

## WCMC Results July 5, 2022

Lake and Overall Risk	Phycocyanin Concentration (ug/l)	Particle Concentration (#/ml)	Cyanobacteria Density	Cyanobacteria Observed
Bell Pond	ND	518	none	
Coes Reservoir	ND	4910	some	Dolichospermum, Microcystis debris, Aphanizomenon
Cooks Pond	10	5585	low	Dolichospermum
Dark Brook Reservoir	ND	1037	low	Dolichospermum, Microcystis debris
East Waushacum Pond	ND	677	low	Dolichospermum, Microcystis debris
Ecotarium Pond	13	6265	none	
Elm Park Pond	895	32236	high	Dolichospermum, Microcystis, Microcystis debris
Green Hill Park Pond	9	2464	some	Oscillatoria, Dolichospermum, Microcystis debris
Indian Lake	ND	7435	some	Dolichospermum, Microcystis debris
Kiver Pond	63	38650	none	
Lake Quinsigamond	ND	627	some	Microcystis debris, Aphanizomenon
Little Indian Lake	140	16887	high	Aphanizomenon, Dolichospermum, Microcystis
Manchaug Pond	ND	961	some	Aphanizomenon, Dolichospermum
Newton Pond	ND	3399	none	
Patch Pond	18	40551	high	Aphanizomenon, Dolichospermum
Patch Reservoir	353	5056	high	Aphanizomenon, Dolichospermum
Salisbury Pond	11	37765	none	
Singletary Lake	10	1096	low	Dolichospermum
Stevens Pond	ND	1335	none	
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 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 cyanobacteria, contact your veterinarian as soon as possible.*

**WCMC Results July 16, 2022**

Lake and Overall Risk	Phycocyanin Concentration (ug/l)	Particle Concentration (#/ml)	Cyanobacteria Density	Cyanobacteria Observed
Bell Pond	ND	480	none	
Burncoat Pond	589	78126	high	Aphanizomenon, Dolichospermum
Coes Reservoir	79	4059	high	Aphanizomenon, Microcystis, Dolichospermum
Cooks Pond	10	6124	low	Dolichospermum
Dark Brook Reservoir	ND	1434	none	
Ecotarium Pond	ND	5596	none	
Elm Park Pond	NA	690093	some	Microcystis debris
Farm Pond	ND	1026	low	Microcystis debris
Flint Pond	15	4431	high	Microcystis, Dolichospermum, Aphanizomenon
Green Hill Park Pond	16	5704	some	Microcystis debris, Dolichospermum, Aphanizomenon
Indian Lake	11	9216	low	Microcystis debris, Dolichospermum, Aphanizomenon
Jordan Pond	22	8974	low	Oscillatoria, Aphanizomenon
Kiver Pond	158	25216	none	
Lake Quinsigamond	ND	2683	low	Aphanizomenon, Dolichospermum, Microcystis debris
Lake Singletary	ND	1917	low	Dolichospermum
Leeseville Pond	ND	1129	none	
Little Indian Lake	58	49765	some	Microcystis, Dolichospermum, Aphanizomenon
Manchaug Pond	ND	916	low	Aphanizomenon
Newton Pond	ND	5084	low	Woronichinia, Microcystis debris
Patch Pond	ND	4721	low	Microcystis debris
Salisbury Pond	16	11158	none	
Lake Waushacum	ND	1559	low	Dolichospermum, Microcystis debris
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	



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 cyanobacteria, contact your veterinarian as soon as possible.*



# 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 users 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.