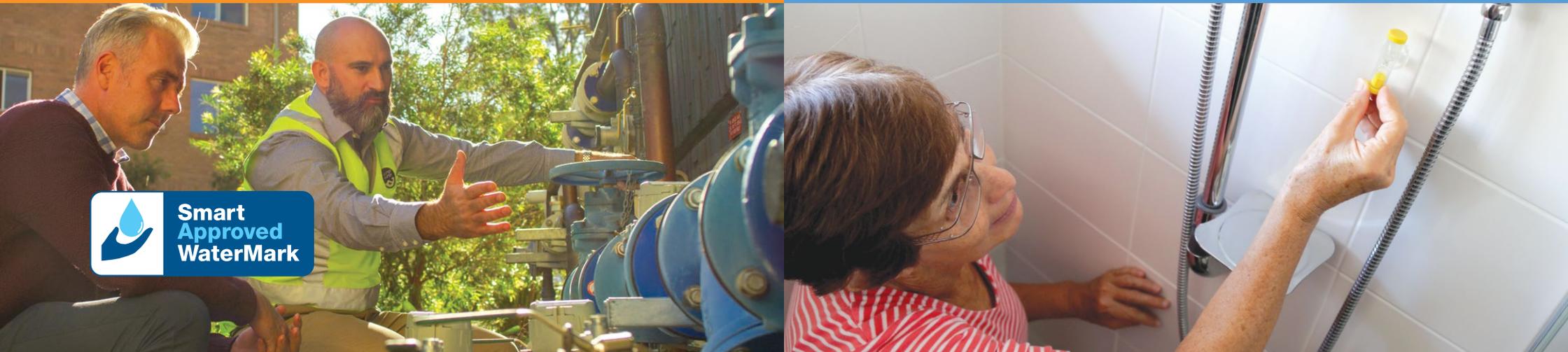




WATER SERVICES  
ASSOCIATION OF AUSTRALIA



# WATER EFFICIENT AUSTRALIA



Smart  
Approved  
WaterMark





# INTRODUCTION

**With drought part of Australia's history and its future, Australian water utilities are setting the benchmark for water efficiency knowledge and engagement worldwide.**

Water utilities have helped Australians to develop a great culture of water efficiency. As a hot, dry country Australia has regularly suffered cycles of severe droughts and floods leading to fears about water security and an understanding of the need to save water.

At the peak of the decade long Millennium Drought dam levels were as low as 30 per cent in Sydney and Melbourne and down to 17 per cent in South East Queensland.

It drove water utilities to promote ways to save water through encouraging behaviour change, offering rebates for the installation of water efficient products and enforcing restrictions around water use.

Water efficiency initiatives across the country were very successful with large decreases in per capita water usage. In Sydney for example water usage dropped by 30 per cent and in some cities even more.

The severity of the drought demanded that water utilities build on their relationship with their customers. It's become clear to the industry in the decade since that building trust with their customers will allow them to more effectively advocate for change and have a greater role in strategic planning in their communities.

**Customer research by WSAA and water utilities around the country shows that water efficiency remains an important issue for customers (even out of drought) and many want their water utility to support them to do more.**

Now, in many cities around Australia, residential water use has remained at much lower levels of consumption than before the Millennium Drought.

Through water efficiency measures and investment in infrastructure such as desalination plants and recycled water, many now consider Australia 'drought proofed'.

**Yet water efficiency remains critical to Australia for both customers and utilities. A base level of water efficiency activities is essential to ensure we are protected for future climate change scenarios.**

Since the drought broke, funding for water efficiency has been reduced meaning that rebates and other water efficiency programs have been scaled back.

However water utilities are now engaging with their customers like never before and investing in large scale water efficiency measures.

This paper aims to demonstrate some of the most innovative programs and products in the water efficiency space from the Millennium Drought to now.

This report is by no means a complete list of all the activities that water utilities or others have been involved in, but aims to feature a selection of the excellent work the sector is undertaking.

# CUSTOMER ENGAGEMENT



## WATER CORPORATION

Water Corporation provides water, wastewater and drainage services across 2.6 million square kilometres of Western Australia.

### CUSTOMER ENGAGEMENT



45  
focus groups



9  
large scale customer workshops



7000  
completed online surveys



14500  
log ins on online portal



*“There are many things that I liked about the Tap In process, mostly I would say it’s Water Corporation’s attitude to a warts and all approach to where we as West Australians are at with water”*

Scott

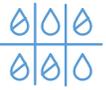


## TAP IN

Tap In, launched in late 2016, was Water Corporation’s state-wide community engagement and customer research program that was run over an 18 month period. It was designed to help identify which issues are of most importance to their customers, which solutions to those issues customers most value and their willingness to pay for each of those solutions. Ultimately it was designed to build these preferences into the organisation’s corporate strategy and financial decision making processes in order to drive a more customer centric water utility. It was the largest program of this nature run by Water Corporation, in which they invited customers from across the state to join the conversation through focus groups, large scale customer workshops, surveys and an on online portal.

