

## 2002 Water Quality Report

For many years, water quality monitoring on Go Home Lake has been funded solely by your Association and limited to a single test of 25 locations around the lake conducted on the Victoria Day weekend.

Water quality monitoring on the lake has been significantly increased for the past three summers (2000-2002), with the addition of bi-weekly testing of 6 selected sites from late June until late September. This additional testing has been made possible with financial assistance from the Township of Georgian Bay, District of Muskoka, and the GBA Foundation. The monitoring program measures Total Coliforms (TC), Escherichia coli (E. coli) and water clarity (Secchi depth) at each of the 6 sites 8 times over the summer.

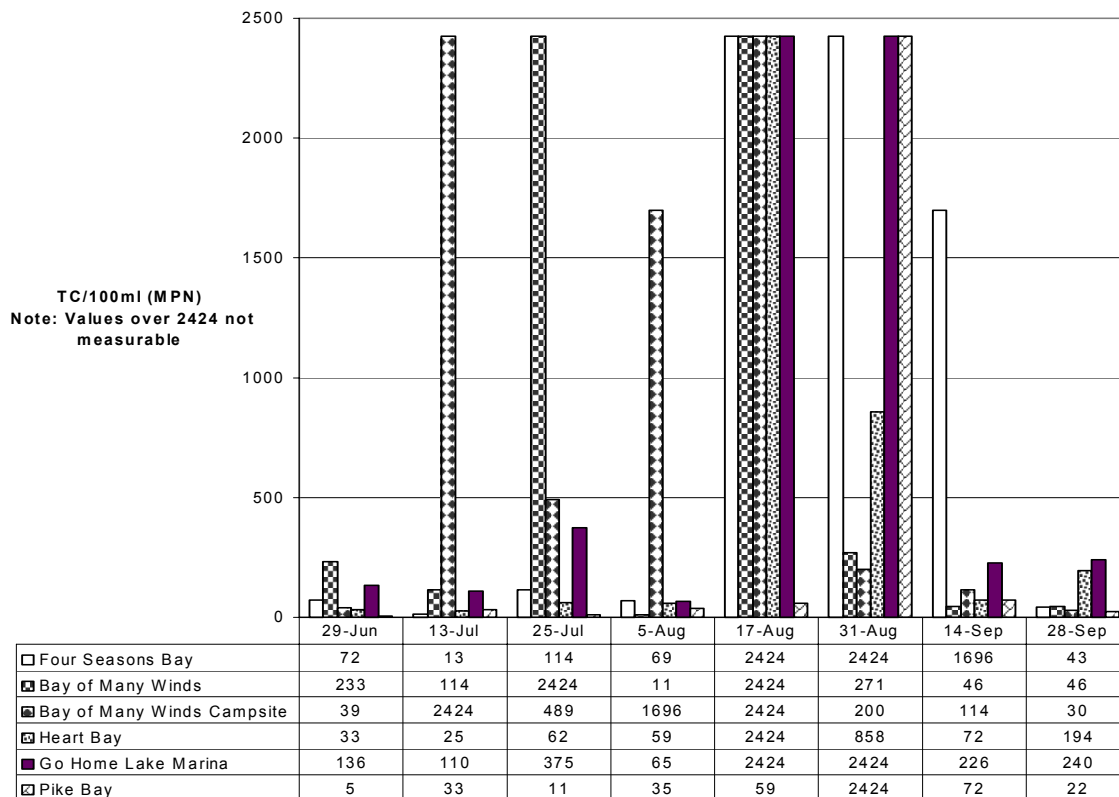
### Total Coliforms

As reported last year, during the summer of 2001 very high TC readings were recorded at several sites, in particular in Four Seasons Bay. We were unable to determine the source of these high TC counts, however, through inquiries made to various government departments and the marine biologist assisting the GBA monitoring program, we learned:

- 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.
- While the TC test is considered an indicator of water quality, high counts are not associated with increased illness rates among recreational water users.

Total Coliform readings during the summer of 2002 were generally much lower except during mid to late August, when dramatic increases were recorded immediately following a significant rainfall event. This suggests the high readings were the result of naturally occurring organisms entering the lake through soil runoff.

Go Home Lake Total Coliforms 2002

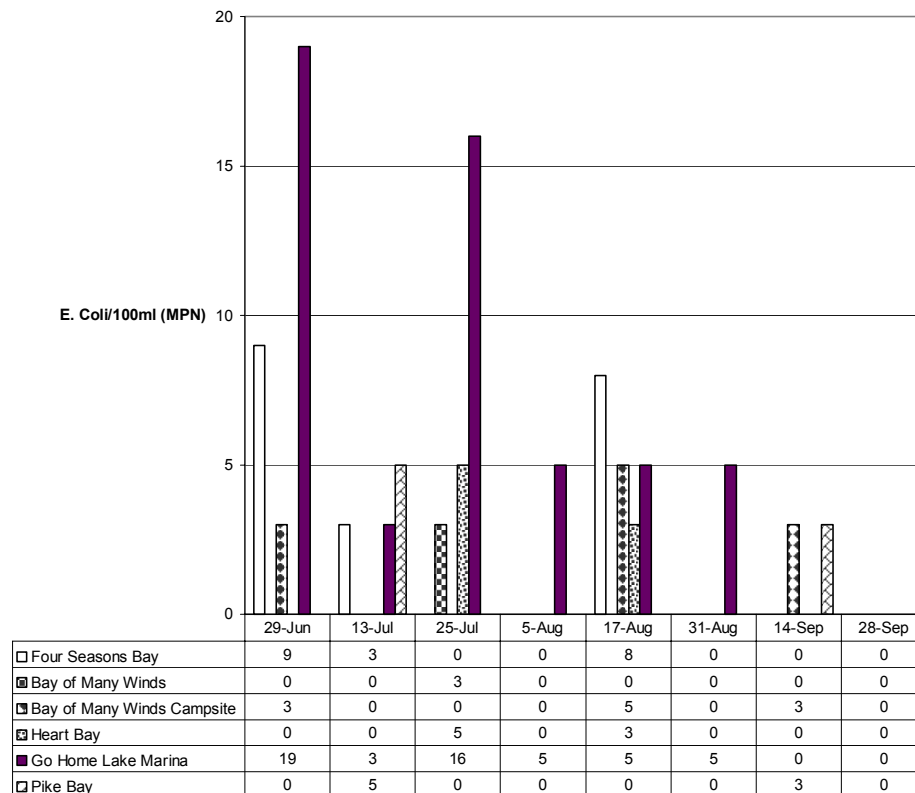


## E. Coli

E. Coli, an organism which is abundant in human and animal excreta is now favoured 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 2002 continue to show significant improvement when compared to prior years. As can be seen from the table below, E. Coli counts on Go Home Lake never approached the provincial guideline during the summer, and only two results (both at Go Home Lake Marina) exceeded the GBA objective.

**Go Home Lake E. Coli 2002**



## Summary

In summary, water quality conditions were generally very good in Go Home Lake during the summer of 2002. The high TC readings in August appear to result from organic soil runoff during heavy rain following a prolonged dry spell. These readings were not associated with corresponding increases in E. Coli counts and therefore do not give rise to health concerns for recreational water users.

We hope to continue this 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 at 705 756 3445, 416 492 7696, or [simon@tipperlinne.com](mailto:simon@tipperlinne.com)