

# **MEANS TO MITIGATE WATER INFILTRATION IN SEWER MAINS**

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## **The problem**

Many sewer treatment plants encounter problems with heavy rainfall events. At Power and Water Corporation, this is evidenced both in the tropics and in the deserts. Northern parts of the NT receive monsoonal downfalls which create an inflow up to five times greater than dry weather periods and the recent high rainfall in Alice Springs has resulted in an extra 0.5-1.0ML of waste a day coming into the sewer treatment plant.

High infiltration has resulted in treatment capacity problems with dry weather discharges being experienced in Alice Springs and the potential for regular overflows in the northern parts of the Territory. The consequences of the inability to treat high flows due to sewer infiltration are environmental and political, however one of the most taxing consequence as a coordinator is that scarce resources are tied up with this vexing problem. These resources could be much better utilised providing a more cost effective service to the Northern Territory population.

## **How will the money be used?**

The money will be used to investigate various methods to determine the areas where sewer infiltration occurs and to investigate forms of sewer pipe infiltration. Contacts will be made with experts in the field around the country and at other water utilities including the South West Water in the UK. I will capture their knowledge along with mine and use it to develop recommendations for how to best determine points of infiltration and rehabilitation of the pipe.

## **Benefits of the project**

The benefits of the project are widespread with sewer infiltration affecting many water utilities across the country. The outcomes of this program could be used to help all utilities to better target their maintenance activities.