

		2023			2022			2021	
sampling site	water depth (in feet)	Date	Total Phosphorus mg/l	E. coli (cts/100ml)	Date	Total Phosphorus mg/l	E. coli (cts/100ml)	Date	Total Phosphorus mg/l
1. INLET	1	23-Aug-23		0	27-Sep-20	0.003	1	02-Aug-21	>0.002
2. Western bay	27	23-Aug-23		2	27-Sep-20	0.005	0	02-Aug-21	0.013
3. OUTLET	26	23-Aug-23		1	27-Sep-20	0.005	1	02-Aug-21	0.006
4. middle of Big Lake ("background site")	35	23-Aug-23	<0.002	N/A	27-Sep-20	0.003	0	02-Aug-21	0.013
5. Bernard Point Bay	8	23-Aug-23		0	27-Sep-20	0.009	0	02-Aug-21	0.014
6. West Mitchell Bay	28	23-Aug-23		0	27-Sep-20	0.005	0	02-Aug-21	0.006
7. Bay in North Mitchell Bay	10	23-Aug-23		0	27-Sep-20	0.004	1	02-Aug-21	0.013
8. Bay west of Narrows	2	23-Aug-23		2	27-Sep-20	0.004	0	02-Aug-21	0.018
9. Paddy's Bay	49	23-Aug-23		N/A	27-Sep-20	0.005	0	02-Aug-21	0.010
10. Brennan Road Bay	2	23-Aug-23		4	27-Sep-20	0.008	1	02-Aug-21	0.016
11. Leduc Bay	19	23-Aug-23		1	27-Sep-20	0.003	0	02-Aug-21	0.016
12. Roy Bay	19	23-Aug-23		0	27-Sep-20	0.034	0	02-Aug-21	0.014
13. East Turtle Bay	2	23-Aug-23		0	27-Sep-20	0.002	0	02-Aug-21	0.018
14. West Tuttle Bay	5	23-Aug-23		2	27-Sep-20	0.005	1	02-Aug-21	0.021
15. McClelland Bay	5	23-Aug-23		0	27-Sep-20	0.009	0	02-Aug-21	0.023
16. Partridge Island Deep Spot	30	23-Aug-23	0.011	N/A	27-Sep-20	0.007	0		
17. Horseshoe Island Deep Spot	55	23-Aug-23	0.006	N/A		N/A			
18. Dome Island Deep Spot	60	23-Aug-23		N/A		N/A			
19. Little Sawmill Bay	5	23-Aug-23		0	27-Sep-20	0.002	1	02-Aug-21	0.010
20. Regatta Bay	38	23-Aug-23		1	27-Sep-20	0.002	1	02-Aug-21	0.020
21. North side of Mitchell's Bay	16	23-Aug-23		N/A	27-Sep-20	0.003	0	02-Aug-21	0.027
22. Mitchell's Bay behind Island	7	23-Aug-23	0.013	2	27-Sep-20	0.008	0	02-Aug-21	0.031
23. Blair Hurst Road Bay	53	23-Aug-23	<0.002	N/A	27-Sep-20	0.005	0	02-Aug-21	0.015
24. Bay behind Horseshoe Island	30	23-Aug-23		0	27-Sep-20	0.002	0	02-Aug-21	0.023

25. Big Sawmill Bay	25	23-Aug-23		0	27-Sep-20	0.003	0	02-Aug-21	0.033
26. O'Rourke's Bay (Jumping Rope Bay)	25	23-Aug-23		1	27-Sep-20	0.002	0	02-Aug-21	0.024

Total Phosphorus (TP) at Lac Bernard should be between 0.00 -0.010 miligrams per litre (mg/l). Highlighted cells indicate elevated TP. At over 0.015 mg/l

Excess phosphorus comes from denuded shorelines and lawn and garden fertilizers. Also possible but less likely are leaking septic systems.

E. coli is monitored for swimming and not for drinking water quality. Quebec classifies water quality as excellent when the levels are 0-20 and all recreational water quality is excellent.

