

Key words: RW reservoir, taste and odor, blue-green algae



Photos: Shows one unit in the reservoir; aerial photo shows reservoir shape and location of initial SolarBee installation.

Reservoir or Lake Use: Reservoir # 2 is a raw water storage reservoir for the city, and was built for additional storage for drinking water.

System Overview and Reservoir Data: Reservoir # 2 is approximately 45 surface acres, with an average depth of 22', maximum depth of 28', and a volume of approximately 1000 acre feet. The reservoir gets its water from a local creek.

Reported Problem Before SolarBee Installation: Primary objectives are to eliminate blue-green algae blooms and resolve associated taste and odor problems. City could only use 10-15% of water due to water quality issues.

SolarBee Installation: Date: October 2002, installed one (1) SB10000F, solar-powered, with intake hose set at 23'. February 2004, installed a second SB10000F in the reservoir.

Results: Within one day after installation the customer could see the entire surface moving. By January 2003, the water quality had sufficiently improved that the city could double the use of water from this reservoir. Water quality remained good throughout 2003 without blue-green algae blooms. Nevertheless, the customer decided to add a second SB10000F that was installed in February 2004. The reservoir manager reported that 2004 and 2005 were good years without either blue-green algae blooms or taste and odor issues, and is very satisfied with the performance of the SolarBees in the reservoir. The city is now able to use the entire reservoir volume for drinking water purposes. In October 2005, the city's Public Works Department received an award from the Colorado Environmental Leadership Program for their successful use of "green" technologies to resolve their lake management problems.

Last updated: 4-20-07