

WEDNESDAY NOVEMBER 16

Water & Wastewater

Welcome to Industry Day

Gary Wong | Global Industry Principal Water & Infrastructure

AVEVA

A photograph of three men in an expo setting, smiling and looking towards the camera. They are wearing lanyards with badges. The background shows an expo booth with a screen displaying 'PI System Calculation Engine' and a list of bullet points. The text 'JOIN US FOR OUR EXPO DINNER EVENT TONIGHT!' is overlaid in large white letters on the left side of the image. A small orange and red horizontal line is above the text. The text '5:00 – 7:30 PM' is overlaid in white letters below the main text. The image has a purple tint.

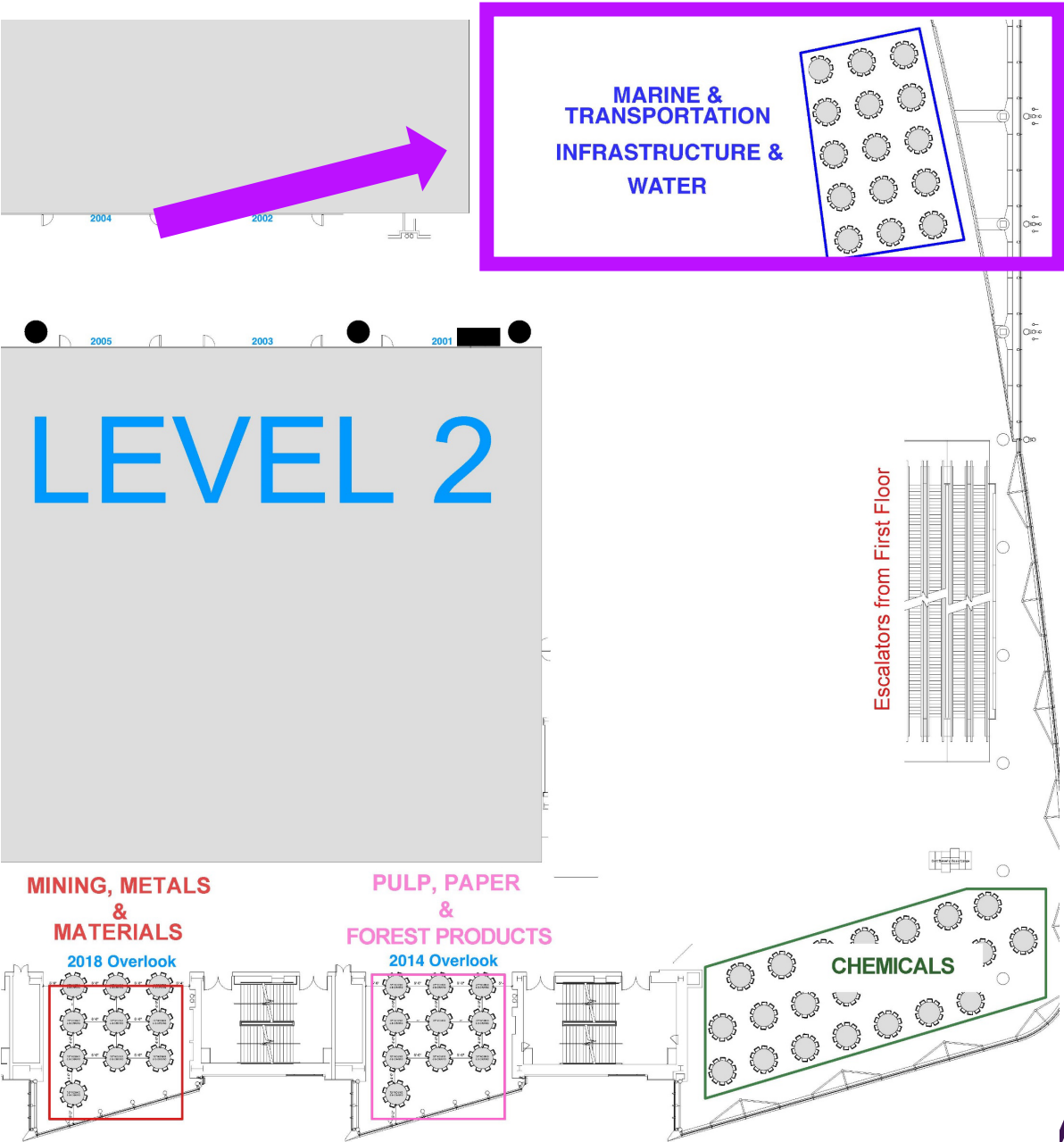
JOIN US FOR OUR EXPO DINNER EVENT TONIGHT!

