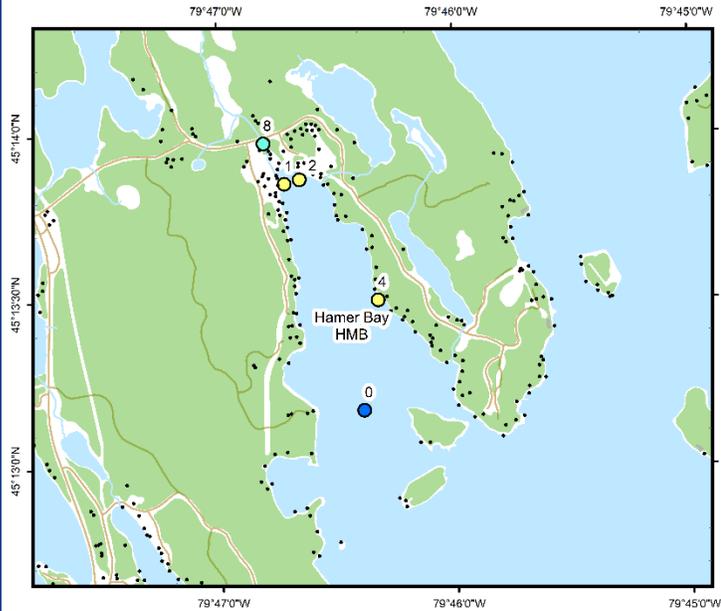




Hamer Bay (HMB)



Area Description:

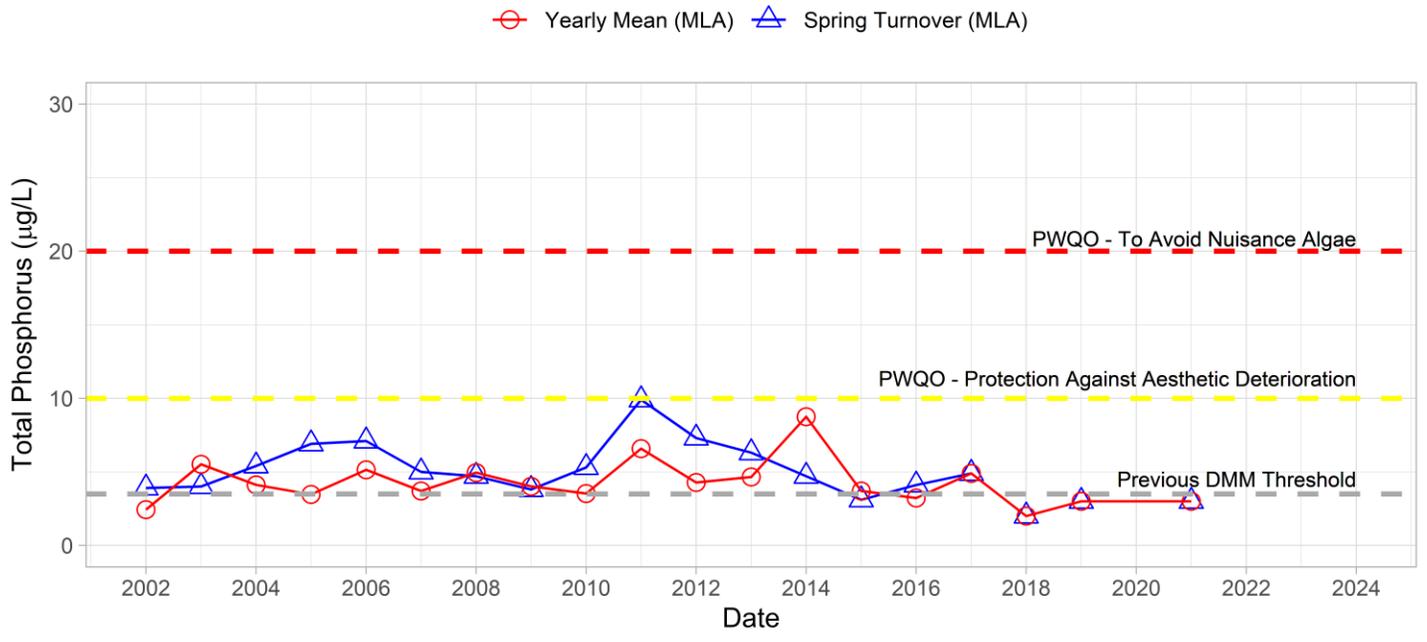
Hamer Bay is in the northern region of Lake Joseph. The bay receives drainage from three creeks, one of which flows through a large golf course and wetland in the north, and the others through smaller lakes and wetlands. Hamer Bay is highly developed including a large marina with several parking lots, a resort, and many residential properties along most of the available shoreline. The main basin of Lake Joseph is currently classified as highly sensitive by the DMM. MLA sampling in Hamer Bay began in 2002.

