

CONFERENCE PROGRAM

(Program, subject to change)

Monday 20 May 2024

8.30am – 5.00pm Rainfall-runoff modelling with HEC-HMS Full Day Workshop

BCEC (additional cost full day workshop)

Tuesday 21 May 2024

8.00am – 12.30pm	Pre-Conference Morning Rain on grid modelling with HEC-RAS Workshop
	BCEC (additional cost half day workshop – morning tea & lunch included)
8.30am – 12.30pm	Pre-Conference Morning Workshop: Risk to Life Tolerability in Floodplain Management
	BCEC (additional cost half day workshop – morning tea & lunch included)
	Pre-Conference Morning Workshop: The data is in – how can we use research to shape change?
	BCEC (additional cost half day workshop – morning tea & lunch included)
12.30pm – 5.00pm	Pre-Conference Afternoon Bridges and culverts in HEC-RAS Workshop BCEC (additional cost half day workshop – lunch & afternoon tea included)
12.30pm – 5.00pm	Pre-Conference Afternoon Workshop: Rising to the Challenge – learning from flood hazards to build resilient communities BCEC (additional cost half day workshop – lunch & afternoon tea included)
12.30pm – 5.00pm	NSW Flood Risk Management: Implementing the 2023 Manual and toolkit BCEC (additional cost half day workshop – lunch & afternoon tea included)
12.30pm – 5.00pm	YFM TriWater Cup BCEC (additional cost half day TriWater Cup)
5.00pm – 7.00pm	Conference Registration & Welcome Reception Trade Exhibition Area, Boulevard Auditorium Foyer, BCEC
From 7.00pm	YFM Function (open to all delegates registered for the Conference) The Charming Squire Sponsored by KBR

Day One - Wednesday 22 May 2024

7.30am Conference Registration, Boulevard Auditorium Foyer

Session 1 Plenary

8.30am - 10.10am

Welcome to Country

Welcome from Floodplain Management Australia lan Dinham, President, Floodplain Management Australia

Welcome from Brisbane City Council

Minister Address (TBC)

Bureau of Meteorology Sponsor Address

The Application of Flood Risk Reduction Techniques: Lessons for Community-Led Relocation

Professor Gavin Smith, North Carolina State University College of Design

Queensland Reconstruction Authority Sponsor Address

NSW Department of Climate Change, Energy, the Environment and Water Sponsor Address

10.10am - 10.40am Morning Tea + Poster Presentations

Session 2 Concurrent

10.40am - 12.35pm

Sponsored by:



	2A: Emergency preparedness, response and recovery	2B: Flood case studies and stories	2C: Modelling and flood data	2D: Managing growth and land use planning
Location:	Boulevard Auditorium	B1	B2	B3
Chair:	Steve Muncaster	Allan Gear	Daniel Copelin	Patrick Paynter
10.40am – 11.05am	No escape: secondary risks in flood-isolated communities Suede Stanton- Drudy, NSW State Emergency Service & Shaza Raini, NSW DCCEEW	The good, bad and ugly: Milwaukee's journey to sustainable flood management David Fowler, Association of State Floodplain Managers International Presenter	Hawkesbury- Nepean River Flood Study: key features and findings Stephen Yeo, NSW Reconstruction Authority	Adapting through risk-based planning - is there a role for the 1%AEP anymore? William Prentice, Water Technology
5 minute	Changeover	Changeover	Changeover	Changeover

11.10am – 11.35am	Burning issues: the impacts of bushfires on flood preparedness and response Gillian Webber, NSW State Emergency Service	Scotland's proactive approach to flood management: the Grangemouth Flood Protection Scheme Adele Jaccon, Jacobs Engineering International Presenter	NSW State Disaster Mitigation Plan – a statewide review of managed relocation Rhys Thomson, Rhelm	Impacts of the new ARR climate change factors on flood planning levels Mark Babister, WMAwater
5 minute	Changeover	Changeover	Changeover	Changeover
11.40am – 12.05pm	NSW Flood Data Portal: from the beginning, linking data to disaster response Keiran O'Fee & Melissa Daley, NSW State Emergency Service	Ex-Tropical Cyclone Gabrielle flood hazard categorisation, Hawke's Bay, New Zealand Ramon Strong, PDP International Presenter	Precipitation- streamflow regression to synthetically extend record length in flood frequency analyses Evan O'Brien , SMEC	Integrating flood risk into planning: using data analysis to identify intolerable risk Stephen Dredge, Meridian Urban
5 minute	Changeover	Changeover	Changeover	Changeover
12.10pm – 12.35pm	Combining and amplifying outcomes from FRMP's, flood forecasting and community awareness projects Adam Berry , Synergy Solutions	Community experiences of the 2022 Tasmanian floods: a mixed methods study Darryl Stellmach, University of Tasmania	Update of design rainfall intensities for South East Queensland Phillip Jordan , HARC	Development controls for equitable management of filling across the Lower Hunter Richard Murphy, NSW DCCEEW & Michael Osborne, Port Stephens Council

12.35pm – 1.15pm Lunch + Poster Presentations

Long Field Trip – Referable Dams departs at 1.00pm and return approximately 5.30pm, afternoon tea included on tour.