The results provided a clear insight into customer’s expectations for a modern day water utility. Interestingly customer expectations around environmental management, and a strong preference for sustainable water sources came through as some of the most important issues for customers. In fact customers expect the Water Corporation to broaden their mandate in this space and to take more of a leadership position within the WA community on environmental issues. In addition they would like to see the community educated and supported to do more to reduce their water consumption. They expect Water Corporation to inform the community about water saving solutions, increase their water knowledge, and monitor, manage and help them to reduce their water usage.

## CUSTOMER ENGAGEMENT

 **87%**  
now know their water days

 **99%**  
positive social interactions

 **1.9M**  
video views

 **7.3M**  
impressions

 *“Humans are the only species on earth that wastes water”*  
Cockatoo

## NATURE KNOWS BEST

Out of the findings of the Tap In Program Water Corporation developed the Nature Knows Best campaign. Using humour to advocate change, the campaign aims to draw people in and make them advocates of behaviour change. The video takes the form of a mockumentary-style concept about a crew of wildlife vigilantes who ensure that the community stays water wise. The campaign was seen on TV, social media and out in the community. Water Corporation has measured the success of the Nature Knows Best campaign through water literacy and waterwise behaviours in the community.

[watercorporation.com.au/natureknowsbest](http://watercorporation.com.au/natureknowsbest)



# HUNTER WATER

Hunter Water services almost 600,000 people in the Lower Hunter region. It provides customers with drinking water, wastewater, recycled water and stormwater services.

## CUSTOMER ENGAGEMENT



10%  
reduction in water use



*“Water belongs to all of us  
and we all have a role to play  
in ensuring a sustainable  
future for generations  
to come”*

Jim Bentley, Managing Director,  
Hunter Water



## LOVE WATER – IT BELONGS TO ALL OF US

Hunter Water’s Love Water campaign encourages customers to work with the utility and wider community to reduce water consumption. Customers in the Hunter Water region are using on average 191 litres per day. This could be reduced by 10%.

Love Water was conceived to help customers become more aware of their relationship with water and learn ways to conserve our most precious resource. The campaign’s emotive language was designed to support an emotional connection with customers and the water they use, and influence social and behavioral change over the long term.

Under the Love Water campaign Hunter Water offers water efficiency advice through their comms channels and integrates its message through its sponsorship, community grants and learning programmes. This approach is coupled with an intensive effort to drive down leakage within the network as part of a collaborative approach to conserve water.

After one year, Hunter Water are seeing promising signs of success from Love Water. Not only has community and stakeholder engagement with the organisation significantly increased, early modelling has suggested that customers are using about four per cent less water than they otherwise would have been, taking into account climate variations.



# SEQWATER

Seqwater delivers bulk water supply for 3.1 million people across South East Queensland. Seqwater works in partnership with South East Queensland water service providers Unity Water, Queensland Urban Utilities, Redland City Council, Logan City Council and the City of Gold Coast.

## CUSTOMER ENGAGEMENT

“With a million extra people living in South East Queensland, we’re still using the same amount of water that we were 15 or 16 years ago”

Neil Brennan, CEO, Seqwater

## WATER SECURITY PROGRAM

The Water Security Program is Seqwater’s plan for providing the region’s drinking water over the next 30 years, including during times of drought and flood. In 2017, Seqwater released version 2 of the Water Security Program which includes a revised Drought Response Plan. The Plan introduces a drought readiness phase to better prepare the region for prospect of drought.

In March 2019, following a record hot and dry summer, Seqwater announced that South East Queensland was set to implement its drought readiness phase, with the combined levels of drinking water dams close to 70%. For Seqwater and its Water Service Provider partners this means the prospect of drought is on the horizon and it’s time for the community to start preparing by being water wise. Seqwater continues to work with water service providers on demand management options to better manage water supply in the future.

Seqwater has launched a three year community education and engagement program which will build community knowledge of how water works now through the SEQ Water Grid, and seek input into developing a sustainable water future in South East Queensland. Importantly, this includes the critical role played by climate resilient water sources, the Gold Coast Desalination Plant and the Western Corridor Recycled Water Scheme. Seqwater’s goal is SEQ communities that are connected to water, participate in the decision making and take action to manage water sustainably.

The Realities of Rain awareness campaign supports the three year program, starting the conversation with South East Queensland communities about what we do when we can’t always count on the rain.

[yourseqwater.com.au/realities-of-rain](http://yourseqwater.com.au/realities-of-rain)



# EDUCATION



# POWER AND WATER CORPORATION

Power and Water Corporation is a government owned corporation. It provides a range of services including distributing electricity and delivering water sewerage services across the Northern Territory.

## EDUCATION



4  
school communities



210  
student pledges to being water smart and influencing the broader community



77%  
of students use less water in all aspects of life after taking part



80%  
of students are going to make sure their families take shorter showers



70%  
of students would now be willing to intervene if they saw someone wasting water

## KATHERINE 'CLOUD TO CUP EDUCATION PROGRAM'

In response to contamination of the ground water supply in the regional town of Katherine Power and Water implemented their Living Water Smart demand management program to reduce peak season water consumption.

