

PROGRAM

21st International
RIVER
SYMPOSIUM

EXCELLENCE – COLLABORATION – INTEGRATION

14–18 OCTOBER 2018
SYDNEY, AUSTRALIA



Doltone House
Darling Island Wharf
Sydney, Australia

EMBRACING
INNOVATION

MANAGED BY

 INTERNATIONAL
RiverFoundation

Welcome

Welcome to the 21st International Riversymposium in Australia's stunning harbour city. We are incredibly excited to be here this year as we mark the first time Riversymposium has been held in Sydney since its inception over twenty years ago.

We thank all our partners for helping us to make this event happen, with a special mention to our Platinum and Gold Partners: the Australian Department of Foreign Affairs and Trade and Brisbane City Council for their invaluable ongoing support, and the University of New South Wales Global Water Institute for joining us for the first time and bringing such a wealth of knowledge, expertise and credibility to the table.

The International RiverFoundation is proud to have the International Riversymposium as one of our flagship programs. This year's theme of 'Embracing Innovation' was a natural choice, helping to inspire delegates to move beyond 'business as usual' approaches and encourage fresh and novel thinking.

This year, we have introduced Learn-Inspire-Transform (LIT) sessions to our program to increase engagement, enable knowledge transfer and effect real, tangible outcomes stemming from Riversymposium dialogue, which is so valuable in many ways. Ultimately, the program has been designed to be inclusive and accessible across all sectors, with many opportunities to contribute, network and learn from one another.

We look forward to you all joining us at our Gala Dinner on Tuesday—a night of fun, networking and celebration as we present a number of prestigious IRF awards. This year, we will be announcing the winners of two Riverprizes: the Bert and Vera Thiess Foundation Australasia Riverprize, and the inaugural Asia Riverprize. We thank the Bert and Vera Thiess Foundation and the Australian Water Partnership for their support of these prizes. For our up and coming river champions, we will also award the Vera Thiess Fellowship for Women, sponsored by the Bert and Vera Thiess Foundation, and the Emerging River Professional Award, sponsored by OceanaGold Corporation. We congratulate all our finalists on their remarkable and inspirational achievements.

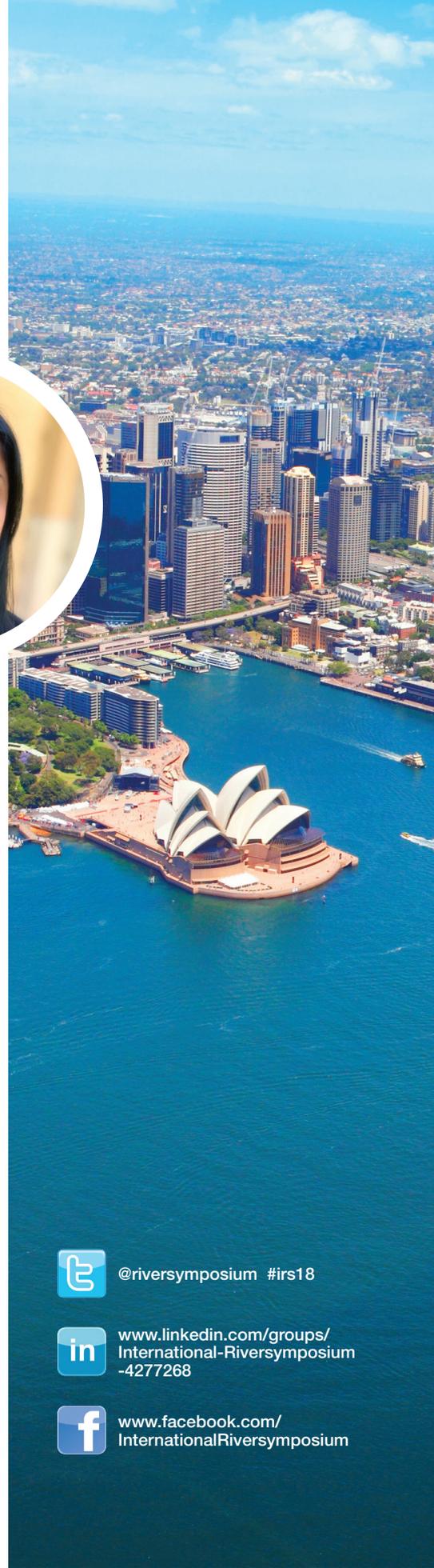
A very warm welcome also goes out to our Riverprize alumni representatives from across the world who are joining us this week. After 19 years of awarding Riverprizes across various geographical regions, we are fortunate enough to have an impressive global network of river experts who remain connected to the IRF. The formalising of our alumni network is well underway and we look forward to developing this further over the coming months.

To all our delegates, sponsors, speakers, special guests, emerging professionals, partners, colleagues and friends, thank you again for coming along. Please come and say hello to myself and the IRF Board and team this week, and we hope you enjoy the 21st International Riversymposium.



Dr Eva Abal

CEO, International RiverFoundation



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Program

Sunday 14 October 2018

1430 – 1700	EWPP Meet and Greet THIS IS AN INVITATION ONLY SESSION <i>Convenor: Vanh Mixap</i>
1800 – 2000	Welcome Function 2 hr Sydney Harbour Cruise (\$100) Clearview Cruise Boat, Departing Darling Island Wharf. Drinks and canapes included. This cruise will give delegates the opportunity to network and meet each other prior to the official start of the conference while taking in the beautiful scenery around the iconic Sydney Harbour.



Monday 15 October 2018

0900 – 1030	Opening Ceremony Welcome to Country Michael Wilson, Assistant Secretary, Governance, Fragility and Water Branch, Australian Department of Foreign Affairs and Trade Mr Roderick Simpson, Environment Commissioner, Greater Sydney Commission Keynote Prof Rebekah Brown (Monash University): Enabling an institutional ecosystem of effort to improve human and environmental health in urban informal settlements <i>Chair: Dr Eva Abal, CEO, International RiverFoundation</i>				
North wharf					
1030	Morning tea				
Room	North 1	North 2	Signorelli	Parkview 1	Parkview 2
	Integrated River Basin Management <i>Simon Walpole</i>	Murray Darling Basin (Australia) <i>Rene Woods</i>	Engagement, Inclusiveness and Ethics <i>Marganita Da Cruz</i>	Rivers by Design <i>Peter Morison</i>	Environmental and Cultural Flows <i>Joanna Taylor</i>
1100	Quantifying uncertainty in nutrient load exports from diffuse landuses to waterways and estuaries <i>Jordan, Phillip - HARC, Australia</i>	The Murray-Darling Basin Plan – implementation update <i>Binning, Carl - Murray-Darling Basin Authority, Australia</i>	Building bridges with the Pasig River community <i>Cabriole, Marie Aislinn - Vera Thiess Fellowship, Philippines</i>	Corridors of concrete: where to invest in naturalising stormwater channels <i>Ho, Jonathan - Alluvium Consulting</i>	The Brisbane Declaration and Global Action Agenda on Environmental Flows (2018) <i>Arthington, Angela - Griffith University</i>
1115	Dealing with constraints on the implementation of integrated and innovative river management <i>Salt, Beth - Georges Riverkeeper, Australia</i>	The ethics of water management: the role of independent experts and civil society in upholding – and reforming – the law <i>Carmody, Emma - EDO NSW, Australia</i>	Inclusive engagement of vulnerable river basin communities in riverbed farming improves economic leadership <i>Gurung, Hari - HELVETAS Swiss Intercooperation, Nepal</i>	River Corridor & Natural Character Management of Rivers in New Zealand <i>Williams, Gary - Waterscape, New Zealand</i>	Enabling an Indigenous community to inform environmental flow setting processes: Results from cultural flow preference studies undertaken in New Zealand <i>Tipa, Gail - Tipa & Associates, New Zealand</i>
1130	Quantitative mapping and monitoring of hydrological ecosystem services to improve river basin management <i>Ha, Lan Thanh - Institute of Water Resources Planning, Ministry of Agriculture and Rural Development, Viet Nam</i>	Looking forward: Exploring innovation in the Murray-Darling Basin <i>Sengupta, Ashmita - CSIRO, Australia</i>	River Olympiad: Educating and engaging youth <i>Rokonuzzaman, Sheikh - Riverine People, Bangladesh</i>	Basin Futures – A Frugal Innovation for Basin Scale Water Resource Assessments <i>Parashar, Amit - CSIRO, Australia</i>	Talking together, working together, walking together <i>Mona Liddy, Michael Douglas - University of Western Australia/ Tjuwalyn Wagiman Aboriginal Corporation</i>
1145	Protecting river catchments and the Great Barrier Reef following flood events <i>Ivezich, Misko - Alluvium Consulting Australia</i>	Novel evapotranspiration model to inform future management using past riparian vegetation trends <i>Doody, Tanya - CSIRO, Australia</i>	A framework for water resource planning through community engagement: A case of inter-state boundary conflict in India <i>Neog, Kangkanika - Council on Energy, Environment and Water, India</i>	From an objective failure to a framework for evidence-based stormwater policy <i>O'Neill, Andrew - Healthy Land and Water, Australia</i>	Do environmental flows in Australia have a public relations problem? <i>Hanasz, Paula - independent consultant, Australia</i>
1200 – 1215		What can predictive eco-hydrology tell us to help inform water management in the Basin? <i>Stratford, Danial - CSIRO, Australia</i>	Inclusive civil society participation in water governance in the Mekong <i>Sim, Socheata - OXFAM, Cambodia</i>	Landholders driving change: designing cost-effective approaches to remediate large-scale dispersive erosion gully features on grazing lands <i>Lucas, Rohan - Alluvium Consulting Australia</i>	The path to water sovereignty - Cultural Flows in action <i>Mooney, Will - Murray Lower Darling Rivers Indigenous Nations, Australia</i>
1230	Lunch				

 Networking	 Plenary	 Session	 Learn-Inspire-Transform
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Monday 15 October 2018