5:00 – 7:30 PM

Expo
Dinner
Reception

Industry
Areas

Level 2



The water energy challenge

For water utilities, energy is the
second-highest expense,
second only to labor costs

U.S. water-related energy use is
>521 million MWh a year
or 13% of the nation's electricity consumption

48% of water withdrawals
in the United States are used for thermoelectric power production

Emissions from electricity
were the largest contributor to water-related energy emissions in 98% of water and wastewater utilities

U.S. water utilities contribute
290 million metric tonnes of CO2 annually, that's
~5% of the nation's overall carbon emissions

On average every cubic meter of water consumed generates
23lb (10.6Kg) of carbon emissions



Five key issues for water and wastewater utilities



Increasing complexity of service networks
Achieving better emergency preparedness and faster responses to crises



Budget constraints
Doing more with less while maintaining critical services



Labor disruption
Attracting a new generation of workers as an aging workforce retires



Aging infrastructure
Extending asset life as costs to modernize increase



Preparing for climate threats and natural disasters
Meeting ESG targets with transparency and working toward sustainability

IMPACT



Five business imperatives for positive outcomes

Operational agility and resiliency

Enabling situational awareness to improve crisis response across city service lines



A connected workforce

Digitalizing workforces to enable remote operations and attract new talent



Sustainability and a path to net zero emissions

Reducing waste and optimize energy efficiency with operational data hubs



Greater operational efficiency

Reducing energy and operational costs through industrial information management



Improved asset reliability and safety

Extending asset life with real-time data and predictive analytics



Digital initiatives to enable success

Increase asset health and performance

Enable full visibility and awareness

Build your industrial information infrastructure

Sustainability impact study

Join us on this journey

AVEVA and Capgemini are partnering with customers to validate the digital solutions sustainability impact on plant operations.

If your company is interested in a free evaluation of sustainability KPI improvements, go to the expo and **ask about the sustainability study**.

Expo Booth

- Energy transition & circular economy
- Capgemini (Partner Expo)



Use cases

- Accelerate low carbon transition with process simulation
- Process and utility optimization
- Increase reliability and efficiency with predictive analytics
- Reduce waste and energy consumption with information and production management

Metrics

- GHG emissions
- Materials waste
- Energy consumption
- Water consumption

Gwinnett County



10:55 – 11.20

- Gwinnett County's unified platform to improve performance and optimize water production
 - Realize sustainability goals and minimize risk to people, assets and operations while producing more than 70 million gallons of water a day for more than a million residents
 - Make smarter, more informed decisions and speed crisis response



Sam Paul

Section Manager | Process Automation /
SCADA Systems & Projects
Gwinnett County Department of Water
Resources



Robert Touchton

Chief Technology Officer
MR Systems

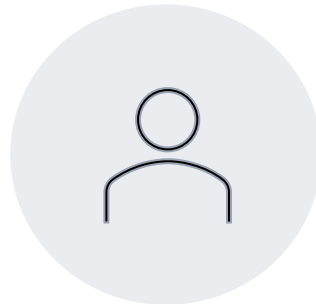


San Jose Water



11:30 – 11:55

- Pump Optimization: San Jose Water's AVEVA PI System implementation
 - With approximately 80% of the annual energy spend attributed to its pump stations, San Jose Water needed to improve both their cost to production ratio and overall pump efficiency
 - To improve efficiency, better manage assets and empower system operators with trusted, timely data



