

**Water Services Association of Australia**

**Submission to the 2015 review of the  
Water Efficiency Labelling Scheme**

**9 February 2015**



**WATER SERVICES  
ASSOCIATION OF AUSTRALIA**

## Key messages

1. Since its inception WSAA has been a strong supporter of the Commonwealth Government's Water Efficiency Labelling Scheme (WELS). It is sound public policy promoting water efficiency.
2. The objectives of conserving water, providing information to consumers and promoting innovation in water efficiency products remain relevant, and the scheme is effective.
3. The economic rationale for the Government to administer the scheme is strong. WELS displays significant public good characteristics.
  - Traditionally governments provide public goods because private markets fail to provide them. In contrast to private goods, public goods are non-rivalrous in consumption and it is difficult to exclude consumers from using them once they are produced. This means that everyone wants them but nobody has an incentive to produce them.
  - This is one reason why WELS predecessor, the AAA scheme struggled as a voluntary scheme.
4. The challenge for the review is to determine whether the scheme can achieve its objectives at lower cost.
5. In seeking to minimise costs the starting point should be the recommendation of the previous review. It found that the administration of the scheme for appliances be merged with the E3 scheme. Given the success in creating identical labels it would probably surprise most consumers to learn that they did not emanate from the same source. The previous review recommended that tap ware be administered by Watermark. It is unclear why these recommendations were not implemented.
6. However, if other options to reduce administrative costs are identified in the review WSAA would not object to them so long as the overall effectiveness was maintained.
7. In this regard WSAA's main comment is that good policy development suggests that a draft report should be released, to allow suppliers and the water industry to comment directly on any proposals for change. This would strengthen the final report and reduce the time to consider and implement any recommendations.

## 1.0 Introduction

The Water Services Association of Australian (WSAA) is the peak body representing the urban water utilities in Australia and New Zealand. Our members provide water services for over 20 million people. WSAA promotes collaboration and innovation across the sector and advocates at the national level on behalf of members.

WSAA has been involved with WELS since its inception and operated its predecessor the AAA voluntary scheme.

WSAA welcomes the opportunity to respond to the review of the Water Efficiency Labelling Scheme (WELS). It is good regulatory practice to review legislation and programs periodically, and this is the second review since the scheme started. In light of the last review WSAA regards this review as a routine review to determine whether the scheme can be tweaked to improve its effectiveness or reduce compliance costs. WELS is a well-functioning and well-established part of the water efficiency landscape. It complements the suite of water efficiency measures which are undertaken and funded by utilities.

WSAA notes the limited timelines and consultation process for the review. If more fundamental changes to the scheme were contemplated a more in-depth consultation process, including a draft report, would obviously be required.

## 2.0 Objectives and Rationale

The objectives of WELS are to:

1. To conserve water supplies by reducing water consumption
2. To provide information for purchasers of water-use and water-saving products
3. To promote the adoption of efficient and effective water use and water-saving technologies.

Feedback to WSAA from across the urban water industry is that these objectives remain appropriate and, as set out in the next section, are currently being met. As the previous review stated 'WELS is good public policy.'

From a consumer perspective WELS represents modern light handed regulation. It does not limit consumers' choices but provides powerful and easily accessible information on which to base water efficiency decisions. Rising prices across the water industry have provided an added incentive to consumers to save water. WELS supports this by allowing them to make informed choices.

### *Rationale for Commonwealth involvement*

The previous independent reviewer, Dr Chris Guest, noted that the 'scheme's principle output is information, which is a *public good*'.

It is worth reiterating the economic rationale for WELS and for Commonwealth administration of the scheme. The scheme is strongly underpinned by the economics of market failure. The consumer information provided by WELS shows significant characteristics of public good. Public goods are likely to

not be provided by private markets, or not provided in sufficient quantities. The characteristics of a public good are that:

- It is non-rivalrous in consumption: one person's consumption of the service does not reduce another person's consumption.
- It is not feasible to exclude consumers from using the information.

