

NOVEMBER 2022

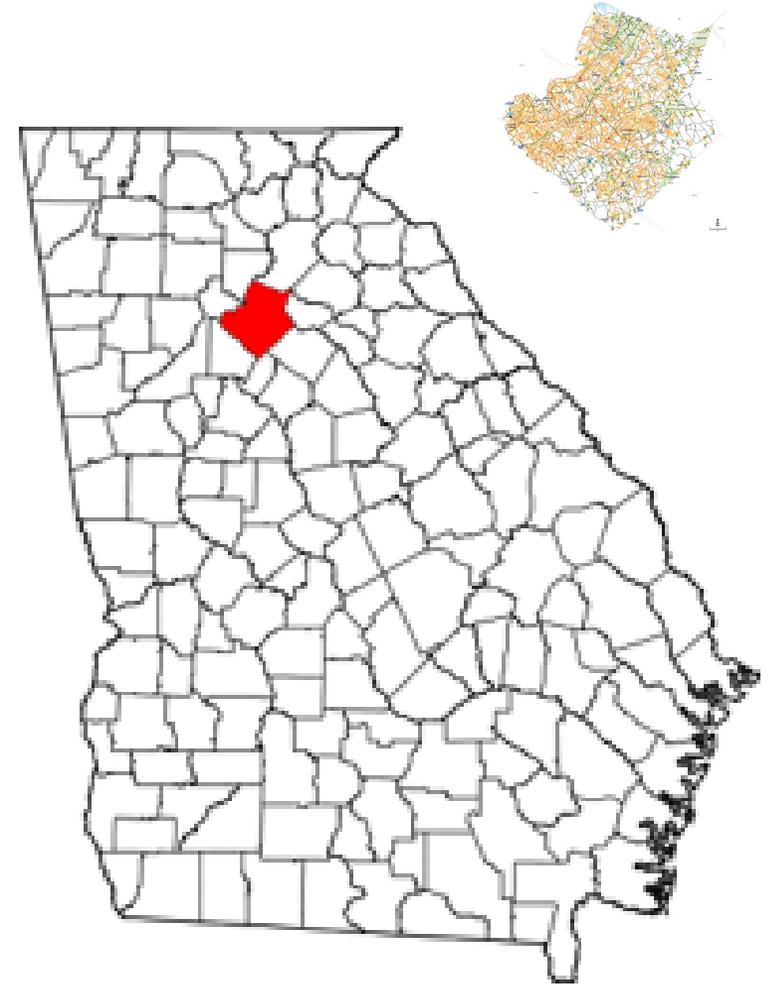
Gwinnett County's unified platform to improve performance and optimize water production

AVEVA

About Gwinnett Water Resources

SCADA Modernization

- Share the journey towards SCADA modernization
- Deployment of UOC
- Implementation of cyber security
- Lessons learned throughout this journey





Outreach and Education

- About 40 miles north of ATL Airport
- Spread out about 437 sq miles
- With a population close to one million people

Award-Winning Water



Peak Performance Award

Platinum 2010-2019

Excellence in Management

Platinum 2022



Utility of the Future

2016



**Adopt-A-Stream
Trainer of the Year**

2020



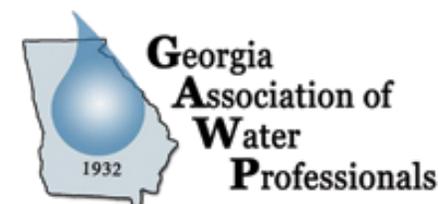
**Platinum Certified
Green Community**

2018



**Research Innovation
and Outstanding
Subscriber Award**

2022



**Plant of the Year –
Crooked Creek WRF**

2022

Best Tasting Water

2022

Outreach and Education

Since 2017, DWR has:

- Removed **150,163lbs** of trash and debris from streams, floodplains, and roadsides at volunteer **113 events**
- Conducted **88 workshops** for **1,576 attendees** on topics from water conservation to pollution prevention
- Made **338 visits** to schools and educated **44,556 students** with the *Water on Wheels* education program