Room	North 1	North 2	Signorelli	Parkview 1	Parkview 2
	Achieving Sustainable Development Goal 6: Targeting Nexus (DFAT Sponsored LIT Session) (PART 1) <i>Russell Rollason</i>	Traditional Knowledge and Cultural Heritage <i>Will Mooney</i>	Engagement, Inclusiveness and Ethics <i>Paula Hanasz</i>	Wetlands <i>Lisa Thurtell</i>	International RiverFoundation Alumni <i>Tara Davis</i>
1330	Achieving the six targets under SDG 6 provides significant opportunities to contribute to other SDG goals. The water-food-energy- climate change –peace etc nexus presents the challenge of focussing to have impact but recognising that water also provides opportunities for more integrated planning to address socio-economic and environmental issues that depend on water. The workshop will explore the nexus issues through activities targeting each of the six targets under SDG6. This session will include views from the field in India and Cambodia as well discuss how gender and social inclusion is important to delivering on improved sustainable and equitable water management. An outline of DFAT's new Global Water Security Initiative will also be presented.	Using vulnerability assessments to design a "big river" flow studies in catchments involving multiple indigenous groups <i>Tipa, Gail - Tipa & Associates, New Zealand</i>	Delivering priorities for the Gippsland lakes through partnerships <i>Phillipson, Sean - East Gippsland Catchment Management Authority, Australia</i>	Designing A Bird Airport – An innovative ecosystem for migratory shorebirds under threat from habitat loss <i>Knights, David - Mcgregor Coxall, Australia</i>	THIS IS AN INVITATION ONLY SESSION Over the last 6 months IRF has supported development of an Alumni Network, which includes all past international and regional Riverprize winners and finalists. A team of a dozen Alumni across the globe have served as steering committee members to help create a foundation and framework for the new network. A draft Alumni Network "Charter" has been produced by the committee for the greater Alumni community to finalize during the Special Session. This will be an interactive workshop for Alumni participating in person and virtually to develop a year-one work plan for the network, prioritizing specific services and coming up with discrete next steps. The Special Session is invite-only for IRF Alumni, board and staff and will be closed to outside participation.
1345		Water resource development as opportunities to strengthen co-existence: Learnings from Indigenous Traditional Owners of the Mitchell Catchment, Queensland <i>Lyons, Illisapeci - CSIRO, Australia</i>	The Truckee River Basin: Collaboration out of Necessity <i>Loux, Jeff - Town of Truckee, United States</i>	Rigorous science helps develop Barwon-Darling Valley Floodplain Management Plan to maintain flood connectivity to important wetlands and riverine ecosystems <i>Hunter, Simon - NSW Office of Environment and Heritage, Australia</i>	
1400		Traditional knowledge of Carps Egg collection and livelihood status of egg collector in the Halda River: A natural fish spawning heritage of Bangladesh <i>Kibria, Md. Manzoorul - University of Chittagong, Bangladesh</i>	Participatory research of public space in the fluvial landscape of the city of Valdivia, Chile. <i>Lehner, Daniela - Instituto de Arquitectura y Urbanismo. Universidad Austral de Chile</i>	Monitoring inundation extents from space: evaluating outcomes of environmental watering in floodplain wetlands <i>Thomas, Rachael - NSW Office of Environment and Heritage, Australia</i>	
1415		Gayini Nimmie-Caira: large-scale cultural and ecological restoration in NSW, Australia. <i>Woods, Rene - Nari Nari Tribal Council, Australia</i>	Enhancing integrated river management for sustainable communities development, long-term sustainability, healthy river ecosystem, capacity building. <i>Harris, Sylvester P - Poverty Reduction Initiative (PORIN), Liberia</i>	Using technology and rural floodplain management to help future-proof flood-dependent wetlands <i>Taylor, Joanna - Office of Environment and Heritage, Australia</i>	
1430			Water and Environmental Management Crisis in Rohingya Camps <i>Kabir, Farah - ActionAid Bangladesh (Ends 1415)</i>		
1500	Afternoon tea				
1530 – 1700	Achieving Sustainable Development Goal 6: Targeting Nexus (DFAT sponsored LIT session) (PART 2)	How Much is a River Worth to a City? (Sydney Water Sponsored LIT session) <i>Phillip Birtles</i>	Mapping of indigenous and cultural values of water and river systems; examples from the Murray Darling and Lake Eyre Basins (Australia).	Emerging River Professional Award (ERPA) finalist presentations <i>Marie Aislin Cabriole</i>	Establishing and Maintaining Riverprize Twinning Partnerships – Recipes for Success <i>Carla Littlejohn</i>
	See Part 1	As we plan for Australian cities to rapidly grow and density, do rivers, streams and estuaries really add to the quality of life for residents and workers? Will expensive waterway improvement works ever be considered seriously against major city infrastructure like rail and road projects? How do we appropriately account for all the "intangibles" a healthy urban waterway provides? We take some economic experts from pioneering work in both Sydney and Melbourne and put them together for a provocative and enlightening panel session.	Indigenous peoples often visualise and understand their rivers and water resources in a way that is quite different from modern hydrological and spatial mapping. Despite its value to water management, mapping of that visualisation, and associated recording of cultural value, is rarely done in a way that adequately reflects this knowledge and also provides a resource for indigenous communities. This session will look at two examples from Australia where that has been attempted and will encourage others with similar interests and experiences to share experience.	Mapping of Diffuse Pollution Risk for Prioritisation of Ecological Infrastructure Protection <i>Nsibirwa, Nantale - University of KwaZulu-Natal, South Africa</i> Chain of Ponds - Moonee Ponds Catchment Collaboration <i>Francis, Julie - Melbourne Water / City of Melbourne, Austria</i> Contributing on the development of an Integrated Water Management System, in the peasant community of San Pedro de Casta, Lima Peru. <i>Fernández López-Lavalle, José Antonio - AQUAFONDO, Peru</i>	As part of the Thiess Riverprize, winners may be eligible to receive funding to establish a Twinning project with another river basin organisation or community that would benefit from their experience and expertise. The IRF assists by facilitating these projects and acting as a catalyst to assist twinning partners with seed funding and matching and providing networking opportunities. Riverprize Twinning provides an exchange of experience and skills based around personal relationships and can range from building capacity for on ground restoration activities, to mentoring and building capacity within organisations to improve river frameworks and policies. This is not an easy task and it is often hard to establish relationships and maintain momentum. Successful twinning requires a combination of committed project champions, hard work, enthusiasm and innovative funding mechanisms. In this LIT session, we invite representatives from the Tweed-Kenya Mentoring Program and Sunshine Coast Rivers Initiative to talk about the ingredients for establishing and maintaining successful twinning programs. Participants will hear about realities and challenges and how our partners overcame these to deliver their programs and will have an opportunity to engage in active discussions to assist with identifying the skills, knowledge, tools and commitment needed to establish successful, long-term twinning relationships. The session will include 40 minutes of presentations, followed by 50 minutes of interactive panel Q&A session.
1830 – 2030	Diversity in Water (\$80) Soho Room, Doltone House, Jones Bay Wharf <i>Lucy Marshall</i>				

Program

Tuesday 16 October 2018

0700 – 0830	EWPP Water Wisdom Breakfast THIS IS AN INVITATION ONLY EVENT <i>Convenor: Vanh Mixap</i>				
0900 – 1030 North wharf	Keynote Wouter T Lincklaen Arriëns: TransformationFirst.Asia Pte Ltd: Starting with Transformation: How Leaders Take a Personal Approach Keynote Dr Ir. Khin Ni Ni Thein: National Water Resources Committee, Myanmar A case study of the Ayeyarwady River <i>Chair: Philip Weller</i>				
1030	Morning tea				
Room	North 1	North 2	Signorelli	Parkview 1	Parkview 2
	Integrated River Basin Management <i>Fiona Chandler</i>	River Science <i>Tanya Doody</i>	Water Security, Climate Resilience and Flooding <i>Piet Filet</i>	Water for Industry and Agriculture <i>Mahala McLindin</i>	GEF/IRF IW:LEARN Twinning Exchange <i>Carla Littlejohn</i>
1100	Lessons from the Aorere River: the New Zealand Riverprize Winner <i>Edgar, Nick - NZ Landcare Trust, New Zealand</i>	Waterbird recruitment and movements: New information for water and wetland managers. <i>McGinness, Heather - CSIRO, Australia</i>	Brisbane Citywide Overland Flow Path Modelling and Flood Risk Mapping <i>Casabella, Joe - Brisbane City Council, Australia</i>	Embracing innovation proves a win-win-win for rivers, irrigators & communities <i>Strang, Meg - NSW Dept of Primary Industries - STBIFM</i>	THIS IS AN INVITATION ONLY SESSION The Global Environment Facility (GEF) is a global partnership among 183 countries, international institutions, NGOs and the private sector to address global environmental issues, while supporting national sustainable development initiatives. GEF International Waters: Learning Exchange and Resource Network (IW:LEARN) offers stakeholders in GEF IW, the opportunity to request support for learning exchanges across GEF IW projects and regions. The International Riverfoundation (IRF) is partnering with GEF IW:LEARN to deliver a number of twinning exchanges between GEF and IRF partners who would mutually benefit from each other's knowledge and experience. The purpose of this session is to facilitate discussion and workshop ideas on how each of the partners can establish a twinning relationship. The key outcome of the workshop will be delivery of a draft 'Twinning Proposal' for each partner.
1115	Managing the Brahmaputra River – A Bangladesh Perspective <i>Rahman, Md. Habibur - Bangladesh Water Development Board, Bangladesh</i>	Measuring productivity of Australian tropical estuaries using standing stock analysis <i>Fries, Jakob - James Cook University/ Queensland government, Australia</i>	The Flood Resilient Homes Program – empowering residents to live through floods <i>Casabella, Joe - Brisbane City Council</i>	Transforming agriculture in the Pilbara through river and groundwater-fed irrigation <i>Dowsley, Kate - Jacobs, Australia</i>	
1130	River Rejuvenation: An innovative methodology of planning and implementation as applied in Kumudvathi river-basin, Bengaluru Rural, India <i>Yale, Lingaraju - International Association for Human Values, The Art of Living, India</i>	An analysis of ecological effects on intake areas along the way of large cross-basin water transfer projects <i>Yin, Jing - China Institute of Water Resources and Hydropower Research, China</i>	A systems approach for stress-testing and maximising the resilience of climate-sensitive systems <i>Westra, Seth - University of Adelaide, Australia</i>	Water-Energy-Food Nexus Assessment in the Lower Mekong Basin <i>Sridhar, Venkataramana - Virginia Tech, United States</i>	
1145	An innovative approach to collaborative natural resource management in the Bremer River catchment <i>Bob Hampson &, Danielle Andlemac - Bremer River Fund, Auspiced by the International RiverFoundation, Australia</i>	Spatio-Temporal Variation of Zooplankton Community of the Natural Carp Spawning Ground of Halda River with Relation to Physico-Chemical Factors <i>Kibria, Md. Manzoarul - University of Chittagong, Bangladesh</i>	Upgrading the seasonal streamflow forecast service for Australia: transition from seasonal to multi-month forecasts <i>Mekanik, Fatemeh - Bureau of Meteorology, Australia</i>		
1200	Numerical Modelling for Planning and Hydraulic Design of Road and Associated Road Structures in Complex Physical and Hydrological Settings in Bangladesh <i>Kanungoe, Pintu - River Research Institute, Bangladesh (End 1215)</i>				
1230	Lunch				

