

Water Quality Report for the Upper Iowa River and Tributaries: 1999 through 2004

Prepared by:
Adam Kiel
GIS Specialist
Northeast Iowa RC&D
101 E. Greene Street
Postville, Iowa 52162

Bear Creek Water Quality Data

UTM X: 620508.2 UTM Y: 4809322.7

Segment Classifications: Significant Warm Water Resource (BW)

Site No.	Site Name	Date	Turbidity-NTU	Atrazine-ppb	MembraneFecal Coliform-per 100mL	E. coli-per 100mL	Nitrate + Nitrite-as N (mg/L)	Ammonia Nitrogen-as N (mg/L)	Total Phosphate-as P (mg/L)	Sample Type
25	Bear Creek	07/21/99	35.8	0.14	22000		3	0.1	0.3	Event
25	Bear Creek	10/06/99	2.84	0.06	20		4.1	0.05	0.05	Non-Event
25	Bear Creek	02/24/00	93	0.08	3000		2	1	0.9	Event
25	Bear Creek	05/18/00	104	1.6	120000		3.2	0.2	0.4	Event
25	Bear Creek	07/05/00	15.1	0.38	3400		3.6	0.1	0.1	Event
25	Bear Creek	08/17/00	10	0.12	2800		3.7	0.1	0.1	Event
25	Bear Creek	10/11/00	2.5	0.09	10		4.4	0.1	0.2	Non-Event
25	Bear Creek	03/22/01	3.1							Event
25	Bear Creek	04/03/01	4	0.07	10		3.9	0.1	0.1	Event
25	Bear Creek	06/15/01	23.7	0.45	13000		3.6	0.1	0.1	Event
25	Bear Creek	01/30/02	2.85	0.06	10		4.2	0.05	0.05	Non-Event
25	Bear Creek	05/02/02		0.06	10		3.1	0.05	0.05	Non-Event
25	Bear Creek	06/04/02		0.33	41000		3	0.05	0.24	Event
25	Bear Creek	07/29/02	1.78	0.06	2600		2.9			Event
25	Bear Creek	04/27/04				10	2.6	0.05	0.04	Non-Event
25	Bear Creek	05/25/04				3400	2.7	0.11	0.16	Event
25	Bear Creek	06/30/04				60	2.8	0.05	0.05	Non-Event
25	Bear Creek	07/27/04				270	3.1	0.05	0.04	Non-Event
25	Bear Creek	08/31/04				560	3.3	0.05	0.06	Non-Event
25	Bear Creek	09/28/04				80	3.3	0.05	0.03	Non-Event
25	Bear Creek	10/27/04				260	3.7	0.05	0.06	Non-Event
All	Average		24.89	0.27	15989.23	662.86	3.31	0.13	0.16	
	Geometric Mean		9.52	0.14	742.64	181.21	3.26	0.08	0.10	
	Maximum		104.00	1.60	120000.00	3400.00	4.40	1.00	0.90	
Event	Average		32.28	0.36	23090.00	3400.00	3.16	0.21	0.27	
	Geometric Mean		14.44	0.20	4664.28	3400.00	3.11	0.13	0.20	
	Maximum		104.00	1.60	120000.00	3400.00	3.90	1.00	0.90	
Non-Event	Average		2.73	0.07	12.50	206.67	3.46	0.06	0.06	
	Geometric Mean		2.73	0.07	11.89	111.16	3.41	0.05	0.05	
	Maximum		2.85	0.09	20.00	560.00	4.40	0.10	0.20	

Beaver Creek MN Water Quality Data

UTM X: 549248.0 UTM Y: 4817382.0

Segment Classifications: None

Site No.	Site Name	Date	Turbidity-NTU	Atrazine-ppb	MembraneFecal Coliform-per 100mL	E. coli-per 100mL	Nitrate + Nitrite-as N (mg/L)	Ammonia Nitrogen-as N (mg/L)	Total Phosphate-as P (mg/L)	Sample Type
4	Beaver Creek, MN	07/21/99	52.6	1.1	1400		8	0.05	0.2	Event
4	Beaver Creek, MN	10/06/99	5.4	0.08	40		4.8	0.05	0.05	Non-Event
4	Beaver Creek, MN	02/24/00	30	0.86	650		3.9	0.5	0.6	Event
4	Beaver Creek, MN	05/18/00	192	6.9	1400		15	0.4	0.2	Event
4	Beaver Creek, MN	07/05/00	7.8	0.48	450		12	0.1	0.1	Event
4	Beaver Creek, MN	08/17/00	9	0.16	810		2.7	0.1	0.1	Event
4	Beaver Creek, MN	10/11/00	5.8	0.09	30		2.8	0.1	0.1	Non-Event
4	Beaver Creek, MN	04/03/01	32	0.06	10		6.7	0.1	0.2	Event
4	Beaver Creek, MN	06/06/01	9.5	1.1	430		12	0.1	0.1	Event
4	Beaver Creek, MN	01/30/02	2.69	0.05	10		4.1	0.05	0.05	Non-Event
4	Beaver Creek, MN	05/02/02		0.11	40		11	0.05	0.05	Non-Event
4	Beaver Creek, MN	06/04/02		4.3	12000		13	3.2	0.67	Event
4	Beaver Creek, MN	07/29/02	18.3	0.08	100		0.5		0.12	Event
4	Beaver Creek, MN	04/27/04		0.13		30	4.4	0.09	0.05	Non-Event
4	Beaver Creek, MN	05/25/04		1.4		470	22	0.06	0.12	Event
4	Beaver Creek, MN	06/29/04		0.46		150	13	0.05	0.04	Non-Event
4	Beaver Creek, MN	07/27/04		0.19		60	9.6	0.09	0.03	Non-Event
4	Beaver Creek, MN	08/31/04		0.11		200	3	0.11	0.06	Non-Event
4	Beaver Creek, MN	09/28/04		0.14		310	10	0.05	0.04	Non-Event
4	Beaver Creek, MN	10/27/04		0.06		60	7.2	0.05	0.02	Non-Event
All	Average		33.19	0.89	1336.15	182.86	8.29	0.28	0.15	
	Geometric Mean		15.19	0.28	205.29	124.82	6.38	0.11	0.09	
	Maximum		192.00	6.90	12000.00	470.00	22.00	3.20	0.67	
Event	Average		43.90	1.64	1916.67	470.00	9.58	0.51	0.24	
	Geometric Mean		24.22	0.66	511.49	470.00	6.67	0.18	0.18	
	Maximum		192.00	6.90	12000.00	470.00	22.00	3.20	0.67	
Non-Event	Average		4.63	0.14	30.00	135.00	6.99	0.07	0.05	
	Geometric Mean		4.38	0.12	26.32	100.07	6.10	0.07	0.05	
	Maximum		5.80	0.46	40.00	310.00	13.00	0.11	0.10	

Beaver Creek IA Water Quality Data

UTM X: 556094.8 UTM Y: 4812113.5

Segment Classifications: Coldwater (BC), High Quality Resource (HQR)

Site No.	Site Name	Date	Turbidity-NTU	Atrazine-ppb	MembraneFecal Coliform-per 100mL	E. coli-per 100mL	Nitrate + Nitrite-as N (mg/L)	Ammonia Nitrogen-as N (mg/L)	Total Phosphate-as P (mg/L)	Sample Type
5	Beaver Creek, Iowa	7/21/99	185	0.93	57000		8.8	0.05	0.4	Event
5	Beaver Creek, Iowa	10/6/99	34.2	0.14	170		6.1	0.05	0.05	Non-Event
5	Beaver Creek, Iowa	2/24/00	41	0.16	580		3.5	0.5	0.5	Event
5	Beaver Creek, Iowa	5/18/00	68	2.5	13000		11	0.2	0.2	Event
5	Beaver Creek, Iowa	7/5/00	14.8	0.35	5700		15	0.1	0.1	Event
5	Beaver Creek, Iowa	10/11/00	1.9	0.16	30		4.2	0.1	0.1	Non-Event
5	Beaver Creek, Iowa	3/22/01	5.82							Event
5	Beaver Creek, Iowa	4/3/01	39	0.06	40		7.3	0.2	0.3	Event
5	Beaver Creek, Iowa	6/15/01	59.5	5.3	13000		13	0.1	0.1	Event
5	Beaver Creek, Iowa	1/30/02	3.4	0.07	300		5.3	0.09	0.08	Non-Event
5	Beaver Creek, Iowa	5/2/02		0.1	50		13	0.05	0.1	Non-Event
5	Beaver Creek, Iowa	6/4/02		2.4	18000		9.5	0.15	0.43	Event
5	Beaver Creek, Iowa	7/29/02	18.2	0.15	2400		1.6		0.16	Event
5	Beaver Creek, Iowa	4/27/04		0.13		1000	3.9	0.13	0.05	Non-Event
5	Beaver Creek, Iowa	5/25/04		1.7		1000	22	0.1	0.17	Event
5	Beaver Creek, Iowa	6/29/04		0.47		760	17	0.05	0.08	Non-Event
5	Beaver Creek, Iowa	7/27/04		0.34		1500	15	0.05	0.04	Non-Event
5	Beaver Creek, Iowa	8/31/04		0.18		350	7.1	0.05	0.05	Non-Event
5	Beaver Creek, Iowa	9/28/04		0.15		1300	10	0.06	0.06	Non-Event
5	Beaver Creek, Iowa	10/27/04		0.07		140	8.8	0.05	0.04	Non-Event
All	Average		42.80	0.81	9189.17	864.29	9.58	0.12	0.16	
	Geometric Mean		21.32	0.30	1127.26	687.53	8.09	0.09	0.11	
	Maximum		185.00	5.30	57000.00	1500.00	22.00	0.50	0.50	
Event	Average		53.92	1.51	13715.00	1000.00	10.19	0.18	0.26	
	Geometric Mean		34.21	0.66	3913.60	1000.00	8.16	0.14	0.22	
	Maximum		185.00	5.30	57000.00	1000.00	22.00	0.50	0.50	
Non-Event	Average		13.17	0.18	137.50	841.67	9.04	0.07	0.07	
	Geometric Mean		6.05	0.15	93.52	645.91	8.02	0.06	0.06	
	Maximum		34.20	0.47	300.00	1500.00	17.00	0.13	0.10	

Bigalk Creek Water Quality Data

UTM X: 574469.4 UTM Y: 4813876.0

Segment Classifications: Coldwater (BC), High Quality (HQ)

