



CRC for  
Water Sensitive Cities

# City of Gold Coast

## Water Sensitive City Transition Strategy

Location:  
Gold Coast,  
Queensland



Case Study — Prepared by Cooperative Research  
Centre for Water Sensitive Cities, August 2019



Australian Government  
Department of Industry,  
Innovation and Science

Business  
Cooperative Research  
Centres Programme

## Insight

*Early application of the Water Sensitive Cities Transition  
Planning Process to City of Gold Coast*

## Project description

The City of Gold Coast was one of the early adopters in applying the CRC for Water Sensitive Cities' Transition Planning Process to develop a water sensitive city vision and transition strategy. The project involved a series of collaborative workshops with 76 leaders and strategic thinkers in the Gold Coast region across water, planning, environment, development and other related sectors.

The purpose of the project was to provide a framework for orienting and coordinating strategic action across the many different stakeholders who will need to collaborate for the Gold Coast's envisioned water future to be achieved. The project produced a water sensitive vision and transition strategy for the Gold Coast, which includes an historical water story for the region, a benchmark of current water sensitive performance, a shared 50-year vision for a water sensitive Gold Coast, and a number of strategies and actions that will need to be undertaken to deliver the vision.

## The drivers

*Develop a vision and strategy to transition to a water sensitive  
Gold Coast*

- **Effects of climate change** – Increased uncertainty and degrees of extremity in rainfall patterns are affecting

the reliability, effectiveness and sustainability of current water services.

- **Growing population and expectations for liveability** – By 2040 the Gold Coast's population is projected to increase from 600,000 to 940,000. The city's waterways and beaches are one of the primary reasons people choose to live and visit the Gold Coast, so protecting these natural assets is very important to community values and the Gold Coast's iconic water lifestyle.
- **Geographical landscape** – The length of the city and its low lying form presents challenges to water service network planning and flood preparedness. However, the city boundaries encompass most of the city's waterways from headwaters to coast, providing a unique opportunity to manage them in a more integrated manner.
- **Ageing infrastructure** – Ageing infrastructure (water and sewerage networks, stormwater networks) and constructed water bodies (lakes and canals), changing community expectations and infrastructure standards will impact the city's capital and operational expenditure.
- **Governance** – Water supply distribution, sewerage, stormwater and recycled water networks, flood planning, and catchment and waterway services are governed within City of Gold Coast, providing a unique opportunity to address institutional barriers that limit innovation.

### What does this case study demonstrate?

Each case study has been selected to demonstrate specific solutions, benefits or enabling structures that support the creation of water sensitive cities. This case study focuses on:

Vision and narrative

Governance and policy

Evaluation frameworks

Leadership and influence

Water literacy and behaviour change

## The innovations




*Early adoption of the Water Sensitive Cities Transition Planning Process by City of Gold Coast to set a vision and direction for its water sensitive future*

