



## Application Profile: Satellite Communications for Automated Meter Reading

### Customer Situation

A large US Water Utility was losing 25% of its water in transit due to leaks and burst pipes – a common problem for utilities with significant rural operations. They began working with one of SkyWave’s channel partners to remedy the situation. The Utility’s goal was to reduce this leakage to 10% as the losses were affecting its top and bottom lines.

SkyWave’s channel partner suggested a satellite-based AMR/AMI (Automated Meter Reading/Advanced Metering Infrastructure) solution. Previously,

the water utility’s only available options were limited to:

- Manual meter readings – with the expense of truck fleets and meter readers, not to mention long intervals between readings;
- Private fixed radio network AMR – requiring the Utility to invest in and maintain expensive infrastructure

Both options were considered to be cost prohibitive. In addition, the manual meter readings were ineffective in the identification and resolution of leaks in a timely fashion due to irregularly delivered monthly meter reads.

**SkyWave**

SATELLITE  
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### Solution

SkyWave's channel partner develops and delivers integrated solutions for Utility customers. To cost-effectively provide daily readings and control of remote meters in the Utility's system, the partner deployed a turnkey satellite AMR/AMI satellite solution based on SkyWave's products and services. AMR is the accepted standard to deliver meter data wirelessly to a utility's offices, and AMI allows for two-way communication.

### Results

In the first 3 months of deployment, the Utility detected over 30 customer leaks ranging in size from 4,000 to 42,000 US gallons per day. This rate of loss detection was 400% higher than the Utility had originally forecast.

The result was that the Utility has increased its operational efficiency with faster detection, isolation, and resolution of leaks. As well, continuous remote metering has enabled more preventive maintenance practices which have decreased the overall number of leaks.

### The SkyWave Solution

This solution uses the reliable and power-efficient SkyWave satellite communication terminals to take full advantage of the following connectivity features:

**Communication:** Global two-way satellite

**Monitored Assets:** Water meters, water quality sensors, flow sensors, level sensors.

**Data Type:** Flow rate, water level, water quality, water consumed.

### About SkyWave:

SkyWave Mobile Communications is a global provider of wireless data communications for the Machine-to-Machine (M2M) market. SkyWave's products provide dependable communication, tracking, monitoring and remote management of fixed and mobile assets. Over the past 15 years, SkyWave has designed, manufactured and shipped more than 450,000 Inmarsat-based satellite terminals to customers globally in the transportation, maritime, oil and gas, utilities and government sectors. For more information, please visit [www.skywave.com](http://www.skywave.com).

### Benefits of Satellite-based Automated Meter Reading (AMR) Solutions

- No private radio network infrastructure investment
- Fast detection, isolation of leaks
- Reduced operational costs (reduction in pumping, filtering, treatment and chlorination costs),
- Improved data accuracy,
- Improved cash flow budgeting,
- Improved customer service and public image
- Ability to know how much water is produced and sold every month
- Quick deployment and installation – less than an hour per meter.

#### HOW TO BUY

SkyWave mobile devices and satellite airtime services are available through a network of Solution Providers who offer turnkey solutions and industry expertise. Visit us at [SkyWave.com](http://SkyWave.com) to learn more.

#### SKYWAVE MOBILE COMMUNICATIONS INC.

750 Palladium Drive  
Suite 368, Ottawa, Ontario  
K2V 1C7 CANADA

T + 1.613.836.4844  
[marketing@skywave.com](mailto:marketing@skywave.com)  
SKYWAVE.COM