



CONFERENCE PROGRAM

(as at 24th May please note this is subject to change)

Tuesday 29th May 2018

8.00am – 9.00am **Pre-Conference Flood Workshop Registration**

Session 1 Concurrent Workshops 9.00am – 10.30am

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| Location: | Meeting Room 7 | Meeting Room 8 |
| | Workshop 1: Interaction of Catchment Flooding with Coastal Processes | Workshop 2: Community Engagement in the Floodplain Management Process |

10.30am – 11.00am **Morning Tea**

Session 2 Concurrent Workshops - continued 11.00am – 12.30pm

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| Location: | Meeting Room 7 | Meeting Room 8 |
| | Workshop 1: Interaction of Catchment Flooding with Coastal Processes | Workshop 2: Community Engagement in the Floodplain Management Process |

12.30pm – 1.30pm **Lunch**

Session 3 Concurrent Workshops - continued 1.30pm – 3.00pm

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| Location: | Meeting Room 7 | Meeting Room 8 |
| | Workshop 1: Interaction of Catchment Flooding with Coastal Processes | Workshop 2: Community Engagement in the Floodplain Management Process |

3.00pm – 3.30pm **Afternoon Tea**

Session 4 Concurrent Workshops – continued 3.30pm – 5.00pm

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| Location: | Meeting Room 7 | Meeting Room 8 |
| | Workshop 1: Interaction of Catchment Flooding with Coastal Processes | Workshop 2: Community Engagement in the Floodplain Management Process |

5.00pm – 7.00pm **Conference Welcome Reception, Arena 2, Trade Display Area**



Day One – Wednesday 30th May 2018

7.30am Registration

Session 1 Plenary 8.30am – 10.00am
Chair: Dwayne Honor

8.35am Welcome to Country

8.40am Welcome from Host Council
 Cllr Tom Tate, Mayor, City of Gold Coast

8.50am Welcome from Floodplain Management Australia
 Ian Dinham, President, Floodplain Management Australia

9.10am Welcome from the Hon Angus Taylor MP, Australian Minister for
 Law Enforcement and Cybersecurity (video presentation)

9.15am Platinum Sponsor “Insurance Council of Australia” Address
 Karl Sullivan, General Manager, Policy Risk and Disaster, Insurance
 Council of Australia

9.20am Keynote Address
 “Making decisions in complex and uncertain times: A National
 Resilience Taskforce”
 Jillian Edwards, Director, National Resilience Taskforce, Department
 of Home Affairs

