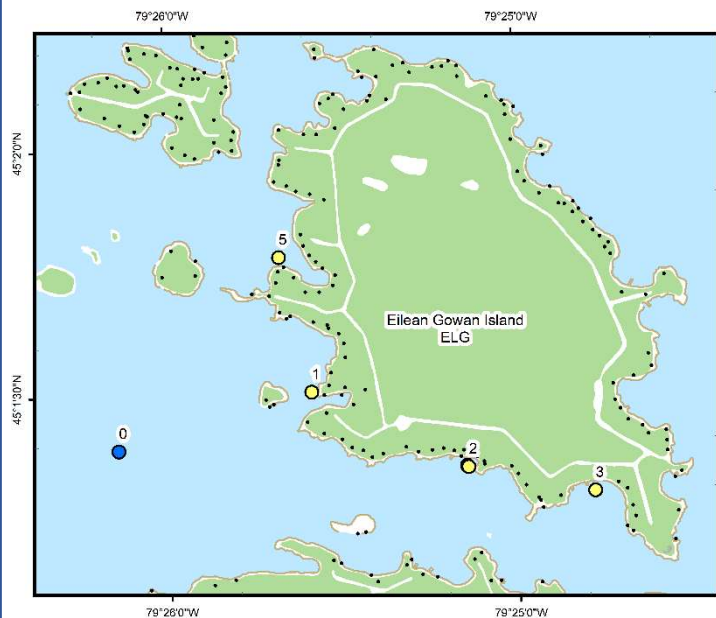




Eilean Gowan Island (ELG)



Area Description:

Eilean Gowan Island is located in the eastern part of Lake Muskoka. The island is developed with residential cottages, many of which appear to retain a well-vegetated shoreline. Some manicured lawns and tennis courts are located directly adjacent to the lake. The interior of Eilean Gowan Island is heavily forested and a stream outlets from the upland area to the lake at ELG-1. MLA monitoring of Eilean Gowan Island began in 2002.

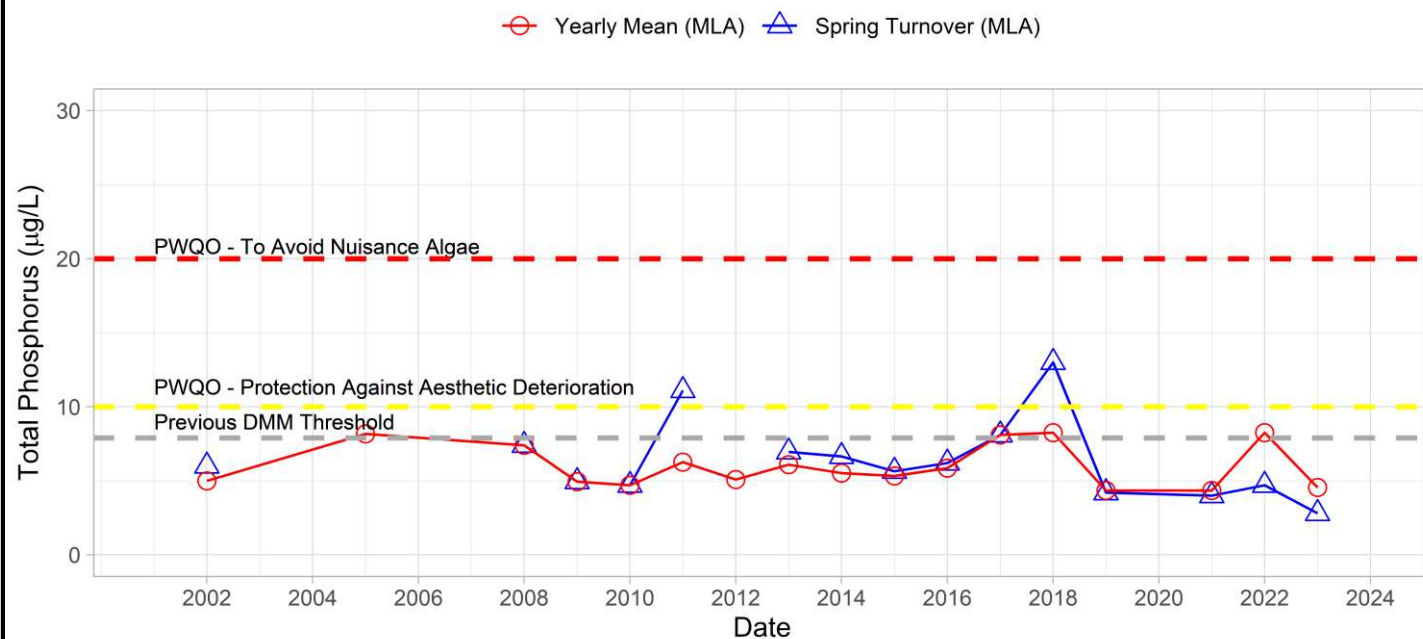
Volunteer Recognition: Doug Tate, Beth Tate, Susan Murphy.

