



SUCCESS STORY

# MEASURING SUCCESS: MASTER METER OCTAVE ULTRASONIC METERS DELIVER RESULTS FOR NEWHALL, CA

Managing a water system as efficiently as possible has always been top priority for Mike Alvord, director of operations for the Newhall County Water District. Yet with California’s deep drought entering its fourth year, overseeing Newhall’s water system has become about more than cost efficiency — much more.

“This is certainly the worst drought of my lifetime,” Alvord says. “One thing that has become extremely important is water conservation, and the ability to accurately monitor how much water is being used and determine if there is any waste.”

Alvord’s team has enlisted a powerful ally in the efforts to operate the most efficient and effective water system possible — Master Meter Octave ultrasonic meters. Installation of several Octave meters over the last few years has boosted revenues, facilitated more accurate metering, reduced maintenance and repair costs, and helped Newhall be more accountable for water used and billed at a time of mandatory water consumption limits.

“The Octave meters we have installed have already paid for themselves several times over,” Alvord says “We’ve already decided to move forward and replace our entire system with the Octave meters. It just makes sense from an economic and conservation standpoint.”

## MEASURING “EVERY LAST DROP”

Master Meter Octave meters offer a compelling value proposition. They are easier to install and maintain than traditional mechanical meters, are extremely durable, and are highly effective at consistently measuring low and high flows in a wide range of situations.

Newhall’s initial experience with the Octave meters proved

to be successful. At the time, a turbine meter that serviced about 400 modular single-family homes required frequent maintenance, and replacement parts were getting harder to come by. Knowing that the meter also was not effectively registering low-flow uses, Newhall opted to replace the meter with an 8” Octave.



“These homes do have yards, so we needed the capability to measure high flows for sprinklers, but also capture low flows when someone at one home was flushing a toilet or brushing their teeth,” Alvord says.

The results were impressive. In the first year, revenue increased by \$52,000, with a 39% increase in consumption registered on just one meter. Alvord is confident that the consumption increase is almost entirely attributable to the more accurate metering provided by the Octave system.

“The way we looked at it, we are simply measuring the amount of water we were unable to measure before,” Alvord says. “These meters not only help the bottom line in terms of annual revenue increase, they are also tracking every single last drop that goes through your system.”



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### BUILDING ON SUCCESS

Encouraged by the results from the first installations, Newhall moved forward with a program to replace meters that were deemed beyond repair, or those that clearly were not tracking usage accurately. For instance, an Octave was installed at an apartment complex where there were no yards, so the need to effectively measure low flows was acute.

"Because it is almost entirely inside uses, you really need to measure every single drop that goes through there," Alvord says.

Within a short time after installing the Octave, it became clear that plenty of water had been averted detection with the old metering system. Over the course of one year, Newhall recorded a 47% spike in consumption from the apartments, and generated a \$48,000 increase in annual revenue.



All told, nine Octave meters have been installed. While some of those meters do not service as large a customer base as the first two meters, the total annual increase in revenue from the other seven meters was \$31,000, and a 41% increase in consumption was measured.

"It's just made a lot of sense, the guys on the crew love that it's easier to install and replace if we ever have to," Alvord says. "Also, the need for testing is significantly reduced."

As the system transitions to the Octave meters, Alvord foresees a day when Newhall will discontinue its annual testing program entirely, another cost and efficiency savings. Currently, a contractor conducts the testing of meters on an annual schedule.

### BUYING SMART

The experience at Newhall is similar to that of other customers who have made the switch to Octave meters, says Greg Land, product manager for solid state measurement at Master Meter.

Land says that the key to making a smart buying decision for new water meters is to do some homework up front, evaluating the meters on the market and determining which is best equipped to service the specific location. Buyers should consider the type of use, the ease of installation, maintenance required, and, most importantly, the ability to accurately measure a wide range of flow consistently over time.

Land is confident that Octave meters have significant advantages when compared to any mechanical meters.

"Octave meters are designed to make your life easier," Land says. "They are easy to install, take up significantly less space, and, because there are no moving parts, reduce maintenance costs and eliminate the need to stock parts."

They are also extremely accurate, Land continues. "For instance, with a turbine meter at a school it could take up to 10 water fountains in use at the same time before the turbine meter even starts to register flow, but that does not mean that the meter will be accurate. It may seem like a small loss, but that can add up to big dollars over time. Those are flows the Octave meter would capture."

Indeed, the Octave meters have made life easier for Mike Alvord and his team as they work to operate as efficiently as possible in drought-riddled California. Newhall is accelerating its plan to eventually switch over all its meters to the Octave technology.

"There is a significant return on investment," Alvord says. "Two of our meters paid for themselves in the first month. There's no guarantee that happens in every situation, but when you are capable of picking up so much more low flow and you don't have to worry about maintenance and testing, you can be very comfortable that these meters will pay for themselves many, many times over."