

12th August 2018

Registration Open

4:00PM - 7:00PM Hotel Lobby

Welcome Reception

5:00PM - 7:00PM Harbour View 1

Drinks and Canapes provided

13th August 2018

Conference Registration open

7:45AM - 5:00PM Mezzanine Level

Opening address and Welcome to country

8:30AM - 9:15AM Grand Ballroom

Keynote Address

9:15AM - 9:45AM Grand Ballroom

9:15 AM **Stephen Cahoon**
Data-Driven Decisions *abs# 1*

Jacobs Gold Sponsor presentation

9:45AM - 9:55AM Grand Ballroom

This conference acknowledges the sponsorship of



Tas Water Sponsor Presentation

9:55AM - 10:05AM Grand Ballroom

This conference acknowledges the sponsorship of



GHD Sponsor Presentation

10:05AM - 10:15AM Grand Ballroom

This conference acknowledges the sponsorship of



Coffee Break

10:15AM - 10:50AM Mezzanine Level

Monitoring & Evaluation

10:50AM - 12:30PM Grand Ballroom 1

Chair: Megan Holcomb

10:50 AM **Chris S Jones**

Regular intervention monitoring providing valuable insights into vegetation responses to environmental flows on rivers *abs# 2*

11:10 AM **Mark Stacey**

A long-term temporal evaluation of environmental flow regimes in southern Victoria *abs# 3*

11:30 AM **John Gooderham**

Tactics for stretching a waterbug based monitoring program across a continent *abs# 4*

11:50 AM **Zeb Tonkin**

Monitoring fish responses to environmental flows across Victoria: a shift towards understanding processes, population dynamics and long-term projections *abs# 5*

12:10 PM **Yi-Ming Ma**

Development of a state-wide map of the extent and location of high value, at-risk groundwater dependent ecosystems *abs# 6*

Priority Setting

10:50AM - 12:30PM Grand Ballroom 2

Chair: Geoff Vietz

10:50 AM **Simon A Mould**

Sociogeomorphic river recovery: integrating human and physical processes *abs# 7*

11:10 AM **Sandra O Brizga**

Rivers, amenity and art: the geomorphologist's role in health and liveability *abs# 8*

11:30 AM **Sean M Phillipson**

Delivering priorities for the Gippsland Lakes through partnerships *abs# 9*

11:50 AM **Julie Francis**

New ways of collaborating for improved catchment outcomes *abs# 10*

12:10 PM **Jesse J Webster**

ALRS - Key observations and lessons associated with the roll out of a state wide flood recovery program. *abs# 11*

Erosion

10:50AM - 12:30PM Grand Ballroom 3

Chair: Julian Martin

10:50 AM **Leigh Smith**

Applied Fluvial Geomorphology in the 21st Century: embracing a Waterway Asset Management approach *abs# 12*

11:10 AM **James Grove**

Dredging up the past: what are the current implications for Victorian rivers from historic gold dredging? *abs# 13*

11:30 AM **Brett Phillips**

Rates of bank erosion under natural and regulated flows in the Upper Murray River system - Khancoban Dam to Jingellic *abs# 14*

11:50 AM **Andrew Simon**

Rates of Bank Erosion under Different and Alternative-Flow Releases along the Mitta Mitta River - Developing Metrics to Limit Erosion Downstream from Dartmouth Dam *abs# 15*

12:10 PM **Neda Yousefi**

Assessment of channel expansion and contraction using cross-section data from repeated LiDAR acquisitions in the Macquarie Marshes, NSW *abs# 16*

Riparian / Vegetation

10:50AM - 12:30PM Chancellor Room 6

Chair: Hugo Bowman

10:50 AM **Rebecca Mabbott**

Trialling the use of controlled burning for exotic vegetation management in novel riparian ecosystems *abs# 17*

11:10 AM **Simon Treadwell**

Causes and management of dieback in River Red Gum trees along Malcolm Creek, Craigieburn *abs# 18*

11:30 AM **Ben Pearson**

Oxley Creek Transformation – An overview of waterway issues and restoration strategies *abs# 19*

11:50 AM **Greg Peters**

Riparian fencing: can't we just make them do it? No, and here's why. *abs# 20*

12:10 PM **Sarah Grimish**

Restoring Riparian Resilience in the Mary River catchment - an integrated catchment management approach *abs# 21*

Lunch

12:30PM - 2:00PM Mezzanine Level

Environmental flows

2:00PM - 3:40PM Grand Ballroom 1

Chair: Yi-Ming Ma

Session sponsored by **JACOBS**

2:00 PM **Lisa Duncan**

When to break the habit: Adapting the FLOWS method for use in the highly modified Lower Broken Creek *abs# 22*

