



CRC for  
Water Sensitive Cities

Many towns and cities face water management challenges but lack the tools and knowledge to make them more water sensitive.

# Toward water sensitive cities: a collaborative approach

The CRC for Water Sensitive Cities provides a diverse talent pool of researchers from more than 20 different disciplines based at a wide range of universities, research centres, government organisations, and private industry.

Collaborative research and industry-led application is the foundation of the Cooperative Research Centre for Water Sensitive Cities.



Australian Government  
Department of Industry,  
Innovation and Science

**Business**  
Cooperative Research  
Centres Programme

# Creating a water sensitive suburb

Local engagement and collaboration are of vital importance when transitioning communities to greater water sensitivity. This was highlighted by our research project in Elwood, a flood-prone bayside suburb in Melbourne's southeast, in the state of Victoria.

Once swampland, Elwood has strong historical connections to water. Increasing the suburb's water sensitivity will involve complex, long-term social and technical change, making community engagement a key to success.

Twenty-four local residents participated in research discussions to develop a citizen-led vision of a future water sensitive Elwood: a suburb celebrating, rather than resisting, its natural water presence, able to adapt to rising waters, and enjoying its thriving biodiversity. The locals then identified the changes necessary to achieve their vision.

This transition planning process yielded diverse ideas and strategies, demonstrating interconnection between water, people, infrastructure, and the landscape.

Ideas for change related to:

- catchment governance
- regulatory frameworks
- community connectedness
- individual resilience and adaptive capacity
- urban planning
- transportation
- public and private spaces
- local waterways and foreshore environments.

## Linking our research with on-ground change

The Elwood case study shows the real-world application of the CRCWSC's research, highlighting that the transition to a water sensitive community can lead to genuine innovation if local citizens are engaged as partners in the process.

Empowering local residents to discuss their concerns, values, and aspirations around water, infrastructure, and environment not only boosts the agenda's legitimacy, but also builds ownership of the local changes and their vision for the future. The message is positive: sustainable, resilient, productive, and liveable communities are well within reach if communities are actively engaged.

Canal  
naturalisation  
& activation

Up stream  
restoration  
restoration

# A collaborative approach

## Social research

Mapping water sensitive city solutions – community visions, local solutions and transition strategies



Community vision identifies preferred outcomes and performance measures.

## Engineering research

Support for making water sensitive city decisions – flood risk modelling and analysis of adaptation strategies



Performance of urban design solutions evaluated against community water cycle measures

## Urban design research

Urban densification and greening – urban design solutions for managing flood risks and achieving water sensitive outcomes.



Possible urban design scenarios prompt community debate about the future

Our initial research is now being applied to many integrated research projects around Australia. The Elwood project demonstrates how five different research activities and their research teams and the community worked together to generate solutions for a water sensitive Elwood.



To find out more about our future research activities view:

<https://watersensitivecities.org.au/research/our-research-focus-2016-2021>



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