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Renewable Water Resources: Improving efficiency and averting problems by integrating AVEVA SCADA system with remote alarm notification

Forward-Thinking Utility Knows The Value of Advanced Technology:
AVEVA SCADA system integrated with remote alarm notification software improves efficiency and averts problems.

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AVEVA





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AVEVA™



 **ReWa**[®]
renewable water resources



Greenville
South Carolina

795

Square miles



530,000

Population



9

WRRFs

450

MILES OF PIPE

87

PUMP STATIONS

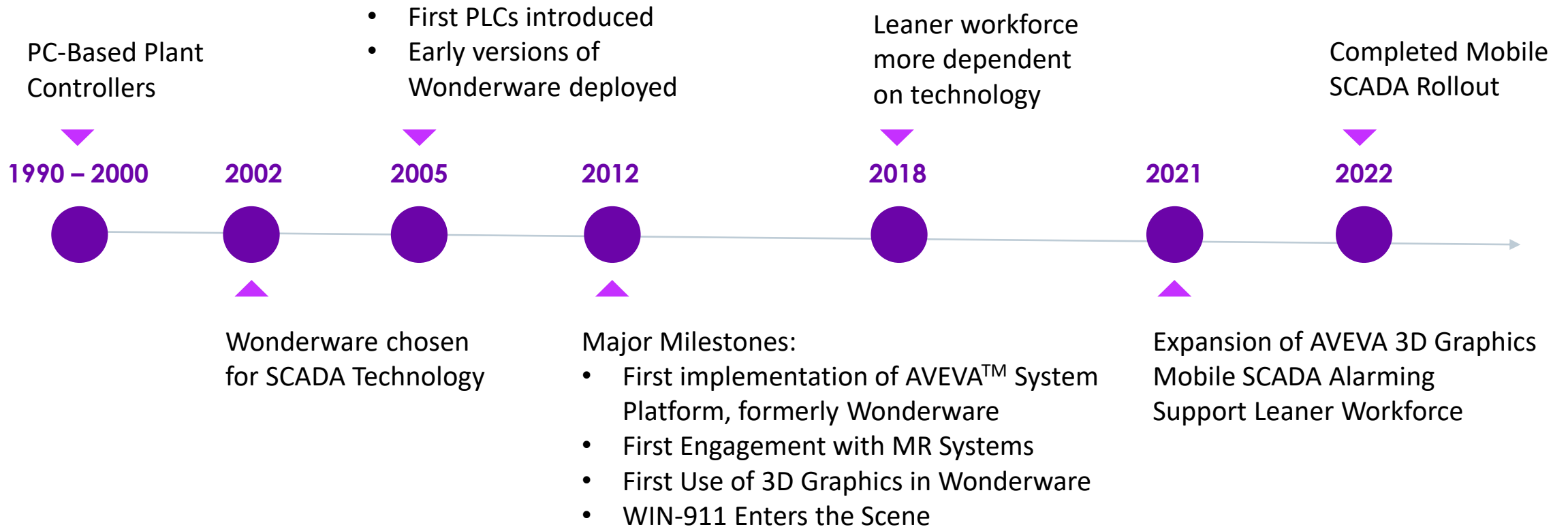
43

MILLION GALLONS



The history

Two-decade partnership between AVEVA and Renewable Water Resources (ReWa)



Renewable Water Resources improves alarm visibility and improves response time by 50%

Challenge

- Reduce the amount of time required for Renewable Water Resources (ReWa) Operations staff to manage alarms due to a leaner workforce
- Finding a SCADA system that could grow seamlessly with the rapid growth of the Greenville, South Carolina area
- Utilizing the latest technology while maintaining ReWa's security standards

Solution

- Standardized on AVEVA™ System Platform for consistent operator experience
- Deployed redundant AVEVA SCADA coupled with a Mobile Alarm Notification Software

Results

- **Reduced time to manage alarms from 10+ seconds to less than 2 seconds**
 - **Saves nearly 200 working hours per year!!**
- **Improved Operations response time by an average of 80%**
- **Increase alarm visibility across the Operations team**



