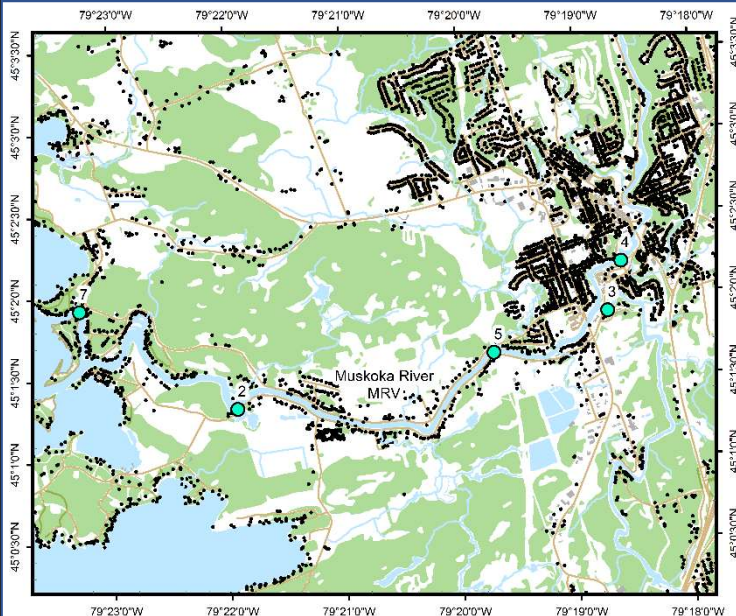




Muskoka River (MRV)



Area Description:

The MLA sample area of the Muskoka River includes the downstream reach from Bracebridge Falls southwest to Alport Bay in Lake Muskoka. The area is highly developed including the urbanized area of Bracebridge, agricultural fields, and extensive residential properties along the entire shoreline. Land clearance and roads are located along both shorelines of the river. MLA monitoring of the Muskoka River began in 2008.

Volunteer Recognition: Mark and Donna Naylor.

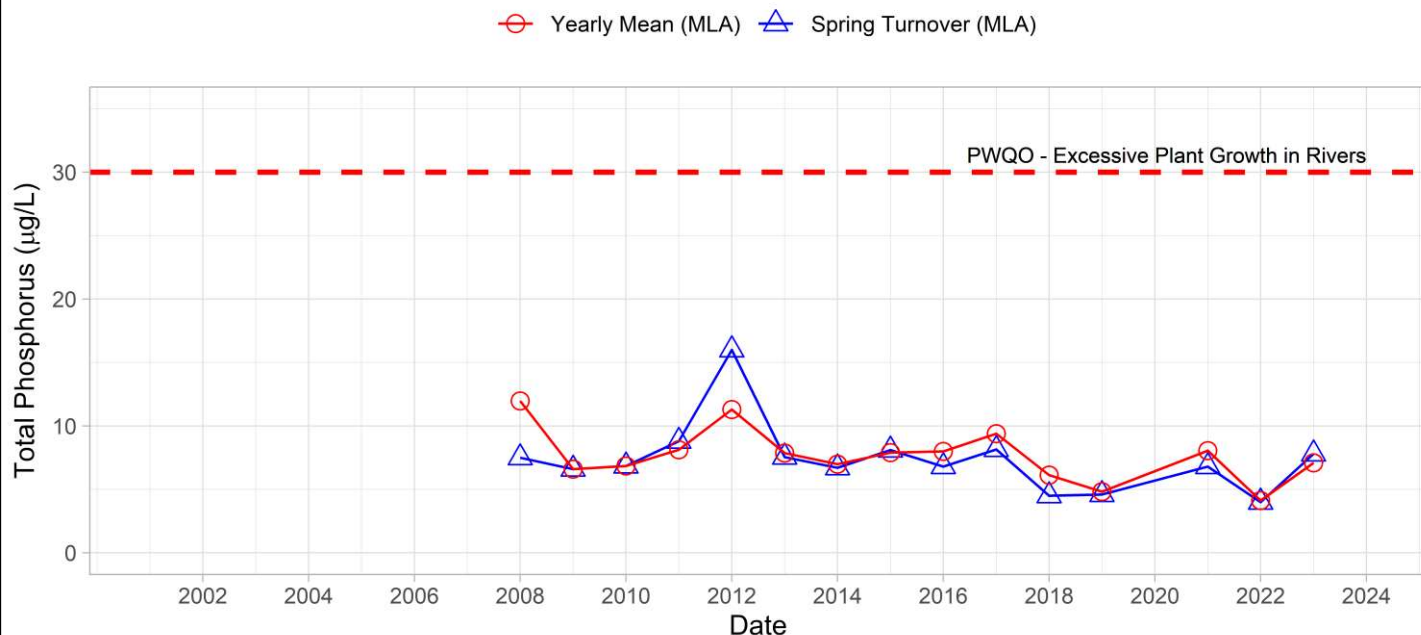
2023 Water Quality Results:

