

# Spirit Creek Watershed Monitoring Committee

## Spring Runoff Sampling Summary

Parameter	-----Spring / 2001-----		-----Spring / 2002-----		-----Spring / 2003-----		-----Spring / 2004-----	
	Low/High	Average/Mean	Low/High	Average/Mean	Low/High	Average/Mean	Low/High	Average/Mean
Conductivity	506 810	652 (733)	246 743	427 (381)	137 380	270 (267)	149 345	221 (198)
Nitrate	1.08 39.2	24.2 (5.1)	0 4	0.6 (0)	1 14	5.5 (3)	N/A	N/A
Sulphate	125 256	193 (217)	42 261	96 (79)	11 63	31 (29)	2.2 60.9	22.06 (19.4)
pH	7.1 8.0	7.6 (7.7)	7.2 8.9	7.6 (7.5)	7.2 7.7	7.4 (7.4)	7.4 7.9	7.6 (7.6)
Total Alkalinity	94 126	110 (112)	76 148	108 (102)	44 112	88 (90)	54 100	70.8 (70)
Bicarbonate	115 154	134 (137)	93 181	128 (124)	54 137	107 (110)	66 122	86 (86.5)
Sodium	5 14	8.9 (9)	2 9	4.6 (4)	0 4	3 (3)	2 7	3.6 (3)
Magnesium	28 46	37 (41)	13 34	21 (19)	4 18	11 (10)	5 17	8.9 (8)
Calcium	35 84	63 (69)	26 85	41 (38)	11 36	24 (24)	8 31	20 (20)
Total Hardness	227 391	310 (311)	123 352	192 (183)	44 164	104 (103)	41 147	87 (83)
Chloride	0 6	2.5 (4)	0 10	0.09 (0)	0 4	0.5 (0)	0.7 21.5	3.8 (2.15)
Potassium	15 22	18.1 (17)	5 18	14 (14)	8 32	18 (18)	10 23	14.9 (14.5)
Turbidity	0.71 1.09	0.82 (0.71)	1.23 18.2	3.7 (1.9)	1.62 10.04	3.1 (2.56)	2.2 34	11.3 (5.4)
Biochem Oxygen Demand	2.4 5.1	3.6 (3.3)	1.6 6.9	3.5 (3.2)	3.8 19	7.6 (7.3)	3.8 11	6.8 (6.1)
Dissolved Organic Carbon	14 26	20.9 (22)	10 19	16.3 (18)	13 50	25 (18)	12.9 20.1	16 (15.6)
Ammonia	0.04 0.48	0.22 (0.2)	0.02 0.08	0.05 (0.04)	0.05 2.1	0.32 (0.17)	0.12 2.93	0.69 (0.38)
Nitrate-N	2.3 10.0	5.7 (5.1)	N/A	N/A	N/A	N/a	0.97 2.05	1.44 (1.36)
Total Kjeldahl Nitrogen	1.5 3.0	2.06 (2.0)	0.9 2.5	1.6 (1.6)	1.3 5.1	2.4 (2)	1.6 5.6	2.48 (2.1)
Total Phosphorus	0.14 0.71	0.38 (0.38)	0.11 0.56	0.34 (0.35)	0.14 1.33	0.5 (0.44)	0.37 2.11	0.65 (0.48)
Phosphorus (Ortho)	0.08 0.66	0.31 (0.29)	0.04 0.47	0.23 (0.24)	0.04 1.0	0.37 (0.33)	0.21 1.87	0.49 (0.295)
Chlorophyll A	0.2 19.4	3.5 (1.9)	2.1 14.19	10.3 (7.3)	0 51.11	6.9 (2.75)	1.9 17.94	3.8 (2.91)
Total Coliform	0 200	38 (10)	210 18000	3940 (1900)	200 9000	1940 (1200)	40 160000	64880 (3500)
Fecal Coliform	0	0	0 300	84 (10)	0 70	9.3 (0)	0 2100	324 (135)
Fecal Strep	0 190	71.3 (40)	30 5100	1197 (560)	120 41000	5998 (2800)	210 24000	10787 (8350)
Hetro. Plate Count	1600 66000	15733	6900 131000	49891 (85000)	10200 872000	208811 (8900)	N/A	N/A
Lead	0 0.001	0	N/A	N/A	N/A	N/A	N/A	N/A
Manganese	0 0.19	0.03 (0.01)	0 0.12	0.04 (0.01)	0 0.23	0.05 (0.02)	0 0.07	0.025 (0.02)
Iron	0 0.7	0.13 (0.0)	0 0.4	0.11 (0.1)	0 0.04	0.06 (<0.1)	0 1.2	0.26 (0.1)
Barium	0 0.05	0	N/A	N/A	N/A	N/A	N/A	N/A
Aluminum	0.02 0.4	0.14 (0.07)	0 0.4	0.07 (0.04)	0 0.18	0.032 (0.04)	0.02 1.07	0.25 (0.085)
Selenium	<0.001	0 (0)	0 0.001	0.00009 (0)	0 0.001	0.00007 (0)	0 0	0 (0)
Total Dissolved Solids	354 523	458 (446)	208 533	310 (291)	97 287	200 (204)	111 255	161 (147)

\*N/A= not available (--)= Mean Average 0= not detectable