

**Australian Government**

**Department of Agriculture  
and Water Resources**

# Reducing Water Use Through Water Efficiency Labelling - the Australian Experience

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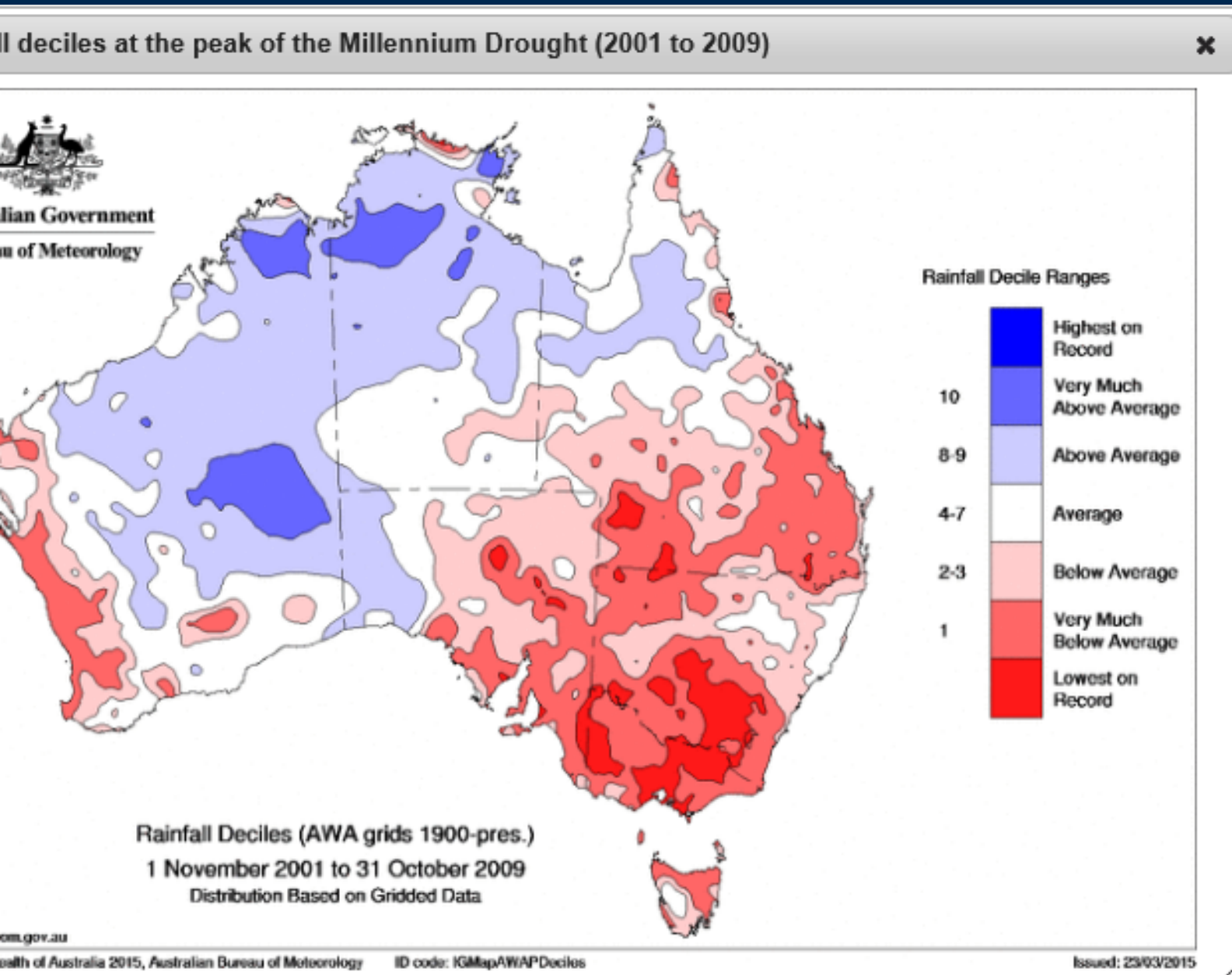


# Reducing Water Use Through Water Efficiency Labelling – the Australian Experience

## Overview

- Context: Water in Australia
- Australia's WELS scheme
- Why we support developing an ISO International Standard
- Thoughts on how the ISO standard could operate

