



## *FREQUENTLY ASKED QUESTIONS*

### Utah Lake Harmful Algal Bloom 2016

***Q: WHAT CAN HAPPEN TO HUMANS IF THEY CONSUME VEGETABLES OR FRUITS IRRIGATED BY WATER THAT HAS HARMFUL ALGAE?***

***WHAT ARE THE SYMPTOMS OF SOMEONE WHO HAS BEEN CONTAMINATED?***

**DWQ:** The potential for fruits and vegetables to accumulate cyanotoxins at concentrations harmful to people depends on many factors, including:

- The concentrations of cyanotoxins in the irrigation water.
- The specific toxins.
- How long the crops are irrigated.
- How long between harvest and consumption.
- Whether flood or spray irrigation was used.
- The type of plant (root, leafy vegetable, or fruit).

DWQ is investigating if chemical analyses can be used to determine if vegetables and fruits have unsafe levels of cyanotoxins. Until these types of analyses are available, DWQ concurs with the Department of Agriculture and Food's recommendation: Use caution in irrigating crops using cyanobacteria contaminated water until toxicity levels have been confirmed. Farmers and ranchers are encouraged to utilize other water sources where available.

Utah Department of  
Environmental Quality

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**Q: DUE TO THE ONGOING ALGAE BLOOM ISSUE, SHOULD WE BE CONCERNED ABOUT PRODUCE BEING SOLD AT UPCOMING FARMER MARKETS HERE IN SALT LAKE COUNTY?**

**Salt Lake County Health:** There is evidence that toxins can accumulate in plants that have been watered with algae-affected secondary water. The actual level of risk varies depending on garden location, watering time, type of watering, time between harvest and consumption, and the type of plant. The final decision to eat home-grown produce potentially exposed to toxins rests with the consumer, but Salt Lake County Health Department advises residents to avoid consuming produce that has been watered with secondary water since July 15. Farmer’s market patrons should ask producers about their water sources and watering practices and then make an informed, individual decision about whether or not to purchase and consume the produce.

**Q: WHAT ABOUT KIDS WHO PLAYED ON LAWNS CONTAMINATED BY THE ALGAE WATER?**

**DWQ:** People should avoid contact with irrigation spray, especially avoiding breathing the mist. Nighttime watering is unlikely to pose a health risk. While data to directly evaluate health risks from contact with the grass is not available, we recommend that direct skin contact be avoided. Skin contact may result in rashes but is not expected to result in serious health effects.

**Q: COULD THIS HAVE BEEN PREVENTED OR DETECTED EARLIER?**

**DWQ:** We don’t yet know if toxins are being produced. We know we have toxin producing species of algae in high concentrations. DWQ recently requested funding from the Water Quality Board to purchase three lake monitoring sondes that in the future will allow us to monitor for blue green algae remotely and detect it earlier giving us a warning sign. (Detecting it earlier does not mean we can prevent it from spreading. It just means we can begin to alert people earlier of the warning). The purchase of the sondes was already under way. We didn’t expect a bloom until late August or September.

**Q: HOW CAN THIS BE TREATED? I UNDERSTAND STORMS TYPICALLY CLEAN THE LAKE, BUT WITH NO STORMS IN THE NEAR FUTURE, IS THERE A PLAN TO USE ENZYMES OR OTHER BACTERIA TO KILL THE ALGAE?**

**DWQ:** The best solution is to reduce nutrient loading to the lake. This gets at the root cause of the problem. The largest source of nutrients to Utah Lake are from wastewater treatment plant discharges. Most of the facilities discharging to Utah Lake have not been upgraded to treat for nutrients. To do so will cause sewer rates to increase.

**Q: ARE THERE ANY CONCERNS ABOUT THE HEALTH OF THE WILDLIFE IN THE AREA? WHAT ABOUT THE FISH IN THE LAKE; DO THEY HAVE ANYWHERE TO GO?**

**Fish & Wildlife:** Right now, it’s too early to tell how the bloom might affect fish in Utah Lake. Biologists with the Division of Wildlife Resources are concerned about oxygen levels in the lake, and they’re working with the Division of Water Quality to determine the current levels. If the oxygen levels get too low—and if even higher concentrations of toxins are released into the water—fish could die.

It’s difficult for fish in the lake to escape the bloom. The Jordan River is the only tributary that flows out of the lake, and the bloom has entered the river. Fish can try to swim up the tributaries that bring water into the lake, but it’s much more difficult to migrate upstream.

DWR biologists encourage anyone who sees dead fish to call the agency’s Central Region office at (801) 491-5678.

A few dead birds have been reported, but DWR biologists have not been able to retrieve samples that are fresh enough to confirm that the deaths were caused by the algae bloom. If further bird deaths are detected, samples will be submitted to a laboratory for necropsy and testing.

**Q: WHAT HELP MIGHT BE AVAILABLE FOR FARMERS WHO WILL BE AFFECTED BY THESE RECOMMENDATIONS? IF THEY DON'T HAVE AN ALTERNATE WATER SOURCE AND CONTINUE WATERING CROPS, WHAT IF THEY HAVE TO THROW THEM AWAY?**

Utah Department of Agriculture and Food is working on finding solutions and researching options.

**Q: HOW FAR COULD THIS SPREAD? NOW THAT IT'S GONE UP THE JORDAN RIVER, COULD IT SPREAD FARTHER NORTH?**

**DWQ:** It could spread to the Great Salt Lake impounded wetlands and the Farmington Bay of the Great Salt Lake. Farmington Bay already has regular toxic algal blooms. The species is different because of the salinity in the Great Salt Lake.

**Q: HOW DOES THIS GROW? WHAT KIND OF ENVIRONMENTAL SITUATIONS ALLOW FOR THESE BLOOMS TO MULTIPLY?**

**DWQ:** High nutrient concentrations in the water, calm and stagnant water, warm weather and abundant sunlight. Of these, the only controllable factor is the nutrient level.

**Q: HOW LONG COULD THIS LAST?**

**DWQ:** It is difficult to say. Some blooms dissipate after a few days, and others continue to bloom in cycles for weeks. Florida, for instance, has been dealing with this on a much more massive scale. ([http://www.nytimes.com/2016/07/19/science/algae-blooms-beaches.html?\\_r=0](http://www.nytimes.com/2016/07/19/science/algae-blooms-beaches.html?_r=0))

**Q: BECAUSE UTAH LAKE HAS BEEN CLOSED, DOES THIS MEAN UTAH LAKE STATE PARK IS ALSO CLOSED?**

**Utah State Parks:** Utah Lake State Park remains open with day-use and camping activities. A private rental concessionaire located at the park is also still renting recreational items to be used in the lower portion of the Provo River.