.90	39.96	1760.00	1.98
NF	CSAH_22**	18-063-001	13	18-Apr-01	10:25	9.60	9.52	40.40	40.48	2000.00	1.22
NF	CSAH_22	18-063-001	13	25-Apr-01	12:50	9.27	9.15	40.73	40.85	2165.00	0.95
NF	CSAH_22	18-063-001	13	1-May-01	11:50	10.00	9.83	40.00	40.17	1800.00	0.89
NF	CSAH_22	18-063-001	13	9-May-01	13:00		10.90		39.10	1400.00	0.8
NF	CSAH_22	18-063-001	13	15-May-01	12:15	11.50	11.52	38.50	38.48	1200.00	0.79
NF	CSAH_22	18-063-001	13	23-May-01	12:15	12.33		37.67		887.80	0.76
NF	CSAH_22	18-063-001	13	30-May-01	11:20	12.90	12.75	37.10	37.25	694.00	0.92
NF	CSAH_22	18-063-001	13	5-Jun-01	14:32	13.29		36.71		581.70	0.9
NF	CSAH_22	18-063-001	13	14-Jun-01	10:10	12.56	12.54	37.44	37.46	809.60	0.9
NF	CSAH_22	18-063-001	13	20-Jun-01	10:30	13.21	13.13	36.79	36.88	603.30	1.2
NF	CSAH_22	18-063-001	13	26-Jun-01	11:05	13.75	13.73	36.25	36.27	457.50	0.96
NF	CSAH_22	18-063-001	13	10-Jul-01	11:20	15.25	15.23	34.75	34.77	130.40	1
NF	CSAH_22	18-063-001	13	25-Jul-01	12:20	15.25	15.25	34.75	34.75	130.40	0.97
NF	CSAH_22	18-063-001	13	15-Aug-01	15:45	16.08	16.08	33.92	33.92	37.73	0.64
NF	CSAH_22	18-063-001	13	22-Aug-01	13:30	16.17	16.17	33.83	33.83	29.55	0.66
NF	CSAH_22	18-063-001	13	5-Sep-01	10:56	16.31	16.31	33.69	33.69	18.77	0.7
NF	CSAH_22	18-063-001	13	2-Oct-01	11:20	16.33	16.33	33.67	33.67	17.38	0.46
NF	CSAH_22	18-063-001	13	17-Oct-01	11:00	16.33	16.33	33.67	33.67	17.38	0.36
NF	CSAH_22	18-063-001	13	6-Nov-01	11:02	16.31	16.31	33.69	33.69	18.77	0.48

DRAFT 2001 SAMPLING DATA-CSAH 22

CROW: Crow River Monitoring Project
 SUBJECT TO CHANGE/REVISION

Location Id	Sampling Point	Tot P mg/L	Chloride mg/L	Tss mg/L	Vss mg/L	Ammonia N mg/L	Alkalinity mg/l_CaCO3	N_N mg/L	Cond umho/cm	Ortho P mg/L	Turbidity NTU
NF	CSAH_22**	0.536	21	11	3.6	0.7	120	2.2	360	0.417	
NF	CSAH_22**	0.18	12	4.7	0.5	0.18	150	2.7	380	0.129	
NF	CSAH_22	0.17	13	7	2	0.12	146	3.42		0.109	
NF	CSAH_22	0.05	14	5	1.5	0.01		1.24	413	0.021	
NF	CSAH_22	0.06	14	5	3			0.92		0.009	
NF	CSAH_22	0.06	14	8	3	0.05	179	0.85		0.022	2.2
NF	CSAH_22	0.07	14	8	2	0.08		1.01		0.025	
NF	CSAH_22	0.08	15	10	2	0.07		1.03		0.039	
NF	CSAH_22	0.08		10	3	0.05		0.93		0.021	
NF	CSAH_22	0.17		13	4	0.2		3.02		0.101	
NF	CSAH_22	0.12		22	6	0.06		1.1		0.018	
NF	CSAH_22	0.08		20	4			0.86		0.026	4.7
NF	CSAH_22	0.12	16	26	6	0.06		0.64		0.04	
NF	CSAH_22	0.08	15	18	7	0.03		0.46		0.014	5.4
NF	CSAH_22	0.07	20	5	2	0.07		0.66		0.007	
NF	CSAH_22	0.05	21	6	2	0.01		0.46		0.0025	
NF	CSAH_22	0.07	28	9	3	0.03		0.89		0.016	
NF	CSAH_22	-0.03	26	5	1	0.01		0.58		0.009	2.6
NF	CSAH_22	-0.01	26	2	1	0.01		0.82		0.006	
NF	CSAH_22	0.06	22	8	4	0.01		0.57		0.007	

DRAFT 2001 SAMPLING DATA-CSAH 22

CROW: Crow River Monitoring Project

SUBJECT TO CHANGE/REVISION

Location	Sampling Point	Date	Temp C	SpCond uS/cm	Cond uS/cm	Salinity ppt	DOsat%	DO Conc mg/L	DO Charge	Depth ft	pH
NF	CSAH_22**	9-Apr-01									
NF	CSAH_22**	18-Apr-01									
NF	CSAH_22	25-Apr-01									
NF	CSAH_22	1-May-01									
NF	CSAH_22	9-May-01	12.73	330	252	0.16		9.95	42	0.072	8.15
NF	CSAH_22	15-May-01	17.5	421	361	0.2		8.73	42	-0.365	7.96
NF	CSAH_22	23-May-01	10.78	441	321	0.21		9.43	38	*	*
NF	CSAH_22	30-May-01	16.01	444	367	0.21		8.32	40	*	*
NF	CSAH_22	5-Jun-01	14.99	443	359	0.21		8.78	40	*	*
NF	CSAH_22	14-Jun-01	19.52	473	423	0.23		6.38	39	*	*
NF	CSAH_22	20-Jun-01	19.45	449			83.6	7.68	48.2		8.1
NF	CSAH_22	26-Jun-01	21.83	440			75	6.57	47.1		8.02
NF	CSAH_22	10-Jul-01	24.68	456			78.8	6.54	49.2		8
NF	CSAH_22	25-Jul-01	22.39	441			89.9	7.79	47.1		8.15
NF	CSAH_22	15-Aug-01	22.9	523		0.25	130.4	11.19	54.3	0.409	8.5
NF	CSAH_22	22-Aug-01	24.73	548	545	0.26	128.8	10.68	51.2	0.686	8.43
NF	CSAH_22	9/5/2001	20.14	623	565	0.3	95.8	8.67	46.1	0.321	8.24
NF	CSAH_22	10/2/2001	13.87	643.0	506.0	0.31	102.1	10.53	45	0.835	8.31
NF	CSAH_22	10/17/2001	5.53	667.0	419.0	0.33	107.5	13.52	42	0.630	8.30
NF	CSAH_22	11/6/2001	9.20	573.0	400.0	0.28	105.8	12.15	42	0.549	8.27

DRAFT 2001 SAMPLING DATA-FOREST CITY

CROW: Crow River Monitoring Project

SUBJECT TO CHANGE/REVISION

Location	Sampling Point	DNR ID	Site #	Sampling Date	Time	measure down ft	measure down	DS ft	US ft	FLOW cfs
NF	FOREST_CTY	18-062-002	11	25-Apr-01	11:45	8.40	8.31	41.60	41.69	3200.00
NF	FOREST_CTY	18-062-002	11	1-May-01	11:10	10.38	10.33	39.63	39.67	2429.00
NF	FOREST_CTY	18-062-002	11	9-May-01	11:45	11.98	11.98	38.02	38.02	1746.00
NF	FOREST_CTY	18-062-002	11	15-May-01	11:35	13.13	13.13	36.88	36.88	1246.00
NF	FOREST_CTY	18-062-002	11	23-May-01	11:43	13.67		36.33		998.50
NF	FOREST_CTY	18-062-002	11	30-May-01	10:50	14.13		35.88		759.00
NF	FOREST_CTY	18-062-002	11	5-Jun-01	14:00	14.54		35.46		637.60
NF	FOREST_CTY	18-062-002	11	14-Jun-01	9:40	13.83		36.17		926.50
NF	FOREST_CTY	18-062-002	11	20-Jun-01	9:55	14.33		35.67		713.20
NF	FOREST_CTY	18-062-002	11	20-Jun-01	9:55	14.33		35.67		713.20
NF	FOREST_CTY	18-062-002	11	26-Jun-01	10:30	15.04		34.96		457.60
NF	FOREST_CTY	18-062-002	11	10-Jul-01	10:55	16.31		33.69		128.00
NF	FOREST_CTY	18-062-002	11	25-Jul-01	11:45	17.27		32.73		27.14
NF	FOREST_CTY	18-062-002	11	15-Aug-01	15:10	17.04		32.96		45.92
NF	FOREST_CTY	18-062-002	11	22-Aug-01	13:05	17.08		32.92		42.65
NF	FOREST_CTY	18-062-002	11	5-Sep-01	10:14	17.33		32.67		22.24
NF	FOREST_CTY	18-062-002	11	2-Oct-01	10:50	17.23		32.77		30.41
NF	FOREST_CTY	18-062-002	11	17-Oct-01	10:30	17.15		32.85		36.94
NF	FOREST_CTY	18-062-002	11	6-Nov-01	10:25	17.13		32.88		39.39

