Ageing infrastructure and declining water resources are major concerns with a growing global population. Controlling water loss has therefore become a priority for water utilities around the world. In order to improve their efficiencies, water utilities need to apply good practice in leak detection.

To deal with losses in an effective manner, particularly from networks in water-scarce areas, water utility managers are increasingly turning to technology to reduce costs, increase efficiency and improve reliability. Companies that continuously invest in technology and innovation should see a positive return on investment in terms of improving daily operations and collection and analysis of network data for decision making and forward planning.

Methodologies for achieving the best results to reduce water losses are continuously evolving. Water utilities and equipment manufacturers are increasingly working together to stretch the boundaries of current knowledge. This is leading to some innovative technologies and new product development to complement current methodologies. This book reflects the situation at the time of publication.

This 2nd edition of the book updates practices and technologies that have been introduced or further developed in recent years in leakage detection outlining recent advancements in technology used, such as satellite aided methods in leak location, pipeline inspection with thermal diagnostics, inspection of pipelines by air using infra-red or thermal imaging cameras, Drones for leak detection activities and even sniffing dogs. In addition, it is enriched with new case studies which provide useful examples of practical applications of several leak detection practices and technologies.