

# CONDITION ASSESSMENT OF PRESSURE WATER MAINS - IS IT WORTH DOING?

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## **ABSTRACT**

This paper discusses case histories of condition assessments that have been performed in Sydney, Australia, Hong Kong, China and Singapore. The paper discusses the methodologies and contractual arrangements to perform these condition assessments, as well as a cost-benefit analysis of the work. The paper briefly explains the techniques involved and the advantages and disadvantages of each. In most cases condition assessment has been shown to be extremely cost effective targeting specific sections or mains for selective replacement. In the case of 150km of sewer rising mains in Singapore, for instance, less than 5km was targeted for short term rehabilitation and replacement.

The paper finally discusses the concept of CapEx Programming, whereby a water authorities capital expenditure budget can be generated from a combination of condition assessment outputs, cost of replacement, and risk that the city or authority is prepared to accept. This approach is seen as the approach that most regulators will introduce and enforce in the next ten or so years.

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