DRAFT 2001 SAMPLING DATA-FOREST CITY

CROW: Crow River Monitoring Project

SUBJECT TO CHANGE/REVISION

Location Id	Sampling Point	Tkn mg/L	Tot P mg/L	Chloride mg/L	Tss mg/L	Ammonia N mg/L	Alkalinity mg/l_CaCO3	Cond umho/cm	N_N mg/L	Vss mg/L
NF	FOREST_CTY	0.88	0.19	12	5	0.08	136		3.28	2
NF	FOREST_CTY	0.84	0.08	14	5	0.01		415	0.99	2
NF	FOREST_CTY	0.7	0.07	15	3				0.61	2
NF	FOREST_CTY	0.81	0.12	16	5	0.07	188		0.67	2
NF	FOREST_CTY	0.68	0.14	16	8	0.06			0.87	3
NF	FOREST_CTY	1	0.14	17	11	0.05			0.95	2
NF	FOREST_CTY	0.86	0.12		15	0.02			0.85	5
NF	FOREST_CTY	0.82	0.23		16	0.12			2.65	4
NF	FOREST_CTY	1.1	0.19		23	0.02			0.97	6
NF	FOREST_CTY	1	0.18							
NF	FOREST_CTY	1	0.2		29				0.84	6
NF	FOREST_CTY	1.1	0.21	17	27	0.07			0.74	7
NF	FOREST_CTY	0.98	0.22	19	34	0.02			0.47	9
NF	FOREST_CTY	0.46	0.17	29	12	0.01			0.18	4
NF	FOREST_CTY	0.74	0.32	32	14	0.01			0.41	4
NF	FOREST_CTY	1.1	0.57	35	27	0.06			0.51	7
NF	FOREST_CTY	0.57	0.5	42	16	0.02			0.52	3
NF	FOREST_CTY	0.48	0.5	46	1	0.01			1.08	1
NF	FOREST_CTY	0.67	0.48	35	19	0.01			0.67	~5

DRAFT 2001 SAMPLING DATA-FOREST CITY

CROW: Crow River Monitoring Project
 SUBJECT TO CHANGE/REVISION

Location Id	Sampling Point	Ortho P mg/L	BOD5 mg/l	Fcoli #/100ml	Turbidity NTU	Trichromatic ug/L
NF	FOREST_CTY	0.154				
NF	FOREST_CTY	0.036				
NF	FOREST_CTY	0.035				
NF	FOREST_CTY	0.077			1.7	
NF	FOREST_CTY	0.081				
NF	FOREST_CTY	0.088				
NF	FOREST_CTY	0.067				
NF	FOREST_CTY	0.167				
NF	FOREST_CTY	0.107				
NF	FOREST_CTY	0.107			6.6	
NF	FOREST_CTY	0.12				
NF	FOREST_CTY	0.122	2.2	280	7.6	
NF	FOREST_CTY	0.203	1.7	60		
NF	FOREST_CTY	0.262	2.2	83		
NF	FOREST_CTY	0.357	2.3			28
NF	FOREST_CTY	0.42			4.6	
NF	FOREST_CTY	0.412				
NF	FOREST_CTY	0.258				

DRAFT 2001 SAMPLING DATA-FOREST CITY

CROW: Crow River Monitoring Project

SUBJECT TO CHANGE/REVISION

Location Id	Sampling Point	Date	Temp C	SpCond uS/cm	Cond uS/cm	Salinity ppt	DOsat%	DO Conc mg/L	DO Chg	pH
NF	FOREST_CTY	25-Apr-01								
NF	FOREST_CTY	1-May-01								
NF	FOREST_CTY	9-May-01	12.92	334	257	0.16		7.96	41	7.86
NF	FOREST_CTY	15-May-01	18.46	439	384	0.21		5.96	39	7.74
NF	FOREST_CTY	23-May-01	10.56	456	330	0.22		8.61	36.9	*
NF	FOREST_CTY	30-May-01	17.38	469	401	0.23		7.31	39	*
NF	FOREST_CTY	5-Jun-01	16.06	465	386	0.23		7.99	40	*
NF	FOREST_CTY	14-Jun-01	20.26	475	432	0.23		5.71	39	*
NF	FOREST_CTY	20-Jun-01	19.38	472			73.9	6.8	47.1	7.91
NF	FOREST_CTY									
NF	FOREST_CTY	26-Jun-01	23.2	465				5.95	47.1	7.97
NF	FOREST_CTY	10-Jul-01	24.81	478			69.8	5.8	48.2	7.97
NF	FOREST_CTY	25-Jul-01	22.11	467			70	7.48	47.1	8.11
NF	FOREST_CTY	15-Aug-01	22.89	578		0.28	85.8	10.08	53.3	8.39
NF	FOREST_CTY	22-Aug-01	24.34	607	600	0.29	117.5	9.47	50.2	8.34
NF	FOREST_CTY	9/5/2001	19.66	666	598	0.32	113.4	7.32	45.1	8.2
NF	FOREST_CTY	10/2/2001	13.38	726.0	565.0	0.36	80.1	8.71	43	8.16
NF	FOREST_CTY	10/17/2001	5.45	763.0	478.0	0.37	83.5	11.75	41	8.19
NF	FOREST_CTY	11/6/2001	8.96	654.0	454.0	0.32	93.3	10.24	40	8.17

DRAFT 2001 SAMPLING DATA-JEWITTS CREEK

CROW: Crow River Monitoring Project

SUBJECT TO CHANGE/REVISION

Location Id	Sampling Point	DNR ID	Site #	Sampling Date	Time	measure down ft	measure down ft	DS ft	US ft	FLOW cfs	Tkn mg/L
NF_TRIB	JEWITTS_CR	18-051-001	12	9-Apr-01	16:20	2.06	2.63	47.94	47.38	128.20	1.98
NF_TRIB	JEWITTS_CR	18-051-001	12	17-Apr-01	*	0.00					
NF_TRIB	JEWITTS_CR	18-051-001	12	25-Apr-01	12:15	1.69	2.27	48.31	47.73	145.70	0.95
NF_TRIB	JEWITTS_CR	18-051-001	12	1-May-01	11:25	2.52	3.10	47.48	46.90	106.40	0.9
NF_TRIB	JEWITTS_CR	18-051-001	12	9-May-01	12:40	3.31		46.69		69.67	0.88
NF_TRIB	JEWITTS_CR	18-051-001	12	15-May-01	12:00	3.96		46.04		48.31	1.3
NF_TRIB	JEWITTS_CR	18-051-001	12	23-May-01	12:00	4.08		45.92		44.63	0.82
NF_TRIB	JEWITTS_CR	18-051-001	12	30-May-01	11:05	4.19		45.81		39.60	1.1
NF_TRIB	JEWITTS_CR	18-051-001	12	5-Jun-01	14:17	4.67		45.33		28.75	1.2
NF_TRIB	JEWITTS_CR	18-051-001	12	14-Jun-01	9:55	3.71		46.29		56.53	0.85
NF	JEWITTS_CR	18-051-001	12	14-Jun-01	9:55	0.00				57.19	0.9
NF_TRIB	JEWITTS_CR	18-051-001	12	20-Jun-01	10:15	3.69		46.31		44.63	1.2
NF_TRIB	JEWITTS_CR	18-051-001	12	26-Jun-01	10:45	4.08		45.92		44.63	1.5
NF_TRIB	JEWITTS_CR	18-051-001	12	10-Jul-01	11:10	5.38		44.63		12.05	2.2
NF_TRIB	JEWITTS_CR	18-051-001	12	25-Jul-01	12:00	5.44		44.56		10.45	1.5
NF_TRIB	JEWITTS_CR	18-051-001	12	2-Oct-01	11:05	5.71		44.29		4.87	1.7
NF_TRIB	JEWITTS_CR	18-051-001	12	17-Oct-01	10:45	5.69		44.31		5.25	2.4
NF_TRIB	JEWITTS_CR	18-051-001	12	6-Nov-01	10:45	5.77		44.23		3.73	3.5

