
PROGRAM

24th September 2017

Registration Open

9:00AM - 5:00PM

Aerial UTS Function Centre Foyer

Student Workshop

10:30AM - 3:30PM

CB10.04.430 - Maths Lab

This conference acknowledges the sponsorship of



Student Mixer

3:30PM - 4:30PM

Aerial UTS Function Centre Foyer

This conference acknowledges the sponsorship of



Student Mentoring Program

4:30PM - 5:00PM

Broadway

Conference Ice Breaker

5:00PM - 7:00PM

Harris/Aerial UTS Function Centre Foyer

25th September 2017

Registration Open

7:30AM - 6:00PM

Aerial UTS Function Centre Foyer

Welcome to Country

8:30AM - 8:50AM

Harris/Jones

Dr. Peter Yanada McKenzie

Opening

8:50AM - 9:00AM

Harris/Jones

Claire Sives

Plenary 1

9:00AM - 9:45AM

Harris/Jones

Chair: Claire Sives

9:00 AM

Paul Sunnucks

Understanding freshwater connection and disconnection in the genomic age

abs# 1

Plenary 2

9:45AM - 10:30AM

Harris/Jones

Chair: Claire Sives

9:45 AM

Samantha Capon

Seeing green: a perspective on the ecology and management of riparian and wetland vegetation in Australia's drylands *abs# 2*

Morning Tea

10:30AM - 10:50AM

Aerial UTS Function Centre Foyer

Environmental Flows 1: Flows

10:50AM - 12:30PM

Harris/Jones

Chair: Alison King

10:50 AM

Nick Bond

Quantifying the effects of altered hydrology and food-web structure on ecosystem carrying capacity in a floodplain river *abs# 3*

11:10 AM

Sally E Maxwell

Demonstrating hydro-ecological responses to the return of low-flows in intermittent streams *abs# 4*

11:30 AM

Alison King

Establishing the environmental water requirements for the Daly River, Northern Territory. *abs# 5*

11:50 AM

Brenton Zampatti

Environmental flows and ecological response: it's not just the size of the allocation, it's how you use it. *abs# 6*

12:10 PM

Matthew Balzer (Student)

Allochthonous carbon influx in riverine food webs; a role for environmental flows *abs# 7*

Cyanobacteria/Molecular ecology and genetics

10:50AM - 12:30PM

Broadway

Chair: Anne Colville

10:50 AM

Anne E Colville

Investigation of unexplained toxicity in cyanobacterial extracts *abs# 12*

11:10 AM

Larelle D Fabbro

Cyanobacterial assemblages following flooding in the Fitzroy River system, Central Queensland, Australia. *abs# 13*

11:30 AM

Tim J Malthus

An algal bloom early warning system for NSW using satellite and near-surface observations *abs# 14*

11:50 AM

Matt Krosch

Evolution of pollution tolerance in Australian *Cricotopus* midges (Diptera: Chironomidae) *abs# 15*

12:10 PM

Melissa Carew

How to develop rapid and cost-effective species-based biological monitoring using high throughput DNA sequencing of DNA barcodes *abs# 16*

Biogeochemistry and ecosystem processes

10:50AM - 12:30PM

Thomas/Wattle

Chair: Mike Grace

10:50 AM

Ryan Burrows

Stream nitrate uptake dynamics in a nitrogen-limited region *abs# 8*

11:10 AM

Wing Tsoi

Stream Metabolism in turbid river systems in the northern Murray Darling Basin *abs# 9*

11:30 AM

Stephanie V Robson (Student)

Pharmaceutical impacts on biogeochemical processes in artificial streams *abs# 10*

11:50 AM

Mike Grace

The killing of photosynthesis at environmentally relevant pharmaceutical concentrations - an inquest! *abs# 11*

Lunch and Pre-AGM Constitution Debate

12:30PM - 1:30PM

Aerial UTS Function Centre Foyer

Environmental Flows 2: Biota

1:30PM - 3:10PM

Harris/Jones

Chair: Iain Ellis

1:30 PM

Joe Greet

Floods are good: evidence from a managed flood on the benefits for native wetland vegetation *abs# 17*

1:50 PM

Jane Roberts

Condition-states and inundation sequences: a new way of describing plant water requirements *abs# 18*

