

Understanding the economics of urban water management for improved waterway health to inform effective investment frameworks and to drive regulatory or incentive changes

Project C4:
Economics

This project will provide a strong case for industry-wide review of integrated water management governance, that considers the costs and benefits of stormwater management in relation to other urban water sources and obligations, including wastewater disposal and treatment, irrigation supply, and waterway health works.

This project will place the actions and changes required for waterway protection and restoration into an institutional analysis of the water industry (in the broadest sense, including water supply, natural resource management, local government, sewerage and drainage authorities, retailers, and companies).

The approach, after the framework proposed by Ostrom (2010), will permit a formal reconciliation of the beneficiaries and cost-bearers of public, private and toll goods provided by the water industry and common-pool resources (such as healthy waterways).

A secondary aim, identified as important by several Melbourne Water staff, of accounting for costs and benefits of management actions, will not be a core part of this project, but instead be delivered through a range of other partnership projects that will generate and gather such information.

It is proposed that a knowledge exchange project be developed to build a data management system, in a collaboration between the Partnership and Melbourne Water managers to systematically capture costs and benefits associated with various management activities.

Methods

By virtue of its broader institutional perspective across the water industry, the proposed approach is distinct from and complements the CRC for Water Sensitive Cities project "Comprehensive economic evaluation framework (IRP2)",

which aims to identify and quantify economic, environmental and community values of investments in water sensitive practices and systems. It is also distinct from the large number of "ecosystem service evaluation" projects currently being undertaken around the world.

The project will require collaboration with and leadership from an institutional economist. An appropriate collaborator will be sought in 2018-2019, with the aim of preparing a project proposal for the following year. A potential collaborator has been identified and a small amount of money has been earmarked to support project proposal development. Similarly, the associated knowledge-exchange project will be developed in the first year.

Outcomes

The primary outcome will be a strong case for industry-wide review of integrated water management governance, that considers the costs and benefits of stormwater management in relation to other urban water sources and obligations, including wastewater disposal and treatment, irrigation supply, and waterway health works.

Project Team:

University of Melbourne

Chris Walsh

Tim Fletcher

Yung En Chee

Melbourne Water

Belinda Lovell

Tiana Preston

Monica Tewman

Trish Grant

Grace Tjandraatmadja

Bronwen Hutchinson

Vanh Mixap

Andrew Grant

Rhys Coleman