



LOCATION

Northern California

APPLICATION

Partner Portal Cloud

INSTALLATION

2020



Build Vs. Buy? Partnering With The Right Data Platform Provider Saves Time And Money

Overview

Balance Hydrologics (Balance), a hydrology, geomorphology, and engineering consulting firm with offices in Berkeley, Santa Cruz, and Truckee, California, needed to update their existing real-time streamflow and water level data reporting website into a robust cloud platform with stream and rainfall graphs that made sense to their clients. The system needed to be streamlined enough for Balance staff to administer, while also being sophisticated enough to bring time-series data together from multiple sources (edge and other datasets) to produce calculations and visualizations in a secure manner.

Challenge

For Balance, the challenge was a common business consideration: continue to expand and upgrade custom software in-house, or partner with an existing cloud data platform

and software provider? Balance collects and displays streamflow and rainfall data for numerous clients throughout California. A portion of the data collected is displayed for public consumption on their website. The rest of the data is only available to clients, as it is private and often collected as part of regulatory requirements related to watershed habitats and water diversions.

Due to the sensitivity of the data, Balance needed a robust cloud solution with a high degree of security from cyber threats and hackers. **In addition, Balance needed a data platform and services provider that would work with them to customize a Partner Portal that could administer their user sites independently.** Balance also needed a system to combine data collected from different types of hardware and software that could be configured to produce the complex calculations and data visualizations their customers needed.



Solution

After collaborative discussions, Balance Hydrologics chose to work with XiO due to the teams' deep domain knowledge related to data platforms and cloud software application development. Leveraging XiO's cloud data platform, the XiO team deployed an easy-to-use private Partner Portal for Balance to add clients, register various field devices used for collecting data, and determine where to display the results.

From there, XiO staff configured the graphs and data visualization tools based on Balance's needs. The result was a cloud-based system capable of displaying rainfall and stream levels by hour, month, and year with near real-time data.

XiO's smart asset object model architecture provides flexible and scalable data management. The cloud data platform and software applications bring together data from multiple sources into a unified, single source of truth, without the need for ladder

logic, tags, or coding. Users can easily add and link assets as needed. Additionally, XiO's solution provides Balance unlimited data storage, enhanced security protocols, and system resilience in the event of a natural disaster.

The public solution, hosted on Balance's website (www.balancehydro.com), collects and displays data that is generated in real-time from stream and rain gauges throughout California and Nevada, installed and managed by Balance.

Results

Leveraging XiO's cloud data platform and analytics software development expertise resulted in a quicker path to a working solution for Balance Hydrologics. With XiO maintaining the software in the cloud, the solution not only meets the needs of Balance, but it also offers a sustainable solution that will serve its clients and the public long into the future.

"XiO's cloud data platform and analytics software have been a huge success with our customers and the public. We have an amazing solution that is easy to use and very secure."

—COLLEEN HARADEN