Blake Chetcuti
Operations Supervisor
San Jose Water



Ethan Smith
Junior Engineer, Capital Planning
San Jose Water Co



AVEVA

South Platte Renew



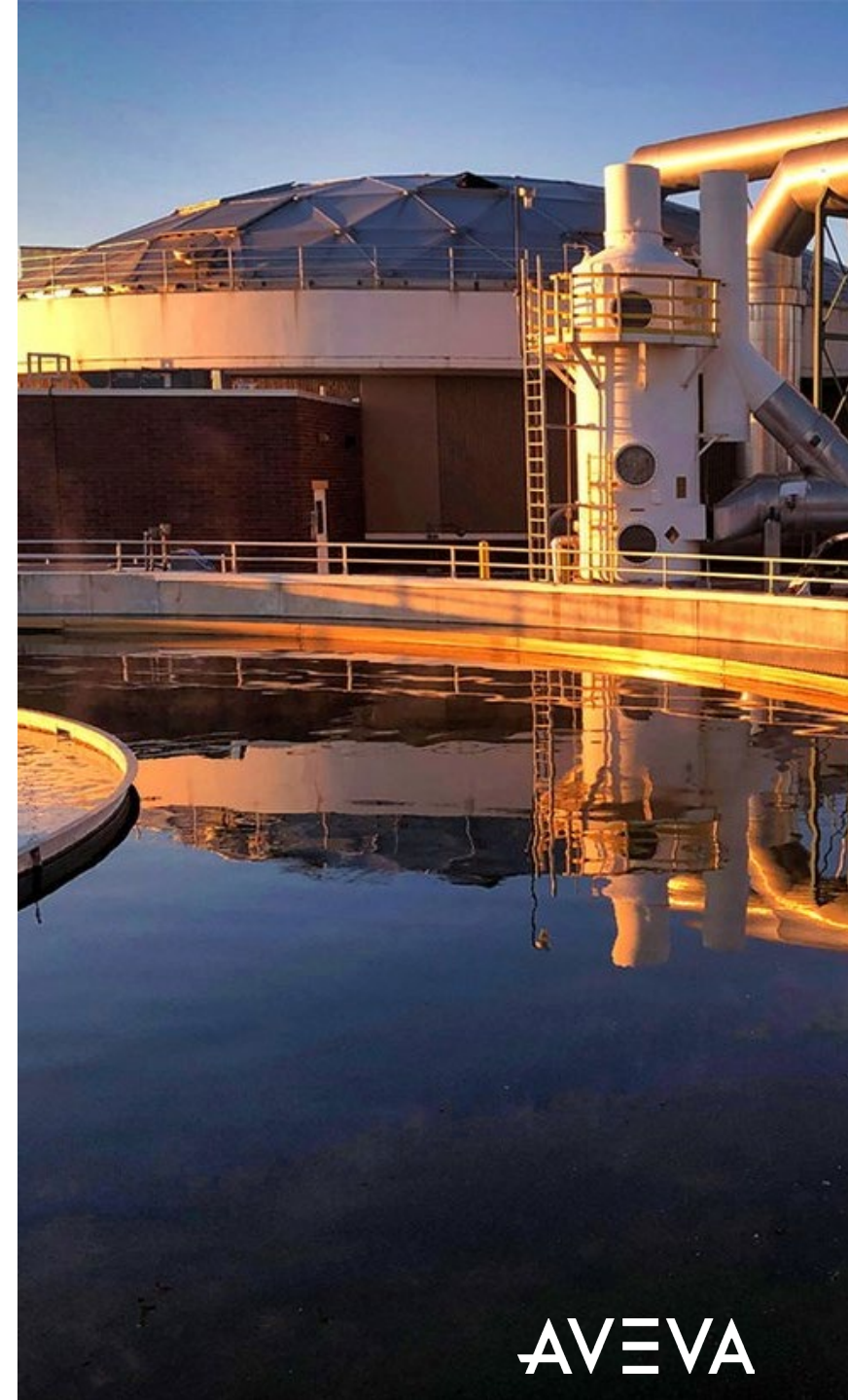
12.05 – 12.30

- South Platte Renew's Advanced Predictive Model vs. Finely Tuned ABAC
 - To meet increasingly stringent regulations on nutrient removal and address increasing influent ammonia concentrations without impacting the treatment of approximately 18 million gallons per day
 - Gain trust of South Platte Renew operations staff for long-term use of advanced process control and achieve stable, year-round partial nitrification performance in the solids contact tanks



