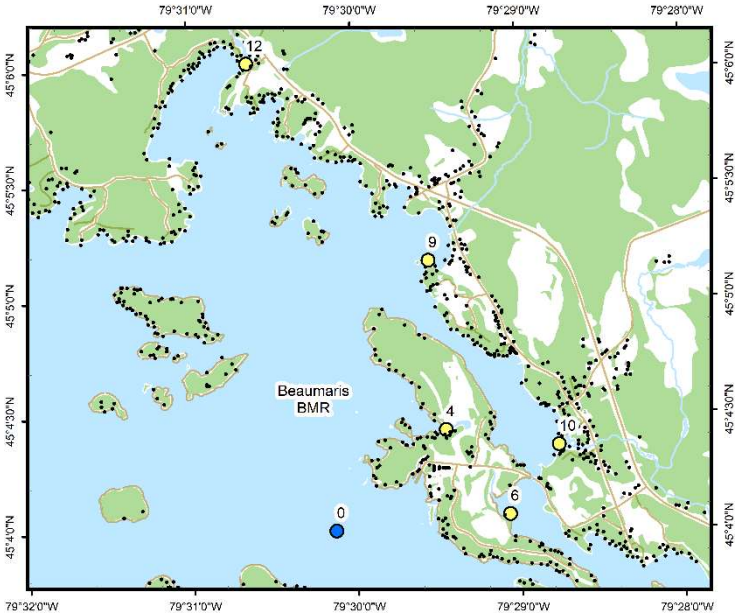
# Beaumaris (BMR)




**Area Description:**

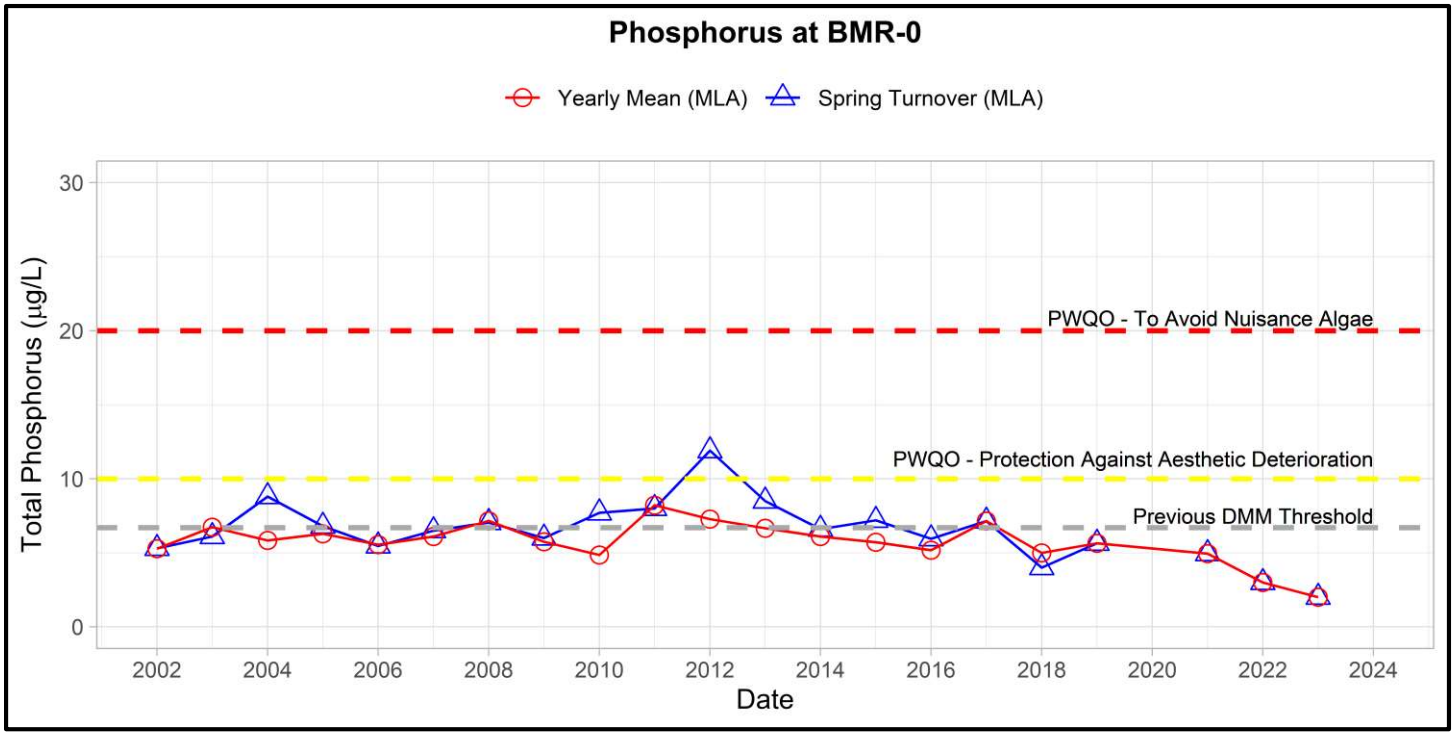
Beaumaris is an island in the Milford Bay region of north-eastern Lake Muskoka and is approximately 132 ha in size. The majority of the island is covered by a golf course with a small private club and marina. Natural shoreline vegetation is largely intact, however large boathouses are common in this area. The watershed includes a wetland to the east where the mainland and the island are linked by a causeway. MLA monitoring at Beaumaris began in 2002.

