



## **Turning Data Into Action™**



### **LOCATION**

Northern California

### **APPLICATION**

Drinking Water

### **INSTALLATION**

2021

# From The Ashes: Rebuilding A Resilient Water Treatment Control System Using Cloud-Based SCADA

## **Overview**

In 2021, Cody Water Association's water treatment plant was destroyed in a catastrophic wildfire that burned over 221,835 acres and 1,003 structures. The complete loss of the treatment equipment and control system provided an opportunity to consider updated technology to improve operations and build a resilient system for generations to come.

## Challenge

Located at 5,850' elevation in the Eldorado National Forest of the Sierra Nevada mountains, Cody Water Association provides drinking water through a 30-year-old surface water system that serves approximately 200 residents living in the area's cabins. The treatment system moves water from nearby Cody Creek through sand filters, disinfecting the water with sodium hypochlorite before storing it in a tank for distribution to end-users. The water system is

unmanned and located some distance from the residences it serves. The system had no digital communication capabilities, requiring operators to travel onsite to manually check the system and make operational changes. While simple in structure, the system plays a critical role in maintaining the health standards for the residents' drinking water.

Following the catastrophic fire, Cody Water faced the challenge of having to build a new control system from the ground up with the added pressure of a time deadline imposed by Eldorado County Environmental Management. Cody Water looked to XiO's cloud technology to provide the visibility, security, and control they needed within a short time frame.

### Solution

Cody Water Association considered other system suppliers but ultimately chose XiO for several reasons, including overall value and the responsive level of service XiO provides



to its customers. Compared to other options, the XiO solution offered more robust remote viewer and control capabilities. Equally important was XiO's reduced time required for design and installation. Other companies could not match XiO's functionality and prompt installation.

After consulting with the volunteers at Cody Water, the team at XiO scoped out a completely new system, including field equipment together with XiO's cloud-based monitoring and control platform. XiO's team, with deep expertise in drinking water process control, provided guidance and further customization to optimize the system for the association's particular needs.

## **Results**

By moving its operations to the cloud, the Association now has a more resilient system that protects its records, reports, and control narratives from natural disasters or other dangers. Because the system is cloud-based, it can be recovered and restored quickly, if needed.

XiO's ACUITY Hub dashboard provides a clear view into the system's operations. The alarm capabilities enable the Association to respond quickly and direct critical resources when problems arise. User-friendly reporting



capabilities allow Cody Water Association to generate and submit digitized compliance reports to the County Environmental Management Department in a fraction of the time it took to perform manual reporting. With XiO's powerful solution, Cody Water can more effectively manage plant operations remotely, saving the crew substantial time it once spent driving to the site.

By partnering with XiO, the Cody Water Association has invested in its future, modernizing a critical system, and providing lasting value to the cabin owners it serves.

"With the help of XiO, Cody Water Association has successfully restored and greatly improved our facility."

-BLAKE FINSTAD, OPERATOR AND ASSOCIATION MEMBER