Laboratory Results

Table 3. 1999 Bacteria Data

LOCATION	MAY		JUNE		AUG.		SEPT.		OCT.		MEAN	
	Fecal	E. coli	Fecal	E. coli	Fecal	E. coli	Fecal	E. coli	Fecal	E. coli	Fecal	E. coli
Beaver River #1	3	3	69	66	184	179	19	19	28	26	61	59
Beaver River #2	3	3	105	104	170	170	54	47	-	-	83	81
Beaver River #3	31	26	160	150	260	260	52	52	720	716	245	241
Beaver River #4	72	71	218	215	250	200	64	64	104	50	142	120
Beaver River #4b	-	-	216	215	72	72	61	61	106	56	114	101
Beaver River #5	50	50	210	210	520	520	78	78	36	20	179	176
Green Falls #1	-	-	270	260	290	240	48	-	5	2	153	167
Green Falls #2	-	-	720	700	110	110	560	-	22	8	353	273
Green Falls #3	-	-	770	770	390	390	1570	-	50	8	695	389
Meadow Brook	-	-	-	-	-	-	-	-	210	204	210	204
Meadow Brook #1	-	-	8000	7000	-	-	242	234	112	56	2785	2430
Meadow Brook #2	-	-	390	380	310	310	94	83	-	-	265	258
Meadow Brook #3	-	-	93	93	100	100	262	262	172	172	157	157
Queen #1	-	-	-	-	270	270	20	21	6	4	99	98
Queen #2	-	-	-	-	35	29	44	39	14	10	31	26
Queen #3	-	-	-	-	10	10	48	42	10	8	23	20
Queen #4	-	-	-	-	27	24	140	103	98	98	88	75

Table 4. **2000 Bacteria Data**

	----------(count per 100 mL)----------											
LOCATION	**May**		**June**		**July**		**Aug**		**Sept**		**Oct**	
	Fecal	E. coli	Fecal	E. coli	Fecal	E. coli	Fecal	E. coli	Fecal	E. coli	Fecal	E. coli
BEAVER RIVER #1	40	33	37	33	15	15	17	16	103	100	<1	<1
BEAVER RIVER #2	243	243	16	14	58	58	24	24	73	60	28	28
BEAVER RIVER #3	20	20	-	-	37	37	53	51	73	73	-	-
BEAVER RIVER #4	60	60	50	50	73	73	100	100	-	-	45	45
BEAVER RIVER #5	173	173	53	53	97	97	160	160	440	400	40	40
GREEN FALLS RIVER #1	17	17	9	9	59	54	23	21	-	-	2	2
GREEN FALLS RIVER #2	73	73	27	27	32	31	24	24	-	-	36	36
GREEN FALLS RIVER #3	550	520	260	250	220	190	260	240	-	-	107	107
MEADOW BROOK #1	370	370	200	200	1400	1400	230	200	700	700	27	26
MEADOW BROOK #2	46	45	62	59	10	10	38	36	120	120	<2	<2
MEADOW BROOK #3	57	57	30	30	187	187	130	110	140	140	18	18
QUEEN RIVER #1	23	23	13	13	9	8	13	12	113	107	15	15
QUEEN RIVER #2	25	22	2	1	-	-	27	25	310	300	<3	<3
QUEEN RIVER #3	-	-	20	16	-	-	70	67	143	133	<3	<3
QUEEN RIVER #4	153	147	80	80	5	5	-	-	77	77	140	140
QUEEN RIVER #5	11	11	11	10	47	45	240	228	647	633	-	-
LOCUSTVILLE #1	176	176	7	7	350	340	250	220	470	450	-	-
LOCUSTVILLE #2	-	-	-	-	-	-	230	220	40	40	-	-
LOCUSTVILLE #3	58	58	9	7	8	8	23	3	120	120	-	-
LOCUSTVILLE #4	< 2	< 2	179	175	-	-	-	-	-	-	-	-
LOCUSTVILLE #5	-	-	-	-	-	-	-	-	20	20	-	-

EPA fresh water standards for recreational contact: Fecal coliform not to exceed 200 fecal coliform / 100 ml.E. coli not to exceed 126 E. coli /100 ml.

