

Colac Integrated Water Cycle Management

Colac Otway Shire Council,
Colac, Victoria

Key messages

The Barwon IWCM Network has developed a process for applying Integrated Water Cycle Management to help inform municipal strategic planning processes.

Integrated Water Management provided a useful lens for a whole-of-city visioning process being undertaken for Colac.

Barwon Water led a process to identify practical IWM opportunities that could contribute to the community vision for Colac as a Botanic Garden City by 2050.

The IWM approach identified six priority opportunities, including overcoming flood constraints in new development areas, linear green pathways, urban stormwater reuse and a green spine.



Memorial Square Rainwater Garden, Colac CBD

Project overview

Colac is a south-west Victorian regional city with a population of approximately 12,000. The city has a strong connection to water through Lake Colac, urban waterways, extensive areas of green open space and wide tree-lined streets, many with traditional grassed swale stormwater drains. Colac's relationship with water is further emphasised by the natural boundary formed around the city by Lake Colac, Barongarook Creek and Deans Creek. Colac's population is expected to increase to 20,000 by 2050. This growth, coupled with the impacts of climate change, will see water become an even more critical issue for Colac over the next three decades.

As part of the Colac 2050 visioning process, Barwon Water worked with the Colac Otway Shire and Corangamite CMA to identify potential opportunities where an integrated water cycle management approach could enhance the liveability characteristics of the city. The process allowed key agencies to collaboratively identify and discuss opportunities for the water cycle to make a positive contribution to Colac's aspirations for liveability, sustainability and productivity. The IWCM Plan put the water cycle 'on the table' in the development of the Colac 2050 plan, which sets out a long term blueprint for the City as the states Botanic Garden City. Water will be central to this vision, through urban creeks as blue-green corridors, water sensitive urban development in floodplain areas and extensive greening of city streetscapes.

Organisations

The Plan was developed by the four key water cycle agencies in the region;

- Colac Otway Shire
- Barwon Water
- Southern Rural Water
- the Corangamite Catchment Management Authority (CMA)
- and was supported through the Living Victoria Fund.

It forms part of the broader agenda of the Barwon Region IWCM Network.

Barwon Water facilitated the development of the Plan on behalf of all the agencies who provided in-kind support. The \$30,000 grant covered the cost of engaging consultants to investigate and develop concept designs for some of the priority IWCM opportunities identified.

“If we didn't have the IWCM plan there's a good chance the vision to embrace Colac's creeks would not have been realised.”

Key elements of the IWCM Plan

Colac's IWCM plan is an innovative process that allows all aspects of the urban water cycle to be considered in the context of a city's long term vision. Key steps in the process include water cycle systems analysis (SWOT), visioning, objective setting and finally identifying and prioritising opportunities to enhance the natural, built and service aspects of the water cycle to best contribute to the 2050 Botanic Garden City Vision. Six priority IWCM opportunities were identified and developed to concept design level and presented to Council for consideration.

Outcomes

The Colac IWCM plan was actioned relatively quickly with the installation of the Memorial Square Rainwater Garden and, Dennis Street GPT. The Plan has been instrumental in other planning strategies including:

- the Lake Colac Masterplan,
- Regional Colac Flood Study,
- Colac Stormwater Drainage Strategy,
- and Colac 2050.

Whole of water cycle management opportunities are now front and centre of planning and design.

Without the IWCM Plan a major opportunity to develop Colac in a way which supports healthy communities, sustainable water use, ecosystem protection and enhancement would have been missed.

“Councils are inherently reactive and pulled in a lot of directions at once. It's very difficult to have long-term visions or valuable investments supported.”



Colac IWCM Plan – Green Spine Conceptual Design

Benefits of developing an IWCM plan

- Developing an IWCM plan gave Council an opportunity to stand back and think about how the city relates to water and how the Colac community can better relate to the water cycle.
- The IWCM Plan gave Council sound justification to ensure Colac develops in a water sensitive way. Central to this was setting out the vision for Colac whereby the creeks that embrace the city are transformed into linear open spaces or 'parkway loops'.
- Through development of the IWCM Plan an opportunity to overcome flooding constraints and open up a new area of development around Colac was realised.
- Having a strategic document that clearly communicates the logic and vision of IWCM is a powerful tool. The Plan gave Council a strong platform to push for IWCM to be taken seriously and integrated into the broader strategic planning agenda. The IWCM Plan also provided a means of describing the merits and value of IWM to developers in a way which could be easily understood.

Cost

- \$50,000 in kind support from Barwon Water as IWCM Plan facilitator
- \$30,000 in kind support from Colac Otway Shire Council, Southern Rural Water and Corangamite CMA
- \$30,000 grant from the Living Victoria Fund

Timeframe

- The IWCM Plan was prepared in 6 months.

Lessons Learnt

- Colac's IWCM Plan is the product of a successful collaboration between water agencies, principally Colac Otway Shire Council and Barwon Water. Without the support of partner agencies, Councils' would not have had the resources or capacity to independently undertake development of an IWCM Plan.
- Barwon Water facilitated an innovative process to apply IWCM in practice and this was supported with specialist consultants to undertake the concept investigations of IWCM opportunities identified. The project team designed innovative information products which provided a powerful and compelling visual concept to explain IWCM opportunities to councilors.

Contact

Stewart Anderson | *Manager Environment and Community Safety, Colac Otway Shire*

P: (03) 5232 9414 | M: 0427 542 653

stewart.anderson@colacotway.vic.gov.au

www.colacotway.vic.gov.au

Tony Overman | *Strategy and Sustainability Coordinator, Barwon Water*

P: (03) 5226 2416 | M: 0439 577 394

tony.overman@barwonwater.vic.gov.au

www.barwonwater.vic.gov.au

“
We need expertise in water
from the CMA,
water authorities and state
government to
ensure our regional
development reflects
the agenda at the state level.
”