River pressures: pathways

to sustainability



1100 - 1230

MORNING TEA River Ecology: Beneath the Surface

Nature's Gifts: Enhancing Ecosystem Services

Chair: Stuart Bunn Dougal Currie, Australia Mapping the groundwater dependence of riparian vegetation

using SEBAL Matthew Currell, Australia

Conceptual models of ground-surface water interaction in the Connewarre Complex Geoff Savage, Australia

Ecological risk of groundwater extraction in the Upper Goulburn-Broken

Penny Winbanks. Australia South West Victoria Groundwater Atlas Chair: Jane Doolan

Julie Dean, Australia

Urban waterway restoration: an intervention for improving mental health?

Helen Smith, Australia

Enhancing river management by understanding landholders attitudes towards ecosystem services

Bonny Dunlop-Heague, Australia

Bulls Brook Biodiversity Corridor – a case study in riparian

Michael Stewardson, Australia

Future perspectives on river health monitoring

African and Australian Collaboration for Sustainable River Management

Presented by ANU, GIZ, SADC, UNESCO Chair in Water Economics and Transboundary Water Governance

Chair: Jamie Pittock

Convening Partner Session

Transitioning Towards Water
Sensitive Cities – Linking Global
Initiatives for Cities of the Future 1

Presented by the Cooperative Research Centre for Water Sensitive Cities

Chair: Rebekah Brown

Jamie Ewert Australia The International Water Association Cities

of the Future initiative

Chris Chesterfield, Australia The Victorian Government's Living Melbourne Living Victoria Initiative of urban water reforms

Bhakti Devi The City of Sydney's decentralised energy and water masterplans

Convening Partner Session Geomorphology in Analysis and Restoration of Fluvial Systems: Approaches and Tools

Presented by Cardno ENTRIX Chair: Andrew Simon

Andrew Simon, USA

Channel disturbance and evolution: controls and implications for stream restoration

Ian Rutherfurd Australia

Sediment budget modelling: if we get the processes and rates wrong the inferred management actions will be wrong too

Jon Olley, Australia

The effect of remnant woodland on sediment and nutrient loads delivered to waterways in subtropical Australia – guide to the extent of rehabilitation required

Mike Rudd, USA

Engineering and geomorphic analysis for design of sustainable stream restoration projects

1330 - 1500

Session A3A Room 203 River Pressures: Pathways to Sustainability

Reflections on managing the Yarra River: context,

Sharing the Swan Canning Riverpark (nicely)

achievements, challenges and future opportunities

Road, rail and infrastructure (or linear networks) – case studies

on impacts and opportunities on urban peri/urban waterways

Assessing River Health

Chair: Malcolm Robb

Michael Attard, Australia

Tamar Estuary and Esk Rivers Ecosystem Health Assessment Program

Patty Chier, Australia

MST: new tools to differentiate contamination sources in urban rivers

Naomi Soustal, Australia

An integrated monitoring and evaluation framework for SEQ waterways

Astria Nugrahany, Indonesia Water quality monitoring - upstream to downstream,

Brantas River Basin

Economies, Healthy People

River Partnerships: Integrating People,

Chair: Jamie Pittock

Jamie Pittock, Australia

Inflow interception: lessons for Australia from South Africa

Helen Gordon, South Africa Healthy catchments the true water providers

Hodson Makurira, Zimbabwe

Food security challenges in the Limpopo Basin

Emmanuel Kasimbazi. Uganda Options for the governance of the Nile River: the

case for application of international law

Transitioning Towards Water Sensitive Cities – Linking Global Initiatives for Cities of the Future 2 Presented by the Cooperative Research

Chair: Tony Wong

Briony Ferguson, Australia Industry engagement and envisioning of

Centre for Water Sensitive Cities

water sensitive cities

Fjalar de Haan

Modelling social-technical dynamics in water sensitive cities

Ana Deletic

Modelling the evolution of water infrastructure in water sensitive cities Chair: Ian Campbell

Keirnan Fowler, Australia

irrigation areas

Catherine Thomson, Australia

Estuary health: stuck between a drying catchment and a rising ocean

Sue Campbell, Australia

Communicating river health: a holistic approach for report

Systematic literature reviews can support decision making for environmental flows