Networking
 Plenary
 Session
 Learn-Inspire-Transform

Tuesday 16 October 2018

Room	North 1	North 2	Signorelli	Parkview 2	
	Water Sensitive Cities <i>David Knights</i>	Water and SDGs interactions – creating a positive-sum game (CSIRO Sponsored LIT Session) - Part 1 <i>Eva Abal</i>	Co-designed pathways to deliver integrated catchment & flood solutions (Suncorp/Watertech Sponsored LIT session) <i>Piet Filet</i>	Sustainable Hydropower <i>Sridhar Venkataramana</i>	
1330	Creating Water Sensitive River Cities <i>Chandler, Fiona - Alluvium Consulting Australia, Australia</i>	Water is a currency that links to nearly every SDG, and a critical determinant of success in achieving them. There is a need for water centric SDG frameworks that allows a user to understand the interactions and implications of applying a set of policies and regulations. The outcomes can be positive or negative, primarily driven by resources available and the ability to identify and apply relevant context setting.	The impetus to build resilient healthy catchments & communities is mounting and is critical if the impacts from an ever-increasing frequency of flood events are to be managed. In this workshop we will demonstrate how a co-designed pathway to build resilience to floods has been used by agencies & local communities to develop catchment-based solutions in Queensland, Australia.	Sustainable hydropower development and governance in the context of transboundary water resources management: A perspective from the Mekong River Commission <i>Pham Tuan, Phan - Mekong River Commission Secretariat</i>	
1345	Swimming in Urban Waterways – aspirations, expectations and the bite of reality <i>Weber, Tony - Alluvium Consulting Australia, Australia</i>	In this LIT session, we invite our participants to an interactive positive sum-game set up exploring the interplay between SDGs using water as a common currency. The aim is to identify positive and negative interactions highlighting how different water policy choices may affect various SDG objectives. Via two contrasting case-studies, we explore the benefits and trade-offs under selected intervention scenarios, with the goal to identify the commonalities and potential divergence of outcomes between the two case studies.	The concept of a Fluvial Transect developed in the SEQ WaterFutures project in 2016, using a design charrette methodology, has been the foundation for this approach. We will outline the steps of: • use a visual approach to identifying problems • collaboratively develop options through drawing & discussion • build a suite of preferred solutions • how this is an alternate to a technical lead flood modelling approach that too often limits this diversity of participation.	Cultural Flow and Hydropower Development: Case of conflict in the Bhilangana River Basin, Uttarakhand, India <i>Shrestha, Rashmi - Icimod Water And Air Department, Nepal</i>	
1400	The future of urban rivers in the burgeoning megacities of Australia <i>Morison, Peter - Alluvium Consulting, Australia</i>	The session structure will involve context and problem definition remarks from key individuals, and setting up a skeleton water-centric SDG framework. The participants will work in teams using the skeleton framework to explore benefits and trade-offs in the two case-studies. Through their collective experiences, we anticipate an evolution towards an adaptive framework that better accounts for both co-benefit and trade-off interactions and allows the user to shift decision making towards a positive-sum outcome.	Participants will then have an opportunity to apply this approach, with guidance from the workshop team, in small group activity to catchments they know. A recent application of this approach to build "A connected catchment" in the Burnett Catchment Flood Resilience Strategy will also be presented, showing footage of the approach, extracts from a large catchment base map (9m by 9m) and steps to make this partnership approach match the local risks that need to be overcome. The experienced project team of collaboration, catchment and resilience specialist will share their tips on how this approach can work in any catchment and build a pathway of that delivers locally designed solutions for their communities well-being and safety.	An evaluation system of river basin sustainable development <i>Liu, Chunna - China Institute of Water Resources and Hydropower Research, China</i>	
1415	Phosphorus offsetting: How new urban growth can support phosphorus reduction and innovative stormwater management. <i>Longstaff, Ben - LSRCA, Canada (End 1430)</i>			Research on key technologies and applications of alternative habitats protection in tributary <i>Wu, Sainan - China Institute of Water Resources and Hydropower Research, China (End 1430)</i>	
1500 Afternoon tea					
Room	North 1	North 2	Signorelli	Parkview 1	Parkview 2
	Riverprize Finalists <i>Deb Nias</i>	Water and SDGs interactions – creating a positive-sum game (CSIRO Sponsored LIT Session) - Part 2 <i>Eva Abal</i>	Achieving River Resilience for Future Generations (SEQ Council of Mayors Sponsored LIT session) <i>Kaye Cavanagh</i>	Governance, International Relations and Leadership <i>Phan Pham Tuan</i>	Technology Innovation in Restoration and Monitoring <i>Phillip Jordan</i>
1530		See Part 1	How resilient are our rivers as we head towards an often-uncertain future? South East Queensland (SEQ) is facing this issue with its population forecast to reach 5.3 million people by 2041, a deteriorating catchment and a changing climate. SEQ has a reputation as a liveable destination due to its subtropical climate however, the severe flooding events of 2011 and 2013 heavily impacted the region with loss of life, interruptions to water supply, widespread infrastructure damage and impacts on Moreton Bay. The events led Council of Mayors (SEQ) to advocate for the establishment of a strategic agreement between leaders of government, councils and water service providers to work collaboratively to protect the region's rivers and catchments. The South East Queensland Resilient Rivers Initiative (SEQ RRI) has demonstrated an effective approach to coordinating action across the region and across ten Councils.	The Yarra River Protection Act (Willip-gin Birrarung murrn) – first steps in implementing a bold act <i>Kelly, Andrew - Yarra Riverkeeper Association, Australia</i>	Applying drone tech to river restoration, design monitoring and reporting <i>Parker, Nathaniel - AirBorn Insight, Australia</i>
1545			During this session we will explore the resilient rivers concept both in Australia and internationally. Carla Littlejohn will provide an overview of the proposed Resilient Rivers Blueprint, aiming to improve the capacity of rivers and communities to recover from disturbances. Organisations from around the world will be given an opportunity to commit to transforming their rivers into resilient rivers. Mayor Karen Williams, Board member of Council of Mayors (SEQ) and representing the SEQ Resilient Rivers Taskforce, will provide an overview of the SEQ RRI case study. Diana Dawson will then provide details of implementation. The session will include presentations, followed by an interactive panel Q&A session, whereby participants are invited to provide input and share their experiences.	The independent voice of the river – A comparison between the Yarra River's Birrarung Council and the human face of the Whanganui River, Te Pou Tupa <i>O'Bryan, Katie - Monash University, Australia</i>	An Innovative Water Control Room For The Goulburn Broken Catchment Management Authority – Turning Data Into Information And Knowledge <i>Jackson, Brian - Water Technology Pty Ltd, Australia</i>
1600				River Governor System Model and effect of the water environment administration system in China <i>Shuang, Zhang - China Institute of Water Resources and Hydropower Research, China</i>	Scaling up water quality simulations in space and time <i>Joehnk, Klaus - CSIRO Land and Water, Australia</i>
1615 – 1700				Water resources management in an international basin: Inco-Maputo Gyeedu-Ababio, Thomas - Inkomati-Usuthu Catchment Management Agency, South Africa (End 1630)	Streamlining and automating environmental Reporting <i>Johnston, Nathan - Fitzroy Partnership for River Health, Australia (End 1630)</i>
1815 – 2200	Riverprize Gala Dinner Heritage wharf, Doltone House. Cost included in full registration.				

Program

Wednesday 17 October 2018

0900 – 1030 North wharf	Keynote Professor William Dennison, University of Maryland: Creating and communicating environmental intelligence 2018 Australasia RiverPrize Winner 2018 Asia RiverPrize Winner <i>Chair: Deb Nias</i>			
1030	Morning tea			
Room	North wharf	Signorelli	Parkview 1	Parkview 2
	SDG 6 – Implementing the Targets (UNSW Sponsored LIT Session) - Part 1 <i>Gregory Leslie</i>	Communicating Science <i>Bob Hampson</i>	Technology Innovation in Restoration and Monitoring <i>Jeff Loux</i>	Science to Policy <i>Mark Drury</i>
1100	The world faces major challenges for sustainability including widespread loss of ecosystem services, resulting from unprecedented rates of biodiversity loss. This is straining planetary boundaries for human existence, including global freshwater use, which has likely already exceeded its planetary boundary. The world's freshwater realm is most severely affected, where the links between ecosystem function and services are critical for human wellbeing. Following the United Nations Rio+20 Summit in Brazil in 2012, the U.N. advanced the 2030 Agenda for Sustainable Development, with the goal to inspire a global transition toward a sustainable and resilient planet through bold and transformative change, requiring a key focus on life's support systems and alleviation of poverty. This session will use a river basin management approach that considers the ecosystem, governance, and legal frameworks when using global indicators and supporting United Nations Sustainable Development Goal 6 (Water and Sanitation) to meet its targets. We will begin with a presentation of the work already done on four of the indicators supporting the targets, followed by a sharing and discussion of the challenges and opportunities for implementation in different river basins of the world. Attendees will be able to contribute their personal experiences and expertise in relation to key challenges such as governance and data availability.	An innovative, cloud based, property flood reporting portal for Greater Shepparton City and Goulburn Broken CMA <i>Jackson, Brian - Water Technology Pty Ltd, Australia</i>		Predicting and regulating boat-generated waves within rivers and sheltered waterways <i>Macfarlane, Gregor - University of Tasmania, Australia</i>
1115		Using fuzzy cognitive maps to visualize and utilize indigenous knowledge and science in freshwater management <i>Tipa, Gail - Tipa & Associates, New Zealand</i>	Cheaper by choice: The hunt for affordable nitrogen sensors <i>Hammill, Ben - Department of Environment and Science, Australia</i>	Science-policy interface: Significance of women's Indigenous knowledge systems for adaptation to floods in Brahmaputra River <i>Katyaini, Suparana - Indian Institute of Technology Delhi, India</i>
1130		Augmented reality keeps rivers free-flowing <i>Blancard, Catherine - WWF, United States</i>	The Gingham Watercourse – How a biplane aided restoration <i>Albertson, Daryl - Mr, Australia</i>	Undermining the world's rivers: Global review of the impacts of sand mining and potential solutions <i>Goichot, Marc - WWF</i>
1145		The effectiveness of report cards in influencing decision making and behaviour change: A comparative study of SEQ and the GBR <i>Greenlee, Madeleine - Bligh Tanner</i>	Utilising remote sensing techniques to identify irrigated crop areas and off river storages <i>Lu, Yi - NSW Department of Industry, Australia</i>	A synthesis of knowledge to support the assessment of impacts of water resource development to environmental assets in northern Australia <i>Pollino, Carmel - CSIRO, Australia</i>
1200	Effective biological indicators for river health report cards <i>Flint, Nicole - CQUniversity, Australia (End 1215)</i>	Development of metrics and an electronic platform to allow rapid visual assessment of urban streams for multiple values <i>Reid, David - Georges Riverkeeper, Australia (End 1215)</i>		
1230	Lunch			



