

## TSSD Comment to Utah DWQ HAB Guidance 1/22/2020 Public Comment

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<https://deq.utah.gov/water-quality/utah-updated-2020-hab-guidance>

Timpanogos Special Service District (TSSD) provides wastewater treatment for the ten northern cities in Utah County, providing service for approximately one quarter of a million people. We have met our permit requirements for over the last 10 years without violations. We are the hands that clean the water.

The advisory being addressed is a state-wide swimming guidance. It is sensible to follow the federal EPA 822-R-19-001 May 2019 guidance. We agree with the proposed adjustments for microcystin and cylindrospermopsin to 8 µg/L and 15 µg/L respectively.

We assert that the listing of cell counts should not be an “Advisory” threshold. It is a secondary stressor and gives inaccurate an unwarranted fear. The above referenced document clearly states; “At this time, available data are insufficient to develop quantitative recreational values for total cyanobacterial cell density related to inflammatory health endpoints” (p 94). The document also clearly states that some programs are using cell counts as an indicator and provides supporting information related to their use. Should Utah persist in using cell counts?

To date, sixty-five Utah lakes have been reported to have cyanobacteria pcell counts are high, the actual toxicity is low. There are multiple different kinds of cyanobacteria and not all have the same toxicity levels, or produce toxins at all. Cell counts provide no reliable correlation with toxicity and are not directly related to toxicity. Other lakes, as opposed to Utah Lake, may exhibits low cell counts with higher toxicity during bloom season. The current management policies are creating the wrong perception of the water quality.

Other states including California and Oregon list toxic cell counts, not just total cell counts. Total cell counts are an indicator, which alone provide inconclusive and misleading data. Using total cell counts to issue advisories leads to an increase in the difficulty to understand listed advisories and adds to the confusion for the public. The over reliance on cell counts have led to multiple instances of over reactions and irrational concerns when little action was warranted. It is agreed that additional information should be collected for cylindrospermopsin It should also be noted that the specific cyanobacterial species of concern, microcystin and cylindrospermopsin, were not even tested for each sample taken. This leads to question whether DWQ have enough resources to provide appropriate data?

We propose a better solution would be to put general warning signs on all water bodies known to have cyanobacteria stating:

“Don't go into water that looks foamy, scummy, thick like paint, pea-green, blue-green or brownish red. A good rule of thumb for you and your pet is: **When in Doubt, Stay Out!**”

We also realize that not all toxins are tested and provided with recommended levels in the EPA guidance document. It has been recommended to have Anatoxin-a warning levels. Although Anatoxin-a is not listed in the document with recommended levels, we accept the recommendations put forth as they seek to protect the public.

The EPA 2019 document covers many topics and references. The Drinking water section 7.6.1 has a note stating “Finished water concentrations ranged from below detection levels to 12.5 µg/L”.

The Utah updated 2020 HAB guidance is simplified and does not take into account duration and frequency. To continue the simplification the advisory by posting permanent warning signs on all known waterbodies to contain cyanobacteria, State HAB website for current data, and the following Warning/Danger Advisory table should be considered.

Table:

Table: HAB Warning/Danger Advisory

Parameter	Warning	Danger
Microcystin (µg/L)	8	2,000
Cylindrospermopsin (µg/L)	15	15
Anatoxin-a (µg/L)	15	90