

# Dominican Republic: 7km<sup>2</sup>/1700 acres drinking water reservoir

After dealing with algal blooms for years, The Santo Domingo Water and Sewage Corporation (CAASD) installed LG Sonic systems to cover the 7km<sup>2</sup>/2.7mi<sup>2</sup> Valdesia reservoir earlier this year. Two months after the start of the project, the results have already exceeded the set targets.

Watch video 

## Drinking water, Santo Domingo Water and Sewage Corporation, Dominican Republic



- ✓ 87% Chlorophyll-a reduction
- ✓ Improvement in the water quality
- ✓ Successful treatment of 7km<sup>2</sup>/2.7mi<sup>2</sup> water surface

### Recovering important water source

Earlier this year, CAASD installed multiple LG Sonic MPC-Buoy algae management systems to cover the 7km<sup>2</sup>/2.7mi<sup>2</sup> Valdesia reservoir. The Valdesia reservoir is the main drinking water supply for the population of the Dominican Republic's capital Santa Domingo and its provinces, providing drinking water to 4 million inhabitants. This hydroelectric plant, therefore, contributes significantly to the country, both in energy production, human consumption and agriculture. The Valdesia reservoir can store 137.54 million<sup>3</sup> meters of water and is used to produce 52,750,000 kWh per year of electricity.

### Chemicals were not the solution

Algal bloom treatment in a water surface as large as the Valdesia reservoir proved challenging for CAASD. The option to use chemical treatment was quickly eliminated. It would be impossible in terms of budget and operations to dose the entire reservoir multiple times a year with chemicals. It was also important to not cause any harm to the environment by using potentially harmful chemicals. This led CAASD, in their search for an environmentally friendly solution, to the MPC-Buoy.



Figure 1: The Valdesia reservoir is the main drinking water supply for the population of the Dominican Republic's capital Santa Domingo.

## The Results: Monitoring and treatment

Choosing MPC-Buoy has allowed CAASD to monitor important algae and water parameters in the entire water surface of the Valdesia reservoir. The collected data is delivered in real-time to web-based software, allowing water quality specialists from LG Sonic to manage algal blooms from their headquarters, 10.000 kilometers away in the Netherlands. CAASD periodical collection of water samples, that are later tested in the laboratory, proved the precision of the data collected with water monitoring.

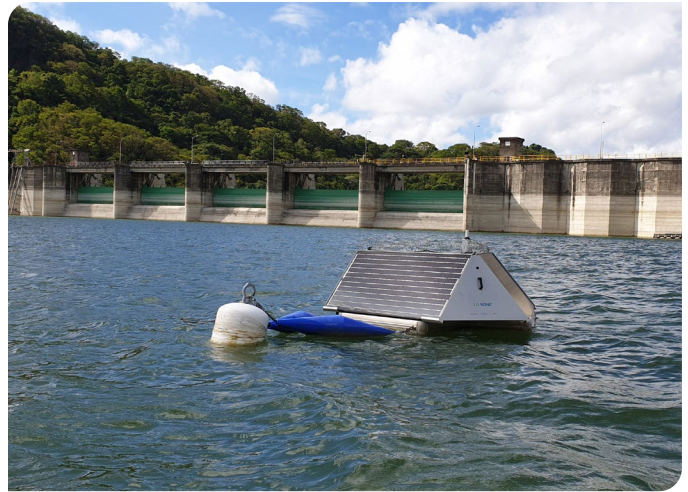


Figure 2: MPC-Buoy installed in Valdesia drinking water reservoir.



*"We are very happy for having the LG Sonic services, since for us it is a guarantee that the waters that we have in the Valdesia dam will be kept in appropriate conditions, so we can keep using it and be able to continue satisfying the drinking water demand of approximately 40% of these four million people who live in the greater Santo Domingo area."*

**Luis Salcedo, Director of Operations Santo Domingo Water and Sewage Corporation (CAASD)**