MEDORA corporation

Cyanobacteria Control In A Municipal Park Lake

SolarBees continue to provide long term cyanobacteria control and water quality benefits.

Topics: cyanobacteria, blue-green algae, macrophytes, lake circulation, irrigation, water clarity, municipal park

Location & Contact Information:
Further information may be available upon request. Please contact Medora Corporation by phone at 866-437-8076 or by e-mail, info@medoraco.com

Reservoir Overview: This two-basin lake is part of a municipal park system and is primarily used for recreation. It also serves as an irrigation source for the park itself and an adjacent golf course.

Small Basin
   11 surface acres
   5 feet maximum depth

Large Basin
   55 surface acres
   16 feet max depth
   6 feet average depth

Pre-Deployment Conditions: This lake had a history of summer cyanobacteria (blue-green algae) blooms causing poor water clarity and noxious odors. Excessive aquatic weed growth was also a significant problem.

Project Objectives: Control cyanobacteria blooms and improve overall water quality.

Solution: A total of five (5) SolarBee® Lake Circulators were deployed at this location.

   Small Basin: One (1) SB10000v12 (June 2006).
   Large Basin: Two (2) SB10000v12 units (October 2006) and two (2) more SB10000v18 units (May 2009).

Results: The Small Basin was bloom free in 2006 with significant water clarity improvement as compared to the Large Basin.

Based on these positive results, the additional SolarBee Lake Circulators were purchased for the Large Basin.

In July 2009, the Park Manager reported that the last two units deployed made the difference. The entire lake (both basins) had never looked clearer.

Cyanobacteria, aquatic weed growth, and odors have trended less since deployment while water clarity and water quality have trended much better.

In 2010, a biological treatment to facilitate sludge digestion was dispersed and circulated via the SolarBee machines.

The Municipality is very pleased with the ecological improvements achieved through active lake circulation.