A unique school education program was devised and implemented, focussing on both traditional Indigenous concepts valuing water and STEM (Science, Technology, Engineering and Mathematics) education. The program was delivered over a single day and covered three themes:

1. Traditional Indigenous Australian water use - How does water shape traditional Indigenous culture in Katherine? The students met with the local indigenous owners at a culturally significant site (Nitmiluk Gorge) and explored the importance of water in traditional culture.
2. Present day water - How does water get from 'cloud to cup' in our lives today? Students heard and interacted with the Power and Water scientists and engineers who provide safe drinking water for the community.
3. Pledge - What is my role in ensuring water for the future? After learning of the significance of water to indigenous cultures, how much effort is involved in delivering safe drinking water today and how important it is to conserve water, each student made a pledge of their own to help save precious drinking water.

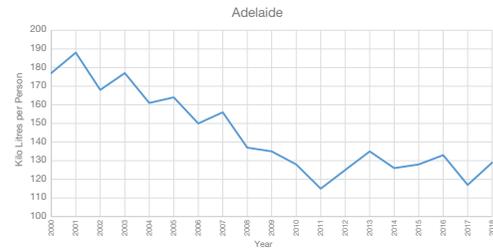


# ACROSS THE REGIONS



## ADELAIDE

South Australia is one of the driest inhabited places on Earth and the population is scattered across a large area. Water is sourced by SA Water from a range of different places to supply Adelaide and South Australia. Most of the water comes from the River Murray, but surface water, sea water and groundwater also make it into supplies. Up until the early 2000's, demand for water from SA Water's customers was steadily increasing. SA Water has found that since the Millennium Drought water efficiency has been enduring and put this down to water efficient fixtures, fittings and products installed, urban planning system reform, pricing reform and behaviour change in the community.

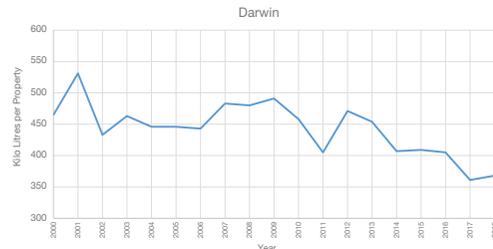


\* Bulk water per capita



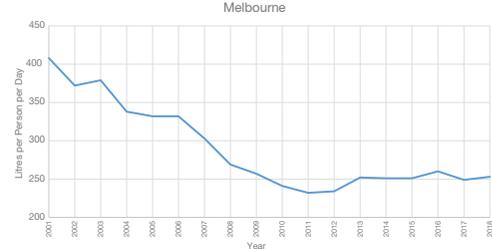
## DARWIN

Darwin is the only capital city in Australia that has never experienced water restrictions. The region's residents use twice the amount of water per person than other Australian cities with similar climates. Although the top end receives plenty of rain in the wet season, only a small percentage of this water actually falls in the Darwin River Dam and surrounding catchment area. Two thirds of this water evaporates. Darwin's population is also growing. The Darwin region is now at a point where more water is required to keep up with the growing demand. Power and Water Corporation are working with the community to encourage water wise behaviours through their 'Living Water Smart' program.



## MELBOURNE

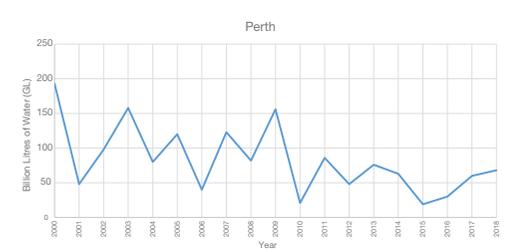
Melbourne Water's latest update on water storage levels show that levels have dipped to 55.1 per cent. This is the lowest level since 2011 when Melbourne was recovering from the Millennium Drought. The downward trend in supplies reflects the challenges of population growth and less water entering the catchments. Despite water wise behaviours remaining front of mind, residential water use has been steady at 161 litres per person per day in 2017/18. Melbourne is relying on desalination to restore water supplies this year. Combining desalinated water with efficiency measures such as Target 155, and investing in recycled water and storm water harvesting, will increase resilience against drought in the region by maintaining storages at a higher level.



## PERTH

Perth and the south west region of Western Australia are in a drying climate that has brought declining rainfall and depleted traditional water sources since the 1970s. Over the last decade Water Corporation has introduced new climate independent sources of water - seawater desalination and groundwater replenishment - to help secure supplies. As the population has risen, water use has remained largely steady.

