



Turning Data Into Action™

Case Study

LOCATION

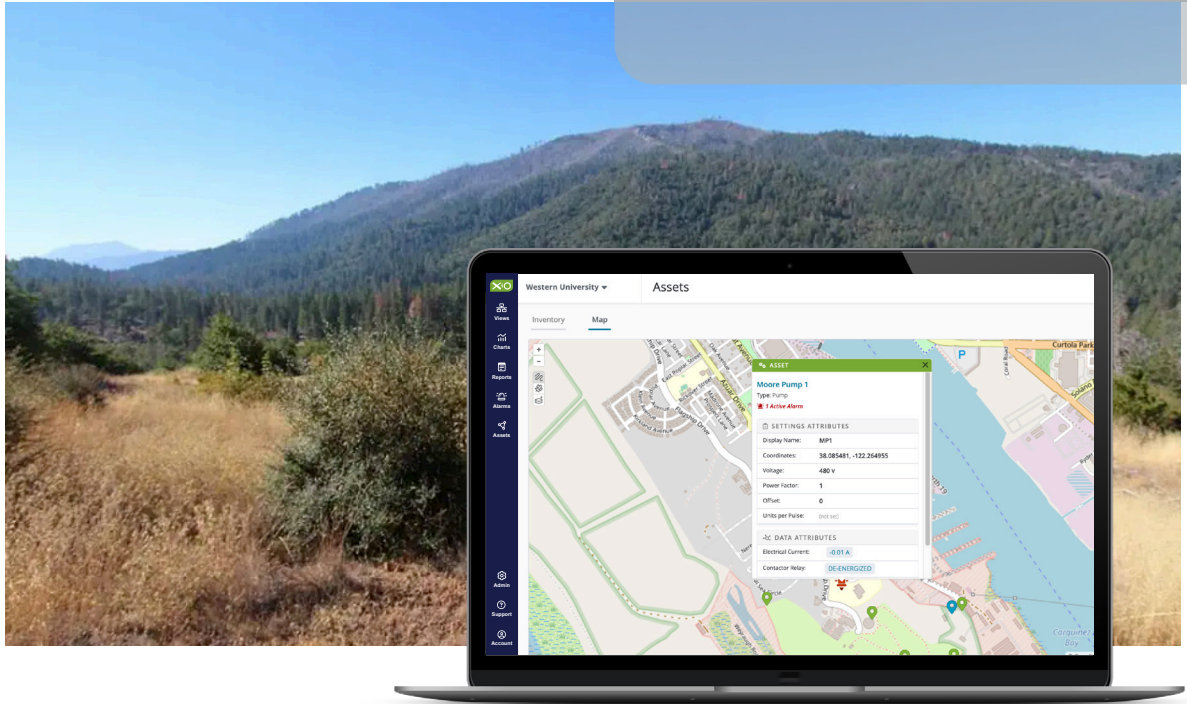
Northern California

APPLICATION

Drinking Water Treatment and Distribution

INSTALLATION

2020



Cloud-Based SCADA Solves Communication And Automation Challenges

Overview

In rural Northern California, three small water systems were required to consolidate operations in an effort to improve the quality and reliability of water they deliver to customers. The project represented a major challenge to traditional SCADA systems due to the inability to use traditional radio telemetry communications and the need for complex automation logic to overcome hydraulic issues unique to the sites.

Challenge

Since 2016, the State of California has sought to consolidate smaller drinking water systems in an effort to pool resources and gain from economies of scale. Cobb Area Water District in northern California's Lake County was part of a regional consolidation plan together with Branding Iron Mutual Water and Hill Nine and Ten Water System.

Consolidation of the three independent water systems presented operational challenges to traditional SCADA automation

technology. The three systems were geographically separated by roughly 14 miles and surrounded by hilly terrain making normal radio telemetry impossible to use. In addition, joining the distribution systems created hydraulic challenges requiring custom complex automation logic, only available through a sophisticated cloud platform.

Solution

The local engineering firm recommended that Cobb Area Water District staff engage with XiO, based on their technical reputation and deep domain expertise. XiO's cloud-based systems are used by more than 200 communities to monitor and operate drinking, wastewater, and irrigation systems.

The team from XiO met with representatives from Cobb Area Water District to understand the scope of work and requirements for success. They proposed a cloud-based solution that eliminated the communication issues by sending data and commands through XiO's cloud data platform via field installed hardware and cellular modems.



XiO's powerful cloud data platform and software applications made it possible to bring data directly to the cloud to leverage advanced custom automation logic to overcome the hydraulic issues. Traditional SCADA technology was not able to overcome the operational challenges.

their local regulatory agency. The insights provided by the XiO system helped Cobb Area Water District directly improve their operations, which resulted in more consistent water quality and consumer confidence for the residents of Cobb, Kelseyville, and surrounding areas.

Results

Thanks to XiO's cloud-based system, operators and managers at Cobb Area Water District were able to gain insight into their combined system. They were able to view system conditions at-a-glance and quickly understand where to deploy resources when needed. Having the operations in "the cloud" allowed operators to receive alarms and alerts via tablet or phone, and saved them time driving from site-to-site to investigate problems blindly. The pre-built reports made it easy to produce compliance reports for

"Thanks to XiO, we were able to consolidate our systems and take advantage of the latest technology. This has greatly improved our operations and saves several hours of operator time each week."

—BEN MURPHY, OPERATOR

