



Customer Background

The Jefferson County Environmental Services Department, based in Birmingham, Alabama, under the direction of the Jefferson County Commission and the County Manager, has the responsibility to collect, transport, and treat sanitary sewage in Jefferson County. It manages and operates 3,100 miles of sewer lines, 170 pumping stations, and ten wastewater treatment plants throughout the region. The sewer system serves an estimated population of 480,000 residents with the potential to treat 199 million gallons of sewage per day. Their treatment plant SCADA systems have standardized SCADA hardware and software platforms that utilize CitectSCADA and Unity-based Modicon PLCs.

Project Background

EA was engaged by Jefferson County and Schneider Electric to provide consulting services which would help them define a plan to roll out programming standards through future automation projects.

The first step to developing the master plan was to audit all ten of the Department's wastewater treatment plants to understand what steps would be required to remediate them.

EA Solutions

EA performed on-site audit and forensic investigation services to ascertain the condition of existing controls infrastructure and programming. Following the on-site investigation, an audit report, gap analysis, and recommendations were put together to provide Jefferson County management a feasible roadmap to rehabilitation, improvement, and standardization.

Key Insights

- SCADA Audit

Key Technologies:

- CitectSCADA
- Modicon PLCs

Project Metrics:

- EA's Services Value: \$75k
- Project Length: 6 months