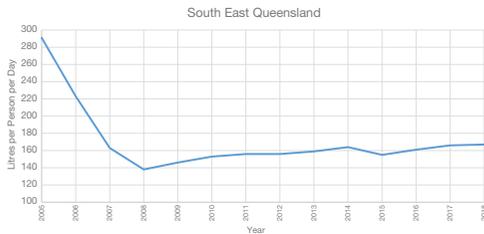
Water Corporation have shown important leadership in establishing partnerships with industry on water saving initiatives and comprehensive, high quality engagement processes with their community. They were the first utility in Australia to implement a community-wide water efficiency program, based on the principles of integrated resource planning. Water efficiency in the community remains of the greatest importance to ensuring water security in the Perth region.





## SOUTH EAST QUEENSLAND

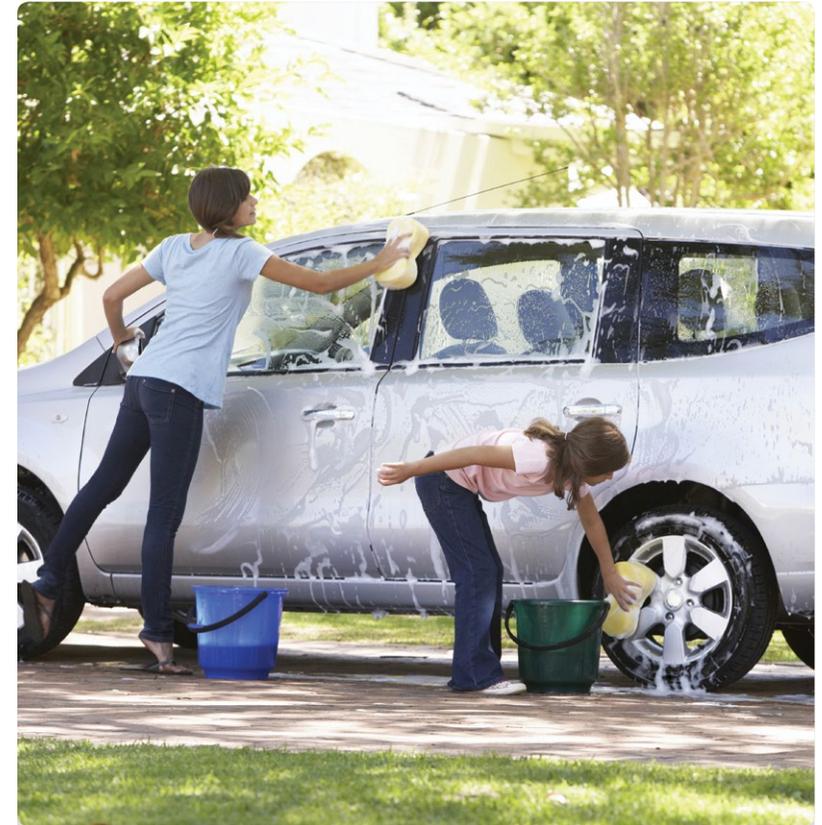
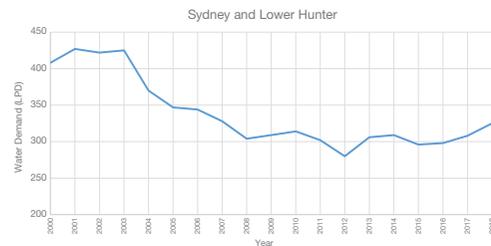
Over the past three decades South East Queensland has experienced unprecedented population growth, with nearly one in seven Australians now calling the region home. During the Millennium Drought, between 2004 and 2007, South East Queensland dam levels dropped from over 60 per cent capacity to less than 20 per cent. Although a long term water security plan was in development at the time, it was realised that a short term drought plan was needed. Developed in partnership with multiple stakeholders including government and water utilities, it included deploying a large scale water efficiency rebate program, the likes of which had not been seen in Australia. Construction of the state's first desalination plant and major wastewater recycling system also began. Due to these measures Seqwater is only just now approaching the levels of production that were experienced pre-drought Millennium Drought.



## SYDNEY AND LOWER HUNTER

Since 2016 the state of New South Wales has been experiencing unusually prolonged hot and dry weather. Despite water wise behaviour for many years, the unprecedented climatic conditions in Sydney and NSW have seen an increase in water use from customers, particularly outdoor use. At the beginning of 2019 Sydney's catchments dropped below 60 per cent, meeting the trigger for the first order of water from the Sydney Desalination Plant. As part of the cost recovery for desalinated water to meet demand, the volumetric water price will rise providing customers with incentives to use water wisely. Australia has also undertaken pioneering work in understanding how responsive consumer demand for water is to changes in price — see box 1.

In addition, Sydney Water and Hunter Water have both launched community education and awareness campaigns to encourage water efficiency. Sydney Water is completing a major review of their water conservation program to ensure they are ready to work with the community to increase water conservation activities if dam levels fall further. This could include revitalising their water efficiency program, and developing an approach to research, design and test new water saving products and offerings.