2:20 PM **Andrew K Sharpe**

Lifting our gaze: improved environmental water management requires a landscape-scale approach *abs# 23*

2:40 PM **Amanda Shipp**

Maintaining drought refuge pools in the Wimmera River *abs# 24*

3:00 PM **Terry Chan**

Detection of long-term change in waterway health due to flow *abs# 25*

3:20 PM **Parvin Zavarei**

Werribee River Ecohydraulics *abs# 26*

Policy

2:00PM - 3:40PM Grand Ballroom 2

Chair: Alison Miller

2:00 PM **Craig Clifton**

Use of catchment carbon offsets to build climate resilience in catchments and help the water sector achieve zero net emissions *abs# 27*

2:20 PM **Glenn D Browning**

Are trade-offs acceptable or just accepting defeat? *abs# 28*

2:40 PM **Chris Cleary**

Collaborative water management in the Ringarooma River catchment Tasmania, Australia *abs# 29*

3:00 PM **Karen White**

Imagine the Yarra: how community, legislation and land use planning is shaping the future of an iconic waterway *abs# 30*

3:20 PM **Phillip Lorenzelli**

What happens to the stream when the coal mine closes – A cautionary tale for legislation, licencing and best practice *abs# 31*

Erosion

2:00PM - 3:40PM Grand Ballroom 3

Chair: Ben Pearson

2:00 PM **Sam J Lewis**

Bank-stabilising rock fillets increase diversity and abundance of macro invertebrate and meiofaunal communities in the Kalang estuary, NSW. *abs# 32*

2:20 PM **Abdullah Baky**

Understanding the evolution of floodplain channels by avulsion: An investigation on the floodplain of Murray River *abs# 33*

2:40 PM **Danielle Udy**

Channel erosion risk assessment of south east Queensland *abs# 34*

3:00 PM **Hugo Bowman**

Managing erosion from vessel wash on a reach of the Murray River *abs# 35*

3:20 PM **Andrew Briggs**

Mid-King Cooperative Avulsion Management *abs# 36*

Riparian / Vegetation

2:00PM - 3:40PM Chancellor Room 6

Chair: Jamie Kaye

2:00 PM **Ross E Hardie**

Rehabilitation of the Nimmie-Caira *abs# 37*

2:20 PM **Ben E Vincent**

Seed germination traits of two common floodplain eucalypts: optimum germination temperatures and influence of leaf litter *abs# 38*

2:40 PM **Matt Bowler**

Willow control in the remote headwater waterways of gippsland *abs# 39*

3:00 PM **Jo Slijkerman**

From planting willows to pulling them out: The past, present and future of riparian management in Victoria *abs# 40*

3:20 PM **Luke R McPhail**

Development of the stream rehabilitation guidelines for Queensland *abs# 41*

Afternoon Tea

3:40PM - 4:10PM Mezzanine Level

Monitoring & Evaluation

4:10PM - 5:30PM Grand Ballroom 1

Chair: Chris Jones

4:10 PM **Apanie Wood**

Is my river health intervention project working? Results and lessons learned from 10 years of riparian works monitoring in the Melbourne region. *abs# 42*

4:30 PM **Scott A Hardie**

Evaluation and redirection of a long term broad scale river health monitoring program in Tasmania Australia *abs# 43*

4:50 PM **Josh Griffiths**

Tracking platypus populations through genetic fingerprints *abs# 44*

5:10 PM **Andrew Weeks**

AquaBlitz: using environmental DNA to map freshwater biodiversity throughout Melbourne's waterways *abs# 45*

Community / Engagement

4:10PM - 5:30PM Grand Ballroom 2

Chair: Jess Dean

4:10 PM **Lori Gould**

What Landholder is That? Tailoring Your Engagement Approach. *abs# 46*

4:30 PM **Tony Wales**

Georges River Aboriginal Riverkeeper Team: a model for successful engagement of Aboriginal communities in natural resource management of urban areas *abs# 47*

4:50 PM **Rob M Richards**

What's in it for me – an evidence based approach to improve landholder adoption of riparian works *abs# 48*

5:10 PM **Julian Skipworth**

When Perception and Evidence Based Practice Collide - Floodplain and Waterway Management in the aftermath of the 2016 Floods at St Marys, Tasmania *abs# 49*

