Australian Government

Department of Agriculture and Water Resources

Reducing Water Use Through Water Efficiency Labelling - the Australian Experience

Dr Carol Grossman
Director, Water Efficiency Labelling and Standards
Department of Agriculture and Water Resources
Australia

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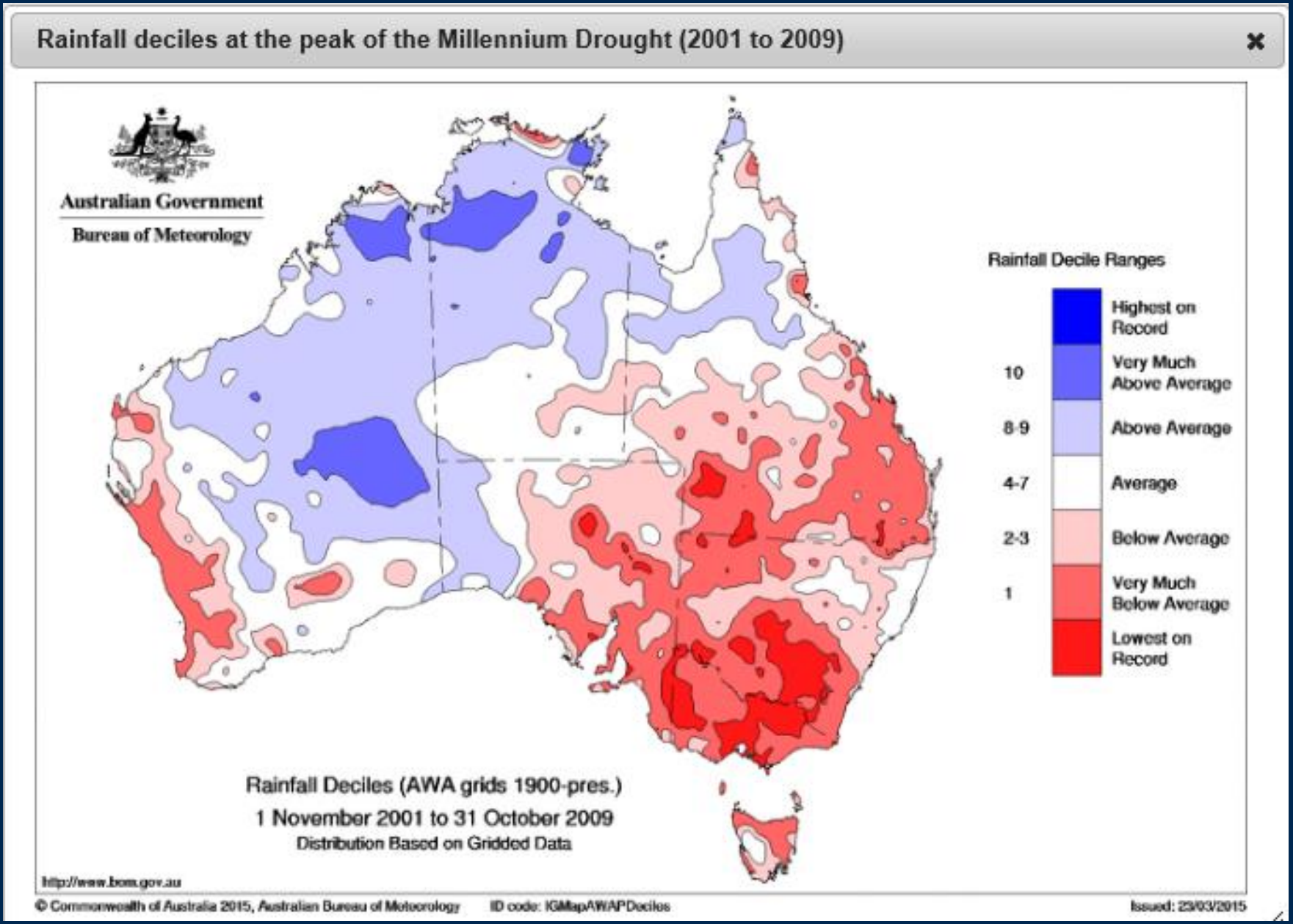
Reducing Water Use Through Water Efficiency Labelling – the Australian Experience

