Worcester Cyanobacteria Monitoring Collaborative

WCMC Results June 7, 2025

Lake and Overall Risk	Phycocyanin Concentration (ug/l)	Particle Concentration (#/ml)	Cyanobacteria Density	Cyanobacteria Observed
Bell Pond	ND	72	none	
Coes Reservoir	ND	251	none	
Cooks Pond	ND	2413	none	
East Lake Waushacum	ND	182	low	Dolichospermum
Ecotarium Pond	36	42	none	
Elm Park Pond	91	14943	low	Microcystis
Farm Pond	ND	2390	low	Woronichinia
Flint Pond	ND	1653	some	Aphanizomenon, Dolichospermum, Microcystis Debris
Green Hill Park Pond	ND	157	low	Dolichospermum, Microcystis
Jordan Pond	ND	757	low	Microcystis
Leeseville Pond	ND	495	none	
Little Indian Lake	9	444	some	Aphanizomenon, Planktolyngbya
Manchaug Pond	ND	484	low	Aphanizomenon , Dolichospermum, Microcystis Debris
Newton Pond	ND	671	low	Dolichospermum
Patch Pond	9	965	none	
Patch Reservoir	11	400	low	Oscillatoria
Salisbury Pond	21	2030	none	
Singletary Lake	ND	217	low	Dolichospermum
Stevens Pond	ND	189	none	
Crystal Pond	10	79	none	
Indian Lake Clason Beach	ND	221	low	Dolichospermum, Planktolyngbya
Lake Ellie	21	2735	none	
Lake Lashaway	ND	1627	none	
Lake Quinsigamond Regatta Point	9	1017	some	Aphanizomenon, Dolichospermum
Lake Quinsigamond Sunset Beach	ND	781	some	Aphanizomenon, Dolichospermum
Lake Quinsigamond Lake Park	16	1664	some	Aphanizomenon, Dolichospermum, Microcystis Debris
Southwick Pond	32	7907	none	

Previous Results for Lake's Not Tested this Period

Burncoat Pond	14	5192	low	

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	*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 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 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 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.

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.