

Algae Control in US Drinking Water Reservoir

A floated solar powered algae control system was installed in Emmitsburg (US) in order to control algae in a reservoir that provides drinking water to approximately 3,000 people. The MPC-Buoy system, installed in April 2017, succeeds in controlling algae, reducing chemical costs and water usage.



Drinking Water Reservoir, Town of Emmitsburg, United States



- ✔ 27% reduction in chemicals
- ✔ 31% overtime reduction in the water plant
- ✔ Improved water quality

The Challenge: Control Algae Problems

The main objective of the project was to reduce algae problems especially during summer months with secondary objectives to reduce chemicals costs, decrease backwashes and clogged filters. The town has been facing high algae growth during summer, which resulted in double water consumption which was needed for backwashing algae and dirt out of the plant's system.



Figure 1: Rainbow Lake, used as drinking water source in Emmitsburg, Maryland, United States.

The Solution: MPC-Buoy

A MPC-Buoy system was installed to control the long-term algae problem in Rainbow Lake. The MPC-Buoy combines real-time water quality monitoring and ultrasonic sound waves to provide a complete and environmentally friendly algae solution in large water surfaces.

The Results: Saved Money and Water

Since the installation of the ultrasound units, the algae control system has proven itself. Costs are reduced significantly, overall chemical costs decreased by 27% in 2017, the water quality improved, overtime at the water plant was reduced by 31 percent, and blackwash water usage decreased over the year.



"The device performed excellent when dealing with blue-green algae".

Cathy Willets, Emmitsburg Town Manager

This case study is based on the article; "LG Sonic Saved Emmitsburg Money and Water" published at The Catocin Banner, written by James Rada Jr.