10.00am – 10.30am Morning Tea + Poster Presentations

Session 2 Plenary 10.30am – 11.30am
Chair: Sue Ribbons

10.30am State & Territory Snapshot

ACT: Tracey Allen, ACT State Emergency Service

NSW: Danny Rose, Tweed Shire Council, FMA Technical Director

NT: Bishnu Gautam, Department of Environment and Natural Resources

QLD: Dwayne Honor, Bundaberg Regional Council, FMA Queensland Director

SA: Belinda Skilton, Department of Environment, Water and Natural Resources

TAS: Mhairi Revie, State Emergency Service Tasmania

VIC: Mike Edwards, Department of Environment, Land, Water and Planning

WA: Simon Rodgers, Department of Water and Environmental Regulation

Session 3 Concurrent

11.40am – 12.40pm

| | 3A: Flood Resilience & Risk Management | 3B: Flood Policy, Guidance & Best Practice | 3C: Adaptation to Climate Change | 3D: Assessing Flood Hazard |
|-------------------|---|---|---|--|
| Location: | Meeting Room 5 & 6 | Meeting Room 7 | Meeting Room 8 | Meeting Room 9 |
| Chair: | Robyn Birkett | Peter Sheath | John Murtagh | Angela Toniato |
| 11.40am – 12.10pm | Mackay Region Flood and Stormwater Strategy: Theory Meets Practice Luke Ferguson , <i>Mackay Regional Council</i> | Improving Delivery Under the NSW Flood Prone Land Policy Duncan McLuckie , <i>NSW Office of Environment & Heritage</i> | Impact of Climate Change on Australian Flood Risk: A Review of Recent Evidence Michael Leonard , <i>University of Adelaide</i> | Manly and Narrabeen Lagoon Flood Intelligence Tool – Integrating Coastal Flooding Information Galen Lewis , <i>Manly Hydraulics Laboratory</i> & Valerie Tulk , <i>Northern Beaches Council</i> |
| 12.10pm – 12.40pm | Is Your Community Resilient? Guidelines for Flood Resilience in the Built Environment Maisie Auld <i>Edge Environment</i> | Show Me the Money! – Economic Analysis in Floodplain Management Rhys Thomson , <i>Rhelim</i> | Coastal Hazard Assessments in Victoria Mike Edwards , <i>Department of Environment, Land, Water and Planning</i> | From Modelling to Reality – Catchment Management - Practical Risk Based Application of Findings Quentin Underwood , <i>Lockyer Valley Regional Council</i> |

12.40pm – 1.30pm Lunch + Long Field Trip Departure

Session 4 Concurrent

1.30pm – 3.00pm

| | 4A: Flood Policy, Guidance & Best Practice | 4B: Flood Emergency Preparedness & Management <i>“Sponsored by Bureau of Meteorology”</i> | 4C: Assessing Flood Hazard & Risk | 4D: Building Community Resilience & Engagement |
|------------------|--|--|--|--|
| Location: | Meeting Room 5 & 6 | Meeting Room 7 | Meeting Room 8 | Meeting Room 9 |
| Chair: | Bronson McPherson | Ailsa Schofield | Joe Thompson | Hamid Mirfenderesk |
| 1.30pm – 2.00pm | ARR2016 - 18 Months on and the OEH Guidelines Mark Babister , <i>WMAwater</i> | Flood Information System Enhancing Emergency Management in South Australia Aaron Blasch , <i>South Australian State Emergency Service</i> | Flood Studies for Large Catchments: the Importance of Rainfall Spatial Variability David Stephens , <i>HARC</i> | Sheltering in Place During Flooding: A Case Study of Ex Cyclone Debbie Marcus Morgan , <i>NSW State Emergency Service</i> |

| | 4A continued | 4B continued | 4C continued | 4D continued |
|-----------------|---|--|---|--|
| 2.00pm – 2.30pm | Implementing National Best Practice Guidance on Flood Risk Management – 12 Months on Duncan McLuckie , <i>National Flood Risk Advisory Group</i> | Improving Decision Support in Flood Response – Impact Based Intelligence Simon Rodgers , <i>Department of Water and Environmental Regulation WA</i> | Censored Continuous Simulation for Flood Probability Estimation in Estuarine Regions Michael Leonard , <i>University of Adelaide</i> | Environments of Preparation, Response and Recovery – One Size Doesn't Fit All Carina Heppell , <i>Victorian State Emergency Service</i> |
| 2.30pm – 3.00pm | Further Benchmarking of Floodplain Risk Management Practice Monique Retallick , <i>WMAwater</i> | Ex-Tropical Cyclone Debbie – Listening to Communities in the NSW Northern Rivers Justin Robinson & Jane Golding , <i>Bureau of Meteorology</i> | Effects of ARR2016, and Rating Curve Changes on Design Flood Conditions for the Hunter River Ben Patterson , <i>Royal HaskoningDHV</i> | Putting the Community into Total Flood Warning Systems Neil Dufty , <i>Molino Stewart</i> |

Session 5

Short Field Trips “Sponsored by City of Gold Coast”

3.00pm – 5.30pm

Afternoon Tea on Field Trip

5.00pm

Close of Day One

7.00pm

Casual Dinner

Level 77, SkyPoint Observation Deck

Sponsored by: WMAwater

Day Two – Thursday 31st May 2018

8.00am

Registration (for 1 Day delegates)

