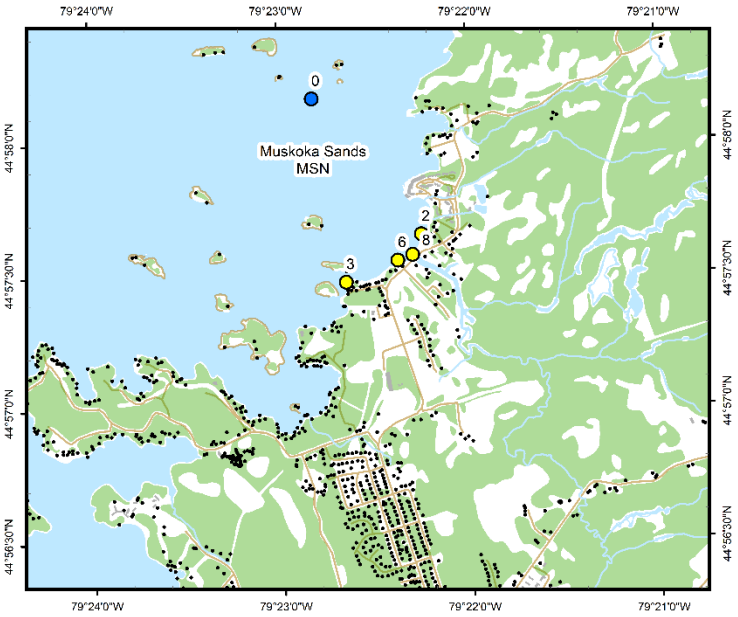
Hutchinson Environmental Sciences Ltd.

MLA™ Muskoka Lakes Association
Preserving Muskoka for Future Generations

Muskoka Sands (MSN)



Area Description:

The Muskoka Sands sampling area is a highly developed region in southeastern Lake Muskoka at the inflow of the Hoc Roc River. Development within the area includes a large resort and golf course, a substantial number of residential properties and a large road network adjacent to the lake. Land use in the upstream reaches of the Hoc Roc River includes agricultural, industrial, residential, and natural wetland areas. MLA monitoring at Muskoka Sands began in 2003.

Volunteer Recognition: Carol Hoskins, Sam Daviau, Sheila Robinson, George Fallis, Stephen Sims.

2022 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		
MSN-0	3.2	3.1			
MSN-2				6	30
MSN-3				4	80
MSN-6				2	50
MSN-8		4.4	3.3		

