

How ATLAS is Transforming the Way We Monitor and Optimize Wastewater Equipment

This case study shows how optimizing wastewater lift station management with advanced technologies like Aquasight's ATLAS can lead to significant cost savings and improved system efficiency. By monitoring pump performance and adjusting operational strategies, we were able to extend equipment lifespan and reduce energy consumption, achieving maximum results tailored to each client's unique needs.

THE CHALLENGE

The management of wastewater lift stations is essential in protecting communities and infrastructure from sewer system backups. However, the optimization of pump cycle frequency and duration presents a unique challenge. While the top priority is to ensure the smooth operation of the lift stations, careful adjustments of wet well setpoints are necessary to reduce energy consumption and extend the lifespan of critical equipment. Addressing this challenge requires the implementation of customized and innovative solutions that consider the unique needs of each client.

KEY POINTS

- Advanced technologies like ATLAS optimize wastewater lift stations for cost savings and extended equipment lifespan.
- Customized strategies tailored to meet each client's unique needs achieve maximum results.
- Real-time feedback enables ongoing optimization for cost savings and system efficiency.



BENEFITS

By applying ATLAS, the differences in wear between pumps were quickly identified and an optimal pump runtime scheme was developed, adjustments to the operational strategy resulted in energy cost savings and extended asset life by reducing wear throughout the day, and the platform allowed for quick feedback on the effects of operational changes, providing valuable insights to the operators.



ATLAS is a game-changer for optimizing wastewater lift station management, providing valuable insights to help ensure smooth operation and cost savings.



SOLUTION

Our team proposed three main solutions to optimize wastewater lift station management:

01

Pump Performance Monitoring

Utilizing ATLAS to monitor pump performance and identify differences in wear between pumps.

02

Review of Pump Curves

Conducting a review of the Total Dynamic Head and live operating points on the pump curves to inform operational changes.

03

Adjusting Wet Well Setpoints

Adjusting wet well setpoints to extend the lifespan of the assets and reduce energy costs.

RESULTS

Optimal Pump Runtime Scheme

Creation of an optimal pump runtime scheme to ensure efficient operation of the lift stations.

Reduced Number of Pump Cycles and Energy Cost

Reduction in the number of pump cycles and energy cost, as well as an increase in system efficiency.

Immediate Feedback

Immediate visibility of the effects of operational changes in the ATLAS platform, providing valuable feedback to operators and allowing for quick adjustment of strategies.