The Department of Water Resources

Mission: To provide superior water service at an excellent value

2 Water production Plants



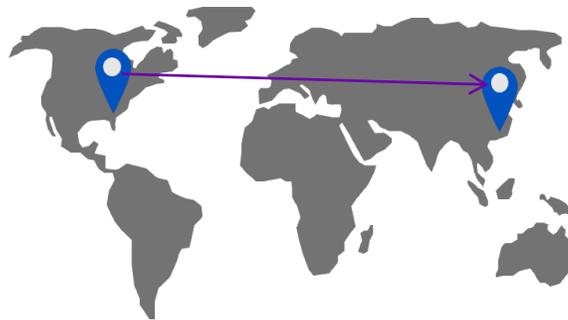
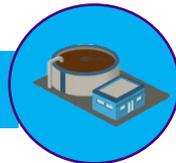
Water Distribution System



WW Collection System



3 WW Reclamation Plants



Protecting Public Health



World Class Water System



Digital Transformation



Utility of the future

SCADA Modernization

Gwinnett County DWR

SCADA UOC Access Portal

Standardization of SCADA systems

New Situational awareness graphics

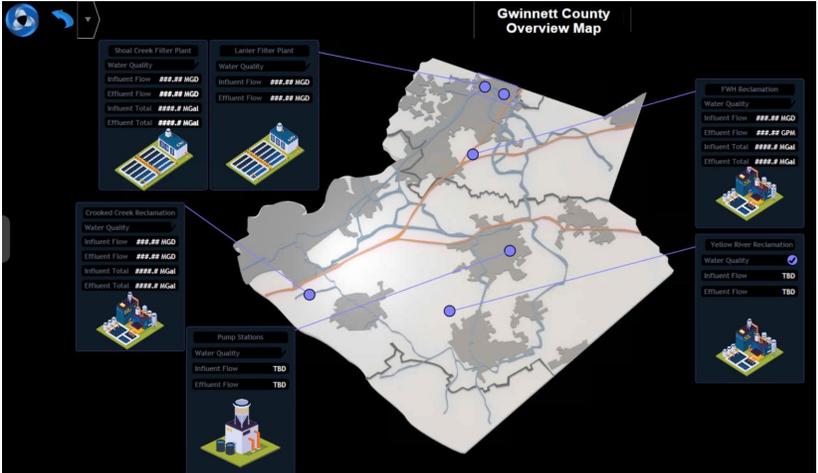
Improved redundancy and reliability



Unified SCADA Platform - UOC

Challenges & Mitigation strategies

Secret behind the success !



Working to be a Utility of the Future

DWR Strategy

- Continuous improvement through personal commitment, innovation, efficiency, and education

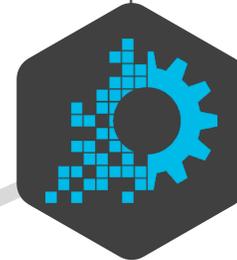
*Providing
fundamental &
reliable services*



*Optimizing
operations,
delivery and
Support*



*Transforming
operations and
systems to meet
future needs*



*Continue to be a utility
of the future*



World-class upstream operations



Challenge

Providing a secured unified platform to improve performance and optimize water production with a focus on sustainability

Solution

Deployed a full range of AVEVA products and integrated technologies to support distributed Process Monitoring & Advanced Analytics on multiple platforms