DRAFT 2001 SAMPLING DATA-JEWITTS CREEK

CROW: Crow River Monitoring Project

SUBJECT TO CHANGE/REVISION

Location Id	Sampling Point	Tot P mg/L	Tss mg/L	Chloride mg/L	Vss mg/L	Ammonia N mg/L	Alkalinity mg/l_CaCO3	Cond umho/cm	N_N mg/L	Ortho P mg/L	Turbidity NTU
NF_TRIB	JEWITTS_CR	0.417	11	21	3.6	0.7	120		2.2	0.417	
NF_TRIB	JEWITTS_CR	0.29	9	18	2	0.09	126		1.47	0.221	
NF_TRIB	JEWITTS_CR	0.44	4	27	2	0.01		444	0.1	0.37	
NF_TRIB	JEWITTS_CR	0.58	15	38	6	0.01			0.19		
NF_TRIB	JEWITTS_CR	1.1	4	42	2	0.12	220		0.26	0.85	2.9
NF_TRIB	JEWITTS_CR	0.71	7	39	2	0.08			0.34	0.656	
NF_TRIB	JEWITTS_CR	0.82	8		2	0.025			0.39	0.325	
NF_TRIB	JEWITTS_CR	0.95	6		4	0.025			0.77	0.81	
NF_TRIB	JEWITTS_CR	1	6		3	0.15			0.76	1.06	
NF	JEWITTS_CR	1.2	6		3	0.025			0.15	0.888	
NF_TRIB	JEWITTS_CR	1.1	5		2				0.36	1.25	3
NF_TRIB	JEWITTS_CR	>1.0	5		3	0.52			1.4	2.01	
NF_TRIB	JEWITTS_CR	2	5	84	3	0.12			1.29	3.52	1.4
NF_TRIB	JEWITTS_CR	3.9	2	124	2	0.01			3.17	3.53	3.5
NF_TRIB	JEWITTS_CR	3.8	4	204	1	2.46			3.84	4.64	
NF_TRIB	JEWITTS_CR	5.4	6	181	2	1.63			3.52	4.63	
NF_TRIB	JEWITTS_CR	5.2	4	160	2						

DRAFT 2001 SAMPLING DATA-JEWITTS CREEK

CROW: Crow River Monitoring Project
 SUBJECT TO CHANGE/REVISION

Location Id	Sampling Point	Date	Temp C	SpCond uS/cm	Cond uS/cm	Salinity ppt	DOsat%	DO Conc mg/L	DO Chg	Depth ft	pH
NF_TRIB	JEWITTS_CR	9-Apr-01									
NF_TRIB	JEWITTS_CR	17-Apr-01									
NF_TRIB	JEWITTS_CR	25-Apr-01									
NF_TRIB	JEWITTS_CR	1-May-01									
NF_TRIB	JEWITTS_CR	9-May-01	12.29	391	296	0.19		3.52	37	1.905	7.39
NF_TRIB	JEWITTS_CR	15-May-01	19.97	554	501	0.27		4.41	39	0.593	7.3
NF_TRIB	JEWITTS_CR	23-May-01	9.69	584	413	0.28		6.72	35.9	*	*
NF_TRIB	JEWITTS_CR	30-May-01	16.26	582	487	0.28		5.87	38	*	*
NF_TRIB	JEWITTS_CR	5-Jun-01	14.54	625	500	0.31		5.95	38	*	*
NF_TRIB	JEWITTS_CR	14-Jun-01	20	521	471	0.25		1.95	34.9	*	*
NF	JEWITTS_CR										
NF_TRIB	JEWITTS_CR	20-Jun-01	18.43	561			29.9	2.8	43.1		7.29
NF_TRIB	JEWITTS_CR	26-Jun-01	22.1	619			10.1	0.88	41		7.33
NF_TRIB	JEWITTS_CR	10-Jul-01	22.34	844			57.7	5	46.1		7.48
NF_TRIB	JEWITTS_CR	25-Jul-01	20.64	1049			68.6	6.14	47.1		7.67
NF_TRIB	JEWITTS_CR	10/2/2001	13.12	1452.0	1122.0	0.73	114.7	11.99	47	0.280	7.90
NF_TRIB	JEWITTS_CR	10/17/2001	6.72	1493.0	972.0	0.75	79.1	9.62	41	1.558	7.74
NF_TRIB	JEWITTS_CR	11/6/2001	11.83	1409.0	1054.0	0.71	110.5	11.90	43	0.861	7.96

DRAFT 2001 SAMPLING DATA-KINGSTON AT 19

CROW: Crow River Monitoring Project

SUBJECT TO CHANGE/REVISION

Location Id	Sampling Point	DNR ID	Site #	Sampling Date	Time	measure down ft	measure down ft	DS ft	US ft	FLOW cfs
NF	KINGSTON**	18-062-001	10	9-Apr-01	13:00	9.75	11.92	40.25	40.68	2272.00
NF	KINGSTON**	18-062-001	10	18-Apr-01	9:40	8.88	11.08	41.13	41.52	2608.00
NF	KINGSTON	18-062-001	10	25-Apr-01	11:15	7.48		42.52	42.03	2812.00
NF	KINGSTON	18-062-001	10	1-May-01	10:45	9.44		40.56	40.07	2085.00
NF	KINGSTON	18-062-001	10	9-May-01	11:20	10.92		39.08	38.59	1633.00
NF	KINGSTON	18-062-001	10	15-May-01	11:00	12.10		37.90	37.41	1043.00
NF	KINGSTON	18-062-001	10	23-May-01	11:23	12.96		37.04	36.55	785.00
NF	KINGSTON	18-062-001	10	30-May-01	10:30	13.67		36.33	35.84	764.00
NF	KINGSTON	18-062-001	10	30-May-01	10:30	13.67		36.33	35.84	764.00
NF	KINGSTON	18-062-001	10	5-Jun-01	13:33	14.54		35.46	34.97	353.40
NF	KINGSTON	18-062-001	10	14-Jun-01	9:25	13.38		36.63	36.14	662.00
NF	KINGSTON	18-062-001	10	20-Jun-01	9:40	14.02		35.98	35.49	468.00
NF	KINGSTON	18-062-001	10	26-Jun-01	10:15	14.96		35.04	34.55	261.00
NF	KINGSTON	18-062-001	10	10-Jul-01	10:40	16.63		33.38	32.89	29.50
NF	KINGSTON	18-062-001	10	25-Jul-01	11:00	16.69	16.92	33.31	33.08	39.00
NF	KINGSTON	18-062-001	10	25-Jul-01	11:10	16.69	16.92	33.31	33.08	39.00
NF	KINGSTON	18-062-001	10	15-Aug-01	14:50	16.42	16.81	33.58	33.19	48.10
NF	KINGSTON	18-062-001	10	22-Aug-01	12:35		16.94		33.06	38.00
NF	KINGSTON	18-062-001	10	22-Aug-01	12:35		16.94		33.06	38.00
NF	KINGSTON	18-062-001	10	5-Sep-01	10:14		17.10		32.90	30.00
NF	KINGSTON	18-062-001	10	2-Oct-01	10:15		17.13		32.88	29.00
NF	KINGSTON	18-062-001	10	17-Oct-01	10:05		16.98		33.02	36.00
NF	KINGSTON	18-062-001	10	6-Nov-01	9:50		16.90		33.10	40.00
NF	KINGSTON	18-062-001	10	6-Nov-01	9:50		16.90		33.10	40.00

DRAFT 2001 SAMPLING DATA-KINGSTON AT 19

CROW: Crow River Monitoring Project

SUBJECT TO CHANGE/REVISION

Location Id	Sampling Point	Tkn mg/L	Tot P mg/L	Chloride mg/L	Tss mg/L	Ammonia N mg/L	Alkalinity mg/l_CaCO3	Cond umho/cm	N_N mg/L	Vss mg/L
NF	KINGSTON**	2.41	0.579	7.8	20	0.78	94	260	2.8	4.8
NF	KINGSTON**	1.49	0.143	12	4.7	0.16	140	370	2.8	0.5
NF	KINGSTON	0.99	0.21	11	12	0.11	127		3.44	4
NF	KINGSTON	0.9	0.08	14	<4	0.01		418	1.03	2
NF	KINGSTON	0.76	0.08	15	~5				0.55	1
NF	KINGSTON	0.79	0.11	16	17	0.06	190		0.73	3
NF	KINGSTON	0.66	0.12	16	12	0.07			0.97	3
NF	KINGSTON	0.96	0.13	17	19	0.02			1.03	4
NF	KINGSTON	1.1	0.14							
NF	KINGSTON	0.81	0.1		17	0.01			0.84	4
NF	KINGSTON	0.86	0.25		25	0.17			2.9	6
NF	KINGSTON	1.1	0.18		28	0.01			1.09	6
NF	KINGSTON	1.1	0.18		29				0.93	6
NF	KINGSTON	0.89	0.22	17	38	0.03			0.81	8
NF	KINGSTON	0.77	0.19							
NF	KINGSTON	0.69	0.28	17	26	0.02			0.57	6
NF	KINGSTON	0.61	0.26	24	6	0.01			0.61	4
NF	KINGSTON	0.58	0.2							
NF	KINGSTON	0.66	0.2	27	7	0.01			0.025	2
NF	KINGSTON	0.77	0.37	37	18	0.01			0.45	6
NF	KINGSTON	0.44	0.35	37	4	0.01			0.25	1
NF	KINGSTON	0.4	0.31	42	4	0.01			0.19	2
NF	KINGSTON	0.45	0.25							
NF	KINGSTON	0.4	0.29	36	9	0.01			0.16	3

