



**ENTERPRISE
AUTOMATION**
A TETRA TECH COMPANY

PROJECT PROFILE

Wastewater lift stations

Encina Wastewater Authority

Client background

The Encina Wastewater Authority (EWA) is a public agency located in Carlsbad, California. EWA provides wastewater treatment services to more than 400,000 residents in northwestern San Diego County. EWA's facilities and services are essential for protecting the local ocean environment, preserving public health, and providing recycled water resources for the region. Enterprise Automation provided sole-sourced automation and integration services to EWA since 2017 as part of a five-year professional services agreement.

Project background

EWA's Encina Water Pollution Control Facility (EWPCF) treats about 22 million gallons per day of wastewater and has a capacity of over 40 MGD. Wastewater is collected from six communities in North San Diego County, relying on gravity and active pumping. The pumping component consists of 4 sewer lift stations that push wastewater into the treatment plant.

Just prior to EA becoming EWA's sole-sourced automation consultant, the Authority had initiated several projects to rehabilitate the controls and some additional components at the lift stations but were unable to produce the results they needed, resulting in laborious manual operation. After several attempts to get the stations started, EWA called EA to alleviate operators from having to monitor the sites in-person 24/7.

EA solution

EA quickly met with operators to determine how the stations were intended to work and develop an action plan. After reviewing the existing PLC code, engineers determined that reprogramming the sites was the only path forward. EA rapidly mobilized and developed new programs using standardized, notated, and thoroughly validated code in about 4 weeks' time. They brought the sites back online, eliminating the need for 24/7 staff support. The sites have operated with no unexpected shutdowns since.

Project Manager



**Matt
Avila**

Project Technical Lead



**Alex
Coker**

Key Insights:

- Urgent support eliminated the need for 24/7 on-site operators

Key Technologies:

- Citect SCADA
- Modicon M580
- Ecostruxure Hybrid DCS