



CRC for
Water Sensitive Cities



Program A: Society | Project A2.1 | Project duration: July 2012 - June 2016

Understanding social processes to achieve water sensitive futures

Overview

The built form of Australian cities reflects the economic and cultural preferences of generations of migrants and settlers for low-density suburban living and the detached “home” rather than the urban apartment. This has resulted in some of the most sprawling cities in the world. In seeking to understand why our expanding cities seem to make such poor use of scarce water supplies, it helps recognise the power of historical and cultural dwelling and lifestyle preferences that cannot easily be undone. The path to more sustainable water usage will mean that the vast bulk of residential buildings that have been constructed over more than two centuries, and the ways in which residents use these, will need to be adapted to meet the new urban water challenges.

This project aims to create an understanding of the social and historical processes of domestic water use and lifestyle in Australian cities. Understanding the reasons for the current built form of our cities and the ways in which Australians use their dwellings and backyards will help inform future policy and guide the development of interventions and strategies to support the adjustment and adaptation to different water sensitive lifestyles.

Key outcomes

This project will document the economic, social and cultural forces that have shaped Australian cities resulting in low density, detached dwellings being the dominant residential form today. It will also identify key water use cultures in our cities and the social meanings and processes that shape people’s everyday water use practices to inform the development of realistic, socially acceptable and effective water sensitive policies. Finally, it will examine people’s understandings about water and the “Australian way of life” and how geographic location, gender, ethnicity and socio-economic factors affect these understandings.

The project will ultimately provide a characterisation or typology of water use cultures and contexts including information about community values, ideals and perceived risks and recommendations for the development of effective and socially acceptable water sensitive interventions. This information will be particularly useful for demand forecasters, local policy-makers and marketing and communications professionals in the water sector.

Early insights into peer pressure around households’ water consumption

Differing cultural values and contexts impact on how technological solutions such as rainwater tanks are taken up and utilised. As an outcome of the literature review four domains - systems and infrastructure; social and geographic capital; domestic water use contexts and technologies; and everyday practices and values - were identified. These domains need to be taken into account in order to adequately understand Australian water use cultures before seeking to change existing water use practices. The findings of the literature review have been published in the report Australian Domestic Water Use Cultures.

The meso level of household and community context (social class, ethnicity and geography) is important and an under-researched field. Early analysis of survey data shows that water use and water sensitive practices are driven by a range of interrelated factors such as household configuration, lot size, age, education, income, attitudes toward sustainability and geographic location. In the coming months the project will explore these interrelated factors and develop a typology of water use cultures. This will provide research partners with a nuanced picture of population groups across Australia and their differing approaches to water use and water saving.



Figure 1. Four domains relevant for understanding water cultures.

Project design

The multi-layered research design comprises a number of components. The first one is a systematic review of research on water use cultures. A large-scale national online survey of 5172 people in major urban centres across different climatic zones in Australia is used to shed light on actual water use practices and knowledge. A series of urban water histories will study the foundation, growth, and economic, social and cultural development of Melbourne, Brisbane and Perth and will investigate how state and local governments as well as residents have adapted to water scarcity. Focus group interviews will explore key water use cultures and what meanings and values these specified social groups attribute to domestic water use. Another part of this project will look into the implications of social inequality for the development of water sensitive cities. It will explore the apparent need for engaging privileged groups with high levels of water literacy, positive water saving attitudes but low practical commitment to water conservation.

Systematic literature review of water use cultures



Large-scale national survey to identify key water use patterns



Urban histories of water use in Melbourne, Brisbane and Perth



Focus group study of diverse communities and households



Synthesise the findings into a typology of water use cultures to identify drivers and barriers to water sensitive practices

Outlook

The next steps are further analysis of the national survey. A report on the history of urban water use from 1788 through to the present with a particular focus on the three major cities covered by the CRC for Water Sensitive Cities – Melbourne, Perth and Brisbane – will be ready in June 2015. Finally, the typology of Australian water use contexts and cultures is under development and will be completed in 2015.

In summary, this project offers a unique opportunity to combine findings from social history reviews, surveys and focus group interviews to generate deep knowledge about Australian water use cultures and opportunities for and barriers to community change and adaption to a water sensitive future.



← Figure 2. The components of the multi-layered project design.



About the Cooperative Research Centre for Water Sensitive Cities

The Cooperative Research Centre for Water Sensitive Cities (CRCWSC) brings together interdisciplinary research expertise and thought-leadership from Australia and the world to address current urban water management challenges facing our cities and regions. In collaboration with over 80 research, government and industry partners, it develops and synthesises knowledge into powerful tools and influences key players aiming to achieve sustainable, resilient and liveable water sensitive cities.

Further information



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