DRAFT 2001 SAMPLING DATA-KINGSTON AT 19

CROW: Crow River Monitoring Project

SUBJECT TO CHANGE/REVISION

Location Id	Sampling Point	Ortho P mg/L	BOD5 mg/l	Fcoli #/100ml	Turbidity NTU	Trichromatic ug/L
NF	KINGSTON**	0.432				
NF	KINGSTON**	0.143				
NF	KINGSTON	0.155				
NF	KINGSTON	0.034				
NF	KINGSTON	0.03				
NF	KINGSTON	0.068			3.9	
NF	KINGSTON	0.084				
NF	KINGSTON	0.084				
NF	KINGSTON					
NF	KINGSTON	0.067				
NF	KINGSTON	0.16				
NF	KINGSTON	0.109				
NF	KINGSTON	0.098			7	
NF	KINGSTON	0.135				
NF	KINGSTON					
NF	KINGSTON	0.134			10	
NF	KINGSTON	0.123	1	93		
NF	KINGSTON					
NF	KINGSTON	0.151	2.3	70		
NF	KINGSTON	0.259	1.8			
NF	KINGSTON	0.275			2.5	
NF	KINGSTON	0.256				37
NF	KINGSTON					
NF	KINGSTON	0.157				

DRAFT 2001 SAMPLING DATA-KINGSTON AT 19

CROW: Crow River Monitoring Project

SUBJECT TO CHANGE/REVISION

Location Id	Sampling Point	Date	DOsat%	Temp C	SpCond uS/cm	Cond uS/cm	Salinity ppt	DO Conc mg/L	DO Charge	pH
NF	KINGSTON**	9-Apr-01								
NF	KINGSTON**	18-Apr-01								
NF	KINGSTON	25-Apr-01								
NF	KINGSTON	1-May-01		13.37	334	259	0.16	9.1	41	7.99
NF	KINGSTON	9-May-01		18.69	441	388	0.21	6.75	40	7.77
NF	KINGSTON	15-May-01		10.64	459	333	0.22	9.06	36.9	*
NF	KINGSTON	23-May-01		17.53	471	404	0.23	8.26	40	*
NF	KINGSTON	30-May-01								
NF	KINGSTON	5-Jun-01		16.43	468	392	0.23	8.67	40	*
NF	KINGSTON	14-Jun-01		20.31	477	434	0.23	6.87	40	*
NF	KINGSTON	20-Jun-01	82.3	19.74	472			7.51	48.2	7.99
NF	KINGSTON	26-Jun-01	77.1	23.57	469			6.53	48.2	8.03
NF	KINGSTON	10-Jul-01	78.3	24.72	499			6.5	50.2	8.03
NF	KINGSTON									
NF	KINGSTON	25-Jul-01	88.4	22.67	467			7.62	48.2	8.15
NF	KINGSTON	15-Aug-01	116.8	23.07	561		0.27	9.99	53.3	8.5
NF	KINGSTON									
NF	KINGSTON	22-Aug-01	118	24.6	588	584	0.28	9.81	50.2	8.53
NF	KINGSTON	9/5/2001	92.2	19.46	660	590	0.32	8.46	45.1	8.36
NF	KINGSTON	10/2/2001	98.6	12.82	696.0	534.0	0.34	10.41	44	8.50
NF	KINGSTON	10/17/2001	104.9	5.28	722.0	450.0	0.35	13.27	42	8.62
NF	KINGSTON									
NF	KINGSTON	11/6/2001	97.0	8.48	658.0	450.0	0.32	11.33	41	8.58

DRAFT 2001 SAMPLING DATA-LAKE KORONIS OUTLET

CROW: Crow River Monitoring Project
 SUBJECT TO CHANGE/REVISION

Location	Sampling Point	DNR ID	Site #	Sampling Date	Time	measure down ft	measure down ft	DS ft	US ft	FLOW cfs
NF	KORONIS OL*	18-055-001	17	10-Apr-01		8.67				591.00
NF	KORONIS OL*	18-055-001	17	18-Apr-01		6.21				1370.00
NF	KORONIS OL*	18-055-001	17	24-Apr-01		6.13				1180.00
NF	KORONIS OL*	18-055-001	17	2-May-01		6.83				1000.00
NF	KORONIS OL*	18-055-001	17	8-May-01		8.13			20 ft datum	721.00
NF	KORONIS OL*	18-055-001	17	15-May-01	13:15	10.02				386.00
NF	KORONIS OL*	18-055-001	17	23-May-01	13:50	11.01			8.98	254.00
NF	KORONIS OL*	18-055-001	17	30-May-01		11.34				227.00
NF	KORONIS OL*	18-055-001	17	5-Jun-01		11.73				186.00
NF	KORONIS OL*	18-055-001	17	14-Jun-01		11.54				189.00
NF	KORONIS OL*	18-055-001	17	26-Jun-01		11.83				169.00
NF	KORONIS_OL	18-055-001	17	10-Jul-01	12:05	13.96		13.96	6.04	23.00
NF	KORONIS OL*	18-055-001	17	18-Jul-01		13.29				65.00
NF	KORONIS_OL	18-055-001	17	25-Jul-01	13:05	13.42		13.42	6.58	70.00
NF	KORONIS_OL	18-055-001	17	6-Aug-01		13.90				28.00
NF	KORONIS_OL	18-055-001	17	22-Aug-01	14:10	14.67		14.67	5.33	4.00
NF	KORONIS_OL	18-055-001	17	5-Sep-01	11:32	15.19		15.19	4.81	0.63
NF	KORONIS_OL	18-055-001	17	2-Oct-01	12:00	14.94		14.94	5.06	1.35
NF	KORONIS_OL	18-055-001	17	17-Oct-01	11:25	14.69		14.69	5.31	3.65

DRAFT 2001 SAMPLING DATA-LAKE KORONIS OUTLET

CROW: Crow River Monitoring Project

SUBJECT TO CHANGE/REVISION

Location Id	Sampling Point	Tkn mg/L	Tot P mg/L	Chloride mg/L	Tss mg/L	Vss mg/L	Ammonia N mg/L	Cond umho/cm	N_N mg/L	Ortho P mg/L
NF	KORONIS_OL*		0.074		4			296.9		
NF	KORONIS_OL*		0.163		4			224.9		
NF	KORONIS_OL*		0.101		3					
NF	KORONIS_OL*		0.094		5			340.1		
NF	KORONIS_OL*		0.081		5			338.4		
NF	KORONIS_OL*	1	0.107	13	8	10	0.15	322.3	0.72	0.005
NF	KORONIS_OL*	0.5	0.073	19.9	8	10	0.12	274.1	0.76	0.019
NF	KORONIS_OL*		0.066		5			279.4		
NF	KORONIS_OL*		0.061		3			282.2		
NF	KORONIS_OL*		0.076		8					
NF	KORONIS_OL*		0.06		13			280.1		
NF	KORONIS_OL	1.1	0.07	14	6	6	0.09		0.025	0.0025
NF	KORONIS_OL*		0.066		19			274.9		
NF	KORONIS_OL	1.1	0.06	14	22	7	0.01		0.025	0.0025
NF	KORONIS_OL		0.058		9			252.3		
NF	KORONIS_OL	0.88	0.05	14	9	4	0.03		0.025	0.0025
NF	KORONIS_OL	0.98	0.06	13	11	6	0.12		0.09	0.0025
NF	KORONIS_OL	1.1	0.07	14	15	8	0.03		0.025	0.0025
NF	KORONIS_OL	0.86	0.03	14	4	3	0.14		0.11	0.0025

DRAFT 2001 SAMPLING DATA-LAKE KORONIS OUTLET

CROW: Crow River Monitoring Project

SUBJECT TO CHANGE/REVISION

Location Id	Sampling Point	Date	Temp C	SpCond uS/cm	Cond uS/cm	Salinity ppt	DOsat%	DO Conc mg/L	DO Chg	pH
NF	KORONIS OL*		2.58				80.1	10.59		7.72
NF	KORONIS OL*		4.71				100	13.34		7.65
NF	KORONIS OL*		9.66				100	12.44		
NF	KORONIS OL*		11.65				100	11.4		8.55
NF	KORONIS OL*		16.66				100	14.03		8.56
NF	KORONIS OL*		12.33				100	8.29		8.29
NF	KORONIS OL*		16.34				127.4	12.09		8.18
NF	KORONIS OL*		14.71				80.2	7.8		8.1
NF	KORONIS OL*		21.13				103.1	8.71		8.23
NF	KORONIS OL*		27.32	381			107.3	8.5	53.3	8.41
NF	KORONIS_OL	10-Jul-01	25.44				91.9	7.35		8.18
NF	KORONIS OL*		26.89	365			109.1	8.7	50.2	8.73
NF	KORONIS_OL	25-Jul-01					114.3	8.14		8.47
NF	KORONIS_OL	22-Aug-01	27.04	426	442	0.2	134.5	10.7	53.3	8.29
NF	KORONIS_OL	9/5/2001	19.1	507	450	0.25	74.3	6.87	45.1	7.77
NF	KORONIS_OL	10/2/2001	14.35	434.0	346.0	0.21	94.2	9.62	44	8.02
NF	KORONIS_OL		4.63	482.0	295.0	0.23	83.6	10.77	40	7.84

