



# Worcester Cyanobacteria Monitoring Collaborative Results 5/16/2026

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)	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 5/16/2026

Waterbody	Overall Risk Rating	Phycocyanin Concentration (ug/l)	Particle Concentration (#/ml)	Cyanobacteria Density	Cyanobacteria Genera Observed
Bell Pond	Very Low	ND - Very Low	687 - Very Low	Very Low	None
Buffumville Lake	Low	ND - Very Low	171 - Very Low	Low	Dolichospermum
Burncoat Pond	Low	17 - Low	11368 - High	low	Aphanizomenon, Dolichospermum, Microcystis
Coes Reservoir	Low	ND - Very Low	593 - Very Low	low	Dolichospermum
Cooks Pond	Very Low	ND - Very Low	357 - Very Low	Very Low	None
Crystal Pond	Very Low	ND - Very Low	51 - Very Low	Very Low	None
East Lake Waushacum	Very Low	ND - Very Low	102 - Very Low	Very Low	None
Ecotarium Pond	Low	47 - Elevated	548 - Very Low	Very Low	None
Farm Pond	Low	ND - Very Low	72 - Very Low	low	Dolichospermum
Flint Pond	Low	ND - Very Low	481 - Very Low	low	Aphanizomenon
Green Hill Park Pond	Very Low	ND - Very Low	992 - Very Low	Very Low	None
Indian Lake Clason Beach	Low	ND - Very Low	1674 - Low	low	Woronichinia, Microcystis, Microcystis Debris
Indian Lake Morgan park	Low	ND - Very Low	1034 - Low	Low	Woronichinia, Microcystis, Microcystis Debris, Dolichospermum
Lake Lashaway	Low	ND - Very Low	387 - Very Low	low	Woronichinia, Dolichospermum
Little Indian Lake	Low	ND - Very Low	11942 - High	low	Planktolyngbya, Aphanizomenon, Dolichospermum
Manchaug Pond	Low	ND - Very Low	213 - Very Low	low	Dolichospermum, Microcystis Debris
Newton Pond	Very Low	ND - Very Low	1193 - Low	Very Low	None

Waterbody	Overall Risk Rating	Phycocyanin Concentration (ug/l)	Particle Concentration (#/ml)	Cyanobacteria Density	Cyanobacteria Genera Observed
Salisbury Pond	Very Low	ND - Very Low	12632 - High	Very Low	None
Stevens Pond	Low	ND - Very Low	678 - Very Low	low	Dolichospermum

## 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.

**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.