2:10 PM **Paul J McInerney**
Flooding drives a macroinvertebrate biomass boom in ephemeral floodplain wetlands
abs# 19

2:30 PM **Iain Ellis**
Fish and flows: Delivering flows for Murray Cod and Golden Perch in the Lower Darling River *abs# 20*

2:50 PM **Heather M McGinness**
Waterbird recruitment and movement: Responses to flooding, stressors and threats
abs# 21

Wetland Vegetation

1:30PM - 3:10PM

Broadway

Chair: Daryl Nielsen

1:30 PM **Guyo Duba Gufu (Student)**
Responses of freshwater macrophytes to low concentrations of additional nitrogen
abs# 27

1:50 PM **William Higginson (Student)**
Seed germination in response to flooding: tangled lignum (*Duma florulenta*) and nitre
goosefoot (*Chenopodium nitrariaceum*) *abs# 28*

2:10 PM **Bertrand Salmi**
Restoring hydraulic connectivity of a small billabong in an urban context *abs# 29*

2:30 PM **Daryl Nielsen**
Infrastructure modifies movement patterns of seeds drifting in lowland rivers
abs# 30

2:50 PM **Fiona Freestone**
Long term condition monitoring shows improvement in wetland vegetation *abs# 31*

Bioassessment and Monitoring/ARC

1:30PM - 3:10PM

Thomas/Wattle

Chair: Ross Thompson

1:30 PM **Tom J Mooney**
Elevated magnesium concentrations in tropical fresh surface waters can affect phyto- and
zooplankton communities. *abs# 22*

1:50 PM **Michael Shackleton**
Efforts in barcoding Australia's aquatic invertebrates: introducing the Aquatic
Invertebrates of Australia (AIA) DNA database *abs# 23*

2:10 PM **Daniela Cortez (Student)**
Disturbing flows: recovery capacity of macroinvertebrate assemblages and traits to natural
flow extremes *abs# 24*

2:30 PM **Evan Chua (Student)**
How Healthy is our Aquatic Ecosystem? Ask the Fish – Development of a Fish Health Index
for the Fitzroy Basin of Central Queensland *abs# 25*

2:50 PM **Ross Thompson**
Inside the Australian Research Council: advice for applicants and reviewers
abs# 26

Afternoon Tea
3:10PM - 3:30PM

Aerial UTS Function Centre Foyer

Environmental Flows 3: Policy

3:30PM - 4:50PM
Chair: Evan Harrison

Harris/Jones

3:30 PM

Sarah J Baines (Student)

Water Policy Innovation: Consideration of Cultural Flows in Decision Processes *abs# 32*

3:50 PM

Evan Harrison

Managing freshwater ecosystems in New Zealand. How to measure success? *abs# 33*

4:10 PM

Katherine Cheshire

Fish and Flows: Developing flows for freshwater fish in NSW *abs# 34*

4:30 PM

Tim Malthus

Critical evaluation of smartphone apps as tools for water quality monitoring in SEQ inland waters *abs# 100*

Biodiversity and Conservation/ Wetland Ecology

3:30PM - 4:50PM
Chair: Justin Cutajar

Broadway

3:30 PM

James Hitchcock

Zooplankton response to a hypoxic blackwater event in the Hunter River estuary *abs# 39*

3:50 PM

Justin Cutajar

Application of the Ecological Character Descriptions for Australian Ramsar sites to achieve sustainable outcomes for an iconic perched Lake in the Southern Highlands of PNG. *abs# 40*

4:10 PM

Tim Mouton

Saltmarsh Restoration in the Hunter Estuary – a Partnership Approach *abs# 41*

4:30 PM

Jayne Brim Box

The use of central Australian waterbodies by native and feral mammals *abs# 42*

SOPA: Wetlands

3:30PM - 4:50PM
Chair: Swapan Paul

Thomas/Wattle

3:30 PM

Swapan Paul

Managing estuarine wetlands at Sydney Olympic Park requires local innovation and adaptation *abs# 35*

3:50 PM

Julie Currey

Using Wetlands to Treat and Dispose of Landfill Leachate at Sydney Olympic Park *abs# 36*

4:10 PM


Lorraine Hardwick (Student)

