

CASE STUDY

# Madera Valley Water Company



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**GREG RODGERS**

*General Manager at Madera Valley Water Company*



samsara



**Madera Valley Water relies on Samsara to help them reduce energy and operating costs with remote visibility and alerts for pump runtimes, flows, and system pressures.**

Madera Valley Water is a mutual water company that serves just under 2000 connections in California's Central Valley. Using Samsara's cloud-based software for remote monitoring and Industrial Controllers (IG) across their well sites and main storage tank, Madera Valley Water has been able to optimize their well pumps to reduce energy consumption, save operators time, and eliminate the service fees required for their previous alarm system.

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### Improved visibility to reduce energy costs

With energy costs making up a significant part of the operating budgets for drinking water systems <sup>1</sup>, it's no surprise that Madera Valley Water is just one of many utilities across the country making energy efficiency a top priority. "We conducted an energy study years ago and found that with an overhead storage tank in the system we could manage our energy use more efficiently and reduce these energy costs" said Greg Rodgers, General Manager at Madera Valley Water.

The tank would be filled when energy rates are low and gravity feed the system to maintain pressure throughout the day. But with almost no data on their pump states and run times, they knew they wouldn't be able to make the most of their new investment. "We knew that during a 24-hour period certain pumps had to run for a certain amount of time, but we couldn't tell exactly when they were running, how many pumps were running at any given time, and whether they were throttled back or running at full speed," said Rodgers. "Without the right data, we were just shooting in the dark."

Searching for an easy way to gather this data, Rodgers turned to Samsara. Today, Madera Valley Water can see all of the data they need to help them run their system more efficiently—pressures, flows, pump run times, and more—in the Samsara dashboard. "The longer we can get through the day feeding exclusively off of the tank, the more money we can save. Thanks to the data we get through Samsara, we've been able to optimize our pump settings so that we're not running during peak energy hours when costs can be up to three times higher," said Rodgers.

### Saving time with mobile visibility and a built-in historian

With a lean team, Madera Valley Water is always looking for ways to increase their operating capacity, especially when it comes to monitoring their system. "We have a small team, so we need to wear a lot of hats," said Rodgers. "You can't be there 24 hours a day, seven days a week monitoring the system to see what it's doing. That's just not a good use of anyone's time."

"With Samsara, if something in the system looks off our operator can immediately take a look at the dashboard. He doesn't have to spend an hour or two looping around the entire system to figure out what's wrong, he can see it on his phone and go directly to that well," said Rodgers.

One of Madera Valley Water's operators, David Heumann, is primarily responsible for maintenance across the system. For David, Samsara has also proven to be a valuable tool for prioritizing work. With the integrated cloud-based historian, he and his coworkers benefit from a complete picture of their operational history.

"The system eliminates a lot of guesswork. I can go back and look at which wells were alerting, why they were alerting, and start to identify early warning signs for potential issues."

1. Energy Efficiency for Water Utilities. (2020). US EPA. <https://www.epa.gov/sustainable-water-infrastructure/energy-efficiency-water-utilities>

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## Integrated connectivity and alerts reduce service fees

In addition to helping Madera Valley Water save on energy costs and increase operator capacity, the platform has also allowed them to simplify their alerting system. Before discovering Samsara, they relied on alarm dialers to call operators any time there was an issue at one of their five wells. Each of these dialers required a dedicated landline with its own service fee.

With integrated alerting, notifications, and cellular connectivity via the IG controller all included in the Samsara platform, Madera Valley Water no longer needed their old dialer system or landline at all five sites. This was an immediate cost-savings that they saw with Samsara. Today, they have alerts set up to call operators and send them text messages any time there are issues that might cause their wells to stop running, including power outages and VFD failures.

Because Samsara alerts are integrated with monitoring dashboards, operators can also get additional context into issues over time and before ever going on site. “It gives you a better idea of what’s actually going on without going on site. We can see what was happening in the system just before we got the alarm” said Rodgers. “We need that information to help us make the best decisions day-to-day.”



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**DAVID HEUMANN**

*Operator at Madera Valley Water Company*

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## Doing more with less

With monitoring, control, and integrated alerts, the choice was clear for Rodgers. “Samsara was the most cost-effective way to get us everything we needed. You really get a whole lot out of the system and you don’t have to outlay a whole lot of capital.”

“You know, everybody over at Samsara has been great. They’ve been able to meet our needs, the service has been great, and that’s a big deal to us.”

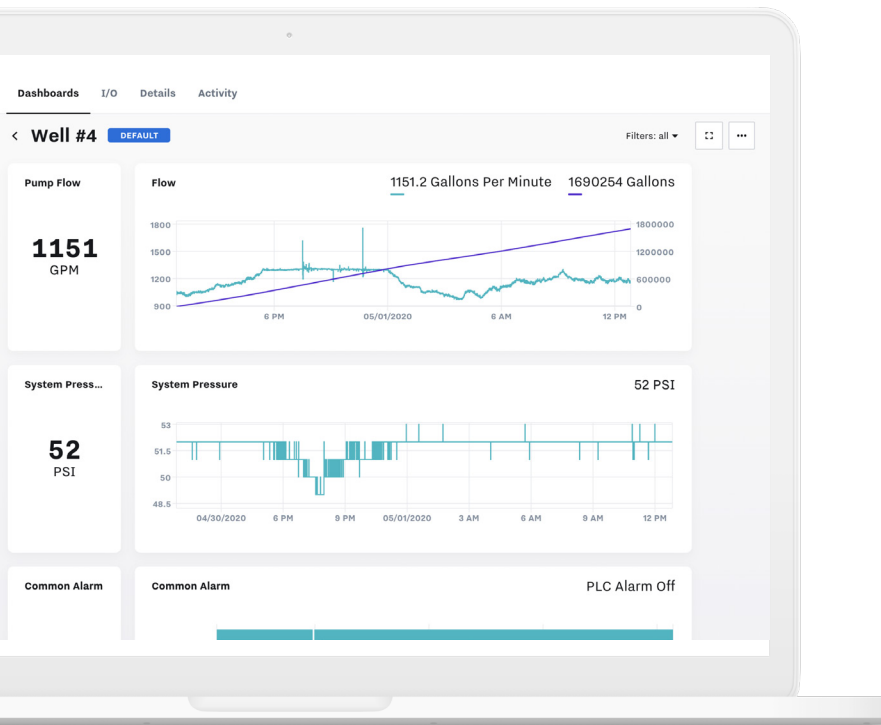
Find out how the Samsara platform can help your organization. Visit [samsara.com/industrial-trial](https://samsara.com/industrial-trial)



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**GREG RODGERS**

*General Manager at Madera Valley Water Company*



**REAL-TIME, REMOTE MONITORING** to track pump runtimes, flows, and system pressure

**MOBILE ACCESS** to view sensor readings and operate pumps from anywhere

**ALERTS & NOTIFICATIONS** to stay on top of issues that could bring down wells

**CLOUD HISTORIAN** to get a complete picture of operational history and identify the early warning signs of pump issues