



### Area Description:

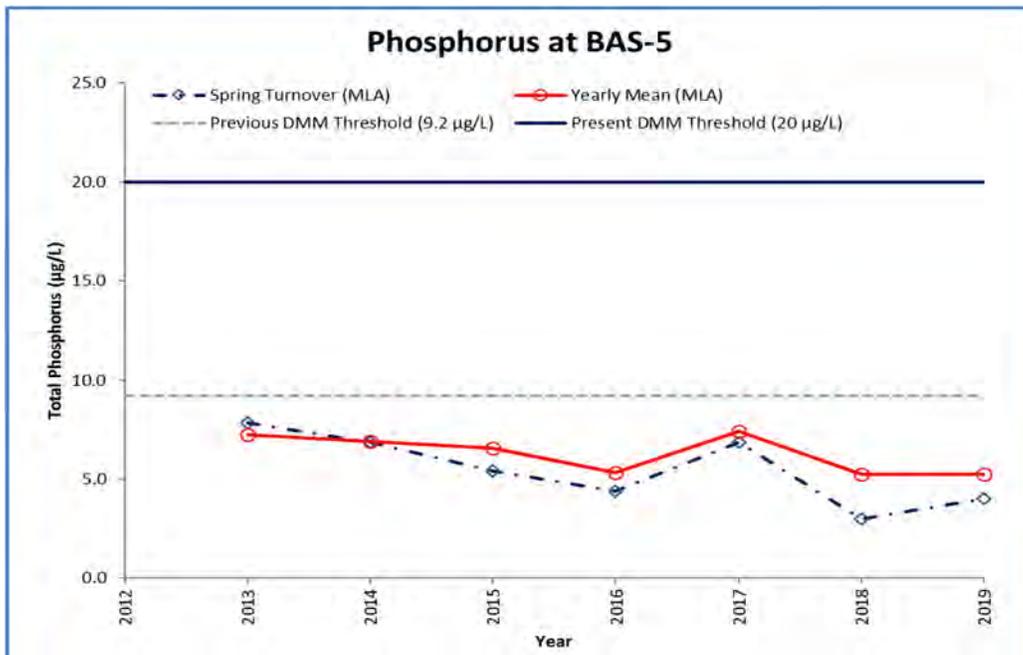
Bass Lake is a small, shallow, moderately developed lake located immediately southwest of Lake Joseph. It is 0.96 km<sup>2</sup> in area with a maximum depth of 8 m. Hwy 169 separates this lake from Lake Joseph at the north end. Bass Lake drains wetlands located to the south and water flows into Stills Bay via Stills Falls. Bass Lake was formerly classified as moderately sensitive by the DMM. Monitoring started in 2005. All stations shown may not be sampled each year.

**Volunteer Recognition: Chris Bodanis, Chris Turney, and Bev Turney.**

## Bass Lake (BAS)

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

Station	Mean Secchi Disk (m)	Total Phosphorus (µg/L)		<i>E. coli</i> Yearly Geometric Mean (cfu/100 ml)	Total Coliform Yearly Geometric Mean (cfu/100 ml)
		Spring Turnover	Yearly Mean		
BAS-2			10.3		
BAS-5	3.1	4.0	5.3		
BAS-7		<3.0	20.9		



## Summary and Recommendations:



BAS-5 spring turnover and yearly mean phosphorus concentrations continue to be below the historic DMM threshold of 9.2 µg/L and all readings remain well below the present DMM threshold (20 µg/L). The yearly mean phosphorus concentration at BAS-5 exceeded the spring turnover phosphorus concentration (yellow stoplight). Phosphorus levels at BAS-7 were elevated during mid-summer, causing an elevated mean, similar to the results in 2018. Secchi measurements also remain stable through sampling years, varying between 2.38 m and 3.75 m. A Harmful Algae Bloom was observed in October 2019, with the algae later found to be nontoxic, resulting in a yellow classification for 2019.

**Beacon recommends all sampling be continued to monitor long-term trends.**

The classification for Bass Lake has been revised to yellow because a blue-green algae bloom was confirmed on the lake, but subsequent testing confirmed that its toxic components – microcystins- were below levels of concern. This is consistent with the MLA classification methodology on page 15 of the main report. The Bass Lake Association [BLA], which monitors the health of the lake under the MLA WQ program, reported an algae bloom to the Simcoe Muskoka District Health Unit [SMDHU] on October 20, 2019. The reported blue-green algae or cyanobacteria bloom was observed in an isolated area at the north end of the lake near Highway 169 and was short-lived. We are advised by BLA that restrictions on flow exiting the lake by beaver dams are the likely cause. After confirming the bloom, SMDHU issued a routine Public Notice on October 24 and lifted this Notice on November 28 following results of tests by the Ministry of Environment, Conservation and Parks [MECP] which showed that the microcystin component of the cyanobacteria was below the instrument detection limit and well below the Ontario Drinking Water Standard. The BLA Executive has been, and continues to be, very active in monitoring and managing the situation and is taking pro-active steps to ensure all is done to avoid similar occurrences.