Session 6

Concurrent

9.00am – 10.00am

| | 6A: Flood Resilience and Risk Management | 6B: Councillors Choice | 6C: Infrastructure Projects | 6D: 10 Minute Presentations |
|------------------|--|---|--|--|
| Location: | Meeting Room 5 & 6 | Meeting Room 7 | Meeting Room 8 | Meeting Room 9 |
| Chair: | Carrie Dearnley | Gerry Gannon | Neil Dufty | Stephen Yeo |
| 9.00am – 9.30am | Setting Regional Floodplain Management Priorities in Victoria Shaun Morgan , North Central Catchment Management Authority & Linda Tubnor West Gippsland Catchment Authority | Councillors Choice <i>Opportunity for Councillors to raise and discuss issues of importance to Local Government</i> | Bruce Highway Link Flood Study Jenny Ahern , AECOM, Andrew Northfield , Hydrology and Risk Consulting | 9.00am – 9.15am To Enter Floodwater or Not? Decision Making Perspectives from the 2017 Western Australia Floods James O'Brien , Risk Frontiers 9.15am – 9.30am Calculated Risk? Understanding NSW Emergency Service Workers' Decisions to Drive into Floodwater Mozumdar Arifa Ahmed , Macquarie University |
| 9.30am – 10.00am | More Flood Resilient Futures and Integrated Risk Management Hamid Mirfenderesk , City of Gold Coast | | Mitigating the Risks of Flood Barriers Through Design Brett Kelly , AWMA | 9.30am – 9.45am A Practical Comparison of ARR1987 and ARR2016 with Varying Rainfall Application Methodologies Ben Hughes , Water Technology 9.45am – 10.00am Clarity of Flood Protection Service Levels Leads to Better Community Understanding and Management Outcomes Thomas Hurst , Melbourne Water |

10.00am – 10.30am Morning Tea + Poster Presentations

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| Session 7 | Plenary | 10.30am – 11.10am Chair: Larry Bolitho |
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- 10.30am **Welcome to Day 2**
- 10.35am **Gold Sponsor “NSW Office of Environment & Heritage” Address**
Duncan McLuckie, *Principal Flood Specialist, NSW Office of Environment and Heritage*
- 10.40am **Keynote Address**
Resilient Queensland – delivering on the Queensland Strategy for Disaster Resilience
Brendan Moon, *CEO, Queensland Reconstruction Authority*
- 11.10am **Gold Sponsor “Queensland Reconstruction Authority” Address**
Brendan Moon, *CEO, Queensland Reconstruction Authority*

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| Session 8 | Concurrent | 11.20am – 12.20pm |
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| | 8A: QLD Flood Resilience Program | 8B: Infrastructure Projects | 8C: Flood Resilience & Risk Management | 8D: 10 Minute Presentations |
|-------------------|--|---|--|--|
| Location: | Meeting Room 5 & 6 | Meeting Room 7 | Meeting Room 8 | Meeting Room 9 |
| Chair: | Gerry Gannon | Leonie Gray | Belinda Skilton | Nic Denshire |
| 11.20am – 11.50am | Building Queensland’s Flood Resilience: Supporting Local Governments through a Catchment Approach to Flood Risk Reduction Graeme Milligan , <i>Queensland Reconstruction Authority</i> <i>Interactive Discussion Session</i> Panel Members Graeme Milligan Dwayne Honor Stephen Dredge Mark Pitt Laura Gannon | Linking Asset Management, Design and Floodplain Risk Management Isabelle Ghetti , <i>Wollongong City Council</i> | That Was Then, This is Now, Futuristic View of Mudgeeraba Creek Floodplain Jacob Franklin , <i>Flume Engineering</i> | 11.20am – 11.35am “Rain-on-grid” Modelling - Is Depth-varying Roughness the Key to Representative Outcomes? Rushiru Kanakaradne , <i>GHD</i> 11.35am – 11.50am Extreme Event Analysis of Rainfall and Streamflow in the Logan Catchment Rohan Eccles , <i>Griffith University</i> |
| 11.50am – 12.20pm | | 11.50am – 12.05pm Dam Failure Flood Inundation – Comparing Traditional Analytical Methods and 2D Hydraulic Modelling Blair Filer , <i>BMT</i> 12.05pm – 12.20pm Flood Modelling for Landslide Dam Failures Krey Price , <i>Surface Water Solutions</i> | Harvey, Irma, Maria, Debbie, Marcia, and Yasi: A Dysfunctional Cyclone Family Michael McMahon , <i>HDR Engineering</i> <i>International Presenter</i> | 11.50am – 12.05pm Improving Modelling of Coastal Risks Through A Network Of Miniaturised Tide Gauges Rodger Tomlinson , <i>Gold Coast Waterways Authority</i> 12.05pm – 12.20pm Project U-Turn - working towards reducing the trend of motorists entering flood water Brendan Davies , <i>NSW State Emergency Service</i> |

