

White Lake Checkup: July 15, 2025

The morning of July 15th this year was hot with full sun and no wind. There were very few boats on the lake. One thing: forest fire smoke blanketed the lake. (See: [smoke.pdf](#)). That did not deter us from visiting our nine sampling sites (using GPS). We measured water temperatures, water clarity and water depth at the Waba Creek dam. Water samples were also taken for analysis of phosphorus, calcium and chloride. These samples were mailed to the Ministry of the Environment Labs for processing. Also collected were plankton samples using a specialized net. These samples were analyzed later using an optical microscope.

Water Temperature: The water temperature in the deeper parts of the lake was 25.6°C, about 0.5 degrees warmer than last year. In the shallower parts, the temperature was about one degree higher at 26.4°C. The highest temperature was recorded in Hayes Bay at 26.9°C.

Water Clarity: Water clarity as expressed as the Secchi depth was 4.3 metres which was 0.9 metres less (clear) than last year. Water clarity ranged from 4.0 to 4.5 in the deeper sampling sites.

For those interested in graphs, the attached figure shows the average Secchi depth reading starting in 2015 to the present. Once zebra mussels took hold in White Lake, the water clarity increased by nearly a factor of two. Since that time to the present, water clarity has changed, but only moderately.

The increased water clarity is a result of the feeding habits of the hundreds of millions of zebra mussels in White Lake; each capable of filtering 1 litre of lake water per day. We calculate that the volume of the entire lake can be filtered in about 2 months' time.

Increased water clarity means more light to encourage the growth of aquatic plants, aka weeds. Zebra mussels excrete (poop!) nutrients, such as phosphorus, in a form that encourages not only weed growth, but also algal blooms, which we have seen annually for the last 12 years. Sadly, increased water clarity in White Lake is not overall a good thing.

Rain: According to Environment Canada, the amount of rain we received in June of this year was 65.5 mm, which is much less than the 149 mm received last year.

Water Depth: The depth of the lake as measured at the gauge at the dam was 147 cm as compared to the target depth of 141 cm; six cm higher than planned by the Ministry of the Environment.

Cormorant Count: Eight cormorants were observed on the lake. Six were counted on this date in 2024. These numbers are in keeping with observations during previous years. The number of cormorants can change from week to week depending on the number of cormorants using the lake and who may be nesting kilometres away. As with any such

survey, the numbers we record are a minimum and it is likely that there are more we did not encounter, although we believe these numbers would be small.

To learn more about current water quality conditions of White Lake, please read our 2024 annual reports, and the State of White Lake Report which can all be accessed from the home page of the White Lake Science website: <https://wlpp.ca>

Contact us at envwlpoa@gmail.com if you have questions or concerns or if you would like to be added to our emailing list and receive all of our reports, bulletins, and checkups.

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