

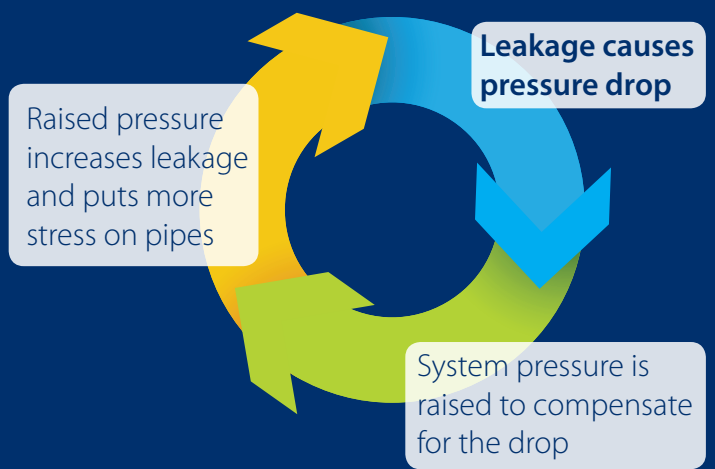
# Strategies for Minimizing Non-Revenue Water (NRW)

## NRW Cause #1: The Vicious Leakage Cycle

**32 billion cubic meters of water** are lost each year (World Bank)

**Half of that** is in developing countries.

That water could have served the needs of **at least 32 million people**



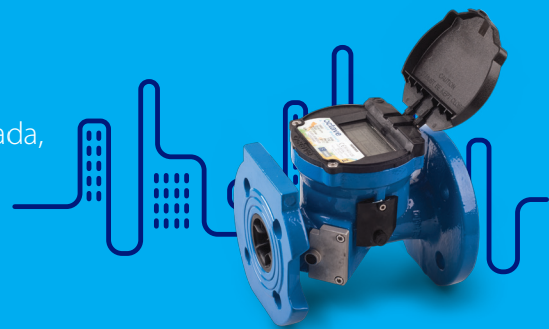
## Solution: Identify Leakage Quickly With District Meter Areas

There are around **1 million miles** of water pipeline in the USA and Canada, enough to **circle the globe 40 times**



**District Meter Areas** turn huge water systems into a **grid of water systems** each with a DMA meter to measure water input.

**Problematic leakage zones are now easier to identify and prioritize.**



## NRW Cause #2: Water That Isn't Billed



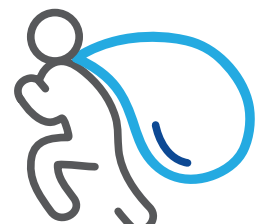
**Authorized**  
Firefighting,  
parks



**Meters**  
Uncalibrated,  
under-registering



**Billing**  
Data errors,  
infrequent



**Theft**  
Disconnected  
meters

## Solution: Smart Water Management Systems Maximize Revenues



**Smart Meters**  
High-precision,  
tamper-proof



**AMI/AMR**  
Automated,  
frequent readings



**Meter Data Management**  
Dashboards,  
reports, alerts



**Integrated Billing**  
Always accurate

**Smart management reduces NRW to the desired 10% benchmark.**

### Sources

[1] Melissa Breyer, 36 eye-opening facts about water, March 21, 2016

[2] William Atkinson, Say "No" to Non-Revenue Water, reprinted September 12, 2016

[3] Global Partnership Aims to Save Lost Water, Environment News Service, September 1, 2016

[4] Alison Saldanha, Bengaluru Ranks Second in Water Wastage, Loses Half its Supply, The Wire, September 17, 2016