



Case study 16

The urban water cycle planning guide

Barwon Water

This case study showcases

how collaboration and integrated planning deliver better value for communities

Problem

The Geelong region is one of the fastest growing in Australia and experienced considerable water management challenges during the millennium drought. New urban landscapes are being planned and designed at a rapid rate. A key challenge for urban planners, developers and governments is how to design and build new urban landscapes which are more liveable for residents and more resilient to external pressures like climate change.

Whilst these stakeholders share an interest in adopting good practice integrating urban and water planning can be complex and difficult. Consequently, it is absent or lacking in the early planning stages of new developments, meaning opportunities are missed and/or inefficiencies arise.

This stems from fragmented management of the different aspects of the urban water cycle from a planning perspective and a lack of tools for integration. Whilst Barwon Water has a key role to play in providing water, sewerage and alternative water to these new landscapes, it recognised the need for greater cross agency collaboration to help ensure the water cycle is considered as early as possible in the design stages.

Solution

Recognising that these challenges presented opportunities for better integration of water and urban planning, Barwon Water led the creation of Victoria's first Integrated Water Cycle Management (IWCM) Network. Establishment under a signed MoU between the water corporation, CMA and Local Government, the network commits the agencies to work

towards a more integrated approach to urban and water planning. By signing the MoU, the organisations commit to playing a role in coordinating, raising awareness, building knowledge and confidence in and developing tools around IWCM.

A number of initiatives have now been delivered through the Network, including:

Colac IWCM Plan

A whole of city water cycle based master planning exercise where the key agencies in Colac worked through a strategic visioning and planning process to identify ways in which the urban water cycle can help the city achieve its broader community vision.

Urban Water Cycle Planning Guide

An online resource to help urban developers, consultants and planners embed the concept of IWCM into the design of new urban subdivisions, including built and natural infrastructure as well as water servicing options.

IWCM plans for development precincts

The network has now developed several IWCM plans for more liveable design of urban developments in the region, including Fyansford and Spring Creek.

Atlas of alternative water opportunities

A detailed database describing all existing, planned and potential demands and supply nodes for alternative (non potable) water for use in all serviced areas across the region.

In the past five years the region has continued to push the boundaries of leading integrating water and urban planning; we have led the preparation of IWCM plans at various scales, (township, precinct and sub-precinct) and created an online guide to help consultants negotiate the integration process (www.urbanwaterplanner.com.au). Staff are taking on new roles as sub-

consultants to lead similar processes in other jurisdictions across the state.

Business case

Through practical collaboration, the Network has developed a genuine commitment to working together for better integration of urban and water planning. Having a shared vision of more liveable urban landscapes and a working network of practitioners has helped the group develop successful funding proposals and become involved in urban master planning early in the process. Funded projects, such as the Guide has further strengthened relationships within the group. The leverage of funding and the sharing of knowledge and capability through joint projects has reaped returns in better developments and smarter water management decisions.

Key drivers

Ultimately, the cornerstone of Barwon Water's approach has been to help the region achieve its broader goals for urban liveability. With a strategic outlook, extensive multi-disciplinary experience and strong regional relationships and networks, Barwon Water has been in a position to help facilitate the changes necessary. Ultimately, this collectively leads to the right solutions for the community.

Benefit/outcome

Facilitating IWCM implementation at a practical scale, thereby leading to enhanced liveability outcomes in new developments such as improved aesthetics, green open spaces, better accessibility, improved environmental outcomes.

Local resilience to climate changes via a more diverse portfolio and water efficiency community

Greater communication, coordination and capacity amongst key players