



STUDY TO DETERMINE IF  
**PREVENTION  
 IS BETTER  
 THAN CURE**  
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CSIR researchers were commissioned to investigate the costs associated with measures to control pollution at source and those required to treat the consequences associated with polluted water for four of the most important water quality problems experienced in South Africa, namely: salinity (the salt content), eutrophication (an increase in chemical nutrients), microbial pollution (disease-causing microorganisms such as bacteria, viruses) and suspended solids (small particles of solid materials).

For a cost comparison, it is necessary to determine the impacts of the pollution on downstream water users who bear the costs of treating the water to suitable quality for use as well as to understand the sources of the pollution and the associated pollution prevention measures available and to attach a cost value to each.

Although the research is ongoing and the final cost comparisons not yet available, it is already evident that costs of treatment at point of use are likely to increase as the quality of

the intake water decreases. Pollution prevention measures are likely to protect the fitness for use of the water resource and will contribute to sustainable environmental management of South Africa's water resources. It is, however, also likely that pollution levels can reach a so-called 'point of no return', where it will no longer be possible – nor will it make economic sense – to treat the polluted water for a specific off-channel use.

The reality of the situation is that there may not be any other option but to pay – and continue paying – the real cost of water.

This Water Research Commission-funded project is running over a three year period ending in March 2011. The final project report will be published as a WRC-report and made publicly available.

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