2023 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		
ELG-0	2.5	2.8	4.6		
ELG-3				4	143
ELG-5		3.0			

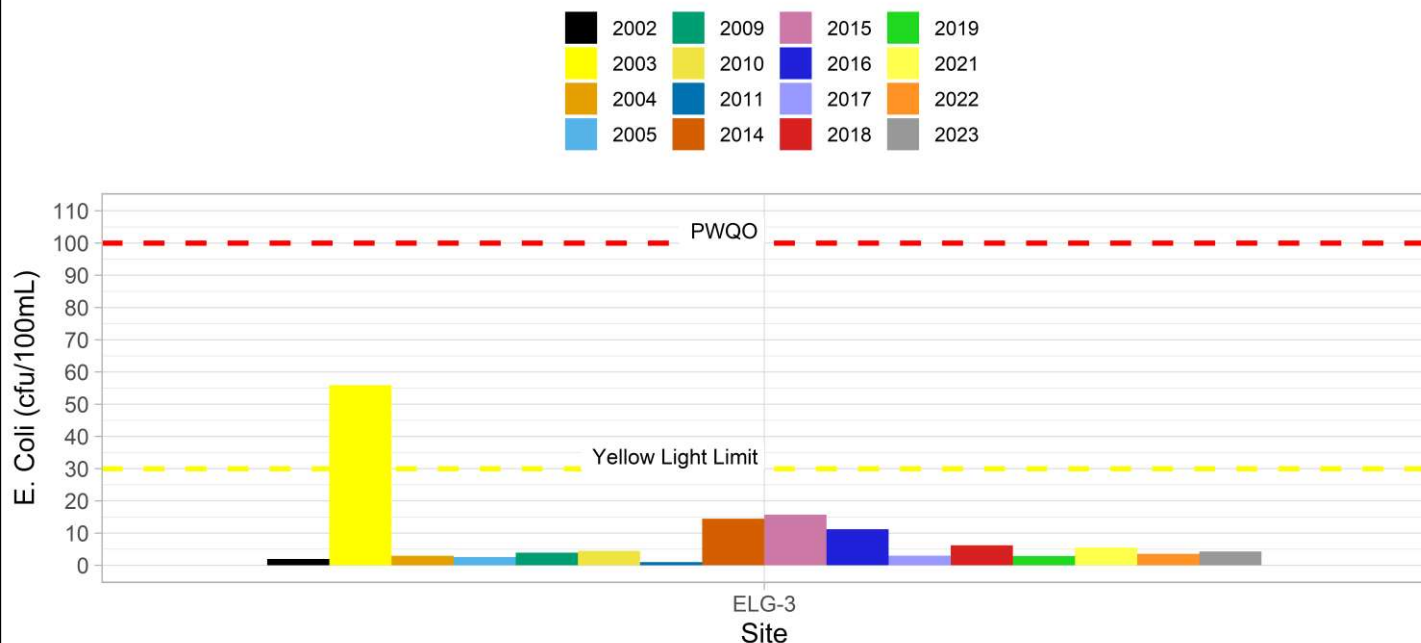
Note: Grubbs test indicates no outliers in Spring or Annual Total Phosphorus data.

Phosphorus at ELG-0





E. Coli Annual Geometric Mean at Eilean Gowan Island



Spring phosphorus concentrations at the deep-water station (ELG-0) were below the historic DMM threshold of 7.9 µg/L and the 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 EAS-5 consistent with previous monitoring at the site. Average annual Secchi disk depth (2.5 m) was consistent with previous monitoring (2.0 – 5.25 m). *E. coli* counts in 2023 were well below the MLA trigger threshold of 30 cfu/100mL at ELG-3, elevated total coliforms counts were the result of a single extreme value (418 cfu/100ml) in June. Bacteria data in 2023 should be interpreted with caution as no re-tests were performed during June sampling to confirm the elevated coliform counts and the annual geomean is based on only two samples **HESL recommends ongoing sampling to continue to monitor for**

long-term trends.