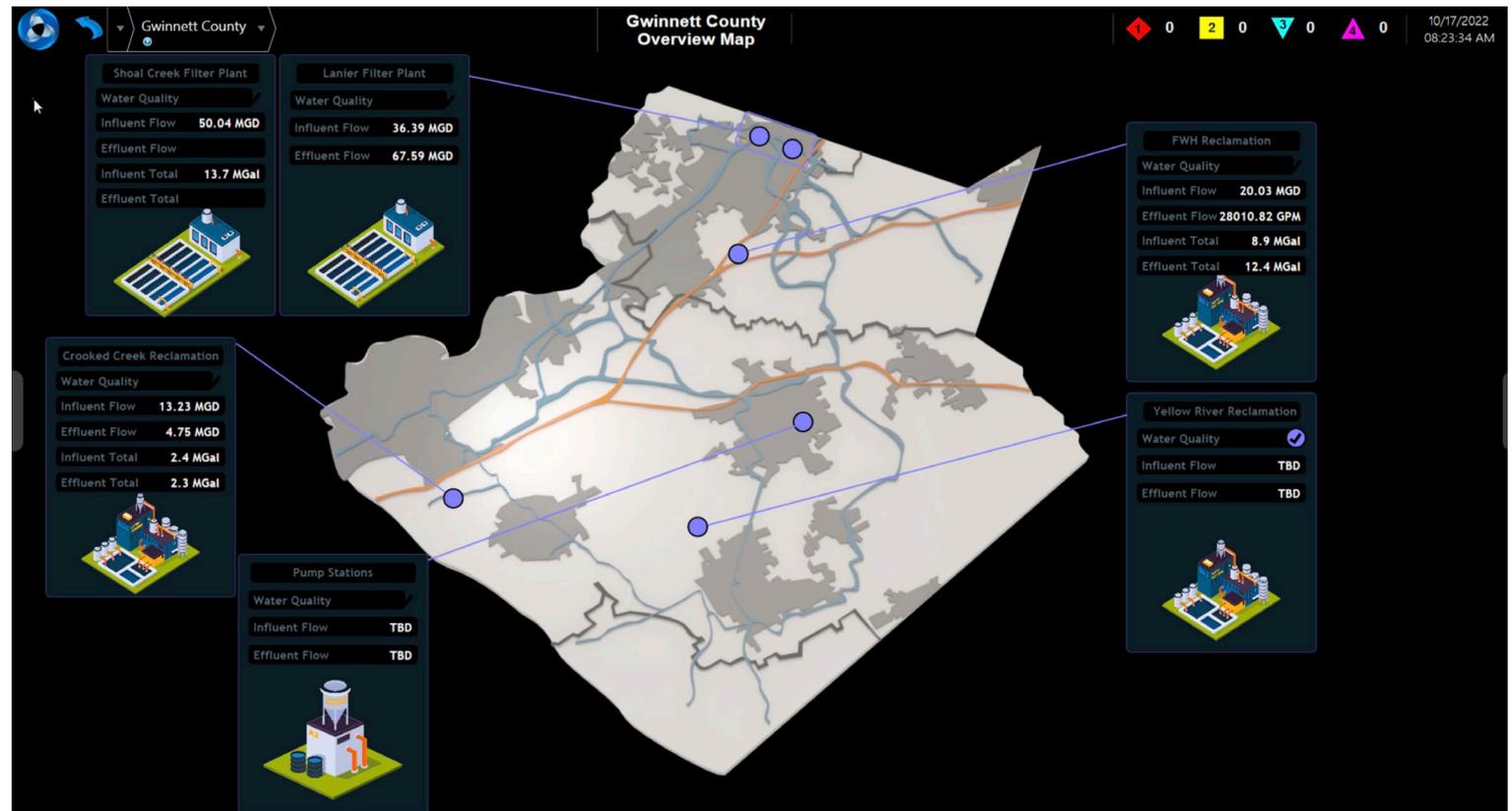
Benefits

Increased production and operational efficiency, reduced costs, mobile inspections, exception-based surveillance, significantly accelerated 'Time to Value' for Advanced Analytics & Machine Learning projects