Table 5. **1999 Total Phosphorus Data**

LOCATION	MAY	JUNE	JULY	SEPT.	OCT.	MEAN
	- - (ug/l or ppb) - -					
Beaver River #1	14	21	9	13	11	14
Beaver River #2	13	12	8	12	-	11
Beaver River #3	8	4	4	9	9	7
Beaver River #4	8	3	14	11	7	9
Beaver River #4B	-	2	9	10	7	7
Beaver River #5	7	4	19	13	23	13
Green Falls River #1	-	ND	13	27	5	12
Green Falls River #2	-	19	17	14	10	15
Green Falls River #3	-	9	8	31	11	15
Meadow Brook #1	-	80	-	22	12	38
Meadow Brook #2	-	22	25	23	20	23
Meadow Brook #3	-	25	23	28	16	23
Queen River #1	-	-	4	-	4	4
Queen River #2	-	-	7	-	7	7
Queen River #3	-	-	7	-	4	6
Queen River #4	-	-	6	-	8	7

Table 6. **2000 Total Phosphorus Data**

LOCATION	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	MEAN
	- - (ug/l or ppb) - -						
BEAVER RIVER #1	8	21	29	-	15	14	17
BEAVER RIVER #2	15	24	27	11	12	10	17
BEAVER RIVER #3	7	-	18	6	10	-	10
BEAVER RIVER #4	14	53	28	22	-	6	25
BEAVER RIVER #5	7	14	27	11	12	9	13
GREEN FALLS RIVER #1	10	10	29	5	-	7	12
GREEN FALLS RIVER #2	16	10	22	13	-	18	16
GREEN FALLS RIVER #3	15	17	22	11	-	33	20
MEADOW BROOK #1	23	26	35	20	25	14	24
MEADOW BROOK #2	18	31	49	27	32	21	30
MEADOW BROOK #3	12	29	43	22	31	16	26
QUEEN RIVER #1	ND	7	5	4	6	8	5
QUEEN RIVER #2	8	12	-	5	7	12	9
QUEEN RIVER #3	-	12	-	18	11	6	12
QUEEN RIVER #4	13	37	41	17	17	9	22
QUEEN RIVER #5	12	36	20	-	18	-	22
LOCUSTVILLE #1	8	44	15	14	11	-	18
LOCUSTVILLE 32	-	-	-	13	6	-	10
LOCUSTVILLE #3	6	9	21	6	6	-	10
LOCUSTVILLE #4	5	6	-	-	-	-	6
LOCUSTVILLE #5	-	-	-	9	6	-	8

Council for Environmental Quality recommends a maximum of 100 ppb for in-stream concentrations.

Table 7. **1999 Nitrate-nitrogen Data**

LOCATION	MAY	JUNE	JULY	SEPT.	OCT.	MEAN
Beaver River #1	470	570	660	520	510	**546**
Beaver River #2	450	530	590	450	-	505
Beaver River #3	100	160	290	-	55	151
Beaver River #4	200	280	530	-	365	344
Beaver River 4B	-	620	2210	-	105	978
Beaver River #5	425	760	2120	-	395	925
Green Falls River #1	-	110	290	-	ND	200
Green Falls River #2	-	80	340	-	ND	210
Green Falls River #3	-	1070	offscale	-	250	660
Meadowbrook #1	-	310	-	-	55	182.5
Meadowbrook #2	-	190	80	-	50	107
Meadowbrook #3	-	340	280	-	65	228
Queen River #1	280	-	30	-	235	182
Queen River #2	300	-	480	-	200	327
Queen River #3	-	-	70	-	35	52.5
Queen River #4	-	-	180	-	70	125

Table 8. **2000 Nitrate-nitrogen Data**

LOCATION	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	MEAN
	- - (ug/l or ppb) - -						
BEAVER RIVER #1	70	130	100	280	80	50	118
BEAVER RIVER #2	80	110	130	140	100	60	103
BEAVER RIVER #3	90	-	180	180	140	-	148
BEAVER RIVER #4	420	880	790	720	-	630	688
BEAVER RIVER #5	360	550	790	750	440	650	590
GREEN FALLS RIVER #1	50	80	110	110	-	ND	74
GREEN FALLS RIVER #2	ND	140	260	80	-	ND	104
GREEN FALLS RIVER #3	320	570	1750	1130	-	1120	978
MEADOW BROOK #1	110	160	260	160	70	120	147
MEADOW BROOK #2	70	220	220	210	170	ND	152
MEADOW BROOK #3	80	150	340	250	150	ND	165
QUEEN RIVER #1	90	110	150	110	70	ND	92
QUEEN RIVER #2	130	150	-	130	90	ND	104
QUEEN RIVER #3	-	150	-	430	290	90	240
QUEEN RIVER #4	360	370	1280	-	270	400	536
QUEEN RIVER #5	270	300	300	250	150	-	254
LOCUSTVILLE #1	100	200	280	240	40	-	172
LOCUSTVILLE #2	-	-	-	ND	ND	-	ND
LOCUSTVILLE #3	ND	40	ND	30	ND	-	ND
LOCUSTVILLE #4	ND	ND	-	-	-	-	ND
LOCUSTVILLE #5	-	-	-	ND	ND	-	ND

There are currently no set standards for nitrates in streams.