DRAFT 2001 SAMPLING DATA-MIDDLE FORK

CROW: Crow River Monitoring Project
 SUBJECT TO CHANGE/REVISION

Location Id	Sampling Point	DNR ID	Site #	Sampling Date	Time	measure down ft	measure down ft	US ft	FLOW cfs	Tkn mg/L
NF_TRIB	MIDDLE FRK*	18-053-001	15	10-Apr-01		8.67				
NF_TRIB	MIDDLE FRK*	18-053-001	15	18-Apr-01		7.33				
NF_TRIB	MIDDLE FRK*	18-053-001	15	24-Apr-01		6.58				
NF_TRIB	MIDDLE FRK*	18-053-001	15	2-May-01		7.21			601.00	
NF_TRIB	MIDDLE FRK*	18-053-001	15	8-May-01		7.45				
NF_TRIB	MIDDLE FRK*	18-053-001	15	15-May-01	14:00	8.08			518.00	0.5
NF_TRIB	MIDDLE FRK*	18-053-001	15	23-May-01	14:35	8.52			469.00	0.5
NF_TRIB	MIDDLE FRK*	18-053-001	15	30-May-01		8.97				
NF_TRIB	MIDDLE FRK*	18-053-001	15	5-Jun-01		9.23				
NF_TRIB	MIDDLE FRK*	18-053-001	15	14-Jun-01		8.63				
NF_TRIB	MIDDLE FRK	18-053-001	15	20-Jun-01	10:45	9.18	9.17	40.83	260.00	0.97
NF_TRIB	MIDDLE FRK	18-053-001	15	10-Jul-01	11:45	10.59	10.63	39.38	95.00	0.84
NF_TRIB	MIDDLE FRK	18-053-001	15	18-Jul-01		11.02				
NF_TRIB	MIDDLE FRK	18-053-001	15	25-Jul-01	12:45	10.96	11.00	39.00	55.00	0.84
NF_TRIB	MIDDLE FRK	18-053-001	15	6-Aug-01		11.40				
NF_TRIB	MIDDLE FRK	18-053-001	15	22-Aug-01	13:55	11.61	11.65	38.35	25.00	0.62
NF_TRIB	MIDDLE FRK	18-053-001	15	5-Sep-01	11:17	11.77	11.81	38.19	20.00	0.68
NF_TRIB	MIDDLE FRK	18-053-001	15	2-Oct-01	11:43	11.81	11.85	38.15	12.00	0.33
NF_TRIB	MIDDLE FRK	18-053-001	15	17-Oct-01	11:15	11.54	11.58	38.42	22.00	0.37
NF_TRIB	MIDDLE FRK	18-053-001	15	6-Nov-01	11:25	11.54	11.58	38.42	22.00	0.67

DRAFT 2001 SAMPLING DATA-MIDDLE FORK

CROW: Crow River Monitoring Project
 SUBJECT TO CHANGE/REVISION

Location Id	Sampling Point	Tot P mg/L	Chloride mg/L	Tss mg/L	Vss mg/L	Ammonia N mg/L	N_N mg/L	Cond umho/cm	Ortho P mg/L	Turbidity NTU
NF_TRIB	MIDDLE FRK*	0.405		16				286.1		
NF_TRIB	MIDDLE FRK*	0.125		8				276		
NF_TRIB	MIDDLE FRK*	0.239		5				358.1		
NF_TRIB	MIDDLE FRK*	0.066		7				359		
NF_TRIB	MIDDLE FRK*	0.05		8				349.8	0.005	
NF_TRIB	MIDDLE FRK*	0.058	14	14	10	0.12	0.79	303.2	0.019	
NF_TRIB	MIDDLE FRK*	0.058	20.5	4	10	0.27	1.2	311.2		
NF_TRIB	MIDDLE FRK*	0.058		7				313.5		
NF_TRIB	MIDDLE FRK*	0.056		3						
NF_TRIB	MIDDLE FRK*	0.147		18						
NF_TRIB	MIDDLE FRK	0.09		18	5	0.02	1.32		0.014	
NF_TRIB	MIDDLE FRK	0.08	16	20	6	0.03	0.79		0.017	
NF_TRIB	MIDDLE FRK	0.091		18				352.3		
NF_TRIB	MIDDLE FRK	0.08	17	13	4	0.06	0.73		0.024	3.4
NF_TRIB	MIDDLE FRK	0.084		7				357.8		
NF_TRIB	MIDDLE FRK	0.04	26	7	2	0.01	0.64		0.0025	
NF_TRIB	MIDDLE FRK	0.04	35	8	2.5	0.09	1.11		0.019	
NF_TRIB	MIDDLE FRK	0.03	34	3	1	0.01	1.02		0.0025	2.3
NF_TRIB	MIDDLE FRK	0.005	41	5	1	0.01	1.7		0.005	
NF_TRIB	MIDDLE FRK	0.09	21	5	3	0.01	0.66		0.0025	

DRAFT 2001 SAMPLING DATA-MIDDLE FORK

CROW: Crow River Monitoring Project
 SUBJECT TO CHANGE/REVISION

Location Id	Sampling Point	Date	Temp C	SpCond uS/cm	Cond uS/cm	Salinity ppt	DOsat%	DO Conc mg/L	DO Chg	pH
NF_TRIB	MIDDLE FRK*		3.24				79.3	10.12		7.41
NF_TRIB	MIDDLE FRK*		6.53				100	13.51		7.7
NF_TRIB	MIDDLE FRK*		14.48				87.4	8.28		7.8
NF_TRIB	MIDDLE FRK*		12.93				93.7	9.44		7.91
NF_TRIB	MIDDLE FRK*		19.6		349.8		102.3	8.72		7.99
NF_TRIB	MIDDLE FRK*		10.86				89.8	7.57		7.82
NF_TRIB	MIDDLE FRK*		17.58				108.8	9.94		7.75
NF_TRIB	MIDDLE FRK*		15.16				78.5	7.53		7.8
NF_TRIB	MIDDLE FRK	20-Jun-01	19.31	455			86.5	7.96	48.2	7.99
NF_TRIB	MIDDLE FRK	10-Jul-01	24.31	463			88.1	7.36	49.2	8.09
NF_TRIB	MIDDLE FRK		25.26				94.2	7.55		7.87
NF_TRIB	MIDDLE FRK	25-Jul-01	22.1	487			95.1	8.29	48.2	8.14
NF_TRIB	MIDDLE FRK		30.46				97.6	7.21		8.13
NF_TRIB	MIDDLE FRK	22-Aug-01	23.82	598	585	0.29	125.3	10.57	51.2	8.37
NF_TRIB	MIDDLE FRK	9/5/2001	18.51	679	595	0.33	94.9	8.88	46.1	8.09
NF_TRIB	MIDDLE FRK	10/2/2001	12.58	730.0	557.0	0.36	106.3	11.28	45	8.17
NF_TRIB	MIDDLE FRK	10/17/2001	5.17	808.0	502.0	0.40	97.1	12.31	41	8.09
NF_TRIB	MIDDLE FRK	11/6/2001	9.28	568.0	397.0	0.28	106.6	12.22	42	8.28