- **Extensive engagement to develop meaningful vision and actions** – The CRCWSC facilitated stakeholder discussions across a series of five one-day workshops, stakeholder interviews and focus groups, drawing on a literature review and the application of benchmarking and diagnostic tools to inform detailed analysis.
- **Setting a 50-year vision for Water Sensitive Gold Coast** – 10 key vision outcomes were developed through agreed stakeholder aspirations which will help the Gold Coast to become a world-leading water sensitive city:
  1. Water and land environments and resources are well-protected and enhance community health, wellbeing and safety.
  2. All urban areas have abundant beautiful, well-designed spaces that celebrate water and bring people together.
  3. The Gold Coast's communities share access to water environments, which supports their identity and lifestyle.
  4. Water systems, infrastructure and land-use planning are integrated, deliver multiple benefits, and are adaptive to changing circumstances.
  5. Water infrastructure systems enable efficient and sustainable use of resources to maximise social economic and environmental outcomes.
  6. Water systems are innovative, support a diverse and sustainable economy and help shape the Gold Coast as a world leading water sensitive city.
  7. People understand, cherish and protect their surrounding water environments.
  8. Collaboration delivers sustainability goals and supports environmental stewardship.
  9. Water decisions are made through informed and inclusive processes to support social, economic and environmental sustainability.
  10. The Yugambah people are actively engaged in water decision making, knowledge sharing and the stewardship of water and land environments.
- **Actions developed based on WSC Index Tool and Transition Dynamics Framework** – The WSC Index Tool was used to benchmark the Gold Coast's current water sensitive performance against a number of WSC goals for the region. The Transition Dynamics Framework was then used to analyse the current enabling environment for the WSC goals, to identify priority actions as part of a strategy to support a meaningful transition to a water sensitive Gold Coast.
- **Framework outputs led to development of the Water Strategy** – The outputs of the WSC Index Tool and Transition Dynamics Framework formed the foundation of the development of the City of Gold Coast Water Strategy. The Water Strategy communicates Council's commitment to the community, with a bold vision and direction to manage water environments and resources sustainably over the next 20 years. The Water Strategy consists of four strategic outcomes and a suite of key transformational actions that align to the Transition Dynamics Framework and its priority objectives, strategies and vision statements to support the transition towards a water sensitive city.
- **Water sensitive network formed** – A water sensitive city network was subsequently formed to continue the crucial community, industry, research and government partnerships.



Gold Coast city skyline.

## The outcomes

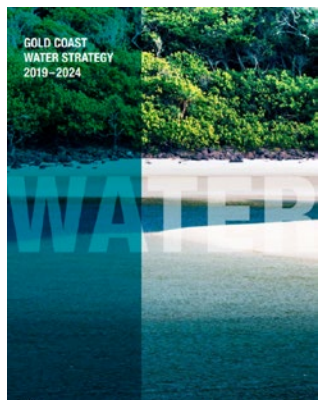
 <b>Cities providing ecosystem services</b>	 <b>Cities as water supply catchments</b>	 <b>Cities comprising water sensitive communities</b>
<p><b>Priority action focus areas:</b></p> <ul style="list-style-type: none"> <li>• <b>Build knowledge</b> across water catchments, groundwater and constructed water bodies.</li> <li>• <b>Improve habitat and waterway stability</b> through stabilising river banks, revegetating riparian zones, and creating waterway assets and habitats that improve water ecology.</li> <li>• <b>Improve natural flow</b> of waterways and fish passage where feasible.</li> </ul>	<p><b>Priority action focus areas:</b></p> <ul style="list-style-type: none"> <li>• <b>Value our resources</b> through improving efficiency and effectiveness of water networks, and optimising recycled water, energy and resource production.</li> <li>• <b>Provide integrated and adaptive</b> water sensitive planning for future services.</li> <li>• <b>Be innovative and sustainable</b> through sharing knowledge, supporting innovation, conducting research and exploring alternative funding solutions.</li> <li>• <b>Plan for water being central to our city</b> design through sustainable planning and development approaches, and integrated stormwater management solutions.</li> </ul>	<p><b>Priority action focus areas:</b></p> <ul style="list-style-type: none"> <li>• <b>Continue engaging with partners and the community</b> around the Water Strategy and its WSC actions.</li> <li>• <b>Foster a network of organisational and community champions</b> who encourage collaboration, innovation and capability to help drive the Water Strategy WSC actions.</li> <li>• <b>Foster knowledge and education, and encourage participation</b> through programs and advocating community led initiatives that increase water knowledge and improve water health.</li> <li>• <b>Promote the respect and collaboration</b> for the cultural value and connection to waterways through arts, design and culture.</li> <li>• <b>Create green and blue urban spaces</b> with multiple benefits to improve access, city cooling and community enjoyment.</li> <li>• <b>Support an adaptive and resilient city</b> through resilience strategies and community preparedness.</li> </ul>

