



PROJECT PROFILE

Consulting and project coordination

City of West Sacramento

Client background

The City of West Sacramento, located in Eastern Yolo County, owns, maintains, and operates nine water sites for the treatment and distribution of clean safe drinking water to over 50,000 residents and a diverse mix of light and heavy industrial establishments.

The City's nine sites contain various combinations of equipment, booster pumps, treatment processes, water storage, treatment chemical storage, control valves, monitoring and instrumentation. These sites and the water treatment plant are networked together using the City's existing SCADA system to allow the City's water treatment staff to continuously monitor and control water treatment and distribution facilities.

Project background

Many of the components making up the existing SCADA system became obsolete and were no longer supported by their manufacturer. Since the remaining components and equipment hardware were proprietary, routine repairs and replacements were extremely costly.

In 2018 the City awarded E&M a design-build contract to replace the existing iFIX SCADA system with Wonderware System Platform and Modicon Unity Pro M340 PLCs. The project rehabilitated 46 sites, each with its own PLC panel and communications equipment. In total, the estimated IO count was nearly 11,500. Due to the complexity of the project and EA's expertise in SCADA integration management and standardization, E&M contracted EA to act as a project coordinator and management consultant.

EA solution

EA applied industry best practices and our proprietary closed-loop project management system to develop a project execution plan which would emphasize a design-first approach with a particular focus on standards enforcement and documentation. At the time this profile was written, the project team was closing out the design phase and preparing to start developing configurations.

Project Manager



**Matt
Avila**

Project Technical Lead



**Alex
Coker**

Key Insights:

- Full SCADA system and PLC upgrade
- Project coordination and execution consulting
- Standards and testing protocol enforcement

Key Technologies:

- Wonderware System Platform
- Modicon M340 & Allen Bradley ControlLogix PLCs
- XetaWave radios
- Prometheus PLC & SCADA Configuration Platform
- Wonderware Historian