



# EPCOR Water USA

## By Showing Customers Water Consumption Activity, Epcor Helps them Get the Full Picture

### FROM METER READS BY HAND (AND FOOT) TO MOBILE AMR

EPCOR Water USA covers a lot of ground to provide crucial services to approximately 149,000 accounts – two-thirds of them in Arizona and the remaining third in New Mexico. Even before EPCOR took over the territory in 2012, American Water had used Neptune® meters and data collection for several years.

At the time, there was no dedicated meter replacement program; and replacement was determined by budget. The utility needed to determine the age of the meter population to focus on replacing lost water and lost revenue. Originally, it switched out old manual meters with new manual meters, until it heard about the benefits of Neptune automatic meter reading (AMR). At that point, the utility began to build a mobile reading program based on E-CODER® and R900® radio frequency technology.

With the move to AMR from manual reading, EPCOR has noticed dramatic results, including a 50 percent reduction in time to read its routes as well as a 50 percent reduction in the number of people needed to read meters. Former readers have been transitioned to other utility work, such as meter box maintenance, resequencing routes, field customer service, and water distribution maintenance, leading to improved efficiencies. EPCOR has also reduced the number of billing cycles across its different areas, from 20 to 16 within the largest Arizona division and by as much as half in other areas such as Paradise Valley and Anthem. The Chaparral District was able to reduce four billing cycles within the first two years of operation.

EPCOR is excited about how Neptune enables it to continue to reap more benefits from the same system components. For instance, the utility is looking forward to implementing the latest software upgrade to the MRX920™ mobile data collector, which leverages GIS technology to graphically display on-screen those meters already read versus those still unread during collection along a route.



**CUSTOMER**  
EPCOR WATER USA

### SERVICE TERRITORY

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### SOLUTION BENEFITS

Migratable AMR-to-AMI system

Reduced reading time, readers by half – reassigned staff to other tasks

Consumption activity history for customer service, water conservation

Greatly reduced truck rolls for meter audits

## SHARING USAGE INFORMATION – AND CONFIDENCE IN THE DATA – WITH CUSTOMERS

The biggest changes EPCOR has experienced have been the result of the R900 System's consumption activity history capabilities, particularly for high/low investigations and check meters. Data logging has proven to be an eye-opener for its customers. Using the R900® Belt Clip Transceiver in conjunction with a handheld device, field service representatives can extract up to 96 days of consumption history for an individual account and share that information on location at a customer's home. EPCOR uses data logging almost daily to review accounts with customers and show them their water usage patterns, along with leaks, and when their consumption may have jumped on a certain date. Some customers are realizing that their problems are being caught early.

In addition to offering on-the-spot data, EPCOR is also providing its water customers extra confidence in the accuracy of the meters themselves. It has modified its customer service processes so that in some areas it no longer needs to perform meter audits. Before, when a customer thought their bill had been too high and blamed the meter, vehicles were dispatched to look for the trouble. Now, with the Neptune R900 System in place, EPCOR has greatly reduced the number of truck rolls by not having to do so many meter audits. EPCOR can prove to customers that the meters are accurate because those meters are digital, not manual. There's no chance for a misread because of an error by a meter reader. Anticipated changes to the AMR meter reading will allow EPCOR to discontinue working meter audits on AMR meters. It expects a 50 percent reduction in truck rolls, which will allow personnel to take other service calls and deal with other issues, improving customer service.

## TAKING STEPS TO CONSERVE MORE WATER WHILE MOVING TOWARD AMI

Overall, customers are appreciative of EPCOR's highly-accurate AMR. Now that they can see exactly how much water they're using and when, they discover consumption they weren't aware of before. It has led to strengthening a core part of the team's mission in the drought-prone Southwest – water conservation. Because the area encompasses many irrigated lawns, there's even greater potential for water loss from causes such as drip emitters. EPCOR field representatives routinely go out to homes and teach customers how, after turning off their water, they can read the leak indicator on their own Neptune register, which clearly shows if the meter is still registering flow. It's easy to read, without the need to time the flow rate as with a manual meter.

As of August 2016, EPCOR is investigating a pilot program to use targeted fixed network data collection for certain areas. The Neptune R900 System provides the advantage of making a transition to AMI simple. The meters are compatible for walk-by, mobile, or fixed and won't require a conversion in the field. When EPCOR is ready for the move to fixed network, it will be able to eliminate on-site check reads and truck rolls for final reads.

EPCOR has come a long way from manually reading meters. As it continues to benefit from a Neptune AMR-to-AMI System, it will have the freedom to go even further and do even more.