Anna Schroeder

Engineering Supervisor
South Platte Renew



Chelan County PUD

14:00 – 14:25



- Water Rights Monitoring and River Modeling at Chelan County PUD
 - To digitize river elevation models and compare with sensor data to monitor boat launches, beach access, and recreational facilities that we maintain along the Columbia River.
 - Combined with our LIDAR bathymetric survey, digital river modeling also has operational impacts by improving near-term inflow estimates.



Shaun Harrington

Data Analyst
Chelan County PUD



Peter Vanney

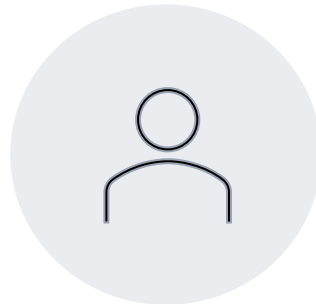
Sr. Data Analyst
Chelan County PUD



Cape May County MUA

14:35 – 15:00

- Cape May County's SCADA Upgrade Case Study - leveraging IT commercial and AVEVA Ecosystem strengths
 - To modernize and standardize the process control and data collection systems across four plants and two departments, for both wastewater and solid waste
 - To remove the constraint of limited tribal knowledge of the long-standing technologies, and allow a new basis to innovate in the future



Rob Winder

Operations Coordinator
Cape May County Municipal Utilities
Authority



Matt Ruth

President
Avanceon

Rob Winder, Matt Ruth Avanceon



AVEVA

Birmingham Water Works Board

15:10 – 15:35



- Birmingham Water Works Board's Journey to OT-IT-ET Convergence
 - Breakdown organizational silos between IT and OT departments to enable an open and mutually beneficial relationship
 - Address identified security vulnerability and replace outdated and homegrown proprietary apps with commercial off the shelf technology



Trey Finch

SCADA Analyst
Birmingham Water Works Board



Dean Ford

Managing Principle Engineer
Luminary Automation, Cybersecurity,
and Engineering



AVEVA

Customer Panel

16:00 – 17:00



Devin Doring

Technical Services Supervisor
City of Salem



Jan Kooy

Director, Engineering
California Water Service



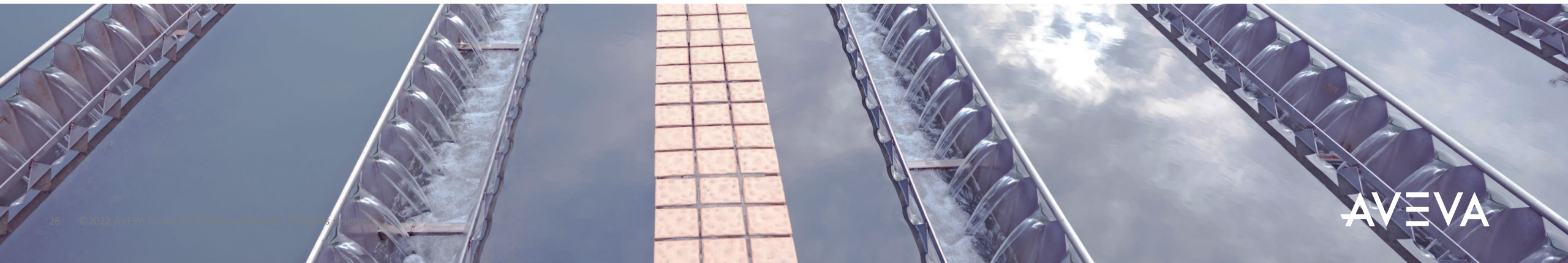
Alain Dedieu

Water & Wastewater Segment President
Schneider Electric



Gary Wong

Industry Principal, Water & Infrastructure
AVEVA



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!