November 2020

Water in the Lower Hunter

Planning our water future

Hunter Water is planning for our future now to ensure our region has a sustainable and resilient water system that can adapt and respond to change. We need to consider new sources of water (supply) and find new ways to reduce the water we all use (demand). This series of information sheets provide an overview of the potential water supply and demand option types we're discussing with our community as we plan our water future together.

Demand option: Conservation of water

What is it and how does it work?

Water conservation programs aim to reduce the demand on drinking water supplies by:

- Identifying and repairing water leaks
- Using water more efficiently
- Finding alternative supplies of water, such as using rainwater tanks for garden watering and toilet flushing in homes.

What is currently in place in the Lower Hunter?

Hunter Water undertakes routine leak detection surveys of the water distribution network to reduce leaks. Reducing water pressures in some parts of the distribution network can also decrease the frequency and likelihood of pipe breaks and leaks.

We promote water conservation behaviours through the Love Water campaign, a schools and early childhood education program and at public events.

We also work with large industrial and commercial customers to reduce their water consumption.

Things we need to consider

Water conservation programs rely on water efficient behaviours and the adoption of water efficient appliances across the population.

There can be a cost burden for some households and businesses to purchase and install water efficient appliances or equipment.

The effectiveness of water conservation programs can be difficult to measure because demand for water is heavily influenced by weather which can often mask changes in consumption.

Conserving water provides environmental benefits as less water is ultimately extracted from the environment due to reduced demand.

How we're considering this option for the Lower Hunter Water Security Plan

We've considered a range of water conservation measures to improve water efficiency and reduce water losses. These have been brought together into three programs that include increasing levels of monitoring and assistance for customers with associated increases in costs.

Given strong community support for water conservation all Lower Hunter Water Security Plan portfolios will include one of these programs.

See **key results table** over page.

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Key results

The table below provides further detail about how this option is being considered in the plan.

	Program A	Program B	Program C
Drinking water savings*	8.4 billion litres per year (12% reduction)	12.1 billion litres per year (16% reduction)	15.5 billion litres per year (20% reduction)
Comparative water supply cost**	$0 ***	$ 1.67 per kilolitre	$2.32 per kilolitre
Reliability and resilience	Reduces demand for water which improves the resilience of the system Relies on the community adopting water-wise behaviours		
Environmental impacts	Less water extracted from the environment		
Cultural and social impacts	Additional costs for investments in water efficient appliances		
Timeframe for delivery	Programs can be implemented immediately but broad behaviour change can take years to achieve.		

** Compared to behaviours between 2016 and 2018*

*** The comparative water supply cost is an annualised cost that allows for comparison of options of varying scales and timeframes. The measure incorporates the whole-of-life cost to build and operate the option and the additional sustainable water supply the option provides. The measure does not assess the increment of demand served or the level of ongoing supply in a long and severe drought. Costs are indicative of 2020/21 dollars and are incremental to business as usual. Costs are Hunter Water costs only and exclude customer costs for the purchase of water efficient appliances and other measures.*

**** A nil cost is shown for Program A as it generally satisfies Hunter Water's economic level of water conservation method.*