Wednesday 17 October 2018

Room	North wharf	Signorelli	Parkview 1	Parkview 2
	SDG 6 – Implementing the Targets (UNSW Sponsored LIT Session) - Part 2	Taking the urban river plunge - how we are making the Parramatta River swimmable again - Parramatta River Catchment Group LIT Session <i>Phillip Birtles</i>	Inclusive approaches to integrate knowledge streams, build environmental intelligence, and engage stakeholders <i>Simon Costanzo</i>	River City Economies (Brisbane City Council Sponsored LIT Session)
1330	See Part 1	<p>The Parramatta River is the main river flowing into the iconic Sydney Harbour. It flows through the heart of one of the fastest growing regions in Australia, with the burgeoning metropolis of Parramatta now dedicated as the 'Central River City' in the three city vision for greater Sydney. This change brings with it a major opportunity in how we view and manage the river going forwards.</p> <p>In 2014, the Parramatta River Catchment Group launched the mission to make the Parramatta River swimmable again by 2025. At the time, this was greeted with a mix of responses, from 'wow, what an ambitious and exciting mission' to 'you have to be joking, who would want to swim in that?'</p> <p>Four years on, we now have a well-researched and supported ten step plan for how this mission will be achieved. We also have a number of success stories that have built support and confidence along the way. Importantly, we can also already swim at four sites along the river.</p> <p>During this LIT session, participants will hear about how we have developed the Parramatta River Masterplan, our ten step plan to making the river swimmable again. During the panel session, we will encourage others to ask questions and share their own experiences and insights.</p> <p>Through this, we hope to inspire new approaches to urban river management and community engagement, and learn from each other to help further transform the way we view and manage the Parramatta River and other urban rivers across the world.</p>	<p>Identifying river restoration and conservation goals that are acceptable to all sectors requires meaningful engagement from all relevant stakeholders, but incorporating knowledge streams from these varied perspectives is challenging. Developing a river basin report card has been used as a catalyst to incorporate these knowledge streams and foster commitment to improving conditions from all relevant sectors. This process increases local capacity for environmental decision making and represents a pathway to link local priorities to national, regional, and global initiatives (e.g. Sustainable Development Goals).</p> <p>This session aims to investigate opportunities to insert "intelligent" reporting of information so that local communities can benefit and respond to national, regional and global findings. This will be a fun and interactive session including role-playing and group discussions using River Basin Health as the session focus. Participants will role play ten different knowledge providers: 1) observational knowledge (e.g., fisher), 2) social network knowledge (e.g., community leader), 3) monitoring knowledge (e.g., resource agency scientist), 4) indigenous knowledge (e.g., local elder), 5) event knowledge (e.g., long term resident), 6) governance knowledge (e.g., local mayor), 7) communication knowledge (e.g., news reporter), 8) emotional knowledge (e.g., poet/artist), 9) ecological knowledge (e.g., ecologist), 10) business/corporate knowledge (e.g., CEO of water provider).</p> <p>Participants will also identify impediments and propose solutions to "intelligent environmental reporting" so that local stakeholders are able to better manage their local environment.</p>	<p>Cities have been built alongside rivers and their floodplains. It's our rivers that shape a city's urban landscape, economy and culture. At the same time, the city reshapes its river. Cities have utilised, modified, and engineered their rivers, altering ecologies and creating new landscapes in the process of urbanisation.</p> <p>A city's economy is underpinned by its natural resources, and rivers are at the heart a city's economy. From water supply to transport corridors, cities rely on rivers. In contrast, rivers can be costly in terms of flood impacts, clean up and recovery.</p> <p>To attract investment and improve liveability, many cities are revitalising their riverfronts which presents opportunities to grow economies, reenergise communities and bring nature closer people.</p> <p>Three river cities will describe their relationship to their river and how it's shaped their city's economy and lifestyle. Brisbane, Australia, San Antonio, USA (2017 International River prize winner) and Vienna, Austria.</p> <p><i>Speakers:</i> <i>Shawn Day, Economic Development Manager, Brisbane City Council</i> <i>Suzanne Scott, General Manager, San Antonio River Authority</i> <i>Walter Kling, Deputy Managing Director, Vienna Waterworks</i></p>
1500	Afternoon tea			
1530 – 1630	Plenary session – Closing Ceremony Keynote Panel Discussion 2019 International Rivers symposium announcement <i>Chair: Paul Greenfield</i>			
1800 – 2000	EWPP Celebrations Dinner THIS IS AN INVITATION ONLY SESSION <i>Convenor: Vanh Mixap</i>			

Thursday 18 October 2018

0800	Study Tours
0930	Tomago Wetland – full day tour of award winning wetland restoration (\$85 + lunch costs). Duration 0800–1800
0930	Our Living River Tour – Making Parramatta River Swimmable Again (\$50 including lunch). Duration 0930–1600
0930	Anandale Morning Walk – 1/2 day walking tour. Participants will need Opal Travel Card with at least \$10 credit (free + morning tea costs). Duration 0930–1330



Networking



Plenary



Session



Learn-Inspire-Transform

Keynote speakers



Professor Rebekah Brown

Director, Monash Sustainable Development Institute, Australia
Program Director, Revitalising Informal Settlements and their Environments (RISE)

Enabling an Institutional Ecosystem of Effort to Improve Human and Environmental Health in Urban Informal Settlements

Over one billion people live in urban informal settlements globally, where polluted water and inadequate sanitation are the leading causes of preventable diseases. Rapid urbanisation exacerbates the inextricably linked challenges of sanitation, water provision, environmental degradation, and public health in these contexts, and conventional solutions are simply insufficient.

If present circumstances are not radically changed, projections indicate that more than three billion people will live in these settlements by 2050. This new normal will require innovative social and institutional transformations to accelerate transitions to more liveable, resilient and sustainable cities for all.

To help meet this challenge, Professor Rebekah Brown is leading an ambitious global research program – Revitalising

Informal Settlements and their Environments (RISE) – in 24 communities in Makassar, Indonesia and Suva, Fiji. RISE is endeavouring to assemble and mobilise an institutional ecosystem of effort to revitalise the environment and, in doing so, improve the health and well-being of some of the world's most vulnerable people.

Working alongside communities, governments, local leaders and partner institutions, the interdisciplinary research program aims to provide new evidence that a localised, water sensitive cities approach to water and sanitation can deliver sustainable planetary health improvements. Pioneered by Monash University and proven in developed contexts, RISE is taking this innovation and co-designing bespoke solutions for informal settlements to contribute to the global sustainable development principle of leaving no one behind.

Presenting the conception and progress of RISE, Professor Brown will illustrate the power of interdisciplinary research and the importance of embracing innovation to enable an institutional ecosystem of effort to address grand sustainable development challenges.

0945, Monday 15 October



Wouter T. Lincklaen Arriëns

Founder and CEO, TransformationFirst.Asia Pte Ltd

Starting with Transformation: How Leaders Take a Personal Approach

Even without the challenge of embracing innovation, water managers have a tough job. Working in complex environments that are full of uncertainties, they engage with stakeholders over whom they have little or no control. Planning projects is already challenging, let alone implementing them successfully.

Fortunately, most water professionals become competent in knowing what it takes to restore and maintain the health of their river. Many, however, have yet to learn how to lead the necessary changes in organisations, including their own. While knowing a lot

about water, they don't know enough about people, how to work effectively with different people, and how to inspire people to embrace innovation.

To embrace innovation is to embrace change. People often resist change. To inspire others, leaders need to work on themselves first, like we learn in the airplane to put our own oxygen mask before helping others. Changing ourselves is called transformation, and water leaders start their transformation by taking a personal approach.

Wouter will review three common leadership problems and their solutions, so that water leaders can start practicing right away during and after the Symposium.

0900, Tuesday 16 October

Australia

water partners for development

Enhancing the sustainable management of water in the Indo-Pacific and beyond



The Australian Water Partnership is an Australian Government initiative bringing together over 180 public and private organisations with international development partners.

We work in response to demand for collaboration and share resources and lessons learned in extreme drought, climate change, and more than three decades of water reform.

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One region, one voice

The Council of Mayors (SEQ) is Australia's largest regional advocacy body, representing the ten councils and more than three million residents in South East Queensland

resilientrivers.com.au



seqmayors.qld.gov.au

Council of Mayors
South East Queensland



Professor William (Bill) Dennison
Vice President for Science Applications,
University of Maryland Centre for
Environmental Science

**Creating and Communicating
Environmental Intelligence**

Environmental Intelligence is a system through which information about a particular region or process is collected for the benefit of improving ecosystem health. Traditionally, researchers collect data, develop models, and communicate results through well-established channels that are often ineffective at communicating results in a way that enables decision making and investment for ecosystem health.

Creating environmental intelligence has been facilitated by the dramatic expansion in data gathering capacity, novel funding schemes, and reporting mechanisms (e.g., report cards). Communicating environmental intelligence has been enhanced by innovations in data visualisation coupled with storytelling. Effectively combining the creation and communication of environmental intelligence can lead to improvements in ecosystem health.

0945, Wednesday 17 October



Dr Ir. Khin. Ni Ni Thein
Secretary of the Advisory Group and the
Member of the National Water Resources
Committee, Myanmar

**For Abstract information, please refer
to the conference app** (see page 22 for
instructions to access the app).

0945, Tuesday 16 October

Learn-Inspire-Transform sessions

1330 – 1700, Monday 15 October

Achieving Sustainable Development Goal 6: Targeting Nexus

Achieving the six targets under SDG 6 provides significant opportunities to contribute to other SDG goals. The water-food-energy- climate change –peace etc nexus presents the challenge of focussing to have impact but recognising that water also provides opportunities for more integrated planning to address socio-economic and environmental issues that depend on water. The workshop will explore the nexus issues through activities targeting each of the six targets under SDG6. This session will include views from the field in India and Cambodia as well discuss how gender and social inclusion is important to delivering on improved sustainable and equitable water management. An outline of DFAT's new Global Water Scarcity Initiative will also be presented.

Sponsored by



Australian Government
Department of Foreign Affairs and Trade

1530 – 1700 Monday 15 October

Emerging River Professional Award Finalists

The Emerging River Professional Award (ERPA), sponsored by OceanaGold Corporation, recognises, rewards and fosters those in the early stages of their careers in rivers. The award is presented to those who have demonstrated innovation, excellence and leadership in river, basin or river-dependent community management. During this session, our three 2018 ERPA finalists will present their work as the final phase of judging for the award.

Sponsored by



Establishing and Maintaining Riverprize Twinning Partnerships – Recipes for Success

As part of the Thies Riverprize, winners may be eligible to receive funding to establish a Twinning project with another river basin organisation or community that would benefit from their experience and expertise. The IRF assists by facilitating these projects and acting as a catalyst to assist twinning partners with seed funding and matching and providing networking opportunities. Riverprize Twinning provides an exchange of experience and skills based around personal relationships and can range from building capacity for on ground restoration activities, to mentoring and building capacity within organisations to improve river frameworks and policies. This is not an easy task and it is often hard to establish relationships and maintain momentum. Successful twinning requires a combination of committed project champions, hard work, enthusiasm and innovative funding mechanisms. In this LIT session, we invite representatives from the Tweed-Kenya Mentoring Program and Sunshine Coast Rivers Initiative to talk about the ingredients for establishing and maintaining successful twinning programs. Participants will hear about realities and challenges and how our partners overcame these to deliver their programs and will have an opportunity to engage in active discussions to assist with identifying the skills, knowledge, tools and commitment needed to establish successful, long-term twinning relationships. The session will include 40 minutes of presentations, followed by 50 minutes of interactive panel Q&A session.

