

Fact Sheet Leakage Management and Detection System

Definition

Leakage in distribution systems is a major problem for water utilities throughout the world, in both wealthy and developing countries. Many water distribution pipes in Grenada were installed decades ago and are approaching the end of their useful life. Leakage rate in Grenada is reported to be approximately 48 percent.

Management, detection and repair of small leaks in a distribution system are critical functions of system operation and maintenance, yet they are often neglected. Leak management methods can prevent or reduce leakage volume and leak detection technology can improve the ability of water utilities to respond quickly and repair leaks.

How does the technology/practice contribute to climate change adaptation?

Growing population will push many countries into water stress and water scarcity in the coming decades. Detection and repair of leaks in water systems is an important part of comprehensive strategies to reduce pressure on existing water resources.

What are the costs and financial requirements?

The costs of leak management, detection and repair include staff training, management, labor, and equipment. However, leak management, detection and repair programs generally pay for themselves by enabling early repair of leaks and reducing water waste. Leaks often damage pipes through erosion; therefore, additional benefits of early detection include reduced maintenance costs and lower probability of catastrophic failures.

Status of the technology in Grenada

NAWASA currently has equipment to detect water leaks in the distribution network.