E. coli comes from human and animal waste.

	2020			2019			2018			
E. coli (cts/100ml)	Date	Total Phosphorus mg/l	E. coli (cts/100ml)	Date	Total Phosphorus mg/l	E. coli (cts/100ml)	water depth (in feet)	August	Total Phosphorus mg/l	fecal coliform(cts/100ml)
1	27-Sep-20	0.003	1	16-Aug-19	0.007	1	1	15-Aug-18	0.006	8
1	27-Sep-20	0.005	0	16-Aug-19	0.002	0	27	15-Aug-18	0.003	2
0	27-Sep-20	0.005	1	16-Aug-19	0.005	1	26	15-Aug-18	0.006	<2
0	27-Sep-20	0.003	0	16-Aug-19	0.003	0	35	15-Aug-18	0.004	<2
0	27-Sep-20	0.009	0	16-Aug-19	0.002	0	8	15-Aug-18	0.003	< 2
1	27-Sep-20	0.005	0	16-Aug-19	0.006	0	28	15-Aug-18	0.007	4
0	27-Sep-20	0.004	1	15-Aug-18	0.004	1	10	15-Aug-18	0.005	<2
0	27-Sep-20	0.004	0	16-Aug-19	0.006	0	2	15-Aug-18	0.007	< 2
0	27-Sep-20	0.005	0	15-Aug-18	0.005	0	49	15-Aug-18	0.006	<2
0	27-Sep-20	0.008	1	16-Aug-19	0.002	1	2	15-Aug-18	0.003	<2
1	27-Sep-20	0.003	0	16-Aug-19	0.007	0	19	15-Aug-18	0.008	<2
0	27-Sep-20	0.034	0	16-Aug-19	0.007	0	19	15-Aug-18	0.008	2
2	27-Sep-20	0.002	0	16-Aug-19	0.006	0	2	15-Aug-18	0.008	<2
0	27-Sep-20	0.005	1	16-Aug-19	0.008	1	5	15-Aug-18	0.011	2
1	27-Sep-20	0.009	0	16-Aug-19	0.008	0	5	15-Aug-18	0.009	4
	27-Sep-20	0.007	0	16-Aug-19	0.004	0	30	15-Aug-18	0.006	<2
		N/A					55	15-Sep-18		
		N/A					60	15-Sep-18		
0	27-Sep-20	0.002	1	16-Aug-19	0.006	1	5	15-Aug-18	0.005	< 2
0	27-Sep-20	0.002	1	15-Aug-18	0.003	1	38	15-Aug-18	0.006	<2
0	27-Sep-20	0.003	0	16-Aug-19	0.010	0	16	15-Aug-18	0.006	<2
4	27-Sep-20	0.008	0	16-Aug-19	0.009	0	7	15-Aug-18	0.007	<2
0	27-Sep-20	0.005	0	16-Aug-19	0.004	0	53	15-Aug-18	0.001	8
0	27-Sep-20	0.002	0	15-Aug-18	0.003	0	30	15-Aug-18	0.008	<2

0	27-Sep-20	0.003	0	16-Aug-19	0.002	0	25	15-Aug-18	0.008	2
0	27-Sep-20	0.002	0	16-Aug-19	0.025	0	25	15-Aug-18	0.007	<2

g/l, problems are likely including algae blooms and excessive weed growth.

onal activities are permitted.

## 2014 Water Quality Monitoring Results

transparency (meters)	MAY ice-out	Total Phosphorus mg/l	transparency	JUNE	water temp °C	Total Phosphorus mg/l	fecal coliform(cts/100ml)	transparency (meters)	JULY	water temp °C	Total Phosphorus mg/l	fecal coliform(cts/100ml)
N/A				27-Jun-14	23.6	0.010	2	depth	20-Jul-14	23.4	0.008	2
N/A				27-Jun-14	23.5	0.006	2	depth	20-Jul-14	23.9	0.009	<2
N/A				27-Jun-14	23.2	0.006	<2	depth	20-Jul-14	23.7	0.010	<2
N/A				27-Jun-14	23.3	0.010	<2	5.75	20-Jul-14	23.8	0.009	<2
N/A				27-Jun-14	23.2	0.008	<2	depth	20-Jul-14	23.8	0.011	<2
N/A				27-Jun-14	23.7	0.010	<2	depth	20-Jul-14	23.2	0.009	<2
N/A				27-Jun-14	24.1	0.009	<2	depth	20-Jul-14	23.2	0.007	<2
				27-Jun-14	24.1	0.011	<2	depth	20-Jul-14	24.1	0.008	<2
N/A				27-Jun-14	23.2	0.010	<2	4.75	20-Jul-14	24.1	0.007	<2
N/A				27-Jun-14	23.5	0.011	<2	depth	20-Jul-14	24.3	0.008	<2
N/A				27-Jun-14	23.7	0.011	6	depth	20-Jul-14	23.9	0.009	<2
N/A				27-Jun-14	23.8	0.022	2	6.00	20-Jul-14	24.1	0.008	4
N/A				27-Jun-14	23.9	0.012	<2	depth	20-Jul-14	25.2	0.009	6
N/A				27-Jun-14	24.4	0.012	<2	depth	20-Jul-14	25.7	0.009	<2
N/A				27-Jun-14	24.1	0.009	12	depth	20-Jul-14	23.7	0.010	2
N/A	02-May-14	0.009	4.00									
5.5m	02-May-14	0.009	4.00									
6.5m	02-May-14	0.007	3.50									
N/A				27-Jun-14	23.4	0.011	<2	depth	20-Jul-14	24.0	0.009	4
N/A				27-Jun-14	23.9	0.011	<2	5.25	20-Jul-14	23.9	0.008	<2
N/A				27-Jun-14	23.8	0.010	2	depth	20-Jul-14	23.3	0.01	4
N/A				27-Jun-14	24.1	0.007	<2	depth	20-Jul-14	23.6	0.01	4
N/A				27-Jun-14	24.0	0.007	4	5	20-Jul-14	23.8	0.009	<2
N/A				27-Jun-14	24.1	0.009	<2	5.00	20-Jul-14	23.8	0.009	<2

