

Ashfield-Colborne Lakefront Association Water Sampling 2004

E. COLI (cfu/100ml)

Site	April14/04	April 28/04	May 12/04	May 26/04	June 9/04	June 23/04	July 7/04	July 21/04	Aug 4/04	Aug 18/04	Sept 1/04	Sept 15/04	Sept 29/04	Oct 13/04	Oct 27/04
A1	33	47	200	200	220	230	1600	600	480	300	830	560	490	90	2900
A2	48	15	100	2700	80	210	530	400	170	200	320	40	310	260	20
A3	28	6	37	700	1150	490	6900	400	390	90	180	60	10	20	<10
A4	12	17	76	1000	280	2000	1850	400	570	105	140	180	160	80	60
A5	42	400	400	2400	3500	2400	17000	980	480	18	480	60	No Sample	No Sample	210
A6	26	41	29	600	430	440	3300	580	140	80	810	780	440	1620	10800
A7	24	26	42	200	3700	1700	1400	380	810	70	200	<10	110	90	2100
A8	10	14	35	400	90	190	1370	130	100	95	120	180	170	40	20
A9	37	300	100	3300	310	2000	8700	1110	780	700	90	10	410	100	10
C1	32	105	100	400	240	320	11500	530	390	900	200	40	90	80	50
C2	6	100	52	1200	990	260	39000	820	1280	90	120	100	30	30	30
C3	No Sample	No Sample	35	600	70	30	1070	410	90	60	150	150	250	50	160

Exceeds recreation limit (100 cfu/100ml) but less than 1000
 Exceeds limit for recreation by 10x
 Microbiologists often consider an order of magnitude (10 fold) as a significant difference

NITRATE as N (mg/l)

Site	April14/04	April 28/04	May 12/04	May 26/04	June 9/04	June 23/04	July 7/04	July 21/04	Aug 4/04	Aug 18/04	Sept 1/04	Sept 15/04	Sept 29/04	Oct 13/04	Oct 27/04
A1	4.49	3.94	5.79	7.62	5.18	5.20	2.10	6.31	1.77	<0.1	1.13	0.30	<0.1	<0.1	4.04
A2	3.93	3.15	4.70	6.79	5.25	5.80	3.73	4.66	3.54	3.52	1.90	0.69	0.48	0.61	3.83
A3	4.04	2.42	4.31	5.76	2.14	1.87	0.56	4.13	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
A4	4.88	4.15	5.58	7.46	5.53	5.22	3.59	7.23	3.14	2.73	1.85	1.69	2.14	2.69	1.85
A5	5.09	4.27	5.92	10.30	5.65	7.09	11.40	6.80	0.27	<0.1	0.10	<0.1	No Sample	No Sample	<0.1
A6	5.59	4.40	6.64	11.80	5.10	6.50	6.24	6.27	0.40	<0.1	0.13	0.19	<0.1	<0.1	0.35
A7	4.09	2.10	5.47	11.70	3.29	3.63	7.23	5.65	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.84
A8	2.47	1.89	1.40	2.60	1.87	1.63	1.72	1.26	1.17	1.22	0.97	0.86	1.30	1.54	1.23
A9	3.78	2.87	3.26	5.00	3.77	4.34	2.88	3.94	2.44	1.82	1.39	0.60	<0.1	0.63	1.23
C1	3.53	3.04	4.15	7.17	3.47	5.71	5.87	4.71	0.79	0.13	<0.1	<0.1	<0.1	<0.1	2.03
C2	4.17	4.11	5.05	6.13	4.59	4.90	7.85	3.62	3.76	3.81	3.42	3.30	4.34	4.73	3.60
C3	No Sample	No Sample	4.58	6.63	3.47	3.47	2.05	2.61	1.43	0.85	0.66	0.51	0.58	0.97	1.88

Exceeds MVCA target for healthy fish and amphibian eggs 4 mg/L of nitrate as N (Proposed Canadian Aquatic Objective is 2.9 mg/L of nitrate as N)

TOTAL PHOSPHOROUS P (mg/l)

Site	April14/04	April 28/04	May 12/04	May 26/04	June 9/04	June 23/04	July 7/04	July 21/04	Aug 4/04	Aug 18/04	Sept 1/04	Sept 15/04	Sept 29/04	Oct 13/04	Oct 27/04
A1	0.008	No Sample	0.009	0.036	0.016	0.028	0.038	0.050	0.044	0.024	0.030	0.029	0.035	0.037	0.055
A2	0.036	No Sample	0.010	0.107	0.017	0.021	0.042	0.143	0.023	No sample	0.031	0.021	0.032	0.017	0.014
A3	0.018	No Sample	0.015	0.037	0.037	0.035	0.119	0.099	0.219	0.130	0.310	0.136	0.132	0.147	0.149
A4	0.021	No Sample	0.007	0.160	0.018	0.017	0.071	0.099	0.053	0.013	0.012	0.016	0.014	0.005	0.015
A5	0.012	No Sample	0.015	0.215	0.032	0.027	0.327	0.100	0.081	0.123	0.151	0.043	No Sample	No Sample	0.123
A6	0.015	No Sample	0.020	0.104	0.022	0.013	0.062	0.110	0.365	0.100	0.120	0.113	0.232	0.112	0.038
A7	0.009	No Sample	0.010	0.078	0.024	0.026	0.063	0.032	0.066	0.081	0.035	0.061	0.095	0.154	0.046
A8	0.010	No Sample	0.013	0.077	0.017	0.013	0.075	0.040	0.025	0.010	0.012	0.012	0.006	0.006	<0.002
A9	0.015	No Sample	0.035	0.100	0.037	0.041	0.376	0.084	0.028	0.039	0.037	0.081	0.041	0.016	0.015
C1	0.010	No Sample	0.022	0.036	0.029	0.017	0.253	0.043	0.028	0.019	0.020	0.019	0.025	0.016	0.015
C2	0.010	No Sample	0.025	0.106	0.027	0.027	0.708	0.052	0.021	0.021	0.041	0.026	0.009	<0.002	0.006
C3	No Sample	No Sample	0.022	0.171	0.019	0.007	0.107	0.065	0.017	0.012	0.019	0.014	0.006	0.006	0.016

Exceeds MVCA target to avoid excessive algae growth of 0.03 mg/L Total Phosphorus as P (Interim Prov. Water Quality Objective for streams and rivers is 0.03 mg/L)

	Site										
	A1	A2	A3	A4	A5	A6	A7	A8	A9	C1	C2
	Boyd Creek	Eighteen Mile	Kintail Creek	Kerrys Creek	Near Kingsbridge	Griffins Creek	Near Midhuron	Nine Mile River	Boundary Creek	Bogies Road Creek	Allans Cree
amples above 4 mg/l of Nitrate as N	50%	38%	25%	50%	57%	56%	38%	0%	13%	38%	63%
% Samples above 00 cfu/100ml E.Coli	81%	56%	44%	69%	79%	75%	63%	44%	63%	56%	50%
% Samples above 00 cfu/100ml E.Coli	13%	6%	13%	19%	29%	19%	25%	6%	25%	6%	19%
% Samples above ng/L Total Phosphorus	47%	43%	87%	27%	77%	73%	73%	20%	67%	20%	27%

age of all samples exceeding certain levels