## Business case

Costs	Benefits
<ul style="list-style-type: none"> <li>• \$90,000 City of Gold Coast</li> <li>• \$35,000 in-kind support from CRCWSC</li> </ul> <p>Package of works included:</p> <ol style="list-style-type: none"> <li>1. Design, logistics and facilitation of 5 workshops (including the benchmarking workshop), including pre and post workshop analysis, report delivery, travel and accommodation</li> <li>2. Benchmark of current WSC performance according to the WSC index</li> <li>3. Creation of shared vision and narrative for Gold Coast as a future WSC</li> <li>4. Application of Transition Dynamics Framework Assessment and recommendations for advancing WS practice</li> <li>5. Outputs:             <ol style="list-style-type: none"> <li>a. Envisioning, Benchmarking and Transition Planning for a Water Sensitive Gold Coast (Final Project Report 142pp)</li> <li>b. Vision and Transition Strategy for a Water Sensitive Gold Coast (Executive Summary 51pp)</li> </ol> </li> </ol>	<ul style="list-style-type: none"> <li>• Shared water narrative and perspectives which led to a collective vision of what a water sensitive Gold Coast will look like across Gold Coast community groups, water resource management authorities, state and local government agencies, university and research teams and relevant industry entities</li> <li>• WSC Index results which created base lines for tracking future progress</li> <li>• New water sensitive network which has strengthened stakeholder relations and created new partnerships and drive strategy implementation</li> <li>• Understanding of gaps and agreement on priorities, transformation objectives and actions for how different stakeholders must work together to deliver the vision</li> <li>• Identification of alternative approaches, innovative water solutions, and adaptive planning which may have cost savings and add value to projects</li> <li>• Engagement process which helped to change mindsets and foster a culture of innovation and collaboration</li> </ul>

## The lessons

- **The process produced more than just useful outputs** – In addition, the process created an opportunity for stakeholders to gain a greater understanding of challenges and opportunities from different perspectives, and to feel supported to adopt more open mindsets for co-creating ideas. This is valuable for strengthening the relationships among stakeholders and building momentum and commitment for driving the Gold Coast's transition towards its envisioned water sensitive future.
- **Need for framework to support continuous improvement** – The outputs of the WSC Index Tool scoring also highlighted the need to establish a framework with mechanisms that will foster a continuous organisational change in mindset towards one that is more collaborative, innovative, adaptable and water sensitive.



### BENCHMARKING THE GOLD COAST IN ITS TRANSITION TO A WATER SENSITIVE CITY

City of Gold Coast (CoGC) is a water sensitive city. It has a long history of water sensitive design. The WSC Index Tool provides a framework for assessing the current state of a city's water sensitive design and provides a benchmark for future improvement. The WSC Index Tool is a framework for assessing the current state of a city's water sensitive design and provides a benchmark for future improvement. The WSC Index Tool is a framework for assessing the current state of a city's water sensitive design and provides a benchmark for future improvement.

Figure 3: Benchmarking the Gold Coast in its transition to a water sensitive city



The Water Strategy recognises the importance of water in supporting our local people, business and industry. Water is the lifeblood of our community. It is essential for our health, safety and well-being. It is also essential for our economy. Water is the lifeblood of our community. It is essential for our health, safety and well-being. It is also essential for our economy.



## Transferability

The Transition Planning Process is applicable to assess a city's current state of water management and to demonstrate how to develop strategies to transition towards a water sensitive city and build momentum for implementation. Like the WSC Index Tool, the Transition Planning Process can be applied in Australia and internationally, guided by certified Water Sensitive City facilitators.

## Project collaborators

- City of Gold Coast
- CRC for Water Sensitive Cities
- State, research institutes and industry representatives
- Community group representatives

## Additional information

More information about the City of Gold Coast Water Sensitive City Transition Strategy can be found at:

- [Vision and Transition Strategy for a Water Sensitive Gold Coast](#)
- [Moving toward Water Sensitive Cities](#)
- [Gold Coast Water Strategy 2019-2024](#)



WSC Index Diagram