Project Challenges

Improve Performance & Optimize Water Production

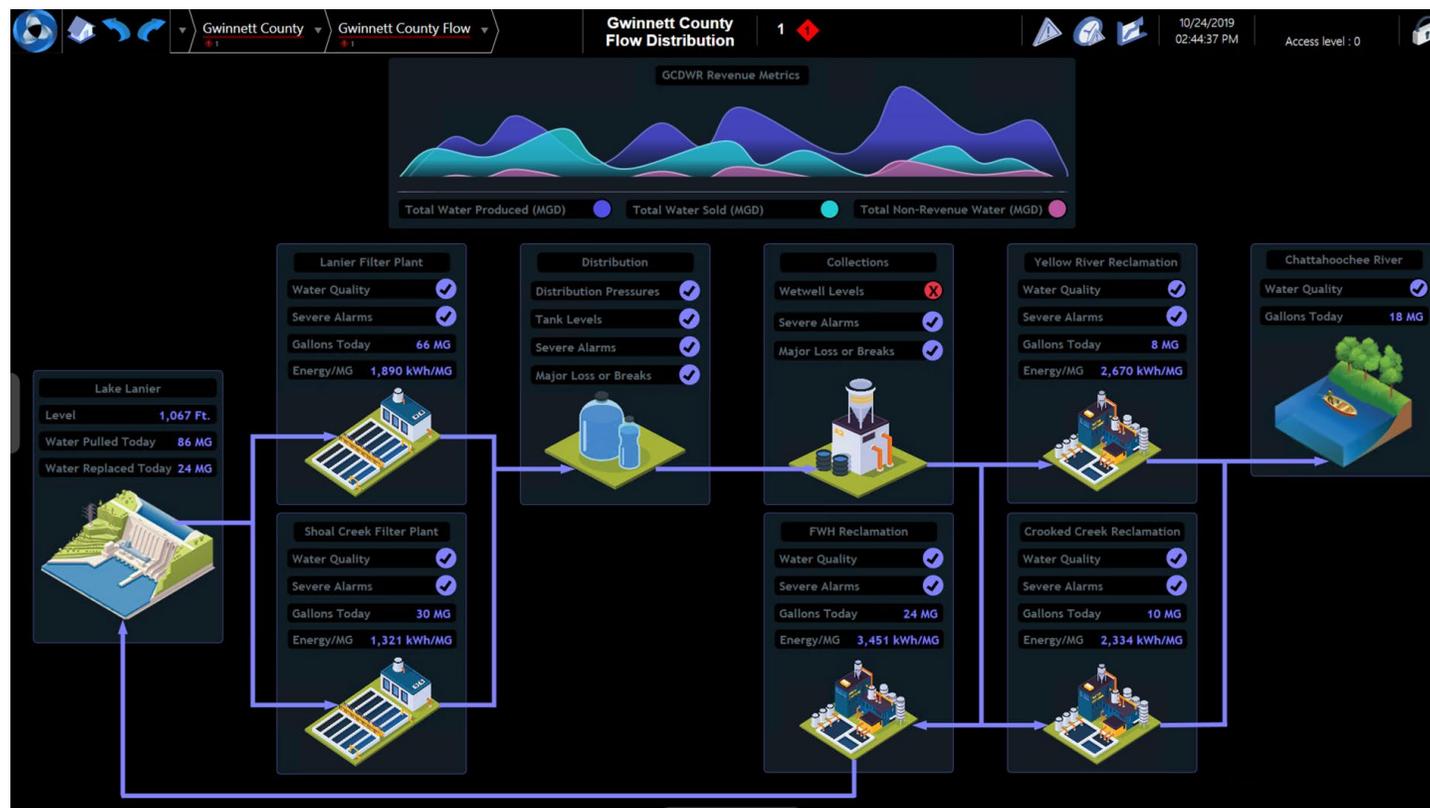
- Visibility
 - Unified platform County-Wide
 - Remote Workers
- Design
 - Aligning UI with emerging workforce
 - Adaptability & Consistency
- Analytics
 - Anomaly Detection
 - Preventive Maintenance
 - Pump Performance



