Algae Treatments on Utah Lake

8/14/2020

Three Algae Treatment pilot studies: were/are being conducted on Utah Lake from June 2020 until present.

SePro – Lincoln Marina & Utah Lake State Park Lincoln Beach Treatments began June 16th – First treatment went well, turbidity ↓ 66%, Cyanobacteria gone post day-1 treatment.

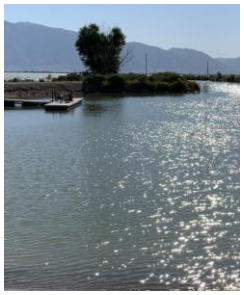
Pre-Treatment

June 16th, 2020

4-hours Post Treatment

June 16th, 2020

20-days Post Treatment



July 7th , 2020

Pre-Treatment

July 7th , 2020

4-hours Post Treatment

July 9th, 2020

20-days Post Treatment

July 15th, 2020

B/G Algae present 7-days after 2nd treatment

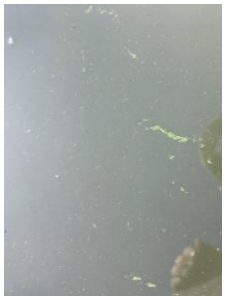
Phosphorus dropped 55% 7-days post treatment

Lincoln Beach Challenges:

- 3.5 Acres of 95,000 acre lake
- Cyanobacteria blooms outside the marina easily pass into marina decreasing longevity of treatment control.

Utah Lake State Park Treatment: Cyanobacteria present at time of treatment. Gone 1-day post treatment

Pre-Treatment



Aug 3rd, 2020

4-hours Post Treatment

Aug 5th, 2020

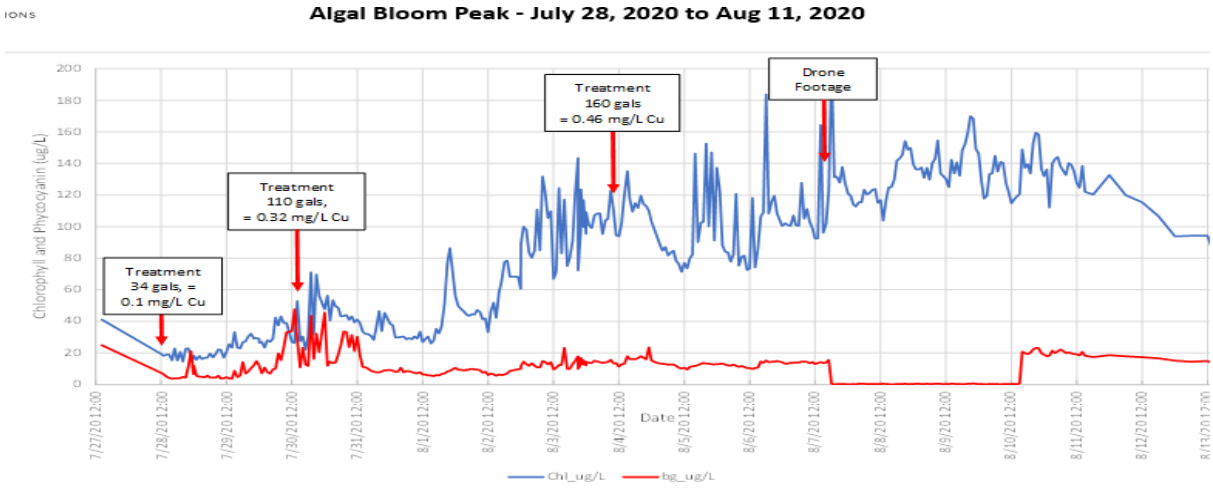
20-days Post Treatment

Aug 11th, 2020

Lindon Marina Treatment – July – August, 2020

- Toxic algae conditions this season are extreme compared to years past (heat, lack of wind, no monsoon weather)
- Treatment chemical chosen is EarthTec – an eco-friendly liquid algaecide with a proven track record of success
- Treatments have successfully remediated toxic blue-green algae levels within the marina and kept the marina open for business
- HAB control is occurring at less than ½ of the EPA limit for copper allowed (the active ingredient in EarthTec)

*"*Without the EarthTec treatments our inner marina would not have been usable for recreational use all summer. The treatments made the water quality in our marina excellent despite HAB conditions right outside of the marina. The application has been easy and remarkably effective." –Ron Madsen, Lindon Marina GM



Limitations & Lessons:

- Algae is present throughout the full water column (not just at the surface)
- Influent of toxic water into the marina affected treatment rates and schedule
- Peak HAB season (July-Aug) will require an adaptive, data-driven approach
- EarthTec results indicate it is selectively controlling HABs without harming beneficial green algae

The Utah Lake Commission is impressed by the general effectiveness of the treatments in the marinas this summer. It's likely that targeted treatments could be effective at decreasing blooms in key areas of the lake. Lake managers need to focus on longterm solutions to Algae Blooms in order to more effectively manage water quality in the future. A combination of longterm solutions and treatments could best address blooms in the interim.