

## 2018 Water Quality Report

Water quality monitoring on Go Home Lake for the past nineteen years (2000-2018) has consisted of biweekly bacteriological testing at 6 selected sites from mid June until mid September. For the past fourteen years (2005-2018) 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.

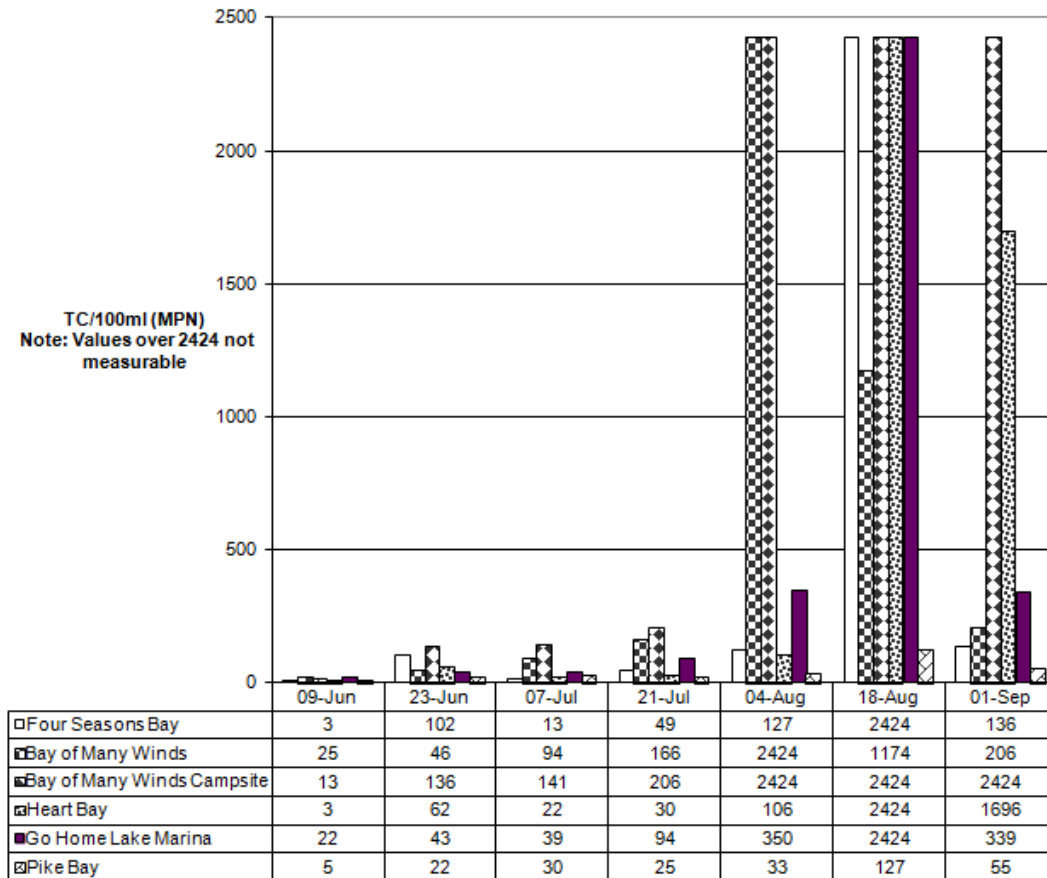
This testing is made possible with financial assistance from the Township of Georgian Bay, and with the kind assistance of Councillor Paul Wiancko of Six Mile Lake.

### Total Coliforms

Total Coliform readings during the summer of 2018 were similar to prior year averages, but somewhat higher than those obtained in 2017. Nine samples exceeded the Ontario recreational waters guideline of 1000 TC/100ml, compared to two in 2017.

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 2018

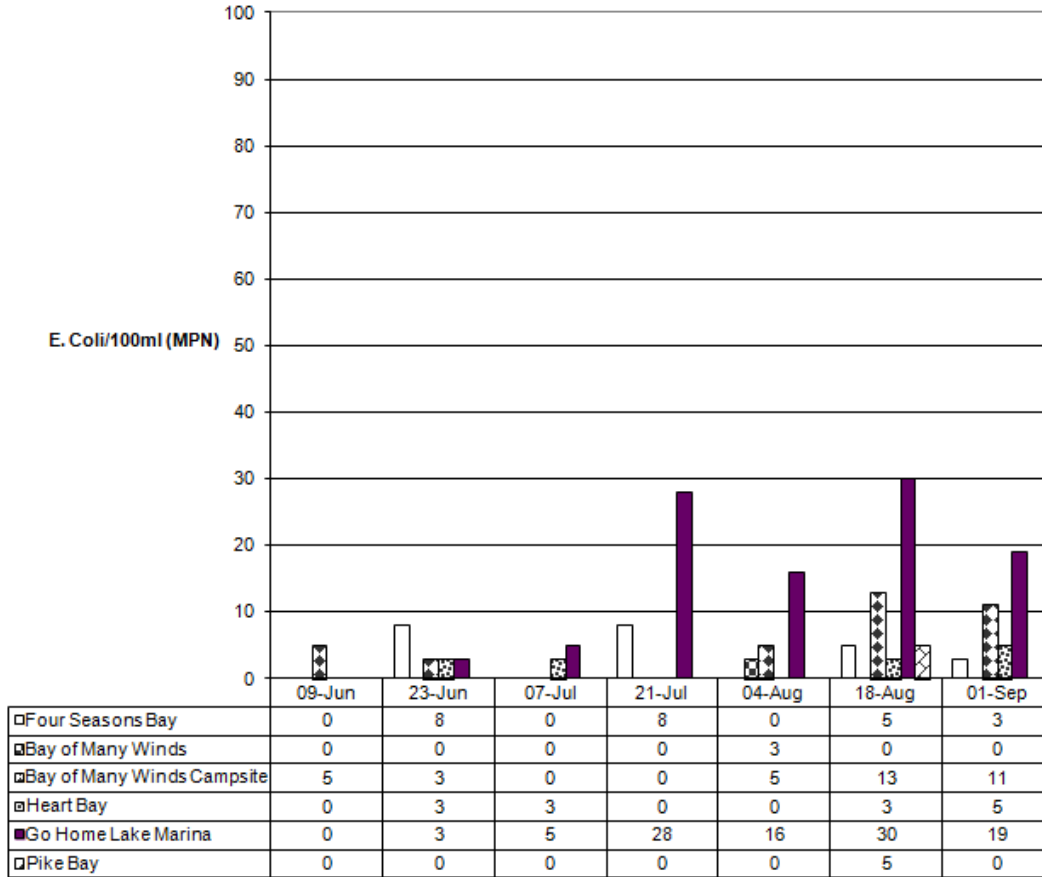


### E. Coli

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 2018 were similar to last year with six results exceeding the GBA objectives, the same number as 2017. These samples were from two sites compared to three sites last year. As usual, a majority of these results were obtained at Go Home Lake Marina.

**Go Home Lake E. Coli 2018**



**Water Quality Analysis**

Detailed water quality analysis has been conducted annually for the past 14 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. 8th, 2018 – Control Dam, Blue Lagoon, Four Seasons Bay, Bay of Many Winds, Crystal Bay, Swallow Bay, and Manning Bay.

Detailed results 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 2018, showing little variation from prior years, although the E. Coli levels at Go Home Lake Marina continue to be an ongoing concern.

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.