DRAFT 2001 SAMPLING DATA-WASHINGTON CREEK

CROW: Crow River Monitoring Project
 SUBJECT TO CHANGI Lab Project # 5520-01-01

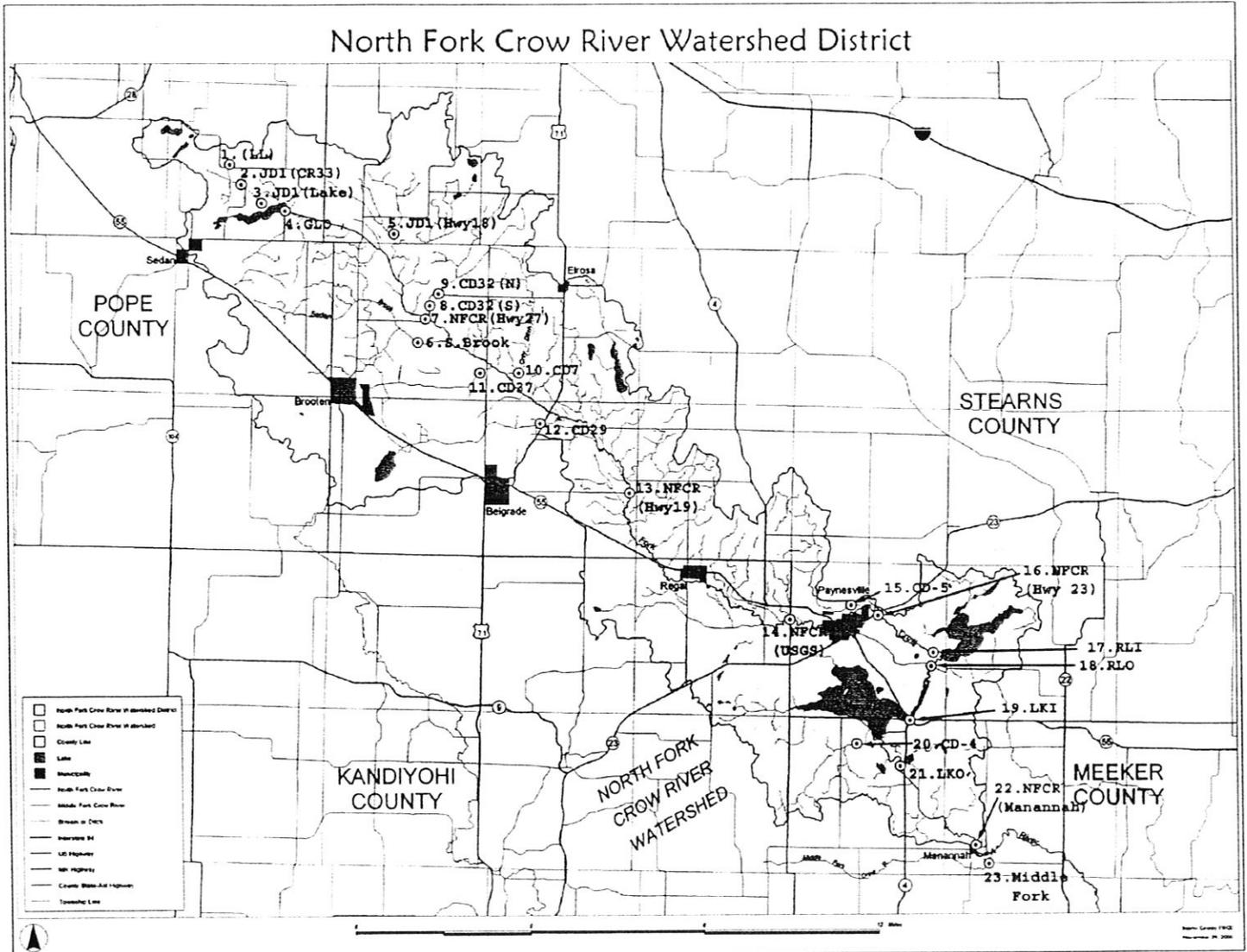
Location Id	Sampling Point	DNR ID	Sampling Date	Time	measure down ft	measure down ft	DS ft	US ft	Tkn mg/L	Tot P mg/L
NF_TRIB	CD9**	old site 9	9-Apr-01	12:20	8.85	8.81	41.15	41.19	2.49	0.363
NF_TRIB	CD9	18061001	25-Apr-01	11:00	8.46	8.44	41.54	41.56	1.2	0.14
NF_TRIB	CD9		1-May-01	10:20	9.31	9.29	40.69	40.71	1.2	~0.05
NF_TRIB	CD9		9-May-01	11:00	9.81	9.79	40.19	40.21	1.1	0.06
NF_TRIB	CD9		15-May-01	10:45	10.48	10.46	39.52	39.54	1.2	0.09

Location Id	Sampling Point	Chloride mg/L	Tss mg/L	Vss mg/L	N_N mg/L	Cond umho/cm	Ammonia N mg/L	Alkalinity mg/l_CaCO3	Ortho P mg/L	Turbidity NTU
NF_TRIB	CD9**	8.8	11	2.6	6.3	360	0.57	120	0.363	
NF_TRIB	CD9	10	9	2	3.87		0.03	140	0.069	
NF_TRIB	CD9	13	2.5	2.5	1.66	438	0.01		0.009	
NF_TRIB	CD9	13	6	4	1.37				0.0025	
NF_TRIB	CD9	14	8	3	0.59		0.03	193	0.005	2.6

Location Id	Sampling Point	Date	Time hh:mm:ss	Temp C	SpCond uS/cm	Cond uS/cm	Salinity ppt	DO Conc mg/L	DO Chg.	pH
NF_TRIB	CD9**	9-Apr-01	12:20							
NF_TRIB	CD9	25-Apr-01	11:00							
NF_TRIB	CD9	1-May-01	11:20							
NF_TRIB	CD9	9-May-01	10:55:52	13.23	345	267	0.17	5.84	40	7.55
NF_TRIB	CD9	15-May-01	10:45:51	20.17	433	393	0.21	5.25	0.39	7.59

**North Fork of the Crow River
Watershed District**

North Fork Crow River Watershed District



Lake Name	Lake ID	Date	Flow (cfs)	Depth Down (Inches)	Staff Gauge	CR10	Turbidity (tube cm)	Temp (C)	DO (mg/L)
CD-4	Site 20	6/13/91	0.19						
CD-4	Site 20	6/25/91	0.20					21.70	8.94
CD-4	Site 20	7/10/91	2.41					22.00	5.23
CD-4	Site 20	7/23/91	1.48					20.60	0.00
CD-4	Site 20	8/7/91	3.54					17.90	0.15
CD-4	Site 20	8/20/91	0.70					16.00	0.00
CD-4	Site 20	9/4/91	0.12					18.20	1.11
CD-4	Site 20	9/19/91	25.50						
CD-4	Site 20	4/4/97							
CD-4	Site 20	6/2/97	1.84						
CD-4	Site 20	7/24/97							
CD-4	Site 20	7/24/97							
CD-4	Site 20	8/25/97							
CD-4	Site 20	8/25/97							
CD-4	Site 20	10/20/97							
CD-4	Site 20	10/20/97							
CD-4	Site 20	6/23/98	1.84						
CD-4	Site 20	7/22/98							
CD-4	Site 20	8/13/98							
CD-4	Site 20	9/15/98							
CD-4	Site 20	3/23/99							
CD-4	Site 20	4/29/99	24.17						
CD-4	Site 20	5/26/99	0.66						
CD-4	Site 20	6/23/99	0.048						
CD-4	Site 20	7/28/99							
CD-4	Site 20	8/25/99							
CD-4	Site 20	6/9/00							
CD-4	Site 20	7/10/00							
CD-4	Site 20	8/14/00							
CD-4	Site 20	11/8/00							
CD-4	Site 20	4/10/01		26.00			42.20	3.57	11.03
CD-4	Site 20	4/18/01	9.95	35.00	6.25	6.26	60.00	6.65	15.67
CD-4	Site 20	4/24/01	46.19	23.50	7.24	7.24	28.00		
CD-4	Site 20	5/2/01	9.67	37.25	6.05	6.05	60.00	12.11	8.77
CD-4	Site 20	5/8/01	5.00	39.25	5.85	5.86	60.00	11.36	10.34

Lake Name	Lake ID	Date	Flow (cfs)	Depth Down (inches)	Staff Gauge	CR10	Turbidity (tube cm)	Temp (C)	DO (mg/L)
Lake Koronis Outlet	Site 21								
Lake Koronis Outlet	Site 21								
NFCR (Manannah)	Site 22	11/2/85	231.00						
NFCR (Manannah)	Site 22	3/27/86	295.00						
NFCR (Manannah)	Site 22	4/1/86	570.00						
NFCR (Manannah)	Site 22	4/8/86	1250.00						
NFCR (Manannah)	Site 22	4/14/86	1300.00						
NFCR (Manannah)	Site 22	4/23/86	877.00						
NFCR (Manannah)	Site 22	4/29/86	977.00						
NFCR (Manannah)	Site 22	5/7/86	853.00						
NFCR (Manannah)	Site 22	5/13/86	1030.00						
NFCR (Manannah)	Site 22	5/20/86	977.00						
NFCR (Manannah)	Site 22	6/11/86	330.00						
NFCR (Manannah)	Site 22	6/17/86	500.00						
NFCR (Manannah)	Site 22	6/24/86	917.00						
NFCR (Manannah)	Site 22	7/8/86	1213.00						
NFCR (Manannah)	Site 22	7/22/86	590.00						
NFCR (Manannah)	Site 22	8/5/86	776.00						
NFCR (Manannah)	Site 22	9/9/86	346.00						
NFCR (Manannah)	Site 22	10/13/86	614.00						
NFCR (Manannah)	Site 22	11/1/86	245.00						
NFCR (Manannah)	Site 22	4/10/01		283.75	N/A	N/A	49.00	2.94	12.78
NFCR (Manannah)	Site 22	4/18/01		247.50	N/A	N/A	60.00	5.27	17.86
NFCR (Manannah)	Site 22	4/24/01		254.50	N/A	N/A	60.00		
NFCR (Manannah)	Site 22	5/2/01		263.25	N/A	N/A	60.00	10.50	10.69
NFCR (Manannah)	Site 22	5/8/01		276.38	N/A	N/A	60.00	11.77	14.95
NFCR (Manannah)	Site 22	5/15/01		291.00	N/A	N/A	60.00	16.68	12.70
NFCR (Manannah)	Site 22	5/23/01		297.50	N/A	N/A	60.00	12.01	8.47
NFCR (Manannah)	Site 22	5/30/01		299.00	N/A	N/A	60.00	15.82	10.93
NFCR (Manannah)	Site 22	6/5/01		301.00	N/A	N/A	60.00	14.23	8.21
NFCR (Manannah)	Site 22	6/26/01		301.50	N/A	N/A	60.00	19.80	6.91
NFCR (Manannah)	Site 22	7/18/01		308.00	N/A	N/A	60.00	25.91	6.74
NFCR (Manannah)	Site 22	8/6/01		311.50	N/A	N/A	60.00	32.81	8.26
NFCR (Manannah)	Site 22				N/A	N/A			
NFCR (Manannah)	Site 22				N/A	N/A			

