



Water literacy in Australia

'Water literacy' is knowledge about water sources, water management and water-related issues

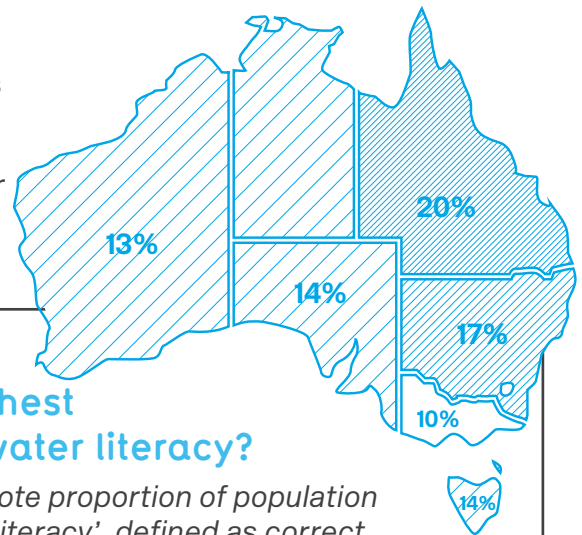
Industry Note
Program A: Society
Project A2.3

Most Australians know that...

- Household actions can reduce water use
- Household fertilizers can impair waterway health
- Stormwater from houses can impair waterway health
- Planting trees near waterways improves waterway health

Most Australians don't know that...

- Domestic wastewater is treated before entering waterways
- Stormwater is not treated before entering waterways
- Separate pipes carry domestic wastewater and stormwater
- A catchment is the total land area draining to a waterway



Why examine water literacy?

Higher water literacy is related to:

- More uptake of water saving devices*
- Greater use of water saving strategies*
- Higher acceptance of alternative water sources*

Which states have the highest and lowest water literacy?

Percentages denote proportion of population with 'high water literacy', defined as correct responses to at least 14 of 17 literacy questions

Who should we target for improving literacy?

- Language other than English at home*
- Lower income*
- Lower education*
- Younger people*



CRC for Water Sensitive Cities



Why study water literacy?

The transition to water sensitive cities requires broad community acceptance of changes in policy, practice and technology, which, in turn, will require effective community engagement. A critical first step in this process is identifying the community's current water-related knowledge - 'water literacy'.

Our approach

A national survey was conducted with a representative sample of Australian adults in 2014 (n=5,172). The survey examined socio-demographics, water attitudes and behaviours. Seventeen knowledge questions were summed to create a water literacy score.

How good is water literacy in Australia?

The figure below shows responses to our 17 water knowledge questions.

What groups have higher water literacy?

Higher water literacy was associated with older age, higher household income and higher education levels. Water literacy was

higher among students than those currently in the workforce. Higher water literacy was also associated with a longer duration of residing in Australia, speaking English in the home, having a north-western European ancestry, and greater life satisfaction.

Does water literacy relate to behaviour?

Even after taking into account other influences on respondents' water behaviours and attitudes, water literacy was associated with a range of water conservation behaviours including: installation of water saving devices in the home; use of water saving strategies in the garden; use of everyday water-saving strategies; and acceptance of alternative water sources.

Where to next?

Engaging communities with water sensitive cities (Project A2.3) will next examine how consumers interpret language and images used to communicate sustainable urban water management. Project outputs will include:

- a database of effective and community-friendly terminology and visuals for use in community engagement
- Guidelines for communicating new or complex information in the area of sustainable urban water management.

Responses to water literacy questions

- Household water conservation can reduce urban water use
- Actions in the home can impact the health of waterways
- Stormwater flows can damage waterway health
- Planting trees near waterways can improve waterway health
- Use of garden fertilizers can degrade waterway health
- Soil erosion from urban areas can degrade waterway health
- The cost of managing water infrastructure is high
- Use of garden pesticides can degrade waterway health
- I know the source of my household water
- Waterways are damaged by large amounts of sediment
- A catchment is the total land area draining to a specific waterway
- The amount of water available for us is finite
- I know what catchment provides my household water
- Delivering drinking water to households is not low-cost or simple
- Urban stormwater is not treated before entering waterways
- Separate pipes are used for domestic wastewater and stormwater
- Domestic wastewater is treated before entering waterways

Percentage of respondents answering correctly (n=5,172)



About the research:

This research was conducted as part of Project A2.3 "Engaging communities with the water sensitive cities" within the CRC for Water Sensitive Cities.

Project A2.3 aims to identify effective community engagement strategies that will promote knowledge about water management, build trust in water institutions, and leverage support for policies that promote sustainable water management.



Talk to:

Kelly Fielding,
The University of Queensland
k.fielding@uq.edu.au



Website:

<http://watersensitivecities.org.au/programs-page/society-program-a/project-a2>

