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Jeffrey D. Allred, Deseret News

Utah Lake is pictured on Thursday, June 29, 2017. Researchers at Brigham Young University will return to Utah Lake Wednesday to take additional water samples to determine the concentration of toxins produced by blue-green algae.

More water sampling for toxins on tap for Utah Lake

By Amy Joi O'Donoghue @amyjoi16
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SALT LAKE CITY — Researchers at Brigham Young University will return to Utah Lake Wednesday to take additional water samples to determine the concentration of toxins produced by blue-green algae.

The determination will either prolong a public health advisory that has remained in effect for the lake nearly all summer or possibly signal an all clear that the water is safe for recreation such as swimming.

Right now, people are advised to avoid swimming, ingestion of any water, and to keep animals and children away from infested waterways to avoid potential exposure.

Sampling last week at Pelican Point showed concentrations of microcystin, a liver toxin produced by the cyanobacteria, at 4.3 micrograms per liter, just barely nudging the standard of 4 micrograms per liter, said Jodi Gardberg, environmental program manager with the Utah Division of Water Quality.

Exposure to toxins in cyanobacteria can cause respiratory issues, produce skin rashes and in certain circumstances cause liver or neurological damage.

Utah water quality regulators established a numerical limit for phosphorus in wastewater discharges, a standard they hope will begin to address the problem of excess nutrients.

The new standard, which imposes reductions by 2020, requires phosphorus concentrations in wastewater discharges to be cut by two-thirds.

Garberg said it's difficult to predict if the algae problem at Utah Lake is beginning to dissipate or if it will remain in the weeks to come, especially given this is the typical time of year when the harmful algae bloom outbreaks occur. As the algae dies off, too, the plants produce toxins.

"That may be the period we are in now, or we may be having another bloom," she said.

Last year, an early and unprecedented algae bloom covered 90 percent of the lake's surface. Additional outbreaks were logged at Farmington Bay, Jordan River, Payson Lakes and Scofield Reservoir, which reported a fish kill and several dead bats.

The problem of cyanobacteria is not unique to Utah. In New Hampshire, officials there are struggling with several outbreaks in multiple lakes. Three years ago, algae-infested Lake Erie was producing the toxin microcystin — the same one found at Utah Lake — leading to the contamination of the main drinking water supply for 500,000 people in the Toledo area.

A shallow inland lake in Ohio suffered an outbreak in 2010, leading to fish kills and 23 cases of human illness and dog deaths.

The lake's resulting closure, according to one study, cost local businesses between $37 million and $47 million in lost revenue and caused several to go out of business.