How the swamps work, views from the Blue Mountains *abs# 38*

4:30 PM

Le Ma (Student)

Physiological tolerance and behavioural response to drought in the freshwater mussel,
Westralunio carteri abs# 37

This conference acknowledges the sponsorship of SydneyOlympicPark 

Poster Session

4:50PM - 5:30PM

Aerial UTS Function Centre Foyer

Lungfish Lecture

5:30PM - 6:30PM

Chair: Jenny Davis

Harris/Jones

Paul I Boon

The Hawkesbury River: a Social and Natural History *abs# 43*

Close

6:30PM - 6:45PM

Harris/Jones

Claire Sives

E-MCR Mixer @ The Australian Youth Hotel

6:45PM - 8:30PM

The Australian Youth Hotel

26th September 2017

Registration Open

7:40AM - 6:30PM

Aerial UTS Function Centre Foyer

Any business

8:30AM - 8:50AM

Harris/Jones

Simon Mitrovic

Plenary 3

8:50AM - 9:35AM

Chair: Simon Mitrovic

Harris/Jones

8:50 AM

Barbara L Peckarsky

Effects of climate change on stream organisms *abs# 44*

Plenary 4

9:35AM - 10:20AM

Chair: Simon Mitrovic

Harris/Jones

9:35 AM

Richard Kingsford

Australian rivers in the Anthropocene *abs# 45*

Morning Tea

10:20AM - 10:40AM

Aerial UTS Function Centre Foyer

OEH: Water for the environment

10:40AM - 12:00PM

Chair: Michael Hughes

Harris/Jones

10:40 AM

Rachael F Thomas

Evaluating inundation regime outcomes for the vegetation of a floodplain wetland landscape *abs# 46*

11:00 AM

Sharon M Bowen

Building ecological reference models for wetland vegetation communities in inland floodplain wetlands in NSW *abs# 47*

11:20 AM


Li Wen

Landscape position affects the resilience of floodplain vegetation communities to climate anomalies *abs# 48*

11:40 AM

Yoshi Kobayashi

Species diversity and distribution of aquatic microfauna for wetland condition assessment *abs# 49*

This conference acknowledges the sponsors  Office of Environment & Heritage

Foodwebs

10:40AM - 12:00PM

Broadway

Chair: Darren Ryder

10:40 AM

Darren RyderFood web responses to hydrologic regimes in floodplain rivers *abs# 54*

11:00 AM

Georgia K Dwyer (Student)A predicted change in the amino acid landscapes available to freshwater carnivores
abs# 55

11:20 AM

Kendal Krause (Student)The effects of the common Carp (*Cyprinus carpio*) and Weather Loach (*Misgurnus
anguillicaudatus*) on emerging zooplankton community abundance and composition
abs# 56

11:40 AM

Bradley Clarke-Wood (Student)Longitudinal trends in land-use, spatial subsidies and food-webs of north-eastern Victorian
perennial streams. *abs# 57***Lakes and reservoirs/Invasive species**

10:40AM - 12:00PM

Thomas/Wattle

Chair: Anne Watson

10:40 AM

Laura Michie (Student)Management of cold water pollution using a thermal curtain; assessing varied release
mechanisms on thermal regimes and algal communities *abs# 50*

11:00 AM

Anne WatsonIs turbidity in a shallow Tasmanian lake controlled by wind or by the extent of macrophyte
coverage? *abs# 51*

11:20 AM

Bernadette ProemseTracing water quality changes in water level manipulated lakes in central Tasmania using
high resolution core scanning and isotopic dating techniques *abs# 52*

11:40 AM

Joe PeraEffects of a fish kill on water quality; potential impacts from the release of the Cyprinid
herpesvirus as a biological control for carp. *abs# 53***Lunch**

12:00PM - 13:00PM

Harris/Aerial UTS Function Centre Foyer

Carp Catch Up Discussion Panel

12:10PM - 13:00PM

Harris/Jones

Matthew Barwick**Ken McColl****Joe Pera****JACOBS: Indigenous Water Knowledge Symposium**

