STUDY TO DETERMINE IF PREVENTION IS BETTER THAN CURE

BY DR SUZAN OELOFSE

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 (this salt content), turbidity (an increase in chemical substances), nitrates (pollutant derived from nitrates) and suspended solids (small particles of solid material).

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 are 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 soil-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-take user.

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 2018. The final project report will be published as a WaterReport and made publicly available.

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