Conference program
Mercure Brisbane Hotel
85-87 North Quay, Brisbane, QLD

2019
Brisbane
Australia

26–28 March
We would like to thank the conference committee for their time and efforts in preparing for the conference:

- Sandra Hall (Committee Chair), AWMC, The University of Queensland
- Natalie Baker, Brisbane City Council
- Sally Boer, E2Designlab
- Fiona Chandler, Alluvium
- Maddie Greenlee, Bligh Tanner
- Alan Hoban, Bligh Tanner
- Samantha Lemons, CRCWSC
- Chris Manning, Townsville City Council
- Tony McAlister, Water Technology
- Pablo Orams Witting, International WaterCentre
- Chris Tanner, CRCWSC
- Warren Traves, GHD

**Mentimeter**

We’ll be using the web-based interaction tool Mentimeter during the conference. Mentimeter allows you to ask questions and engage with the session topic and conversation.

1. Download the Mentimeter app to your phone via the App or Google store or go to [www.menti.com](http://www.menti.com).
2. At the start of each session, you will receive a Mentimeter code. Simply enter the code and follow the prompts.

**Test it out**

Once you have Mentimeter on your phone or browser, enter the code **91 26 46** and answer our fun pre-poll question.

**Parking**

Parking is available in two public carparks, both located within two blocks of the Ibis and Mercure hotels, Brisbane:

- Mercure Brisbane (85–87 North Quay), under the Mercure Hotel
- Tank Street (40 Tank Street).


The Mercure offers a discounted guest rate of $36 per 24 hours (validation at reception). On arrival, please advise hotel reception that you require parking and obtain a PIN code for entering and exiting the carpark during your stay.

**Get social**

Follow us on Twitter: [@crcwsc](https://twitter.com/crcwsc)

Use **#2019WSCC** on your social posts to join the conference conversations.
Welcome to the 4th Water Sensitive Cities Conference 2019

Welcome to Brisbane and the next event in the continuing evolution of the CRC for Water Sensitive Cities conference series.

Our conferences began as a platform for discussing research projects and findings—and now we present how industry is applying the knowledge we’ve generated and synthesised to real-life projects of different social-technical dimensions, scales and climatic conditions.

We have long envisaged that water sensitive practices are powerful enablers of sustainable, resilient, productive and liveable cities. It is not just about water, and this year we are pleased to welcome speakers and panellists from the widest cross-section of sectors and practice disciplines that shape our cities.

This broader engagement is giving rise to fresh perspectives and new topics, including ecological and human health and wellbeing, and urban metabolism within a changing climate. For the first time, we are also sharing the insights and experiences from our international work as we adapt them for local applications.

We will also share with you at this conference our proposed next phase of collaborative efforts to unlock the full potential of Australian cities and towns by mainstreaming water sensitive practices to create urban places with healthy people, thriving protected ecosystems, and innovative and strong economies.

These are exciting times for Australian cities and towns because research into practice is really coming to fruition. It is truly heartening to see that we now have the knowledge, the innovation, and the integration of different disciplines to deliver water sensitive cities, locally and internationally. I look forward to deepening our shared understanding of this reality, and genuinely engaging as an industry, throughout this conference.