Sponsored by



Mapping of indigenous and cultural values of water and river systems; examples from the Murray Darling and Lake Eyre Basins

Indigenous peoples often visualise and understand their rivers and water resources in a way that is quite different from modern hydrological and spatial mapping. Despite its value to water management, mapping of that visualisation, and associated recording of cultural value, is rarely done in a way that adequately reflects this knowledge and also provides a resource for indigenous communities. This session will look at two examples from Australia where that has been attempted and will encourage others with similar interests and experiences to share experience.

How much is a River Worth to a City?

As we plan for Australian cities to rapidly grow and densify, do rivers, streams and estuaries really add to the quality of life for residents and workers? Will expensive waterway improvement works ever be considered seriously against major city infrastructure like rail and road projects? How do we appropriately account for all the “intangibles” a healthy urban waterway provides?

We take some economic experts from pioneering work in both Sydney and Melbourne and put them together for a provocative and enlightening panel session.

Sponsored by



1330 – 1500, Tuesday 16 October

Co-designed pathways to deliver integrated catchment & flood solutions

The impetus to build resilient healthy catchments & communities is mounting and is critical if the impacts from an ever-increasing frequency of flood events are to be managed. In this workshop we will demonstrate how a co-designed pathway to build resilience to floods has been used by agencies & local communities to develop catchment-based solutions in Queensland, Australia.

The concept of a Fluvial Transect developed in the SEQ WaterFutures project in 2016, using a design charrette methodology, has been the foundation for this approach.

We will outline the steps of using a visual approach to identifying problems, collaboratively developing options through drawing & discussion, building a suite of preferred solutions and discussing how this is an alternate to a technical lead flood modelling approach that too often limits this diversity of participation.

Participants will then have an opportunity to apply this approach, with guidance from the workshop team, in small group activity to catchments they know.

A recent application of this approach to build “A connected catchment” in the Burnett Catchment Flood Resilience Strategy will also be presented, showing footage of the approach, extracts from a large catchment base map (9m by 9m) and steps to make this partnership approach match the local risks that need to be overcome.

The experienced project team of collaboration, catchment and resilience specialist will share their tips on how this approach can work in any catchment and build a pathway of that delivers locally designed solutions for their communities well-being and safety.

Sponsored by Suncorp and Watertech



1330 – 1700, Tuesday 16 October

Water and Sustainable Development Goals Interactions – Creating a positive-sum game

Water is a currency that links to nearly every SDG, and a critical determinant of success in achieving them. There is a need for water centric SDG frameworks that allows a user to understand the interactions and implications of applying a set of policies and regulations. The outcomes can be positive or negative, primarily driven by resources available and the ability to identify and apply relevant context setting.

In this LIT session, we invite our participants to an interactive positive sum-game set up exploring the interplay between SDGs using water as a common currency. The aim is to identify positive and negative interactions highlighting how different water policy choices may affect various SDG objectives. Via two contrasting case-studies, we explore the benefits and trade-offs under selected intervention scenarios, with the goal to identify the commonalities and potential divergence of outcomes between the two case studies.

The session structure will involve context and problem definition remarks from key individuals, and setting up a skeleton water-centric SDG framework. The participants will work in teams using the skeleton framework to explore benefits and trade-offs in the two case-studies. Through their collective experiences, we anticipate an evolution towards an adaptive framework that better accounts for both co-benefit and trade-off interactions and allows the user to shift decision making towards a positive-sum outcome.

Sponsored by



1530 – 1700, Tuesday 16 October

Achieving River Resilience for Future Generations

How resilient are our rivers as we head towards an often-uncertain future? South East Queensland (SEQ) is facing this issue with its population forecast to reach 5.3 million people by 2041, a deteriorating catchment and a changing climate.

SEQ has a reputation as a liveable

destination due to its subtropical climate however, the severe flooding events of 2011 and 2013 heavily impacted the region with loss of life, interruptions to water supply, widespread infrastructure damage and impacts on Moreton Bay.

The events led Council of Mayors (SEQ) to advocate for the establishment of a strategic agreement between leaders of government, councils and water service providers to work collaboratively to protect the region's rivers and catchments. The South East Queensland Resilient Rivers Initiative (SEQ RRI) has demonstrated an effective approach to coordinating action across the region and across ten Councils.

During this session we will explore the resilient rivers concept both in Australia and internationally. Carla Littlejohn will provide an overview of the proposed Resilient Rivers Blueprint, aiming to improve the capacity of rivers and communities to recover from disturbances. Organisations from around the world will be given an opportunity to commit to transforming their rivers into resilient rivers. Mayor Karen Williams, Board member of Council of Mayors (SEQ) and representing the SEQ Resilient Rivers Taskforce, will provide an overview of the SEQ RRI case study. Diana Dawson will then provide details of implementation.

The session will include presentations, followed by an interactive panel Q&A session, whereby participants are invited to provide input and share their experiences.

Sponsored by



Riverprize Finalists

The International RiverFoundation's *Riverprize* awards are the world's foremost award in river basin management. They recognise and reward organisations making waves in the sustainable management of the world's rivers, whether at the grassroots or transboundary level.

The prize rewards inspiring initiatives that implement integrated river basin management to restore and protect rivers, wetlands, lakes and estuaries.

In this session, you will hear inspiring stories from the finalists in the 2018 Australasia *Riverprize* and the 2018 Asia *Riverprize*.

Sponsored by Bert and Vera Thiess Foundation and Australian Water Partnership



1100 – 1500, Wednesday 17 October

Sustainable Development Goal 6 – Implementing the Targets

The world faces major challenges for sustainability including widespread loss of ecosystem services, resulting from unprecedented rates of biodiversity loss. This is straining planetary boundaries for human existence, including global freshwater use, which has likely already exceeded its planetary boundary. The world's freshwater realm is most severely affected, where the links between ecosystem function and services are critical for human wellbeing. Following the United Nations Rio+20 Summit in Brazil in 2012, the U.N. advanced the 2030 Agenda for Sustainable Development, with the goal to inspire a global transition toward a sustainable and resilient planet through bold and transformative change, requiring a key focus on life's support systems and alleviation of poverty.

This session will use a river basin management approach that considers the ecosystem, governance, and legal frameworks when using global indicators and supporting United Nations Sustainable Development Goal 6 (Water and Sanitation) to meet its targets. We will begin with a presentation of the work already done on four of the indicators supporting the targets, followed by a sharing and discussion of the challenges and opportunities for implementation in different river basins of the world. Attendees will be able to contribute their personal experiences and expertise in relation to key challenges such as governance and data availability.

Sponsored by



UNSW Sydney Global Water Institute

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1330 – 1500, Wednesday 17 October

Inclusive approaches to integrate knowledge streams, build environmental intelligence, and engage stakeholders

Identifying river restoration and conservation goals that are acceptable to all sectors requires meaningful engagement from all relevant stakeholders, but incorporating knowledge streams from these varied perspectives is challenging. Developing a river basin report card has been used as a catalyst to incorporate these knowledge

streams and foster commitment to improving conditions from all relevant sectors. This process increases local capacity for environmental decision making and represents a pathway to link local priorities to national, regional, and global initiatives (e.g. Sustainable Development Goals).

This session aims to investigate opportunities to insert “intelligent” reporting of information so that local communities can benefit and respond to national, regional and global findings. This will be a fun and interactive session including role-playing and group discussions using River Basin Health as the session focus. Participants will role play ten different knowledge providers: 1) observational knowledge (e.g., fisher), 2) social network knowledge (e.g., community leader), 3) monitoring knowledge (e.g., resource agency scientist), 4) indigenous knowledge (e.g., local elder), 5) event knowledge (e.g., long term resident), 6) governance knowledge (e.g., local mayor), 7) communication knowledge (e.g., news reporter), 8) emotional knowledge (e.g., poet/artist), 9) ecological knowledge (e.g., ecologist), 10) business/corporate knowledge (e.g., CEO of water provider).

Participants will also identify impediments and propose solutions to “intelligent environmental reporting” so that local stakeholders are able to better manage their local environment.

River City Economies

Cities have been built alongside rivers and their floodplains. It's our rivers that shape a city's urban landscape, economy and culture. At the same time, the city reshapes its river. Cities have utilised, modified, and engineered their rivers, altering ecologies and creating new landscapes in the process of urbanisation.

A city's economy is underpinned by its natural resources, and rivers are at the heart a city's economy. From water supply to transport corridors, cities rely on rivers. In contrast, rivers can be costly in terms of flood impacts, clean up and recovery.

To attract investment and improve liveability, many cities are revitalising their riverfronts which presents opportunities to grow economies, reenergise communities and bring nature closer people.

Three river cities will describe their relationship to their river and how it's shaped their city's economy and lifestyle. Brisbane, Australia, San Antonio, USA (2017 International Riverprize winner) and Vienna, Austria.

Sponsored by



Dedicated to a better Brisbane

Taking the urban river plunge – how we are making the Parramatta River swimmable again

The Parramatta River is the main river flowing into the iconic Sydney Harbour. It flows through the heart of one of the fastest growing regions in Australia, with the burgeoning metropolis of Parramatta now dedicated as the ‘Central River City’ in the three city vision for greater Sydney. This change brings with it a major opportunity in how we view and manage the river going forwards.

In 2014, the Parramatta River Catchment Group launched the mission to make the Parramatta River swimmable again by 2025. At the time, this was greeted with a mix of responses, from ‘wow, what an ambitious and exciting mission’ to ‘you have to be joking, who would want to swim in that?’.

Four years on, we now have a well-researched and supported ten step plan for how this mission will be achieved. We also have a number of success stories that have built support and confidence along the way. Importantly, we can also already swim at four sites along the river.

During this LIT session, participants will hear about how we have developed the Parramatta River Masterplan, our ten step plan to making the river swimmable again. During the panel session, we will encourage others to ask questions and share their own experiences and insights.

Through this, we hope to inspire new approaches to urban river management and community engagement, and learn from each other to help further transform the way we view and manage the Parramatta River and other urban rivers across the world.

Sponsored by



Parramatta River Catchment Group



JACOBS



Knowledge Resources

THE
AUSTRALIAN
WATER
PARTNERSHIP



The Australian Water Reform Journey

An overview of three decades of policy, management and institutional transformation
August 2016

The Australian Water Reform Journey: An overview of three decades of policy, management and institutional transformation: Traces how water policy, management and institutional arrangements have been transformed in Australia over the past three decades. Distils the key elements of the reform journey and lessons learned in conducting reforms.

Building Resilience to Drought

The Millennium Drought and Water Reform in Australia
August 2016

Building Resilience to Drought: Australia's Millennium Drought (1997–2009) severely tested new arrangements developed during a multi-decadal program of water reform and lead to a new set of arrangements for dealing with drought and water scarcity. The drought ultimately played a key role in progressing water reform and building resilience to future water scarcity.