Site No.	Site Name	Date	Turbidity-NTU	Atrazine-ppb	MembraneFecal Coliform-per 100mL	E. coli-per 100mL	Nitrate + Nitrite-as N (mg/L)	Ammonia Nitrogen-as N (mg/L)	Total Phosphate-as P (mg/L)	Sample Type
7	Bigalk Creek	07/21/99	179	0.15	21000		5.6	0.05	0.5	Event
7	Bigalk Creek	10/06/99	1.15	0.06	81		8	0.05	0.05	Non-Event
7	Bigalk Creek	02/24/00	28	0.37	1000		3.7	0.7	2.2	Event
7	Bigalk Creek	05/18/00	138	1.1	210000		5.7	0.4	0.4	Event
7	Bigalk Creek	07/05/00	6.3	0.28	870		8.1	0.1	0.1	Event
7	Bigalk Creek	08/17/00	26	0.28	92000		8.2	0.1	0.2	Event
7	Bigalk Creek - Alt 107	10/11/00	2.7	0.14	210		11	0.1	0.1	Non-Event
7	Bigalk Creek	03/22/01	1.82							Event
7	Bigalk Creek - Alt 107	04/03/01	15	0.05	55		6.7	0.1	0.1	Event
7	Bigalk Creek	06/15/01	59.8	0.83	37000		6	0.1	0.3	Event
7	Bigalk	05/02/02		0.07	160		6.1	0.06	0.05	Non-Event
7	Bigalk	06/04/02		0.81	2900		0.2	0.11	0.44	Event
7	Bigalk Creek	07/29/02	996	0.08	4100				1.2	Event
7	Bigalk Creek	04/29/04		0.11		110	6.5	0.05	0.07	Non-Event
7	Bigalk Creek	05/25/04		1.2		930	11	0.09	0.15	Event
7	Bigalk Creek	07/27/04		0.29		2400	10	0.05	0.07	Non-Event
7	Bigalk Creek	08/31/04		0.16		2800	9.8	0.05	0.08	Non-Event
7	Bigalk Creek	09/28/04		0.15		40	9.8	0.05	0.06	Non-Event
7	Bigalk Creek	10/27/04		0.08		590	9.5	0.05	0.09	Non-Event
All	Average		132.16	0.35	30781.33	1145.00	7.41	0.13	0.34	
	Geometric Mean		21.96	0.21	2311.32	503.14	6.09	0.09	0.17	
	Maximum		996.00	1.20	210000.00	2800.00	11.00	0.70	2.20	
Event	Average		161.10	0.52	40991.67	930.00	6.13	0.19	0.56	
	Geometric Mean		38.46	0.33	5890.68	930.00	4.46	0.13	0.34	
	Maximum		996.00	1.20	210000.00	930.00	11.00	0.70	2.20	
Non-Event	Average		1.93	0.13	150.33	1188.00	8.84	0.06	0.07	
	Geometric Mean		1.76	0.12	139.62	444.97	8.67	0.06	0.07	
	Maximum		2.70	0.29	210.00	2800.00	11.00	0.10	0.10	

Canoe Creek Water Quality Data

UTM X: 612043.7 UTM Y: 4802551.2

Segment Classifications: Coldwater (BC), High Quality Resource (HQR), High Quality (HQ), Limited Resource Warm Water (BLR), Significant Warm Water Resource (BW)

Site No.	Site Name	Date	Turbidity-NTU	Atrazine-ppb	MembraneFecal Coliform-per 100mL	E. coli-per 100mL	Nitrate + Nitrite-as N (mg/L)	Ammonia Nitrogen-as N (mg/L)	Total Phosphate-as P (mg/L)	Sample Type
20	Canoe Creek	07/21/99	199	0.26	29000		3.8	0.05	0.7	Event
20	Canoe Creek	10/06/99	5.31	0.07	260		3.4	0.05	0.05	Non-Event
20	Canoe Creek	02/24/00	328	0.09	3800		2.2	0.9	1.3	Event
20	Canoe Creek	05/18/00	23	0.6	51000		1.6	0.2	0.2	Event
20	Canoe Creek	07/05/00	29.4	0.38	4100		5.2	0.1	0.2	Event
20	Canoe Creek	08/17/00		0.14	10000		3.7	0.1	0.1	Event
20	Canoe Creek	10/11/00	2.5	0.09	120		3.3	0.1	0.2	Non-Event
20	Canoe Creek	03/22/01	7.85							Event
20	Canoe Creek	04/03/01	636	0.06	340		5.7	0.1	1	Event
20	Canoe Creek	06/15/01	45.6	2	14000		4.4	0.2	0.2	Event
20	Canoe Creek	01/30/02	0.73	0.05	27		2.9	0.05	0.05	Non-Event
20	Canoe Creek	05/02/02		0.05	0.1		2.2	0.05	0.05	Non-Event
20	Canoe Creek	06/04/02		0.57	27000		2.3	0.1	0.41	Event
20	Canoe Creek	07/29/02	367	0.1	26000		2.6		0.69	Event
20	Canoe Creek	04/27/04				10	0.91	1	0.06	Non-Event
20	Canoe Creek	05/25/04				4200	7.1	0.08	0.28	Event
20	Canoe Creek	06/29/04				240	4.9	0.05	0.03	Non-Event
20	Canoe Creek	07/27/04				850	4.7	0.05	0.1	Non-Event
20	Canoe Creek	08/31/04				910	3.8	0.05	0.11	Non-Event
20	Canoe Creek	09/28/04				210	3.1	0.05	0.04	Non-Event
20	Canoe Creek	10/27/04				90	3	0.05	0.08	Non-Event
All	Average		149.49	0.34	12742.08	930.00	3.54	0.18	0.29	
	Geometric Mean		31.98	0.17	1378.43	283.55	3.22	0.10	0.16	
	Maximum		636.00	2.00	51000.00	4200.00	7.10	1.00	1.30	
Event	Average		204.48	0.47	18360.00	4200.00	3.86	0.20	0.51	
	Geometric Mean		88.28	0.26	9713.74	4200.00	3.50	0.13	0.38	
	Maximum		636.00	2.00	51000.00	4200.00	7.10	0.90	1.30	
Non-Event	Average		2.85	0.07	101.78	385.00	3.22	0.15	0.08	
	Geometric Mean		2.13	0.06	17.04	180.93	2.97	0.07	0.07	
	Maximum		5.31	0.09	260.00	910.00	4.90	1.00	0.20	

Casey's Springs Creek Water Quality Data

UTM X: 591984.9 UTM Y: 4801125.4

Segment Classifications: Coldwater (BC), High Quality Resource (HQR)

Site No.	Site Name	Date	Turbidity-NTU	Atrazine-ppb	MembraneFecal Coliform-per 100mL	E. coli-per 100mL	Nitrate + Nitrite as N (mg/L)	Ammonia Nitrogen-as N (mg/L)	Total Phosphate-as P (mg/L)	Sample Type
11	Casey's Springs Creek	07/21/99	98.40	0.2	68000		3.7	0.05	0.7	Event
11	Casey's Springs Creek	10/06/99	4.62	0.07	560		5.3	0.05	0.05	Non-Event
11	Casey's Springs Creek	02/24/00	3.40	0.06	810		3	0.3	2	Event
11	Casey's Springs Creek	05/18/00	14.00	0.28	570		3.3	0.1	0.1	Event
11	Casey's Springs Creek	07/05/00	12.00	0.13	1200		5.3	0.1	0.1	Event
11	Casey's Springs Creek	10/11/00	1.80	0.05	45		5.7	0.1	0.1	Non-Event
11	Casey's Springs Creek	03/22/01	4.54							Event
11	Casey's Springs Creek	04/03/01	43.00	0.07	90		5.6	0.1	0.2	Event
11	Casey's Springs Creek	06/15/01	3.65	0.19	2600		5.4	0.1	0.1	Event
11	Casey's Springs Creek	01/30/02	1.93	0.05	18		5.6	0.05	0.05	Non-Event
11	Casey's Springs Creek	05/02/02		0.68	0		3.8	0.05	0.05	Non-Event
11	Casey's Springs Creek	06/04/02		0.19	910		3.6	0.05	0.1	Event
11	Casey's Springs Creek	07/29/02	112.00	0.37	27000		4		0.39	Event
11	Casey's Springs Creek	04/27/04		0.05		30	4	0.08	0.06	Non-Event
11	Casey's Springs Creek	05/25/04		1.4		640	6.4	0.05	0.18	Event
11	Casey's Springs Creek	06/29/04		0.33		10	5.6	0.05	0.06	Non-Event
11	Casey's Springs Creek	07/27/04		0.27		440	5.7	0.05	0.08	Non-Event
11	Casey's Springs Creek	08/31/04		0.13		160	5.6	0.05	0.09	Non-Event
11	Casey's Springs Creek	09/28/04		0.08		430	5	0.05	0.06	Non-Event
11	Casey's Springs Creek	10/27/04		0.05		36	4.8	0.05	0.25	Non-Event
All	Average		27.21	0.24	8483.59	249.43	4.81	0.08	0.25	
	Geometric Mean		9.71	0.15	382.56	111.12	4.70	0.07	0.13	
	Maximum		112.00	1.40	68000.00	640.00	6.40	0.30	2.00	
Event	Average		36.37	0.32	12647.50	640.00	4.48	0.11	0.43	
	Geometric Mean		16.09	0.20	1958.66	640.00	4.34	0.09	0.23	
	Maximum		112.00	1.40	68000.00	640.00	6.40	0.30	2.00	
Non-Event	Average		2.78	0.18	155.78	184.33	5.11	0.06	0.09	
	Geometric Mean		2.52	0.11	14.59	83.00	5.06	0.06	0.07	
	Maximum		4.62	0.68	560.00	440.00	5.70	0.10	0.25	

Clear Creek Water Quality Data

UTM X: 628623.1 UTM Y: 4810795.5

Segment Classifications: Coldwater (BC), High Quality Resource (HQR)

Site No.	Site Name	Date	Turbidity-NTU	Atrazine-ppb	MembraneFecal Coliform-per 100mL	E. coli-per 100mL	Nitrate + Nitrite-as N (mg/L)	Ammonia Nitrogen-as N (mg/L)	Total Phosphate-as P (mg/L)	Sample Type
28	Clear Creek	07/21/99	9.9	0.025	29000		1.4	0.05	0.2	Event
28	Clear Creek	10/06/99	4.96	0.025	770		1.7	0.05	0.05	Non-Event
28	Clear Creek	02/24/00	28	0.05	560		1.4	0.4	0.3	Event
28	Clear Creek	05/18/00	8	3	180000		1.2	0.4	0.8	Event
28	Clear Creek	07/05/00	57.7	0.08	3000		1.6	0.1	0.1	Event
28	Clear Creek	08/17/00	13	0.06	17000		1.4	0.1	0.1	Event
28	Clear Creek	10/11/00	4.8	0.05	790		1.8	0.1	0.2	Non-Event
28	Clear Creek	03/22/01	2.21							Event
28	Clear Creek	04/03/01	5	0.05	82		1.6	0.1	0.1	Event
28	Clear Creek	06/15/01	42.8	3.5	25000		1.9	0.1	0.1	Event
28	Clear Creek	01/30/02	2.71	0.05	90		1.9	0.05	0.05	Non-Event
28	Clear Creek	05/02/02		0.05	1500		1.4	0.05	0.07	Non-Event
28	Clear Creek	06/04/02		1.3	140000		1.2	0.32	0.9	Event
28	Clear Creek	07/29/02	7.74		15000		1.3		0.05	Event
28	Clear Creek	04/27/04				520	1.5	0.05	0.07	Non-Event
28	Clear Creek	05/25/04				1500	1.9	0.08	0.13	Event
28	Clear Creek	06/30/04				870	1.7	0.05	0.07	Non-Event
28	Clear Creek	07/27/04				1700	1.8	0.05	0.06	Non-Event
28	Clear Creek	08/31/04				4100	1.8	0.05	0.07	Non-Event
28	Clear Creek	09/28/04				1200	1.8	0.05	0.05	Non-Event
28	Clear Creek	10/27/04				2700	1.9	0.05	0.1	Non-Event
All	Average		15.57	0.69	31753.23	1798.57	1.61	0.12	0.18	
	Geometric Mean		9.25	0.12	3926.35	1476.87	1.59	0.08	0.11	
	Maximum		57.70	3.50	180000.00	4100.00	1.90	0.40	0.90	
Event	Average		19.37	1.01	45515.78	1500.00	1.49	0.18	0.28	
	Geometric Mean		12.22	0.21	9519.19	1500.00	1.47	0.14	0.18	
	Maximum		57.70	3.50	180000.00	1500.00	1.90	0.40	0.90	
Non-Event	Average		4.16	0.04	787.50	1848.33	1.73	0.06	0.08	
	Geometric Mean		4.01	0.04	535.32	1473.05	1.72	0.05	0.07	
	Maximum		4.96	0.05	1500.00	4100.00	1.90	0.10	0.20	