Tony Wong
CEO, CRC for Water Sensitive Cities
### Day 1

**Tuesday 26 March**

<table>
<thead>
<tr>
<th>Time</th>
<th>Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:00 am</td>
<td><strong>Session 1 – Welcome address</strong>, Professor Mohan Krishnamoorthy, Pro-Vice-Chancellor (Research Partnerships), The University of Queensland</td>
</tr>
<tr>
<td>9:10 am</td>
<td><strong>Welcome to Country</strong>, Ashley Ruska, Nunukul Yuggera</td>
</tr>
<tr>
<td>9:15 am</td>
<td><strong>Opening remarks</strong>, Professor Tony Wong, CEO, CRCWSC</td>
</tr>
<tr>
<td>9:30 am</td>
<td><strong>Designing the 21st century city in nature: prospects for a high(er) density urbanism</strong>, Caroline Stalker, Design Director (Urban), Principal, Arup Australasia</td>
</tr>
<tr>
<td>10:00 am</td>
<td><strong>Resilience thinking in unlocking the complexities of cities: the complementary roles of the public and private sectors</strong>, Adam Fennessy, Partner – Advisory, Government and Public Sector; Oceania Leader – Future Cities, EY</td>
</tr>
<tr>
<td>10:30 am</td>
<td>Morning tea</td>
</tr>
<tr>
<td>11:00 am</td>
<td><strong>Session 2A – Planning for a changing climate, City cooling</strong>&lt;br&gt;Chair: Fiona Chandler, Alluvium Consulting</td>
</tr>
<tr>
<td></td>
<td>The state of climate science for informing urban cooling, Dr Kerry Nice, Research Fellow, CRCWSC, Monash University</td>
</tr>
<tr>
<td></td>
<td>Informing urban planning decisions:&lt;br&gt;Amaravati, Dr Stephanie Jacobs, Climate Scientist, Mosaic Insights/Alluvium</td>
</tr>
<tr>
<td></td>
<td>GPOP Green Grid – Making Sydney’s new heart cooler and greener, Alan Hoban, Director, Bligh Tanner</td>
</tr>
<tr>
<td></td>
<td>Planning for the design of green and cool cities – the Victorian experience, Kim Markwell, Freshwater Ecologist, E2Designlab</td>
</tr>
<tr>
<td></td>
<td>Panel discussion, Melissa Bradley, Program Manager, Water Sensitive SA and SA Regional Manager, CRCWSC</td>
</tr>
<tr>
<td>12:30 pm</td>
<td>Lunch</td>
</tr>
<tr>
<td></td>
<td><strong>Session 2B – Valuing a water sensitive city, Resources, innovation and efficiency</strong>&lt;br&gt;Chair: Dr Sandra Hall, Advanced Water Management Centre, The University of Queensland</td>
</tr>
<tr>
<td></td>
<td>Resource recovery: innovative, efficient, needed, Professor Zhiguo Yuan AM, Director, Advanced Water Management Centre, The University of Queensland</td>
</tr>
<tr>
<td></td>
<td>An enabling environment for innovation, Rita Chandra, Project Manager, Urban Water Futures Division, Yarra Valley Water</td>
</tr>
<tr>
<td></td>
<td>Purple Phototrophic Bacteria: a silver bullet for effective resource recovery from wastewater?, Dr Tim Hülsen, The University of Queensland</td>
</tr>
<tr>
<td></td>
<td>Innovation Centre in Subiaco WA, Paul Nolan, Research and Development Principal, Water Corporation</td>
</tr>
<tr>
<td></td>
<td>Panel discussion, Dave Solley, Senior Technical Director Water and Biosolids Process, GHD</td>
</tr>
</tbody>
</table>
# 4th Water Sensitive Cities Conference Program

**Brisbane, Australia**

## 1:30 pm

### Session 3A – Planning for a changing climate, Flood resilience

**Chair:** Tony McAlister, Director, Water Technology

- Flood resilient urban design, Piet Filet, Engagement and Collaboration Specialist, International WaterCentre
- Moving beyond the Q100 Quagmire: risk based land use planning, Shannon McGuire, Director Planning, Ethos Urban
- Housing design to respond to seasonal groundwater inundation, Daniel Martin, PhD student, CRCWSC, The University of Western Australia
- Flood resilient housing, Dr James Davidson, James Davidson Architect
- Panel discussion, Scott Moorhead, General Manager, Townsville Water and Waste, and Graeme Milligan, Executive Director, Queensland Reconstruction Authority

### Session 3B – Valuing a water sensitive city, Communities

**Chair:** Madeleine Greenlee, Senior Water and Environmental Engineer, Bligh Tanner

- Engaging communities, Dr Jo Lindsay, Social Scientist and Associate Dean Enterprise, Monash University and CRCWSC
- Accessing the research: Bendigo, Liam Sibly, Senior Water Strategy Officer, City of Greater Bendigo, and Karim Khodja, Bendigo community member
- Townsville schools and water conservation, Annmarie Grasso, Townsville City Council
- Engaging the community in a waterwise Perth, Antonietta Torre, Water Corporation
- Panel discussion, Dr Cara Beal, Senior Lecturer and Senior Research Fellow, Griffith University

