

Australia's Water Efficiency Labelling and Standards (WELS) scheme - Benefits and future directions

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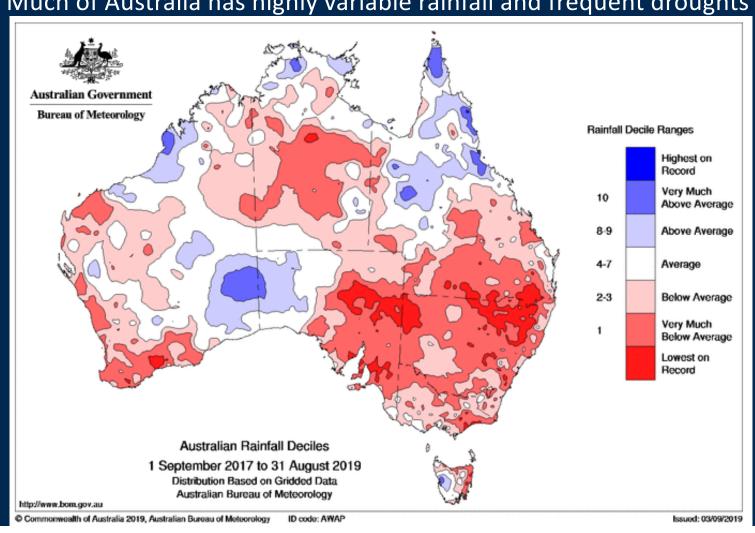
Water Efficiency Labelling and Standards (WELS) scheme

- Consumer labelling is mandatory
- Applies to showers, taps (faucets), toilets, urinals, flow controllers, dishwashers and washing machines
- These products must be tested, registered and labelled in accordance with Australian standards (AS/NZS 6400)
- Products supplied as part of a new building, unit or modular building component must comply



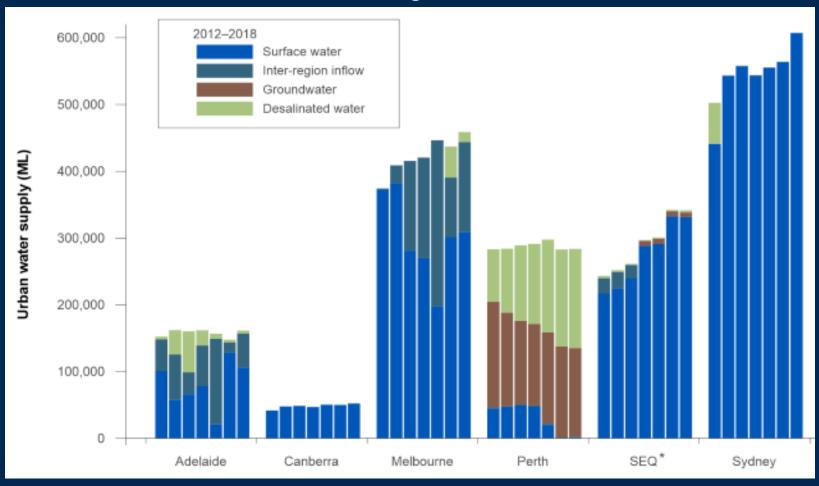
Context: Water in Australia

Much of Australia has highly variable rainfall and frequent droughts



Context: Water in Australia

2017-18: 62% surface water, 24% groundwater, 7% desalination



Source: Bureau of Meteorology National Water Account 2018

Context: Water in Australia

Current water storages of capital cities (Bureau of Meteorology, 8 Sept 2019)



- If drought were to continue 2-3 years, many cities would face water security challenges.
- Managing demand is MUCH more cost-effective than augmenting supply.

Global Water Context

- Over 2 billion people live in countries experiencing high water stress
- A third of the world's biggest groundwater systems are already in distress
- Water scarcity is expected to intensify as a result of climate change
- The World Economic Forum's Global Risk Report has listed water crises among the top-five risks for eight consecutive years
- In 2017 water was a major factor in conflict in at least 45 countries

Data from UN and World Economic Forum websites

Water Efficiency Labelling and Standards Act 2005

WELS started during Australia's Millennium Drought

Objects of the Act:

- a) to conserve water supplies by reducing water consumption
- b) to provide information for purchasers of water-use and water-saving products
- c) to promote the adoption of efficient and effective wateruse and water-saving technologies



Australians recognise and use the WELS label

Consumers use the water rating label in deciding which product to buy:

- 87% of consumers recognised the Water Rating label
- Most consumers of WELS products used the star ratings to compare water efficiency of products
- Most consumers were influenced by the water rating label when deciding which product to buy