N/A				27-Jun-14	23.1	0.008	<2	5.75	20-Jul-14	24.0	0.009	<2
N/A				27-Jun-14	23.5	0.011	<2	5.00	20-Jul-14	24.2	0.012	<2

## 2013 Water Quality Monitoring Results

transparency (meters)	Sept	water temp °C	Total Phosphorus mg/l	fecal coliform(cts/100ml)	transparency (meters)	water depth (in feet)	July	water temp °C	Total Phosphorus mg/l	fecal coliform(cts/100ml)	transparency (meters)	Sept
depth	14-Sep-14	17.4	0.008	2	depth	5	16-Jul-13	26.4	0.008	<10		09-Sep-13
3.25	14-Sep-14	17.4	0.005	2	depth	19	16-Jul-13	26.2	0.005	10	4.25	09-Sep-13
depth	14-Sep-14	17.0	0.004	4	depth	6	16-Jul-13	26.4	0.007	<10		09-Sep-13
3.25	14-Sep-14	17.6	0.006	4	3.75	36	16-Jul-13	26.7	0.005	<10	4.25	09-Sep-13
depth	14-Sep-14	17.6	0.016	< 2	depth	7	16-Jul-13	26.9	0.020	<10		09-Sep-13
3.25	14-Sep-14	17.4	0.006	6	3.75	28	16-Jul-13	27.0	0.009	<10	4.50	09-Sep-13
depth	14-Sep-14	17.1	0.004	14	depth	8	16-Jul-13	27.6	0.012	10		09-Sep-13
depth	14-Sep-14	17.7	0.005	< 2	depth	6	16-Jul-13	27.8	0.008	<10		09-Sep-13
3.25	14-Sep-14	17.7	0.004	4	3.75	50	16-Jul-13	26.4	0.005	<10	4.50	09-Sep-13
depth	14-Sep-14	17.7	0.012	6	depth	10	16-Jul-13	26.8	0.009	10		09-Sep-13
3.50	14-Sep-14	17.7	0.017	10	3.25	24	16-Jul-13	27.1	0.009	<10	4	09-Sep-13
3.50	14-Sep-14	17.6	0.015	2	3.50	20	16-Jul-13	27.2	0.015	<10	4.00	09-Sep-13
depth	14-Sep-14	17.0	0.023	4	depth	6	16-Jul-13	27.3	0.01	10		09-Sep-13
depth	14-Sep-14	15.3	0.015	10	depth	6	16-Jul-13	27.7	0.008	<10		09-Sep-13
depth	14-Sep-14	17.3	0.023	12	depth	3	16-Jul-13	27.6	0.022	<10		09-Sep-13
						30	16-Jul-13					09-Sep-13
						100	16-Jul-13					09-Sep-13
						60	16-Jul-13					09-Sep-13
depth	14-Sep-14	17.5	0.009	< 2	depth	10	16-Jul-13	26.8	0.007	<10		09-Sep-13
3.25	14-Sep-14	17.6	0.009	6	3.75	56	16-Jul-13	27.4	0.009	20	4.25	09-Sep-13
depth	14-Sep-14	17.1	0.008	16	depth	12	16-Jul-13	27.0	0.006	<10		09-Sep-13
depth	14-Sep-14	17.3	0.010	8	depth	6	16-Jul-13	27.3	0.005	<10		09-Sep-13
3.75	14-Sep-14	17.2	0.012	2	3.25	26	16-Jul-13	27.0	0.006	<10	4.50	09-Sep-13
3.75	14-Sep-14	17.6	0.014	2	3.75	25	16-Jul-13	27.6	0.006	<10	4.5	09-Sep-13

depth	14-Sep-14	17.7	0.009	< 2	depth	8	16-Jul-13	26.7	0.019	10		09-Sep-13
3.50	14-Sep-14	17.7	0.009	2	3.75	36	16-Jul-13	26.8	0.006	<10	4.5	09-Sep-13

Total Phosphorus mg/l	fecal coliform(cts/100ml)
0.007	<10
0.007	<10
0.006	<10
0.007	<10
0.008	<10
0.006	10
0.008	<10
0.008	<10
0.006	<10
0.008	<10
0.006	<10
0.006	<10
0.009	10
0.008	<10
0.008	<10
0.009	<10
0.008	<10
0.007	<10
0.005	<10
0.005	<10
0.007	<10

0.007	10
0.008	<10