WaterGuide

Setting a path to improved water management and use under scarcity

WaterGuide: An organising framework for improved water management and use in response to scarcity. Published as part of Australia's contribution to the High Level Panel on Water, it has since been used as the foundation for water policy dialogues with Jordan, Mexico, Senegal and Iran. This 2nd edition improves the six-step framework based on its application and demonstrates how it can be applied to improve water management globally.

A Guide to Managing Water for the Environment

A framing paper for the High Level Panel on Water

A Guide to Managing Water for the Environment: As pressure on water resources from different sectors increases year on year, water allocation and use decisions must acknowledge the fundamental importance of water for the environment. This guide sets out elements that can be helpful when establishing or reforming policies in any jurisdiction based on lessons from Australia and other countries.

The Evolution of Water Stewardship

An Australian Perspective

The Evolution of Water Stewardship: Tells the story of a concept catalysed by Australia's Millenium Drought, eventually developing into a global system for managing water risks and for collaboration between business, government and community. AWS Water Stewardship provides a roadmap for industry, agriculture and all non-domestic water users to adopt good water stewardship.

Gender Equality & Goal 6: The Critical Connection

The Critical Connection

Gender Equality & Goal 6: The Critical Connection: Explores how SDG6 and the High-Level Panel on Water Action Plan can significantly contribute to gender equality in both water resources management and WASH, and by doing so, will contribute to more sustainable and effective water management outcomes for all people, while decreasing the inequalities prevalent in many societies.

Hydrogeology of the Dry Zone — Central Myanmar

Dr Leonard Warren Drury
Axeo Rock Consultants

Hydrogeology of the Dry Zone, Central Myanmar: A major study that revises and updates hydrogeological surveys and a drilling program begun in the late 1970s to mid-1980s in the Myanmar Dry Zone. It represents an understanding of the groundwater resources based on decades of experience from hydrogeologists from Myanmar and Dr Len Drury's extensive international experience.

Ayeyarwady SOBA 2017: Synthesis Report

State of the Basin Assessment (Volume I)
Ayeyarwady State of the Basin Assessment (SOPA) Project

Ayeyarwady State of the Basin Assessment (SOBA) Synthesis Report: The result of the most comprehensive assessment ever completed on Myanmar's Ayeyarwady River Basin. The draft report was launched at the Asia-Pacific Water Summit in Yangon, Myanmar in December 2017, and the latest version captures the outputs of AWP's significant work in Myanmar.

Visit the Australia booth for a USB copy of these publications and more, or download at waterpartnership.org.au

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Australian Government



The Australian Water Partnership is supported by the Australian Government

Awards

Riverprize

Bert and Vera Thies Foundation Australasia Riverprize finalists



Whangawehi Stream, New Zealand

The Whangawehi Stream is at risk of faecal contamination from stock and sedimentation from farmland, and has suffered from a lack of riparian habitats for bird and fish life. Under a community-led catchment management plan, the Whangawehi Catchment Management Group (WCMG) has been helping farmers manage pests and re-vegetate the river margins, resulting in the establishment of 160,000 native trees, 60 hectares of riparian margins and the retirement of 10 hectares of native bush block. Monitoring has revealed a 95% survival rate of plants, an increase in bird life and a 15% improvement in water quality. The once nearly extinct white bait population is now abundant, and the endangered long fin eel has grown to healthy populations.



Laidley Creek, Australia

Increased sediment and nutrient transport is impacting on the health of Brisbane River and Moreton Bay. Around 80% of sediment pollution in the lower Brisbane River comes from just 20% of the catchment, mostly from eroded streams and gullies in the Lockyer Valley. A collaborative partnership and an investment of AUD \$2.4 million has transformed a 3 kilometres stretch of Laidley Creek in the Lockyer Valley. Works included controlling invasive weeds, planting native trees and grasses, installing six cross channel creek structures and stabilising steep heavily eroded banks. This has resulted in stabilisation of valuable farmland and improved flood resilience and the prevention of 16,000 tonnes of sediment, 11 tonnes of nitrogen and 22 tonnes of phosphorous from entering the creek and ultimately Moreton Bay.



Parramatta River, Australia

The Parramatta River flows through the heart of one of the fastest growing regions in Australia. The Parramatta River Catchment Group (PRCG) launched the 'Our Living River' initiative in 2014, with the mission to make the Parramatta River swimmable again. The PRCG is an alliance of local and state government agencies and the community and is responsible for the strategic coordination of the catchment. In October 2018, the group will launch the Parramatta River Masterplan, which provides a manifesto for change in the way the river and its catchment will be managed into the future. The Masterplan grasps the opportunity that accelerated urban growth can bring to improvements in water quality and local amenity if it is well-planned and integrated, with clearly defined and community driven outcomes.

The International RiverFoundation's *Riverprize* awards are the world's foremost award in river basin management. They recognise and reward organisations making waves in the sustainable management of the world's rivers, whether at the grassroots or transboundary level.

The prize rewards inspiring initiatives that implement integrated river basin management to restore and protect rivers, wetlands, lakes and estuaries. Previous winners and finalists have received widespread recognition, built

new partnerships, shared their knowledge and won other awards following *Riverprize*, becoming part of a network of river practitioners and experts from around the world.

In 2018, International RiverFoundation is awarding an Australasia *Riverprize* and an Asia *Riverprize* for the first time.

The winners will be announced at the *Riverprize* Gala Dinner on Tuesday 16 October. All finalists will present their work during the conference at 1530 on Tuesday 16 October.

Inaugural Asia *Riverprize* finalists



Pasig River, Philippines

The Pasig River was declared biologically dead in the 1990s due to persistent pollution caused by population growth and industrial development along its riverbanks. However PRRC and its partners river restoration and management efforts have effectively brought the Pasig River back to life. These efforts have included delivering quality projects, programs, activities, and advocacies in easement recovery, riverbank development, waste and water quality management, and public awareness.

From 1999 to 2017, PRRC have resettled 18,719 families living along the riverbanks to decent homes, dismantled 376 encroaching private structures, established 37,471.68 linear meters of environmental preservation areas, developed 17 of its 47 identified tributaries, diverted almost 22,000 kilograms of solid waste, and transformed communities into environmentally- responsible citizens. This has resulted in significant water quality improvement, as well as the revitalisation and development of the Pasig River system.



Yangtze River, China

The Yangtze River basin accounts for 40% of China's freshwater resources, more than 70% of the country's rice production, 50% of its grain, more than 70% of fishery production, and 40% of the China's GDP.

Asia Development Bank's (ADB) Yangtze River Economic Belt (YREB) team have facilitated significant institutional and policy reforms on river and water governance in the Yangtze River basin. From 2016 to 2020, support is being directed to four key areas in the YREB development plan: (i) ecosystem restoration, environmental protection, and management of water resources, (ii) green and inclusive industrial transformation, (iii) construction of an integrated multimodal transport corridor, and (iv) policy reform to increase the connectivity and cooperation among provinces and cities.

The goal is to prioritize the YREB ecosystem restoration over economic development, including establishing a financial incentive mechanism to reward provinces that launch their own eco-compensation agreements between different provinces or within their own provinces.

The implications for the introduction of such river basin reforms are long term, with sustained impact and environmental improvements, particularly in the upper to middle reaches of the Yangtze River.

**Winners
announced at the
Riverprize Gala
Dinner, Tuesday
16 October**

Riverprize judges

**Dr Deborah Nias (Chair)
Prof Paul Greenfield
Mr Vijay Kumar
Mr Bradley Moggridge**

Awards

Vera Thiess Fellowship for Women

The International RiverFoundation's Vera Thiess Fellowship for Women gives women the opportunity to gain valuable work experience through the IRF and its partners, with the goal of advancing women's participation in water and river management. This fellowship goes not only towards supporting the selected candidate in their career, but towards continuing the important work of bridging the gap in women's participation in river basin management.

Awarded in the name of the late Vera Thiess, a long-time supporter of the IRF, the Fellowship recognises Vera's and the Thiess family's long-time philanthropic support and commitment to forward-looking initiatives of the International RiverFoundation. Through the Fellowship, we honour Vera's legacy by supporting women's involvement in river basin and water management. We also acknowledge the inspirational role of the Thiess family, whose story began with five brothers who started a small earthmoving business that then grew into a globally respected establishment that overcame hardship, broke boundaries and forged new ground.

Unlike a traditional research fellowship, the selected candidate has a unique opportunity to gain valuable work experience with the IRF and its alumni and partners worldwide. The 2018 Fellows will measure the impact of IRF's programs.

Fellows



Charity Mundava

Charity has a combined background in natural and geo-spatial sciences. She is passionate about the sustainable management of our planet. She works with WaterNSW as a spatial scientist in the water industry providing advice for projects relating to water quality and catchment management. Previous to this role, Charity worked for Curtin University, Perth with the

Photogrammetry unit and also the Remote Sensing Laboratory at the University of Zurich, Switzerland. Over the years, Charity has been the recipient of various awards, including research scholarships, travel grants, student citation awards and industry scholarships for her excellence in the field of spatial sciences.



Carmina Rivera

Carmina grew up in a small town south of Metro Manila in the Philippines. Carmina has a bachelor's degree in Economics. Carmina started her career as a Project Associate in a human capital and organisational development consulting firm that helped her engage with a wide array of private and public organisations. After a couple of years, Carmina briefly worked as a Research Assistant under the Urban Development and Water Division of the Asian Development Bank – Viet Nam Resident Mission. Her work was mainly focused on conducting preliminary

economic analyses for water supply and wastewater projects located at the Mekong Delta. Fuelled by her desire to pursue a meaningful path towards creating a positive impact to the environment and communities, Carmina pursued further studies and recently completed a master's degree in Integrated Water Management at the University of Queensland, Australia. She seeks to expand her career in the water sector through her interests in sustainable development, policy and governance, and alternative financing for water supply and sanitation.

Winner
announced at the
Riverprize Gala
Dinner, Tuesday
16 October

Emerging River Professional Award

The Emerging River Professional Award (ERPA), sponsored by OceanaGold Corporation, recognises, rewards and fosters those in the early stages of their careers in rivers. The award is presented to those who have demonstrated innovation, excellence and leadership in river, basin or river-dependent community management.

The ERPA is open internationally to all river professionals of all disciplines who have been working in their field for ten years or less, and have demonstrated exceptional and measurable achievements in rivers, basins or river-dependent communities.

The winner will be announced at the *Riverprize* Gala Dinner on Tuesday 16 October. The finalists will present their work during the conference at 1530 on Monday 15 October.

Emerging River Professional Award judges

Prof Angela Arthington
Ms Kaye Cavanagh
Dr Andrew O'Neill

Finalists



Julie Francis, Australia

Ms Julie Francis has a degree in science, a masters of agricultural science and completed the International Water Centre's 9-month leadership program in 2016. Julie specialises in both collaboration and sustainable cities and has worked in a variety of Victorian state and local government roles. She was seconded to Melbourne Water in late 2016 to lead a collaboration of organisations working to transform the Moonee Ponds Creek into an iconic waterway for Melbourne.



