



FREQUENTLY ASKED QUESTIONS:

Blue-Green Algae at Lake Morena Park

What is blue-green algae?

Algae are photosynthetic organisms that are a natural and important part of any aquatic environment. Blue-green algae, or cyanobacteria, looks like algae, but it is actually photosynthetic bacteria. Like algae, it can be found in freshwater and marine aquatic environments. It also flourishes in water that is slow-moving or stagnant; thick with nutrients due to prolonged heat or drought. When the conditions are right, the bacteria can spread rapidly – the cyanobacterial growth forming a “bloom” that can produce toxins, known as cyanotoxins. This is also referred to as Harmful Algal Blooms (HABs). HABs can affect the local ecosystem and can harm people as well as pets.

HABs have been more prevalent in recent years. This is due to a combination of extended periods of heat, and increased inputs of nutrients like nitrogen and phosphorus as a result of surrounding land uses and run-off from recent storms.

What are the signs of Harmful Algal Blooms (HABs)?

Small blue-green, green, white or brown particles in the water. There may also be streaks in water that look like spilled paint, along with mats or foam. At times HABs can have an odor described as gasoline, septic or fishy.

Are there HABs at Lake Morena?

Due to the increased stormwater run-off into Lake Morena Reservoir and the warm temperatures experienced during the summer months, the presence of algae has been a seasonal occurrence at Lake Morena over the years. On August 24, 2023, results from routine testing of reservoir water quality by the City of San Diego Public Utilities Department found high levels of cyanobacteria toxins in the water that are caused by blue-green algae resulting in a “Danger” advisory being implemented by DPR and City staff. The toxin is water-based but can cause health risks resulting from recreational contact with the water, or if they are ingested (by drinking the water or eating fish that live in the water).

Will this affect my use of Lake Morena Reservoir?

Yes. A “Danger” advisory has been posted at the reservoir and public access to the reservoir has been closed. All previously allowed activities, such as fishing, kayaking and boating are not currently allowed. Recreational contact with the water, such as swimming was not previously and is currently not allowed.

Dog walkers are encouraged to exercise caution and refrain their pets from entering and/or drinking water from the lake.

What precautions can the public take?

The public should follow all posted advisories and closely monitor children and pets to avoid accidental contact with the water.



Are other lakes, rivers and bodies of water affected?

Lake Morena is not the only body of water that has been affected by algae blooms; increased storm runoff and warm temperatures have caused an increase in blue-green algae blooms across California and throughout the United States – in everything from freshwater lakes to rivers and streams.

Cyanobacteria can occur in any fresh or marine water body under the right conditions and are especially prevalent after dry seasons like summer. Recreational water users should be cautious about swimming, drinking, and cooking with water from areas with noticeable algal blooms.

How will the toxin be removed from the lake, and how long will it take?

The County of San Diego Department of Parks and Recreation is working with the City of San Diego Public Utilities Division to explore possible short-term and long-term options to reduce cyanotoxin levels. However, it is generally agreed upon that there isn't one treatment that will serve as a "quick fix" to eliminate toxic algae blooms due to the size and complexities of the lake.

The City of San Diego will continue to test water samples on a weekly basis until toxin levels are below the "Danger" advisory threshold. Once toxin levels reach the "Caution" or "Warning" advisory thresholds, testing will be done on a bi-weekly or monthly basis.

There is not exact timeframe on when the toxin levels will subside but natural environmental conditions including cooler weather, and decreased runoff can help to reduce the occurrence of blooms therefore the reducing the likelihood of cyanotoxin development.

Additional Resources

California Water Quality Monitoring Council

[Frequently Asked Questions about Freshwater and Estuarine Harmful Algal Blooms](#)

California Department of Water Resources

[Frequently Asked Questions](#)

Video: [Understanding the Dangers of Blue-Green Algae \(Cyanobacteria\)](#)

Video: [Understanding the Dangers of Blue-Green Algae \(Cyanobacteria\)](#) (Spanish version)