

2017 Water Quality Report

Water quality monitoring on Go Home Lake for the past eighteen years (2000-2017) has consisted of biweekly bacteriological testing at 6 selected sites from mid June until mid September. For the past thirteen years (2005-2017) depth profiles to analyze water temperature, dissolved oxygen, conductivity (a measure of water source and circulation patterns), clarity and total phosphorus have been conducted at 7 locations in early September.

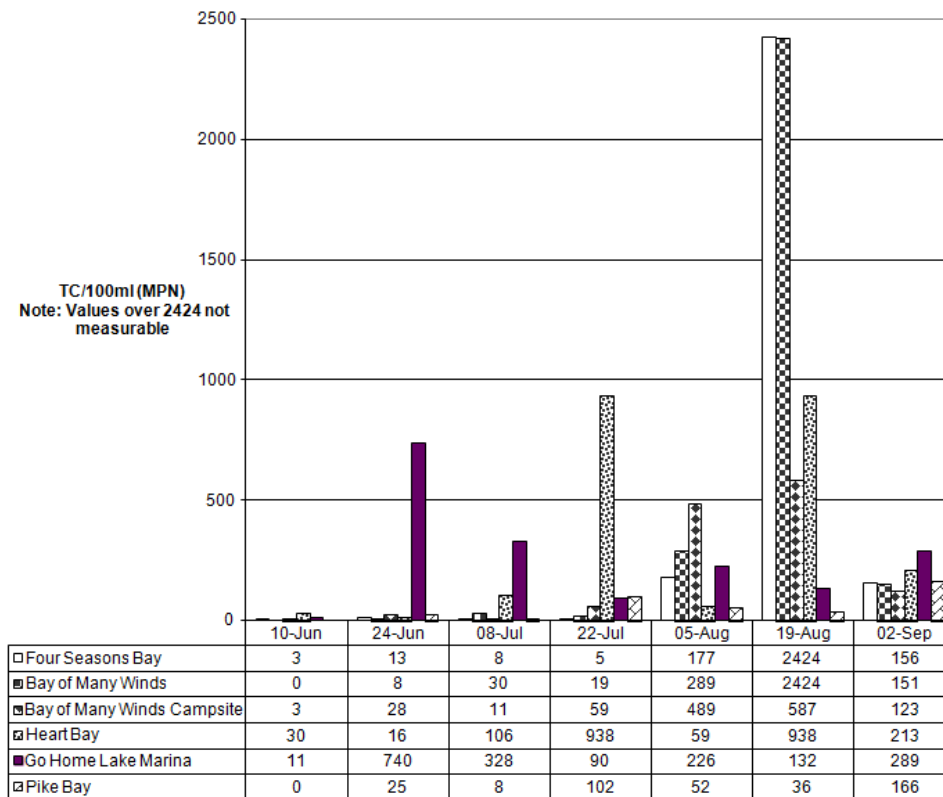
This testing is made possible with financial assistance from the Township of Georgian Bay, and with the kind assistance of Councillor Paul Wiancko of Six Mile Lake.

Total Coliforms

Total Coliform readings during the summer of 2017 were again lower than prior year averages, and similar to those obtained in 2016, with only two samples exceeding the Ontario recreational waters guideline of 1000 TC/100ml.

The majority of organisms measured by the TC test occur naturally in the environment, and enter the lake through soil runoff and decaying organic matter. There is little evidence that human activity contributes significantly to TC readings.

Go Home Lake Total Coliforms 2017

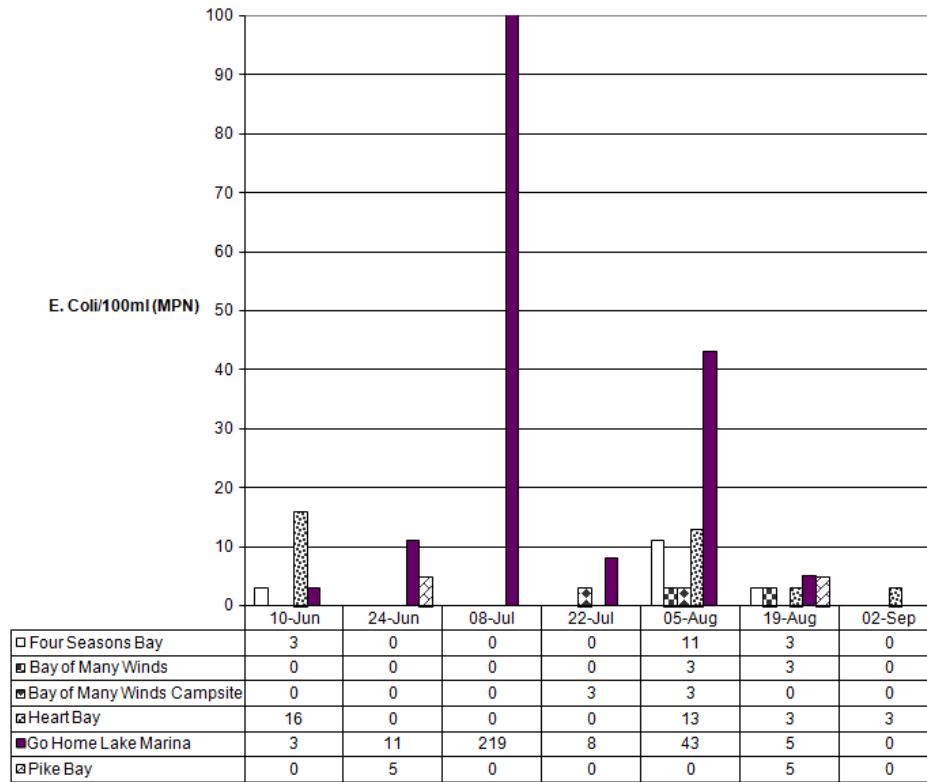


E. Coli

E. Coli, an organism which is abundant in human and animal excreta, is now favored as an indicator of fecal contamination. Studies have shown that illness rates among recreational water users increase with fecal-associated bacteria levels in the water. Health Canada has established a guideline of 0 E. Coli/100ml for drinking water, while Ontario uses 100 E. Coli/100ml as the recreational water guideline. Because children typically ingest quantities of lake water while swimming or playing, the GBA has proposed an objective of 10 E. Coli/100ml for our recreational waters.

E. Coli readings during the summer of 2017 were slightly higher than last year with six results exceeding the GBA objectives, compared to four in 2016. These samples were from three sites, a wider distribution than in prior years when only one site, Go Home Lake Marina, was represented.

Go Home Lake E. Coli 2017



Water Quality Analysis

Detailed water quality analysis has been conducted annually for the past 13 years in late summer, including vertical (top to bottom) temperature and oxygen profiles taken at every meter, conductivity and total phosphorous above and below the thermocline, and water clarity at the surface.

Seven locations were sampled on Sept. 9th, 2017 – Control Dam, Blue Lagoon, Four Seasons Bay, Bay of Many Winds, Crystal Bay, Swallow Bay, and Manning Bay.

Detailed results were not received from the lab in time for the fall newsletter, but will be published in the Township’s Inland Lakes Water Quality Report in due course.

Summary

In summary, bacteriological conditions were quite good in Go Home Lake during the summer of 2017, showing little variation from prior years, although the moderate increase in E. Coli levels and distribution will be of concern should this trend continue in 2018.

We hope to continue the water quality monitoring program in future years to enable us to track the effectiveness of our efforts to preserve this important natural resource. For further information on the program contact Simon Edwards, Lot 172.