Nantale Nsibirwa, South Africa

Nantale Nsibirwa is from South Africa and is currently completing a Master of Science in Hydrology at the University of KwaZulu-Natal and a short-term internship with the United Nations (UN) Environment agency. During the last two years, she has mapped diffuse pollution risk to prioritise ecological infrastructure protection in the uMngeni Catchment, South Africa.



Jose Fernandez, Peru

Jose Fernandez gained a degree in Forestry Engineering in 2015. He began lecturing to undergraduate students about the application of geographic information systems before taking on the position of Environmental Specialist for the Water Fund for Lima and Callao (AQUAFONDO). He is currently responsible for the management and conservation of water resources and has been involved in a project to develop an integrated water management system in the local peasant community of San Pedro de Casta, Lima Peru.

Study tours

Tomago Wetland – Award-winning Restoration

0800–1800, Thursday 21 September

TICKETS: \$85 + lunch

INCLUSIONS: Transport

PLEASE BRING: Money for lunch

NSW Water Research Laboratory has been working in collaboration with the NSW National Parks and Wildlife Services (NPWS) and the Department of Primary Industries (NSW Fisheries) since 2004 to transform the Tomago Wetlands site from a large acidic landscape into a restored productive tidal wetland. The project has proven a terrific success, winning awards for both conservation and engineering

excellence. Innovative technical, modelling and monitoring solutions were developed to provide the precise conditions required to regenerate saltmarsh ecosystem and restore over 400 hectares of severely degraded land into a thriving ecosystem.

The tour will be hosted by experts from both UNSW's Water Research Laboratory & the Centre for Ecosystem Science and the NSW Office for Environment and Heritage.

Sponsored by



UNSW SYDNEY Global Water Institute

Our Living River – Making Parramatta River Swimmable Again

0930–1600, Thursday 21 September

TICKETS: \$50

INCLUSIONS: Lunch

PLEASE BRING: Money for ferry ticket

The Parramatta River flows through the heart of one of the fastest growing regions in Australia, with the burgeoning metropolis of Parramatta now dedicated as the 'Central River City' in the three city vision for greater Sydney. High density residential and business developments are rapidly replacing old industrial and residential sites along the

Sponsored by

river. With this has come a massive increase in community demand for quality river interactions.

In response to this, the Parramatta River Catchment Group (PRCG) launched the mission to make the Parramatta River swimmable again and embarked on the co-development of a Masterplan for the river. The PRCG is an alliance of local Councils, state government agencies and the community who are working together to improve the health of the river.



Guided walk of water sensitive urban design in Annandale

0930am–1330, Thursday 21 September

TICKETS: Free

PLEASE BRING: Opal card with \$10 balance, money for morning tea

A guided walk of water sensitive urban design in the heritage-listed conservation area of Annandale is being offered on Thursday, 18 October.

This 4-hour tour includes a visit to a site of reintroduced Mangroves, a constructed salt marsh wetland, a living street, swales on streets, constructed fresh water wetland and the Harold Park site.

Your guide is Marghanita da Cruz.

Marghanita has been gathering the history of Annandale, which she is publishing as a series of short walk books. Marghanita has also been a long time advocate for nature in the urban environment and has shared this passion through walks and exhibitions. Marghanita was elected to the Inner West Council in September 2017.

Social program



Welcome Function Cruise

1830–2030, Sunday 14 October
VENUE: Clearview Cruise Boat,
Departing Darling Island Wharf
TICKETS: \$100
DRESS: Smart casual

Diversity in Water

1800–2030, Monday 15 October
VENUE: Soho Room,
Doltone House, Jones Bay Wharf
TICKETS: \$80
DRESS: Smart casual
*Sponsored by the Australian
Water Partnership*

Riverprize Gala Dinner

1815–2200, Tuesday 16 October
VENUE: Heritage Wharf,
Doltone House,
Jones Bay Wharf
TICKETS: \$175
DRESS: Cocktail





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21st International

RIVER SYMPOSIUM APP



Download the official 21st International Riversymposium app now! Customise and personalise your event schedule, connect with other delegates through the messaging function, and access any and all conference information in one handy location.

To access the App on a phone you will need to do the following:

1. Download the Ignite Events App from Apple or Google Stores
2. Enter the Event Code **RIVER18**
3. Click 'Register Now' to register your account with your first and last name, organisation and email

Once registered in the App you will receive an email confirming your App Registration along with your access code and login details.

Brisbane City Council is proud to be a gold sponsor of the 21st International Riversymposium

Brisbane is a clean, green and sustainable city, famous for its riverside location, subtropical climate and friendly relaxed lifestyle. Water is Brisbane's most precious natural resource and central to the city's identity and liveability.

Located in one of the fastest-growing regions in Australia with more than 1.2 million people, Brisbane is Australia's New World City. As a WaterSmart City, Brisbane is committed to the protection, enhancement and sustainable management of our waterways.

Brisbane will host the 22nd International Riversymposium. We look forward to welcoming you in 2019 to our river city.

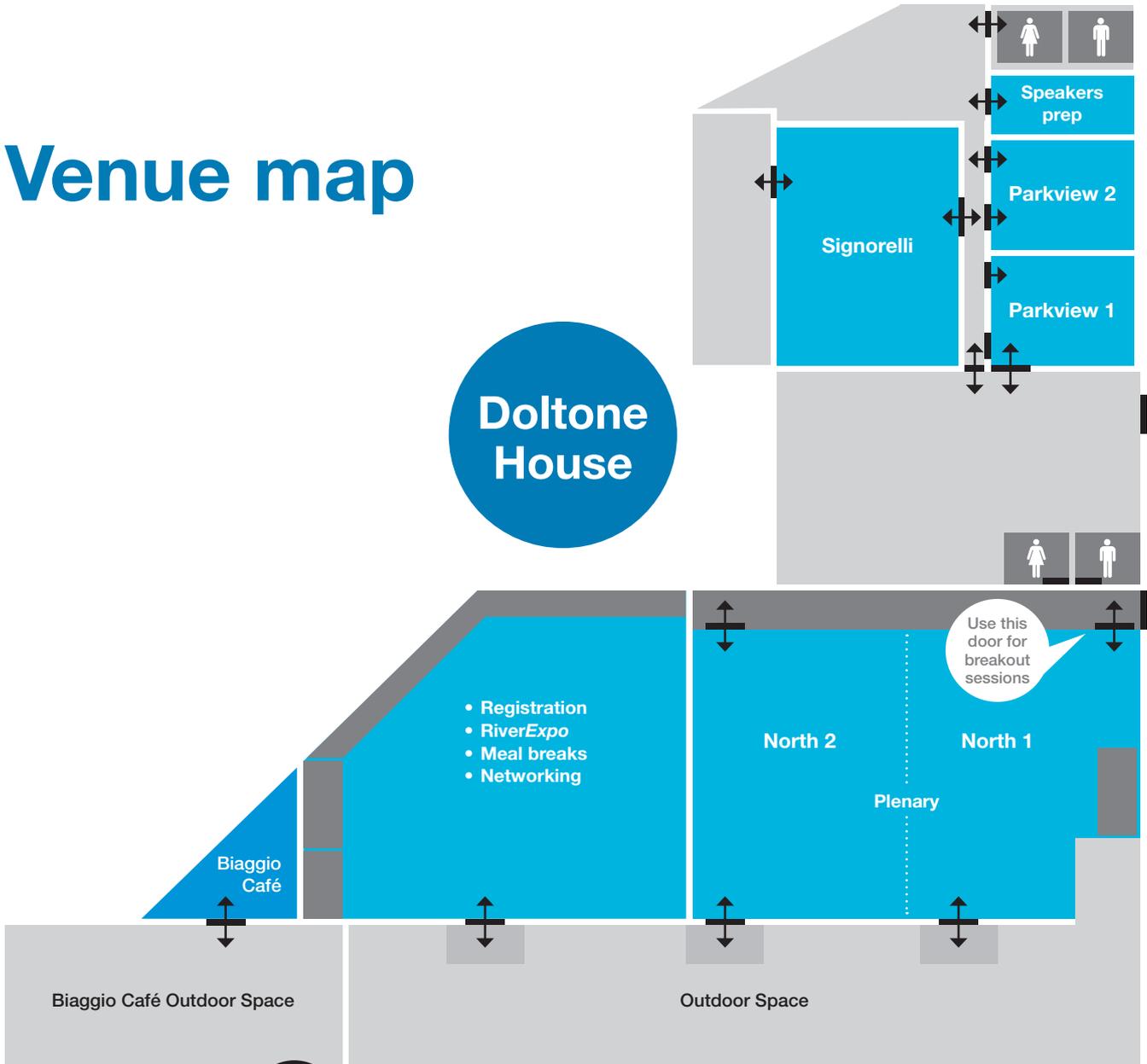
For more information visit Council's display booth or go to brisbane.qld.gov.au and search 'clean green sustainable'.



Dedicated to a better Brisbane

Venue map

Doltone House



Diversity in Water – Soho Room, located at Jones Bay Wharf

Riverprize Gala Dinner – Heritage Wharf, located at Jones Bay Wharf

The International Riversymposium conference – Doltone House, located at Darling Island Wharf



Global Water Institute

The UNSW Global Water Institute (UNSW-GWI) is a world leader in water research, innovation and problem solving.

With our membership of over 400 researchers, professional staff and PhD students drawing on the water expertise of eight faculties and 14 specialist centres across the University, we have created the Nation's most advanced water knowledge hub.

We are also a proud partner in the PLS Alliance, an exciting collaboration between UNSW, King's College London and Arizona State University. Together, we have joined forces to help find research-led solutions to some of the most pressing global challenges.



Solving global water issues together

www.globalwaterinstitute.unsw.edu.au

PLUS ALLIANCE
PHOENIX | LONDON | SYDNEY



CSIRO collaborating to boost global water management

www.csiro.au



As Australia's innovation catalyst, we are working nationally and internationally to inform policies and strategies for supporting effective water management. Our research seeks to improve the livelihoods and well-being of people in river basins around the world.



A global leader in the provision of advice, information, modelling, insights and technology for water management.



Identifying relationships between water, the environment and people.



Assessments of current and future water availability under scenarios of change.



Long-term collaborative relationships with international governments, water agencies, research institutions and industry.

B&M | 18-00490



Sydney deserves a world-class river

There's a global movement to make city rivers the centres of life they once were.

Now, it's Sydney's turn.

In 2014 we launched our mission to make the Parramatta River swimmable again by 2025.

We have now developed a ten-step Masterplan, based on scientific studies and community input, which will help make our vision a reality.

Find out more at:

www.ourlivingriver.com.au



Further information

WiFi

Complimentary high-speed Wifi is available at all locations across Doltone House for delegates to check emails and for web browsing.

Conference app

Download our conference app to stay up to date with any program changes, connect with other delegates or read more about our presenters. See instructions on page 22.