1:00PM - 3:10PM

Harris/Jones

Chair: Phil Duncan

13:00

Jodi Braszell

13:10

Phil Duncan

13:20

Jane Doolan

- 1:30 PM **Virginia Marshall**
Aboriginal Water Rights: A path to national reform *abs# 58*
- 2:10 PM **Sonia Cooper & Monica Morgan**
Yorta Yorta Recognition of our Woka (Country) and Walla (Water) – Our Perspective.
abs# 59
- 2:30 PM **Fred Hooper**
How development has effected Murrawarri Cultural Values on the Culgoa and Bokhara Rivers. *abs# 60*
- 2:50 PM **Bradley Moggridge (Student)**
Australia’s First Peoples water values and knowledge, and the challenge to fit into the ever changing cycle of water politics. *abs# 61*

This conference acknowledges the sponsorship of **JACOBS**

Afternoon Tea

3:10PM - 3:30PM

Aerial UTS Function Centre Foyer

JACOBS: Indigenous Water Knowledge Symposium

3:40PM - 6:10PM

Harris/Jones

Chair: Teresa Mackintosh

- 3:10 PM **Teresa Mackintosh**
- 3:40 PM **Matthew Dale**
Indigenous water allocation – a New Zealand perspective *abs# 62*
- 4:10 PM **Brett Cockeram**
Mahitahi: Cultural Health Monitoring and co-management frameworks between Iwi and local government *abs# 63*
- 4:30 PM **Shaina Russell (Student)**
Investigating the links between feral ungulates, billabongs and Indigenous health. *abs# 64*
- 4:50 PM **Vanessa Cavanagh**
The Aboriginal Riverkeeper Team Project, Georges River, Sydney *abs# 65*
- 5:10 PM **Terence Abbott, Victor Dobson and Veronica Dobson**
Restoring remote wetlands in central Australia *abs# 66*
- 5:50 PM **Lana D Hartwig (Student)**
Aboriginal engagement in Australia’s water markets: A New South Wales case study
abs# 67

This conference acknowledges the sponsorship of **JACOBS**

Close

6:00PM - 6:10PM

Harris/Jones

Simon Mitrovic

Pizza and Band Night @ The Loft

6:30PM - 10:00PM

The Loft

27th September 2017

Registration Desk Open

7:40AM - 5:30PM

Aerial UTS Function Centre Foyer

Any business

8:30AM - 8:50AM

Harris/Jones

Yoshi Kobayashi

Plenary 5

8:50AM - 9:35AM

Chair: Yoshi Kobayashi

Harris/Jones

8:50 AM

Michael Pace

Lake Experiments to Test Early Warnings of Resilience Loss *abs# 68*

Plenary 6

9:35AM - 10:20AM

Chair: Yoshi Kobayashi

Harris/Jones

9:35 AM

Dianne Gleeson

Environmental DNA and Freshwater Biomonitoring: From promise to delivery, and future directions. *abs# 69*

Morning Tea

10:20AM - 10:40AM

Aerial UTS Function Centre Foyer

Stream Ecology 1

10:40AM - 12:20PM

Chair: Andrew Brooks

Harris/Jones

10:40 AM

Andrew J. Brooks

The effect of a weir on stream insect drift *abs# 70*

11:00 AM

Anthony C Lovell

Urban influences on freshwater shrimp (*Paratya australiensis*) across two phylogeographic regions of Greater Melbourne *abs# 71*

11:20 AM


Aleicia Holland

Dissolved organic carbon composition differs between circumneutral and naturally acidic waters and climatic regions *abs# 73*

11:40 AM

Catherine Cunningham

The effect of subsidence from long wall coal mining on the ecology and water quality of streams *abs# 74*

This conference acknowledges the sponsorship of 

Arid aquatic ecosystems/Climate change and aquatic ecosystems

10:40AM - 12:20PM

Broadway

Chair: Peter Gell

10:40 AM

Jenny Davis

Characterising the microbiomes of arid zone springs and waterholes *abs# 80*

11:00 AM

Brian Timms

Regional seasonal seasoning; invertebrates in Paroo salt lakes *abs# 82*

11:20 AM

Peter Gell

The nature of the lower lakes and the MDB plan: time for some truth *abs# 83*

11:40 AM

Laura Bateson

Mosquitoes and Multi-Criteria Assessment (MCA): Risk assessment for a large number of wetlands *abs# 84*