Coldwater Creek Water Quality Data

UTM X: 585138.0 UTM Y: 4809526.1

Segment Classifications: Coldwater (BC), High Quality (HQ)

Site No.	Site Name	Date	Turbidity-NTU	Atrazine-ppb	MembraneFecal Coliform-per 100mL	E. coli-per 100mL	Nitrate + Nitrite-as N (mg/L)	Ammonia Nitrogen-as N (mg/L)	Total Phosphate-as P (mg/L)	Sample Type
9	Coldwater Creek	07/21/99	168	0.61	36000		4.4	0.1	0.5	Event
9	Coldwater Creek	10/06/99	2.57	0.1	73		7.1	0.05	0.05	Non-Event
9	Coldwater Creek	02/24/00	125	0.19	5500		2.8	1	1.4	Event
9	Coldwater Creek	05/18/00	186	18	1100000		4.7	1	3.9	Event
9	Coldwater Creek	07/05/00	12	0.55	3900		6.7	0.2	0.2	Event
9	Coldwater Creek	10/11/00	2.2	0.13	36		7.2	0.1	0.2	Non-Event
9	Coldwater Creek	03/22/01	5.5							Event
9	Coldwater Creek	04/03/01	85	0.07	280		5.2	0.2	0.5	Event
9	Coldwater Creek	06/15/01	1376	13	160000		3.8	0.1	1.9	Event
9	Coldwater Creek	01/30/02	2.64	0.09	55		6.3	0.05	0.1	Non-Event
9	Coldwater Creek	05/02/02		0.11	10		5.6	0.05	0.11	Non-Event
9	Coldwater Creek	06/04/02		1	130000		4.8	0.07	0.53	Event
9	Coldwater Creek	07/29/02	23.3	0.21	9000		5.8		0.2	Event
9	Coldwater Creek	04/27/04		0.08		10	3.3	0.05	0.1	Non-Event
9	Coldwater Creek	05/25/04		1.7		1600	6.6	0.05	0.24	Event
9	Coldwater Creek	06/29/04		0.62		150	6.2	0.05	0.09	Non-Event
9	Coldwater Creek	07/27/04				170	6.3	0.06	0.1	Non-Event
9	Coldwater Creek	08/31/04		0.27		290	6.5	0.05	0.14	Non-Event
9	Coldwater Creek	09/28/04		0.15		150	6.2	0.05	0.11	Non-Event
9	Coldwater Creek	10/27/04		0.11		45	6.1	0.05	0.1	Non-Event
All	Average		180.75	2.06	120404.50	345.00	5.56	0.18	0.55	
	Geometric Mean		28.60	0.36	2516.02	134.56	5.39	0.09	0.24	
	Maximum		1376.00	18.00	1100000.00	1600.00	7.20	1.00	3.90	
Event	Average		247.60	3.93	180585.00	1600.00	4.98	0.34	1.04	
	Geometric Mean		71.75	0.90	21432.52	1600.00	4.82	0.19	0.62	
	Maximum		1376.00	18.00	1100000.00	1600.00	6.70	1.00	3.90	
Non-Event	Average		2.47	0.18	43.50	135.83	6.08	0.06	0.11	
	Geometric Mean		2.46	0.15	34.67	89.06	5.97	0.05	0.10	
	Maximum		2.64	0.62	73.00	290.00	7.20	0.10	0.20	

Coon Creek Water Quality Data

UTM X: 609955.1 UTM Y: 4798678.8

Segment Classifications: Coldwater (BC), High Quality (HQ)

Site No.	Site Name	Date	Turbidity-NTU	Atrazine-ppb	MembraneFecal Coliform-per 100mL	E. coli-per 100mL	Nitrate + Nitrite-as N (mg/L)	Ammonia Nitrogen-as N (mg/L)	Total Phosphate-as P (mg/L)	Sample Type
19	Coon Creek	07/21/99	51.9	0.39	70000		5.2	0.1	1	Event
19	Coon Creek	10/06/99	3.29	0.09	210		5.2	0.05	0.05	Non-Event
19	Coon Creek	02/24/00	17	0.05	5300		4.8	0.7	1.6	Event
19	Coon Creek	05/18/00	22	0.27	32000		3.6	0.2	0.2	Event
19	Coon Creek	07/05/00	33.4	0.22	7200		5.5	0.1	0.2	Event
19	Coon Creek	08/17/00								Event
19	Coon Creek	10/11/00	1.9	0.12	190		4.8	0.1	0.1	Non-Event
19	Coon Creek	03/22/01	7							Event
19	Coon Creek	04/03/01	15	0.09	150		9.2	0.1	0.2	Event
19	Coon Creek	06/15/01	446	11	1100000		4.8	0.5	0.9	Event
19	Coon Creek	01/30/02	3.03	0.08	10		5.1	0.05	0.05	Non-Event
19	Coon Creek	05/02/02		0.07	0.1		5.1	0.05	0.06	Non-Event
19	Coon Creek	06/04/02		14	140000		4.8	0.35	2.2	Event
19	Coon Creek	07/29/02	322	0.38	670000		5	0.25	1.8	Event
19	Coon Creek	04/27/04				60	3.8	0.06	0.06	Non-Event
19	Coon Creek	05/25/04				9200	9.1	0.1	0.22	Event
19	Coon Creek	06/29/04				310	5.8	0.05	0.06	Non-Event
19	Coon Creek	07/27/04				350	5.9	0.05	0.09	Non-Event
19	Coon Creek	08/31/04				550	5.6	0.05	0.08	Non-Event
19	Coon Creek	09/28/04				300	5.3	0.05	0.06	Non-Event
19	Coon Creek	10/27/04				230	5	0.05	0.02	Non-Event
All	Average		83.87	2.23	168755.01	1571.43	5.45	0.16	0.47	
	Geometric Mean		19.82	0.29	2474.82	419.15	5.31	0.10	0.18	
	Maximum		446.00	14.00	1100000.00	9200.00	9.20	0.70	2.20	
Event	Average		114.29	3.30	253081.25	9200.00	5.78	0.27	0.92	
	Geometric Mean		42.05	0.53	32748.61	9200.00	5.52	0.20	0.60	
	Maximum		446.00	14.00	1100000.00	9200.00	9.20	0.70	2.20	
Non-Event	Average		2.74	0.09	102.53	300.00	5.16	0.06	0.06	
	Geometric Mean		2.67	0.09	14.13	250.49	5.13	0.05	0.06	
	Maximum		3.29	0.12	210.00	550.00	5.90	0.10	0.10	

Decorah Dry Run Water Quality Data

UTM X: 599370.4 UTM Y: 4795364.3

Segment Classifications: None

Site No.	Site Name	Date	Turbidity-NTU	Atrazine-ppb	MembraneFecal Coliform-per 100mL	E. coli-per 100mL	Nitrate + Nitrite-as N (mg/L)	Ammonia Nitrogen-as N (mg/L)	Total Phosphate-as P (mg/L)	Sample Type
15	Decorah Dry Run	07/21/99	219	0.025	28000		0.5	0.05	0.5	Event
15	Decorah Dry Run	10/06/99	2.72	0.42	2000		1.8	0.05	0.05	Non-Event
15	Decorah Dry Run	02/24/00	98	0.1	2800		1.5	0.4	0.7	Event
15	Decorah Dry Run	05/18/00	186	0.77	12000		0.6	0.4	0.5	Event
15	Decorah Dry Run	07/05/00	11.3	0.19	3600		2.4	0.1	0.2	Event
15	Decorah Dry Run	08/17/00	41	0.16	9800		1.4	0.1	0.2	Event
15	Decorah Dry Run	10/11/00	1	0.24	1600		2.3	0.1	0.3	Non-Event
15	Decorah Dry Run	03/22/01	23.9							Event
15	Decorah Dry Run	04/03/01	15	0.14	73		3.3	0.1	0.1	Event
15	Decorah Dry Run	06/15/01	10.2	0.32	2600		2.5	0.1	0.1	Event
15	Decorah Dry Run	01/30/02	1.93	0.22	210		1.2	0.05	0.05	Non-Event
15	Decorah Dry Run	05/02/02		0.1	530		2.1	0.05	0.06	Non-Event
15	Decorah Dry Run	06/04/02		0.36	25000		1.5	0.14	0.26	Event
15	Decorah Dry Run	07/29/02	22.6	0.1	3000		2.6		0.28	Event
15	Decorah Dry Run	04/27/04		0.15		20	0.41	0.05	0.07	Non-Event
15	Decorah Dry Run	05/25/04				2200	3.1	0.05	0.17	Event
15	Decorah Dry Run	06/29/04				500	2	0.05	0.12	Non-Event
15	Decorah Dry Run	07/27/04				240	2.4	0.05	0.06	Non-Event
15	Decorah Dry Run	08/31/04				7200	1.9	0.08	0.07	Non-Event
15	Decorah Dry Run	09/30/04				45	1.5	0.06	0.07	Non-Event
15	Decorah Dry Run	10/27/04				370	1.7	0.05	0.13	Non-Event
All	Average		52.72	0.24	7016.38	1510.71	1.84	0.11	0.20	
	Geometric Mean		17.46	0.18	2523.49	349.18	1.62	0.08	0.14	
	Maximum		219.00	0.77	28000.00	7200.00	3.30	0.40	0.70	
Event	Average		69.67	0.24	9652.56	2200.00	1.94	0.16	0.30	
	Geometric Mean		37.67	0.17	4270.58	2200.00	1.65	0.12	0.25	
	Maximum		219.00	0.77	28000.00	2200.00	3.30	0.40	0.70	
Non-Event	Average		1.88	0.23	1085.00	1395.83	1.73	0.06	0.10	
	Geometric Mean		1.74	0.20	772.52	256.94	1.58	0.06	0.08	
	Maximum		2.72	0.42	2000.00	7200.00	2.40	0.10	0.30	

Dry Run Creek/Twin Springs Water Quality Data

UTM X: 596715.4 UTM Y: 4794718.5

Segment Classifications: Coldwater (BC), High Quality Resource (HQR), High Quality (HQ)

