

Worcester Cyanobacteria Monitoring Collaborative

WCMC Results May 3, 2025						
Lake and Overall Risk	Phycoyanin Concentration (ug/l)	Particle Concentration (#/ml)	Cyanobacteria Density	Cyanobacteria Observed		
Bell Pond	ND	105	none			
Coes Reservoir	ND	187	low	Dolichospermum		
Cooks Pond	ND	516	none			
Crystal Pond	ND	31	none			
East Lake Waushacum	ND	848	none			
Ecotarium Pond	ND	245	none			
Elm Park Pond	208	10445	low	Dolichospermum, Microcystis Debris		
Farm Pond	10	505	low	Dolichospermum		
Flint Pond	ND	192	low	Aphanizomenon		
Green Hill Park Pond	ND	205	low	Microcystis Debris		
Indian Lake	ND	125	low	Microcystis Debris, Woronichinia		
Jordan Pond	18	2017	low	Dolichospermum		
Lake Ellie	ND	13576	none			
Lake Lashaway	ND	95	low	Dolichospermum		
Lake Quinsigamond Lake Park	ND	1342	some	Aphanizomenon		
Lake Quinsigamond Sunset Beach	ND	336	some	Aphanizomenon		
Lake QuinsigamondRegatta Point	ND	699	low	Aphanizomenon		
Leeseville Pond	15	3114	none			
Little Indian Lake	ND	7279	low	Dolichospermum , Planktolyngbya		
Manchaug Pond	ND	688	none			
Newton Pond	ND	155	low	Aphanizomenon		
Patch Pond	ND	634	none			
Patch Reservoir	ND	1759	none			
Salisbury Pond	11	9529	none			
Singletary Lake	ND	274	none			
Stevens Pond	ND	429	low	Dolichospermum		
Risk of Exposure	Phycocyanin ug/l	Particles/ml	Comparative density of cyanobacteria			
Almost none	0-15	0-1000	none			
Low Elevated	15-20 20-50	1000-5000 5000-10000	low some			
Blooming	>50	>10000	high	See reverse side for details		

Results are based on methods that are not certified by the Commonwealth of MA but are presented as recommendations so that lake uses can make informed choices about their contact. We encourage people to use their best judgement, and "If in doubt, stay out!"

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Learn more at WorcesterMA.gov/WCMC



Interpreting WCMC Results

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 and see these CDC guidelines:

Cyanobacterial Blooms: Information for Veterinarians | Harmful Algal Blooms | CDC.

The WCMC is a group of volunteer community scientists that is developing ways to assess risk to 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 recommendations so that lake uses can make informed choices about their contact.

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The WCMC does not measure cyanotoxins, instead the group uses four parameters to determine 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 determined by reviewing all four parameters together.

Risk of Exposure	Phycocyanin ug/l	Particles/ml	Comparative density of cyanobacteria
Almost none	0-15	0-1000	none
Low	15-20	1000-5000	low
Elevated	20-50	5000-10000	some
Blooming	>50	>10000	high

ND = Below detection limits

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.