Adaptive Management

10:40AM - 12:20PM

Thomas/Wattle

Chair: Rebecca Lester

10:40 AM

Ben Gawne

Challenges associated with the adaptive management of environmental flows in the MDB *abs# 75*

11:00 AM

Peter Negus

Validation of the success of feral pig management in tropical wetlands *abs# 76*

11:20 AM

Ashley Macqueen

Are we on track? Developing plausible future trajectories for *Ruppia tuberosa* in the Coorong for assessing environmental watering targets *abs# 77*

11:40 AM

David J Reid

Comparison of macroinvertebrate communities in concreted and non-engineered urban stream reaches *abs# 79*

Lunch and AGM

12:20PM - 1:40PM

Harris/Aerial UTS Function Centre Foyer

Keynote Talk

1:40PM - 2:20PM

Harris/Jones

Chair: Ross Thompson

1:40 PM

David Papps

Science, adaptive management and Basin-scale environmental watering *abs# 85*

Stream Ecology 2

2:20PM - 3:40PM

Chair: Rebecca Lester

Harris/Jones

2:20 PM

Erinn K Richmond (Student)

Drugs in bugs: a wide diversity of PPCPs in aquatic insect and spiders *abs# 86*

2:40 PM

Harrison Ritchie (Student)

Damsels In Distress: Effect of Water Quality and Disturbance on the Morphology of Coenagrionidae Damselflies *abs# 87*

3:00 PM

Leigh A Stitz (Student)

Macroinvertebrate community succession under variable flow regimes in subtropical Australia. *abs# 88*

3:20 PM

Rebecca E Lester

Using fractal dimension to capture ecologically-relevant physical variation in streams *abs# 89*

Geomorphology/Palaeoecology

2:20PM - 3:40PM

Chair: Tim Ralph

Broadway

2:20 PM

Amy George

The geomorphic influence on riparian seed banks *abs# 94*

2:40 PM

Fran Sheldon

Effective restoration strategies in rapidly changing subtropical river systems *abs# 95*

3:00 PM

Timothy J Ralph

Rivers behaving badly? The influence of fluvial geomorphology on aquatic ecosystem metabolism *abs# 96*

3:20 PM

Peter Negus

Relationships between diatom communities and environmental attributes in Cape York wetlands *abs# 97*

DELWP 1: New directions in monitoring and research for the Victorian Waterway Management Program

2:20PM - 3:40PM

Chair: Amber Clarke

Thomas/Wattle

2:20 PM

Amber Clarke

New directions in monitoring, reporting and evaluation for the Victorian Waterway Management Program *abs# 90*


2:40 PM

Jacqui Brooks

Victorian environmental water monitoring and assessment in a policy and management context *abs# 91*

3:00 PM **Wayne Koster**
Environmental flow responses of fish populations in Victorian tributaries of the Murray River *abs# 92*

3:20 PM **Kaylene Morris**
Building the evidence base underpinning riparian management in Victoria *abs# 93*

This conference acknowledges the sponsorship of  **Environment, Land, Water and Planning**

Afternoon Tea
3:40PM - 4:00PM

Aerial UTS Function Centre Foyer

Social, cultural and ecological assets/Citizen Science


4:00PM - 5:20PM
Chair: Simon Mitrovic

Harris/Jones

4:00 PM **Catherine Leigh**
Are all rivers equal? Perceptions of ecosystem services and values across three continents *abs# 98*

4:20 PM **Clarissa Barbosa**
Waterwatch and citizen science: from better data and beyond *abs# 99*

4:40 PM **Simon Mitrovic**
The Algal Resource Kit; a new citizen science tool to increase monitoring for freshwater cyanobacterial blooms *abs# 109*

This conference acknowledges the sponsorship of 

Digital tools for scientific monitoring and modelling

4:00PM - 5:20PM
Chair: Mirela Tulbure

Broadway

4:00 PM **Mirela G Tulbure**
Remote sensing and spatiotemporal analysis of surface water dynamics and environmental change at subcontinental scale *abs# 114*

4:20 PM **Saan Ketelaar-Jones (Student)**
Using flexible mesh modelling to simulate turbidity in a shallow, oligotrophic lake *abs# 115*

4:40 PM **Adrian T Dickson**
Aquatic Sciences Data Reference Model *abs# 116*

5:00 PM **Janice L Kerr**
Determining key wetland hydrological parameters using analysis of Landsat imagery *abs# 117*