Lake Name	Lake ID	Date	% DO Sat	pH	Cond	Chl-a (ug/L)	TP (mg/L)	TSS (mg/L)	TDS (mg/L)	Cl (mg/L)	TVS (mg/L)
CD-4	Site 20	6/13/91					0.047	2			3.3
CD-4	Site 20	6/25/91					0.042	2			1.3
CD-4	Site 20	7/10/91					0.171	20			17.8
CD-4	Site 20	7/23/91			520.00		0.110	6			3.1
CD-4	Site 20	8/7/91					0.091	4			
CD-4	Site 20	8/20/91					0.117	2			1.7
CD-4	Site 20	9/4/91			816.00		0.260	3			2.5
CD-4	Site 20	9/19/91					0.182	1			
CD-4	Site 20	4/4/97					0.177	7			
CD-4	Site 20	6/2/97					0.030	0			
CD-4	Site 20	7/24/97					0.137	8			
CD-4	Site 20	7/24/97					0.168	1			
CD-4	Site 20	8/25/97					0.104	7			
CD-4	Site 20	8/25/97					0.137	2			
CD-4	Site 20	10/20/97					0.055	3			
CD-4	Site 20	10/20/97					0.111	0			
CD-4	Site 20	6/23/98					0.089	6			
CD-4	Site 20	7/22/98					0.084	2			
CD-4	Site 20	8/13/98					0.102	6			
CD-4	Site 20	9/15/98					0.127	4			
CD-4	Site 20	3/23/99					0.165	1			
CD-4	Site 20	4/29/99					0.045	3			
CD-4	Site 20	5/26/99					0.076	12			
CD-4	Site 20	6/23/99					0.084	4			
CD-4	Site 20	7/28/99					0.119	7			
CD-4	Site 20	8/25/99					0.109	5			
CD-4	Site 20	6/9/00					0.127	3			
CD-4	Site 20	7/10/00					0.112	5			
CD-4	Site 20	8/14/00					0.183	14			
CD-4	Site 20	11/8/00					0.094	0.10			
CD-4	Site 20	4/10/01	86.70	7.46	218.90		0.265	8.00	0.1402		
CD-4	Site 20	4/18/01	100.00	7.41	329.70		0.176	4.00	0.2110		
CD-4	Site 20	4/24/01					0.223	14.00			
CD-4	Site 20	5/2/01	86.60	7.55	471.50		0.094	4.00	0.3018		
CD-4	Site 20	5/8/01	99.20	7.97	500.80		0.058	20.00	0.3205		
CD-4	Site 20	5/15/01	112.70	8.09	503.40		0.056	4.00	0.3221		

Lake Name	Lake ID	Date	NH4 (mg/L)	NO3-NO2 (mg/L)	TKN (mg/L)	Ortho Phos. (mg/L)	Fecal Coliform	BOD (mg/L)
CD-4	Site 20	6/13/91				0.02		
CD-4	Site 20	6/25/91				0.02		
CD-4	Site 20	7/10/91				0.02		
CD-4	Site 20	7/23/91				0.025		
CD-4	Site 20	8/7/91	0.11	0.05	1.1	0.079		
CD-4	Site 20	8/20/91	0.05	0.05	0.97	0.083		
CD-4	Site 20	9/4/91				0.23		
CD-4	Site 20	9/19/91	0.1	0.15	0.93	0.15		
CD-4	Site 20	4/4/97						
CD-4	Site 20	6/2/97						
CD-4	Site 20	7/24/97						
CD-4	Site 20	7/24/97						
CD-4	Site 20	8/25/97						
CD-4	Site 20	8/25/97						
CD-4	Site 20	10/20/97						
CD-4	Site 20	10/20/97						
CD-4	Site 20	6/23/98						
CD-4	Site 20	7/22/98						
CD-4	Site 20	8/13/98						
CD-4	Site 20	9/15/98						
CD-4	Site 20	3/23/99						
CD-4	Site 20	4/29/99						
CD-4	Site 20	5/26/99						
CD-4	Site 20	6/23/99						
CD-4	Site 20	7/28/99						
CD-4	Site 20	8/25/99						
CD-4	Site 20	6/9/00						
CD-4	Site 20	7/10/00						
CD-4	Site 20	8/14/00						
CD-4	Site 20	11/8/00						
CD-4	Site 20	4/10/01						
CD-4	Site 20	4/18/01						
CD-4	Site 20	4/24/01						
CD-4	Site 20	5/2/01						
CD-4	Site 20	5/8/01						
CD-4	Site 20	5/15/01						

Lake Name	Lake ID	Date	Depth	Temp (C)	DO (mg/L)	% DO Sat	pH	Cond	Secchi (ft)	Chl-a (ug/L)	TP (mg/L)
Lake Koronis	LK-1	6/20/2001	1	20.08	9.67	110.8	8.67	283.4	6	40	0.053
Lake Koronis	LK-1	6/20/2001	2	19.96	8.95	101.2	8.62	285.2			
Lake Koronis	LK-1	6/20/2001	3	19.93	8.51	97.3	8.59	285.7			
Lake Koronis	LK-1	6/20/2001	4	19.88	8.29	94.6	8.58	285.4			
Lake Koronis	LK-1	6/20/2001	5	19.53	7.8	88.4	8.54	285.4			
Lake Koronis	LK-1	6/20/2001	6	18.71	6.99	78	8.43	284.1			
Lake Koronis	LK-1	6/20/2001	7	18.41	6.64	73.6	8.4	287.4			
Lake Koronis	LK-1	6/20/2001	8	17.61	5.87	64	8.28	287.4			
Lake Koronis	LK-1	6/20/2001	9	16.84	5.18	55.3	8.17	288			
Lake Koronis	LK-1	6/20/2001	10	16.71	4.97	53.2	8.15	289.1			
Lake Koronis	LK-1	6/20/2001	12	14.74	3.42	35.1	7.92	288.6			
Lake Koronis	LK-1	6/20/2001	14	13.8	3.09	31.1	7.84	288.9			
Lake Koronis	LK-1	6/20/2001	16	13.22	2.12	21.1	7.75	289.7			
Lake Koronis	LK-1	6/20/2001	18	13	1.57	14.9	7.7	290.3			
Lake Koronis	LK-1	6/20/2001	20	12.93	1.23	12.2	7.67	290.7			
Lake Koronis	LK-1	7/11/2001	0	25.42	9.35	116.3	8.61	251.1	3.5	23	0.038
Lake Koronis	LK-1	7/11/2001	1	25.4	9.43	116.9	8.6	252.6			
Lake Koronis	LK-1	7/11/2001	2	25.09	9.4	115.9	8.57	253.5			
Lake Koronis	LK-1	7/11/2001	3	24.72	8.9	108.9	8.52	257.7			
Lake Koronis	LK-1	7/11/2001	4	23.82	6.07	73	8.11	272.3			
Lake Koronis	LK-1	7/11/2001	5	22.09	3.61	42.1	7.82	278.3			
Lake Koronis	LK-1	7/11/2001	6	21.58	1.45	16.5	7.66	281.5			
Lake Koronis	LK-1	7/11/2001	7	19.98	0.47	5.3	7.57	289.9			
Lake Koronis	LK-1	7/11/2001	8	18.94	0.35	3.8	7.55	292.2			
Lake Koronis	LK-1	7/11/2001	9	17.13	0.26	3	7.53	294.2			
Lake Koronis	LK-1	7/11/2001	10	16.01	0.23	2.4	7.5	294.8			
Lake Koronis	LK-1	7/11/2001	12	14.84	0.19	1.9	7.48	294.5			
Lake Koronis	LK-1	7/25/2001	0	25.62	6.88	85.4	8.36	263.6	4	16	0.033
Lake Koronis	LK-1	7/25/2001	1	25.63	6.79	84.5	8.36	264.1			
Lake Koronis	LK-1	7/25/2001	2	25.62	6.57	81.8	8.35	262.8			
Lake Koronis	LK-1	7/25/2001	3	25.6	6.5	81	8.35	262.6			
Lake Koronis	LK-1	7/25/2001	4	25.61	6.18	77.1	8.35	262.4			
Lake Koronis	LK-1	7/25/2001	5	25.05	2.72	33.5	7.91	274			
Lake Koronis	LK-1	7/25/2001	6	23.18	0.92	10.9	7.67	282.4			
Lake Koronis	LK-1	7/25/2001	7	20.34	0.44	5	7.5	293.3			
Lake Koronis	LK-1	7/25/2001	8	18.71	0.34	3.5	7.47	298.1			

