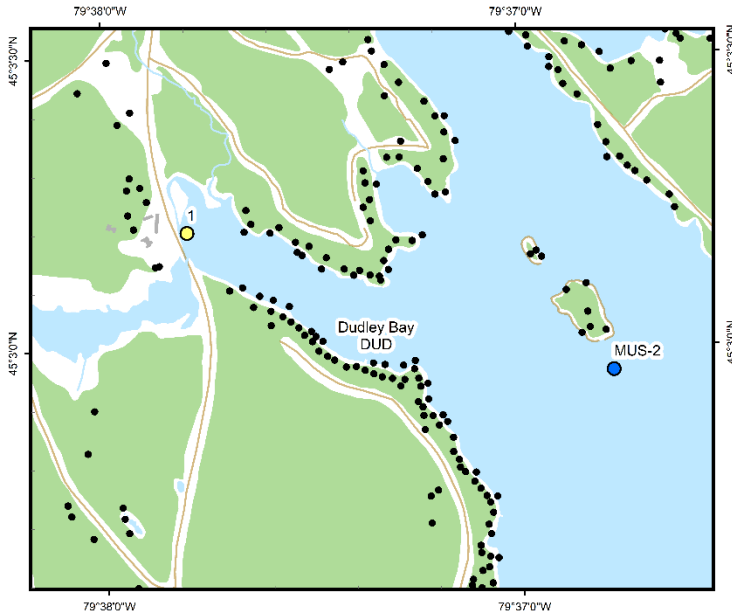


# Dudley Bay (DUD-1 and MUS-2)



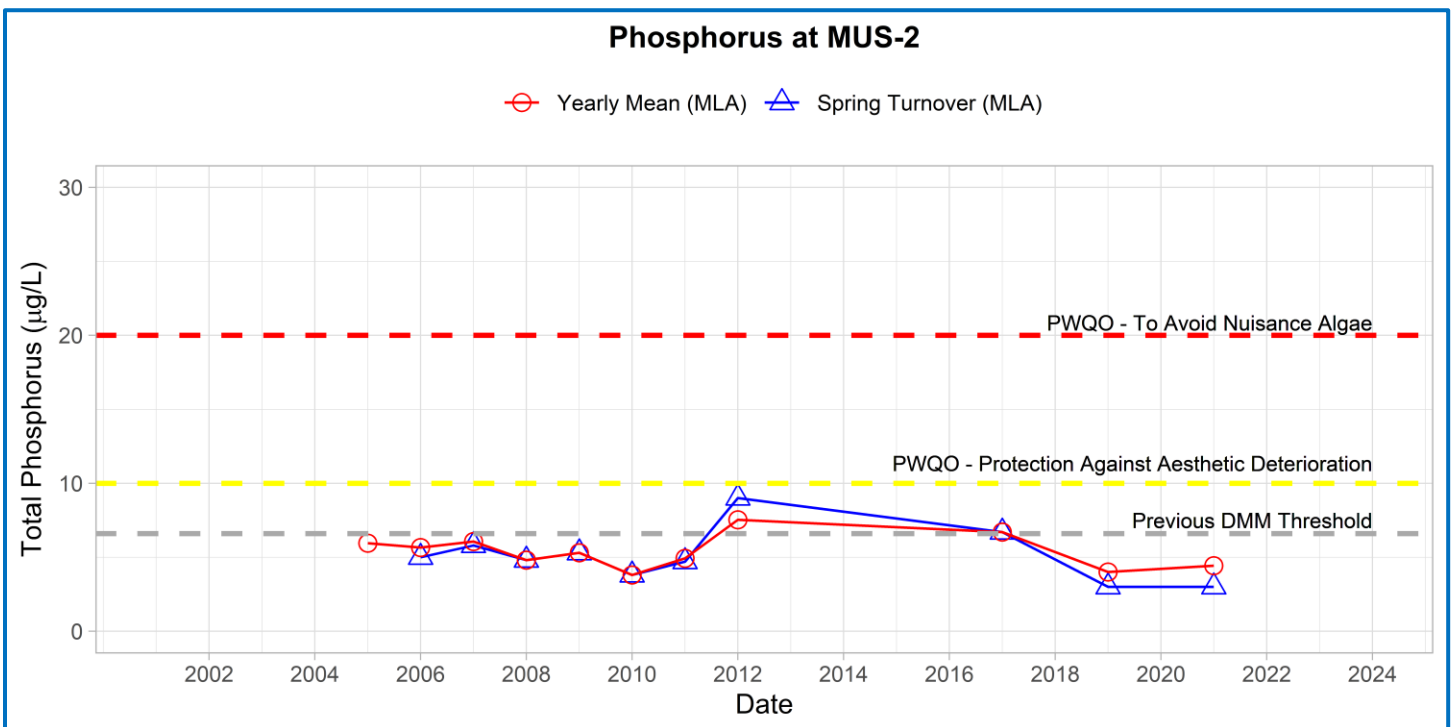
### Area Description:

Dudley Bay is a moderately developed area in eastern Lake Muskoka, with a surface area of 3.55 km<sup>2</sup> and a maximum depth of 20 m. Development in the area includes residential properties, a cranberry farm and Highway 169, which runs in close proximity to the western shoreline. Several creeks and wetlands drain into the bay, including from the cranberry marsh. Dudley Bay was historically classified as moderately sensitive by the DMM. Monitoring started in 2005.

Volunteer Recognition: Eleanor Lewis, Kim Seon and Jim Lewis.

### 2021 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		
DUD-1		7.2	5.8		
MUS-2	4.0	3.0	4.4		



Note: Grubbs test indicates no data collected were considered outliers.



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Annual average and spring phosphorus concentrations at the deep-water station (MUS-2) were below the historic DMM threshold of 6.6  $\mu\text{g/L}$  and Provincial Water Quality Monitoring Objectives for Protection Against Aesthetic Deterioration (10  $\mu\text{g/L}$ ) and Nuisance Algal Growth (20  $\mu\text{g/L}$ ). Nearshore monitoring of annual average and spring phosphorus concentrations at DUD-1 were lower than in 2019 and within the range of variability of previous monitoring years. Average annual Secchi disk depth (4.0 m) was consistent with previous monitoring (2.5 – 4.75 m). **HESL recommends ongoing sampling to continue to monitor for long-term trends and emerging issues.**