



Quarles Water Treatment Plant

Client: Cobb County - Marietta Water Authority

Location: Marietta, GA



System Features

- Ethernet Processors •
- Fiber Ethernet Switches •
- LCD Operator Interface •
- OPC Compliant Field Device Interface •
- SQL Server •
- Data Warehousing •
- Report Generation •
- iFIX •

The Cobb County - Marietta Water Authority is a public utility that provides treated drinking water on a wholesale basis to fourteen retail water customers through two hundred miles of pipe. The Authority was formed in 1951 as the state of Georgia's first independent water authority, and recently the Authority has undergone the process of water treatment expansion from sixty-four MGD to eighty-seven MGD at the James E. Quarles Water Treatment Plant.

As part of the expansion, the Cobb County-Marietta Water Authority selected Transdyn to supply the new process control system to automate the facilities. Transdyn provided the new field instrumentation, control panels, programmable logic controllers, computers and the fiber optic network. Managed by iFIX, the system monitors and controls the Quarles Water Treatment Plant, raw water pump station and two remote sites.

The installed system consists of multiple PLC's with Flex IO located throughout the facility. Operator interfaces are located in key process areas for local monitoring and control. A dedicated server is utilized to communicate directly with the plant's turbidimeters and particle counters using OPC compliant interfaces. The data is stored on a dedicated SQL server database. A plant wide Ethernet fiber ring provides connectivity between the in plant PLCs, SCADA servers and workstations. The fiber network also provides connectivity for the plant's CCTV system. Leased telephone lines are utilized for communications to the remote sites.