

# Cyanobacteria Control In A Raw Water Reservoir

*SolarBee continues to provide long term water quality benefits over a decade after deployment.*

**Topics:** cyanobacteria, blue-green algae, taste & odor, raw water reservoir, lake circulation.



## **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](mailto:info@medoraco.com)

**System Overview:** This reservoir receives its water from a local river and serves as the primary raw water source for a municipal potable water treatment facility.

- Surface Area: 3.2 hectare (8 acres)
- Maximum Depth: 5.5 meters (18 feet)
- Total Capacity: ~91 million liters (24 million gallons).

**Pre-Deployment Conditions:** The reservoir suffered from a history of cyanobacteria (blue-green algae) blooms which created significant taste and odor issues for their water treatment facility.

The Customer resorted to algaecide (copper sulfate) applications; however, this created other water quality issues and was not seen as a viable long term option. They wanted a more environmentally friendly solution to their problem and chose to move forward with SolarBee lake circulation.

**Project Objectives:** Control cyanobacteria blooms and associated taste and odor issues. Improve overall water quality entering the potable water treatment facility.

**Solution:** One (1) SolarBee® SB5000v12 Lake Circulator (April 2007). This machine incorporates a tethered anchor system, a “flipped panel” facing to the southeast for increased solar collection and a supplemental grid-power connection for additional system charging during the darkest days of winter.

**Results:** After the first summer with the SolarBee deployed, the Operations Manager commented in a local news article how pleased he was with the results of the project. The experience no cyanobacteria blooms, no associated taste & odor issues, and no other water quality problems. He was also happy with the ease of installation & maintenance of the equipment.

In the many years since deployment, taste & odor complaints have ceased and subsequently, they no longer treat the reservoir with algaecides.

They are very happy with their SolarBee and the sustainable water quality benefits active lake circulation continues to provide.

**Update (2018):** This Customer has been a long-time participant in Medora’s BeeKeeper Service Program. They like having scheduled service & maintenance as well as the BeeKeeper’s other protections to ensure their SolarBee is kept in good operating condition.