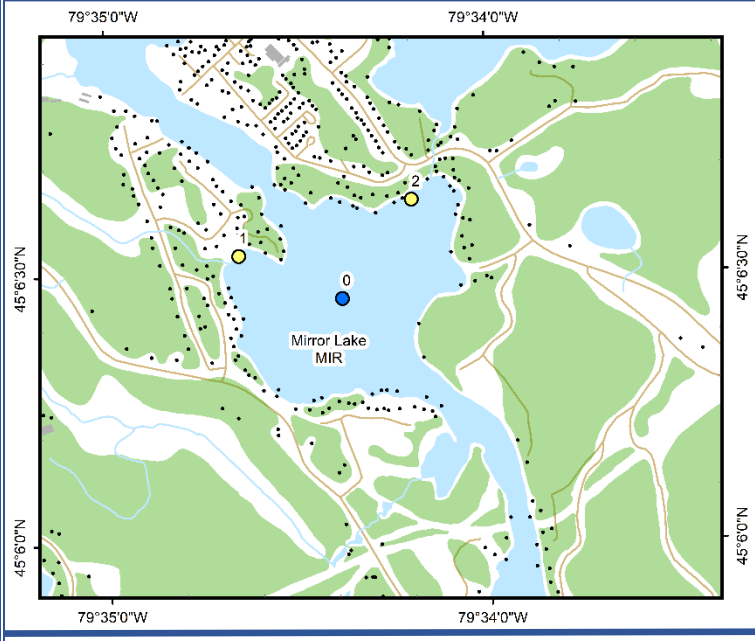
Mirror Lake (MIR)



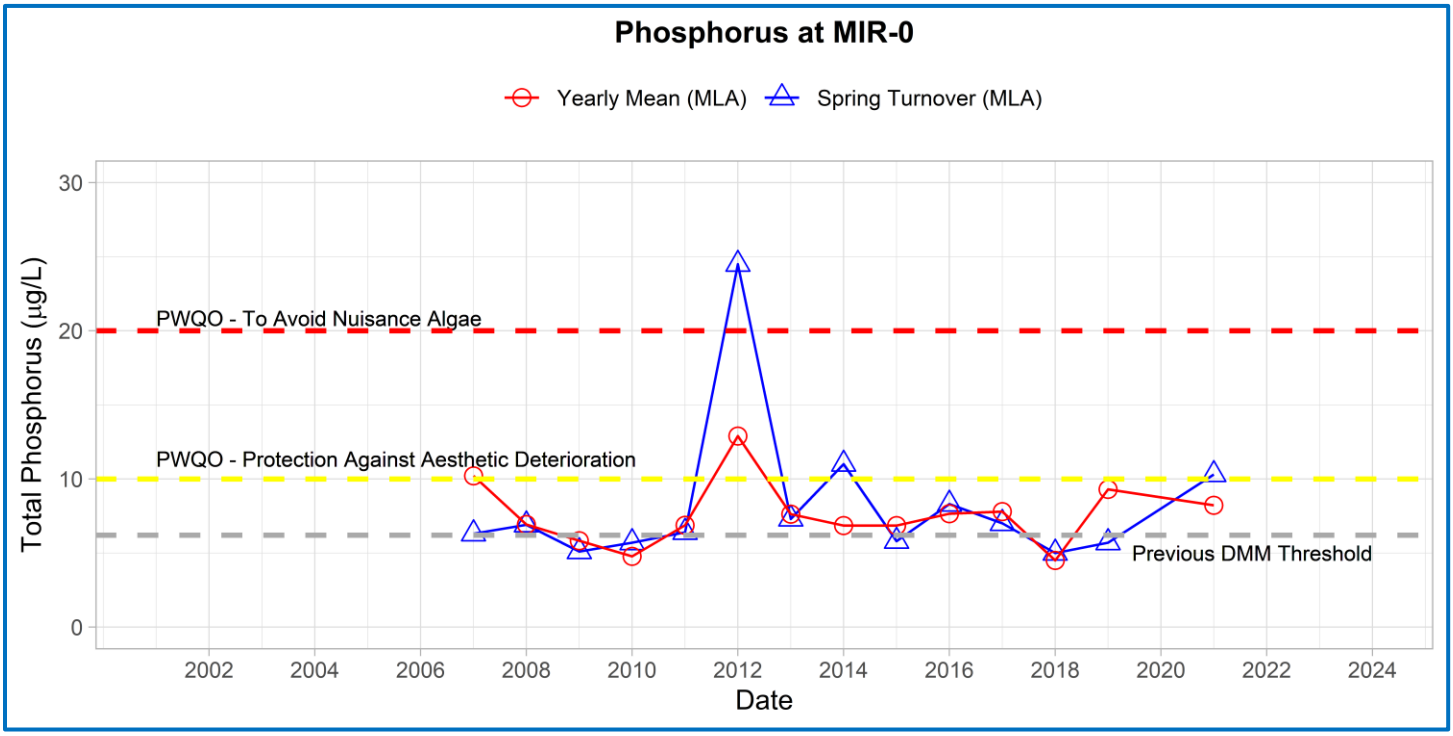
Area Description:

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 Prot 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.