### 3:00 pm

**Afternoon tea**

### 3:30 pm

**Session 4 – Plenary panel, Transitions journey**

**Chair:** Jamie Ewert, National Engagement Manager, CRCWSC

- Gold Coast: the transition journey, Kathy Baker, Manager, Service Sustainability, City of Gold Coast
- Transitioning towards water for liveability: the Kunshan journey thus far, Jianbin Wang, International Engagement Manager – China, CRCWSC
- Fostering champions to drive change, Ashley Vincent and Shelley Shepherd, Water Sensitive Transitions Network
- Panel discussion, Dr Briony Rogers, CRCWSC

### 5:00 pm

**Close**

### 6:00 pm

Join us for cocktails and the launch of our bid for a new CRC. Enjoy local acoustics duo McDermott and North as we discuss our future beyond 2021. **Mercure Foyer**

### 7:00 pm – 10:00 pm

Enjoy an evening with industry colleagues at the official conference dinner. **Chelsea Ballroom**
Day 2  Wednesday  
27 March

<table>
<thead>
<tr>
<th>Time</th>
<th>Program</th>
</tr>
</thead>
</table>
| 7:00 am - 8:45 am | WSC Breakfast – Valuing inclusion, inspiring change  
Facilitator: Dr Sandra Hall, Advanced Water Management Centre, The University of Queensland and Board Member, Australian Water Association  
Join us for a networking breakfast. Hear from inspiring speakers who embrace innovation and inclusion in their workplace, and who will share their achievements and the challenges that they’ve overcome. Embrace the opportunity to meet with and learn from others within the industry, and to engage with the panel via a Q&A session.  
Panellists: Terri Benson, Managing Director and Executive Director, South East Water; Professor Vicki Chen, Executive Dean of Engineering, Architecture and Information Technology, The University of Queensland; Sally Boer, Director, E2Designlab; and Pablo Orams Witting, Senior Project Officer, International WaterCentre  
Optional event: $40 per head. Please register at the registration desk. |
| 9:00 am   | Session 5 – Integrated platforms for city transformation  
Chair: Chris Manning, Townsville City Council  
Experience an integrated showcase of the CRCWSC’s flagship platforms: the Transitions Platform, the City-shaping Platform and the Design Platform. These platforms integrate data, knowledge, tools and processes, so you can readily apply them to connect people, share knowledge and access resources for guiding a water sensitive city transition.  
Case studies will show how industry is using the platforms to diagnose problems, identify priorities, set targets, analyse options, generate solutions, evaluate performance, monitor progress, and embed learning across organisations and cities.  
CRCWSC platforms: Dr Briony Rogers, Katie Hammer, Chris Chesterfield, Dr Christian Urich  
Case studies: Shelley Shepherd, Director, Urbaqua; Sergey Volotovskiy, Manager, External Policy, Water Corporation; and Sally Boer, Director, E2Designlab  
Panel Q&A discussion |
| 10:30 am  | Morning tea                                                              |
| 11:00 am  | Session 6A – Living with a changing climate  
Urban metabolism  
Chair: Tony McAlister, Director, Water Technology  
Introduction: John Savell, Director Strategic Projects, Department of Housing WA |
|           | Session 6B – Valuing a water sensitive city  
Ecological and human health and wellbeing  
Chair: Sally Boer, Director, E2Designlab |
<table>
<thead>
<tr>
<th>Session 7A – Living with a changing climate</th>
<th>Session 7B – Valuing a water sensitive city</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Chair:</strong> Alan Hoban, Director, Water and Environment, Bligh Tanner</td>
<td><strong>Chair:</strong> Warren Traves, Water Market Leader, GHD</td>
</tr>
<tr>
<td><strong>Urban intensification</strong></td>
<td><strong>Economics</strong></td>
</tr>
<tr>
<td><strong>How do we support urban intensification?</strong>, Professor Nigel Bertram, Practice Professor of Architecture, Faculty of Art Design and Architecture, Monash University</td>
<td><strong>Adoption of water sensitive urban designs: the role of economic analysis</strong>, Dr Sayed Iftekhar, Research Leader, CRCWSC and The University of Western Australia</td>
</tr>
<tr>
<td><strong>Pursuing a hybrid approach to water in Fishermans Bend</strong>, Aidan O’Neill, Head of Fishermans Bend Strategy, City of Port Phillip</td>
<td><strong>Estimation of demand for recycled wastewater and stormwater for planning and management of a wastewater treatment plant buffer zone: a Western Australian case study</strong>, Dr Louise Blackmore, Postdoctoral Researcher, The University of Western Australia</td>
</tr>
<tr>
<td><strong>Informing urban planning decisions: Sydenham to Bankstown</strong>, Sue Burton, Executive Officer, Cooks River Alliance, and Alejandra Rojas, Executive Planner, City of Canterbury Bankstown</td>
<td><strong>Valuing the benefits of water sensitive projects: an application to Tarralla Creek Renaturalisation</strong>, Rita Chandra, Project Manager, Urban Water Futures Division, Yarra Valley Water</td>
</tr>
</tbody>
</table>

