

Intelligent O&M

Introducing Intelligent O&M, a Digital OneWater solution which provides a powerful blending of Jacobs' water subject matter expertise in operations, design and data science, with Palantir's Foundry platform and user interface, to provide direct and predictive guidance to frontline O&M staff.



Historical and real-time data analyzed and portrayed in a useful manner for process optimization.



Real-time updates to field staff via mobile or tablet.



Our case study site resulted in savings of approximately \$300K/year in power.

Introducing Intelligent O&M

When operators in the field are bombarded with noisy Supervisory Control and Data Acquisition (SCADA) systems and information overload, it's incredibly difficult to distill actionable insights, forcing operators to rely on gut-based, qualitative decision-making. Operators need innovative digital tools that make their lives simpler, not more complex. They need IT that's customized to their day-to-day workflow and actually works in the field.

With the Palantir Foundry platform and Jacobs' smart algorithms and wastewater process optimization tools such as Replica™, plant management and site staff are armed with the practical data science tools needed to conduct proactive, data-driven operations, maximizing performance and cost-savings plant-wide.



Key Benefits



Moves process control from reactive to proactive.

Predictive tools and algorithms that capture best practices to empower field staff to act ahead of the need.



Tremendous efficiency and cost savings.

We anticipate an average savings of 10 to 20% on blower power from our existing case studies.



Broad acceptance by O&M staff.

A direct recommendation to field staff to their smart phones or tablets providing actionable insights and specific instructions throughout their shift.



Cyber secure.

Data ingestion, monitoring and user interfaces are all secured through Palantir's industry-leading United States Department of Defense Level 6 security protocols.

Sophisticated analysis made simple

Palantir pulls data from various sources and translates it into easy-to-understand recommendations for process improvements.

The software follows the below process:

- **Data Integration.** Integration via data connectors from sensors, SCADA, maintenance, lab and ERP data.
- Ontology. The DataStream is cleaned and transformed into standardized, easily interpretable data models called an 'ontology'.
- Jacobs Smart Algorithms. The DataStream runs through a process model to make real-time predictions.
- Email/SMS. Predictions compared against compliance levels and converted to easy to understand emails or texts.
- Real World Performance Data. Operator can reject recommendation and provide feedback for process engineer to review.

What is the benefit for plant staff?

Palantir provides the opportunity to alleviate several pinch points in the industry, including:

- Power consumption
- Carbon footprint
- Chemical consumption
- Maintenance management
- Labor availability
- Regulatory compliance
- Cyber security

Want to learn more about **Digital OneWater** and Intelligent **O&M?** Contact the team here.



