Wonderware Helps Deliver Clean Water to Pinellas County

by Wonderware

“The Platform helps us build templates for our pump and pump station objects. We can deploy a template out to many types of pump stations. There may be two or three hundred of those at one time, but all we need to do is make one template and disperse those out. We can build a pump station with a screen in a matter of minutes, compared to maybe one or two hours before.”

Ken Osborne, SCADA Systems Coordinator, Pinellas County Utilities

Company Overview

Pinellas County Utilities (PCU) - Clearwater, FL (USA)

Pinellas County Utilities has a rich history dating back to the Spanish conquistadors who discovered this Florida peninsula in the early 16th century in their search for gold and silver. Today PCU is a thriving community with a local population of nearly 1 million that is dwarfed by the estimated 4.2 million tourists who visit each year. Among the many basic services managed by PCU, supplying ample fresh water and wastewater treatment remain top priorities for this community, which is bounded by the Gulf of Mexico on the west and Tampa Bay on the east. With the help of Wonderware System Platform, PCU continues to consistently meet or surpass federal and state drinking water-quality regulations and continues to manage an efficient wastewater operation. PCU provides safe, high-quality and cost-effective water and wastewater services to consumer and business accounts, supplying an average of 66 million gallons of drinking water and treats 30 million gallons of wastewater at its facilities every day.

VALUE DRIVERS

Goals
• Supply ample fresh water and provide wastewater treatment for 1 million citizens and 4.2 million visitors each year;
• Meet or surpass federal and state drinking water-quality regulations.

Challenges
• Replace the outdated SCADA system at PCU with a unified and centralized solution;
• Create a system that will publish valuable real-time and historical plant information to the web or company intranet.

KEY METRICS

Wonderware Solutions
• ActiveFactory software;
• InTouch HMI;
• Wonderware System Platform.

Results
• Wonderware system saved 30 to 40 percent in time for editing and changing application screens resulting in engineering productivity and streamlined engineering time;
• PCU programs have won numerous regional and national awards for innovation and effectiveness.
Operating the Pinellas County Utilities

In the late 1990s an outdated SCADA system at Pinellas County Utilities (PCU) was evaluated for its effectiveness. It was found not to be Y2K compliant, excessive labor was required to monitor the process and the system needed constant maintenance and adjustments.

Also, PCU lacked efficient process and production reporting and analysis for its management, which could only review critical data at specific stations at the plant. PCU began its search for a solution that was scalable and more efficient, and would help support the utility’s operational goals.

PCU turned to a software solution from Wonderware to solve all its concerns

Wonderware software leverages the power of Microsoft’s .NET technology for optimal application integration. PCU is currently using the Wonderware System Platform and this provides a unified environment for visualization, plant history, device communications and automation application integration.

The reclaimed water operations at PCU utilize a four-step treatment and disinfection process. The first step eliminates large solid material. Next, microorganisms break down smaller solids.

This is followed by removing fine suspended particles and the final step adds chlorine to eliminate disease-causing organisms. Wastewater takes 10-12 days to be treated and, on average, four houses of wastewater are needed to supply one house with reclaimed water. Wonderware’s software solution has successfully supported PCU’s operations during every step of this process.

Key Metrics

Pinellas County’s Wonderware System Platform implementation has saved 30 to 40 percent in time for editing and changing screens. With Wonderware software, Pinellas County has boosted its engineering productivity and also streamlined engineering time. ActiveFactory software provides the water utility with data trend analysis, sophisticated numerical data analysis and comprehensive data reporting. The combination of these tools enables PCU to publish valuable real-time and historical plant information to the Web or company intranet, permitting authorized management to review plant operations.

Web access to historical and real-time information at PCU facilities is simplified by the Wonderware Information Server production and performance management portal.

PCU programs have won numerous regional and national awards for innovation and effectiveness, and with the implementation of Wonderware innovative software solutions, the organization continues to strive for excellence.

---

This document was realized thanks to the support of Wonderware Southeast