Table 9. **1999 Ammonia-nitrogen Data**

LOCATION	MAY	JUNE	JULY	SEPT.	OCT.	MEAN
Beaver River #1	60	150	40	ND	ND	83
Beaver River #2	710	100	15	ND	-	275
Beaver River #3	90	40	20	ND	50	50
Beaver River #4	310	60	35	ND	30	109
Beaver River 4B	-	50	50	ND	ND	50
Beaver River #5	610	40	80	ND	30	190
Green Falls River #1	-	ND	65	40	ND	31
Green Falls River #2	-	50	25	ND	ND	24
Green Falls River #3	-	60	15	20	ND	26
Meadowbrook #1	-	150	-	20	40	70
Meadowbrook #2	-	80	-	50	ND	65
Meadowbrook #3	-	ND	-	20	ND	20
Queen River #1	0	0	0	0	ND	
Queen River #2	0	0	0	0	ND	
Queen River #3	0	0	0	0	ND	
Queen River #4	0	0	0	0	ND	

Table 10. **2000 Ammonia-nitrogen Data**

LOCATION	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	MEAN
	- - - - - - - - - - - - - (ug/l or ppb) - - - - - - - - - - - - -						
BEAVER RIVER #1	70	100	80	70	40	40	67
BEAVER RIVER #2	ND	85	70	70	30	50	53
BEAVER RIVER #3	60	-	ND	40	ND	-	30
BEAVER RIVER #4	ND	100	ND	50	-	40	42
BEAVER RIVER #5	30	70	50	30	60	40	47
GREEN FALLS RIVER #1	ND	60	50	40	-	ND	34
GREEN FALLS RIVER #2	50	ND	ND	40	-	ND	24
GREEN FALLS RIVER #3	50	60	50	70	-	40	54
MEADOW BROOK #1	ND	60	100	40	ND	30	42
MEADOW BROOK #2	ND	-	100	60	60	70	60
MEADOW BROOK #3	30	90	50	50	ND	40	45
QUEEN RIVER #1	ND	30	40	60	ND	30	30
QUEEN RIVER #2	ND	30	-	30	ND	30	22
QUEEN RIVER #3	-	ND	-	80	30	30	38
QUEEN RIVER #4	ND	40	ND	-	50	40	30
QUEEN RIVER #5	ND	40	30	40	ND	-	26
LOCUSTVILLE #1	ND	ND	ND	ND	ND	-	10
LOCUSTVILLE #2	-	-	-	30	ND	-	20
LOCUSTVILLE #3	30	40	40	ND	30	-	30
LOCUSTVILLE #4	60	40	-	-	40	-	47
LOCUSTVILLE #5	-	-	-	-	ND	-	10

There are currently no standards for ammonia-nitrogen in streams.

Table 11. **1999 Chloride Data**

LOCATION	MAY	JUNE	JULY	SEPT.	OCT.	MEAN
Beaver River #1	20	20	15	75	20	30
Beaver River #2	15	20	15	20	-	18
Beaver River #3	15	15	15	20	20	17
Beaver River #4	20	15	15	15	20	17
Beaver River 4B	15	15	40	-	20	23
Beaver River #5	15	15	40	-	20	23
Green Falls River #1	-	5	ND	5	5	5
Green Falls River #2	-	10	45	-	10	22
Green Falls River #3	-	10	40	10	10	18
Meadow Brook Inlet	-	-	-	15	20	18
Meadowbrook #1	-	10	-	10	10	10
Meadowbrook #2	-	10	ND	10	15	12
Meadowbrook #3	-	10	ND	10	15	12
Queen River #1	-	-	10	10	10	10
Queen River #2	-	-	ND	10	10	10
Queen River #3	-	-	15	15	15	15
Queen River #4	-	-	15	10	15	13