Project Solution

Deploying a full range of AVEVA products

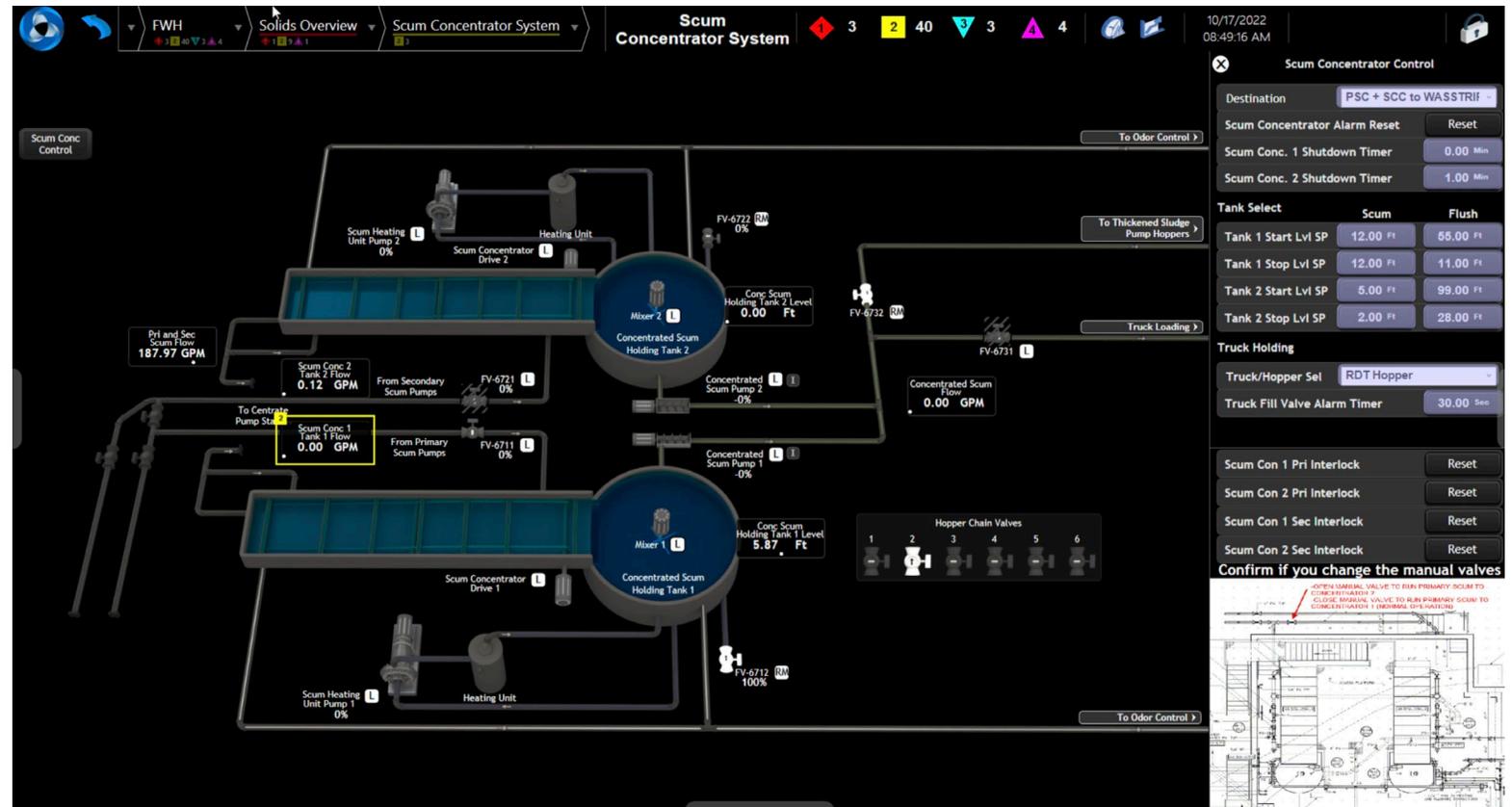
- Unified Platform
 - Multi Galaxy (DMZ & Enterprise)
 - Access Anywhere OMI
- Data Analytics & Access
 - Historical Replication
 - Analytical Platforms
 - Reporting
- Security
 - Architecture
 - 2FA
 - Privileged Access