12.20pm – 1.15pm Lunch + Poster Presentations

Session 9 Concurrent

1.15pm – 3.15pm

| | 9A: Land Use Planning | 9B: Flood Emergency Preparedness & Management | 9C: Assessing Flood Hazard & Risk | 9D: 10 Minute Presentations |
|------------------|---|---|--|---|
| Location: | Meeting Room 5 & 6 | Meeting Room 7 | Meeting Room 8 | Meeting Room 9 |
| Chair: | Paul Grech | Tracey Allen | Allan Gear | Gerry Gannon |
| 1.15pm – 1.45pm | Building Community Resilience through Development Controls – The New Victorian Development Guidelines Mike Edwards , <i>Department Environment, Land, Water and Planning, Victoria</i> | Good, Bad and Ugly: Assessing Evacuation Compliance, Murrumbidgee Region Flooding, March 2012 Stephen Yeo , <i>Flood Focus Consulting</i> | Parramatta Flash Flood Forecasting Information System Ben Patterson <i>Royal HaskoningDHV & Herman de Jonge</i> <i>Royal HaskoningDHV Netherlands</i> International Presenter | 1.15pm – 1.30pm Flood Mitigation Challenges in Built Urban Environment - Brickmakers Creek Flood Mitigation Maruf Hossain , <i>Liverpool City Council</i> 1.30pm – 1.45pm Stormwater Infrastructure Planning to Support Land Use Planning – Local Government Infrastructure Plan (LGIP) Glen Dare , <i>Brisbane City Council</i> |
| 1.45pm – 2.15pm | Flood Mapping Criteria: Study Specific and Council-wide Fiona Coe , <i>Northern Beaches Council</i> | Development and Running of a Staff Ride for a Flood Event Ray Jasper , <i>Victoria State Emergency Service</i> | The Long Road to Planning for Natural Hazards – Reflections on Mangaroa Sharyn Westlake , <i>Greater Wellington Regional Council</i> International Presenter | 1.45pm – 2.00pm Frequent Flood Events & Environmental Protection: What Ecology Can Teach Us Nicole Webb , <i>Stephen N Webb & Associates & Steven Jarman</i> <i>Eco Logical Australia</i> 2.00pm – 2.15pm Discovery and Access Portal for NSW Flood Risk Information Elliott Simmons , <i>NSW State Emergency Service</i> |

| | 9A continued | 9B continued | 9C continued | 9D continued |
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| 2.15pm – 2.45pm | Land use planning and emergency management – two streams, one flow: Why are land use planners missing emergency management considerations? Marcus Morgan & Ailsa Schofield, NSW State Emergency Service | Quarries in the Floodplain an Emergency Management Challenge During Flooding Keith O'Brien, Victoria State Emergency Service | Testing of New HEC-RAS 2D Model Features Mark Forest, HDR <i>International Presenter</i> | 2.15pm – 2.30pm Pragmatic Assessment of the Interaction of Riverine and Coastal Flooding Barry Rodgers, BMT 2.30pm – 2.45pm Modelling the Impacts of Solar Farms Daniel Niven <i>Premise (Water)</i> |
| 2.45pm – 3.15pm | Creating Consistency in a Post-amalgamation World: Northern Beaches Council Flood Management Harmonisation Duncan Howley, Northern Beaches Council | Community Driven Flood Risk Management Planning for Rural Toowoomba Townships Rodney Betts <i>Toowoomba Regional Council & Mark Page</i> Engeny Water Management | Estimating the Life Safety Benefits Associated with Flood Warning Systems Michael Cawood, <i>Michael Cawood & Associates</i> | 2.45pm – 3.00pm Flood Study of Adelaide River Floodplain Kok Keng Tan, SMEC 3.00pm – 3.15pm Application of Hydrodynamic Models in Light Rail Network Design Ivan Varga Sampedro, Arup |