**Panel discussion, Professor Karen Hussey, Director, Centre for Policy Futures, The University of Queensland**

**Panel discussion, Associate Professor Mark Kennard, Griffith University**

---

**Urban metabolism: concepts, applications and use for water sensitive cities**, Associate Professor Steven Kenway, Research Leader, CRCWSC and The University of Queensland

**Why protecting and enhancing ecology is so important and delivers multiple benefits**, Julie McLellan, CEO, Healthy Land and Water

**The Brabham development as a waterwise blueprint for challenging groundwater situations**, Susanne Martins, Manager Innovation and Sustainability, Commercial Operations, WA Department of Housing

**Connections with water and health in Indigenous communities**, Dr Cara Beal, Senior Lecturer and Senior Research Fellow, Griffith University

**Aura: a water sensitive city**, Mark Stephens, Senior Environment and Community Development Manager, Stockland

**Applying the Transition Dynamics Framework: Melbourne Water’s Living Rivers program**, Sara Lloyd, Director, E2DesignLab

**Creating a leading water and energy efficient estate at Aquarevo – the development experience**, David Bergmann, Research and Development Manager, South East Water, and Rory Costelloe, Executive Director, Villawood Properties

**Accessing the research: tools to support decision making**, Dr Leah Beesley, The University of Western Australia

---

**Panel discussion, Professor Karen Hussey, Director, Centre for Policy Futures, The University of Queensland**

**Panel discussion, Associate Professor Mark Kennard, Griffith University**
### Delivering the transition to water sensitive cities: approaches, activities and achievements

#### 26—28 March 2019

**Informing urban planning decisions:**
Innovation House Townsville, Darren Finlay, Director, Sustainability Townsville

**Panel discussion,** Melissa Bradley, Program Manager, Water Sensitive SA and SA Regional Manager, CRCWSC, and Belinda Smith, Structure Planning Manager, Metropolitan Planning Authority

**Integrating and valuing alternative water in Adelaide, South Australia,** Craig Flavel, Senior Groundwater Engineer, Water Technology SA

**Panel discussion,** Professor David Pannell, Professor of Agricultural and Resource Economics, The University of Western Australia

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>3:00 pm</td>
<td>Afternoon tea</td>
</tr>
<tr>
<td>3:30 pm</td>
<td><strong>Session 8 – The future of the CRCWSC</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Facilitator:</strong> Professor Tony Wong, CEO, CRCWSC</td>
</tr>
<tr>
<td></td>
<td>This is a town hall Q&amp;A session with a five-member panel, moderated by Tony Wong. Panel members will comprise senior representatives from the CRCWSC’s Board, Executive Team and Key Partner Organisations. They will discuss and answer questions from the audience on the next tranche of CRCWSC research and adoption activities. These activities are aiming to facilitate and accelerate the mainstreaming of water sensitive cities practices in Australian and global cities and towns by harnessing the emerging opportunities presented by global urbanisation and intensification; digital technologies; community activation and empowerment; collaborative and innovative governance; and Aboriginal knowledge and values. <strong>Panel discussion:</strong> Terri Benson, South East Water; Greg Cash, Department of Communities WA; Dr Briony Rogers, CRCWSC; Ben Furmage, CRCWSC; and Paul Heaton, City of Gold Coast</td>
</tr>
<tr>
<td>5:00 pm</td>
<td>Close</td>
</tr>
</tbody>
</table>
Day 3  
Thursday 28 March