In the case of WELS, one consumer's use of efficiency labelling does not reduce the value to other consumers, nor is it desirable in this case to attempt to exclude users from accessing water efficiency information. These characteristics mean that private producers do not have sufficient incentives to produce the service. Public goods often suffer from 'free rider' problems where everyone wants the good but no one has an incentive to pay for it hoping to free ride on the expenditure of others. Lighthouses are a classic example of a public good, but information often also displays these traits. At its core WELS provides valuable information to the marketplace, which the marketplace does not itself have an incentive to provide.

There is a very large literature on public goods and how best to deal with them. One approach is to form a club to deliver the service. WELS predecessor, the voluntary AAA scheme operated by WSAA, could be interpreted as an attempt to form a club good to deliver water efficiency information. However, the experience of that program illustrates the problems with this sort of information product. The scheme was not able to convey sufficient information to customers for them to make an informed choice as not all manufacturers had an incentive to voluntarily participate. In addition, some in the water sector were able to free ride on the efforts of others.

This experience underpins WSAA's view, shared by the previous independent review, that because of the nature of the WELS, it needs to be mandatory (at least for key water using products). To be mandatory it follows the scheme should be administered by the Commonwealth, and the Commonwealth should oversee the funding of the scheme.

### **3.0 Impact and effectiveness**

There has been a transformation in the efficiency of water use in Australia over the last 15 years. The millennium drought triggered a suite of responses to use water more wisely. In 2005-06 the average residential consumption across Australia was over 200kl per property. In 2012-13 average use was well below 200kl per property (figure 3.0). 2005-06 was itself a year in deep drought and subject to water restrictions so earlier consumption would have been significantly higher.

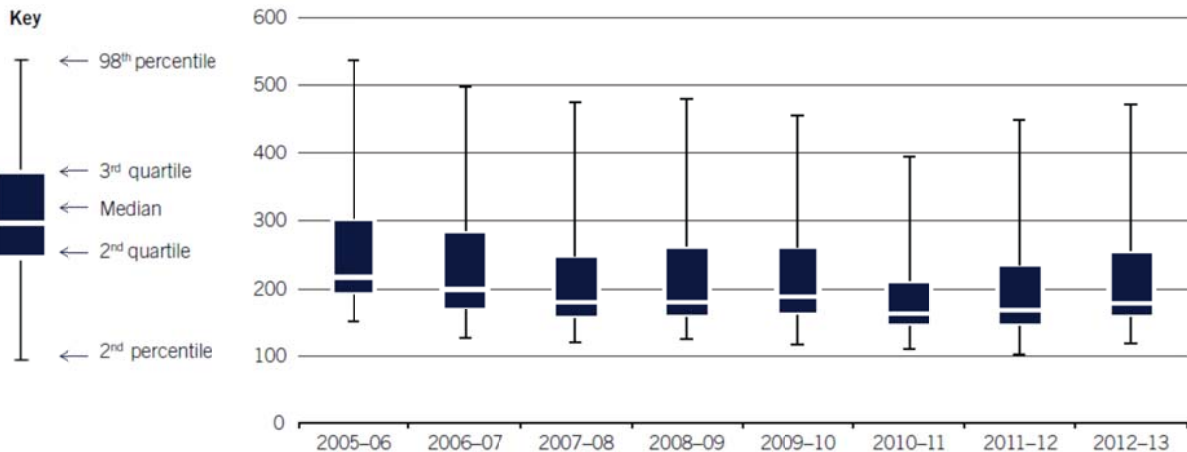
In addition to the increase in water efficiency, figure 3.1 demonstrates that the behaviours learned during drought have continued.

WELS significantly complemented the water efficiency initiatives of water businesses over the past decade. The labelling scheme is a key element of a broader water efficiency program including:

- Development of water conservation programs
- Incentive based mechanisms
- Residential and domestic water use efficiency measures aimed at use and appliance efficiency

- Landscape water use efficiency
- Industrial commercial and institutional water use and efficiency measures including considerations of cleaning and process water, commercial kitchens, laundries, cooling and heating systems, commercial swimming pools, car washes etc
- On-going behavioural change activities and direct water conservations and restriction measures

**Figure 3.1 Average annual residential water supplied, 2005-06 to 2012-13 (kl per property)**



Source: National Water Commission, National Performance Report 1012-13

Examples where WELS is integrated with state government policy include:

- the Victorian Building Code mandate 3 Star showers in new residential homes;
- also in Victoria, the WELS 5 Star rating is a criterion for eligibility for a washing machine rebate. Over a three year period the number of available 5 Star WELS rated washing machines has increased, the number of rebates claimed for these machines has increased by over 5 times and is still increasing. The price of these 5 Star WELS rated machines has dropped significantly; and
- Compliance with NSW BASIX legislation and the water efficiency regulations under the *NSW Residential Tenancies Act 2010* relies on WELS labelling.