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

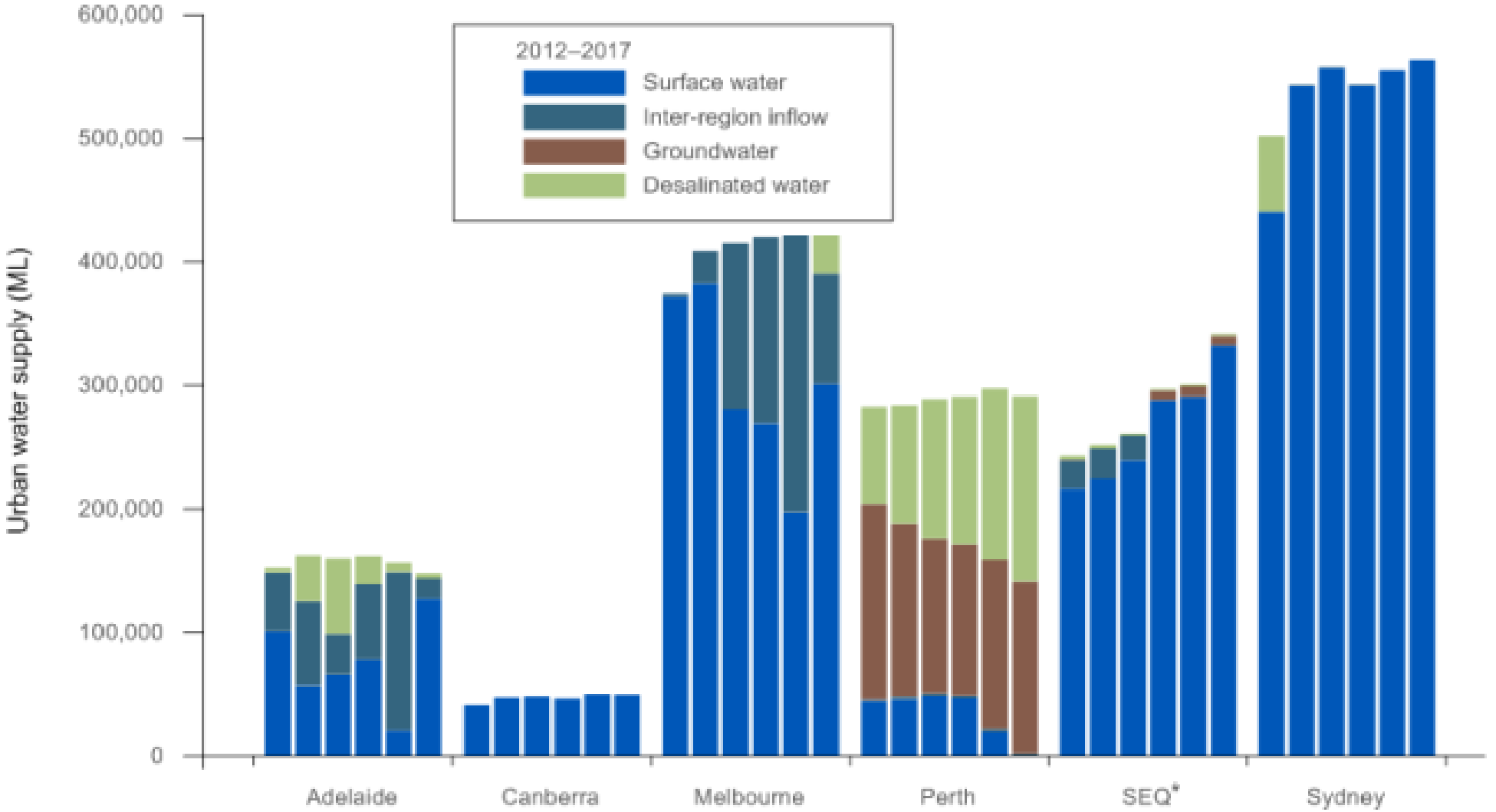


Much of Australia has highly variable rainfall and frequent droughts

Most people live on the east/southeast coasts

Not unusual to have drought covering all major cities at once

Water in Australia – Urban Water Sources



2016-17

-63% surface water

-24% groundwater

- 8% desalination

Source: Bureau of Meteorology National Water Account 2017

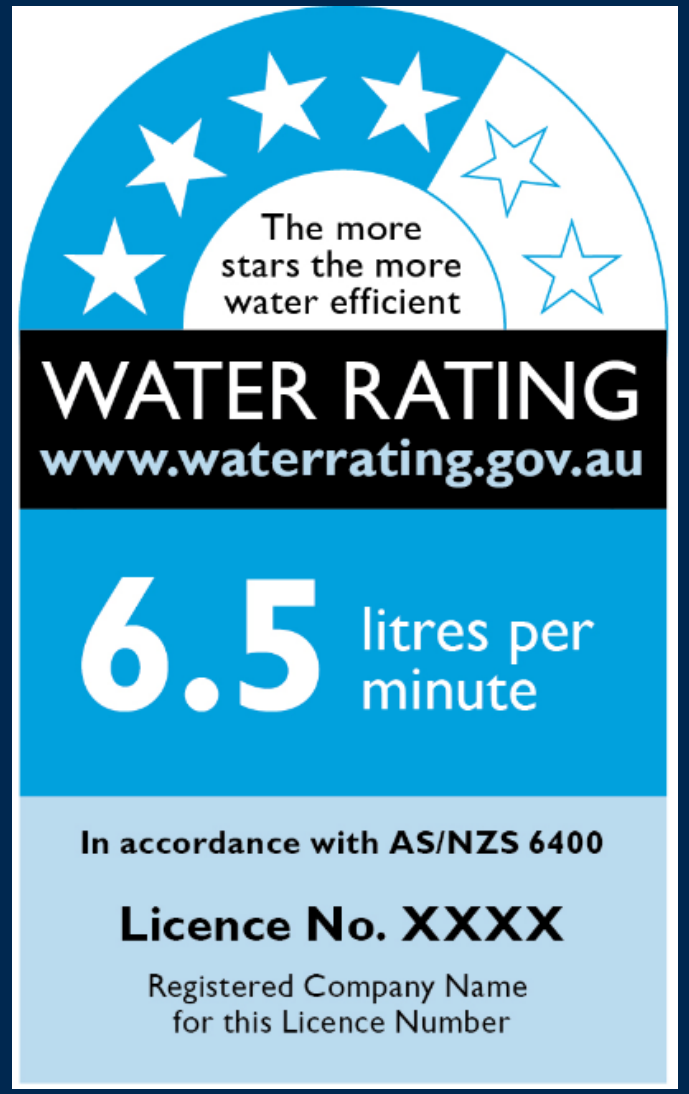
Australia's water efficiency labelling scheme started during the Millennium Drought

In 2005:

- Australia's large dams were less than half full
- Many communities had water restrictions
- All states and territories were concerned about water and had agreed to the 2004 National Water Initiative

Water Efficiency Labelling and Standards (WELS) scheme

- Mandatory consumer labelling scheme to reduce water use
- Covers:
  - Plumbing products - showers, taps (faucets), toilets, urinals, flow controllers