Delivering Digital Transformation

Unified Platform

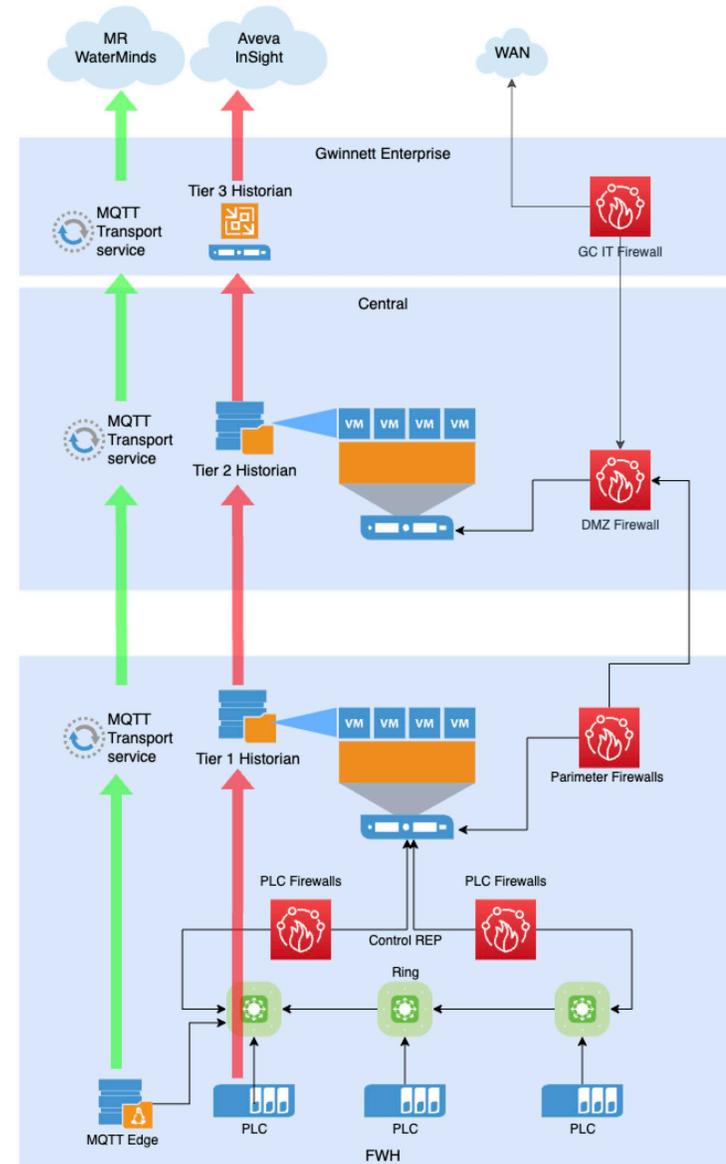
- UOC
 - Multi Galaxy (DMZ & Enterprise)
 - Access Anywhere OMI
- OMI (Plant Level)
 - Design Concepts & Situational Awareness
 - PreVision (Visual Pattern Recognition)
 - Playback
- Enterprise Level
 - Insight View (Cloud)
 - AI/ML (Behavioral Analysis)
- Story
 - Flow Totalizer Analysis
 - Water Loss



