Troy Lake Water Report – 2018

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
May	18.6	25.2	19.2		14	29.9	21.5	24.7	17.4	31.3	23.3
June	20	42.2	26.7	21.3	20.5	19.5	29.4	29	17.2	20.2	23.1
July	26.6	35.7	32	24.6	38.6	20.8	30.6	22.8	20.8	24.0	21.6
Aug.	35.7	44.3	53.4	32.9	27.6	32.3	27.2	24.2	22.5	21.5	22.4
Sept.	38.8	35.6	51.2	52.5	40.8	41.2	36.9	38.9	29	20.3	38.0
Oct.	32.9	30.4	72.5	26.3	34.6	45.3	54.2	31.7	31.2	26.4	34.2
Avg.	**28.7**	**35.5**	**42.5**	**31.52**	**29.35**	**31.5**	**33.3**	**28.5**	**23**	**24.0**	**27.1**

Phosphorous Concentration in µg/litre 27.1 (2018). Still within the lowest 3 of the last 10 years but creeping up again.

Secchi Disc Depth (clarity in meters per season over the 6 sample months)

2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
1.7	1.3	1.6	1.4	1.5	1.6	1.38	1.7	1.7	1.6	1.9

Summary

TROY LAKE is considered an Eutrophic Lake (enriched - higher levels of nutrients).

2018 average phosphorous readings are again within the best in the last 10 years!!! (still enriched but okay for a shallow spring-fed lake with low turnover)

The average Secchi disc reading of 1.9 m is the highest we have had in the last 10 years.

Calcium over the last 10 years is being measured in Ontario Lakes.
Our 2018 calcium average was at 23.85 mg/L. THIS IS GOOD.
Some lakes have dropped below 1.5mg/L. which have had negative effects on many aquatic animals that need calcium, such as mollusks, clams, amphipods, and crayfish. Calcium concentrations of 0.5 mg/L and between 1-2.5 mg/L are the survival thresholds for daphniids and crayfish.

Blue Green Algae

The growth of algae in the water depends on nutrients such as phosphorus and nitrogen. A certain level of algae is desirable; it supports fish populations and other aquatic life. However, the introduction of excess phosphorus and nitrogen leads to excess algae growth, and instead of nurturing a lake, it chokes it. **(Please don't fertilize your lawns).** Proper cottage environmental maintenance (properly maintained septic system, non use of fertilizers, non-use of phosphorus containing detergents) will over time, improve the water quality of our lakes.

If you suspect a blue-green algal bloom: • assume toxins are present • avoid using the water • restrict pet access to the water, and • call the ministry's Spills Action Centre at **CALL 1-800-268-6060**