

# Vallecitos Water District improves water quality with MPC-Buoy

Award-winning reclamation facility in California deploys innovative LG Sonic ultrasound technology against algae growth.



## Improving water quality

In sunny California, MPC-Buoy technology is controlling algae in reclaimed water since 2018. Vallecitos Water District provides 5.25 million gallons recycled water for irrigation every day.

TSS levels need to be low to fulfil the demands of modern irrigation systems. Algae increases TSS and clogs the filters that are in place to remove TSS prior to the distribution to the irrigation systems. This allows for less cleaning of the filters.

## Sustainable innovation

Vallecitos Water District is known for its sustainable and innovative focus when it comes to water and wastewater treatment. Introducing LG Sonic technology in their Meadowlark Water Reclamation Facility was the logical next step for this award-winning facility in California. The MPC-Buoy technology is installed in an open water reservoir where the treated reclaimed water is stored to be later used for irrigation. The ultrasound encounters algae in nutrient-rich reclaimed water, specifically phosphorus, in an area with intense sunlight and little rain, which are the perfect conditions for algal blooms.

- ✔ Reduced TSS and pH levels
- ✔ Improved Dissolved Oxygen levels
- ✔ Reduction in algae growth
- ✔ Improved overall water quality

## Improved TSS, pH and DO levels

Despite the perfect conditions for algae growth, LG Sonic along with other forms of treatment, has reduced the overall levels of algae in the reservoir since the installation. Not only improving the TSS, but also pH and Dissolved Oxygen levels. This ensures that Vallecitos Water District can provide even higher quality water to their reclaimed water customers.

Vallecitos Water District and LG Sonic have been working closely together to monitor the water quality for optimum as it has been a new step for both parties. Later this year further cooperation is planned for another reservoir.



Figure 1: MPC-Buoy installed at the reclamation facility of Vallecitos Water District in California, US.