Mobile phones

As a courtesy to fellow delegates and speakers, please ensure mobile phones are switched to silent during conference sessions.

Delegate feedback

Please take the opportunity to complete the evaluation form in your delegate satchel, or via the conference app. We seek to continue building the *International Riversymposium* as a major national and international annual event highlighting the importance of river health. We appreciate your feedback and treat information collected with the utmost confidence. Please return your completed form to the registration desk prior to the closing plenary on Wednesday. There will also be forms available in each session for instant feedback.

Abstracts

For environmental purposes, the quick reference guide and abstracts have not been printed in the program book. They are available on the app or on the *Riversymposium* website (www.riversymposium.com)

Smoking

All buildings within Doltone House are smoke-free environments. Australian law dictates that smoking is prohibited within 5m of the entrance of a public building. Smoking zones are marked accordingly.

Dress code

Casual business attire is appropriate for the conference sessions and the welcome reception. The *Riverprize* gala dinner is cocktail dress. A jacket may be required for air-conditioned session rooms and evening social functions.

Climate

During the conference, Sydney is in the middle of Springtime. In spring, days are warm, but the humidity is not as high as summer. Average daily temperatures range from 11-23°C (51.8-73.4°F). The evenings can become cool, so it's recommended to carry a light jacket.

Disclaimer

The International RiverFoundation act only as organisers of these activities and do not accept responsibility for any act or omission on the part of the service providers. No liability is accepted for any inaccuracy, misdescription, delay, damage, death or personal injury.

Special diets

All special dietary requirements have been passed on to the venue and will be catered for accordingly. Delegates who have advised special dietary requirements should identify themselves to the serving staff at functions. Please note, we cannot guarantee 100% nut-free ingredients as some ingredients from external suppliers and may contain traces of nuts. If you have not advised us of your requirements, please see the registration staff as soon as possible. Special meals cannot be guaranteed for delegates who have not previously advised of their requirements.

Tickets

Attendance at social events including the Welcome Function cruise, Diversity in Water and the post-conference study tours is by ticket only. If tickets are misplaced, please advise staff at the registration desk. A limited number of function tickets will be available for purchase onsite from the registration desk. Please check with the registration staff as to the availability of tickets.

Cancellation policy

The conference reserves the right to cancel or vary optional activities if minimum numbers are not reached. Regrettably, optional social functions and additional ticket cancellations cannot be refunded if participation is cancelled less than fifteen (15) days prior to the event.

Locality and transport information

An efficient network of transport options makes travelling around Sydney and regional NSW affordable and enjoyable. The Sydney public transport system, provided by Transport for NSW, consists of trains, buses, ferries and light rail. Use the trip planner at <https://transportnsw.info/> to plan your travel.

Opal Card

Opal is the smartcard ticketing system used to pay for travel on public transport. Add value before you travel and tap on and off to pay your fare.

There are lots of benefits of using an Opal card, including, cheaper fares and daily and weekly fare caps. If you don't have an Opal card, you can purchase single trip tickets on most services, however prices are more expensive than using an Opal card fare. Opal cards are available over the counter from most retailers, including convenience stores and newsagents, while concession cards must be applied for online, or over the phone.

Walking

From Town Hall, take a short walk over the Pyrmont Bridge at Darling Harbour and Darling Island Wharf is located opposite The Star.

Water Taxi

Average cost of \$15* from the CBD Water Taxi. For further information call Water Taxis Combined 1300 666 484.

Train

Departs from Central Station to St James Station regularly and operates 24 hrs per day, 7 days a week. 1.7km from Central Station.

Light rail

Departs from Central Station to The Star every 10 to 15 minutes and operates 24 hrs per day, 7 days a week.

Bus

The State Transit Bus Route 389 regularly departs from City – Town Hall Park Street to Pirrama Rd.

Ferry

Operates 7 days a week from Wharf No. 5 at Circular Quay and stops at Pyrmont Bay. For route and timetable information on State Transit's 'Darling Harbour' ferry to Pyrmont Bay.

Bicycle

The area is easily accessible by a bicycle, with several on and off-road cycle paths and bike racks nearby.

Parking

The Star parking station – located on Pyrmont St, Pyrmont. For further information call (02) 9777 9000.

Wilson Jones Bay Wharf carpark – located on 19-21 Pirrama Rd, Pyrmont (opposite Doltone House).

All day \$19* Wilson Carpark Ticket Validation available from Doltone House, please see staff for more information.

All day \$16* (+\$0.50 booking fee) Wilson Carpark via pre-book parking at www.bookabay.com with promotional code 'Doltone'.

2018 Organising Committee

Dr Natalie Baker (Chair)
Dr Eva Abal
Prof Angela Arthington
Ms Sarah Holland-Clift
Dr Andrew Dansie
Ms Carla Littlejohn
Ms Bounthavivanh Mixap
Dr Brian McIntosh
Mr Russell Rollason

Riversymposium Strategic Planning Committee

Dr Eva Abal
Dr Natalie Baker
Dr Selina Ward
Prof Bill Dennison
Dr Marian Neal
Mr John McCarthy AO
Mr Thomas Panella

Thanks to our sponsors



Australian Government

Department of Foreign Affairs and Trade



Australian Department of Foreign Affairs and Trade

Across the Asia-Pacific region, Australia has been sharing its experience and technology in river and water management. DFAT supports the Sustainable Development Investment Portfolio in South Asia and the Greater Mekong Water Resources Program in the greater Mekong region.

Since January 2017, Australian Prime Minister the Hon Malcolm Turnbull, has been a member of the High Level Panel on Water (HLPW) established by the United Nations Secretary General and the World Bank President to mobilise international action to achieve water and sanitation for all as set out in SDG 6. DFAT will report on the work of the HLPW at this year's *Riversymposium* in Brisbane.

In 2015, DFAT established the Australian Water Partnership (AWP) to improve access to Australian water management experience and expertise in both the public and private sectors for countries in the Asia-Pacific region. The AWP will also be conducting workshops at this year's *Riversymposium*.

Brisbane City Council

Brisbane is Australia's River City, renowned for its subtropical climate and friendly relaxed lifestyle – all of which attract businesses, workers, students and tourists from across the world. Brisbane City Council has the ambition to grow its New World City status and to become a globally connected, prosperous city with an enviable lifestyle quality.

Already home to more than 1.2 million people, Brisbane is one of the fastest growing regions in Australia. To ensure Brisbane meets the needs of an increasing population and maintains resilience in a region prone to drought and floods, Brisbane City Council is embracing new technology and innovation to address the growing need for water, air and energy resources.

UNSW Global Water Institute

UNSW is ranked number five in the world for water resources and is globally renowned for its water research, consulting, education and technical advice. The UNSW Global Water Institute (UNSW-GWI) pulls together UNSW's water expertise into a single multi-

disciplinary powerhouse of research and innovation, solving critical national and global water problems. A proud partner in the PLuS Alliance, UNSW joins King's College London and Arizona State University to collaboratively find research-led solutions to some of the most pressing global challenges.

Sydney Water

Sydney Water is Australia's largest water services provider. Every day, we proudly protect the health of our community by providing safe and high quality drinking water, removing wastewater and preserving our rivers and beaches for almost five million people and businesses across Sydney, the Blue Mountains and the Illawarra.

Australian Water Partnership

The Australian Water Partnership is an Australian Government initiative. We make a difference by mobilising and connecting Australian water sector expertise to address demand in the Indo-Pacific to enhance sustainable water management. We share resources and lessons learned in extreme drought, climate change, and over three decades of water reform.



UNSW Global Water Institute
SYDNEY



Dedicated to a better Brisbane



CSIRO

CSIRO is a globally recognised provider of innovative research solutions to the most significant land, water and ecosystem management challenges. We partner with public, academic and private sector entities, nationally and internationally, to solve the complex challenges that arise from the demands and impacts of human activities on the environment.

OceanaGold

It is our pleasure to sponsor the Emerging Rivers Professional Award which is an opportunity to recognise tomorrows leaders in water management.

OceanaGold is a multinational, mid-tier gold mining company with significant global operating, development and exploration experience and operating assets in the Philippines, New Zealand and the United States.

Our vision is to be the gold mining company of choice, operating long-life, high-quality and high-margin assets, while delivering superior returns in a responsible manner.

We produce gold, silver and copper, all metals that are essential to economic

development and societal wellbeing – from renewable energy to life-saving medical devices and the communication and information technology that connects our communities.

Our success is due to the dedication and efforts of our people. We have an unwavering focus on the health and safety of our people, the wellbeing of our local communities and an unrelenting commitment to uphold the highest standards in environmental and sustainability practices.

From exploration through to operations and closure, we manage our environmental and social impacts across the life cycle of our assets, manage our impacts and, more broadly, contribute to our host communities and society.

Parramatta River Catchment Group

The Parramatta River Catchment Group (PRCG) is an alliance of councils, government agencies and community groups who are working together to improve the Parramatta River and the creeks that flow into it. Our ten-step Masterplan will help us achieve our mission to make the Parramatta River swimmable again by 2025.

Council of Mayors

The Council of Mayors (SEQ) is Australia's largest regional advocacy body, representing the interests of the ten councils and more than three million residents in South East Queensland.

The Councils of Mayors (SEQ) leads a number of regional initiatives including Resilient Rivers, a coordinated approach to managing South East Queensland's catchments.

Water Technology Pty Ltd

Water Technology is an employee owned organisation focused on the needs of our clients and the community. We live and breathe the challenges of land and water management. Our capabilities encompass all aspects of surface and groundwater within the natural and built environment, including comprehensive coastal engineering and environmental services.

International RiverFoundation

The International RiverFoundation champions integrated river basin management for the restoration, protection and sustainable management of the world's rivers.

Water is crucial for all life—and we need healthy rivers, lakes and wetlands for sustainable development. We promote and support effective management of these resources by facilitating knowledge sharing, education and best practice river basin management, and by recognising and rewarding those making a difference.

We draw upon our large networks, and seek to build new ones, to revive the world's rivers through multi-sector partnerships around the world. We are committed to supporting positive ecological, economic and social outcomes through our programs, which aim to change the lives of individuals and communities.

www.riverfoundation.org.au



OUR PROGRAMS

Riversymposium

A global forum for river managers, policy developers, scientists, consultants, students, NGOs, indigenous and community organisations and business & industry representatives.

Riverprize

The world's foremost award in river basin management.

Twinning

Twinning pairs *Riverprize* winners with communities who can benefit from their knowledge.

Scholarships, fellowships and grants

- Ken Thiess Memorial Scholarship
- Vera Thiess Fellowship for Women
- *Riversymposium* sponsored delegates

Emerging River Professional Award

Recognising those in the early stages of their careers in rivers.

Women and Water

A forum to advance understanding of gender roles and their influence on managing the world's water

River Recovery

Integrated, on-ground programs assisting communities to revive the health of their rivers and improve livelihoods

We envision
a future in which people
and ecosystems benefit
from sustainably
managed rivers