3 REASONS TO THINK DIFFERENTLY ABOUT REMOTE NETWORK WATER LOSS

Rethinking Network Leak Detection In Remote Communities

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1. LONG DISTANCES AND NO BUNNINGS DOWN THE ROAD…

OK, so we were unlikely to run down to Bunnings if a valve breaks or there is a major rupture in the network. But when the nearest specialized plumber or parts supplier is over 300km's away on a dirt road, we had to be certain that turning off valves or exposing pipelines with potential leaks would not disrupt town water supply for days. At first a desktop community water balance from source to sewer and a community wide physical meter check was undertaken. This revealed several meters were underreporting or not updated in the database.

2. MORE DATA IS ALWAYS GOOD RIGHT? WRONG!

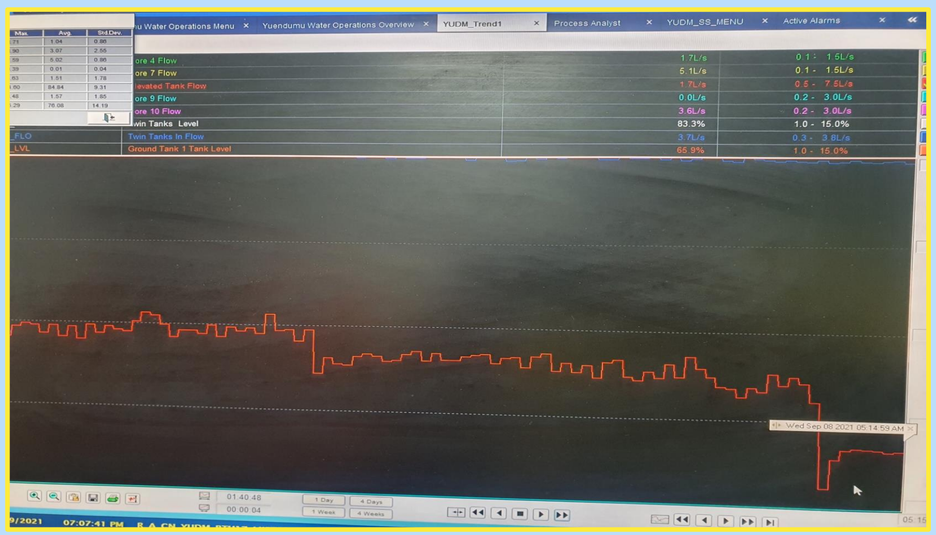
In the modern world, reliable, accurate and timely data is the key to solving a myriad of water problems. But in remote settings, it is all the usual problems, multiplied by ten. All very well having data that pings up to the cloud every 2 nanoseconds but if the battery fails or communications drop out, support can be a 1000's kilometer return trip. This distance makes the long-term operability and ease of infield maintenance paramount.

3. BUILDING RELATIONSHIPS AND TRUST

There is a crucial need to do it right the first time. Unlike in a metropolitan area, it is cost prohibitive to return for a short visit to confirm a leak location if contractors are unable to find it. If too many dry holes are encountered, contractors can lose faith in the work. It is important to work with the contractors fixing the leaks as they are found. It is better to stay an extra day, than having to come back

RESULTS: PROOF IS IN THE PUDDING

Groundwork is where the rubber really hits the road. By making sure all the data was correct, approvals had been granted, people knew who we were and what we were doing. The network leak detection team was able to identify 48 leaks within the water mains and customer properties with an estimated combined flow of 111 L/min in the community, this accounted for approximately 25% of total water demand.



LESSON LEARNT

The biggest challenges and opportunities are remote monitoring combined with field ground truthing. Done correctly it can save money by increasing the efficiency of specialist's teams, enabling them to narrow the focus of their work. This reduces time required in the field, saving thousands in mobilization costs and repeat visits. Understanding the context and limitations of the area in which the data is being collected is key Developing a strong plan and ongoing partnership between private and government organization will bring the best success. .