Site No.	Site Name	Date	Turbidity-NTU	Atrazine-ppb	MembraneFecal Coliform-per 100mL	E. coli-per 100mL	Nitrate + Nitrite-as N (mg/L)	Ammonia Nitrogen-as N (mg/L)	Total Phosphate-as P (mg/L)	Sample Type
13	Dry Run Creek	07/21/99	891	0.28	890000		3	0.4	2.5	Event
13	Dry Run Creek	10/06/99	1.14	0.1	64		7.1	0.05	0.05	Non-Event
13	Dry Run Creek	02/24/00	68	0.09	2800		4	0.8	0.8	Event
13	Dry Run Creek	05/18/00	11	0.25	2700		4.3	0.1	0.1	Event
13	Dry Run Creek	07/05/00	11.3	0.11	1000		8.2	0.1	0.1	Event
13	Dry Run Creek	08/17/00	480	0.12	160000		4.1	0.1	1	Event
13	Dry Run Creek	10/11/00	2.4	0.16	64		6.9	0.1	4.8	Non-Event
13	Dry Run Creek	03/22/01	92							Event
13	Dry Run Creek	04/03/01	37	0.05	70		9.1	0.1	0.2	Event
13	Dry Run Creek	06/15/01	26.5	0.97	47000		6.8	0.1	0.3	Event
13	Dry Run Creek	01/30/02	1.41	0.05	10		5.5	0.05	0.07	Non-Event
13	Dry Run Creek	05/02/02		0.05	450		5.2	0.05	0.11	Non-Event
13	Dry Run Creek	06/04/02		1.4	49000		4.9	0.13	0.96	Event
13	Dry Run Creek	07/29/02	21	0.32	130000		5.6	0.07	0.64	Event
13	Dry Run Creek	04/27/04		0.05		40	4.9	0.05	0.11	Non-Event
13	Dry Run Creek	05/25/04		1.6		2000	10	0.06	0.25	Event
13	Dry Run Creek	06/29/04		0.33		20	8.7	0.05	0.08	Non-Event
13	Dry Run Creek	07/27/04		0.18		1000	8.9	0.05	0.07	Non-Event
13	Dry Run Creek	08/31/04		0.12		330	7.4	0.05	0.07	Non-Event
13	Dry Run Creek	09/28/04		0.14		60	7.1	0.37	0.06	Non-Event
13	Dry Run Creek	10/27/04		0.11		10	6.8	0.05	0.08	Non-Event
All	Average		136.90	0.32	98704.46	494.29	6.43	0.14	0.62	
	Geometric Mean		23.36	0.17	2705.37	117.91	6.13	0.09	0.22	
	Maximum		891.00	1.60	890000.00	2000.00	10.00	0.80	4.80	
Event	Average		181.98	0.52	142507.78	2000.00	6.00	0.20	0.69	
	Geometric Mean		57.48	0.28	14137.55	2000.00	5.58	0.13	0.42	
	Maximum		891.00	1.60	890000.00	2000.00	10.00	0.80	2.50	
Non-Event	Average		1.65	0.13	147.00	243.33	6.85	0.09	0.55	
	Geometric Mean		1.57	0.11	65.52	73.56	6.73	0.07	0.11	
	Maximum		2.40	0.33	450.00	1000.00	8.90	0.37	4.80	

French Creek Water Quality Data

UTM X: 630056.1 UTM Y: 4808538.1

Segment Classifications: Coldwater (BC), High Quality (HQ)

Site No.	Site Name	Date	Turbidity-NTU	Atrazine-ppb	MembraneFecal Coliform-per 100mL	E. coli-per 100mL	Nitrate + Nitrite-as N (mg/L)	Ammonia Nitrogen-as N (mg/L)	Total Phosphate-as P (mg/L)	Sample Type
29	French Creek	07/21/99	9	0.06	17000		1.5	0.05	0.1	Event
29	French Creek	10/06/99	1.94	0.025	400		1.5	0.05	0.05	Non-Event
29	French Creek	02/24/00	9	0.05	510		1.6	0.1	0.1	Event
29	French Creek	05/18/00	248	3	200000		1.3	0.2	1.2	Event
29	French Creek	07/05/00	14.5	0.06	2000		1.4	0.1	0.1	Event
29	French Creek	08/17/00								Event
29	French Creek	10/11/00	2.2	0.05	90		1.5	0.1	0.2	Non-Event
29	French Creek	02/22/01	1.67							Event
29	French Creek	04/03/01	7	0.05	120		1.5	0.1	0.1	Event
29	French Creek	06/15/01	19.1	0.16	8400		1.5	0.1	0.1	Event
29	French Creek	01/30/02	0.63	0.05	30		1.7	0.05	0.05	Non-Event
29	French Creek	05/02/02		0.05	160		1.4	0.05	0.05	Non-Event
29	French Creek	06/04/02		2.6	16000		1.4	0.1	0.5	Event
29	French Creek	07/29/02	9.64	0.05	14000		1.4			Event
29	French Creek	04/27/04				180	1.4	0.05	0.09	Non-Event
29	French Creek	05/25/04				1900	1.9	0.05	0.1	Event
29	French Creek	06/30/04				60	1.3	0.05	0.22	Non-Event
29	French Creek	07/27/04				870	1.6	0.05	0.04	Non-Event
29	French Creek	08/31/04				480	1.6	0.09	0.02	Non-Event
29	French Creek	09/28/04				420	1.5	0.05	0.02	Non-Event
29	French Creek	10/27/04				11000	1.6	0.05	0.11	Non-Event
All	Average		29.33	0.52	21,559.17	2,130.00	1.51	0.08	0.18	
	Geometric Mean		6.90	0.10	1,505.26	630.46	1.50	0.07	0.10	
	Maximum		248.00	3.00	200,000.00	11,000.00	1.90	0.20	1.20	
Event	Average		39.74	0.75	32,253.75	1,900.00	1.50	0.10	0.29	
	Geometric Mean		12.58	0.17	5,454.10	1,900.00	1.49	0.09	0.17	
	Maximum		248.00	3.00	200,000.00	1,900.00	1.90	0.20	1.20	
Non-Event	Average		1.59	0.04	170.00	2,168.33	1.51	0.06	0.09	
	Geometric Mean		1.39	0.04	114.65	524.57	1.51	0.06	0.06	
	Maximum		2.20	0.05	400.00	11,000.00	1.70	0.10	0.22	

Little Iowa Water Quality Data

UTM X: 538905.0 UTM Y:4820050.3

Segment Classifications: None

Site No.	Site Name	Date	Turbidity-NTU	Atrazine-ppb	MembraneFecal Coliform-per 100mL	E. coli-per 100mL	Nitrate + Nitrite as N (mg/L)	Ammonia Nitrogen-as N (mg/L)	Total Phosphate-as P (mg/L)	Sample Type
2	Little IA	7/21/1999	187	2	3300		7.8	0.05	0.3	Event
2	Little IA	10/6/1999	2.2	0.1	27		7	0.05	0.05	Non-Event
2	Little IA	2/24/2000	20	0.17	220		5	0.7	1.8	Event
2	Little IA	5/18/2000	145	11	1200		16	0.5	0.4	Event
2	Little IA	7/5/2000	4.9	0.61	370		13	0.1	0.1	Event
2	Little IA	8/17/2000	5	0.19	820		4.3	0.1	0.1	Event
2	Little IA	10/11/2000	2.9	0.1	45		5.4	0.1	0.2	Non-Event
2	Little IA	4/3/2001	21	0.11	18		6.4	0.2	1.3	Event
2	Little IA	6/6/2001	9	0.16	350		13	0.1	0.1	Event
2	Little IA	1/30/2002	1.73	0.05	10		4.6	0.05	0.05	Non-Event
2	Little IA	5/2/2002		0.07			12	0.05	0.05	Non-Event
2	Little IA	6/4/2002		14	1800		12	0.53	0.87	Event
2	Little IA	7/29/2002	10.6	0.13	100		1.5		0.07	Event
2	Little IA	4/27/2004		0.22		110	6.3	0.05	0.02	Non-Event
2	Little IA	5/25/2004		1.3		450	24	0.05	0.08	Event
2	Little IA	6/29/2004		0.21		150	16	0.05	0.03	Non-Event
2	Little IA	7/27/2004		0.19		40	9.3	0.08	0.03	Non-Event
2	Little IA	8/31/2004		0.12		120	7.6	0.05	0.04	Non-Event
2	Little IA	9/28/2004		0.12		400	11.0	0.05	0.04	Non-Event
2	Little IA	10/27/2004		0.05		50	8.2	0.05	0.04	Non-Event
All	Average		37.21	1.55	688.33	188.57	9.52	0.15	0.28	
	Geometric Mean		11.03	0.27	198.05	132.39	8.15	0.09	0.11	
	Maximum		187.00	14.00	3300.00	450.00	24.00	0.70	1.80	
Event	Average		50.31	2.97	908.67	450.00	10.30	0.26	0.51	
	Geometric Mean		20.10	0.67	406.00	450.00	8.12	0.17	0.26	
	Maximum		187.00	14.00	3300.00	450.00	24.00	0.70	1.80	
Non-Event	Average		2.28	0.12	27.33	145.00	8.74	0.06	0.06	
	Geometric Mean		2.23	0.11	22.99	107.97	8.18	0.06	0.04	
	Maximum		2.90	0.22	45.00	400.00	16.00	0.10	0.20	

North Bear Creek Water Quality Data

UTM X: 611979.7 UTM Y: 4811661.4

Segment Classifications: Coldwater (BC), High Quality Resource (HQR), High Quality (HQ)

Site No.	Site Name	Date	Turbidity-NTU	Atrazine-ppb	MembraneFecal Coliform-per 100mL	E. coli-per 100mL	Nitrate + Nitrite-as N (mg/L)	Ammonia Nitrogen-as N (mg/L)	Total Phosphate-as P (mg/L)	Sample Type
24	North Bear Creek	07/21/99	40.6	0.15	12000		3.9	0.4	0.3	Event
24	North Bear Creek	10/06/99	2.23	0.06	27		5.6	0.05	0.05	Non-Event
24	North Bear Creek	02/24/00	34	0.09	2300		3.8	0.6	0.5	Event
24	North Bear Creek	05/18/00	166	1.5	610000		3.8	0.6	1.3	Event
24	North Bear Creek	07/05/00	6.9	0.28	2500		5	0.1	0.1	Event
24	North Bear Creek	08/17/00	13	0.14	4800		4.8	0.1	0.1	Event
24	North Bear Creek	10/11/00	2.5	0.08	27		6	0.1	0.2	Non-Event
24	North Bear Creek	03/22/01	2.86							Event
24	North Bear Creek	04/03/01	3	0.07	10		5	0.1	0.1	Event
24	North Bear Creek	06/15/01	17.3	0.21	5400		4.7	0.1	0.1	Event
24	North Bear Creek	01/30/02	1.08	0.08	10		5.6	0.05	0.06	Non-Event
24	North Bear Creek	05/02/02		0.09	10		4.5	0.05	0.05	Non-Event
24	North Bear Creek	06/04/02		0.99	19000		4.2	0.11	0.25	Event
24	North Bear Creek	07/29/02	4.39	0.1	270		4.7			Event
24	North Bear Creek	04/27/04				10	4.1	0.05	0.03	Non-Event
24	North Bear Creek	05/25/04				710	3.9	0.41	0.15	Event
24	North Bear Creek	06/30/04				82	4.3	0.05	0.04	Non-Event
24	North Bear Creek	07/27/04				90	4.5	0.05	0.04	Non-Event
24	North Bear Creek	08/31/04				82	4.6	0.05	0.06	Non-Event
24	North Bear Creek	09/28/04				50	4.7	0.05	0.04	Non-Event
24	North Bear Creek	10/27/04				130	5	0.05	0.12	Non-Event
All	Average		24.49	0.30	50488.77	164.86	4.64	0.16	0.19	
	Geometric Mean		8.11	0.16	654.94	83.34	4.60	0.10	0.11	
	Maximum		166.00	1.50	610000.00	710.00	6.00	0.60	1.30	
Event	Average		32.01	0.39	72920.00	710.00	4.38	0.28	0.32	
	Geometric Mean		13.34	0.22	3369.36	710.00	4.35	0.21	0.21	
	Maximum		166.00	1.50	610000.00	710.00	5.00	0.60	1.30	
Non-Event	Average		1.94	0.08	18.50	74.00	4.89	0.06	0.07	
	Geometric Mean		1.82	0.08	16.43	58.32	4.85	0.05	0.06	
	Maximum		2.50	0.09	27.00	130.00	6.00	0.10	0.20	