3.15pm – 3.45pm Afternoon Tea + Poster Presentations

Session 10 FMA Annual General Meeting 3.45pm – 5.30pm
“All FMA Members please attend”

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| 10A: FMA Annual General Meeting <i>“All FMA Members please attend”</i> | 10B: Workshop “Road testing ARR16 – tips and tricks for common but complex applications” |
| Location: Meeting Room 5 & 6 | Location: Meeting Room 7 |

5.30pm Close of Day Two

7.00pm Conference Dinner
Hall 4, Gold Coast Convention & Exhibition Centre
Sponsored by: Royal HaskoningDHV

Day Three – Friday 1st June 2018

8.30am **Registration (for 1 Day delegates)**

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| Session 11 | Plenary | 9.00am – 10.10am Chair: Allan Ezzy |
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9.00am Welcome to Day 3

9.05am Silver Sponsor “BMT” Address
Carrie Dearnley, *Senior Flood Engineer, BMT*

9.10am **Keynote Address**
When the Ocean Meets the River – Coastal Flood Exposure
Mara Bun, *Chair of the Board of Gold Coast Waterways Authority*

9.55am Silver Sponsor “Water Modelling Solutions” Address
Monika Balicki & Blake Boulton, *Directors Water Modelling Solutions*

10.00am Address from NSW State Emergency Service Commissioner Mark Smethurst DSC, AM

10.05am 2019 FMA National Conference, Canberra, ACT

10.10am – 10.40am Morning Tea + Poster Presentations

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| Session 12 | Concurrent | 10.40am – 12.40pm |
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| | 12A: Flood Stories & Case Studies | 12B: Flood Policy, Guidance & Best Practice | 12C: Assessing Flood Hazard & Risk | 12D: Infrastructure Projects |
|-------------------|--|--|--|---|
| Location: | Meeting Room 5 & 6 | Meeting Room 7 | Meeting Room 8 | Meeting Room 9 |
| Chair: | Danny Rose | Mike Edwards | Simon Rodgers | Martin Rose |
| 10.40am – 11.10am | Lessons Learned from the Floods Following Cyclone Debbie on the Logan-Albert Rivers Janaka Gunawardena & William Prentice <i>Logan City Council</i> | A Review of Modelling Practice in a Gauged Urban Catchment Under ARR2016 Daniel Wood , <i>Cardno</i> | The Incorporation of Climate into the Flood Hydrology of South East Queensland Greg McMahon , <i>G M McMahon Consultants</i> | Emergency Breaching Protocols for the Protection of Yenda Daniel Williams , <i>BMT</i> |
| 11.10am – 11.40am | Four Floods in 18 Months – Who is to Blame? Clarissa Campbell , <i>Moreton Bay Regional Council</i> | Customer Centric Approach to Impact Based Forecasting and Warning Services - the Bureau of Meteorology way Justin Robinson <i>Bureau of Meteorology</i> | Hydraulic Categrisation Neal Albert , <i>Office of Environment and Heritage</i> | The Use of Geosynthetic Materials in Flood Prevention and Erosion Control Systems Richard Austin , <i>Polyfabrics</i> |
| 11.40am – 12.10pm | A Case Study of ARR 2016 Temporal Patterns for Design Flow Estimation Crispin Smythe , <i>Sunshine Coast</i> | Flood Risk Management and Flood Dependent Ecosystems – Low Flow, High Flow and Everything in Between Louise Collier , <i>Rhelm</i> | Testing of Simulated Flood Effects on the Strength of Selected Building Components Tariq Maqsood , <i>Geoscience Australia</i> | Flow and Flood Management During Construction: Powells Creek, Sydney Nick Lewis , <i>Royal HaskoningDHV</i> |