Challenges



Leaner workforce



More efficiently
manage SCADA alarms
to more quickly notify
operators



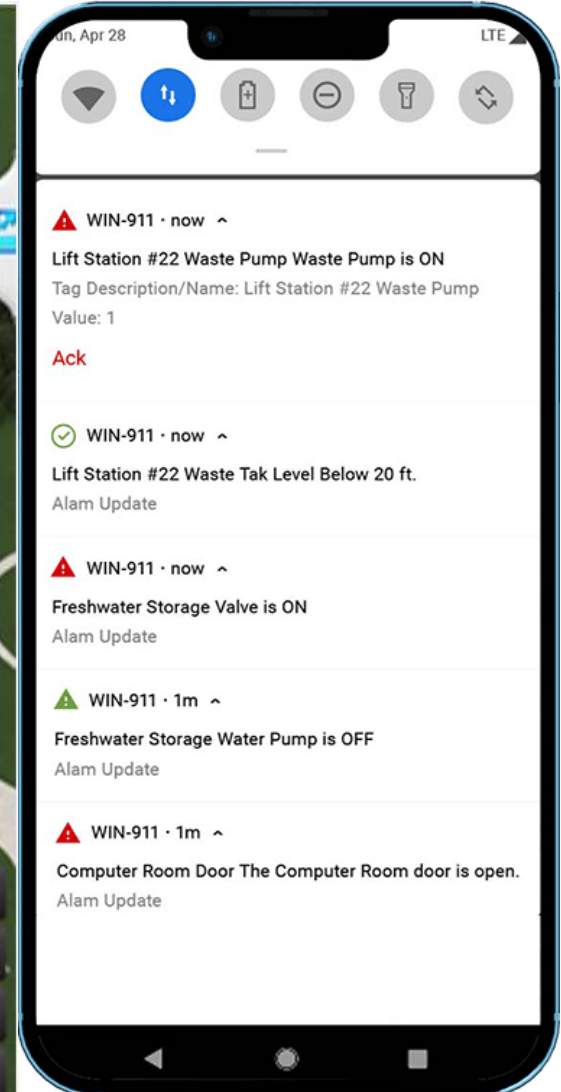
Work with a SCADA
system that could grow
with the utility



High security
protocols

Solutions Utilized

AVEVA System Platform – AVEVA™ Historian – WIN-911 Mobile App



The Project/Process

- Tech-savvy operator identified the mobile value (Initiation)
- Built secure architecture
- Piloted at a single WRRF (Iron out the kinks)
- Full deploy mode
- Nine months from start to finish
- Resource draw – 450 hours total
 - **Only** 40-hours for the ops team, 1-hour per person!!

Benefits



Improve operator usability



Improve alarm response time by 80%



Increase visibility to every alarm, day and night

"Who likes phone calls these days? Having the ability to access alarm details quickly, understand what is in alarm and acknowledge alarms without having to log into a Plant Control System is priceless."

-ReWa WRRF Operator

"WIN-911 mobile has been an excellent addition to our operations process. The immediate notification when an alarm is activated has helped our team respond quickly and efficiently. The chat option within the app is a nice feature to have as well. It gives us the ability to communicate/inform others of issues or fixes during an alarm."

- ReWa WRRF Supervisor

Maintaining Compliance

AVEVA System Platform and WIN-911 Monitoring Software:

- Provided notice of a WRRF power outage outside normal working hours enabling personnel to quickly address the situation to avoid a Sanitary Sewer Overflow (SSO)
- Prevents SSO from pump failure during heavy rains
- Ensures mechanical bar screen rakes don't become overloaded with rags, paper, plastics and metals, ensuring downstream equipment isn't damaged or clogged, and proper Influent flows to prevent an SSO
- Avoids system build-up and release of Effluent Solids resulting in an SSO

Conclusion & Lessons Learned



Application
Architecture/Security



Staying current on
technologies



Multiple alarming
channels



Standardization

Questions?

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



Torsten Byrnes

Please remember to...

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



Tony Jones

Thank you!

Come see SmartSights at Exhibitor Booth # 31!

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