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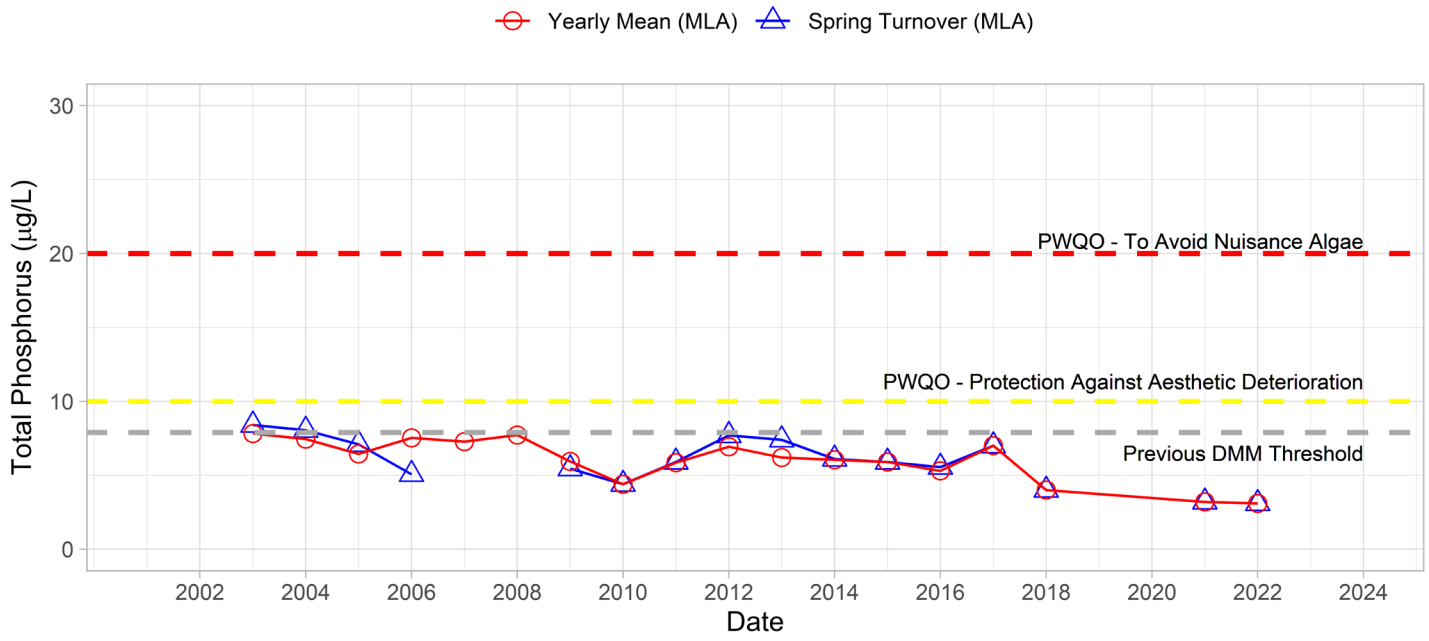
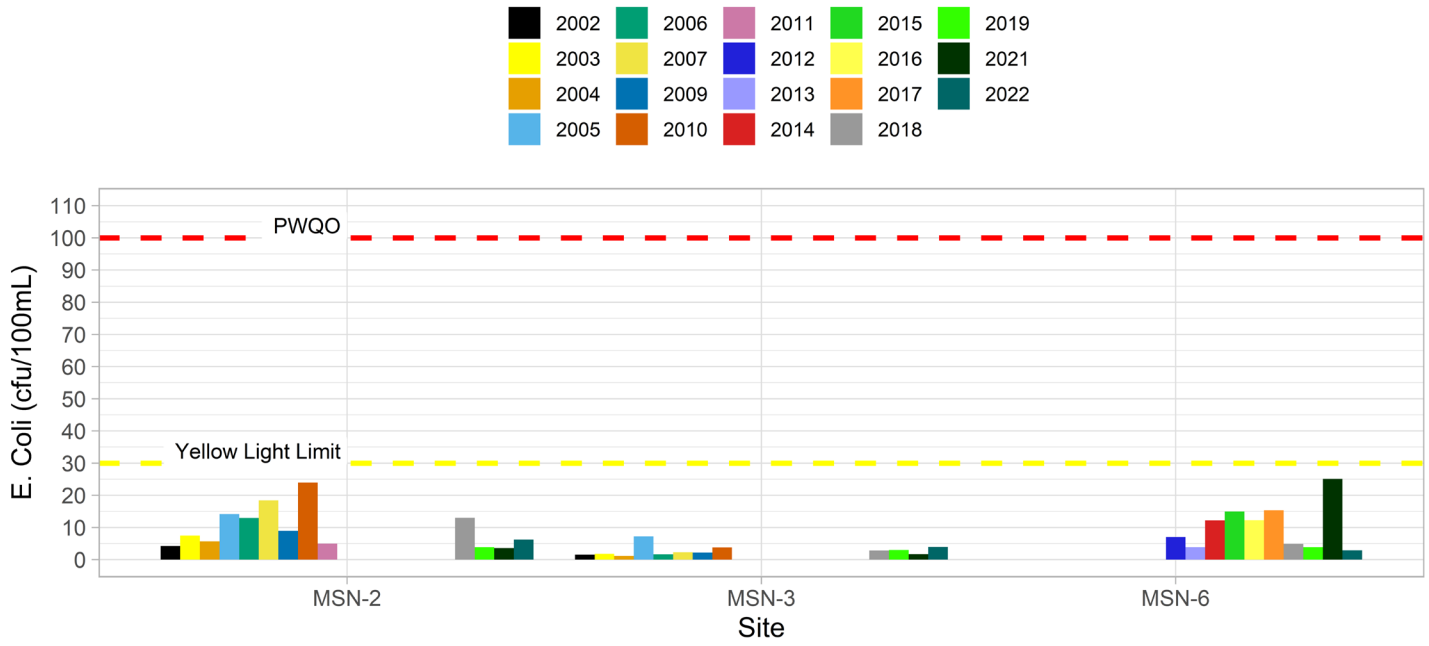
Phosphorus at MSN-0



Note: Grubbs test indicates no outliers in Spring or Annual Total Phosphorus data.

E. Coli Annual Geometric Mean at Muskoka Sands



The spring phosphorus concentration at the deep-water station (MSN-0) was below the historic DMM threshold of 7.9 µg/L and Provincial Water Quality Monitoring Objectives for Protection Against Aesthetic Deterioration (10 µg/L) and Nuisance Algal Growth (20 µg/L). Nearshore monitoring of spring phosphorus concentrations at MSN-8 was the lowest on record and all samples collected were below 10 µg/L. Issues with storm sampling identified in 2021 were resolved in 2022 and bacteria counts declined to values typical of the long-term monitoring record. Average annual Secchi disk depth (3.7 m) was consistent with previous monitoring (1.0 - 5.25 m). **HESL recommends ongoing sampling to continue to monitor for long-term trends and emerging issues.**