



2019 FLOODPLAIN MANAGEMENT AUSTRALIA



NATIONAL CONFERENCE

*A National Call to Action:
Making Australia Flood Safe*

14 - 17 May 2019 Hotel Realm, Canberra, ACT www.floodplainconference.com

CONFERENCE PROGRAM

(as at 9th April please note this is subject to change)

Monday 13th May 2019

9.30am – 5.00pm **Application of Australian Rainfall and Runoff (ARR2016) in Urban Areas (One Day Workshop), Hotel Realm**

Tuesday 14th May 2019

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

Session 1 Concurrent Workshops 9.00am – 10.30am

	½ Day Morning Workshop: Introduction to Floodplain Risk Management	Full Day Workshop: Total Flood Warning Systems
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10.30am – 11.00am **Morning Tea**

Session 2 Concurrent Workshops 11.00am – 12.30pm

	½ Day Morning Workshop: Introduction to Floodplain Risk Management	Full Day Workshop: Total Flood Warning Systems
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12.30pm – 1.30pm **Lunch**

Session 3 Concurrent Workshops 1.30pm – 3.00pm

	½ Day Afternoon Workshop: Modelling for Non-Modellers	Full Day Workshop: Total Flood Warning Systems
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3.00pm – 3.30pm **Afternoon Tea**

Session 4 Concurrent Workshops – continued 3.30pm – 5.00pm

	½ Day Afternoon Workshop: Modelling for Non-Modellers	Full Day Workshop: Total Flood Warning Systems
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5.00pm – 7.00pm **Conference Welcome Reception**
Sponsored by “NSW State Emergency Service”

Day One – Wednesday 15 May 2019

7.30am Conference Registration

Session 1 Plenary 8.30am – 10.10am

8.30am Welcome to Country

8.40am Welcome from Host

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

9.05am Minister Address

9.30am Keynote Address:
Sarah Barker, *Special Counsel at MinterEllison*

10.10am – 10.40am Morning Tea + Poster Presentations

Session 2 Concurrent 10.40am – 12.40pm

	Session 2A: Flood Policy, Guidance and Best Practice	Session 2B: Communicating Flood Hazard and Risk	Session 2C: Modelling	Session 2D: Emergency Preparedness and Management
10.40am – 11.10am	How Reliable is Your Design Flood Estimate? Scott Podger , <i>WMAwater</i>	Australia Speaks: National Survey Exploring Experiences and Attitudes Towards Entering Floodwater Katharine Haynes , <i>Macquarie University</i>	Cooking Up ARR16 Storms in Wollongong – the Importance of Using Local Ingredients Isabelle Ghetti , <i>Wollongong City Council</i>	Mainstream Technology Trends - Identifying New Vulnerabilities and Opportunities in Flood Emergency Management Kara Agllias , <i>Royal HaskoningDHV</i>
11.10am – 11.40am	The Design Flood – Have we got it Right? Mike Edwards , <i>Department of Environment, Land, Water and Planning</i>	Increasing Community Resilience to Flooding in the Hawkesbury-Nepean Valley Holly Langler <i>Infrastructure NSW</i>	The Need to Manage the Looming "Big Flood Data" Problem Cameron Druery , <i>Advisian</i>	Better Practice Disaster Planning for Catastrophic Flood Disasters Andrew Gissing , <i>Risk Frontiers</i>
11.40am – 12.10pm	'Room for the River': Are European Flood Mitigation Strategies Applicable for Australia? Kieran McAndrew , <i>Clarence Valley Council</i>	A System Approach for Managing and Communicating Risk for Levee-Protected Communities Sharyn Westlake <i>Greater Wellington Regional Council</i> <i>International presenter</i>	Rain on Grid Modelling for Rural Catchments Rhain Bateman , <i>West Gippsland Catchment Management Authority</i>	Improving Decision Support in Flood Response – Impact Based Intelligence Simon Rodgers , <i>Department of Water and Environmental Regulation</i>

