Improving Irrigation in Browns Valley, California

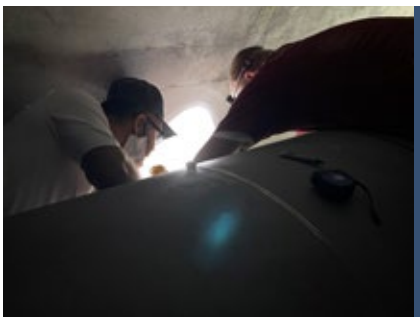
In Northern California, the Browns Valley Irrigation District supplies water to hundreds of farmers. California is currently experiencing record drought conditions, so knowing where and how much water is coming and going is extremely important. As this water source needs to supply many farmers in Northern California, accurate measurement is key as it ensures that farms are able to properly function and sustain the plants and/or livestock they have.

The specific source of water that irrigates the fields in the Browns Valley District comes from the Collins Lake reservoir. The water from the Collins Lake reservoir is gravity-fed through a mile-long pipe underneath the lake that then empties into a canal to the farmers in the valley. Even though there is a source of water for the hundreds of farmers in the area, there was no existing way of accurately knowing how much water was reaching the canal.

At the time, the amount of water that flowed through the pipe was based on estimation using flow charts. These flow charts only allow for assumptions regarding water supply to be made, which could be harmful in such a dry climate as these assumptions are prone to human error. The location of the pipe also posed a challenge for any meter installation as it is extremely long and underground, making it challenging to see as the workspace was so dark.

Pulsar Measurement's Sales Manager for the Americas, Shaun Minton, worked with the Browns Valley Irrigation District to install a Greyline TTFM 6.1 Transit Time Flow Meter to ensure the most accurate water flow measurement. The TTFM is a clamp-on flow meter for measuring the flow of clean liquids in full pipes, with less than 2% solids or gas bubbles. Even with those mild disturbances, the meter measures within ±1% of accuracy. As the pipe diameter is so large, the TTFM was ideal as there are transducers available to fit various pipe sizes, from 0.5 in (15 mm) to 48 in (1,200 mm), depending on the pipe dimensions. The meter is also easy to maintain as there are no moving parts and no drift in how well the meter will perform over time.

Shaun Minton had this to say about the TTFM 6.1 installation, "In my 20 years in the environmental equipment



"Having to string a long cable from the surface of the control room through the tunnel and then working in almost complete darkness was quite an experience."

Shaun Minton, Sales Manager for the Americas, Pulsar Measurement

business, I have never been under tougher working conditions. Having to string a long cable from the surface of the control room through the tunnel and then working in almost complete darkness was quite an experience. However, when the end result was a happy customer, I was happy to have had the opportunity."

Installing an accurate flow meter posed its challenges in this application, but the TTFM 6.1 was up to the task. The Browns Valley Irrigation District was pleased to have such an accurate meter installed for their irrigation system, ensuring that all the farmers in the region receive the necessary water supply while also maintaining appropriate water levels at the Collins Lake reservoir.

To learn more about how our Greyline TTFM 6.1 can accurately measure flow for your application, visit: https://pulsarmeasurement.com/greyline-ttfm-6-1.

More Information

Greyline TTFM 6.1: pulsarmeasurement.com/greyline-ttfm-6-1

Browns Valley Irrigation District: bvid.org

Delivering the Measure of Possibility

Pulsar Measurement offers worldwide professional support for all of our products, and our network of global partners all offer full support and training. Our facilities in Malvern, UK and Largo, USA are home to technical support teams who are always available to answer your call or attend your site when required. Our global presence, with direct offices in the UK, USA, Canada, and Malaysia, allows us to create close relationships with our customers and provide service, support, training, and information throughout the lifetime of your product.

By taking a step forward in echo processing technology, Pulsar Measurement addresses applications previously thought to be beyond the scope of ultrasonic measurement. This technology improves signal processing at the transducer head which has made it possible to increase resistance to electrical noise, enabling the transducer to 'zone in' on the true echo.

For more information, please visit our website:

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