Delivering Digital Transformation

Data Analytics & Access

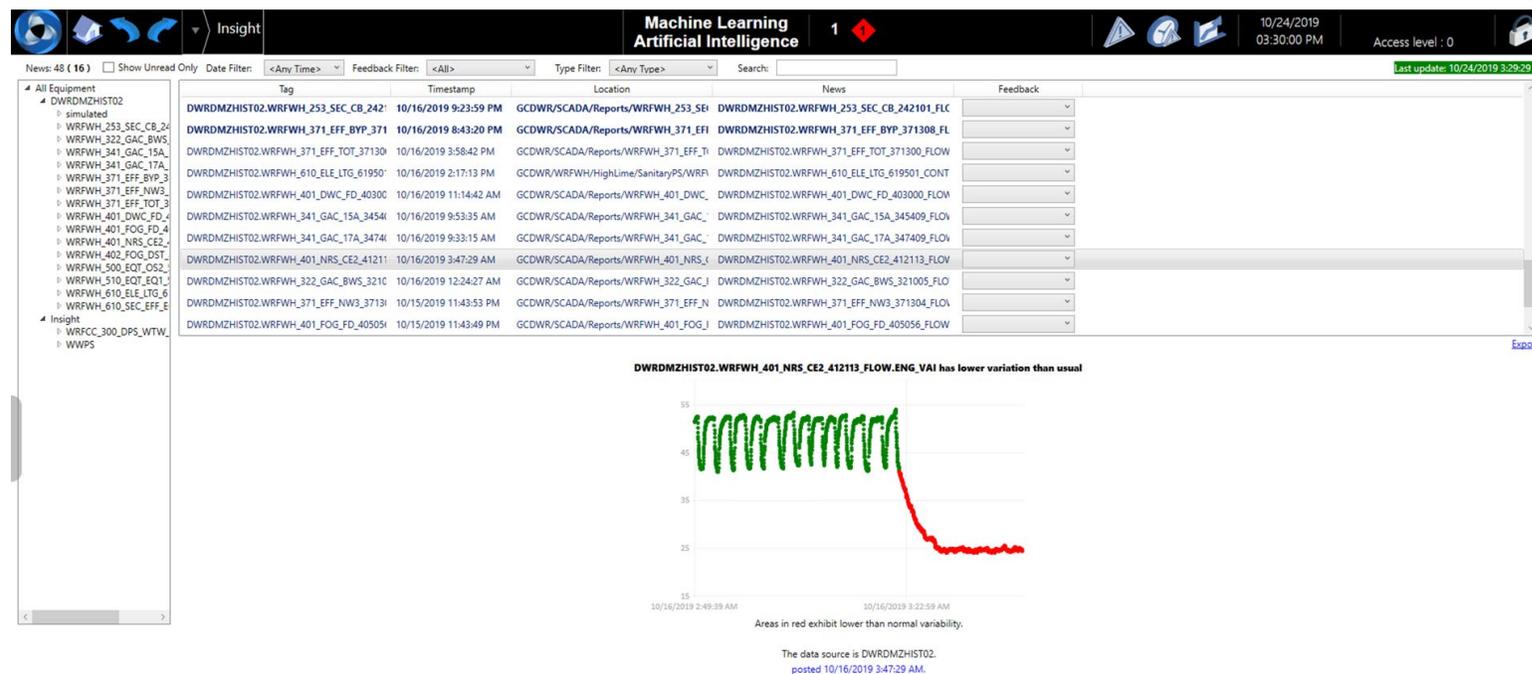
- Tiered Historians
 - Replication
 - Segregated and Segmented Network
- Aveva Analytical Platform
 - InSight
 - AI/ML (Behavioral Analysis)
 - Aveva Reports
 - SCADA Playback
 - Historical Process Screens
 - Relevant Equipment
- External Platforms
 - Tableau
 - PowerBI
 - Hach Wims
 - Alexa Integration