	Session 2A cont	Session 2B cont	Session 2C cont	Session 2D cont
12.10pm – 12.40pm	Otaki Flood Damage Assessment: Quantify the Impact of Structural Works Nuno Lopes Jeronimo , <i>DHI Water and Environment Ltd</i> International presenter	Moving Towards National-scale Flood Maps and Impact Forecasts Dan Rodger , <i>Jeremy Benn Pacific</i>	Rainwater Harvesting for Urban Flood Management – an Integrated Modelling Framework Behzad Jamali , <i>Monash University</i>	Flood Forecasting – Managing Flood Events in the Face of Uncertainty Fiona Ling , <i>WMAwater</i>

12.40pm – 1.30pm Lunch + Long Field Trip Departure

Session 3 Concurrent 1.30pm – 3.00pm

	Session 3A: Flood Policy, Guidance and Best Practice	Session 3B: Social and Cultural Aspects	Session 3C: Infrastructure Projects and Asset Management (Levees)	Session 3D: 10 Minute Presentations
1.30pm – 2.00pm	Brisbane River Strategic Floodplain Management Plan: a Regionally Coordinated and Multi-disciplined Approach Graeme Milligan , <i>Queensland Reconstruction Authority</i>	We'll Come to You – Door Knocking in two Wollongong Floodplains Emma Maratea , <i>Rhelm</i>	The Realities of Flood Proofing Towns Using Levees Ed Henty , <i>Cardno</i>	<p>1.30pm – 1.45pm Achieving the “All Hazards Approach”: Expanding Mapping Support from Bushfires to Floods Gabrielle Eckert, <i>South Australia Department for Environment and Water</i></p> <p>1.45pm – 2.00pm Managing Hazards at the Milford Huts - Opihi River Mouth Philip Lees, <i>Environment Canterbury</i> International presenter</p>

	Session 3A cont	Session 3B cont	Session 3C cont	Session 3D cont
2.00pm – 2.30pm	Brisbane Citywide Overland Flow Path Modelling and Flood Risk Mapping Brany Iezzi, <i>Brisbane City Council</i>	Social Vulnerability Drivers: Spatial Mapping in a High-risk Flood Affected Rural Region of NSW Margaret Rolfe, <i>University of Sydney</i>	Flood Mitigation Asset – Levee Reconstruction in an Estuary with Multiple Management Issues Mir Abdus Subhan, <i>Camden Council</i>	2.00pm – 2.15pm Communicating Planning Scheme Amendments in Victoria Ben Hughes, <i>Water Technology</i>
				2.15pm – 2.30pm A Method to Better Assess the Effectiveness of Flood Warnings Hench Wang <i>Hydrology and Risk Consulting (HARC)</i>
2.30pm – 3.00pm	Towards a State-Wide Disaster Resilience Investment Framework Charlotte Spliethoff, <i>Queensland Reconstruction Authority</i>	Analysing the Social Impacts of Flood Risk Management Options Neil Duffy, Molino Stewart Pty Ltd	The Performance of NSW Urban Levees Adjacent to Riverbanks Fred Spain, <i>NSW Public Works Advisory</i>	2.30pm – 2.45pm City of Wagga Wagga: Protecting the City and People During a Flood Andrew Mason, <i>Wagga Wagga City Council</i>
				2.45pm – 3.00pm Using Animation to Clear Muddied Waters Oscar Garratt, <i>Wollongong City Council</i>

Session 4

Short Field Trips

3.00pm – 5.30pm

Afternoon Tea on Field Trip

5.30pm

Close of Day One

7.00pm

Casual Dinner, National Museum of Australia
Sponsored by “WMAwater”

Day Two – Thursday 16 May 2019

7.30am

Councillors Choice Breakfast Session

Opportunity for Councillors to raise and discuss issues of importance to Local Government

8.00am

Registration (for 1 Day delegates)