<table>
<thead>
<tr>
<th>Time</th>
<th>Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:00 am - 12:00 pm</td>
<td>Today’s training sessions will be held on Level 2 of the hotel.</td>
</tr>
<tr>
<td></td>
<td><strong>Workshop 1A</strong></td>
</tr>
<tr>
<td></td>
<td>Quantifying water performance of residential design alternatives using an Urban Water Mass Balance Tool developed by the Water Sensitive Outcomes for Infill Developments (IRP4) project*</td>
</tr>
<tr>
<td></td>
<td>In this interactive workshop, participants will first see a demonstration of how an Urban Water Mass Balance Tool can be used to generate indicators of water performance for residential dwelling designs. Participants will then take part in a team activity in which the performance of a range of alternative dwelling designs are evaluated and compared for an urban infill case study for the city of Salisbury in South Australia. This will inform a group discussion about how water performance evaluation can be used to promote more water sensitive infill development.</td>
</tr>
<tr>
<td></td>
<td>Target audience: planners, local government, architects, engineers, developers</td>
</tr>
<tr>
<td></td>
<td>*Workshops 1A and 1B are aligned, so please consider coming to both.</td>
</tr>
<tr>
<td>12:30 pm</td>
<td>Lunch</td>
</tr>
<tr>
<td>1:00 pm - 4:30 pm</td>
<td><strong>Workshop 2B</strong></td>
</tr>
<tr>
<td></td>
<td>I’m a champion; how about you? Exploring the CRCWSC Transition Dynamics Framework and best practice approaches to research adoption</td>
</tr>
<tr>
<td></td>
<td>Learn how to influence the uptake of water sensitive practices in your organisation and your city. Champions of water sensitive cities come in all shapes and sizes, and range in their ability to influence practice.</td>
</tr>
</tbody>
</table>

*Workshops 1A and 1B are aligned, so please consider coming to both.*
The newly launched product from our TAP team helps water and urban planning practitioners collaborate throughout the strategic planning process. We’ll walk through a case study from Salisbury, with development scenarios, during the morning session 1A. Then together we’ll iterate future built scenarios to drive better heat and water sensitive city outcomes. Sign up to this workshop for insider access to the Scenario Tool, and take back to work a tool you can use to improve your organisation’s role in strategic planning.

Target audience: planners, local government, architects, engineers, developers

This workshop will explore the Transition Dynamics Framework as a tool for driving change, best practice approaches to research adoption, and strategies for helping your organisation become an institutional champion.

Target audience: all change makers

<table>
<thead>
<tr>
<th>Site visit 1 (8:30 am – 12:30 pm)</th>
<th>Site visit 2 (12:30 pm – 4:00 pm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A bus tour to Queensland Urban Utilities’ award winning Innovation Centre and Waste Water Treatment Plant at Luggage Point</td>
<td>A walking tour of South Bank Rain Bank</td>
</tr>
</tbody>
</table>

See information flyer

See information flyer
Our sponsors —

MONASH University

THE UNIVERSITY OF QUEENSLAND
AUSTRALIA
CREATE CHANGE

Government of Western Australia
Department of Communities

CITY OF GOLD COAST

WATER TECHNOLOGY
WATER, COASTAL & ENVIRONMENTAL CONSULTANTS

GHD
Disclaimer:
The CRCWSC reserves the right to use any photograph/video taken at this conference for any lawful purpose (including such purposes as publicity, illustration, advertising, and web content) without the express written permission of those included within the photograph/video. A person attending the conference who does not wish to have their image recorded for distribution should make their wishes known to the photographer or event organisers, and/or contact the CRCWSC. Thank you for your understanding and cooperation!