# Water in Australia – Frequent Droughts

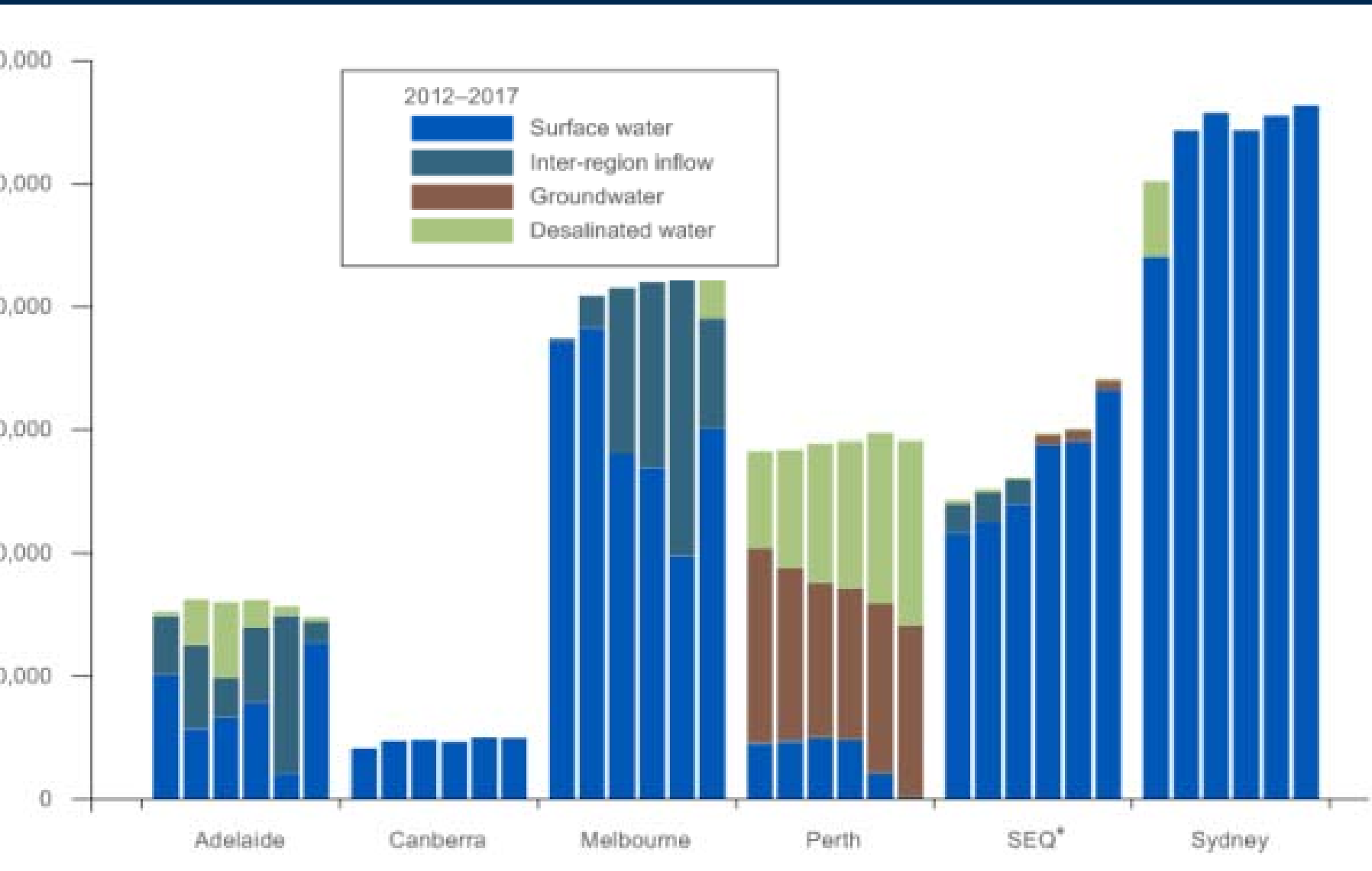


Much of Australia has highly variable rainfall and frequent droughts

Most people live on the east/southeastern coasts

Not unusual to have a drought covering major cities at one time

# Water in Australia – Urban Water Sources



2016  
 -63% surface  
 -24% ground  
 - 8% desali

Source: Bureau of Meteorology National Water Account 2017

# Australia's water efficiency labelling scheme started during the Millennium Drought

05:

