

2020 Water Quality Report

Water quality monitoring on Go Home Lake for the past twenty one years (2000-2020) has consisted of biweekly bacteriological testing at 6 selected sites from mid June until mid September. For the past sixteen years (2005-2020) 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.

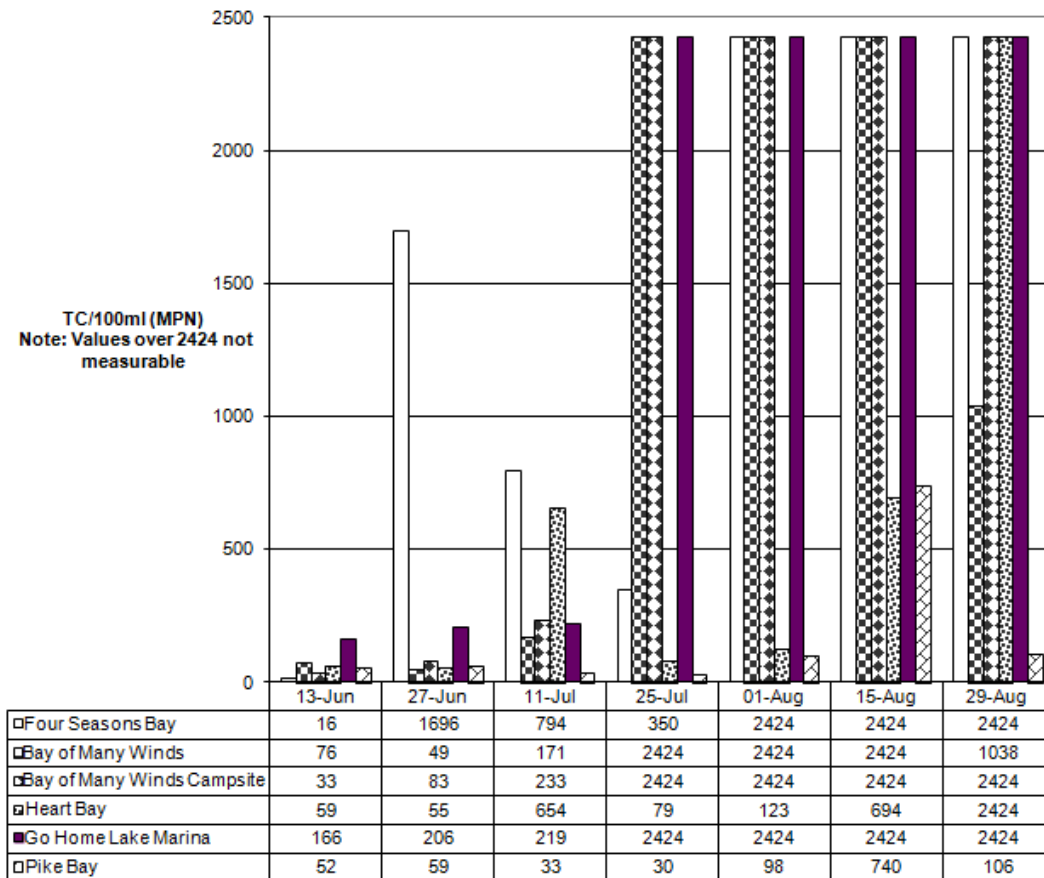
This testing is made possible with financial assistance from the Township of Georgian Bay, and with the kind assistance of Councillor Paul Wiancko of Six Mile Lake.

Total Coliforms

Total Coliform readings during the summer of 2020 were similar to prior year averages, although somewhat higher than those obtained in 2019. Seventeen samples exceeded the Ontario recreational waters guideline of 1000 TC/100ml, compared to eight in 2019.

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 2020

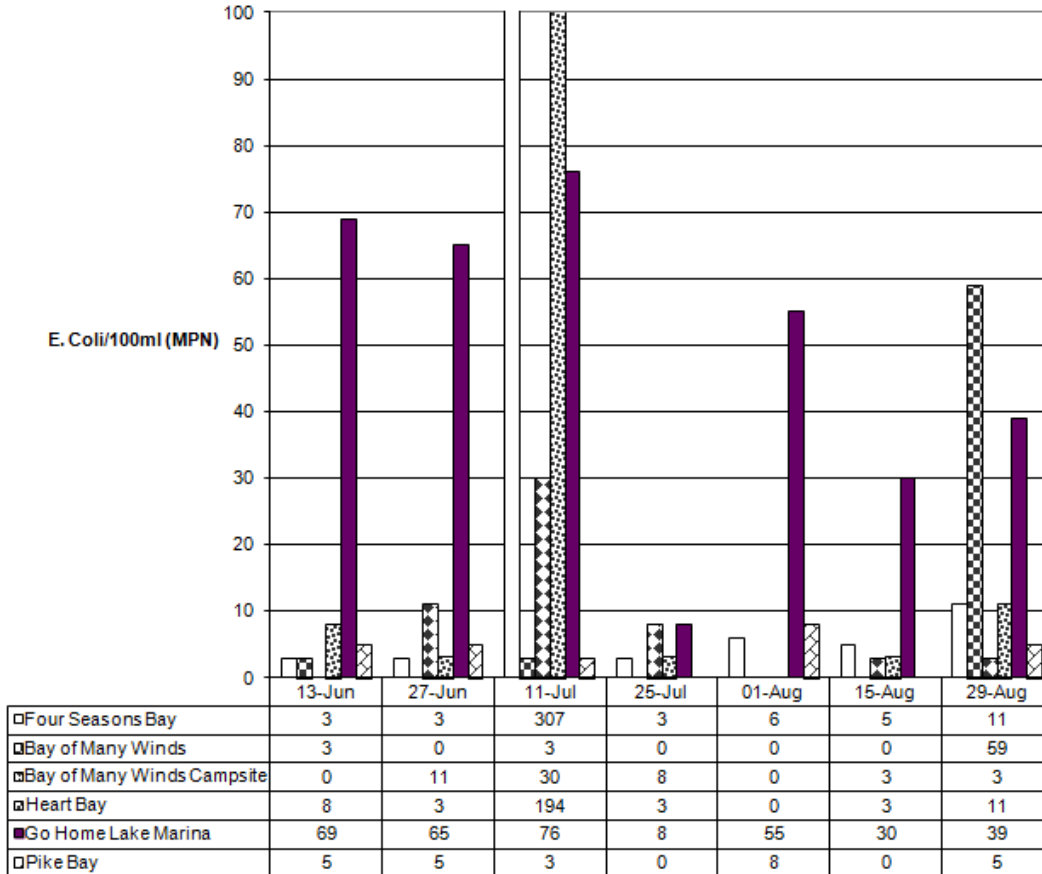


E. Coli

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 2020 were significantly higher than last year with 13 results exceeding the GBA objective, compared to 5 in 2019. Results on July 11th were particularly poor following a significant rainfall event on the 10th, but had returned to normal by July 25th. Readings at Go Home Lake Marina continue to be quite high, as they have been for several years.

Go Home Lake E. Coli 2020



Water Quality Analysis

Detailed water quality analysis has been conducted annually for the past 16 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. 12th, 2020 – 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 somewhat poorer in Go Home Lake during the summer of 2020 compared to prior year s. 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.