Volunteer Recognition: Louise Cragg, Don Furniss, Andree Baillargeon, Chris Cragg, Eliza Nevin, Lisa MacLatchy Naprawa, Peter Walsh.

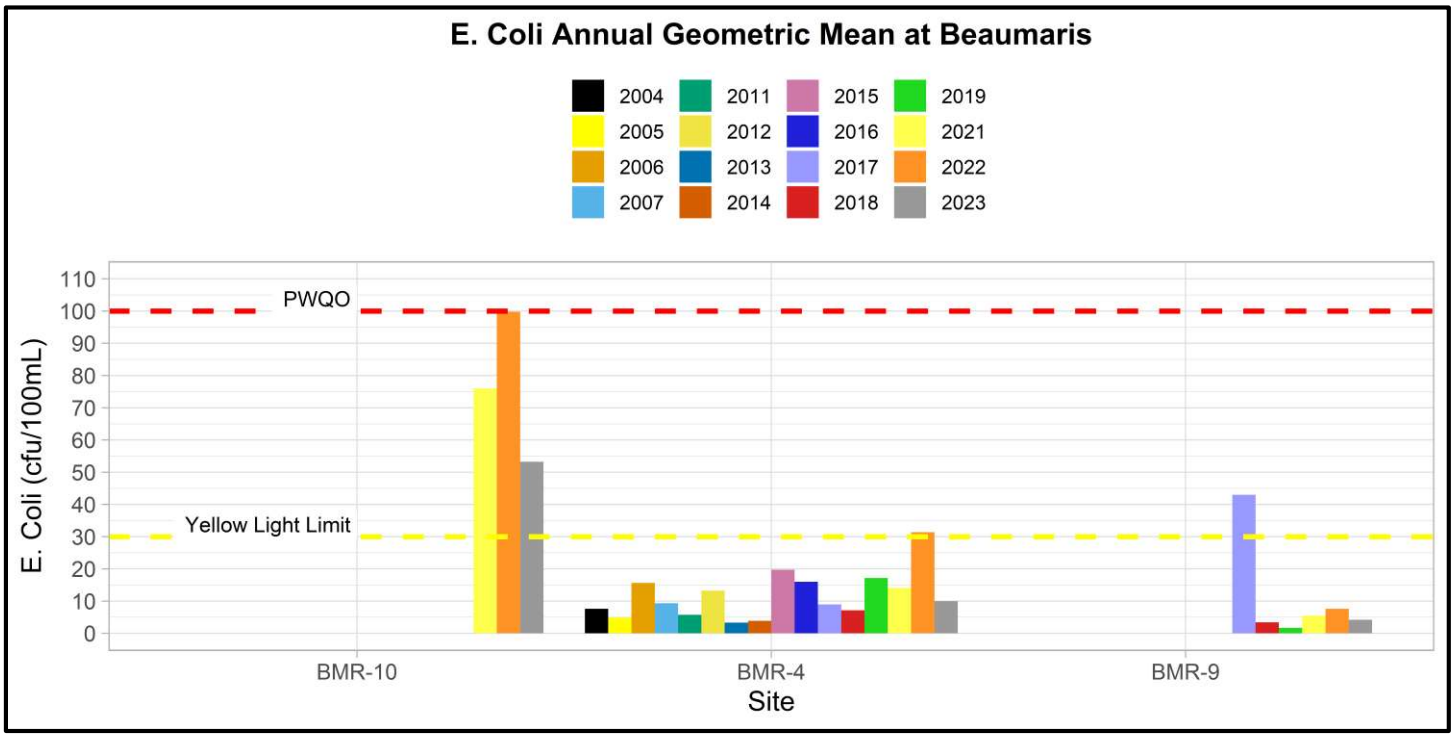
2023 Water Quality Results:

| | 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 | | |
| **BMR-0** | 2.2 | 2.0 | | | |
| **BMR-4** | | 3.5 | | 15 | 116 |
| **BMR-6** | | 3.5 | | | |
| **BMR-9** | | 2.8 | | 8 | 79 |
| **BMR-10** | | 8.3 | 13.2 | 53 | 849 |
| **BMR-12** | | 17.9 | | | |

Note: Grubbs test indicated that the phosphorus concentration in 2021 at BMR-10 was an outlier.




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



Spring phosphorus concentrations at the deep-water station (BMR-0) were below the historic DMM threshold of 6.7 µg/L and the Provincial Water Quality Monitoring Objectives for Protection Against Aesthetic Deterioration (10 µg/L) and Nuisance Algal Growth (20 µg/L) in 2023. Nearshore monitoring of spring phosphorus concentrations was within the range of variability of previous monitoring years. Nearshore phosphorus concentration have been variable since monitoring of BMR-10 and 12 began in 2017 and therefore ongoing monitoring at these sites is recommended. Average annual Secchi disk depth (2.2 m) was consistent with previous monitoring (2.25 - 4.40 m). The *E. coli* concentrations at BMR-4 and 9 were well below the yellow light limit set by the MLA, bacteria collected at BMR-10 exceeded the yellow light trigger established by the MLA. BMR-10 included four re-tests in July and storm event samples (June and August), however even when removing storm event results *E. coli* concentrations were still above the yellow light trigger. Bacteria protocols were not followed during all sampling events, e.g., June, when high values should have resulted in re-tests. **HESL recommends ongoing sampling to continue to monitor for long-term trends and to further inform on the elevated bacteria concentrations observed at several nearshore sites in 2022 and 2023.**