Delivering Digital Transformation

Data Analytics & Access

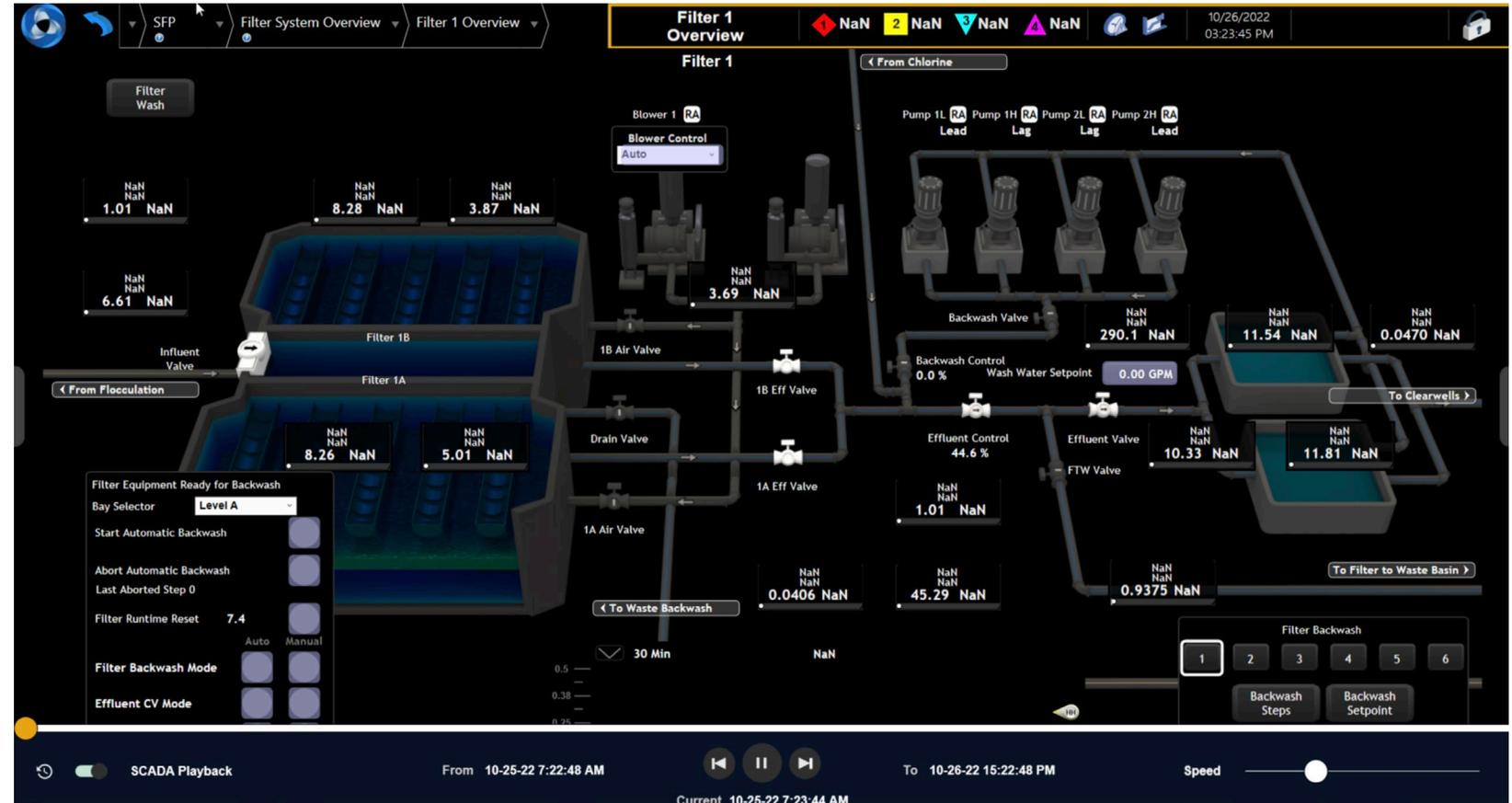
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Delivering Digital Transformation

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Impact of Digital Transformation

- Production Optimization – By using situational awareness graphics, it helps Ops to make decisions faster and easier.
- By using the data from Tired historians,
- Reduced Equipment and energy use

- Asset Maintenance





Optimize Backwash Strategy

Reduce water

Best chlorine dose

Questions?

Please wait for the microphone.
State your name and company.



Please remember to...

Navigate to this session in the mobile app to complete the survey.



Thank you!

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AVEVA is a global leader in industrial software, sparking ingenuity to drive responsible use of the world's resources. The company's secure industrial cloud platform and applications enable businesses to harness the power of their information and improve collaboration with customers, suppliers and partners.

Over 20,000 enterprises in over 100 countries rely on AVEVA to help them deliver life's essentials: safe and reliable energy, food, medicines, infrastructure and more. By connecting people with trusted information and AI-enriched insights, AVEVA enables teams to engineer efficiently and optimize operations, driving growth and sustainability.

Named as one of the world's most innovative companies, AVEVA supports customers with open solutions and the expertise of more than 6,400 employees, 5,000 partners and 5,700 certified developers. With operations around the globe, we are headquartered in Cambridge, UK and listed on the London Stock Exchange's FTSE 100.

Learn more at www.aveva.com