

Source Water Algae Improves at Berthoud, Colorado

Reduced Taste & Odor Compounds

THE PROBLEM

Taste and Odor Events

Summer algal growth increased geosmin and MIB levels, requiring higher PAC doses and increasing chemical dependency.

Algae Variability Between Reservoir Cells

The East and West Cells behaved differently, with algae growth in the West affecting raw water quality supplied from the East.

Limited Predictive Insight

Reliance on lab results and visual checks limited real-time anticipation of changing reservoir conditions.

KEY RESULTS

1

Reduced Taste & Odor Intensity

Fewer intense taste and odor issues between July and early September of 2025 compared to the previous year.

2

Improved Algae Conditions

Noticeably less floating algae was observed in the East Cell since the installation of the buoy systems.

3

Operational Insights via Monitoring

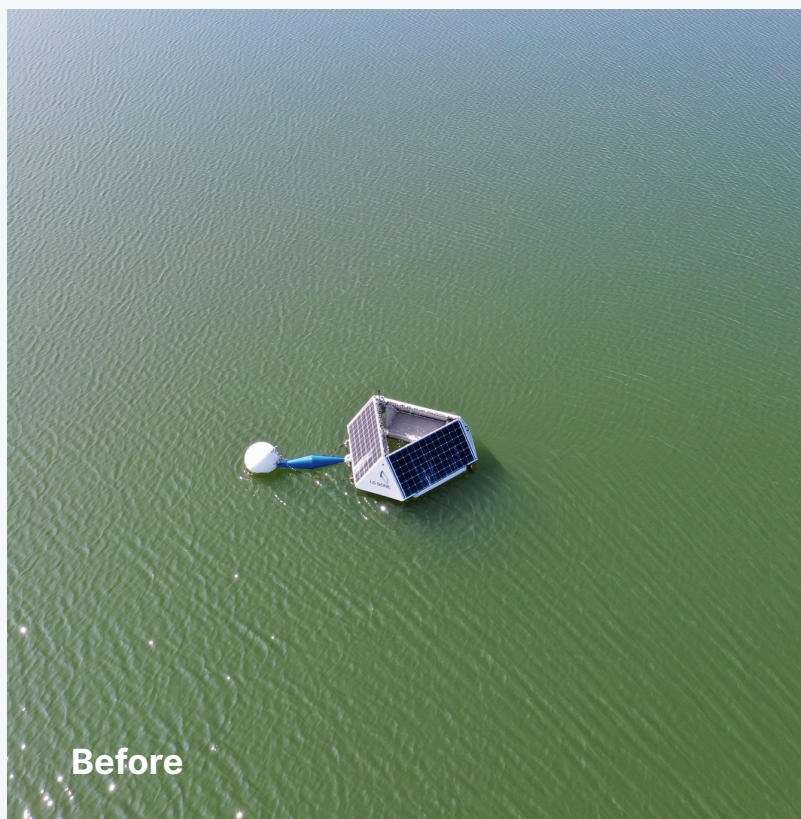
Continuous real-time data from MPC-View supported better planning and anticipation of treatment needs.

BACKGROUND

The Town of Berthoud, Colorado operates a surface water treatment system supplied by the Berthoud Reservoir. The reservoir spans more than 30 acres, making source water algae management a critical operational consideration.

THE SOLUTION

To improve source water quality and reduce treatment challenges associated with source water algae, Berthoud sought an upstream approach focused on algae control and real-time monitoring.





The LG Sonic device has effectively reduced the amount of algae and organic matter entering the Berthoud water treatment plant.

Imam Sugianto,
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Environmental Compliance Inc.
Town of Berthoud WTP

OBSERVATIONS



Chlorophyll-a levels declined from May to October 2025, becoming lower and more stable after late spring. Despite occasional short peaks, the overall trend showed reduced algal biomass and improved source water conditions.



Fig.2: Chlorophyll-a levels dropped (May-Oct 2025)

Berthoud's experience demonstrates how proactive, source-level algae control combined with real-time monitoring can reduce the intensity of taste and odor challenges and support more stable treatment operations.