Because of this integration, it is not likely to be possible to isolate the precise impact of WELS in the program range. Part of the constraint is data availability. More broadly, because the elements of the program complement and reinforce each other, attempting to unpack the contribution of WELS in isolation is akin to trying to determine which blade of a pair of scissors does the cutting. Good consumer information is assumed by a number of the other program elements.

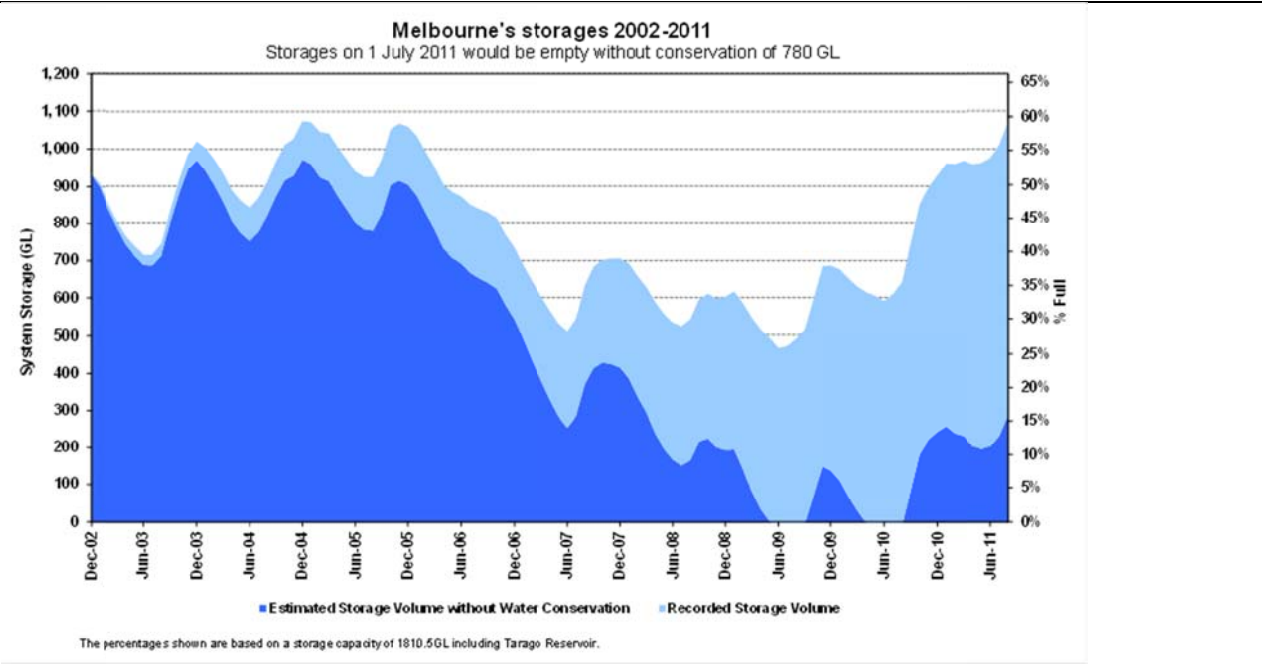
However, one indicator of WELS impact is its brand recognition. Research by the Smart Approved Water Mark shows the recognition of WELS by consumers continues to grow and is over 80 per cent. This is a very high figure for an information brand (see SAWM submission for details).

Overall, water efficiency programs across Australia have had a significant impact on total water demands, the need for system developments and thus utilities' water supply capital planning and water pricing. Water efficiency has been shown to have the potential for significant deferral of system augmentations (eg supply and transfer works), (ISF 2008 and 2014). WSAA (2013) *Position paper 005 Using Water Wisely* highlights the success of water efficiency initiatives across Australia.

