



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 14th March please note this is subject to change)

Monday 13th May 2019

9.30am – 5.00pm **Application of Australian Rainfall and Runoff (ARR2019) 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**

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**

9.20am **ALGA 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>	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>

		International presenter		
	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	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 Melissa Dixon, <i>Queensland Reconstruction Authority</i>	Analysing the Social Impacts of Flood Risk Management Options Neil Duffy, <i>Molino Stewart Pty Ltd</i>	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</i> & Adam Berry, <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 Flood Data Reporting During and After the Cyclone Debbie Event in NSW Sarah Dakin , <i>Manly Hydraulics Laboratory</i>
				10.15am – 10.30am Planned Retreat or Hold the Line – A Coastal Community Conundrum Chris Fauth , <i>Environment Canterbury</i> <i>International presenter</i>

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**

12.45pm – 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> <i>International presenter</i>	Improving Guidance for Councils and Committees on Floodplain Management in New South Wales Duncan McLuckie , <i>NSW Office of Environment and Heritage</i>	Enhancing the Resilience of our Communities to Natural Hazards Through Private Developments Shane Murrphy , <i>Burchills Engineering Solutions</i>	Integrating Real-time Landscape Changes in Flood Forecasting Ben Caddis , <i>BMT</i>

	Session 7A cont	Session 7B cont	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, Logan City Council & Rhys Cullen, WRM Water & Environment	Updated Emergency Management Requirements from the NSW Floodplain Risk Management Process Angela Toniato, NSW Office of Environment and Heritage	Risk-based Land Use Planning: Evolving from the Q100 Quagmire Shannon McGuire, Ethos Urban & Carrie Dearnley, BMT	The Application of Info4eco Flash Flood Technology to Canberra's February 2018 Flood Philip Prentice, Info4eco
2.45pm – 3.15pm	Coupled Hydraulic-Sediment Transport Flood Modelling – Impact of a Movable Bed on Flooding Behaviour of Coastal Rivers and Estuaries Hamid Mirfenderesk, City of Gold Coast	Updating Guidance on Floodways and Flood Hazard in New South Wales Duncan McLuckie, NSW Office of Environment and Heritage		Practical Applications of Low-Cost Water Level Gauges in a Flood Early Warning Network Mitchell Redenbach, Water Modelling Solutions

3.15pm – 3.45pm Afternoon Tea + Poster Presentations

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

8A: FMA Annual General Meeting
“All FMA Members please attend”

8B: Big Data, Better Outcomes Workshop

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?

This workshop will explore new and emerging data sources and collection techniques, explore potential applications and highlight industry challenges.

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
 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> International presenter
11.20am – 11.50am		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 Michael South, <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>

	Session 10A cont	Session 10B cont	Session 10C cont	Session 10D cont
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>	1.40pm – 1.55pm Practical Application of ARR 2016 Procedures to Flood Modelling in a Variety of NSW Catchments Leon Collins, <i>Advisian</i>
				1.55pm – 2.10pm Plain Speakin – Writing Flood Studies to be Read by Everyone Else Richard Murphy, <i>NSW Office of Environment & Heritage</i>
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>	2.10pm – 2.25pm Development of an Automated Flooded Road Immunity Analysis Tool Wendy Carlisle, <i>Water Modelling Solutions</i>
				2.25pm – 2.40pm Legal Perspectives of Levee Ownership and Maintenance in NSW Kieran McAndrew, <i>Clarence Valley Council</i>

	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>Southern Cross University</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 Blake Boulton, <i>Water Modelling Solutions</i>

3.10pm – 3.40pm Conference Wrap Up with Afternoon Tea