



NORTH DALLAS WATER AUTHORITY

CLIENT

DALLAS COUNTY, ALABAMA

LOCATION



Saving Resources and Labor (in More Ways than One) with ARB® Mobile™

Dallas County, Alabama was created by the state territorial legislature on February 9, 1818, and named in honor of former U.S. Treasury Secretary Alexander Dallas. Located within the heart of the fertile-soiled Black Belt region in the west-central part of the state, the county encompasses 993 square miles. North of historic Selma, Dallas County is largely rural; spread out around the City of Valley Grande are smaller, unincorporated communities such as Plantersville and Summerfield. Serving this portion of the county is the North Dallas Water Authority (Authority).

Driving, Walking, Stopping, Starting, and Dodging Traffic

According to the Authority's general manager, Hart Sims, trying to key in manual, direct reads of 2,800 meters (a large percentage of which had been in the ground as long as 20 years) over such a wide area was inefficient, to say the least. He and his five employees had to cover ground in three trucks, with each man periodically getting out to walk a separate route. The effort took the team three full days, with another day for the inevitable rereads.

This process was not just inefficient but dangerous as well. Having the meter readers constantly making stops and then pulling back into traffic eventually led to an accident. Fortunately, no one was hurt, but it was obvious to Sims that it was time to go ahead with a long-overdue meter changeout.

Neptune: Lead Free and There for the Long Haul

Due to the aging meter population, Sims had already begun installing new meters and had 800 new units in the ground. "We chose Neptune, with one of the main reasons being that they had certified lead free bronze meters," he said. "Seeing how the USEPA would get more stringent in their regulations, it was the smart choice."

Knowing that he had another 2,000 meters to replace, Sims began researching the possibility of moving to an automatic meter reading (AMR) system. After a comparative cost breakdown, he found that a switch to Neptune's R900® radio frequency (RF) technology – including the purchase and installation of Neptune E-Coder)R900/™ encoder registers with built-in transmitters – would cost \$1.05 per meter per month over the course of 15 years. For that same timeframe, merely changing out the meters and continuing to read them manually would cost the Authority \$1.68 per meter per month. After he presented this information to the board, and explained that the total savings in labor, fuel consumption, and meter and vehicle maintenance would reach \$315,000 over the 15-year period, Sims was given the go-ahead in late June of 2010 to begin implementation.

In July 2010, the North Dallas Water Authority started installing its new ARB® Utility Management System™ in-house. The first order of business was to fit E-Coder)R900/ units to the existing Neptune meters. In October, the Authority began replacing the remaining 2,000 meters with new Neptune meters and E-Coder)R900/ registers. Installation is expected to be complete by late April 2011.

In addition to the cost savings, Sims also credits the new meters and encoders with much more accurate reads for the Authority. "The human error has been taken out of it," he said. So has much of the danger. Using the new, lighter version of Neptune's portable MRX920™ Mobile Data Collector, one meter reader can collect the system's reads from the safety of one truck in just five hours. No more stops and starts along busy roads plus the ability to read no matter the weather. And with two fewer vehicles collecting reads, labor is freed up for other tasks such as catching up on routine maintenance. "This is one of the greatest benefits we realize from using Neptune," said Sims. "And as a bonus, there's a lot less fuel used [than before]."

Going the Extra Mile without Extra Mileage

By taking advantage of the capabilities inherent in the ARB® Mobile™ System, North Dallas Water Authority has improved service to its customers. Not only does ARB Mobile "make things quicker in the billing area," according to Sims; but with E-CoderPLUS leak detection data, it also allows his staff "to notify customers faster if they have a problem on their side of the meter". And when customers have a question about the amount of their bill, the Authority now can extract 96 days of hourly data logging information straight from the endpoint to show exactly when excess consumption took place – helping resolve billing disputes and influence consumption habits and possible conservation efforts.

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– Hart Sims, General Manager



Sims added that the Authority has experienced "really helpful customer service" from Neptune. Neptune Territory Manager Kevin Smith worked closely with the team from North Dallas County to provide the assistance they'd need to effectively and easily leave the walk-by days behind.

Sims encourages other utilities who are investigating AMR to do their homework. "You need to break everything down on a monthly basis to compare operational costs on radio reads versus manual reads. We did, and it made perfect sense to go with Neptune."

Neptune Technology Group Inc.
1600 Alabama Highway 229
Tallassee, AL 36078
USA
Tel: (800) 645-1892
Fax: (334) 283-7293

Neptune Technology Group (Canada) Ltd.
7275 West Credit Avenue
Mississauga, Ontario
L5N 5M9
Canada
Tel: (905) 858-4211
Fax: (905) 858-0428

Neptune Technology Group Inc.
Ejército Nacional No. 418
Piso 12, Desp. 1201-1202
Col. Chapultepec Morales
Delegación Miguel Hidalgo
11570 México, Distrito Federal
Tel: (525) 55203 5294 / (525) 55203 5708
Fax: (525) 55203 6503

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TECHNOLOGY GROUP
neptunetg.com