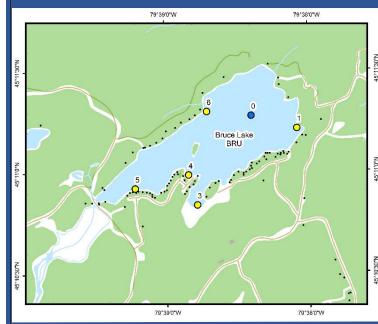




Bruce Lake (BRU)



Area Description:

Bruce Lake is a small (surface area = 0.98 km²) lake with a maximum depth of 6 m, located east of Highway 632, between Lake Joseph and Lake Rosseau. Based on DMM data ~7% of the catchment area for this lake is comprised of wetlands. Moderate development on the lake includes a golf course located immediately to the south. Bruce Lake is currently listed as vulnerable by the District of Muskoka following an algae bloom in 2020.

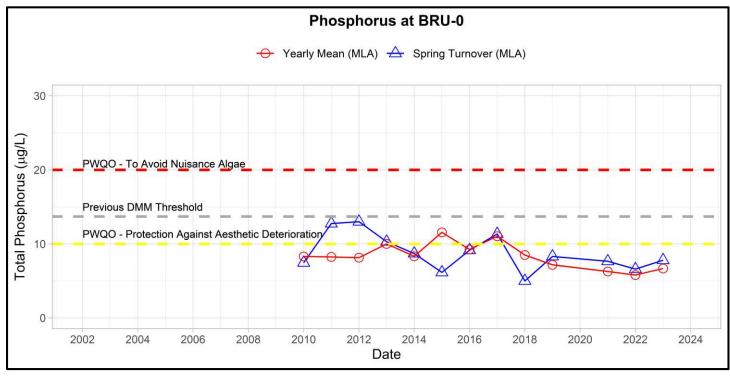
Volunteer Recognition: Andrew Coppola, John Harvey, Paul Hutchinson.

2023 Water Quality Results:

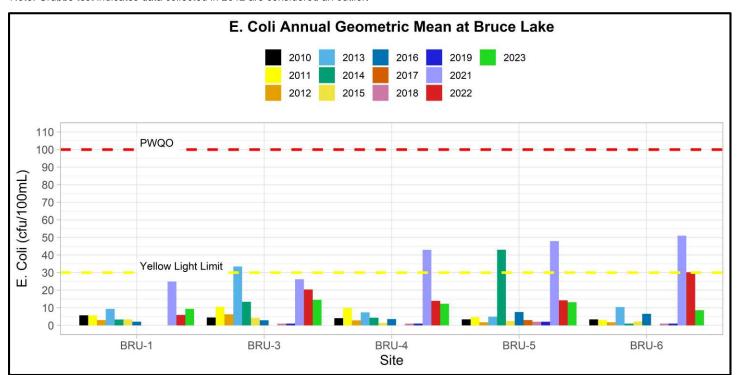
	Mean Secchi Disk (m)	Total Phosphorus (μg/L)		E. coli Yearly	Total Coliforms
		Spring Turnover	Yearly Mean	Geometric Mean (cfu/100mL)	Yearly Geometric Mean (cfu/100 mL)
BRU-0	3.1	7.8	6.7		
BRU-1		9.7	20.0 (7.4)	4	23
BRU-3		8.7	6.9	12	40
BRU-4		8.5	6.9	10	34
BRU-5		7.9	7.9	14	47
BRU-6		9.2	6.9	9	29







Note: Grubbs test indicates data collected in 2012 are considered an outlier.









In 2023, annual average and spring phosphorus concentrations at the deep-water station (BRU-0) were below the historic DMM threshold of 13.7 μ g/L and Provincial Water Quality Monitoring Objectives for Protection Against Aesthetic Deterioration (10 μ g/L) and Nuisance Algal Growth (20 μ g/L). Nearshore monitoring of annual and spring phosphorus concentrations at BRU-1, 3, 4, 5 and 6 were within the range of variability of previous monitoring. *E. coli* samples at all stations were below the yellow light trigger established by the MLA. Average annual Secchi disk depth (3.1 m) was consistent with previous monitoring (2.4 and 6.5 m). A harmful algae bloom was reported on Bruce Lake in 2020 resulting in a yellow light being maintained for this lake in 2023. **HESL recommends ongoing sampling to monitor for long-term trends and emerging issues.**