

PROJECT PROFILE

Agency Wide SCADA Standards

Water Replenishment District of Southern California (WRD)

Client background

The Water Replenishment District of Southern California (WRD) is the largest groundwater agency in California, managing and protecting groundwater resources for 4 million residents in the most populated county in the US. WRD owns and operates several assets including a 5MGD capacity desalter (Goldsworthy), an 8MGD advanced water treatment facility (LVL), and is in the process of constructing a second advanced water treatment facility with expansion capacity of up to 29.6MGD.

Project background

Prior to contracting EA as their only integrator, WRD had developed Allen-Bradley and AVEVA AppServer SCADA standards through their design consultant. Although they believed the project was complete and the standards would be sufficient for future projects, those standards were neither used nor tested by the consultant. When EA investigated them prior to use, engineers found that many did not meet the requirements WRD required. Most of the standards were missing several key features.

EA solution

The District decided that the value of developing new standards with additional features far outweighed the cost of reverse engineering and re-developing their existing standards.

EA leveraged its vast library of validated AVEVA AppServer and Allen-Bradley standards to quickly develop a customized set for WRD. The design process included detailed client interviews, development of an equipment catalog that covered all WRD sites, multiple progress review webinars, and two-stage comprehensive testing. The end result was a complete set of nearly two-dozen HMI and PLC standards which have been successfully leveraged at multiple WRD sites.

Project Manager



Project Technical Lead



Key Insights:

- Developed custom set of 20+ HMI and PLC standards
- Conducted interviews, developed equipment catalog, and two stages of testing

Key Technologies:

- Allen-Bradley PLCs
- AVEVA System Platform and InTouch HMI
- AVEVA Historian
- VMWare



