

# LEAK DETECTION – OUTCOMES AND DIFFICULTIES

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## **ABSTRACT**

Water loss management isn't rocket science, yet despite a growing awareness about the likely impact of climate change, population growth and increasing demand on water resources, many New Zealand Territorial Authorities (TAs) have no active leakage control policy. Many fix only leaks that become visible, are reported to them by third parties or that become evident during routine maintenance work. Why is this? Does the average New Zealand TA know the extent of water loss from their system and do they care? Why should they bother? New Zealand currently lacks the strong drivers that have driven down water loss in other countries, such as the recent drought in Australia or the strong role of the auditor (OFWAT) in the UK. Is this a reason or indeed an excuse for doing little or in many cases nothing?

This paper looks at case studies from four typical New Zealand townships with populations of less than 5000, two from the South Island and two from the North Island. All had significant leakage problems but none had any real idea of how much water was being lost from their system or had an active leakage control policy. We will examine the drivers for fixing the leaks in each of the case studies and for developing an appropriate long term water loss management policy and programme. We will look at some of the issues and challenges encountered and detail the outcomes achieved and the short and long term benefit to the Council and indeed the wider community.

## **KEYWORDS**

**Water loss management, Non Revenue Water, leakage, sustainability**