  - White goods - clothes washing machines and dishwashers
- Products must be tested, registered and labelled in accordance with Australian standards



WELS scheme – Underpinning standards

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

- Establishes star ratings for each product based on water consumption, eg for taps:

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

- 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

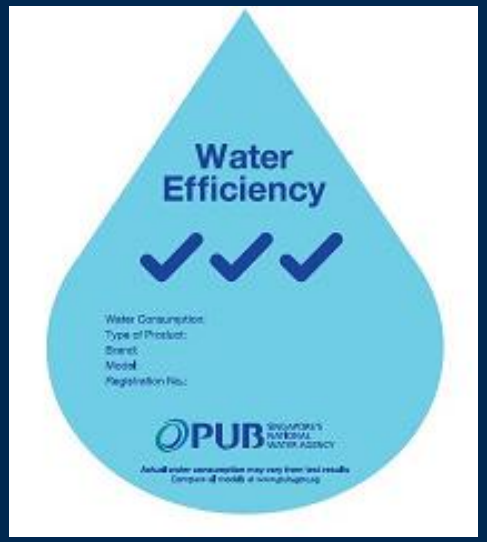
	2013	2021	2030
Annual water savings (GL/year)	70	147	204
Cumulative GHG reduction (MT CO_2-e)	5.5	20.4	46.4
Annual household utility bill savings ($m/year)	520	1,390	2,063

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

These 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 qualify for voluntary certification program
6	9 L/min	3-star	Not rated		
7	12 L/min	2-star	Not rated	Does not meet minimum standard	
8	16 L/min	1-star	Not rated		
9	>16 L/min	0-star	Not rated		

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