



## Stanley Bay (STN)



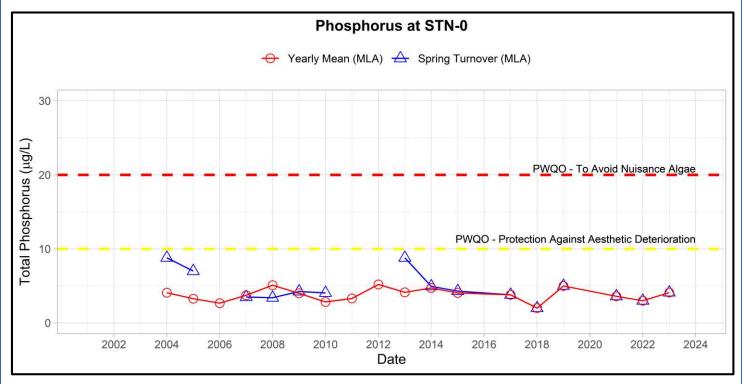
## Area Description:

Stanley Bay is a deep-water bay on the north-east side of Lake Joseph. The bay is developed with largely intact forest cover along the shoreline. The bay is surrounded by numerous roads and a moderate level of residential development, and agricultural development which could negatively impact water quality.

Volunteer Recognition: Alex Magditsch, Cecil Hayhoe.

## 2023 Water Quality Results:

	Mean Secchi Disk (m)	Total Phosphorus (μg/L)		E. coli Yearly	Total Coliforms
		Spring Turnover	Yearly Mean	Geometric Mean (cfu/100mL)	Yearly Geometric Mean (cfu/100 mL)
STN-0	5.0	4.1			
STN-2		2.0			



Note: Grubbs test indicates 2011 data for spring total phosphorus was an outlier.







The spring 2011 phosphorus sample at STN-0 was identified as an outlier (29.1  $\mu$ g/L) and was significantly higher than any phosphorus measurement recorded historically at the site. This value is suspected to be a result of sample contamination and therefore has been eliminated from the results but retained in the long-term dataset for future consideration as additional data are collected. All measured phosphorus concentrations in 2023 were below the Provincial Water Quality Monitoring Objectives for Protection Against Aesthetic Deterioration (10  $\mu$ g/L) and Nuisance Algal Growth (20  $\mu$ g/L). Monitoring of spring phosphorus concentrations at STN-2 was within the range of variability of previous monitoring years. Average annual Secchi disk depth (5.0 m) was consistent with previous monitoring (3.75 - 8.0 m). **HESL recommends ongoing sampling to continue to monitor for long-term trends and emerging issues.**