Session 5

Concurrent

9.00am – 10.30am

	5A: Flood Policy, Guidance and Best Practice	5B: National Collaboration and Coordination	5C: Flood Prediction and Warning	5D: 10 Minute Presentations
9.00am – 9.30am	The Flood Resilient Homes Program – Empowering Residents to Live Through Floods Ouswatta Perera, <i>Brisbane City Council</i>	Sustainable Flood Warning Infrastructure: the Benefits of National Collaboration Carla Mooney, <i>Bureau of Meteorology</i>	Is Real Time Giving us More Time? Sophia Buchanan, <i>Innovyze & Adam Berry,</i> <i>Synergy Solutions</i>	9.00am – 9.15am A Potential Slowing of Tropical Cyclones in Australia and Implications for Flooding Thomas Mortlock, <i>Risk Frontiers</i>
				9.15am – 9.30am Elements of a Flood Disaster – Understanding the 2011 Grantham Flood Baijie Chen, <i>WRM Water & Environment</i>
9.30am – 10.00am	Review of 2019 ANCOLD Guidelines for Detention Basin Operation and the Practical Application of the NSW Dam Safety Committee's Guidelines on the Design of Detention Basin Spillways Nick Lewis, <i>Royal HaskoningDHV</i>	Improving Flood Forecasting Services in England and Australia Through International Collaboration Alex Cornish, <i>Bureau of Meteorology</i>	NSW Extreme Ocean Water Levels Bronson McPherson, <i>Manly Hydraulics Laboratory</i>	9.30am – 9.45am When Perception and Evidence-Based Practice Collide – Floodplain Management in the Aftermath of the 2016 Floods at St Marys, Tasmania Ben Tate, <i>Water Technology</i>
				9.45am – 10.00am Developing an Emergency Management Sector Adaptation Plan for Climate Change in Queensland Matthew Thompson <i>Queensland Fire and Emergency Services</i>

	Session 5A cont	Session 5B cont	Session 5C cont	Session 5D cont
10.00am – 10.30am	Shelter in Place - are we in a Policy Vacuum? Chris Thomas , <i>Advisian</i>	When you Don't Fit the Mould – Creating Local Guidance for Wollongong LGA Rhys Thomson , <i>RHELM</i>	FloodSmart Parramatta: A Total Flash Flood Warning Service Chris Gooch , <i>City of Parramatta Council</i>	10.00am – 10.15am Legal Perspectives of Levee Ownership and Maintenance in NSW Kieran McAndrew , <i>Clarence Valley Council</i>
				10.15am – 10.30am Planned Retreat or Hold the Line – A Coastal Community Conundrum Chris Fauth , <i>Environment Canterbury</i> International presenter

10.30am – 11.00am Morning Tea + Poster Presentations

Session 6 Plenary 11.00am – 12.45pm

11.00am	Welcome to Day 2
11.05am	State & Territory Snapshot
12.05pm	Panel Session
12.40pm	Gold Sponsor “NSW Office of Environment & Heritage” Address Duncan McLuckie , <i>Principal Flood Specialist, NSW Office of Environment and Heritage</i>

12.45pm – 1.45pm Lunch + Poster Presentations

Session 7 Concurrent 1.45pm – 3.15pm

	Session 7A: Modelling	Session 7B: NSW Office of Environment & Heritage	Session 7C: Land Use Planning	Session 7D: Flood Prediction and Warning
1.45pm – 2.15pm	Evaluating Regional and Downstream Impacts of a Roadway Encroachment into the Floodplain Mark Forest , <i>HDR</i> International presenter	Directions to Improve Guidance for Floodplain Management in NSW <i>This will discuss the Floodplain Development Manual and supporting guides and tools for areas including flood hazard, flood emergency response classification and flood function and</i>	Enhancing the Resilience of our Communities to Natural Hazards Through Private Developments Shane Murrihy , <i>Burchills Engineering Solutions</i>	Integrating Real-time Landscape Changes in Flood Forecasting Ben Caddis , <i>BMT</i>