1500 – 1530 1530 - 1700 **AFTERNOON TEA**

Greg Bain, Australia

Mark Coffey, Australia

Rod Hughes, Australia

Room Plenary 1 **River Management Young Achievers Award**

Sponsored by Thiess Services Managed by the International WaterCentre Alumni Network

Guest Speaker: Dr Ian Rutherfurd University of Melbourne and DSE, Victoria

Finalist Presentations:

river systems

Mark Bachmann, Australia Restoration of the Piccaninnie Ponds wetland system (South

Virgilio Hermoso Lopez, Australia

Systematic rehabilitation planning for freshwater ecosystems

Australia, 2000-2011)

Celine Steinfeld, Australia Hydrological and ecological effects of earthworks in dryland

Chair: Penny Rogers

Anthony Paull, Australia

Restoring flows and fish passage to the Hawkesbury-

Penny Rogers, Australia

Determination of the cultural eflows at Kulcurna Conservation Reserve

River Health: Healthy Rivers, Healthy

Luke Johnston, Australia

Monitoring aquatic ecosystems within altered flow regimes from hydro-electricity plant

Mark Bayley, Australia

Assessing ecosystem health in the Nerang River Estuary

Stakeholder Collaboration, Effective Partnerships

Chair: Leon Metzeling

Michael McCartney, New Zealand Manawatu River Leaders' Accord

Simon Warner, Australia

Healthy Country: a successful model to reduce sediment entering waterways Simon Gartenstein, Australia

Mersey-Forth Water Management Review process, learnings and outcomes

Akira Wada, Japan

Success factor analysis of river restoration projects in Japan

Convening Partner Session
River Cities/Advancing IRBM
within the Urban Concept

Presented by the International RiverFoundation Chair: Ania Grobicki

River Cities, Global Perspectives from Robert Oates, UK

Fritz Holzwarth, Germany Bart Fokkens, the Netherlands

Odontuya Tsetsegdelger, Mongolia Vicente Tuddao, Philippines

Ania Grobicki, Sweden Robert Zimmerman, USA

Decision support for licensing and planning in self-supply

River Knowledge: Tools and Techniques For

Angus Webb. Australia

Session A4F **Using Technology and Modelling**

Abu Saleh Khan, Bangladesh

Augmentation of the Buriganda River dry season flows Nima Zorriasateyn, Australia

Modelling the impact of urbanisation on sediment transport and changes to depth of bedload

Caleb Clarke, New Zealand Urban stream characterisation and improvement

opportunities in central Auckland (New Zealand)

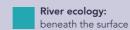
John Conallin, Australia

Using Strategic Adaptive Management to meet the needs of social-ecological thinking

WELCOME FUNCTION & TRADE EXHIBITION, Melbourne Convention and Exhibition Centre

Session A4A





River health: healthy rivers, healthy economies, healthy people

A river runs through it: designing river cities

River knowledge: tools and techniques for action

River partnerships: integrating people, governance and policy

River pressures: pathways to sustainability

0900 – 1000

Room Plenary 1 Session B1

Chair: Jamie Pittock

'Keynote: Dr David Molden, International Centre for Integrated Mountain Development (ICIMOD), Nepal

The Himalayan Water Towers: finding water security in a time of change and uncertainty

Keynote: Celeste Cantú , Santa Ana Watershed Project Authority, USA Watershed based management: integrating people, resources and policy

1000 – 1030 1030 - 1200 Room Plenary 1

Riverprize Finalists

Session B2A

Session B2E Convening Partner Session
Challenges for River Health and Environmental Flow Management in Highly Modified Rivers

Presented by the International RiverFoundation

Chair: Matthew Reddy Australian Riverprize finalists: Condamine River, QLD, Carl Mitchell

Georges River, NSW, Alison Hanlon

Swan and Canning Rivers, WA, Rod Hughes

Thiess International Riverprize finalists: Prespa Lakes, Greece, Irene Koutseri

Okavango River, Angola, Namibia and Botswana,

Ebenizario Chonquica

Nushagak River, USA, Tim Troll Willamette River, USA, Pam Wiley Presented by the International WaterCentre

Chair: Angela Arthington Stuart Bunn, Australia

Managing modified river basins Wang Zhongjing, China

The challenges of river basin governance in Chinese Rivers

Nick Bond Australia

River health assessment in China: recent findings and future opportunities

Robert Speed, Australia

Water resources planning and governance in highly contested rivers

Panel discussion

Elements of effective river health management programs in highly modified systems