### Box 1.

Sydney Water and the University of Sydney undertook a sophisticated Econometric Assessment of Sydney's Residential Water Use. While metering is the norm in Australia, "The study found a diverse range of responses by residential households to changes in water usage price and weather conditions. Grouping households by the way they pay for water usage charges, participation in water appliance efficiency programs, and property size, has allowed for a far greater understanding of the impact of water usage prices on water use. The short-run real price elasticity is very low, which contributes to a greater understanding of the practical ability to use scarcity pricing to balance the supply and demand for water. Water usage appears to be rather inelastic in the long run as well."

Source: Abrams, B. Sarafidis, V. Kumaradevan, S. Spaninks, F. *An econometric assessment of pricing Sydney's Residential Water Use*, The Economic Record, Vol.88, No 280 March, 2012, 89-105

# SUSTAINABLE HOUSING

## SYDNEY WATER

Sydney Water provides 1.4 billion litres of fresh water a day to 2 million customers across Sydney, the Blue Mountains and Illawarra.

### SUSTAINABLE HOUSING



Reduces water use from over 600 litres a day to **200-300 litres per day**



Since 2006 serviced **1,200 apartments**



**30%** average water saving since 2006 - about 74 million litres in 2017-18

### SUSTAINABLE HOUSING



Aims to reduce water and greenhouse gas emissions by **40%**

### BASIX

The Building Sustainability Index (BASIX) is one of the strongest sustainable planning measures to ever be undertaken in Australia. The BASIX mandates that all new homes in New South Wales be more water and energy efficient than average, and also applies to alterations or additions to existing homes above \$50,000. It aims to reduce water consumption and greenhouse gas emissions by 40% compared to pre-BASIX buildings. The online assessment tool allows customer to compare the targets with current building plans. Often, rainwater tanks or water saving appliances such as showerheads, taps or toilets need to be installed to meet the criteria.

### WATERFIX® STRATA

Sydney Water's WaterFix® Strata program targets strata buildings with high water use with a unique benchmarking tool. The tool has identified strata buildings with water use greater than 600 litres per bedroom per day. Efficient strata buildings use 200-300 litres per bedroom per day. Water savings are achieved by repairing leaks, installing water efficient devices and addressing leaks in common areas.

With only a single meter serving the majority of Sydney's residential strata buildings, the incentive for individual apartment dwellers is limited. To incentivise the program, the WaterFix® Strata program is based on a performance guarantee. Under this agreement, the strata body pays no upfront costs, instead repaying costs with the savings achieved by the WaterFix® services. That is, the water bill of the account is held static until the costs of the service are recovered.

In one building with 154 apartments, WaterFix® Strata helped reduce water use in the building by 34% and saved the strata committee about \$44,000 a year in water-related costs.

# SOUTH EAST WATER

South East Water delivers water, sewerage and recycled water services to 1.7 million people across Melbourne's south east.

## SUSTAINABLE HOUSING



Will provide homes for  
**450 families**



**3**  
types of water  
(drinking, recycled and rainwater)



Up to **70%**  
less drinking water will be used  
by every home



Approx. **\$15,000**  
of state of the art water  
technology developed and supplied by  
South East Water to each home

## AQUAREVO

Using their own land South East Water have teamed up with Villawood Properties on a unique residential development collaboration. Built on a former wastewater treatment plant site, Aquarevo will be the most water and energy efficient residential community in Australia. Residents will enjoy the benefits of smart design and leading edge, intelligent water solutions.

Aquarevo homes will:

- Feature a high-tech rain to hot water system for bathing and showering that includes screening, filtering, treatment and temperature sensing devices.
- Connect to a pressure sewer system that pumps wastewater to a water recycling plant within the estate, treats the water to Class A standard, and sends it back to each home for use in the garden, toilet or washing machine.
- Feature rainwater tanks with technology that receives weather forecasts – then releases water before heavy rainfall to minimise overflows or flooding in local waterways.
- Connect to a OneBox® device that controls the water technology in each home, remotely monitors the pressure sewer and reads each home's water and energy use.

## SUSTAINABLE HOUSING



**80**  
residential dwellings  
accommodating  
**180 new residents on a  
2.29 ha site**



**60-70%**  
less drinking water use  
than an average home  
in Perth

## WHITE GUM VALLEY

White Gum Valley (WGV) is an award winning, innovative housing development from LandCorp and the University of Western Australia. Setting a new standard for waterwise development in Western Australia, homes in the WGV development will use 60-70% less drinking water than an average home in Perth.

The development includes a communal groundwater irrigation system, rainwater harvesting and demonstrates how to transform an infiltration basin eyesore into a sought-after public space. Homes are fitted with smart dual-meters which can alert residents to their mains water use and savings, while providing an early warning of any leaks or supply issues. Landscaping initiatives include incorporating micro swales and vegetated basins to minimise stormwater runoff, while tree pits are used to retain water in root wells.

The many water saving initiatives incorporated in the estate saw it become the first development in Western Australia to achieve the Water Corporation's Waterwise Development status.



# TECHNOLOGY



## SA WATER

SA Water provides water and sewerage services for around 1.6 million people across the state of South Australia.

