CRC for
Water Sensitive Cities

Program A: Society | Project A3.2 | Project duration: July 2012 – July 2016

Better regulatory frameworks for water sensitive cities

Overview

A crucial barrier to advancing water sensitive cities (WSC) to date has been the existing regulatory arrangements. The need for an improved regulatory framework has been widely accepted but understanding complex existing frameworks as well as how best to reform these has been challenging.

This project will assess current barriers to the adoption of new urban water practices, technologies and alternative water sources arising from legislative and regulative frameworks. It will also assess the risks associated with projects that utilise alternative water sources.

Key outcomes

This project seeks to better understand existing institutional and traditional practices by examining the webs of regulatory rules, tools, constraints and incentives which either help or hinder more sustainable water sensitive practices. It examines how a wide variety of regulatory methods can assist in achieving better public policy outcomes as required in a WSC. The project will:

- assess current regulatory frameworks embedded in state legislation to identify gaps and overlaps in relation to alternative water sources and water sensitive urban practices
- identify elements for more comprehensive, co-ordinated and integrated regulatory frameworks
- classify and evaluate mechanisms for assessing, allocating, sharing and distributing risks associated with alternative water sources and water sensitive urban design (WSUD) technologies
- develop a new model for risk assessment and diversification.

Key findings on Melbourne's urban water regulation

The report "Conceptualising Urban Water Regulation – The Melbourne System", released in February 2014, presents a preliminary conceptual model and issues paper which suggests areas where research is needed. It maps current regulatory frameworks that impact on urban water management in Victoria, with a particular focus on the Melbourne metropolitan area. It also synthesises and presents detailed descriptions of the principal actors or stakeholders, roles, responsibilities, legislation and tools that characterise the Melbourne urban water regulation space.

How can we reduce the complexity of the regulatory infrastructure in Victoria?

Urban water management in Victoria is made up of multiple, complex webs of regulatory tools across the five key systems relating to water resources, service delivery and pricing, built environment, and environmental and public health. This suggests that regulators need to think in more detail about how these multiple webs link together so that their combined influence pushes in the desired direction.

How can we improve service delivery and price regulation?
Current frameworks for service standards and price setting in Melbourne's urban water sector operate largely within an economic efficiency paradigm. These are not well aligned to emerging concepts of sustainability, and there are likely to be significant challenges in aligning these conceptual frameworks.

How can we improve the regulation of the built environment?
Over recent years there has been a transition from the use of hard infrastructure for delivering drainage services to the use of softer infrastructure that also provides environmental benefits. This area of the regulatory space is still evolving and the interactions between these tools and their relative effectiveness are under-explored.

How do we protect environmental health through effective regulation?
Traditionally, Australian environmental health regulation regimes have focused on the control of point source pollution. Victoria's point source pollution controls are seen as robust and effective. However, environmental health regimes for the control of non-point source pollution and threats to the environment caused by stormwater flow are less developed, less coherent and, even when present, are poorly enforced.

An Australian Government Initiative

CRC AUSTRALIA

Project design

The project consists of two components. Component 1 involves an analysis of the current regulatory frameworks in Western Australia, Victoria and Queensland to identify gaps, inconsistencies and deficiencies in the regulation of various types of alternative water sources and WSUD projects.

The mapping will encompass provisions made in the Water Acts of each state which determine, for example, governance, water rights and allocation; environmental legislation and guidelines; health legislation and guidelines; pricing of water supply and services; environmental impact assessment regimes; and drought restrictions. It will also identify those regulatory tools that either help or hinder water sensitive practices. Component 2 involves collaborating with industry to develop new risk assessment and diversification tools.

The research will focus on both traditional and emerging WSC risks and analyse a range of decentralisation scenarios to gain insights into how traditional WSC risks might be differently allocated in the future under different ownership and operational regimes.

Outlook

Both the completed state legislative reviews as well as the above mentioned report provide crucial foundations on which the remainder of the project is to be built. Future work will use these legislative mappings as well as the conceptual framework as the basis for a comparative analysis of the regulatory regimes surrounding urban water management in Victoria, Western Australia and Queensland. It will also encompass new insights into how future regulatory frameworks might better allocate risks through both ownership and ongoing operation.

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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