North Branch of the Upper Iowa Water Quality Data

UTM X: 537414.4 UTM Y:4819463.7

Segment Classifications: None

Site No.	Site Name	Date	Turbidity-NTU	Atrazine-ppb	MembraneFecal Coliform-per 100mL	E. coli-per 100mL	Nitrate + Nitrite-as N (mg/L)	Ammonia Nitrogen-as N (mg/L)	Total Phosphate-as P (mg/L)	Sample Type
1	N Branch Upper Iowa, MN	07/21/99		1.4	4200		9.2	0.05	0.03	Event
1	N Branch Upper Iowa, MN	10/06/99	2.3	0.11	400		5	0.05	0.1	Non-Event
1	N Branch Upper Iowa, MN	02/24/00	40	0.54	2000		3.3	0.9	0.9	Event
1	N Branch Upper Iowa, MN	05/18/00	376	4	89000		11	0.2	0.8	Event
1	N Branch Upper Iowa, MN	07/05/00	14.6	0.48	750		17	0.1	0.1	Event
1	N Branch Upper Iowa, MN	08/17/00	4	0.3	4200		3.8	0.05	0.1	Event
1	N Branch Upper Iowa, MN	10/11/00	5.1	0.12	410		4.6	0.1	0.1	Non-Event
1	N Branch Upper Iowa, MN	03/03/01	5.92							Event
1	N Branch Upper Iowa, MN	04/03/01	33	0.17	160		7.6	0.3	0.4	Event
1	N Branch Upper Iowa, MN	06/06/01	25	0.66	4000		15	0.1	0.1	Event
1	N Branch Upper Iowa, MN	01/30/02	1.85	0.07	82		4.6	0.05	0.05	Non-Event
1	N Branch Upper Iowa, MN	05/02/02		0.11	36		15	0.05	0.05	Non-Event
1	N Branch Upper Iowa, MN	06/04/02		19	9400		8.6	0.36	1.2	Event
1	N Branch Upper Iowa, MN	07/29/02	18.4	0.09	13000		2.6	0.05	0.14	Event
1	N Branch Upper Iowa, MN	04/27/04		0.13		91	3.6	0.05	0.07	Non-Event
1	N Branch Upper Iowa, MN	05/25/04		0.71		630	25	0.15	0.16	Event
1	N Branch Upper Iowa, MN	06/29/04		0.3		110	18	0.05	0.06	Non-Event
1	N Branch Upper Iowa, MN	07/27/04		0.14		60	11	0.06	0.06	Non-Event
1	N Branch Upper Iowa, MN	08/31/04		0.11		260	12	0.09	0.09	Non-Event
1	N Branch Upper Iowa, MN	09/28/04		0.10		210	12.0	0.05	0.04	Non-Event
1	N Branch Upper Iowa, MN	10/27/04		0.05		930	9.4	0.05	0.03	Non-Event
All	Average		47.83	1.43	9818.31	327.29	9.92	0.14	0.23	
	Geometric Mean		12.95	0.29	1412.59	211.95	8.24	0.09	0.11	
	Maximum		376.00	19.00	89000.00	930.00	25.00	0.90	1.20	
Event	Average		64.62	2.74	14078.89	630.00	10.31	0.23	0.39	
	Geometric Mean		23.02	0.75	3846.15	630.00	8.20	0.14	0.22	
	Maximum		376.00	19.00	89000.00	630.00	25.00	0.90	1.20	
Non-Event	Average		3.08	0.12	232.00	276.83	9.52	0.06	0.07	
	Geometric Mean		2.79	0.11	148.33	176.76	8.29	0.06	0.06	
	Maximum		5.10	0.30	410.00	930.00	18.00	0.10	0.10	

Patterson Creek Water Quality Data

UTM X: 615490.3 UTM Y: 4801803.8

Segment Classifications: Coldwater (BC), High Quality (HQ)

Site No.	Site Name	Date	Turbidity-NTU	Atrazine-ppb	MembraneFecal Coliform-per 100mL	E. coli-per 100mL	Nitrate + Nitrite as N (mg/L)	Ammonia Nitrogen-as N (mg/L)	Total Phosphate-as P (mg/L)	Sample Type
21	Patterson Creek	07/21/99	44.7	0.16	21000		1.8	0.05	0.2	Event
21	Patterson Creek	10/06/99	2.36	0.025	230		2	0.05	0.05	Non-Event
21	Patterson Creek	02/24/00	29	0.12	650		1.8	0.3	0.3	Event
21	Patterson Creek	05/18/00	23	0.23	83000		1.3	0.2	0.2	Event
21	Patterson Creek	07/05/00	18.4	0.37	2100		3.4	0.1	0.1	Event
21	Patterson Creek	08/17/00	134	0.22	45000		3.1	0.1	0.3	Event
21	Patterson Creek	10/11/00	1.5	0.06	90		1.6	0.1	0.4	Non-Event
21	Patterson Creek	03/22/01	3.63							Event
21	Patterson Creek	04/03/01	33	0.12	110		4.4	0.3	0.4	Event
21	Patterson Creek	06/15/01	1536	8.6	170000		2.2	0.3	1.8	Event
21	Patterson Creek	01/30/02	1.42	0.11	10		1.8	0.05	0.05	Non-Event
21	Patterson Creek	05/02/02		0.08	45		3	0.05	0.05	Non-Event
21	Patterson Creek	06/04/02		3.7	110000		2.4	0.33	1.4	Event
21	Patterson Creek	07/29/02	1778	0.46	83000		1.5	0.12	1.7	Event
21	Patterson Creek	04/27/04				30	0.91	0.05	0.14	Non-Event
21	Patterson Creek	05/25/04				2100	4.1	0.11	0.13	Event
21	Patterson Creek	06/30/04				360	1.8	0.05	0.06	Non-Event
21	Patterson Creek	07/27/04				420	2.4	0.05	0.06	Non-Event
21	Patterson Creek	08/31/04				410	1.7	0.05	0.07	Non-Event
21	Patterson Creek	09/28/04				250	1.3	0.05	0.04	Non-Event
21	Patterson Creek	10/27/04				2000	1.6	0.05	0.11	Non-Event
All	Average		300.42	1.10	39633.46	795.71	2.21	0.12	0.38	
	Geometric Mean		26.52	0.24	2525.78	410.16	2.04	0.09	0.17	
	Maximum		1778.00	8.60	170000.00	2100.00	4.40	0.33	1.80	
Event	Average		399.97	1.55	57206.67	2100.00	2.60	0.19	0.65	
	Geometric Mean		66.09	0.44	13810.75	2100.00	2.40	0.16	0.39	
	Maximum		1778.00	8.60	170000.00	2100.00	4.40	0.33	1.80	
Non-Event	Average		1.76	0.07	93.75	578.33	1.81	0.06	0.10	
	Geometric Mean		1.71	0.06	55.25	312.42	1.73	0.05	0.08	
	Maximum		2.36	0.11	230.00	2000.00	3.00	0.10	0.40	

Pine Creek East Water Quality Data

UTM X: 614199.9 UTM Y: 4805607.4

Segment Classifications: Coldwater (BC), High Quality Resource (HQR)

Site No.	Site Name	Date	Turbidity-NTU	Atrazine-ppb	MembraneFecal Coliform-per 100mL	E. coli-per 100mL	Nitrate + Nitrite-as N (mg/L)	Ammonia Nitrogen-as N (mg/L)	Total Phosphate-as P (mg/L)	Sample Type
22	Pine Creek, Satre	07/21/99	5.89	0.12	550		1.9	0.05	0.1	Event
22	Pine Creek, Satre	10/06/99	3.53	0.025	45		2.6	0.05	0.05	Non-Event
22	Pine Creek, Satre	02/24/00	17	0.05	420		1.8	0.6	0.5	Event
22	Pine Creek, Satre	05/18/00	2652	1.3	23000		1.2	1.1	2.4	Event
22	Pine Creek, Satre	07/05/00	6.2	0.1	300		2	0.1	0.1	Event
22	Pine Creek, Satre	08/17/00	9	0.05	2600		2	0.1	0.1	Event
22	Pine Creek, Satre	10/11/00	6.1	0.06	36		2.8	0.1	0.3	Non-Event
22	Pine Creek, Satre	03/22/01	3.54							Event
22	Pine Creek, Satre	04/03/01	3	0.05	10		2.6	0.1	0.1	Event
22	Pine Creek, Satre	06/15/01	8.2	0.35	660		2.1	0.1	0.1	Event
22	Pine Creek, Satre	01/30/02	2.7	0.05	10		2.6	0.05	0.05	Non-Event
22	Pine Creek, Satre	05/02/02		0.05	0.1		2	0.05	0.05	Non-Event
22	Pine Creek, Satre	06/04/02		0.42	640		1.6	0.05	0.05	Event
22	Pine Creek, Satre	07/29/02	6.43		100		1.4		0.06	Event
22	Pine Creek, Satre	04/27/04				10	0.98	0.05	0.02	Non-Event
22	Pine Creek, Satre	05/25/04				700	1.6	0.05	0.08	Event
22	Pine Creek, Satre	06/30/04				120	1.3	0.05	0.15	Non-Event
22	Pine Creek, Satre	07/27/04				150	1.6	0.05	0.04	Non-Event
22	Pine Creek, Satre	08/31/04				200	1.7	0.05	0.05	Non-Event
22	Pine Creek, Satre	09/28/04				50	1.6	0.05	0.03	Non-Event
22	Pine Creek, Satre	10/27/04				70	1.9	0.05	0.08	Non-Event
All	Average		226.97	0.22	2182.39	185.71	1.86	0.15	0.22	
	Geometric Mean		9.41	0.10	129.34	98.22	1.80	0.08	0.09	
	Maximum		2652.00	1.30	23000.00	700.00	2.80	1.10	2.40	
Event	Average		301.25	0.31	3142.22	700.00	1.82	0.25	0.36	
	Geometric Mean		12.65	0.15	493.95	700.00	1.78	0.13	0.14	
	Maximum		2652.00	1.30	23000.00	700.00	2.60	1.10	2.40	
Non-Event	Average		4.11	0.05	22.78	100.00	1.91	0.06	0.08	
	Geometric Mean		3.87	0.04	6.34	70.80	1.82	0.05	0.06	
	Maximum		6.10	0.06	45.00	200.00	2.80	0.10	0.30	

Pine Creek West Water Quality Data

UTM X: 589131.6 UYM Y:4806769.9

Segment Classifications: Coldwater (BC), High Quality Resource (HQR)

Site No.	Site Name	Date	Turbidity-NTU	Atrazine-ppb	MembraneFecal Coliform-per 100mL	E. coli-per 100mL	Nitrate + Nitrite-as N (mg/L)	Ammonia Nitrogen-as N (mg/L)	Total Phosphate-as P (mg/L)	Sample Type
10	Pine Creek, Burr Oak	07/21/99	393	0.39	9400		5	0.05	0.8	Event
10	Pine Creek, Burr Oak	10/06/99	3.22	0.08	410		6.5	0.05	0.1	Non-Event
10	Pine Creek, Burr Oak	02/24/00	251	0.12	2100		2.1	0.7	1.2	Event
10	Pine Creek, Burr Oak	05/18/00	2196	12	600000		2.8	0.9	4.3	Event
10	Pine Creek, Burr Oak	07/05/00	19.4	0.5	1600		8.2	0.6	0.2	Event
10	Pine Creek, Burr Oak	10/11/00	1.5	0.17	91		6	0.1	0.2	Non-Event
10	Pine Creek, Burr Oak	03/22/01	11.5							Event
10	Pine Creek, Burr Oak	04/03/01	296	0.05	280		5.8	0.1	0.7	Event
10	Pine Creek, Burr Oak	06/15/01	4800	26	200000		3.6	0.5	5.9	Event
10	Pine Creek, Burr Oak	01/30/02	2.5	0.09	10		5	0.05	0.08	Non-Event
10	Pine Creek, Burr Oak	05/02/02		0.07	0.1		3.5	0.05	0.1	Non-Event
10	Pine Creek, Burr Oak	06/04/02		0.17	1500		2.7	0.08	0.22	Event
10	Pine Creek, Burr Oak	07/29/02	46.6	0.17	360		3.8		0.22	Event
10	Pine Creek, Burr Oak	04/27/04		0.08		10	0.94	0.05	0.07	Non-Event
10	Pine Creek, Burr Oak	05/25/04		0.84		2900	7.8	0.44	0.24	Event
10	Pine Creek, Burr Oak	06/29/04		0.57		470	8.7	0.05	0.06	Non-Event
10	Pine Creek, Burr Oak	07/27/04		0.23		170	7.4	0.05	0.1	Non-Event
10	Pine Creek, Burr Oak	08/31/04		0.15		260	5.5	0.05	0.16	Non-Event
10	Pine Creek, Burr Oak	09/28/04		0.12		680	4.7	0.05	0.12	Non-Event
10	Pine Creek, Burr Oak	10/27/04		0.09		470	4.8	0.05	0.12	Non-Event
All	Average		729.16	2.20	67979.26	708.57	4.99	0.22	0.78	
	Geometric Mean		60.34	0.27	725.83	294.59	4.45	0.11	0.26	
	Maximum		4800.00	26.00	600000.00	2900.00	8.70	0.90	5.90	
Event	Average		1001.69	4.47	101905.00	2900.00	4.64	0.42	1.53	
	Geometric Mean		205.66	0.59	5245.36	2900.00	4.20	0.28	0.70	
	Maximum		4800.00	26.00	600000.00	2900.00	8.20	0.90	5.90	
Non-Event	Average		2.41	0.17	127.78	343.33	5.30	0.06	0.11	
	Geometric Mean		2.29	0.13	13.90	201.23	4.69	0.05	0.10	
	Maximum		3.22	0.57	410.00	680.00	8.70	0.10	0.20	