### TECHNOLOGY

 **120**  
businesses signed up

 **400**  
business customer smart meters

 **870**  
Litres per minute –  
Largest leak alert

 Offered to customers since  
**2016**

*“(The portal) has been of significant benefit to our organisation as we have been able to identify water losses promptly and act immediately.”*

Courts Administration Authority

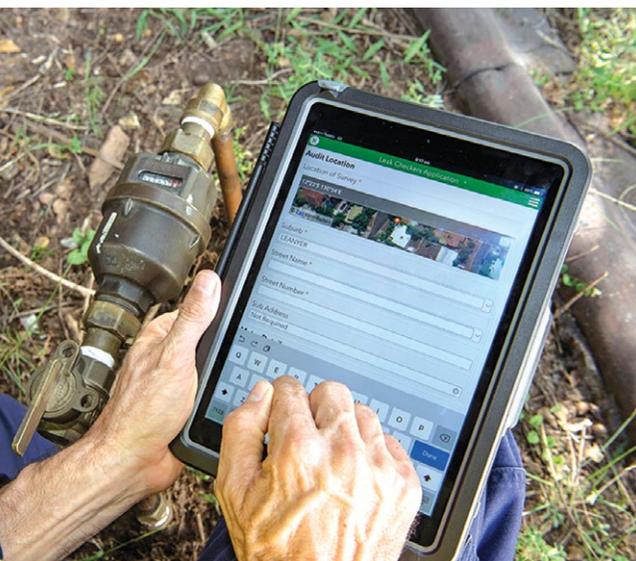
# MACKAY REGIONAL COUNCIL

Water and Waste is a commercialised business unit of Mackay Regional Council. Their region extends across 7000 square kilometres, encompassing many different communities. In order to reliably supply water to these communities, water is sourced from 4 rivers and 42 bores.

## SMART METERS

SA Water have worked with businesses across South Australia to install smart meters to help them better manage their water use. Businesses have included Westfield, Adelaide Oval and Zoos SA. Business customers pay an affordable price for the installation of a data logger on their existing water meters. The 15 minutes interval data is sent back to SA Water and customers can access a portal to see this information anytime in a secure and easy to read format. The main benefit customers have reported to SA Water is an increased understanding of how they use their water. SA Water monitor consumption data to alert customers of changes in water consumption that may indicate leaks or other opportunities to improve water efficiency and many have been able to use this and information from monitoring the portal themselves to help identify leaks or faulty equipment. By making changes based on this information customers are saving significant volumes of water and money.

This program is part of an emerging larger Smart Network Program from SA Water.



## TECHNOLOGY



**14,300**  
consumers have signed up for the program



**9500+**  
properties with potential leaks detected



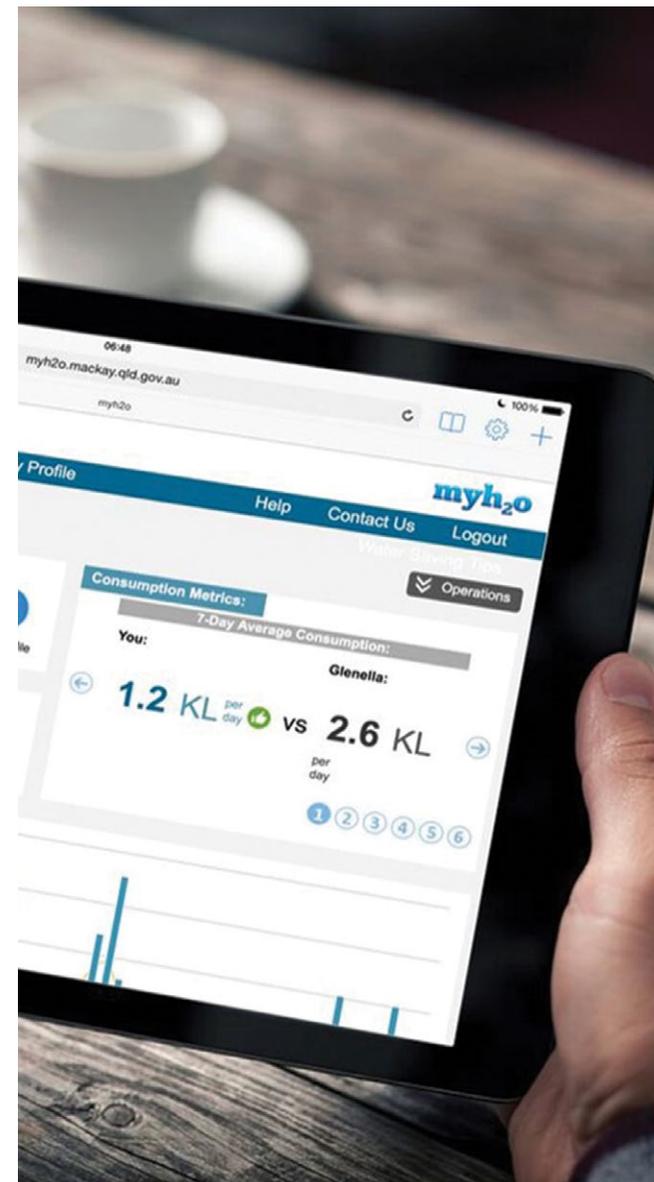
**10%**  
reduction in peak water consumption

## MYH2O

It's been described as award winning, cost effective and cutting edge. When Mackay Regional Council in North Queensland introduced smart metering it was to help slow investment demands, but they also found it changed their community's culture of water use.

