

Worcester Cyanobacteria Monitoring Collaborative

WCMC Results May 19, 2025							
Lake and Overall Risk	Phycoyanin Concentration (ug/l)	Particle Concentration (#/ml)	Cyanobacteria Density	Cyanobacteria Observed			
Bell Pond	ND	50	none				
Burncoat Pond	14	5192	low	Microcystis, Planktolyngbya			
Coes Reservoir	ND	338	low	Dolichospermum			
Cooks Pond	ND	355	none				
Crystal Pond	ND	998	none				
East Lake Waushacum*	ND	No Data	No Data				
Elm Park Pond*	Not Taken	5369	some	Microcystis Debris			
Farm Pond	ND	112	low	Dolichospermum			
Flint Pond*	13	No Data	No Data				
Green Hill Park Pond	ND	1325	low	Aphanizomenon, Dolichospermum			
Indian Lake *	ND	No Data	No Data				
Jordan Pond	ND	371	low	Microcystis			
Lake Ellie	31	2807	none				
Lake Lashaway	ND	323	low	Dolichospermum			
Lake Quinsigamond Lake Park	ND	618	low	Aphanizomenon, Dolichospermum			
Lake Quinsigamond Kings Point	ND	545	low	Aphanizomenon			
Little Indian Lake	15	4447	some	Planktolyngbya			
Manchaug Pond	ND	391	low	Dolichospermum			
Newton Pond	ND	309	low	Dolichospermum, Microcystis			
Patch Pond	ND	10735	none				
Patch Reservoir	ND	2081	none				
Salisbury Pond	ND	4118	low	Microcystis			
Stevens Pond	ND	294	low	Dolichospermum			
	*Not rated due to lack of data. Data lost due to lab error.						
	Previous Result	s for Lake's Not Tes	sted this Period				
Ecotarium Pond	ND	245	none				
Leeseville Pond	15.00	3114	none				
Singletary Lake	ND	274	none				
Risk of Exposure	Phycocyanin ug/l	Particles/ml	Comparative density of cyanobacteria				
Almost none	0-15	0-1000	none				
Low Elevated High	15-20 20-50 >50	1000-5000 5000-10000 >10000	low some 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!" If you or your pet has been exposed to water that may contain cyanotoxins, rinse the areas with tap water immediately. If your pet has ingested scums or water containing cyanobcteria, contact your veterinarian as soon as possible.							
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 quidelines:

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.

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

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.