Source: Quantum Market Research, WELS Scheme Effectiveness: Report of Survey Findings, 2014, waterrating.gov.au

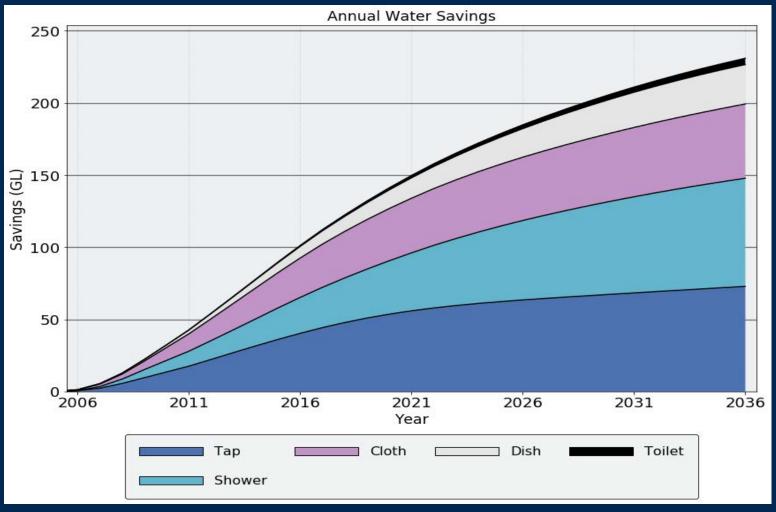
Effectiveness of WELS in reducing water consumption

Estimated water and energy savings and reductions in greenhouse gas emissions attributable to WELS since it commenced in 2005

	2017	2026	2036
Annual water savings (GL/year)	112	185	231
Cumulative GHG reduction (MT CO ₂ -e)	11.0	31.5	55.9
Annual household utility bill savings (\$m/year)	1048	1,766	2,638

Source: Evaluation of the environmental and economic impacts of the WELS scheme, Institute for Sustainable Futures, University of Technology Sydney, 2018

Water savings from WELS by product type



Source: Evaluation of the environmental and economic impacts of the WELS scheme, Institute for Sustainable Futures, University of Technology Sydney, 2018

Promoting innovation and uptake of new technologies

- Higher star ratings for best-of-type can make products more attractive to consumers
- 2016 changes allowed for:
 - 6-star toilets such as vacuum toilets
 - 4-star showers that pass comfort testing
- Clear shifts over time towards more efficient clothes washing machines available in the market







Future directions - WELS

Develop an ISO International Standard for water efficiency labelling

- 17 countries participating, an additional 17 observing
- Steve Cummings chairs ISO PC316, the committee developing the standard
- Pete DeMarco (IAPMO USA) chairs the ad-hoc working group handling plumbing products
- Once the standard is finalised we will need to align our WELS standard (AS/NZS 6400:2016)
- The ISO standard is expected to:
 - Decrease compliance costs for Australian businesses
 - Make it easier for new countries to implement water efficiency labelling schemes





Future directions - WELS

Compliance: monitor what's being installed in new buildings

- Plumbers can help check the WELS information and save the packaging label for the consumer
- Refer unregistered or unlabelled products to welscompliance@agriculture.gov.au or 1800 372 5232
 – allegations will remain confidential
- Only supply registered and labelled products, in accordance with the WELS Act.



Future directions - WELS

2020 independent review of the WELS scheme is likely to consider improvements that would:

- increase water savings
- increase consumer savings
- reduce costs to business and community

Possibilities:

- Include ratings for plumbing system designs (eg WaterSense labeled homes)
- Consider additional products
- Ways to maintain/increase compliance

Future directions – beyond WELS

The Australian Government has committed to renewing the 2004 National Water Initiative, with a greater focus on urban water such as integrated water cycle management.

Integrated water cycle management can include:

- Re-use of wastewater at household, apartment/office building, community or catchment scale
- Managing stormwater in ways that provide greater public access to waterways (eg stormwater retention wetlands, naturalised creeks)
- Managing stormwater and/or wastewater to provide water to irrigate public open space
- Centralised or de-centralised approaches

Planning for water supply, wastewater and stormwater should be an integral part of urban development planning

Considering the future

What we do now will affect our water security and cost of supply for years to come. People in the plumbing industry have an impact on the water efficiency of many households.

- Consider water efficiency in design and installation of plumbing systems
- Be open to innovative approaches
- Use the WELS information to choose and recommend efficient products
- Refer non-compliance to the WELS Compliance team.

WELS website: www.waterrating.gov.au

WELS compliance: 1800 372 746 (within Australia)

+61 2 6272 5232 (international)



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