Lake Name	Lake ID	Date	Depth	Temp (C)	DO (mg/L)	% DO Sat	pH	Cond	Secchi (ft)	Chl-a (ug/L)	TP (mg/L)
Lake Koronis	LK-1	7/25/2001	9	17.36	0.29	3.1	7.45	301.3			
Lake Koronis	LK-1	7/25/2001	10	16.28	0.26	2.7	7.44	305.3			
Lake Koronis	LK-1	7/25/2001	12	14.88	0.26	2.6	7.38	308.5			
Lake Koronis	LK-1	8/13/2001	0	24.66	7.33	89.6	8.58	239.3	4		
Lake Koronis	LK-1	8/13/2001	1	24.73	7.18	87.5	8.6	239.6			
Lake Koronis	LK-1	8/13/2001	2	24.71	6.99	85.6	8.6	240.3			
Lake Koronis	LK-1	8/13/2001	3	24.7	6.76	82.6	8.6	241.7			
Lake Koronis	LK-1	8/13/2001	4	24.68	6.65	81.2	8.6	241.5			
Lake Koronis	LK-1	8/13/2001	5	24.66	6.4	78.5	8.59	241.3			
Lake Koronis	LK-1	8/13/2001	6	24.6	6.39	77.9	8.58	241.4			
Lake Koronis	LK-1	8/13/2001	7	24.22	6.17	74.4	8.55	243.1			
Lake Koronis	LK-1	8/13/2001	8	22.62	3.9	45.9	8.23	256.3			
Lake Koronis	LK-1	8/13/2001	9	19.27	0.6	6.2	7.73	282.5			
Lake Koronis	LK-1	8/13/2001	10	17.28	0.37	3.9	7.6	287.6			
Lake Koronis	LK-1	8/13/2001	12	15.16	0.3	3	7.51	291.7			
Lake Koronis	LK-1										
Lake Koronis	LK-1										
Lake Koronis	LK-1										
Lake Koronis	LK-1										
Lake Koronis	LK-1										
Lake Koronis	LK-1										
Lake Koronis	LK-1										
Lake Koronis	LK-1										
Lake Koronis	LK-1										
Lake Koronis	LK-2	6/20/2001	1	20.06	9.11	104.4	8.67	280.5	5	48	0.053
Lake Koronis	LK-2	6/20/2001	2	19.98	8.83	101.1	8.66	280.7			
Lake Koronis	LK-2	6/20/2001	3	19.92	8.89	101.6	8.66	280.4			
Lake Koronis	LK-2	6/20/2001	4	19.9	8.72	99.6	8.66	281.2			
Lake Koronis	LK-2	6/20/2001	5	19.83	8.74	100.1	8.66	281.2			
Lake Koronis	LK-2	6/20/2001	6	19.66	8.31	90	8.54	282.5			
Lake Koronis	LK-2	6/20/2001	7	16.1	5.21	54.6	8.13	285.4			
Lake Koronis	LK-2	6/20/2001	8	14.5	3.76	38.4	7.94	286.8			
Lake Koronis	LK-2	6/20/2001	9	13.38	3.2	31.9	7.84	287			
Lake Koronis	LK-2	6/20/2001	10	12.57	1.99	19.4	7.7	287.1			
Lake Koronis	LK-2	6/20/2001	12	11.49	0.34	3.3	7.55	290.3			
Lake Koronis	LK-2	7/11/2001	0	23.78	9.65	116.1	8.53	263.5	4	20	0.03
Lake Koronis	LK-2	7/11/2001	1	24.8	9.19	122.5	8.56	258.4			
Lake Koronis	LK-2	7/11/2001	2	24.61	9.59	117.2	8.58	256.8			
Lake Koronis	LK-2	7/11/2001	3	24.43	9.8	119.3	8.57	256.4			

Lake Name	Lake ID	Date	TSS (mg/L)	TDS (mg/L)	NH4 (mg/L)	NO3-NO2 (mg/L)	TKN (mg/L)	Ortho Phos. (mg/L)	Fecal Coliform
Lake Koronis	LK-1	6/20/2001	7	0.1814					
Lake Koronis	LK-1	6/20/2001		0.1825					
Lake Koronis	LK-1	6/20/2001		0.1828					
Lake Koronis	LK-1	6/20/2001		0.1828					
Lake Koronis	LK-1	6/20/2001		0.1821					
Lake Koronis	LK-1	6/20/2001		0.1825					
Lake Koronis	LK-1	6/20/2001		0.1818					
Lake Koronis	LK-1	6/20/2001		0.184					
Lake Koronis	LK-1	6/20/2001		0.1843					
Lake Koronis	LK-1	6/20/2001		0.1851					
Lake Koronis	LK-1	6/20/2001		0.1847					
Lake Koronis	LK-1	6/20/2001		0.1849					
Lake Koronis	LK-1	6/20/2001		0.1854					
Lake Koronis	LK-1	6/20/2001		0.1858					
Lake Koronis	LK-1	6/20/2001		0.186					
Lake Koronis	LK-1	7/11/2001	5	0.1607					
Lake Koronis	LK-1	7/11/2001		0.1617					
Lake Koronis	LK-1	7/11/2001		0.1622					
Lake Koronis	LK-1	7/11/2001		0.1649					
Lake Koronis	LK-1	7/11/2001		0.1741					
Lake Koronis	LK-1	7/11/2001		0.1781					
Lake Koronis	LK-1	7/11/2001		0.1801					
Lake Koronis	LK-1	7/11/2001		0.1855					
Lake Koronis	LK-1	7/11/2001		0.1854					
Lake Koronis	LK-1	7/11/2001		0.1866					
Lake Koronis	LK-1	7/11/2001		0.1887					
Lake Koronis	LK-1	7/11/2001		0.1887					
Lake Koronis	LK-1	7/25/2001	9	0.1683					
Lake Koronis	LK-1	7/25/2001		0.169					
Lake Koronis	LK-1	7/25/2001		0.1682					
Lake Koronis	LK-1	7/25/2001		0.1681					
Lake Koronis	LK-1	7/25/2001		0.1688					
Lake Koronis	LK-1	7/25/2001		0.1754					
Lake Koronis	LK-1	7/25/2001		0.1807					
Lake Koronis	LK-1	7/25/2001		0.1877					
Lake Koronis	LK-1	7/25/2001		0.1921					

Lake Name	Lake ID	Date	TSS (mg/L)	TDS (mg/L)	NH4 (mg/L)	NO3-NO2 (mg/L)	TKN (mg/L)	Ortho Phos. (mg/L)	Fecul Coliform
Lake Koronis	LK-1	7/25/2001		0.1928					
Lake Koronis	LK-1	7/25/2001		0.1953					
Lake Koronis	LK-1	7/25/2001		0.1974					
Lake Koronis	LK-1	8/13/2001		0.1531					
Lake Koronis	LK-1	8/13/2001		0.1533					
Lake Koronis	LK-1	8/13/2001		0.155					
Lake Koronis	LK-1	8/13/2001		0.1547					
Lake Koronis	LK-1	8/13/2001		0.1545					
Lake Koronis	LK-1	8/13/2001		0.1545					
Lake Koronis	LK-1	8/13/2001		0.1547					
Lake Koronis	LK-1	8/13/2001		0.155					
Lake Koronis	LK-1	8/13/2001		0.1641					
Lake Koronis	LK-1	8/13/2001		0.1798					
Lake Koronis	LK-1	8/13/2001		0.184					
Lake Koronis	LK-1	8/13/2001		0.1863					
Lake Koronis	LK-1								
Lake Koronis	LK-1								
Lake Koronis	LK-1								
Lake Koronis	LK-1								
Lake Koronis	LK-1								
Lake Koronis	LK-1								
Lake Koronis	LK-1								
Lake Koronis	LK-1								
Lake Koronis	LK-1								
Lake Koronis	LK-2	6/20/2001	6	0.1795					
Lake Koronis	LK-2	6/20/2001		0.1796					
Lake Koronis	LK-2	6/20/2001		0.1795					
Lake Koronis	LK-2	6/20/2001		0.1799					
Lake Koronis	LK-2	6/20/2001		0.1798					
Lake Koronis	LK-2	6/20/2001		0.177					
Lake Koronis	LK-2	6/20/2001		0.1786					
Lake Koronis	LK-2	6/20/2001		0.1835					
Lake Koronis	LK-2	6/20/2001		0.1837					
Lake Koronis	LK-2	6/20/2001		0.1837					
Lake Koronis	LK-2	6/20/2001		0.1858					
Lake Koronis	LK-2	7/11/2001	7	0.1686					
Lake Koronis	LK-2	7/11/2001		0.1644					
Lake Koronis	LK-2	7/11/2001		0.1643					
Lake Koronis	LK-2	7/11/2001		0.1641					



**The Mid-Minnesota
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