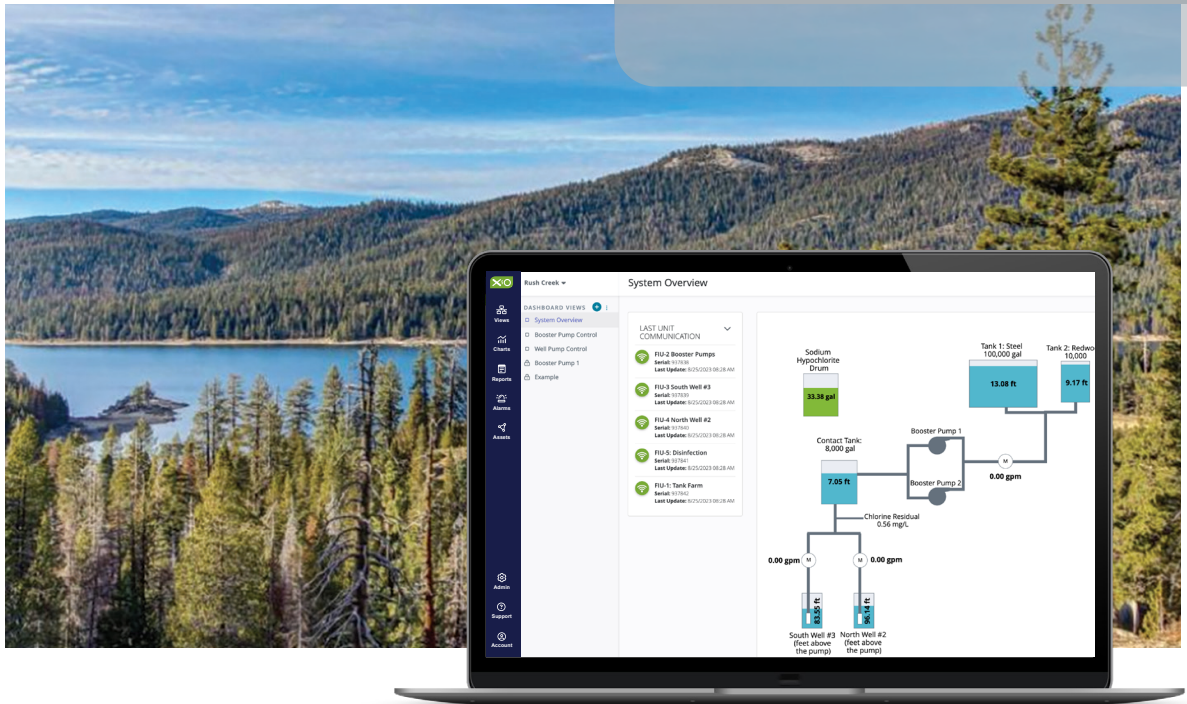




Turning Data Into Action™

Case Study



#### LOCATION

Northern California

#### APPLICATION

Drinking Water

#### INSTALLATION

2017

## Cloud Operations Keep The Taps Running Amid California's Record Snowfall

### Overview

Cold Springs Water Company, located in Tuolumne County in the Sierra Nevada Mountains of California at 5,800 feet, is surrounded by National Forest Service lands. The water company serves a population of 1,235 people through a community water system fed primarily by surface water with well water as backup.

### Challenge

**The rugged terrain made driving from tank to tank an arduous process that represented significant driving time for utilities that needed to continuously monitor and maintain critical infrastructure.** In addition, the topography made it nearly impossible to use traditional telemetry and radios as a means of remote control.

In 2023, a series of moisture-laden storms, termed “atmospheric rivers”, delivered record snowfall to the Sierra Nevada. The dense snowpack left many locations under 7 feet of snow for nearly four months of 2023.

Deep snow made maintaining the drinking water system a difficult challenge and risky to staff. For an unprecedented period, Cold Springs Water Company couldn't send out crews to check on tanks and operations.

### Solution

Fortunately for Cold Springs Water Company, they had turned to XiO several years earlier for a cloud solution to gain visibility and remote control over their system. XiO's cloud platform combined cellular communication and field hardware together with powerful operations management software. Moving controls to the cloud meant operators could monitor and control the entire treatment and distribution system from any web-enabled device.

Operators gained the ability to see if pumps were working correctly, if disinfection levels were within compliance, and if there was enough water storage to meet demand. The new system insights together with the ability to make changes remotely when needed, was a game-changer for the operations



staff. Instead of spending hours driving or snowshoeing to various sites, staff could check the system at-a-glance and make setpoint modifications.

Once their data was in the cloud, the staff at Cold Springs was able to view operational trends and look for ways to optimize their system's performance.

## Results

Cold Springs experienced a quick payback with XiO. There were immediate savings of staff time, labor costs and fuel, as well as reduced risk and increased safety. When the record snowfall of 2023 made travel throughout the area unsafe, XiO's cloud platform enabled Cold Springs' management to operate the system remotely, in a way that did not endanger their staff. Having access to equipment and data at their fingertips enabled the water company to continue

providing water to their customers in a safe manner, despite back-to-back storms that caused hazardous conditions.

Cold Springs chose XiO for its robust, flexible, and accessible platform. Using XiO, Cold Springs continued water service to their customers during record snowpack while keeping employees safe.



“XiO’s Cloud SCADA® was a lifesaver this year. Thanks to you, we were able to operate our system remotely, keeping our employees from having to travel through the deep snows.”

—JEFF KERNS, CHIEF OPERATOR