	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		
MRV-2	2.0	7.8	7.1	29	139
MRV-3		5.6			
MRV-4		7.0			
MRV-5		26.4			
MRV-7				34	163

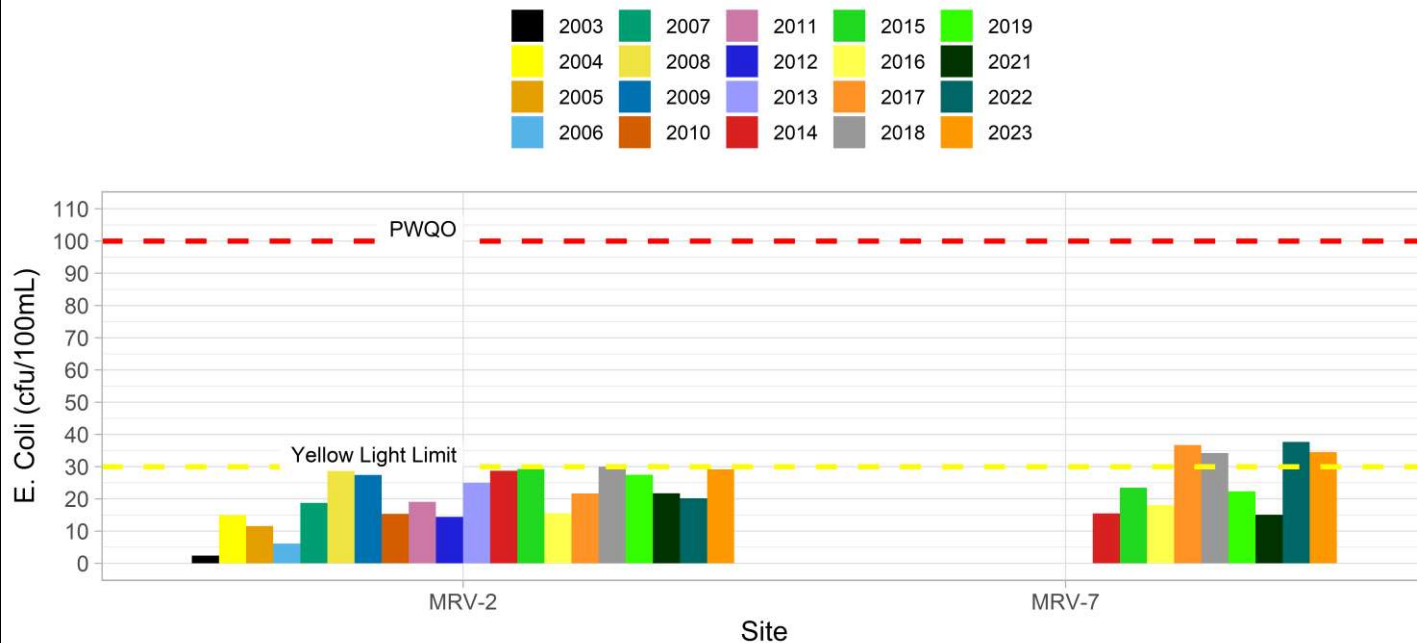
Note: Grubbs test indicates spring phosphorus data collected in 2012 are considered an outlier.



Phosphorus at MRV-2



E. Coli Annual Geometric Mean at Muskoka River



Annual average and spring phosphorus concentrations at the downstream station (MRV--2) were below Provincial Water Quality Monitoring Objectives for the Elimination of Excessive Plant Growth in Rivers and Streams (30 µg/L). Nearshore monitoring of spring phosphorus concentrations at MRV-3, 4, 5 and 7 were within the range of variability of previous monitoring years. The geometric mean of *E coli* samples collected in 2023 at MRV-7 was above the MLA stoplight limit, while MRV-2 was just below (29 CFU/100mL). Average annual Secchi disk depth (2.0 m) was consistent with previous monitoring (1.22 and 10.25 m). **HESL recommends ongoing sampling to assess bacteria concentrations, and to continue to monitor for long-term trends and emerging issues.**