

Taylorsville-Bennion Improvement District

Boosting Water Revenue with Improved Accuracy and Cellular Connectivity

On the south side of the Salt Lake City Metro area lies the City of Taylorsville, home to the Taylorsville-Bennion Improvement District. TBID provides water for around 70,000 residents with more than 17,000 water connections. A Neptune® customer for decades with T-10® mechanical meters and R900[®] System endpoints, TBID was very satisfied with their drive-by AMR system. However, as their meters and endpoints entered the end of their operational lifespan, IT Administrator Lance Fisher identified an opportunity to upgrade to cellular AMI, which he believed would bring additional benefits to the district.

UPGRADING TO A SYSTEM AS RELIABLE AS THE METERS.

Fisher stated that the district had been very pleased with their current equipment, a mix of Neptune T-10 residential meters, compound meters, and R900 System endpoints read with vehicle-bound R900 mobile data collectors.

"We could read all 17,000 meters in a day with the drive by unit," he said. "It was a good system."

When the opportunity to upgrade to an AMI system came around in 2019, TBID conducted propagation studies to see if it would be feasible for them to install their own gateways for a fixed based AMI system. They discovered that due to their hilly geography, the number of towers they'd have to install would be too expensive for them to invest in their own infrastructure.

Then in 2022, the mechanical meters were approaching time for replacement and batteries on the endpoints were close to running out. So, when they put out their RFP, an important requirement was to find a way to transition to AMI so they could get as close to 100 percent of meters read, with minimal need for infrastructure.

Neptune's R900 cellular endpoints were a perfect fit.

"Neptune meters are really good," Fisher said. "Having those to begin with and then adding something like cellular AMI on top of that, gives you a reading system that is as good as the meters. It's kind of a no brainer."



CUSTOMER Taylorsville-Bennion

Improvement District

SERVICE TERRITORY

17,000+ water connections for 70,000 residents

SOLUTION BENEFITS

Transitioned to cellular AMI to read close to 100 percent of meters, with minimal need for infrastructure

After installation of MACH 10® ultrasonic meters, accuracy jumped to nearly 100%

Gained \$400,000 to \$450,000 of increased revenue per year

Neptune® 360[™] software eliminates the need for service vans to conduct physical readings when customers have high bill complaints

Neptune[®] My360[™] consumer portal empowers customers by providing access to daily water usage to troubleshoot concerns on their own



MORE REVENUE AND BETTER OPERATIONAL EFFICIENCY WITH STATE-OF-THE-ART EQUIPMENT

In the upgrade to cellular AMI, TBID switched out their old mechanical meters for new ultrasonic MACH 10° meters, from residential $\frac{5}{8}$ " for their everyday consumers, to the 10° C&I meters for their largest customers.

Before the changeout they were seeing about 90% reading accuracy district-wide. After that, accuracy jumped to nearly 100%, with only a handful of meters not reporting, due to known areas of poor cellular coverage.

"It's amazing. We're getting more revenue, so that's saving us money," Fisher said. "We're being able to bill for the actual usage, rather than estimating."

According to their financial studies, they're now reading 12% more water usage than they were before because of the new, more accurate ultrasonic meters, contributing to between \$400,000 and \$450,000 of increased revenue per year.

Not only that but they're also saving time. Before, while they were able to read every meter in a day, there would still be a week of troubleshooting before they were able to bill. Now, everything can be done in a day.

FIRST CLASS CUSTOMER SERVICE

The hardware is merely one component for achieving an efficient and seamless operating system. Software plays a pivotal role, and Neptune® 360™ helps streamline processes by eliminating the need for service vans to conduct physical readings when customers have high bill complaints.

"We can actually drill down into their data and say, 'Well, at 1:00 AM you must have turned your sprinklers on because you used this many gallons and you've been doing that every day," Fisher explained. "That's really great being able to do that so the billing clerk that works with me, her work has gone down quite a bit."

They're also incorporating the Neptune® My360™ consumer portal, empowering their customers by providing access to their personal daily water usage to troubleshoot concerns on their own, giving them the tools they need without having to call the TBID office.

"It's an amazing thing to say, 'Now you know you have a leak, you better sign up for this and you can watch and actually see when you fixed it'," he said.

A CLOSEKNIT PARTNERSHIP

Eager to continue improved operational performance with new innovations, Fisher is evaluating the next upgrades that will make TBID even better, like the temperature and pressure capabilities of the MACH 10 that will provide deeper insights into system performance and address irregularities quickly and efficiently.

Fisher noted how the need to continuously improve started years ago. "We beta tested a few things and were the first ones to do the drive-by and remote reading," he said. "So that's just a good example of how Neptune's worked with us over the years."

All of this to continue the high level of quality Fisher has come to expect from a team he's worked with for nearly 30 years.

"First of all, it's the best meter out there.
You couple that with a good reading
system, and you've got the best

overall system you can
get," he said. "We
love the meters,
and now we're having
great success with the cellular

product. It's not just talk, it works."





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