Convening Partner Session Enhancing Integrity For Better Sovernance In River Basins

Presented by the Water Integrity Network and Global Water Partnerships

Chair: Ania Grobicki

Binayak Das, Germany Enhancing Integrity in river basin management,

some examples of success Ranjith Ratnayake, Sri Lanka Impact of awareness campaign and legal recourse, sand mining in Sri Lanka

Eben Chonguica, Namibia

Promoting Integrity through planning in Trans-boundary Basins

Astria Nugrahany, Indonesia

Financial stability and accountability, Jasa Tirta Public Corporation, Indonesia

Phillip Weller, Australia Danube River Commission

Panellists:

Ania Grobicki, Horst Vogel, Hodson Makurira, Astria Nugrahany, Portia Segomelo

Creating Water Sensitive Cities

Rachel Brown, Australia

A GIS based decision support tool for quantifying and managing stormwater runoff in Greater Melbourne linked to modelling in eWater Source

Robert Zimmerman, USA

Strategy, tactics, and insights: restoring the Urban Charles River

Schiemer Fritz, Austria

Loosening the strict corset: scope for remediation of urban wetlands

A River Runs Through It: Designing River Cities

Chair: lan Rutherfurd

Ian Rutherfurd, Australia

Managing vegetation to protect small towns from

David Lembcke, Canada

Towards Water Sensitive Urban Design in an Ontario (Canada) Catchment

Phillip Johnstone, Australia

Waterways in the Liveable City (Double Presentation)

1300 - 1430

LUNCH

A River Runs Through It: Designing River Cities

Chair: Phillip Johnstone Ian Penrose, Australia The Yarra's Story as told by its Riverkeeper

Matthew Davis, New Zealand Catchment management in the Auckland region (New Zealand): scale and programme intervention issues

Kieron Beardmore, Australia

How do you create a 'Water Smart Liveable City'?

Hannah Pexton, Australia

Water Sensitive Cities Study Tour - implementing an integrated water future

Convening Partner Session
Twinning – Global Knowledge Sharing
Partnerships for Improved River Basin Management

Chair: Melanie Ryan Robert Oates, UK

Thames – Ganges Twinning

Gayle Wood, USA

Lake Simcoe - Ayuqulia Catchment Twinning

Presented by the International RiverFoundation

Asghar Nawab, India Thames - Ganges Twinning

Richard Hopkins, Australia Mekong – Murray Partnership

Philip Weller, Austria ICPDR and ORASECOM Twinning

Nigel Dobson, Australia Tweed Kenya Mentoring Program How to Inspire People to Work Collaboratively – A Practical Theory for Powerful Partnerships

Presented by the Australian River Restoration Centre

Chair: Siwan Lovett

Facilitated workshop by: Siwan Lovett, Australia

Peter Rennie, Australia

Creating Water Sensitive Cities

Chair: Phil Edwards Scott Hardy, Australia

Urban ABCD Management Framework – new tools for urban water management Jamie Ewert, Australia

An integrated water management atlas for Melbourne

Joshua Hale, Australia Predicting the impact of urbanisation induced

changes in hydrology on environmental values Jackie Myers, Australia

Water Sensitive Cities: implications for the reuse of urban stormwater

Linking Research to Decisions and

Cutting to the core: conservation in the Panama Canal Watershed

Chair: Martin Reed

Krey Price, USA

Dominic Blackham, Australia Managing hydromodification to protect the

geomorphic form of waterways

Asitha Katupitiya, Australia Recent floods and salinity of the Murray River

John McGuckin, Australia

Urban sprawl and protection of a nationally threatened fish species

1430 - 1500 1500 - 1630 AFTERNOON TEA

River Pressures: Pathways to Sustainability

Darren Bos, Australia

Balancing cost with community: are market-based incentives the best approach for stormwater retrofits?