The installation of smart meters has given residents quick access to their water consumption data, which they are able to access through the 'myh2o' website. The website allows residents to receive notifications on water use and potential leaks, via email or SMS, prompting customers to engage in more water efficient behaviour. 14,300 consumers have signed up for the program, resulting in significant increase in the level of customer engagement.

Utilising the data Mackay Regional Council has also been able to produce highly targeted communications and educational campaigns aimed at preventing leaks and reducing outdoor water use. For example Mackay Regional Council now know that people with pools use around 20% more water than people without and can directly target this group of customers with relevant and useful information.



# LABELLING SCHEMES

## LABELLING SCHEMES



Use of WELS rated products led to an average saving of

**\$42** per person



By 2021 the use of water efficient products will help reduce domestic water use by an estimated

**150,000** million litres each year—enough water to fill **60,000** Olympic swimming pools



Households and businesses are now saving over

**\$1 billion** a year on utility bills as a result of the WELS scheme

## WELS

The Water Efficiency Labelling and Standards (WELS) scheme is a national scheme to help Australian's save water in their homes. WELS reduces demand for drinking water by informing consumers about water efficiency at the point of sale. Under the scheme products such as taps, toilets and showerheads must be tested under standardised conditions by a government regulator. Each product is given a comparative rating score to indicate the product's efficiency (between 1 and 6 stars). In 2017-18 the WELS scheme helped save 100GL of water and by 2021 the use of water efficient products will help reduce domestic water use by an estimated 150,000 million litres each year. Saving water is also saving customers money on their bills. Households and businesses are now saving over \$1 billion a year on utility bills as a result of the WELS scheme. This is expected to climb to over \$2.6 billion dollars a year by 2036.

## DUAL FLUSH TOILETS

Invented in Australia over 30 years ago the dual flush toilet has undergone radical redesigns since to produce some of the most water efficient toilets in the world.

The first dual flush system released 11 litres on full flush and 5.5 litres on half flush. Dual flush toilets that achieve a WELS rating of four stars now use about 4.5 and 3 litres - close to half of the original system.

Sydney Water's toilet replacement program installed over 28,000 toilets between 2008/2011. Each toilet replacement saving an estimated 23,000 litres per household per year.

## WATER SAVING SHOWERHEADS

Showering uses large volumes of water in the home. A non water efficient showerhead can use 12-22 litres per minute. Switching to a WELS rated water saving showerhead uses 9 litres per minute or less. A water efficient showerhead can save more than 26 litres of water for an average 7 minute shower, which is more than 9,000 litres of water per person in the household per year. Going from a 9L to a 7.5L flowrate can mean saving more than 5000L of water per year.

In Melbourne's largest program 460,000 showerheads were exchanged for WELS rated water saving showerheads. Measured savings in Melbourne ranged from 8500 to 12400 litres per household per year.

## WATER EFFICIENT WASHING MACHINES

In Perth in a program that lasted from 2003/2009, 80,000 rebates for washing machines were provided in the first two years, rising to 200,000 by the end.



The biggest water-users in the home are washing machines, showers, taps and toilets, and along with outdoor use can be a serious drain on our water resources. Labelling schemes, new technology, rebates and restrictions were all used during the Millennium Drought and ongoing to help customers cut back on water use.

National, regulated schemes such as WELS and SAWM providing information about the water efficiency of fittings, appliances and outdoor products are crucial to underpinning rebates, retrofits, audit programs and regulation programs run by utilities and others. They also provide consistent terminology that can be used by water utilities when talking to their customers about water saving initiatives.

Research shows that water efficiency programs were loved by customers, and many didn't seem to mind water restrictions. It demonstrates a great partnership between the water utility and the customer in working together to save water.



**9** out of **10** people recognise the water rating label



**22,737** products registered

## LABELLING SCHEMES

 **1000+**  
applications reviewed

 **300+**  
products and services approved



In February 2019, Smart Approved WaterMark launched Blue House - an innovative, immersive and interactive customer water efficiency tool. Blue House brings water efficiency to life for to customers at a pace that suits them. They are invited to take a journey through a water efficient home, seeing advice and products as they go. More at [www.smartwatermark.org/blue-house](http://www.smartwatermark.org/blue-house)

## SMART APPROVED WATERMARK

Smart Approved WaterMark certify water efficient products and services in Australia and Europe, and provide advice to communities on saving water around the home, garden and business.

As part of their advisory role SAWM provide their 65 members including businesses, water utilities and councils with a range of educational, interactive water saving resources.