Silver Creek East Water Quality Data

UTM X: 624635.6 UTM Y: 4805528.0

Segment Classifications: Coldwater (BC), High Quality (HQ)

Site No.	Site Name	Date	Turbidity-NTU	Atrazine-ppb	MembraneFecal Coliform-per 100mL	E. coli-per 100mL	Nitrate + Nitrite-as N (mg/L)	Ammonia Nitrogen-as N (mg/L)	Total Phosphate-as P (mg/L)	Sample Type
27	Silver Creek, Waukon	07/21/99	19	0.14	36000		1.7	0.1	0.2	Event
27	Silver Creek, Waukon	10/06/99	6.84	0.025	2400		1.9	0.05	0.05	Non-Event
27	Silver Creek, Waukon	02/24/00	25	0.05	1000		1.6	0.5	0.3	Event
27	Silver Creek, Waukon	05/18/00	774	4.7	300000		1.2	0.3	1.5	Event
27	Silver Creek, Waukon	07/05/00	21.5	0.2	5700		2.2	0.1	0.1	Event
27	Silver Creek, Waukon	08/17/00	192	0.06	390000		1.8	0.1	0.4	Event
27	Silver Creek, Waukon	10/11/00	1.2	0.05	320		1.8	0.1	0.3	Non-Event
27	Silver Creek, Waukon	03/22/01	1.89							Event
27	Silver Creek, Waukon	04/03/01	2	0.05	540		1.8	0.1	0.1	Event
27	Silver Creek, Waukon	06/15/01	246	1.4	180000		1.4	0.1	0.4	Event
27	Silver Creek, Waukon	01/30/02	2.59	0.05	80		1.9	0.05	0.05	Non-Event
27	Silver Creek, Waukon	05/02/02		0.05	82		1.6	0.05	0.06	Non-Event
27	Silver Creek, Waukon	06/04/02		13	280000		2.3	0.35	1.8	Event
27	Silver Creek, Waukon	07/29/02	68.7	0.06	210000		1.5	0.05	0.42	Event
27	Silver Creek, Waukon	04/27/04				10	1	0.05	0.05	Non-Event
27	Silver Creek, Waukon	05/25/04				2000	2.1	0.05	0.1	Event
27	Silver Creek, Waukon	06/30/04				50	1.4	0.05	0.05	Non-Event
27	Silver Creek, Waukon	07/27/04				170	1.5	0.05	0.03	Non-Event
27	Silver Creek, Waukon	08/31/04				1100	1.7	0.05	0.06	Non-Event
27	Silver Creek, Waukon	09/28/04				60	1.4	0.05	0.02	Non-Event
27	Silver Creek, Waukon	10/27/04				270	1.7	0.05	0.06	Non-Event
All	Average		113.39	1.53	108163.23	522.86	1.68	0.12	0.30	
	Geometric Mean		18.89	0.17	8142.24	162.79	1.64	0.08	0.13	
	Maximum		774	13	390000	2000	2.3	0.5	1.8	
Event	Average		150.01	2.18	155915.56	2000.00	1.76	0.18	0.53	
	Geometric Mean		35.81	0.30	37223.99	2000.00	1.73	0.13	0.32	
	Maximum		774.00	13.00	390000.00	2000.00	2.30	0.50	1.80	
Non-Event	Average		3.54	0.04	720.50	276.67	1.59	0.06	0.07	
	Geometric Mean		2.77	0.04	266.42	107.17	1.57	0.05	0.05	
	Maximum		6.84	0.05	2400.00	1100.00	1.90	0.10	0.30	

Silver Creek Cresco Water Quality Data

UTM X: 579635.9 UTM Y: 4807094.1

Segment Classifications: None

Site No.	Site Name	Date	Turbidity-NTU	Atrazine-ppb	MembraneFecal Coliform-per 100mL	E. coli-per 100mL	Nitrate + Nitrite-as N (mg/L)	Ammonia Nitrogen-as N (mg/L)	Total Phosphate-as P (mg/L)	Sample Type
8	Silver Creek, Cresco	07/21/99	151	0.75	130000		6.5	0.05	0.9	Event
8	Silver Creek, Cresco	10/06/99	2.82	0.11	500		9.8	0.05	0.6	Non-Event
8	Silver Creek, Cresco	02/24/00	96	0.16	1900		5.2	0.6	1.9	Event
8	Silver Creek, Cresco	05/18/00	2820	9.2	690000		5.9	1.8	4.5	Event
8	Silver Creek, Cresco	07/05/00	14.8	0.35	1100		11	0.2	0.2	Event
8	Silver Creek, Cresco	08/17/00	16	0.15	5400		8.2	0.1	0.8	Event
8	Silver Creek, Cresco	10/11/00	2.2	0.12	400		10	0.1	0.8	Non-Event
8	Silver Creek, Cresco	03/22/01	6.73							Event
8	Silver Creek, Cresco	04/03/01	44	0.07	320		9.5	0.1	0.5	Event
8	Silver Creek, Cresco	06/15/01	52.2	2.5	45000		10	0.1	0.4	Event
8	Silver Creek, Cresco	05/02/02		0.09	470		8.9	0.05	0.9	Non-Event
8	Silver Creek, Cresco	06/04/02		4.2	12000		4.9	0.26	3.3	Event
8	Silver Creek, Cresco	07/29/02	45.6	0.31	200000		6	0.28	1.2	Event
8	Silver Creek, Cresco	04/27/04		0.07		2400	2.2	0.05	0.08	Non-Event
8	Silver Creek, Cresco	05/25/04		1.6		4400	13	0.05	0.38	Event
8	Silver Creek, Cresco	06/29/04		0.41		470	11	0.05	0.52	Non-Event
8	Silver Creek, Cresco	07/27/04		0.29		500	12	0.05	0.53	Non-Event
8	Silver Creek, Cresco	08/31/04		0.2		410	10	0.05	0.92	Non-Event
8	Silver Creek, Cresco	09/28/04		0.14		310	9.4	0.05	1.6	Non-Event
8	Silver Creek, Cresco	10/27/04		0.06		330	7.9	0.05	1.5	Non-Event
All	Average		295.58	1.09	90590.83	1260.00	8.49	0.21	1.13	
	Geometric Mean		32.47	0.32	6209.92	723.81	7.93	0.10	0.77	
	Maximum		2820.00	9.20	690000.00	4400.00	13.00	1.80	4.50	
Event	Average		360.70	1.93	120635.56	4400.00	8.02	0.35	1.41	
	Geometric Mean		57.46	0.68	14843.80	4400.00	7.61	0.18	0.91	
	Maximum		2820.00	9.20	690000.00	4400.00	13.00	1.80	4.50	
Non-Event	Average		2.51	0.17	456.67	736.67	9.02	0.06	0.83	
	Geometric Mean		2.49	0.14	454.68	535.78	8.31	0.05	0.65	
	Maximum		2.82	0.41	500.00	2400.00	12.00	0.10	1.60	

South Bear Creek Water Quality Data

UTM X: 611811.4 UTM Y: 4811448.1

Segment Classifications: Coldwater (BC), High Quality (HQ)

Site No.	Site Name	Date	Turbidity-NTU	Atrazine-ppb	MembraneFecal Coliform-per 100mL	E. coli-per 100mL	Nitrate + Nitrite-as N (mg/L)	Ammonia Nitrogen-as N (mg/L)	Total Phosphate-as P (mg/L)	Sample Type
23	South Bear Creek	07/21/99	7.73	0.18	17000		3.3	0.05	0.2	Event
23	South Bear Creek	10/06/99	1.05	0.1	60		5	0.05	0.05	Non-Event
23	South Bear Creek	02/24/00	24	0.08	1600		2.7	0.5	0.5	Event
23	South Bear Creek	05/18/00	193	1.6	95000		3	0.3	0.5	Event
23	South Bear Creek	07/05/00	10.4	0.37	5300		3.8	0.1	0.1	Event
23	South Bear Creek	08/17/00	7	0.08	1300		3.7	0.1	0.1	Event
23	South Bear Creek	10/11/00	3.6	0.06	10		4.5	0.1	0.2	Non-Event
23	South Bear Creek	03/22/01	2.84							Event
23	South Bear Creek	04/03/01	3	0.05	10		4.1	0.1	0.1	Event
23	South Bear Creek	06/15/01	7.61	0.14	11000		3.6	0.1	0.1	Event
23	South Bear Creek	01/30/02	1.18	0.05	10		4.7	0.05	0.05	Non-Event
23	South Bear Creek	05/02/02		0.06	0.1		3.6	0.05	0.05	Non-Event
23	South Bear Creek	06/04/02		0.88	89000		3.2	0.1	0.39	Event
23	South Bear Creek	07/29/02	2.33	0.05	73000		3.6		0.09	Event
23	South Bear Creek	04/27/04				10	3.2	0.05	0.03	Non-Event
23	South Bear Creek	05/25/04				2200	2.9	0.19	0.12	Event
23	South Bear Creek	06/30/04				80	3.3	0.05	0.09	Non-Event
23	South Bear Creek	07/27/04				90	3.7	0.05	0.03	Non-Event
23	South Bear Creek	08/31/04				230	3.8	0.05	0.06	Non-Event
23	South Bear Creek	09/28/04				91	3.9	0.05	0.04	Non-Event
23	South Bear Creek	10/27/04				50	4.2	0.05	0.06	Non-Event
All	Average		21.98	0.28	22560.78	393.00	3.69	0.11	0.14	
	Geometric Mean		5.89	0.13	687.28	107.49	3.65	0.08	0.10	
	Maximum		193.00	1.60	95000.00	2200.00	5.00	0.50	0.50	
Event	Average		28.66	0.38	32578.89	2200.00	3.39	0.17	0.22	
	Geometric Mean		9.02	0.18	6157.46	2200.00	3.36	0.13	0.17	
	Maximum		193.00	1.60	95000.00	2200.00	4.10	0.50	0.50	
Non-Event	Average		1.94	0.07	20.03	91.83	3.99	0.06	0.07	
	Geometric Mean		1.65	0.07	4.95	64.99	3.95	0.05	0.06	
	Maximum		3.60	0.10	60.00	230.00	5.00	0.10	0.20	