	Session 7A cont	<i>future priorities.</i>	Session 7C cont	Session 7D cont
2.15pm – 2.45pm	Application of Australian Rainfall and Runoff 2016 Guidelines to Slacks and Scrubby Creek Catchment Janaka Gunawardena, <i>Logan City Council</i>	Duncan McLuckie Angela Toniato & Elise Armstrong <i>NSW Office of Environment and Heritage</i>	Risk-based Land Use Planning: Evolving from the Q100 Quagmire Shannon McGuire, <i>Ethos Urban & Carrie Dearnley, BMT</i>	The Application of Info4eco Flash Flood Technology to Canberra's February 2018 Flood Philip Prentice, <i>Info4eco</i>
2.45pm – 3.15pm	Impact of Erosion/Deposition Processes during Design Floods on the Flood Planning Levels? – A case study on the impact of a movable bed on flooding behaviour of river Hamid Mirfenderesk, <i>City of Gold Coast</i>		Clustering Flood Risk- Are We Compounding the Problem by Using the 1% AEP Level for Too Much? Monique Retallick, <i>WMAwater</i>	Practical Applications of Low-Cost Water Level Gauges in a Flood Early Warning Network Mitchell Redenbach, <i>Water Modelling Solutions</i>

3.15pm – 3.45pm Afternoon Tea + Poster Presentations

Session 8 FMA Annual General Meeting 3.45pm – 5.30pm
“All FMA Members please attend”

<p>8A: FMA Annual General Meeting <i>“All FMA Members please attend”</i></p>	<p>8B: Big Data, Better Outcomes Workshop</p> <p><i>Real-time data, the internet of things & low-cost technology – flood professionals have access to more data than ever before and in near real-time. How can we exploit this opportunity for better calibrated flood models and improved disaster management, without getting overwhelmed by mountains of data?</i></p> <p><i>This workshop will explore new and emerging data sources and collection techniques, explore potential applications and highlight industry challenges.</i></p>
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5.30pm Close of Day Two

7.00pm Conference Dinner, Old Parliament House
Sponsored by “Royal HaskoningDHV”

Day Three – Friday 17 May 2019

8.30am Registration (for 1 Day delegates)

Session 9 Plenary

9.00am – 10.20am

9.00am Welcome to Day 3

9.05am Sponsor Address

9.10am Presentation of 2019 Award Winning Projects

9.25am Sponsor Address

9.30am Keynote Address

Harald Drager, *President of The International Emergency Management Society*

10.10am 2020 FMA National Conference Presentation

10.20am – 10.50am Morning Tea + Poster Presentations

Session 10 Concurrent

10.50am – 12.50pm

	Session 10A: Land Use Planning	Session 10B: Environmental Aspects (Climate)	Session 10C: Social and Cultural Aspects	Session 10D: Infrastructure Projects and Asset Management
10.50am – 11.20am	How do you Develop a Regional Landuse Planning Framework for the Hawkesbury- Nepean Valley? Melanie Schwecke , <i>Department of Planning and Environment</i>	Canberra's Floodplain Management in a Changing Climate Patrick Paynter , <i>Environment, Planning and Sustainable Development Directorate</i>	Capacity Building Approach to Disaster Preparedness Sarah U'Brien , <i>Dungog Shire Community Centre</i>	Learning from the Oroville Dam Spillway Failure Robert Boling , <i>HDR</i> <i>International presenter</i>
11.20am – 11.50am	A Penny for Your Flood – Quantifying the Impact Rhys Thomson , <i>Rhelm</i>	Estimating Peak Design Flows Under Climate Change Incorporating Increased Rainfall Intensities and Drier Antecedent Conditions Rebecca Lett , <i>Department of Environment Land Water and Planning</i>	The Path of Least Resistance: Engaging Senior Citizens in the Inverleigh Flood Study Angela Vary , <i>Department of Environment Land Water and Planning</i>	Best Practice Planning for Residual Risk Behind Levees: the Launceston Experience Darren Lyons , <i>BMT Eastern Australia</i>