To take Melbourne as an example, Figure 3.1 highlights the impact of the range of activities (eg water conservation programs, water restrictions, behavioural change, appliance change-over and qualification of water rights) on the overall water storage volumes available to Melbourne during the Millennium

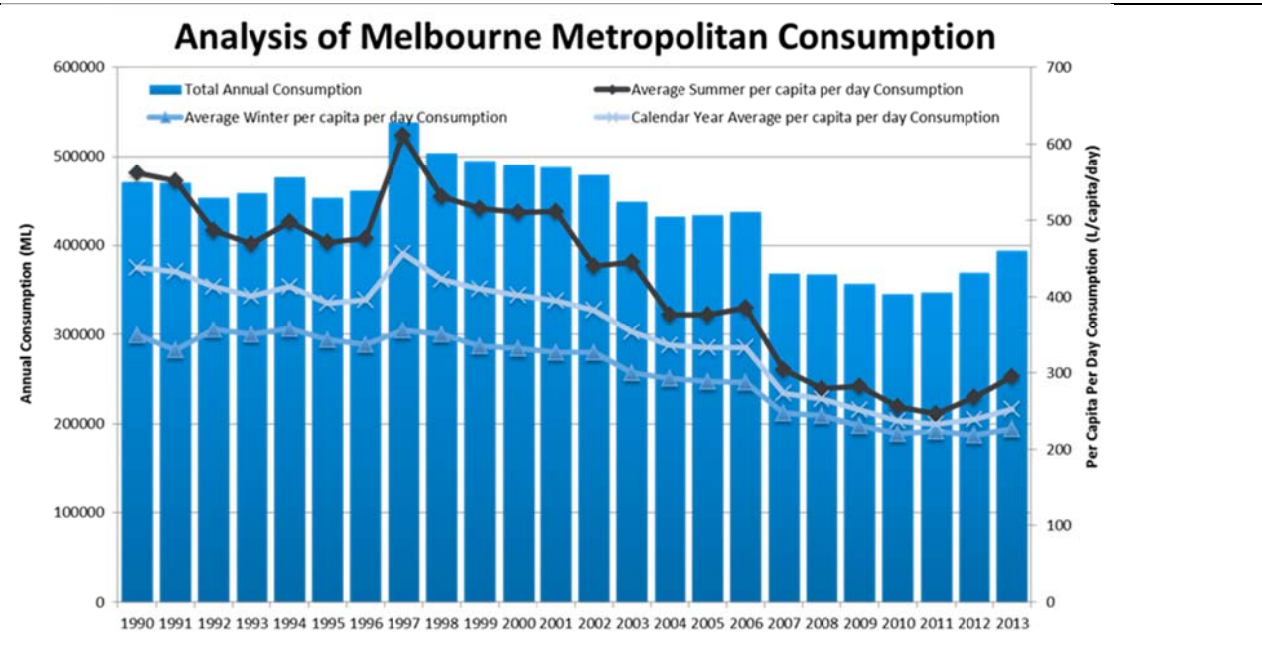
drought. It also shows the implications if these actions had not been undertaken. This Figure highlights the role of water conservation in preserving available supplies and supports the need for a raft of activities implemented over a range of timescales to ensure ongoing water savings.

**Figure 3.1 Melbourne Storages**



Since the Millennium drought water use levels in Melbourne have not increased to the pre-drought levels (Figure 3.2). This is in part due to increased awareness of appliance water efficiency through WELS, increased consumer awareness of water efficiency, the increased price competitiveness and acceptance of water efficient appliances (eg shower roses, front load washing machines) and the subsequent changeover of water appliances within the market.