Urban / Stormwater

4:10PM - 5:30PM Grand Ballroom 3

Chair: Glenn Browning

4:10 PM **Barnaby Resch**

Returning native fish to an urban creek in Logan *abs# 50*

4:30 PM **David J Reid**

Using concreted stormwater channels for determining 'worse case scenarios' when assigning grades of relative condition to urban waterways *abs# 51*

4:50 PM **Carl Tippler**

Concrete Stormwater Channels: Urban Stream Wasteland or Supercharged Ecosystems? *abs# 52*

5:10 PM **Michael Dean**

Setting Appropriate Goals for Urban Stream Restoration: A Case Study from Blacktown City Council *abs# 53*

Concurrent Session

4:10PM - 5:30PM Chancellor Room 6

Chair: Ashley Roberts

4:10 PM **Matt Curtis**

Fish Passage Considerations for Retrofit of Base Flow Weir Gauges *abs# 54*

4:30 PM **Andrew Telfer**

Groundwater the known unknown in floodplain management *abs# 55*

4:50 PM **Sarah L McSweeney**

Predicting opening duration of intermittently open/closed estuaries in victoria *abs# 56*

5:10 PM **Danielle Udy**

When one model just isn't enough *abs# 57*

Evening with Steve Posselt

6:00PM - 7:00PM Mezzanine Level

Steve Posselt

What is it like to paddle up the Mississippi in a flood? *abs# 58*

Dinner at leisure

7:00PM - 9:00PM Atrium Bar

Recommend casual dining at the Atrium Bar

14th August 2018

Conference Registration open

7:30AM - 5:00PM Mezzanine Level

Keynote Session

8:30AM - 9:30AM Grand Ballroom

Session sponsored by **JACOBS**

8:30 AM **Siwan Lovett**

Who me? The case for investing in our social capital. *abs# 59*

9:00 AM **Rawiri Tinirau**

Ko au te Awa, ko te Awa ko au: I am the River, and the River is me – What it means to belong to the Whanganui River *abs# 60*

Plenary Session: Valuing Rivers

9:30AM - 10:00AM Grand Ballroom

9:30 AM **Nick Marsh**

Which on-ground projects will give me the best environmental return? *abs# 61*

9:45 AM **Sarina Loo**

“Does anyone here speak water-ish?” – How the benefits of environmental flows get lost in translation *abs# 62*

Coffee Break

10:00AM - 10:30AM Mezzanine Level

Environmental flows

10:30AM - 12:10PM Grand Ballroom 1

Chair: Lisa Duncan

10:30 AM **Phil Slessar**

Flows, habitat, connectivity and cooperation: recovering native fish in northern Victoria *abs# 63*

10:50 AM **Sarah Heard**

Environmental response of reconnecting billabongs along the Yarra River *abs# 64*

11:10 AM **Paul Frazier**

Warrego Hydrology: what is, what was and what might have been. *abs# 65*

11:30 AM **Amanda Shipp**

Toorale environmental water delivery project: A case study in loaves and fishes *abs# 66*

11:50 AM **Saideepa Kumar**

Are target based approaches appropriate for managing environmental water? *abs# 67*

Water Quality

10:30AM - 12:10PM Grand Ballroom 2

Chair: Marie Bigot

10:30 AM **Jason K Reynolds**

The Presence of Illicit Compounds in the Hawkesbury-Nepean River System *abs# 68*

10:50 AM **Nakia Belmer**

Heavy metal contamination of water column from a coal mine waste water discharge resulting in

mobilisation of metal contaminants to riparian vegetation. Wollangambe River, Blue Mountains Australia. *abs# 69*

11:10 AM **Danlu Guo**

A web-based interface to visualize and model spatio-temporal variability of stream water quality *abs# 70*

11:30 AM **Elizabeth Pope**

Data versus desktop: an assessment of the severity of cold water pollution in the Swampy Plains and Murray Rivers below Khancoban Dam *abs# 71*

11:50 AM **Bonnie Bonneville**

Planning for future wastewater discharges to streams in urban-growth areas, Tasmania *abs# 72*

Priority Setting

10:30AM - 12:10PM Grand Ballroom 3

Chair: Andrew Sharpe

10:30 AM **Christopher J Walsh**

Benefits and challenges of incorporating spatially-explicit quantitative modelling and action prioritisation in Melbourne Water's Healthy Waterways Strategy *abs# 73*

10:50 AM **Claire Sims**

Multi site environmental water planning in South Australia using ewater source *abs# 74*

11:10 AM **Bruce J Christie**

Using Aquatic Habitat Mapping to prioritise on-ground investment *abs# 75*

11:30 AM **Geoff Vietz**

Urban Streamflow Evaluation and Amelioration Method: A New Approach for Waterway Protection and Rehabilitation *abs# 76*

