



# Cyanobacteria Monitoring Bi-Weekly Update of Chatham Ponds

Sampling for the week of: June 10, 2024

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For more information: [Cyanobacteria](#) | [Association to Preserve Cape Cod \(apcc.org\)](#)

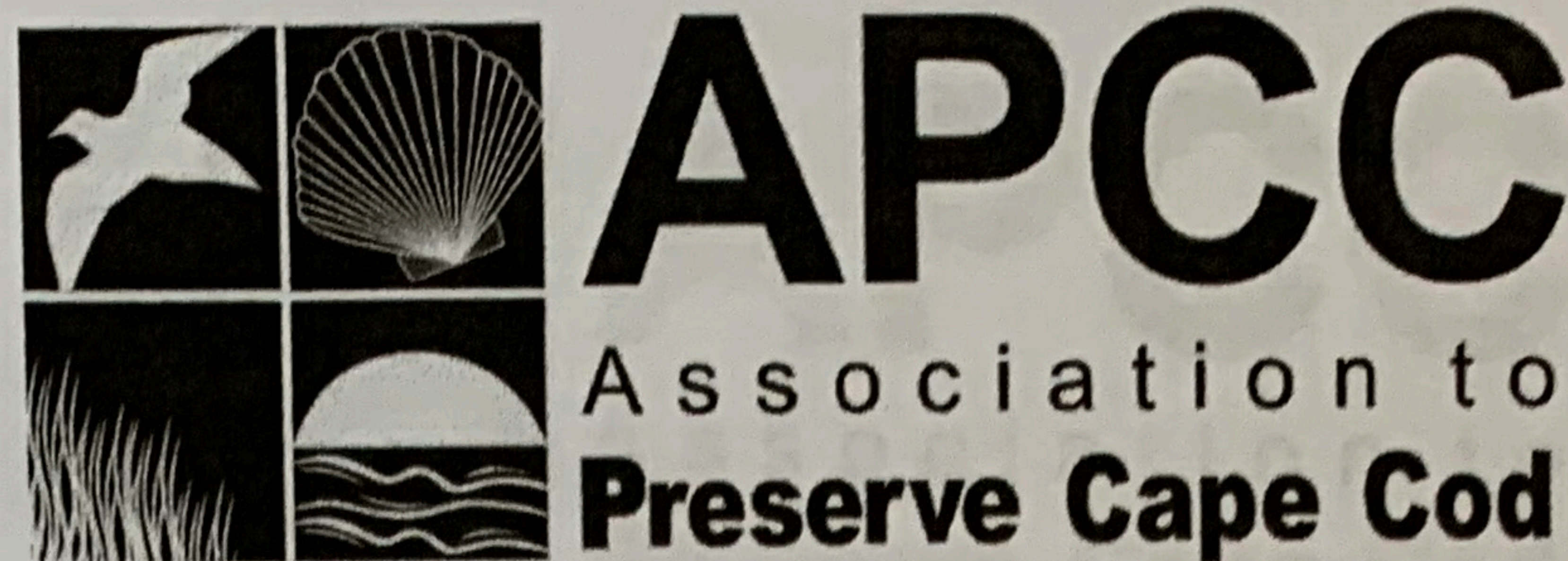
Pond	Sample Date	Pond Water Temp (F)	General Turbidity	Dominant Genus	BFC PC ave. (ug/L <sup>-1</sup> ) *	Estimated BFC microcystin concentrations (ug/L <sup>-1</sup> )			Net growth rate (ud <sup>-1</sup> )			Cyano. Scum	Recent Activity	Current Risk Category
						MCY (Cl-) *	MCY *	MCY (Cl+) *	<50um	WLW	BFC			
Pickerel Pond	6/11/24	70.9	Clear	DS	2	-	-	-	-	-	-	-	-	Acceptable
Trout Pond	6/11/24	70.1	Clear	N/A	2	-	-	-	-	-	-	-	-	Acceptable

\*All BFC PC values rounded to the nearest whole number. Complete data set available upon request.

**Notes:** Pickerel and Trout Ponds were found to be in the Acceptable risk tier category on June 10, 2024.

DS - common genus of cyanobacteria

**Photos:**



**Mixed** Indicates that no single genus of cyanobacteria was found to be dominant. A genus must be found to have a composition and dominance of at least 70% to be considered the dominant genus in a sample.

**WO, AZ** (*Woronochinia* and *Aphanizomenon*) Additional genera of cyanobacteria that are believed to produce regulated toxins at a similar rate to *Dolichospermum*

## Risk Category Descriptions

### Acceptable

**Definition:** No concerning cyanobacteria results at the time and place of sampling. To the best of APCC's knowledge and based on our monitoring results, toxin levels are below State standards for recreational usage of the pond with respect to cyanobacteria and toxins.

Map color is blue.

Formerly the Low Warning Tier.

Recommended Sampling Frequency: Biweekly.

In samples containing low levels of cyanobacteria with high growth rates APCC will recommend weekly sampling.

Recommended Action: None.

### Potential for Concern

**Definition:** Monitoring results or the presence of cyanobacteria scum at the time and place of sampling indicate a potential for increased risk for exposure to cyanobacteria toxins approaching but below state standards. Conditions do not yet warrant the posting of a recreational human health advisory according to guidelines from the Massachusetts Department of Public Health (MDPH). While these conditions pose low health risks to adults, risks are higher for children or pets based on lower body mass, particularly if contaminated water is incidentally ingested. Children may inadvertently consume pond water while swimming and pet exposure can result from drinking or ingesting pond water or from grooming after swimming.

Map color is yellow.

Map color yellow with crosshatching indicates a municipal pet advisory has been issued.

Formerly the Moderate Warning Tier

Recommended Sampling Frequency: Weekly.

Recommended Action:

1. APCC or the town will provide a GRAB sample for toxin analysis to the Barnstable County Water Quality Lab for samples suspected of possibly



exceeding the MDPH guidelines for microcystin in recreational waters.

2. A "Pet Advisory" or similar advisory may be posted in accordance with each town's policies and procedures until the pond returns to Acceptable status.
3. Sampling should be increased to weekly until all results are once again in the "Acceptable" category.

#### **Restriction Warnings**

Definition: Monitoring results at the time and place of sampling indicate the pond is unsafe for recreation by humans and pets based on one or more of the following criteria: 1) presence of microcystin at or above state standards (8 ppb microcystin) as described in MDPH guidance, 2) presence of significant cyanobacteria scum layers according to MDPH guidance, 3) a municipal health agent issues a closure for any other reason related to cyanobacteria.

Recreational risk to adults is moderate following exposure. Recreational risks are especially high for children and pets following exposure through accidental ingestion of contaminated water. Children may inadvertently consume pond water while swimming and pet exposure can result from ingestion or directly drinking pond water or from grooming after swimming. Due to lower body masses, children and pets are more susceptible to cyanobacteria risks than adults.

Map color is red.

Map color red with crosshatching indicates a municipal advisory has been issued.

Formerly the High Warning Tier.

Recommended Sampling Frequency: Weekly.

#### **Recommended Action:**

1. APCC or the town will provide a GRAB sample for toxin analysis to the Barnstable County Water Quality Lab for samples suspected of possibly exceeding the MDPH guidelines for microcystin in recreational waters.
2. The town should post a recreational advisory or similar advisory according to municipal policies and procedures and otherwise notify the public to avoid contact and exposure until the pond meets criteria to be reopened or the advisory is lifted by the local health agent.