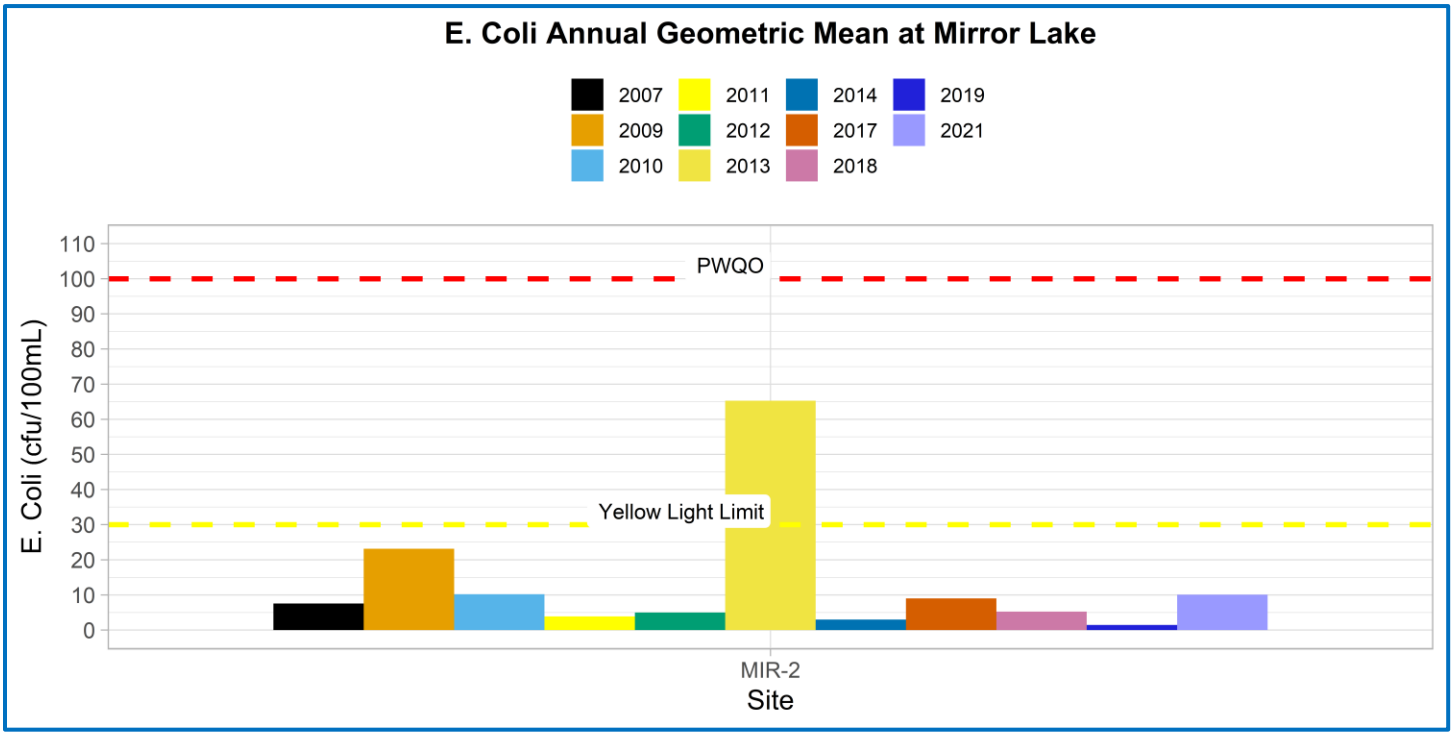
Volunteer Recognition: Susan Carson, Jane Armstrong and Chris Vandergrift

2021 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	3.1	10.3	8.2		
MIR-2		6.3		10	40



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



Annual average phosphorus concentrations at the deep-water station (MIR-0) were above the historic DMM threshold of 6.2 µg/L and Provincial Water Quality Monitoring Objectives for Protection Against Aesthetic Deterioration (10 µg/L) but below the PWQO for the Prevention of Nuisance Algal Growth (20 µg/L). Spring phosphorus concentrations in 2012 and 2021 were considered outliers from the dataset. The 2014 spring phosphorus result at MIR-0 are no longer considered an outlier. Nearshore monitoring of the spring phosphorus concentration at MIR-2 was within the range of variability of previous monitoring. *E. coli* counts were below the MLA stoplight limits at MIR-2 in 2019. Average annual Secchi disk depth (3.1 m) was consistent with previous monitoring (1.95 and 4.45 m). **HESL recommends ongoing sampling to continue to monitor for long-term trends and emerging issues.**