11:50 AM **Chris Dwyer**

Prioritising Kayak Access on the Yarra River *abs# 77*

Great Barrier Reef

10:30AM - 11:50AM Chancellor Room 6

Chair: Simon Mould

10:30 AM **Lynise Wearne**

Innovative solutions to alluvial gully remediation: a case study from the Great Barrier Reef catchments *abs# 78*

10:50 AM **Andrew Brooks**

A comparison of methods for measuring water quality improvements from gully rehabilitation in Great Barrier Reef catchments *abs# 79*

11:10 AM **Scott Wilkinson**

Addressing gully erosion in the Great Barrier Reef catchments: priorities and progress *abs# 80*

11:30 AM **Tony Weber**

Cost and approaches to achieving the Great Barrier Reef water quality targets *abs# 81*

Lunch

12:10PM - 12:40PM Mezzanine Level

Field Trip 1: North West Bay River Catchment Tour - Summit to sea

12:30PM - 5:00PM

Bus departs at 12:30pm from corner Campbell St and Davey St (side of the Hotel alongside the restaurant Tasman) Google maps [here](#)

Please ensure you have appropriate weather proof clothing, suitable shoes and a high-vis vest if you are attending either of the field trips.

Field Trip 2: Hobart Rivulet Tour - Urban Stream Management

12:30PM - 5:00PM

Bus departs at 12:30pm from corner Campbell St and Davey St (side of the Hotel alongside the restaurant Tasman) Google maps [here](#)

Please ensure you have appropriate weather proof clothing, suitable shoes and a high-vis vest if you are attending either of the field trips.

Workshop: Legal rights for rivers: could it (should it?) happen in Australia?

1:00PM - 5:00PM Grand Ballroom 3

Welcome

Overview of legal rights for rivers (Dr Erin O'Donnell)

Guest speakers

- Rawiri Tinirau (NZ) – Legal rights for the Whanganui River (15 minutes)
- Dr Avril Horne (Aus) – Environmental water management and legal rights (15 minutes)

Audience questions

Afternoon tea

Small group discussion: how could legal rights work in the Australian context?

Each group tackles a specific river catchment, focusing on the following questions:

- What is the subject of the rights? (river, basin, catchment)
- What are the important values of the river?
- What rights and powers should the river person have? (water rights, property rights, other specific powers)
- What sort of organisation should represent the river? (guardians, funding)
- How will all stakeholders be represented? (Indigenous people, irrigators, wider community, environment)

- How would the balance between competition and collaboration be managed?

Example Australian river catchments:

- Murrumbidgee River (NSW)
- Kati-Thanda Lake Eyre (SA)
- Derwent River (Tasmania)
- Margaret River (WA)
- Martuwarra/Fitzroy River (WA)
- Other suggestions from participants, based on local knowledge

Participants will receive: (1) a map (2) a brief description of their catchments to guide their discussions.

Whole group discussion

Ferry departs Brooke Street Pier, Hobart

6:30PM - 7:00PM

Conference Dinner at MONA

7:00PM - 10:30PM

Keynote Presentation by Kirsha Kaechele

Ferry departs MONA for Hobart

10:30PM - 11:00PM

Post Conference Dinner Drinks - Glass House

11:00AM - 12:30AM

15th August 2018

Conference Registration open

7:45AM - 1:00PM Mezzanine Level

Sediment

9:00AM - 10:20AM Grand Ballroom 1

Chair: Andrew Simon

9:00 AM Michael D Cheetham

Hope for the best, plan for the worst: Managing sediment input in the upper catchment whilst preparing for avulsion at the mouth. *abs# 82*

9:20 AM Alex Sims

Local scale interventions accelerate recovery at the tail of a bedload pulse *abs# 83*

9:40 AM Timothy Pietsch

Characterizing channel geometry distribution for sediment budgeting in large catchments *abs# 84*

10:00 AM **Jonathan Garber**

Establishing the feasible fine sediment trapping efficiency of floodplains: a case study in Southeastern Queensland abs# 85

Urban / Stormwater

9:00AM - 10:20AM Grand Ballroom 2

Chair: David Reid

9:00 AM **Ben Berry**

Looking through Goggles - The Murray River from a different perspective - A short film *abs# 86*

9:20 AM **Kathryn L Russell**

Urban streams and sediments: informing better management through recent findings *abs# 87*

9:40 AM **Andrew H O'Neill**

Were load-based stormwater objectives a necessary mistake to progress water sensitive urban design? *abs# 88*

