Worcester Cyanobacteria Monitoring Collaborative Results 8/3/2026

The WCMC is a group of volunteer community scientists that is developing ways to assess risk of cyanotoxin exposure using fast and low-cost methods. These results are based on methods that are not certified by the Commonwealth of MA but are presented as additional information so that lake users can make informed choices about their contact.

We encourage people to use their best judgement, and "If in doubt, stay out!"

If you or your pet has been exposed to water that may contain cyanotoxins, rinse with tap water immediately. Do not let animals lick their fur. If your pet has ingested scums or water containing cyanobacteria, contact your veterinarian as soon as possible.
CDC - Cyanobacteria Blooms and Your Health

CDC – Preventing Pet and livestock Illnesses Caused by Harmful Cyanobacteria Blooms

Interpreting WCMC Results

The WCMC does not measure cyanotoxins, instead the group uses four parameters to estimate the **risk of cyanotoxin exposure**. These include **phycocyanin concentration**, **particle concentration**, **cyanobacteria density**, and the **cyanobacteria observed**. Each of the results are ranked and given a color to identify severity. The overall risk of exposure at each lake is estimated by reviewing all four parameters together. Results listed as ND (Not Detected) indicate that the result was less than the level that equipment can reliably detect.

Table 1. Legend for interpreting results

Overall Risk Rating	Phycocyanin Concentration (RFU)	Particle Concentration (#/ml)	Relative Cyanobacteria Density
Very Low	ND - 15 - Very Low	0-1000 - Very Low	Very Low
Low	15-20 - Low	1000-5000 - Low	Low
Elevated	20-50 – Elevated	5000-10000 - Elevated	Elevated
High	>50 - High	>10000 - High	High

Table 2. Results from samples collected on 8/3/2026

Waterbody	Overall Risk Rating	Phycocyanin Concentration (ug/l)	Particle Concentration (#/ml)	Relative Cyanobacteria Density	Cyanobacteria Genera Observed
Buffumville Lake	Low	9 - Very Low	1613 - Low	low	Microcystis Debris
Coes Reservoir	Elevated	19 - Low	1517 - Low	Elevated	Aphanizomenon, Dolichospermum, Microcystis Debris, Woronichinia
Cooks Pond	Low	11 - Very Low	1254 - Low	Low	Microcystis Debris
Crystal Pond	Very Low	ND - Very Low	159 - Very Low	Very Low	None
East Lake Waushacum	Low	12 - Very Low	770 - Very Low	Low	Dolichospermum, Microcystis Debris
Farm Pond	Low	10 - Very Low	571 - Very Low	Low	Dolichospermum, Oscillatoria
Green Hill Park Pond	Low	14 - Very Low	2611 - Low	Elevated	Aphanocapsa, Dolichospermum, Aphanizomenon
Indian Lake Clason Beach	High	21 - Elevated	2416 - Low	High	Aphanizomenon, Dolichospermum, Microcystis, Microcystis Debris, Planktolyngbya
Jordan Pond	Low	13 - Very Low	568 - Very Low	Elevated	Dolichospermum, Aphanizomenon, Snowella
Lake Lashaway	Low	11 - Very Low	352 - Very Low	Low	Dolichospermum, Microcystis Debris, Aphanizomenon
Little Indian Lake	Low	41 - Elevated	16865 - High	Very Low	None
Manchaug Pond	Low	ND - Very Low	217 - Very Low	Low	Microcystis Debris

Waterbody	Overall Risk Rating	Phycocyanin Concentration (ug/l)	Particle Concentration (#/ml)	Relative Cyanobacteria Density	Cyanobacteria Genera Observed
Mossy Pond	Very Low	10 - Very Low	199 - Very Low	Very Low	None
Newton Pond	Low	15 - Low	621 - Very Low	Low	Snowella, Microcystis Debris
Salisbury Pond	Elevated	33 - Elevated	9055 - Elevated	Elevated	Dolichospermum, Microcystis, Microcystis Debris, Woronichinia

Table 3. Previous Results for Lakes Not Tested this Period

Waterbody	Overall Risk Rating	Phycocyanin Concentration (ug/l)	Particle Concentration (#/ml)	Cyanobacteria Density	Date Last Sampled
Burncoat Pond	Elevated	98 - High	35218 – High	Low	7/18/2026
Ecotarium Pond	Very Low	14 – Very Low	179 – Very Low	Very Low	7/18/2026
Elm Park Pond	High	9992 - High	548161 – High	Elevated	7/18/2026
Flint Pond	Very Low	ND – Very Low	819 – Very Low	Very Low	6/13/2026
Indian Lake Morgan Park	Elevated	24 - Elevated	2952 – Low	High	7/18/2026
Lake Ellie	Elevated	98 - High	24565 – High	Very Low	7/18/2026
Lake Quinsigamond Lake Park	Low	ND – Very Low	692 – Very Low	Elevated	7/18/2026
Leeseville Pond	Very Low	ND – Very Low	520 – Very Low	Very Low	7/18/2026

Waterbody	Overall Risk Rating	Phycocyanin Concentration (ug/l)	Particle Concentration (#/ml)	Cyanobacteria Density	Date Last Sampled
Patch Reservoir	High	87 - High	3879 – Low	High	7/18/2026
Stevens Pond	Low	ND – Very Low	678 – Very Low	Low	5/16/2026

Data Definitions

Risk of Exposure: Overall risk of exposure to cyanotoxins in the waterbody based on a holistic interpretation of the data collected.

Phycocyanin: Cyanobacteria-specific pigment concentration in the water. The more phycocyanin there is in the water, the more cyanobacteria are present. However, because different kinds of cyanobacteria produce different quantities of phycocyanin, the risk of toxin production is different for the same concentration of phycocyanin when there are different cyanobacteria present.

Particle Concentration: Particles include living and non-living materials and can be a proxy for overall turbidity of the water. High concentrations of particles in the water can be indicative of cyanobacteria blooms but can also be the result of other factors such as non-living debris and sediment. The phycocyanin concentrations and cyanobacteria density help to interpret if particles are due to cyanobacteria or other sources.

Relative Cyanobacteria Density: The ratio of cyanobacteria to other organisms in the sample. Higher densities can indicate elevated risk of exposure to cyanotoxins. Density results do not consider concentration, but in general, systems dominated by cyanobacteria are at higher risk for producing toxins.

Cyanobacteria Observed: Genera of cyanobacteria identified in the sample. Because different cyanobacteria have different levels of phycocyanin, observed cyanobacteria help determine the threshold of phycocyanin that is considered risky.

ND: ND (Not Detected) indicates that the result was less than the level that laboratory equipment can reliably detect.