Table 12. **2000 Chloride Data**

LOCATION	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	MEAN
	- - - - - - - - - - - - - (mg/L or ppm) - - - - - - - - - - - - - -						
BEAVER RIVER #1	15	20	20	15	15	20	18
BEAVER RIVER #2	15	15	20	20	15	15	17
BEAVER RIVER #3	15	-	15	15	15	-	15
BEAVER RIVER #4	15	20	15	15	-	15	16
BEAVER RIVER #5	15	15	30	15	15	15	18
GREEN FALLS RIVER #1	5	5	5	10	-	5	6
GREEN FALLS RIVER #2	10	5	10	30	-	10	13
GREEN FALLS RIVER #3	10	10	15	15	-	15	13
MEADOW BROOK #1	15	15	15	10	10	15	13
MEADOW BROOK #2	15	-	10	15	15	15	14
MEADOW BROOK #3	15	10	10	15	10	15	13
QUEEN RIVER #1	5	5	10	15	10	10	9
QUEEN RIVER #2	10	-	-	10	10	10	10
QUEEN RIVER #3	-	10	-	10	10	15	11
QUEEN RIVER #4	10	10	15	-	10	15	12
QUEEN RIVER #5	10	15	15	10	10	-	12
LOCUSTVILLE #1	10	5	10	10	5	-	8
LOCUSTVILLE #2	-	-	-	5	ND	-	**3**
LOCUSTVILLE #3	15	15	20	25	10	-	15
LOCUSTVILLE #4	5	5	-	-	-	-	9
LOCUSTVILLE #5	-	-	-	-	10	-	10

EPA suggested drinking water standard is 250 ppm. The EPA standard is the point at which a salty taste becomes generally apparent.

Table 13. **1999 pH Data**

LOCATION	MAY	JUNE	JULY	SEPT.	OCT.	MEAN
Beaver River #1	6.6	6.2	*	6.3	6.0	6.3
Beaver River #2	6.5	6.6	*	6.2	*	6.4
Beaver River #3	6.6	6.7	*	6.4	6.1	6.4
Beaver River #4	6.4	6.4	*	6.3	6.1	6.3
Beaver River #4B	*	6.6	*	6.0	5.9	6.2
Beaver River #5	6.3	6.8	6.9	6.3	6.6	6.6
Green Falls River #1	*	6.6	6.5	5.0	5.8	6.0
Green Falls River #2	*	7.1	6.3	5.9	6.2	6.3
Green Falls River #3	*	6.8	7.1	6.0	6.2	6.5
Meadow Brook Inlet	*	*	*	*	6.5	6.5
Meadow Brook #1	*	6.4	*	5.7	5.4	5.8
Meadow Brook #2	*	6.6	*	6.3	6.3	6.4
Meadow Brook #3	*	6.6	*	6.5	6.1	6.4
Queen River #1	*	*	5.6	6.1	5.7	5.8
Queen River #2	*	*	7.1	6.7	6.3	6.7
Queen River #3	*	*	6.4	6.3	5.8	6.2
Queen River #4	*	*	6.4	6.3	5.9	6.2

Table 14. **2000 pH Data**

LOCATION	MAY	JUNE	JULY	AUG.	SEPT	OCT.	MEAN
	- - - - - - - - - - - - - (pH) - - - - - - - - - - - - -						
BEAVER RIVER #1	6.2	5.9	6.3	6.0	6.0	6.2	6.1
BEAVER RIVER #2	6.2	6.6	6.3	5.8	6.2	6.4	6.2
BEAVER RIVER #3	6.1	-	6.2	5.9	6.4	-	6.2
BEAVER RIVER #4	6.1	6.6	7.7	6.0	-	6.4	6.6
BEAVER RIVER #5	6.2	6.3	7.0	6.0	6.5	6.4	6.4
GREEN FALLS RIVER #1	6.2	6.4	6.5	6.2	-	6.4	6.3
GREEN FALLS RIVER #2	6.6	6.4	6.4	6.4	-	6.5	6.4
GREEN FALLS RIVER #3	6.5	6.4	6.6	6.4	-	6.5	6.5
MEADOW BROOK #1	5.8	5.9	6.5	5.5	6.3	6.7	6.1
MEADOW BROOK #2	6.2	6.2	-	6.3	6.4	6.4	6.3
MEADOW BROOK #3	6.4	6.6	-	6.4	6.5	6.4	6.5
QUEEN RIVER #1	5.7	6.2	6.6	5.7	5.8	6.3	6.0
QUEEN RIVER #2	6.6	6.6	-	6.5	6.5	6.7	6.6
QUEEN RIVER #3	-	6.4	-	5.8	6.3	6.4	6.2
QUEEN RIVER #4	6.2	-	6.4	-	6.2	6.4	6.3
QUEEN RIVER #5	6.4	6.5	6.2	5.9	6.3	-	6.3
LOCUSTVILLE #1	5.7	5.9	6.5	5.7	4.8	-	5.7
LOCUSTVILLE #2	-	-	-	5.5	4.6	-	5.1
LOCUSTVILLE #3	5.8	6.4	6.6	6.3	5.7	-	6.2
LOCUSTVILLE #4	5.7	5.9	DRY	-	-	-	5.8
LOCUSTVILLE #5	-	-	-	4.5	4.2	-	4.4

Normal pH range for streams is between 6 and 9 pH units. The pH scale is logarithmic, which means that a change in one whole number indicates a tenfold difference in acidity.