Volunteer Recognition: Alex Magditsch, Cecil Hayhoe.

2021 Water Quality Results:

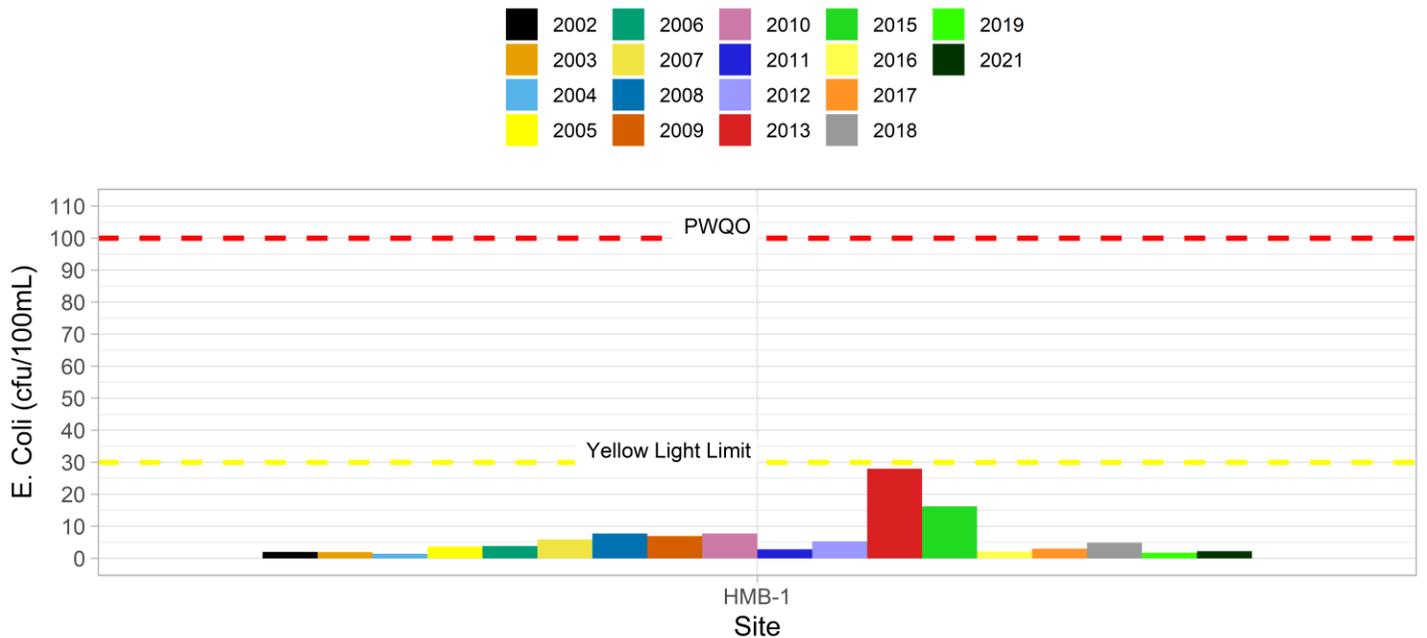
	Mean Secchi Disk (m)	Total Phosphorus ($\mu\text{g/L}$)		E. coli Yearly Geometric Mean (cfu/100mL)	Total Coliforms Yearly Geometric Mean (cfu/100 mL)
		Spring Turnover	Yearly Mean		
HMB-0	5.9	3.0			
HMB-1		4.7	6.0	2.2	90
HMB-2		3.0	3.3		
HMB-4		3.0	3.0		
HMB-8		34.5	41.0		

Phosphorus at HMB-0



Note: Grubbs test indicates 2014 Annual Total Phosphorus data was an outlier.

E. Coli Annual Geometric Mean at Hamer Bay



In 2021, spring phosphorus at HMB-0 was below the detection limit (3.0 µg/L). All measured phosphorus concentrations were 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 and annual average phosphorus concentrations at HMB-1, 2 and 4 were within the range of variability of previous monitoring. Phosphorus concentrations at HMB-8 were above the PWQO guideline for controlling excessive plant growth in rivers and streams (30 µg/L) in two of the four samples collected but were consistent with previous monitoring. Bacterial counts of *E. coli* at HMB-1 remain well below the MLA established limits. Elevated total coliforms at HMB-1 in 2021 were heavily influenced by a single sample (375 cfu/100mL)



Hutchinson
Environmental Sciences Ltd.



collected during heavy rain. Average annual Secchi disk depth (5.9 m) was consistent with previous monitoring (3.3 - 8.0 m). **HESL recommends ongoing sampling to continue to monitor for long-term trends and emerging issues.**