Sandra Walpole, Australia Water market values in the Hawkesbury-Nepean catchment:

Brahmaputra River

an environmental perspective Shahriar Rahman, Bangladesh

Development of an eco-hydrological framework for the

Addressing Asymmetry In Transnational Boundary And Urban Water Relationships

Presented by the International RiverFoundation

Chair: Don Blackmore Ania Grobicki, Sweden Philip Weller, Austria

Jed Mabilog, Philippines Janet Lopoz, Philippines

Rapule Pule, South Africa Eben Chonguica, Botswana

Odontuya Tsetsegdelger, Mongolia

Stakeholder Collaboration, Effective Partnerships

Chair: Rod Hughes Chris McCulloch, Australia

Ana Terrazas, Australia

NSW Central West Council's Salinity and Water Quality Alliance

Integrating community and government in a rapidly urbanizing Perth: SERCUL

Louise Duff. Australia Case studies in collaborative wetland monitoring, evaluation and reporting

Mark Thornley, Australia Dolphin Watch: government, scientists and the Perth community working together

Creating Water Sensitive Cities

Chair: Phillip Johnstone Wade Fitzgerald, Australia

Rejuvenating an entire inner-city catchment -Norman Creek, Brisbane

Rob Catchlove, Australia Politics and the media: are they holding our urban waterways back from taking the next big

Andrew O'Neill, Australia Wave of discontent

leap?

Phil Edwards Australia What do you get when you cross a city and a water cvcle?

A River Runs Through It: Designing River Cities

Sanjaykumar Yadav, India Performance evaluation of water supply services of Indian city

Edith Pat Mbano, Nigeria

Chair: Ashley Rogers

Compromising environmental sustainability for urbanisation and riverbank activities in Nigeria Ashley Roberts, Australia

Implication of climate change on costs to waterway management actions Maria Endarwati, Indonesia

One river, one plan, one management: 'How difficult to adopt it!'



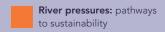
River ecology: beneath the surface

River health: healthy rivers, healthy economies, healthy people

A river runs through it: designing river cities

River knowledge: tools and techniques for action

River partnerships: integrating people, governance and policy





Surface Water, Groundwater Relationships
Chair: Angela Arthington
Susanta Chakraborty, India Sustainable water management in water scarcity zones of southwest Bengal
Daryl Nielsen, Australia Promoting connectivity fuels food-webs downstream of floodplain forests
Fing Fong May Chui , Singapore Restoring baseflow in Singapore canals for natural habitats
Joanna Wand, Australia Can environmental flows increase abundance of native

ling Fong May Chui, Singapore
Restoring baseflow in Singapore canals for natural habitats
Joanna Wand, Australia
Can environmental flows increase abundance of native
vegetation on riverbanks?

Room 203 Convening Partner Se A Decade of Waterwa Victoria: Hard Lesson	ay Health Management in
Presented by Victorian Dep Environment	partment of Sustainability and
Chair: John Riddiford	
Jane Doolan, Australia Introduction	
Amber Clarke, Australia A decade of waterway heal lessons learnt	th management in Victoria: hard
Paulo Lay, Australia Making the best of a good efficient use of environmen	9

efficient use of environmental water
Beth Ashworth , Australia Be prepared – annual environmental water planning and use of scenarios
Adam Bester, Australia Glenelg River Restoration Project – the story so far
Trent Wallis, Australia The Barwon through Geelong – managing for river health

within an urban setting

River Partnerships: Integrating People, Governance and Policy Chair: Jamie Pittock Ian Penrose, Australia Passion, persistence and people-power – the 'Go Yarra Flow' story David Lindley, South Africa Beyond compliance to self control: change orientated learning for wetland sustainability practices Vjeko Matic, Australia

protect streams against infill development Nathan Johnston, Australia Establishing the Fitzroy Partnership for River Health

Developing a 'best practice' planning overlay to

Session C3D Room 211 Convening Partner Session Australia – Netherlands Water Challenge

Presented by Netherlands Water Partnership and Kath Lynch, Australia the International WaterCentre Chair: Gregor van Essen

Gregor van Essen, The Netherlands Introduction to the Australia – Netherlands Water Challenge **Poster presentation** by selected Phase 1

Challenge entrants Wang Zhongjing, China An international perspective

Facilitated workshop

	Improving water quality through science in a National Coastal Hotspot
er	Cameron Wearing , Australia Seqwater Optimising Multi-barrier treatment
	Bill Dennison , Australia Connecting management, monitoring and research to solve environmental problems

Linking Research to Decisions and

Policies

AFTERNOON TEA 1500 – <u>1530</u> 1530 - 1700 Room Plenary 1 Closing Ceremony Australia - Netherlands Water Challenge Encouragement Award

1330 - 1500

Chair: Prof Paul Greenfield AO, International WaterCentre

River Management Young Achiever Award Winner

The Great River Debate: river cities need to make room for their river

Session C4