THE WELS INFLUENCE

WELS IS AUSTRALIA'S WATER EFFICIENCY LABELLING SCHEME, INTRODUCED TO ENSURE WATER SAVINGS WERE MADE DURING EXTENDED DROUGHT PERIODS. **TERRY NGUYEN** TAKES A LOOK AT WHERE WELS IS NOW THAT THE DROUGHT HAS PAST AND WHY IT SHOULD REMAIN.

The continuation of the Water Efficiency Labelling and Standards (WELS) scheme remains for Australians regardless of our current water storage situation. Factors behind the scenes make reverse changes more difficult with each day that passes.

The Water Efficiency Labelling and Standards (WELS) scheme has now influenced how Australians have utilised water for over 10 years. The WELS scheme was introduced to curb water usage during one of the longest extended droughts experienced within Australia in recent times.

Upon face value the WELS scheme appears a simple concept, with labels placed on packaging advertising what the reflective water consumption of the product was determined to be. However, this simple concept posed more challenges than initially thought. To put this into perspective we need to get back to basic understandings of the precious commodity that is water.

Water in habitable areas of the world is relatively abundant, but tricky to move to where it is required. In comparison to other essential services, the difficulties lie within its physical properties. Water requires very large storage areas, and because of its heavy weight makes it expensive to transfer for a variety of reasons. Above all, it is unlike other essential services because delivery to the end user is greatly affected by elevation and topography.

Dwellings that are situated with a smaller difference in elevation relative to the source reservoir will have lower supply pressures than dwellings that have a greater difference in elevation between the source reservoir and the dwelling. For example, a home situated on a hill will typically have lower supply pressures than a home situated in a valley. The home situated in the valley can enjoy the benefits gravity can create on their shower performance due to increased pressure and flow. Here lies one of the greatest challenges of the WELS scheme.

The WELS scheme assures confidence to the end user that the product is fit for purpose, but more importantly it provides reassurance to the customer of the products' water consumption. Water pressure is known to vary

significantly between dwellings based on surrounding topography. Because the water pressure is a large contributor to the water consumption of a product, the testing based on the WELS scheme has been designed to ensure that water pressure is no longer a contributing factor. PROVE Standards & Engineering perform such tests on products such as taps and showers to ensure that the labelling on the product is a true representative of the product's water consumption relative to the tolerances of the water pressures available.

Due to the fact water is such a difficult commodity to move and supply, government water utility companies have already begun adjusting for the reduced water usage rates the WELS scheme has created. Reduced water consumption requires less clean water transfer, and also indirectly results in the lesser removal of waste water from each dwelling. The reduced water supply and removal rate impacts on the way infrastructure is created. Behind the scenes, water utility companies' act as conservative as possible, providing lowest community cost for any necessary infrastructure required. Water utility companies must forecast water consumption demands many years in advance, and rely upon current consumption rates to generate any needed upgrades of assets.

With parts of Australia now relieved from immediate drought affects through soaking rains and construction of desalination plants, it is easy to question the ongoing support of the WELS scheme. But what needs to be understood is that water supply to our homes from the utilities is now dependant on the current water usage, and an immediate reversal to the current WELS scheme will cause drastic effects to our potable water supply.

The ongoing support for the WELS scheme has been a success to the current Australian population, ensuring we have maintained clean potable water supply through difficult times. Clean water reserves in the future will remain a challenge, and will continue to shape the water conservation of the next generation of Australians. ■

For any queries regarding how products such as taps, showers, toilets, urinals and flow controllers are tested for water efficiency please contact us via www.proveng.com.au