Australia's large dams were less than half full

many communities had water restrictions

states and territories were concerned about water and  
agreed to the 2004 National Water Initiative



Department of Agriculture and  
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Carol Grossman  
WELS Director





# Water Efficiency Labelling and Standards (WELS) scheme

andatory consumer labelling scheme to reduce water use  
ers:

- Plumbing products - showers, taps (faucets), toilets, urinals, flow controllers
- White goods - clothes washing machines and dishwashers

ducts must be tested, registered and labelled in  
ordance with Australian standards



# WELS scheme – Underpinning standards

Australian/New Zealand Standard 6400: Water efficient products – Rating and labelling  
Performance requirements for rating and labelling of products

Establishes star ratings for each product based on water consumption, eg for tap water

Star rating	Flow range (L/min)
3 Star	7.5 – 9.0
4 Star	6.0 – 7.5
5 Star	4.5 – 6.0
5 Star	1.1 – 4.5

AS/NZS 6400 calls up product-specific standards for testing methods and performance requirements

# WELS scheme – Product Registration

Product registration applications must include:

Test reports from an accredited laboratory showing water consumption in accordance with product-specific and WELS standards

WaterMark certification for plumbing products

- WaterMark is a separate scheme that ensures products are fit for purpose

Product images (to help with verification)

Registration fees

- 80% of WELS administration costs are paid through fees



# WELS scheme – Compliance and Enforcement

WELS registration and labelling is a legal requirement and most businesses comply

Areas of risk are:

- Changes to traditional supply chains, including online sales
- Building industry, including modular bathrooms

Penalties include:

- Cancelling or suspending registration
- Infringement notices – up to \$6300 AUD per offence
- Court imposed penalties – up to \$63,000 AUD per offence, or in some cases imprisonment

# WELS Effectiveness

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

	2013	2021	2030
Annual water savings (GL/year)	70	147	204
Cumulative GHG reduction (MT CO <sub>2</sub> -e)	5.5	20.4	46.4
Annual household utility bill savings (\$m/year)	520	1,390	2,063

Source: Evaluation of the Environmental Effects of the WELS Scheme, Institute for Sustainable Futures, University of Technology Sydney, 2015

Australian population: nearly 25 million

Other Asia-Pacific countries have similar water efficiency labelling and standards schemes, eg:

Singapore



Malaysia



New Zealand



China



They differ in label design, voluntary or mandatory, products covered, ranges of water use for each rating

# Why an ISO International Standard?

Australian industry values consistency – reduces manufacturing and compliance costs  
Australia committed to developing an ISO International Standard on water efficiency  
labelling as part of its membership in the United Nations and World Bank High Level  
Panel on Water

- UN Sustainable Development Goal 6:
  - Ensure access to water and sanitation for all
- Water scarcity affects more than 40 per cent of the global population
- World Economic Forum consistently ranks water among the top 5 global risks

# What an International Standard might cover

## In scope – International Standard

What products are included

How products are tested for water efficiency

Rating bands or approaches, eg for showers, rating bands could be based on flow rates such as:

Band 1: 4.5-6.0 L/min

Band 2: 6.0-7.5 L/min

Band 3: 7.5-9 L/min

Band 4: 9.0-12.0 L/min

ISO label (?)

## Out of scope – how the standard is used in each country

- Mandatory or voluntary labelling
- Minimum efficiency requirements, eg in Australia toilets must not exceed an average flush volume of 5.5 L
- Consumer labelling of products, including overall label design (?)

# Banding- hypothetical example

## Water efficiency of taps (faucets)

ISO Band	Maximum Flow rate	Australian WELS rating	Country A	Country B	Country C
1	2 L/min	6-star	3-tick	Meets minimum standard	Qualifies for voluntary certification program
2	3.5 L/min	6-star	2-tick		
3	4.5 L/min	6-star	2-tick		
4	6 L/min	5-star	1-tick		
5	7.5 L/min	4-star	Not rated	Does not meet minimum standard	Does not qualify for voluntary certification program
6	9 L/min	3-star	Not rated		
7	12 L/min	2-star	Not rated		
8	16 L/min	1-star	Not rated		
9	>16 L/min	0-star	Not rated		



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