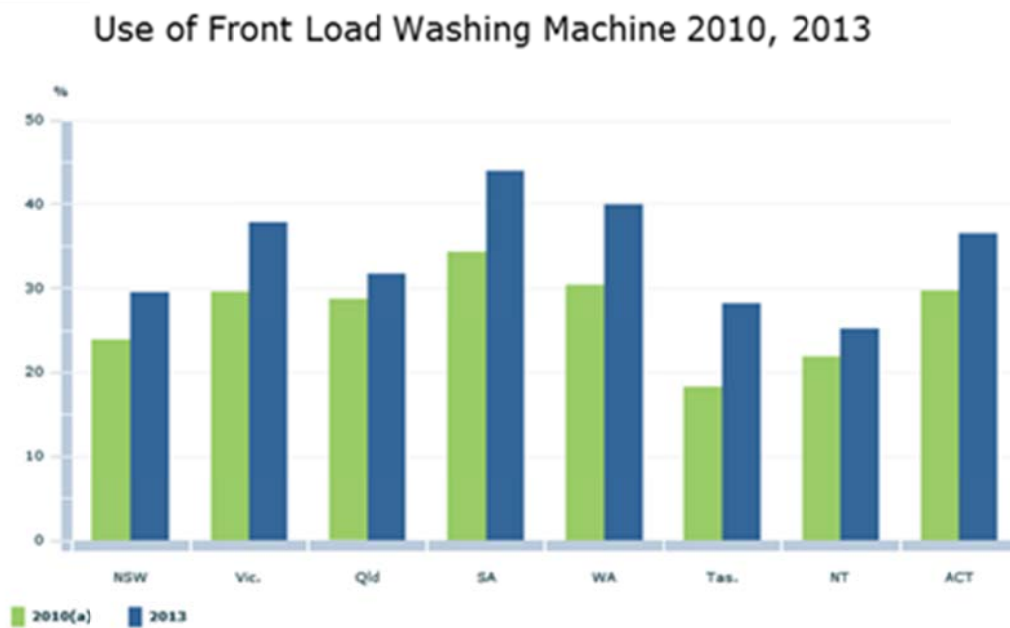
**Figure 3.2 Decomposing Melbourne's Consumption**



A similar story to that of Melbourne could be told for most utilities across Australia.

Recent work by the Australian Bureau of Statistics<sup>1</sup> highlights the shifts in the uptake of efficient appliances, for example front load washing machines (Figure 3.3), which can be attributable in part to the WELS. In addition, a recent study (Arbon, N et al, 2014) of households in Adelaide found that appliance efficiency rather than behaviour was the primary driver for reductions in indoor water use with washing machines offering the greatest potential water savings. It also stated that schemes that encourage the uptake of efficient washing machines should be encouraged.

**Figure 3.3 Front-loader Penetration**



### Further gains in water efficiency

While WELS has been effective the discussion paper asks about the potential future gains in water efficiency.

Table 3.1 shows the end-use data for Sydney Water. In general, showers make up the largest indoor use (approximately 30% total use) followed by toilets, washing machines and tap ware.

<sup>1</sup> (ABS – see <http://www.abs.gov.au/ausstats/abs@.nsf/Latestproducts/4602.0.55.003Main%20Features5Mar%202013?opendocument&tabname=Summary&prodno=4602.0.55.003&issue=Mar%202013&num=&view>)



**Table 3.1 Residential use of water by end use in Sydney**

2013-14 Residential end use estimates		
	% of indoor water use	% of total household use
Toilets	17%	13%
Showers	38%	30%
Washing Machine	18%	14%
Dishwasher	3%	3%
Taps	20%	16%
Leaks	5%	4%
Indoor source substitution*	-2%	-1%
<b>Total indoor</b>	<b>100%</b>	<b>79%^</b>

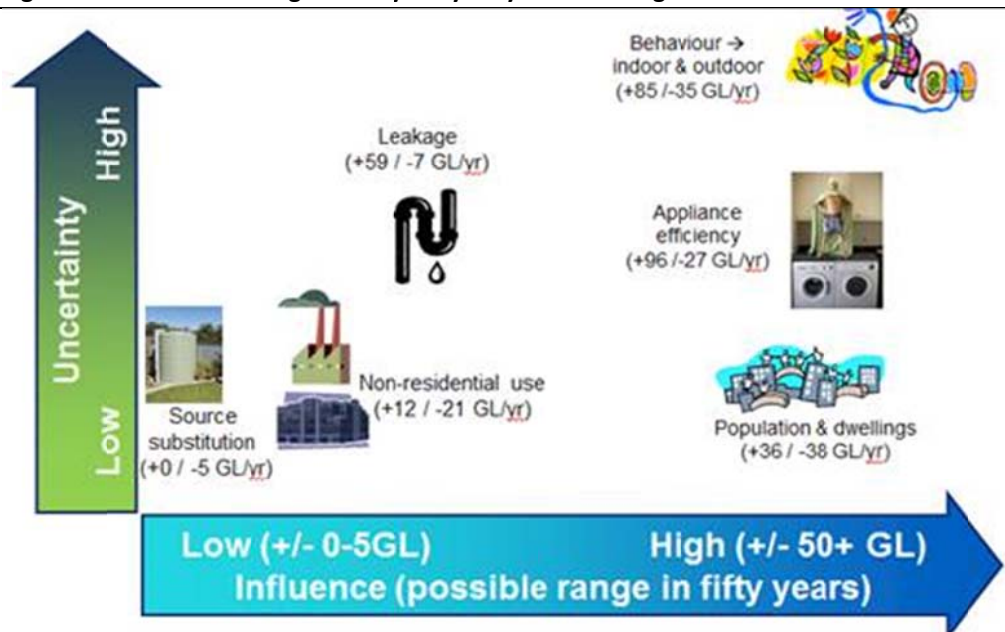
\* likely to be used for toilets and some washing machines.

