

Parameters	Freshwater Guidelines	Smiths Falls to Burrits Rapids			Burrits Rapids to Long Island		
		Max.	Min.	Average	Max.	Min.	Average
<b>Fertilizer (nutrients)</b>							
Ammonia (mg/L)	1.37	0.059	0.003	0.013	0.093	0.003	0.018
Nitrate+Nitrite (mg/L)	No limit	0.10	0.00	0.03	0.06	0.00	0.01
Total Kjeldahl Nitrogen	No limit	0.96	0.44	0.57	0.84	0.47	0.62
Phosphorus (mg/L)	0.03	0.029	0.019	0.022	0.044	0.021	0.031
Reactive Phosphorus (mg/L)	No limit	0.007	0.002	0.004	0.031	0.002	0.008
Total Phosphorus (mg/L)	0.03	0.079	0.016	0.024	0.049	0.007	0.032
<b>Ions (salts)</b>							
Alkalinity (mg/L CaCO <sub>3</sub> )	not established	118	67	83	131	71	93
Calcium (mg/L)	not established	34.5	18.2	26.5	37.4	19.1	27.6
Chlorine (mg/L)	not established	10.9	9.1	10.0	17.1	9.8	11.9
Conductance (uS/cm)	not established	270	176	210	310	186	230
Potassium (mg/L)	not established	1.43	0.28	0.84	1.43	0.27	0.84
Magnesium (mg/L)	not established	10.20	7.38	8.47	14.20	8.22	10.65
Sodium (mg/L)	not established	6.73	5.34	6.10	9.51	5.66	7.03
Sulfate (mg/L)	not established	8.70	5.80	6.93	7.60	5.30	6.48
pH	5 to 9	8.99	8.09	8.48	8.79	7.98	8.28
<b>Metals</b>							
Aluminium (mg/L)	0.005-0.1000	0.1190	0.0010	0.0478	0.1120	0.0010	0.0603
Cadmium (mg/L)	<0.020	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
Cobalt (mg/L)	<0.020	0.0086	0.0004	0.0016	0.0019	0.0004	0.0006
Chromium (mg/L)	<0.020	0.0006	0.0006	0.0006	0.0009	0.0006	0.0006
Copper (mg/L)	0.002-0.004	0.0009	0.0005	0.0007	0.0031	0.0005	0.0009
Iron (mg/L)	0.3	0.0779	0.0249	0.0379	0.1100	0.0320	0.0619
Manganese (mg/L)	<0.020	0.0696	0.0113	0.0273	0.0835	0.0156	0.0352
Molybdenum (mg/L)	<0.020	0.0005	0.0005	0.0005	0.0044	0.0005	0.0007
Nickel (mg/L)	<0.020	0.0029	0.0006	0.0010	0.0033	0.0006	0.0009
Lead (mg/L)	<0.020	0.0020	0.0020	0.0020	0.0021	0.0020	0.0020
Silica (mg/L)	No limit	0.5080	0.1240	0.2963	0.8740	0.1800	0.4345
Vanadium (mg/L)	not established	0.0012	0.0005	0.0007	0.0014	0.0005	0.0008
Zinc (mg/L)	0.03	0.0117	0.0001	0.0057	0.0098	0.0003	0.0056
<b>Bacteria Algae Carbon</b>							
<i>E. coli</i> (CFU/100mL)	100	24.0	2.0	3.6	24.0	2.0	3.9
Dissolved Organic Carbon (mg/L)	No limit	8.4	5.3	6.5	9.1	6.1	7.3
Total Suspended Solids (mg/L)	No limit	3.2	0.8	1.6	4.5	0.8	2.6

Parameters	Freshwater Guidelines	Long Island to Hogs Back			Hogs Back to Rideau Falls		
		Max.	Min.	Average	Max.	Min.	Average
<b>Fertilizer (nutrients)</b>							
Ammonia (mg/L)	1.37	0.057	0.003	0.020	0.044	0.003	0.020
Nitrate+Nitrite (mg/L)	No limit	0.40	0.00	0.04	0.18	0.00	0.04
Total Kjeldahl Nitrogen	No limit	0.75	0.51	0.60	0.59	0.50	0.55
Phosphorus (mg/L)	0.03	0.045	0.028	0.036	0.032	0.022	0.027
Reactive Phosphorus (mg/L)	No limit	0.032	0.003	0.017	0.036	0.004	0.016
Total Phosphorus (mg/L)	0.03	0.049	0.024	0.037	0.047	0.019	0.033
<b>Ions (salts)</b>							
Alkalinity (mg/L CaCO <sub>3</sub> )	not established	150	80	106	143	97	116
Calcium (mg/L)	not established	43.6	21.5	31.8	45.4	26.6	35.9
Chlorine (mg/L)	not established	25.0	11.9	19.3	34.0	18.3	27.9
Conductance (uS/cm)	not established	380	220	280	400	280	329
Potassium (mg/L)	not established	1.64	0.73	1.12	1.57	1.00	1.32
Magnesium (mg/L)	not established	15.50	7.24	13.06	15.40	11.90	14.12
Sodium (mg/L)	not established	13.20	6.17	10.48	18.70	10.50	14.56
Sulfate (mg/L)	not established	11.20	5.50	8.49	14.60	7.60	11.35
pH	5 to 9	8.34	7.95	8.16	8.44	8.04	8.20
<b>Metals</b>							
Aluminium (mg/L)	0.005-0.1000	0.1590	0.0502	0.0892	0.0864	0.0673	0.0769
Cadmium (mg/L)	<0.020	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
Cobalt (mg/L)	<0.020	0.0011	0.0004	0.0006	0.0005	0.0004	0.0004
Chromium (mg/L)	<0.020	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006
Copper (mg/L)	0.002-0.004	0.0017	0.0006	0.0011	0.0019	0.0012	0.0016
Iron (mg/L)	0.3	0.1190	0.0395	0.0687	0.0523	0.0501	0.0512
Manganese (mg/L)	<0.020	0.0368	0.0158	0.0249	0.0270	0.0179	0.0225
Molybdenum (mg/L)	<0.020	0.0008	0.0005	0.0005	0.0005	0.0005	0.0005
Nickel (mg/L)	<0.020	0.0030	0.0006	0.0014	0.0006	0.0006	0.0006
Lead (mg/L)	<0.020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020
Silica (mg/L)	No limit	1.3600	0.2110	0.7116	1.2400	0.6320	0.8315
Vanadium (mg/L)	not established	0.0015	0.0005	0.0011	0.0015	0.0012	0.0013
Zinc (mg/L)	0.03	0.0130	0.0005	0.0071	0.0116	0.0081	0.0099
<b>Bacteria Algae Carbon</b>							
<i>E. coli</i> (CFU/100mL)	100	36.0	2.0	6.0	94.0	2.0	38.5
Dissolved Organic Carbon (mg/L)	No limit	8.8	0.5	7.7	8.5	7.1	7.6
Total Suspended Solids (mg/L)	No limit	3.6	0.5	1.7	2.0	0.5	1.2