| | 12A continued | 12B continued | 12C continued | 12D continued |
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| 12.10pm – 12.40pm | Risk-based Approach to Developing Flood Warning Services, Example of Charlton Victoria Yves Bessard , <i>Bureau of Meteorology</i> | Punching the Numbers: How Can We Do Better? Ella Harrison <i>WMAwater</i> | Flash Mob – Preparing a Music Festival for Floods Steven Molino , <i>Molino Stewart</i> | Defining Acceptable Impacts Mark Babister , <i>WMAwater</i> |

12.40pm – 1.30pm Lunch + Poster Presentations

Session 13 Concurrent 1.30pm – 3.00pm

| | 13A: Modelling | 13B: Flood Policy, Guidance & Best Practice | 13C: Flood Emergency Preparedness & Management | 13D: 10 Minute Presentations |
|------------------|---|---|--|---|
| Location: | Meeting Room 5 & 6 | Meeting Room 7 | Meeting Room 8 | Meeting Room 9 |
| Chair: | Drew Bewsher | | Mhairi Revie | Gerry Gannon |
| 1.30pm – 2.00pm | Application of Remotely Piloted Aircraft (Drone) Derived Elevation Data in Floodplain Modelling Tim Morrison , <i>HydroSpatial</i> | Riparian Vegetation Management: A Unifying Framework for River and Flood Management Andrew Brooks , <i>Griffith University</i> | Crying Wolf and Herding Cats: Optimising NSW Flood, Storm and Tsunami Warnings Andrew Richards , <i>NSW State Emergency Service</i> | 1.30pm – 1.45pm How Flood Intelligence is Utilised to Support Community Preparedness Within Greater Melbourne Ray Jasper , <i>Victoria State Emergency Service</i> 1.45pm – 2.00pm Hydronet Rainwatch – Forecasted, Observed and Historical Weather Data at Your Fingertips Brian Jackson , <i>Water Technology</i> |
| 2.00pm – 2.30pm | A Comparison of Ensemble and Average Variability Method (AVM) Temporal Pattern Approaches Ari Craven , <i>Engeny Water Management</i> | Applying Natural Flood Management Principles to Australian Catchments Justine Kemp , <i>Griffith University</i> | Developing a Performance-based Standard for Flood Warning Infrastructure Philip Douglas , <i>Bureau of Meteorology</i> | 2.00pm – 2.15pm Ensemble Storm Injector: Updating Australia's Hydrologic Models for ARR 2016 Chris Ryan , <i>Catchment Simulation Solutions</i> 2.15pm – 2.30pm The changing Clarence River (post-2016 earthquakes) Michelle Wild , <i>Environment Canterbury</i> International Presenter |
| 2.30pm – 3.00pm | "Risk in Renewal" a case study assessing IWM within an existing urban catchment Lachlan Inglis , <i>Water Technology</i> | ARR 2016 – Adopting a Practical Methodology for Catchment Scale Urban Flood Mapping Projects Rob Swan , <i>Cardno</i> | Toowoomba Region Low Cost Gauging Blake Boulton , <i>Water Modelling Solutions</i> | 2.30pm – 2.45pm Future Proofing A Linear Infrastructure Project In An Urban Growth Corridor Stefan Yance , <i>KBR</i> |

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| | | | | 2.45pm – 3.00pm An Adaptive Approach to Flood Planning Scott Marshall, <i>Manly Hydraulics Laboratory</i> |
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| 3.00pm – 3.30pm | Conference Wrap Up with Afternoon Tea |
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