

Medora Corporation Lake

USMNLK-LOC357.001

Topics: Lake, blue-green algae, taste and odors, aquatic weeds, water clarity



SolarBee® unit deployed in lagoon.

Customer: Information is available upon request from Medora Corporation. 866-437-8076 info@medoraco.com

Overview: This is a 6-acre lagoon with a single, narrow inlet connection to the approximately 1200-acre Lake. Maximum depth in the lagoon is about 7 ft. The lagoon also receives stormwater drainage from a county ditch. Both the lake and lagoon are primarily recreational.

Conditions / Objectives: The Lake Association had reported stagnation, excessive blue-green algae growth, and noxious odors associated with these conditions. The lagoon also experienced substantial aquatic weed infestations, including coontail and duckweed, necessitating several herbicide applications each year.

Solution: One (1) SB2500R unit in the center of the lagoon deployed April 2004.

Results: The Lake Association reports that blue-green algae blooms and associated noxious odors in the lagoon were greatly reduced following the SolarBee installation, and have been effectively prevented in subsequent years. Water clarity has also shown noticeable improvement, both when compared to prior years and to the main lake (see photo above). A 2005-06 duckweed infestation, primarily due to contributions from a county ditch draining into the lagoon, was greatly reduced following a herbicide

application assisted with SolarBee circulation. Coontail has also shown reductions with progressively limited herbicide use. By 2010 aquatic weed growth was the least seen in memory, and no herbicides were applied at all that year. However, in 2011 the area experienced record rainfall and the highest lake levels in many decades. Unfortunately, coontail returned due to optimal growing conditions; and with high inflows, herbicide applications were less effective. There has also been a noticeable increase in white-flowered water lilies in the lagoon, a positive indication of bottom muck decomposition as these plants do best on sandy bottoms. But this may also be due to the recent infestation of carp the lagoon has experienced since about 2009. Carp root around the bottom stirring up sediments enhancing organic decomposition, but at the same time reducing water clarity with resuspended inorganic turbidity. Although zebra mussels have also infested the lake, none appear to survive well in the lagoon. The homeowners appreciate that improving lake ecology through enhanced circulation is a natural process that can take time to achieve. They are pleased that “[t]he SolarBee continues to do an awesome job eliminating odors and blue-green algae.”