Staff Creek Water Quality Data

UTM X: 546564.5 UTM Y: 4815554.6

Segment Classifications: Coldwater (BC), High Quality Resource (HQR)

Site No.	Site Name	Date	Turbidity-NTU	Atrazine-ppb	MembraneFecal Coliform-per 100mL	E. coli-per 100mL	Nitrate + Nitrite-as N (mg/L)	Ammonia Nitrogen-as N (mg/L)	Total Phosphate-as P (mg/L)	Sample Type
3	Staff Creek	02/24/00	39	0.09	860		4.4	0.5	0.7	Event
3	Staff Creek	07/21/99	558	0.95	29000		6.4	0.05	0.8	Event
3	Staff Creek	10/06/99	5.7	0.1	220		4.9	0.05	0.05	Non-Event
3	Staff Creek	05/18/00	46	0.7	25000		4.3	0.3	0.1	Event
3	Staff Creek	07/05/00	9.7	0.43	1200		16	0.5	0.2	Event
3	Staff Creek	10/11/00	1.8	0.12	230		3.9	0.1	0.2	Non-Event
3	Staff Creek	03/22/01	5.42							Event
3	Staff Creek	04/03/01	68	0.05	80		8.7	0.1	0.3	Event
3	Staff Creek	06/15/01	201	4.3	5300		15	0.1	0.4	Event
3	Staff Creek	01/30/02	11.7	0.07	120		4.5	0.05	0.11	Non-Event
3	Staff Creek	05/02/02		0.13	40		13	0.05	0.05	Non-Event
3	Staff Creek	06/04/02		77	500		9.4	0.28	3.5	Event
3	Staff Creek	07/29/02	14.4	0.16	700		1.6		0.16	Event
3	Staff Creek	04/27/04		0.09		90	5.8	0.05	0.04	Non-Event
3	Staff Creek	05/25/04		2.2		1300	25	0.06	0.18	Event
3	Staff Creek	06/30/04		0.43		110	18	0.05	0.04	Non-Event
3	Staff Creek	07/27/04		0.18		1900	16	0.05	0.05	Non-Event
3	Staff Creek	08/31/04		0.16		530	9.2	0.05	0.05	Non-Event
3	Staff Creek	09/28/04		0.12		1100	11	0.05	0.05	Non-Event
3	Staff Creek	10/27/04		0.08		340	8	0.05	0.06	Non-Event
All	Average		87.34	4.60	5270.83	767.14	9.74	0.14	0.37	
	Geometric Mean		23.56	0.31	740.01	467.04	8.00	0.09	0.14	
	Maximum		558.00	77.00	29000.00	1900.00	25.00	0.50	3.50	
Event	Average		117.69	9.54	7830.00	1300.00	10.09	0.24	0.70	
	Geometric Mean		42.36	0.81	1801.70	1300.00	7.70	0.17	0.37	
	Maximum		558.00	77.00	29000.00	1300.00	25.00	0.50	3.50	
Non-Event	Average		6.40	0.15	152.50	678.33	9.43	0.06	0.07	
	Geometric Mean		4.93	0.13	124.84	393.78	8.28	0.05	0.06	
	Maximum		11.70	0.43	230.00	1900.00	18.00	0.10	0.20	

Ten Mile Creek Water Quality Data

UTM X: 592963.4 UTM Y: 4798376.4

Segment Classifications: Coldwater (BC), High Quality Resource (HQR)

Site No.	Site Name	Date	Turbidity-NTU	Atrazine-ppb	MembraneFecal Coliform-per 100mL	E. coli-per 100mL	Nitrate + Nitrite as N (mg/L)	Ammonia Nitrogen-as N (mg/L)	Total Phosphate-as P (mg/L)	Sample Type
12	Ten Mile Creek	07/21/99	456	1.2	100000		3.5	0.05	1.4	Event
12	Ten Mile Creek	10/06/99	2.69	0.11	40		5	0.05	0.05	Non-Event
12	Ten Mile Creek	02/24/00	146	0.76	4500		3	1.1	1.5	Event
12	Ten Mile Creek	05/18/00	27	1.1	2700		3	0.2	0.1	Event
12	Ten Mile Creek	07/05/00	4.9	0.52	430		7.2	0.1	0.1	Event
12	Ten Mile Creek	08/17/00	29	0.26	700		4.7	0.1	0.2	Event
12	Ten Mile Creek	10/11/00	2.7	0.2	100		4	0.1	0.2	Non-Event
12	Ten Mile Creek	03/22/01	23.9							Event
12	Ten Mile Creek	04/03/01	81	0.15	160		6.5	0.1	0.5	Event
12	Ten Mile Creek	06/15/01	97.7	5	110000		8.3	0.3	0.5	Event
12	Ten Mile Creek	01/30/02	2.27	0.09	110		3.6	0.05	0.09	Non-Event
12	Ten Mile Creek	05/02/02		0.2	10		3.7	0.05	0.06	Non-Event
12	Ten Mile Creek	06/04/02		1.1	1000		4.1	0.05	0.47	Event
12	Ten Mile Creek	07/29/02	369	1	120000		3	0.26	1.3	Event
12	Ten Mile Creek	04/27/04		0.1		10	3.1	0.05	0.07	Non-Event
12	Ten Mile Creek	05/25/04		2.4		6400	14	0.14	0.34	Event
12	Ten Mile Creek	06/29/04		0.63		220	9.1	0.05	0.06	Non-Event
12	Ten Mile Creek	07/27/04		0.38		380	7.9	0.05	0.1	Non-Event
12	Ten Mile Creek	08/31/04		0.37			6	0.05	0.09	Non-Event
12	Ten Mile Creek	09/28/04		0.16		10	4.4	0.05	0.1	Non-Event
12	Ten Mile Creek	10/27/04		0.12		36	4.1	0.05	0.1	Non-Event
All	Average		103.51	0.79	24268.57	1176.00	5.41	0.15	0.37	
	Geometric Mean		28.56	0.41	1098.67	111.54	4.90	0.09	0.19	
	Maximum		456.00	5.00	120000.00	6400.00	14.00	1.10	1.50	
Event	Average		137.17	1.35	37721.11	6400.00	5.73	0.24	0.64	
	Geometric Mean		63.93	0.88	4510.29	6400.00	5.01	0.15	0.43	
	Maximum		456.00	5.00	120000.00	6400.00	14.00	1.10	1.50	
Non-Event	Average		2.55	0.24	65.00	131.20	5.09	0.06	0.09	
	Geometric Mean		2.55	0.19	45.80	49.63	4.80	0.05	0.09	
	Maximum		2.70	0.63	110.00	380.00	9.10	0.10	0.20	

Trout River Water Quality Data

UTM X: 607785.0 UTM Y: 4796925.8

Segment Classifications: Coldwater (BC), High Quality Resource (HQR), High Quality (HQ), Limited Resource Warm Water (BLR)

Site No.	Site Name	Date	Turbidity-NTU	Atrazine-ppb	MembraneFecal Coliform-per 100mL	E. coli-per 100mL	Nitrate + Nitrite-as N (mg/L)	Ammonia Nitrogen-as N (mg/L)	Total Phosphate-as P (mg/L)	Sample Type
18	Trout River	07/21/99	407	0.2	60000		5.4	0.05	0.9	Event
18	Trout River	10/06/99	7.37	0.06	670		5.3	0.05	0.05	Non-Event
18	Trout River	02/24/00	70	0.08	2000		3.7	0.6	0.6	Event
18	Trout River	05/18/00	12	0.1	2700		3.2	0.2	0.1	Event
18	Trout River	07/05/00	7	0.16	1300		8.1	0.1	0.1	Event
18	Trout River	08/17/00	277	0.1	39000		5.8	0.1	0.5	Event
18	Trout River	10/11/00	1.8	0.05	830		5	0.1	0.3	Non-Event
18	Trout River	03/22/01	82.2							Event
18	Trout River	04/03/01	111	0.06	250		10	0.1	0.4	Event
18	Trout River	06/15/01	19.6	0.41	6300		7.4	0.1	0.1	Event
18	Trout River	01/30/02	0.97	0.05	36		5.7	0.05	0.05	Non-Event
18	Trout River	05/02/02		0.05	0.1		6.4	0.05	0.06	Non-Event
18	Trout River	06/04/02		19	6600		6.4	0.06	0.53	Event
18	Trout River	07/29/02	1852	0.38	320000		2.1	0.26	2.6	Event
18	Trout River	04/27/04				380	3.2	0.36	0.06	Non-Event
18	Trout River	05/25/04				4500	10	0.05	0.24	Event
18	Trout River	06/29/04				380	8	0.05	0.04	Non-Event
18	Trout River	07/27/04				490	7.7	0.05	0.08	Non-Event
18	Trout River	08/31/04				550	5.7	0.05	0.06	Non-Event
18	Trout River	09/28/04				500	4.8	0.05	0.04	Non-Event
18	Trout River	10/27/04				410	4.5	0.05	0.05	Non-Event
All	Average		237.33	1.59	33822.01	1030.00	5.92	0.12	0.34	
	Geometric Mean		34.48	0.16	1434.98	621.71	5.52	0.09	0.15	
	Maximum		1852.00	19.00	320000.00	4500.00	10.00	0.60	2.60	
Event	Average		315.31	2.28	48683.33	4500.00	6.21	0.16	0.61	
	Geometric Mean		84.50	0.25	7239.78	4500.00	5.59	0.12	0.36	
	Maximum		1852.00	19.00	320000.00	4500.00	10.00	0.60	2.60	
Non-Event	Average		3.38	0.05	384.03	451.67	5.63	0.09	0.08	
	Geometric Mean		2.34	0.05	37.62	447.01	5.46	0.07	0.06	
	Maximum		7.37	0.06	830.00	550.00	8.00	0.36	0.30	

Trout Run Water Quality Data

UTM X: 600650.6 UTM Y: 4793711.7

Segment Classifications: Coldwater (BC), High Quality Resource (HQR), High Quality (HQ), Limited Resource Warm Water (BLR)

Site No.	Site Name	Date	Turbidity-NTU	Atrazine-ppb	MembraneFecal Coliform-per 100mL	E. coli-per 100mL	Nitrate + Nitrite-as N (mg/L)	Ammonia Nitrogen-as N (mg/L)	Total Phosphate-as P (mg/L)	Sample Type
16	Trout Run	07/21/99	1028	0.5	200000		3.7	0.4	2.8	Event
16	Trout Run	10/06/99	3.36	0.08	210		6.2	0.05	0.1	Non-Event
16	Trout Run	02/24/00	101	0.1	5800		3.8	1	1.3	Event
16	Trout Run	05/18/00	2	0.52	740		3.7	0.1	0.1	Event
16	Trout Run	07/05/00	6.3	0.29	1200		7.5	0.1	0.2	Event
16	Trout Run	08/17/00	792	0.15	400000		3.9	0.2	1.9	Event
16	Trout Run	10/11/00	1.8	0.09	30		5.7	0.1	0.2	Non-Event
16	Trout Run	03/22/01	83.5							Event
16	Trout Run	04/03/01	90	0.05	130		9.6	0.1	0.4	Event
16	Trout Run	06/15/01	52	0.4	50000		6.5	0.1	0.3	Event
16	Trout Run	01/30/02	1.61	0.05	10		4.9	0.05	0.06	Non-Event
16	Trout Run	05/02/02		0.09	36		5.2	0.05	0.15	Non-Event
16	Trout Run	06/04/02		22	200000		4.5	0.55	1.8	Event
16	Trout Run	07/29/02	1684	0.36	190000		2.8	0.31	1.9	Event
16	Trout Run	04/27/04				100	3.4	0.05	0.1	Non-Event
16	Trout Run	05/25/04				13000	11	0.07	0.4	Event
16	Trout Run	06/29/04				310	8.1	0.05	0.1	Non-Event
16	Trout Run	07/27/04				1700	7.7	0.05	0.12	Non-Event
16	Trout Run	08/31/04				270	5.9	0.05	0.11	Non-Event
16	Trout Run	09/28/04				110	5.4	0.05	0.09	Non-Event
16	Trout Run	10/27/04				20	5.2	0.05	0.1	Non-Event
All	Average		320.46	1.90	80627.38	2215.71	5.74	0.17	0.61	
	Geometric Mean		37.03	0.22	2585.59	327.83	5.38	0.10	0.27	
	Maximum		1684.00	22.00	400000.00	13000.00	11.00	1.00	2.80	
Event	Average		426.53	2.71	116430.00	13000.00	5.70	0.29	1.11	
	Geometric Mean		95.83	0.38	16713.59	13000.00	5.15	0.20	0.68	
	Maximum		1684.00	22.00	400000.00	13000.00	11.00	1.00	2.80	
Non-Event	Average		2.26	0.08	71.50	418.33	5.77	0.06	0.11	
	Geometric Mean		2.14	0.08	38.81	177.53	5.62	0.05	0.11	
	Maximum		3.36	0.09	210.00	1700.00	8.10	0.10	0.20	

