

Smart water meters stop money going down the drain

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A project by Griffith University's Smart Water Research Facility has discovered that using 'smart' water meters to identify leaks in and around the home can result in significant savings.

Project Leader, Associate Professor Rodney Stewart, said the benefits are more than just household savings. There are also wider environmental and economic issues at stake.

"Reducing the amount of water lost through leaks has further implications for both [energy consumption](#) and treatment costs," Associate Professor Stewart said.

The study focused on Hervey Bay in Queensland, Australia where smart water meters were installed in 22,000 households.

Through this monitoring system, 4% of households were identified as having a suspected leak, and the customers were contacted.

Of those customers, 46% undertook work which confirmed they did have at least one leak and repaired it. For almost 70% of the leaks, the cost of repairs was less than AUD\$200, while for 50%, the cost was less than AUD\$100.

The end result, however, was that water leakage at those properties was reduced by as much as 91%.

While there is an obvious financial windfall, those customers surveyed claimed environmental motivations for conserving water were stronger in than their desire to save money.

The findings of the study have been published in the *Journal of Cleaner Production*.

"Major urban centres across the globe will experience significant increases in demand for water as populations continue to grow," Associate Professor Stewart said.

"Questions around how much water is lost post-meter in households and what measures can be used to reduce those losses are vitally important for improving water management.

"This study confirmed that smart metering provides water utilities with a powerful tool to rapidly identify and address significant volumes of post-meter leakage. These findings will be of immense value to urban water managers attempting to reduce [water](#) demand or improve system efficiency."

More information: Britton, T.C., Stewart, R.A., & O'Halloran, K.R. (2013) Smart metering: enabler for rapid and effective post meter leakage identification and water loss management. *Journal of Cleaner Production*. 54: 166-176. DOI.10.1016/j.jclepro.2013.05.018

Provided by Griffith University

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