Blue House is an innovative water efficiency experience for consumers brought to you by WSAA and Smart Approved WaterMark. Consumers are taken on an immersive journey through a water efficient home, seeing advice and products as they go.

Founded in 2004 SAWM have reviewed over 1000 applications and approved more than 300 products and services.



### POOL COVERS

Evaporation is a major cause of water loss from pools and spas, but it can be reduced by up to 90% by using a pool cover. Covering the pool lowers the water temperature, decreases evaporation and prevents debris falling on the pool surface.



### WATERWISE IRRIGATION CONTROLLERS

Water Corporation recently offered a rebate to customers of \$250 for the purchase of water wise irrigation controllers. The wifi enable controllers automatically adjust watering times according to the weather. Water Corporation in Western Australia found in trial of 60 customers that gardens remained healthy and the average household reduced their garden watering by 15% (around 95,000 litres) in the first year.



### GARDEN MULCH

Encouraging customers to implement simple measures such as mulching ensures gardens are water efficient all the time and green even during times of drought. Mulch can reduce evaporation from soil by up to 70%. Not only do mulches conserve water and reduce the need for irrigation, they also moderate soil temperature, inhibit weed growth and, over time, improve the soil structure and health of plants.



### RAINWATER TANKS

As a result of rebates and regulations rainwater tanks more than doubled in cities by the end of the Millennium Drought. Rainwater tanks increased in Melbourne from 6-12% and Brisbane from 5-38%. A case study of a model home in Melbourne shows that the use of rainwater tanks to supply water for laundry, dishwashing, toilets and an outside garden reduces the reliance on drinking water by 40%. New technology such as rainwater bladders are enabling customers with space constraints to get on board.

# REBATES



## REBATES



Started in  
**2005**



**10,000**  
customers assisted



**\$600,000**  
saved a year in water bills and



**178** mega litres  
in water (70 olympic swimming pools)

## COMMUNITY REBATE PROGRAM

Although rebates have been scaled back since the end of the Millennium Drought, many water utilities are still offering rebates to customers in vulnerable and hardship situations. In Melbourne the Community Rebate Program offers rebates to these customers to help reduce their water consumption and water bills. This is done by improving the water efficiency of appliances and fixing leaks around the property. The program is run by each of the retail water utilities who sends a qualified plumber to undertake a water audit and retrofit.

The Community Rebate Program began in 2015 and has assisted around 10,000 customers across Victoria saving \$600,000 a year in water bills and around 178 Megalitres in water. The program is expected to assist an additional 5,000 customers over the next two years.

# POWER AND WATER CORPORATION

Power and Water Corporation is a government owned corporation. It provides a range of services including distributing electricity and delivering water sewerage services across the Northern Territory.

## REBATES



Almost **50,000**  
customer properties checked for  
on-lot leaks at the water meters



**1GL+**  
of water saved

## COMMUNITY LEAK PROGRAM

Almost 50,000 customer water meters have been checked for signs of on-lot leaks in Darwin, Katherine and Alice Springs saving over a billion litres of water. The program is the first of its kind in Australia and utilises two mobile GIS survey apps; one for Leak Checkers and another for Plumbers to identify, quantify and track the repair of leaks in the field. Leak Checkers check water meters for tell-tale slow movement which indicates a leak on the customer side. They then alert the customer to the presence of a leak via a card in the mailbox. The card also directs customers to a \$200 Leak Find and Fix rebate that is offered by registered participating plumbers.

The project has gained water industry and GIS sector recognition through winning the Australian Water Association Program Innovation Award and an ESRI International Special Achievement in GIS Award.





## ABOUT THE WATER SERVICES ASSOCIATION OF AUSTRALIA

The Water Services Association of Australia (WSAA) is the peak body that supports the Australian urban water industry. Our members provide water and sewerage services to over 20 million customers in Australia and New Zealand and many of Australia's largest industrial and commercial enterprises.

WSAA facilitates collaboration, knowledge sharing, networking and cooperation within the urban water industry. The collegiate approach of its members has led to industrywide advances to national water issues.

WSAA can demonstrate success in standardising industry performance monitoring and benchmarking, as well as many research outcomes of national significance. The Executive of the Association retains strong links with policy makers and legislative bodies and their influencers, to monitor emerging issues of importance. WSAA is regularly consulted and its advice sought by decision makers when developing strategic directions for the water industry.

For more information visit  
[www.wsaa.asn.au](http://www.wsaa.asn.au)



## ABOUT SMART APPROVED WATERMARK

In order to enable a world that is aware of and actively engaged in, the efficient use of water, Smart Approved WaterMark certifies water efficient products and services and provides advice to communities on saving water around the home, garden and business. As part of our advisory role we provide our subscribers within businesses, water utilities and councils with a range of educational, interactive water saving resources. This program is called 'Smart Water Advice' and is designed to help them encourage their customers and communities to change their behaviour with regards to water efficiency. Smart Water Advice has have over 65 subscribers as of March 2019.

For more information on Smart Approved WaterMark visit  
[www.smartwatermark.org](http://www.smartwatermark.org)

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