Upper Iowa River Decorah Water Quality Data

UTM X: 601986.0 UTM Y: 4795476.9

Segment Classifications: Recreational Use (A), High Quality Resource (HQR), Significant Warm Water Resource (BW)

Site No.	Site Name	Date	Turbidity-NTU	Atrazine-ppb	MembraneFecal Coliform-per 100mL	E. coli-per 100mL	Nitrate + Nitrite-as N (mg/L)	Ammonia Nitrogen-as N (mg/L)	Total Phosphate-as P (mg/L)	Sample Type
17	Upper Iowa River, Decorah	07/21/99	463	0.95	47000		4.4	0.05	1	Event
17	Upper Iowa River, Decorah	10/06/99	6.32	0.12	20		5.8	0.05	0.1	Non-Event
17	Upper Iowa River, Decorah	02/24/00	245	0.22	5400		2.6	1.1	1.6	Event
17	Upper Iowa River, Decorah	05/18/00	32	0.36	4100		2.7	0.3	0.5	Event
17	Upper Iowa River, Decorah	07/05/00	19.7	0.57	860		8.3	0.1	0.2	Event
17	Upper Iowa River, Decorah	08/17/00	459	0.14	290000		4.4	0.1	1.1	Event
17	Upper Iowa River, Decorah	10/11/00	2.2	0.12	20		5.2	0.1	0.2	Non-Event
17	Upper Iowa River, Decorah	03/22/01	30.8							Event
17	Upper Iowa River, Decorah	04/03/01	191	0.09	140		7.1	0.1	0.7	Event
17	Upper Iowa River, Decorah	06/15/01	153	1.8	3600		8.8	0.1	0.3	Event
17	Upper Iowa River, Decorah	01/30/02	1.47	0.07	10		5	0.05	0.11	Non-Event
17	Upper Iowa River, Decorah	06/04/02		10	120000		3.9	0.26	1	Event
17	Upper Iowa River, Decorah	07/29/02	550	0.28	220000		3.2	0.14	1.3	Event
17	Upper Iowa River, Decorah	04/27/04				20	2.3	0.05	0.1	Non-Event
17	Upper Iowa River, Decorah	05/25/04				1800	13	0.12	0.34	Event
17	Upper Iowa River, Decorah	07/27/04				230	8.5	0.05	0.08	Non-Event
17	Upper Iowa River, Decorah	08/31/04				400	5.9	0.05	0.13	Non-Event
17	Upper Iowa River, Decorah	09/28/04				82	7.2	0.05	0.08	Non-Event
17	Upper Iowa River, Decorah	10/27/04				20	5.7	0.05	0.11	Non-Event
All	Average		179.46	1.23	57595.83	425.33	5.78	0.16	0.50	
	Geometric Mean		51.30	0.34	2213.21	132.58	5.22	0.10	0.30	
	Maximum		550.00	10.00	290000.00	1800.00	13.00	1.10	1.60	
Event	Average		238.17	1.60	76788.89	1800.00	5.84	0.24	0.80	
	Geometric Mean		136.31	0.52	11476.27	1800.00	5.08	0.15	0.66	
	Maximum		550.00	10.00	290000.00	1800.00	13.00	1.10	1.60	
Non-Event	Average		3.33	0.10	16.67	150.40	5.70	0.06	0.11	
	Geometric Mean		2.73	0.10	15.87	78.69	5.39	0.05	0.11	
	Maximum		6.32	0.12	20.00	400.00	8.50	0.10	0.20	

Upper Iowa River Mouth Water Quality Data

UTM X: 637881.2 UTM Y: 4814924.1

Segment Classifications: Recreational Use (A), High Quality Resource (HQR), Significant Warm Water Resource (BW)

Site No.	Site Name	Date	Turbidity-NTU	Atrazine-ppb	MembraneFecal Coliform-per 100mL	E. coli-per 100mL	Nitrate + Nitrite-as N (mg/L)	Ammonia Nitrogen-as N (mg/L)	Total Phosphate-as P (mg/L)	Sample Type
30	Mouth of Upper Iowa River	07/21/99	456	0.87	3300		3.8	0.05	0.6	Event
30	Mouth of Upper Iowa River	10/06/99	5.07	0.07	40		4	0.05	0.05	Non-Event
30	Mouth of Upper Iowa River	02/24/00	381	0.05	4300		2.6	1.2	0.6	Event
30	Mouth of Upper Iowa River	05/18/00	122	2.8	92000		2	0.3	0.6	Event
30	Mouth of Upper Iowa River	07/05/00	37.3	0.37	1000		6.4	0.1	0.2	Event
30	Mouth of Upper Iowa River	08/17/00	22	0.31	6400		3.7	0.1	0.1	Event
30	Mouth of Upper Iowa River	10/11/00	2.3	0.09	10		3.3	0.1	0.2	Non-Event
30	Mouth of Upper Iowa River	03/22/01	9.63							Event
30	Mouth of Upper Iowa River	04/03/01	110	0.08	40		7.4	0.1	0.4	Event
30	Mouth of Upper Iowa River	06/15/01	10.6	0.69	5500		6.1	0.1	0.1	Event
30	Mouth of Upper Iowa River	01/30/02	2.03	0.05	27		3.4	0.05	0.05	Non-Event
30	Mouth of Upper Iowa River	05/02/02		0.19	220		7.4	0.05	0.2	Non-Event
30	Mouth of Upper Iowa River	06/04/02		0.98	20000		2.4	0.05	0.48	Event
30	Mouth of Upper Iowa River	07/29/02	71.5	0.15	820		2		0.31	Event
30	Mouth of Upper Iowa River	04/27/04				10	1.4	0.05	0.06	Non-Event
30	Mouth of Upper Iowa River	05/25/04				920	11	0.1	0.57	Event
30	Mouth of Upper Iowa River	06/30/04				110	7.2	0.05	0.08	Non-Event
30	Mouth of Upper Iowa River	07/27/04				200	6.6	0.05	0.13	Non-Event
30	Mouth of Upper Iowa River	08/31/04				430	4.4	0.05	0.14	Non-Event
30	Mouth of Upper Iowa River	09/28/04				110	5.4	0.05	0.09	Non-Event
30	Mouth of Upper Iowa River	10/27/04				40	4	0.05	0.04	Non-Event
All	Average		102.45	0.52	10281.31	260.00	4.73	0.14	0.25	
	Geometric Mean		28.84	0.24	816.45	121.14	4.15	0.08	0.17	
	Maximum		456.00	2.80	92000.00	920.00	11.00	1.20	0.60	
Event	Average		135.56	0.70	14817.78	920.00	4.74	0.23	0.40	
	Geometric Mean		62.21	0.36	3145.51	920.00	4.02	0.13	0.33	
	Maximum		456.00	2.80	92000.00	920.00	11.00	1.20	0.60	
Non-Event	Average		3.13	0.10	74.25	150.00	4.71	0.06	0.10	
	Geometric Mean		2.87	0.09	39.26	86.41	4.29	0.05	0.09	
	Maximum		5.07	0.19	220.00	430.00	7.40	0.10	0.20	

Waterloo Creek Water Quality Data

UTM X: 619840.4 UTM Y: 4809955.8

Segment Classifications: Coldwater (BC), High Quality (HQ)

Site No.	Site Name	Date	Turbidity-NTU	Atrazine-ppb	MembraneFecal Coliform-per 100mL	E. coli-per 100mL	Nitrate + Nitrite-as N (mg/L)	Ammonia Nitrogen-as N (mg/L)	Total Phosphate-as P (mg/L)	Sample Type
26	Waterloo Creek	07/21/99	14.3	0.1	96000		3	0.05	0.3	Event
26	Waterloo Creek	10/06/99	2.78	0.06	10		3.9	0.05	0.05	Non-Event
26	Waterloo Creek	02/24/00	44	0.07	1700		2.6	3.4	0.6	Event
26	Waterloo Creek	05/18/00	89	0.79	110000		2.9	0.2	0.6	Event
26	Waterloo Creek	07/05/00	3.1	0.08	420		3.2	0.1	0.1	Event
26	Waterloo Creek	08/17/00	5	0.11	7200		3.3	0.1	0.1	Event
26	Waterloo Creek	10/11/00	2.5	0.07	40		4.2	0.1	0.3	Non-Event
26	Waterloo Creek	03/22/01	1.53							Event
26	Waterloo Creek	04/03/01	3	0.05	10		3.9	0.1	0.1	Event
26	Waterloo Creek	06/15/01	15	0.56	3900		3.4	0.1	0.1	Event
26	Waterloo Creek	01/30/02	2.4	0.05	10		4.1	0.05	0.05	Non-Event
26	Waterloo Creek	05/02/02		0.06	0.1		3.2	0.05	0.05	Non-Event
26	Waterloo Creek	06/04/02		0.46	21000		2.8	0.05	0.19	Event
26	Waterloo Creek	07/29/02	2.65	0.05	1200		3			Event
26	Waterloo Creek	04/27/04				10	2.9	0.05	0.05	Non-Event
26	Waterloo Creek	05/25/04				800	3	0.06	0.09	Event
26	Waterloo Creek	06/30/04				90	3.1	0.05	0.06	Non-Event
26	Waterloo Creek	07/27/04				410	3.3	0.05	0.04	Non-Event
26	Waterloo Creek	08/31/04				530	3.3	0.05	0.04	Non-Event
26	Waterloo Creek	09/28/04				170	3.5	0.05	0.03	Non-Event
26	Waterloo Creek	10/27/04				170	3.7	0.05	0.07	Non-Event
All	Average		15.44	0.19	18576.16	311.43	3.32	0.25	0.15	
	Geometric Mean		6.10	0.11	437.23	172.37	3.29	0.08	0.10	
	Maximum		89.00	0.79	110000.00	800.00	4.20	3.40	0.60	
Event	Average		19.73	0.25	26825.56	800.00	3.11	0.46	0.24	
	Geometric Mean		8.15	0.15	3351.51	800.00	3.09	0.13	0.18	
	Maximum		89.00	0.79	110000.00	800.00	3.90	3.40	0.60	
Non-Event	Average		2.56	0.06	15.03	230.00	3.52	0.06	0.07	
	Geometric Mean		2.56	0.06	4.47	133.46	3.50	0.05	0.06	
	Maximum		2.78	0.07	40.00	530.00	4.20	0.10	0.30	