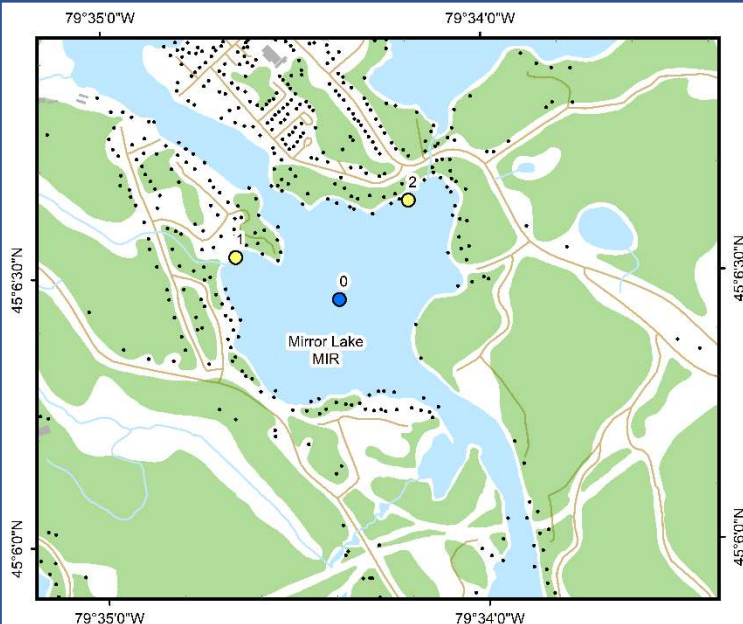




Mirror Lake (MIR)



Area Description:

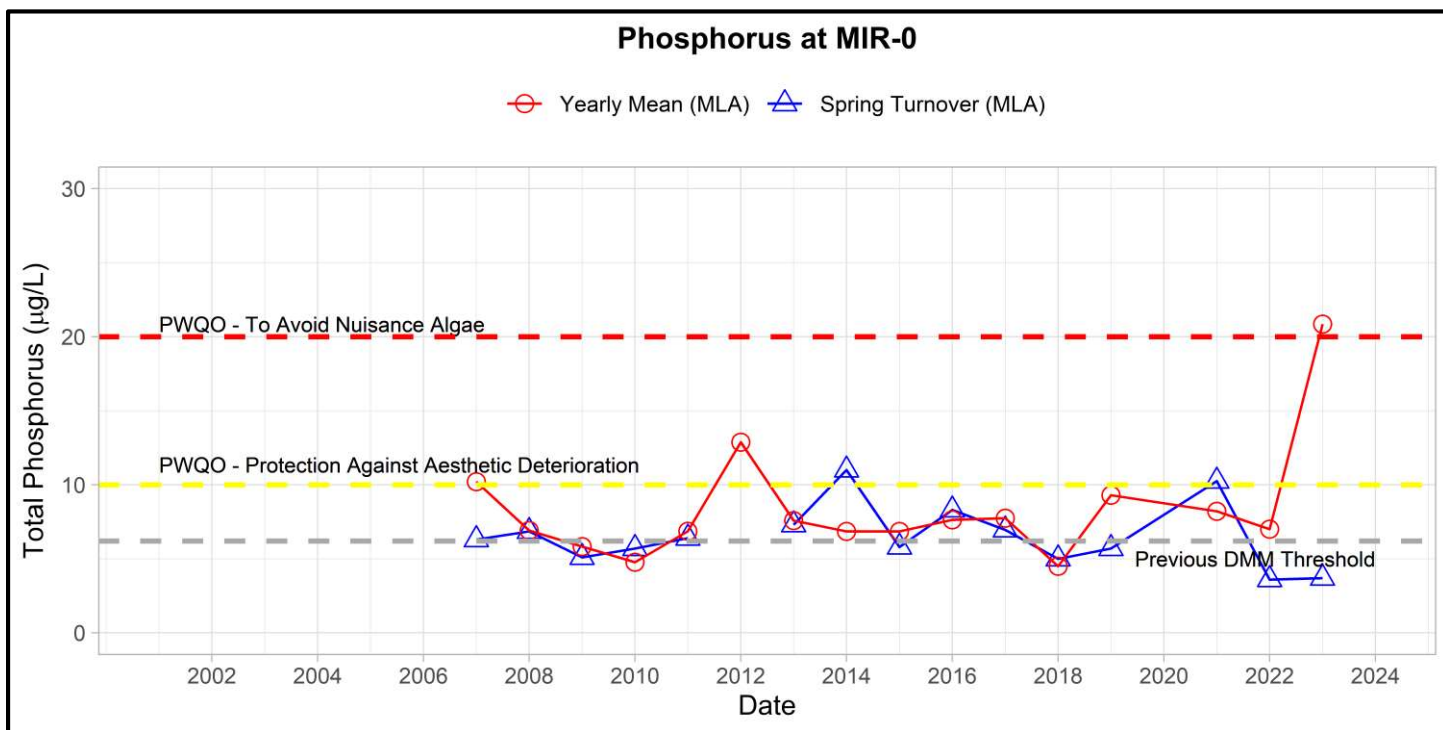
Mirror Lake is a widening of the Indian River south of Port Carling just north of the inflow to Lake Muskoka. The lake has a surface area of 0.46 km² and a maximum depth of 8 m. Two creeks flow into the lake near sampling sites MIR-1 and MIR-2. Development on the lake is high and includes drainage from the urban area of Port Carling. Mirror Lake has a small watershed, approximately 0.97 km², and is currently classified as moderately sensitive and over-threshold by the DMM. MLA monitoring of Mirror Lake began in 2007.

Volunteer Recognition: Susan Carson, Jane Armstrong and Chris Vandergrift

2023 Water Quality Results:

	Mean Secchi Disk (m)	Total Phosphorus (µg/L)		E. coli Yearly Geometric Mean (cfu/100mL)	Total Coliforms Yearly Geometric Mean (cfu/100 mL)
		Spring Turnover	Yearly Mean		
MIR-0	3.0	3.7	20.9		
MIR-2		4.9		8	77

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





E. Coli Annual Geometric Mean at Mirror Lake



Annual average phosphorus concentrations at the deep-water station (MIR-0) were above the historic DMM threshold of 6.2 µg/L as well as the Provincial Water Quality Monitoring Objectives for Protection Against Aesthetic Deterioration (10 µg/L) and the PWQO for the Prevention of Nuisance Algal Growth (20 µg/L). Spring phosphorus concentrations in 2023 at MIR-0 and MIR-2 were low and within the range of variability of previous monitoring, however June and August TP at MIR-0 were amongst the highest values recorded in the history of the program. Ongoing monitoring in 2024 is recommended to determine if elevated TP at the site is a potentially ongoing issue. *E. coli* counts remained low in 2023 and were below the MLA stoplight limits at MIR-2. Average annual Secchi disk depth (3.0 m) was consistent with previous monitoring (1.95 and 4.45 m). **HESL recommends ongoing sampling to inform on the elevated phosphorus concentrations recorded in 2023, and to continue to monitor for long-term trends and emerging issues.**