

Lower Otay Reservoir

Why are caution signs posted at Otay Reservoir?

Due to an algae bloom, the City of San Diego has posted caution signs at its Otay Reservoir alerting the public to avoid water contact. Visitors to the reservoir are advised to not expose skin to the water while the cautionary alert is in effect.

Testing of the algae bloom revealed the presence of Cyanobacteria, also called “blue-green algae” at Otay Reservoir. Further testing by City biologists determined that the Cyanobacteria algae bloom is producing Microcystin toxin, which can be harmful to humans and animals if their skin is exposed to the water, or they ingest untreated water. Levels are at the cautionary stage and the City is taking voluntary measures to ensure public safety.

The City will continue to monitor the algal activity and conduct ongoing testing at the reservoir and provide updates as information becomes available.

Is my tap water safe?

The algae bloom does not affect the safety or quality of the City’s treated drinking water. The City’s drinking water is treated using several processes, each providing additional water quality improvements. Using a method of treating the water multiple times provides many levels of safety and testing before water is delivered to homes and businesses.

How does the City monitor algae in its reservoirs?

Miramar, Hodges, San Vicente, El Capitan, Murray and Otay reservoirs are monitored weekly for Algae blooms while Sutherland, Morena and Barrett are monitored monthly based on the characteristics of each reservoir.

When an algal bloom is observed or reported, a trained biologist from the City collects a sample and transports it back to the City lab for identification. Along with the sample, the biologist also records the following general characteristics of the bloom: the date first observed, location, relative size, and intensity along with water quality data, which includes chlorophyll a and phycocyanin, collected with a multiparameter water quality sonde. The collected sample is prepared for microscopic identification by a trained biologist to identify, at the genus level, what type of bloom is present.

If a bloom is composed of Cyanobacteria and is characterized moderate or above in intensity according to testing, lab staff notifies Water Systems Operation staff to inform them to post the reservoir at CAUTION LEVEL until further notice. Sampling for Microcystins is conducted until there is sufficient evidence conditions are safe and posting is discontinued.

What is blue-green algae?

Cyanobacteria, also called “blue-green algae”, are prokaryotes that obtain their energy through

photosynthesis and are the only photosynthetic prokaryotes able to produce oxygen. These single-to multi-celled organisms abound throughout the world. They are important primary producers (organisms that make energy directly from the sun) in aquatic ecosystems. They live in fresh and saltwater and nearly every condition in between. Usually, they provide food to organisms higher up on the food chain.

Under certain environmental conditions in freshwater systems, cyanobacteria can increase rapidly in biomass resulting in a “bloom”. Cyanobacterial blooms can cause several unwanted effects, including producing unpleasant tastes and odors, and producing Cyanotoxins, such as Microcystin.

Cyanotoxins are toxins produced by some cyanobacteria. Cyanobacteria blooms that produce cyanotoxins are one subset of blooms can sometimes have negative impacts on the environment and raise concerns for recreational use, pets, wildlife, and livestock.