



Area Description:

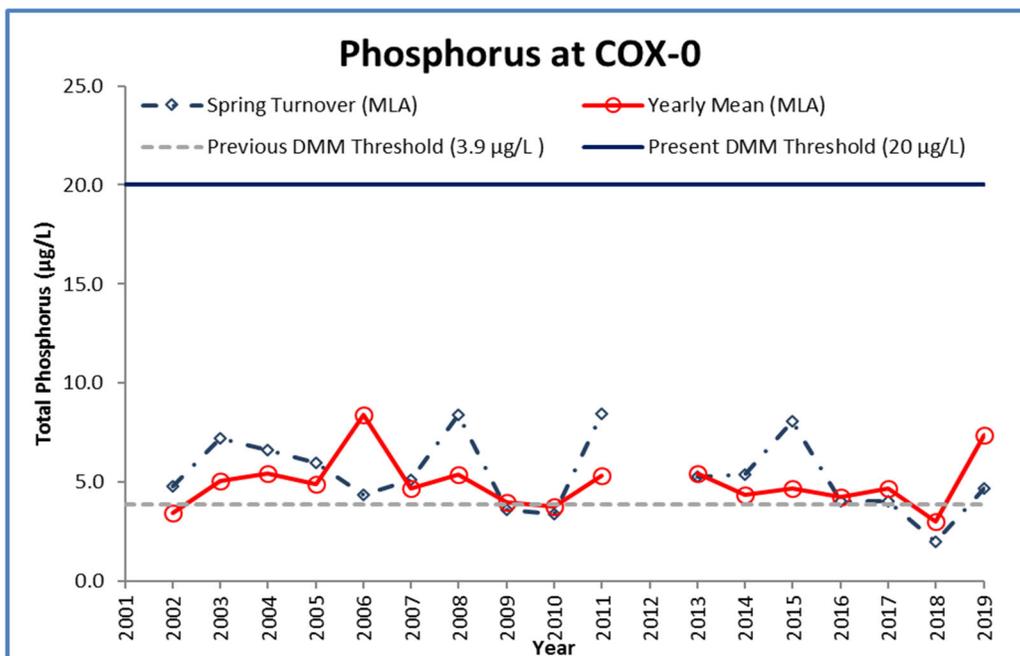
Cox Bay is the southernmost bay of Lake Joseph. The bay is 1.84 km² in area and is up to 12 m in depth. A large resort and golf course are located adjacent to the lake, along with a marina and a canal crossing into Lake Rosseau at Port Sandfield. Most of the shoreline area is developed, but many residences maintain forested cover on their properties. More than 15% of the shoreline is open lawn, pavement or is intensely landscaped. The Cox Bay Stewardship Initiative group has identified ten permanent watercourses that drain into the bay. Cox Bay was historically classified as moderately sensitive and over-threshold by the DMM. Monitoring started in 2002. All stations shown may not be sampled each year.

Volunteer Recognition: Liz Lundell, Stuart Golvin, Judy Golvin, and Guy Burry.

Cox Bay (COX)

2019 Water Quality Results: (Note: Hatched cell signifies not tested for in 2019)

Station	Mean Secchi Disk (m)	Total Phosphorus (µg/L)		E. coli Yearly Geometric Mean (cfu/100 ml)	Total Coliform Yearly Geometric Mean (cfu/100 ml)	DOC Yearly Mean
		Spring Turnover	Yearly Mean			
COX-0	4.5	4.7	7.4			
COX-2		5.0				
COX-3		3.9				
COX-6		8.9	8.3			
COX-7		3.1	4.4			
COX-8		4.8				



Summary and Recommendations:



Yearly mean and spring phosphorus concentrations at the deep station (COX-0) were above the historic DMM threshold of 3.9 µg/L in 2019 and all readings remain well below the present DMM threshold (20 µg/L). The 2019 spring phosphorus concentrations and yearly mean at COX-3, COX-7 and COX-8 are consistent with results to date. The 2019 yearly mean phosphorus average at COX-6 is the highest recorded due to the highest sample result to date in June (17.2 µg/L). That said, the yearly mean phosphorus at COX-0 was substantially higher than the spring turnover concentration, resulting in Cox Bay being classified as yellow in 2019. Secchi measurements vary through sampling years, ranging between 3.35 and 8.25 m (2015). **Beacon recommends sampling continue to monitor long-term trends.**