10:00 AM **Desmond O. Anim**

Managing urban streams: change the channel or change the flow? *abs# 89*

Community / Engagement

9:00AM - 10:20AM Grand Ballroom 3

Chair: Beth Salt

9:00 AM **Bron Gwyther**

Did it work? Do the landholders value and manage it? Is it still there? Setting the standard for follow-up riparian inspections and landholder engagement *abs# 90*

9:20 AM **Beth Salt**

Georges Riverkeeper - 40 years in the making *abs# 91*

9:40 AM **Mary Bonet**

Supporting and connecting community through restoration- Why the Rivers of Carbon model works for Landcare *abs# 92*

10:00 AM **Jess R Dean**

Benefits of the Mary River catchment Waterwatch Program for integrated stream management and monitoring outcomes *abs# 93*

Water Quality

9:00AM - 10:20AM Chancellor Room 6

Chair: Nakia Belmer

9:00 AM **Marie Bigot**

Derivation of site-specific water quality objectives within a highly disturbed Tasmanian catchment *abs# 94*

9:20 AM **Rani Carroll**

Is geochemical contamination from urban development contributing to weed invasions in high conservation value wetlands *abs# 95*

9:40 AM **Benjamin Green**

Community triggers EPA action to address river water pollution caused by inflow of coal mine waste water *abs# 96*

10:00 AM **Katherine Morrison**

A five-year investigation of water pollution in a small stream due to stream channel fracturing that was triggered by subsidence from underground coal mining *abs# 97*

Coffee Break

10:20AM - 10:50AM Mezzanine Level

Erosion / Sediment

10:50AM - 12:10PM Grand Ballroom 1

Chair: TBC

10:50 AM **Kirstie Fryirs**

It's a good news story! Tracking geomorphic recovery of rivers in eastern New South Wales as part of process-based river management *abs# 98*

11:10 AM **Fergus Hancock**

Towards identifying geomorphic rarity and vulnerability use of River Styles in high ecological value aquatic ecosystems *abs# 99*

11:30 AM **Zoe Samson**

Maribyrnong river erosion control project floating boom trial *abs# 100*

11:50 AM **Brad Wedlock**

Gully erosion control activities in the Mary River catchment *abs# 101*

Urban / Stormwater

10:50AM - 12:10PM Grand Ballroom 2

Chair: Kathryn Russell

10:50 AM **Niloo Ms Tara**

Maintenance of WSUD Assets – “The good, The bad and The ugly” *abs# 102*

11:10 AM **Adam Hall**

The Challenges Faced in Naturalising Channelised/Urbanised Waterways Extend Far Beyond the Physical Design of a Functioning Waterway. *abs# 103*

11:30 AM **Rhys A Coleman**

Habitat improvement and creation for threatened dwarf galaxias (*Galaxiella pusilla*) along the Dandenong Creek corridor in the south eastern suburbs of Melbourne *abs# 104*

11:50 AM **Ian Wright**

Water quality and ecological recovery of a mountain stream after 60 years of receiving sewage effluent *abs# 105*

Community / Engagement

10:50AM - 12:10PM Grand Ballroom 3

Chair: Apanie Wood

10:50 AM **Lizzie Younger and Anna Zsoldos**

Reflection on the achievements of River Health Incentives Program: 22 years of partnering with community to improve waterway health *abs# 106*

11:10 AM **Alan Hoban**

Design Your Creek Week – Community co-design to for a 1.6 km waterway naturalisation project. *abs# 107*

11:30 AM **Simon Laird**

What to do when your data doesn't tell the whole picture..? *abs# 108*

11:50 AM **Tom Atkin**

Wodonga regional waterway action plan: a community led waterway action plan abs# 109

Wetlands

10:50AM - 12:10PM Chancellor Room 6

Chair: Sean Phillipson

10:50 AM **Danelle Agnew**

Ecosystem productivity of a wet-dry tropics wetland system: Establishing a baseline understanding for conservation *abs# 110*

11:10 AM **Mick Callan**

The Importance of Swampy Meadows *abs# 111*

11:30 AM **Ashley Roberts**

Challenges of improving the connectivity of an abandoned Yarra River water course *abs# 112*

11:50 AM **Steve Wickson**

Using redundant drainage infrastructure to protect vulnerable wetlands *abs# 113*

Keynote Address: Don Watson

12:10PM - 12:40PM Grand Ballroom 1

Don Watson

Australia's land management history and how to meaningfully discuss and communicate the need and opportunity for change *abs# 114*

Closing Address

12:40PM - 12:50PM Grand Ballroom 1

Lunch

12:50PM - 2:00PM Mezzanine Level