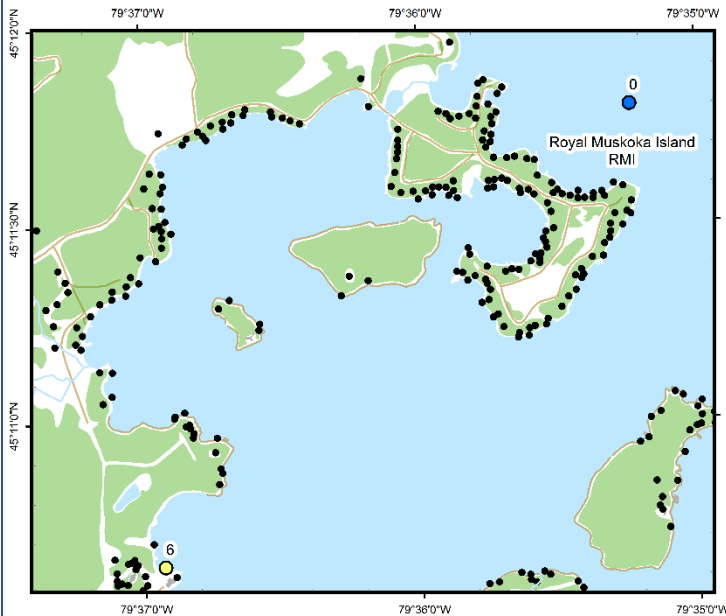


Royal Muskoka Island (RMI)



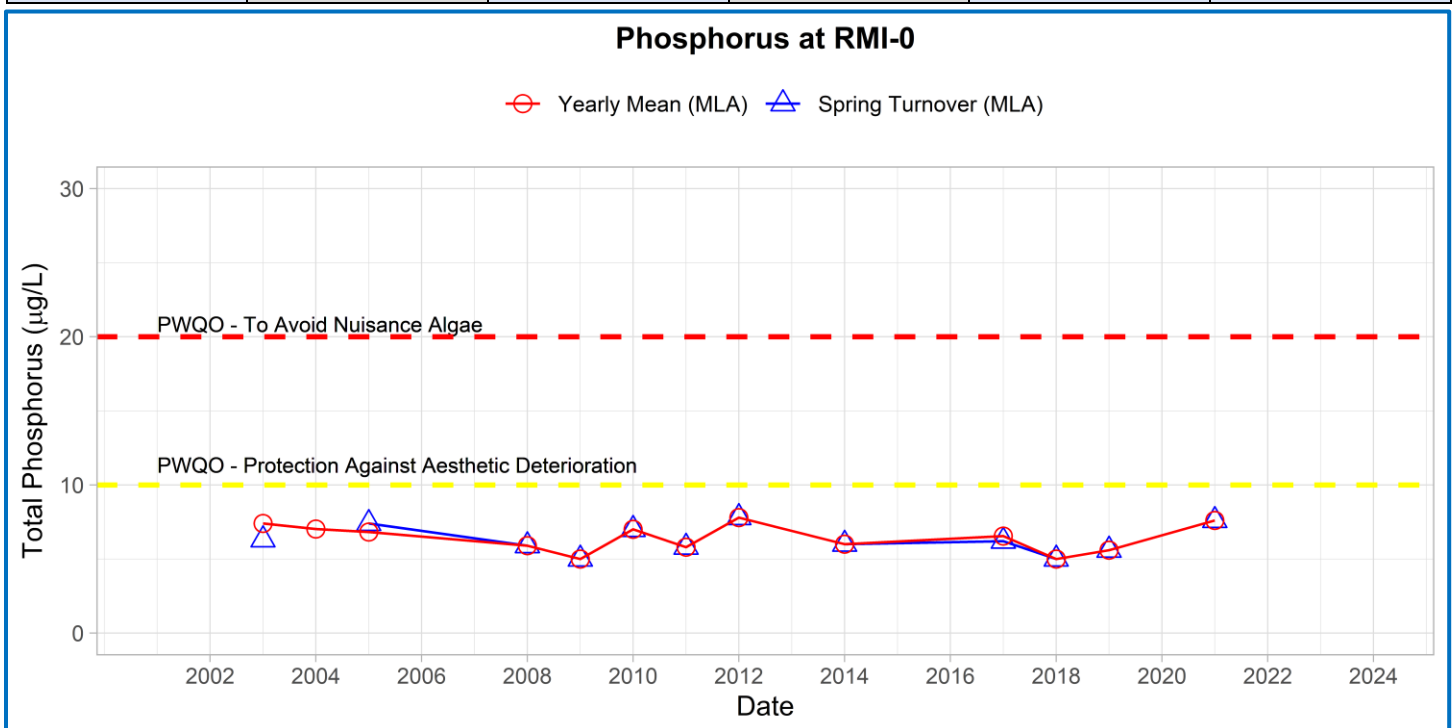
Area Description:

Royal Muskoka Island is a heavily developed residential island in the central portion of Lake Rosseau. A substantial portion of the island's interior has been deforested. Nearshore monitoring extends southwest to include a sampling station adjacent to a summer camp. Northwest winds result in significant wave action near the island. MLA monitoring of Royal Muskoka Island began in 2003.

Volunteer Recognition: Mark Tiffin, Katherine Seybold.

2021 Water Quality Results:

	Mean Secchi Disk (m)	Total Phosphorus ($\mu\text{g/L}$)		E. coli Yearly Geometric Mean (cfu/100mL)	Total Coliforms Yearly Geometric Mean (cfu/100 mL)
		Spring Turnover	Yearly Mean		
RMI-0	4.35	7.6			
RMI-6		4.6		5	93



Note: Grubbs test indicates no outliers in spring and annual total phosphorus data.



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In 2021, the spring phosphorus concentration at the deep-water station (RMI-0) was below 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 concentration at RMI-6 was the lowest recorded at the site since monitoring began in 2017. *E. coli* counts in 2021 were below the MLA trigger value. Average annual Secchi disk depth (4.35 m) was consistent with previous monitoring (2.2 – 4.7 m). **HESL recommends ongoing sampling to continue to monitor for long-term trends and emerging issues.**