11.50am – 12.20pm	Strategic Planning in a Highly Developed Rural Floodplain (Macquarie River) Tim Morrison, <i>HydroSpatial</i>	Regional Sensitivity of Flood Risk to Climate Drivers Andrew Dyer, <i>IAG Natural Perils</i>	Flood Waters and Mosquitoes - a Public Health Perspective Melissa Wilson, <i>Buloke Shire Council</i>	Assessing Tangible and Intangible Flood Impacts in Newstead, Launceston Tariq Maqsood, <i>RMIT University</i>
12.20pm – 12.50pm	NSW Voluntary Purchase Scheme – A Council’s Experience Leon McLean, <i>Tweed Shire Council</i>	Strategic Assessment of the Impact of Climate Change on the Hunter Valley Flood Mitigation Scheme Grantley Smith, <i>Water Research Laboratory</i>	Advancing Flood Risk Management in Pacific Island Countries: Challenges and Priorities Stephen Yeo, <i>Flood Focus Consulting</i>	Flood Mitigation Challenges in Built Urban Environment Liverpool CBD Case Study Madhu Pudasaini, <i>Liverpool City Council</i>

12.50pm – 1.40pm Lunch + Poster Presentations

Session 11 Concurrent 1.40pm – 3.10pm

	Session 11A: Flood Stories and Case Studies	Session 11B: Infrastructure Projects and Asset Management	Session 11C: Flood Policy, Guidance and Best Practice	Session 11D: 10 Minute Presentations
1.40pm – 2.10pm	A Fluvial Transect Focus Builds Vision and Strategy for Flood Safe Communities Piet Filet, <i>Flood Community of Practice</i>	Flood Resilient Infrastructure – A Design Framework Steven Molino, <i>Molino Stewart</i>	Flood Modelling, not Just for Defining Flood Extents – the Nimmie Cairra Project Erin Askew, <i>WMAwater</i>	<p>1.40pm – 1.55pm Practical Application of ARR 2016 Procedures to Flood Modelling in a Variety of NSW Catchments Leon Collins, <i>Advisian</i></p> <p>1.55pm – 2.10pm Plain Speaking – Writing Flood Studies for Broad Understanding Richard Murphy, <i>NSW Office of Environment & Heritage</i></p>
2.10pm – 2.40pm	Lismore Floodplain Risk Management Study – the Technical Foundation – Challenge and Reward Scott Moffett, <i>Rous County Council</i>	Mass Warning and Siren Alert Notification for Advanced Community Warning: SunWater Case Study Antony Volcich, <i>Aquamonix</i>	Taking a Cue from Nature: Holistic Floodplain Management in Rockhampton Monishaa Prasad, <i>Rockhampton Regional Council</i>	<p>2.10pm – 2.25pm Development of an Automated Flooded Road Immunity Analysis Tool Wendy Carlisle, <i>Water Modelling Solutions</i></p> <p>2.25pm – 2.40pm Flood Data Reporting During and After the Cyclone Debbie Event in NSW Sarah Dakin, <i>Manly Hydraulics Laboratory</i></p>

	Session 11A cont	Session 11B cont	Session 11C cont	Session 11D cont
2.40pm – 3.10pm	Floodplain Management Services – Setting the Foundation for Rockhampton Jordan Maultby, <i>AECOM Australia</i>	Outcome Based Optimisation of Integrated Stormwater Infrastructure in Sydney's South-West David Tetley, <i>Catchment Simulation Solutions</i>	What Kind of Research is Needed to Make Australia Flood Safe? Caroline Sullivan, <i>National Centre for Flood Research</i>	2.40pm – 2.55pm Comparison of Direct Rainfall Hydrology Approach with Traditional Hydrology: Three Case Studies Maria Pinto, <i>Camden Council</i>
				2.55pm – 3.10pm Community Involvement in Collection and Consumption of Real Time Data Julian Skipworth, <i>Water Modelling Solutions</i>

3.10pm – 3.40pm

Conference Wrap Up with Afternoon Tea