DELWP 2: New directions in monitoring and research for the Victorian Waterway Management Program

4:00PM - 5:20PM

Thomas/Wattle

Chair: Amber Clarke

4:00 PM

Barbara J. Downes

Evaluating the role of dispersal constraints: from one field experiment to a multi-site restoration programme *abs# 110*

4:20 PM

William D. Bovill

New methods reveal the relationships between riparian vegetation, retention-capacity, and standing stocks of CPOM in streams. *abs# 111*

4:40 PM

Fiona Y Warry

The Victorian Index of Estuary Condition: benchmarking estuary resource condition with tested biotic indicators *abs# 112*

5:00 PM

Yafei Zhu

Aggregating our knowledge using a coupled hydrodynamic-biogeochemical/ecological model to enhance our understanding of the environmental and ecological conditions of the Gippsland Lakes *abs# 113*

This conference acknowledges the sponsorship of



Environment,
Land, Water
and Planning

Close

5:20PM - 5:30PM

Harris/Jones

Yoshi Kobayashi

Conference Dinner/Harbour Cruise

6:30PM - 9:30PM

John Cadman II, No 1 King St Wharf

28th September 2017

Registration Desk Open

7:30AM - 5:30PM

Aerial UTS Function Centre Foyer

Field Trip 1 - Sydney Olympic Park Tour

9:30AM - 2:00PM

Field Trip 2 - Indigenous Flows Day Tour: Royal National Park

7:00AM - 7:00PM

Taxonomy Workshop Registration Open

8:30AM - 4:30PM

CB10.03.460 - Classroom

Taxonomy Workshop

9:30AM - 10:15AM

CB10.03.460 - Classroom

9:30 AM

Phillip Suter

Preliminary Key to Mature Female *Paratya* (Decapoda : Atyidae) from Australian inland waters. Putting a face to a name! *abs# 118*

The conference acknowledges the support of

Sydney
WATER

Morning Tea

10:15AM - 10:45AM

CB10.03.460 - Classroom

Taxonomy Workshop

10:45AM - 12:45PM

CB10.03.460 - Classroom

10:45 AM

Winston Ponder

Australian freshwater molluscs *abs# 119*

11:15 AM

Julia Mynott

Revision of the genus *Dinotoperla* Tillyard, 1921 (Plecoptera: Gripopterygidae). *abs# 120*

12:00 PM

Michael Shackleton

Taxonomic implications of DNA barcode data for Trichoptera. *abs# 121*

The conference acknowledges the support of

Sydney
WATER

Lunch

12:45PM - 2:00PM

CB10.03.460 - Classroom

Taxonomy Workshop

2:00PM - 4:00PM

CB10.03.460 - Classroom

2:00 PM

Gunther Theischinger

How are Australia's listed dragonflies doing? *abs# 122*

2:45 PM

Chris Madden

A dichotomous key for aquatic Diptera pupae to family level *abs# 123*

3:15 PM

Brian Timms

Keys to the Australian clam shrimps (Crustacea: Branchipoda: Laevicaudata, Spinicaudata, Cyclestherida). *abs# 124*

The conference acknowledges the support of

Sydney
WATER

Closing Speech

4:00PM - 4:30PM

CB10.03.460 - Classroom

POSTER LISTING

Daniel Coleman

The recovery of riffle macroinvertebrates after river drying: the role of low flow access rules *abs# 101*

Lindsey Frost

Bacteria to birds: Tracing the flow of energy through a wetland to understand ecosystem responses to environmental watering *abs# 102*

Amanda M McArthur

Effects of Simulated Browsing on Brisbane Riparian Seedlings *abs# 103*

William Higginson

10 years after active and passive riparian restoration: riparian and geomorphological condition *abs# 104*

Leigh Stitz

Macroinvertebrates in tropical ephemeral streams: ecological patterns, biomonitoring and management *abs# 105*

Darren Ryder

Scaling biodiversity responses to hydrological regimes *abs# 106*

Valerie Caron

Feral animal exclusion is key to the restoration of waterholes in central Australia *abs# 107*

Megan Powell

Building a wetland inventory for NSW *abs# 108*