^ Remainder of water is used outdoors.

There is still room for improvement in regards to selection of water efficient appliances. In Perth, 54% of households have water efficient showerheads and in Melbourne this figure is 37%. There are still significantly less front loaders than top loaders (29% in Perth and 45% in Melbourne). However, anecdotally there is probably less scope for gains in tap ware, as in many cases consumers' use of taps are independent of flow as they are used to fill baths, laundry tubs and kitchen sinks.

A number of utilities are building long-term demand forecasts based on assumptions of increasing appliance efficiency (based on stock turnover rates and efficiency assumptions). For example, Sydney Water's long term demand forecasts include several plausible futures for water demand. Overall appliance efficiency is one of the largest factors of variability in the demand forecasts (Figure 3.4)

**Figure 3.4 Factors affecting accuracy of Sydney Water's long term water demand forecasts**



\*GL calculations are based on Sydney Water's 2013 demand forecast. Graph supplied by Sydney Water 2013



## 4.0 Future directions

WSAA considers that the real challenge for the review is whether the scheme can achieve its objectives at lower cost. It is pleasing to see that manufacturers and suppliers are generally supportive of the scheme. WSAA shares their concern that the compliance costs need to be minimised.

In terms of the scheme itself, some WSAA members commented on slowness of reviewing new products for inclusion into the scheme. For instance, evaporative coolers were proposed for inclusion in 2005 and reviewed positively between 2008 and 2010. It is 2015 and evaporative coolers have still not been included ten years after they were first shortlisted.

In seeking to minimise the administrative costs of the scheme, the starting point should be the recommendations of the previous independent review. It found that the administration of the scheme for appliances should be merged with the E3 scheme. Given the success in creating identical labels it would probably surprise most consumers to learn that they did not emanate from the same source. The previous review recommended that tap ware be administered by Watermark. It is unclear why these recommendations were not implemented.

In thinking about these recommendations five years on, it may be appropriate to include showerheads and toilets in a merged E3 scheme. These are among the categories on which consumers place the greatest importance in buying decisions, and yield the greatest potential water efficiency savings in the future.

This would leave tap ware to be transferred to Watermark. If such a transfer were not possible there are a range of options which could be considered. The industry would be happy to comment on options which balance compliance costs with potential water efficiency savings from tap ware.

In this regard WSAA considers that it would be good policy to release a draft report to allow suppliers, retailers and the water industry to comment directly on any proposals for change. This would strengthen the final report and reduce the time to consider and implement any recommendations.

## References

1. Arbon, N., Thyer, M., Hatton MacDonald, D., Beverly, K., Lambert, M., 2014, *Understanding and Predicting Household Water Use for Adelaide*, Goyder Institute for Water Research Technical Report Series No. 14/15, Adelaide, South Australia
2. Water Corporation 2009, *Perth Residential End Use Study 2008-09*, Water Corporation, Leederville, Western Australia
3. Gan, K., Redhead, M., 2013, *Melbourne Residential End Use Studies*, Smart Water Fund, Melbourne Victoria

## Contact details

WSAA welcomes the opportunity to provide a submission to the Inquiry on this matter. If there are any details you wish to follow up on please contact:

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