Session 3 Concurrent			1.19	5pm – 2.40pm
	3A: Flood policy, guidance and best practice	3B: Flood prediction and warning	3C: Flood case studies and stories	3D: 10 Minute Presentations
Location:	Boulevard Auditorium	B1	B2	B3
Chair:	Sharyn Westlake	Ramon Strong	Camille White	Mike Edwards
1.15pm – 1.40pm	\$31 Million Flood Risk Management Program Katrina Smith, Queensland Reconstruction Authority	Probabilistic flood forecasting — embrace a range or maintain the binary? Chris Samuel, Bureau of Meteorology Young Floodplain Manager	Tomorrow's floodplain: a change in thinking on future coastal flooding Richard Sharp, Water Technology	1.15pm – 1.25pm Estimating environmental damages from soil loss during flooding events Mitchell Kirby, JB Pacific Young Floodplain Manager 1.30pm – 1.40pm Getting harder and harder to drain: 'flood mitigation' in low-lying coastal floodplains Chrisy Clay, Rous County Council

5 minute	Changeover	Changeover	Changeover	Changeover
1.45pm –	Everything's different	Understanding	The flow must go	1.45pm – 1.55pm
2.10pm	north of the border -	flood risk when	on: more robust	Flood mitigation in
	even flood risk	engineers and the	river gauges for	the Pacific: a
	management	general public do	future extremes	scoping study for
	Mathew Martin &	not speak the same	Van Cuong	Ba, Fiji
	Carrie Dearnley,	language	Nguyen,	Luke Joseph,
	WRM Water &	Mark Forest,	Department of Water	Royal HaskoningDHV
	Environment	Consor North	and Environmental	2.00pm – 2.10pm
		America	Regulation	Croc n' roll:
		International Presenter	Young Floodplain	navigating floods in
			Manager	the Adelaide River
				Tarkan Pasin, WRM
				Water & Environment
5 minute	Changeover	Changeover	Changeover	Changeover
2.15pm –	The Maitland flood of	Applying the	Australia's largest	2.15pm – 2.25pm
2.40pm	July 2022	Bureau's flood	measured river	Innovative
	lan Jackson & Tom	scenarios product	flow? Assessing the	approaches for
	Sigley, NSW	to emergency	2023 Fitzroy River	floodplain
	Department of	response	rating curves	management – RFD
	Climate Change,	coordination	Krey Price,	flood model update
	Energy, the	Tom Jory, NSW	Surface Water	2022
	Environment and	State Emergency	Solutions	Abigail Lillo, BMT
	Water	Service & Ailsa		2.30pm – 2.40pm
		Schofield, Bureau		How are Victorian
		of Meteorology		authorities using
				climate change
				riverine modelling in
				decision-making?
				Lachlan Inglis,
				Water Technology

Session 4 Short Field Trips

3.00pm - 5.30pm

Short field trips depart at 3.00pm (sharp) and will return to BCEC approximately 5.30pm, afternoon tea is included on all tours.

FT2: City Cat Tour – Creating a Resilient River City FT3: Delivering the Norman Creek Master Plan

FT4: Kedron Brook

5.30pm Close of Day One

7.30pm - 10.30pm Casual Dinner

Rivershed, Howard Smith Wharves

(return transfers available from Southbank – additional information to follow)

Sponsored by WMAwater

Day Two – Thursday 23 May 2024

8.30am

Registration (for 1 Day delegates), Boulevard Auditorium Foyer

Session 5

Concurrent

9.00am - 10.25am

Sponsored by:



Energy, Environmer and Climat

	5A: Flood policy, guidance and best practice	5B: Social sciences, human behaviour and communication	5C: Environmental aspects, climate change, coastal hazards and adaptation	5D: 10 Minute Presentations
Location:	Boulevard Auditorium	B1	B2	B3
Chair:	Ainslie Frazer	Paul Grech	Carla Mooney	
9.00am – 9.25am	Strategic management of flood risk Duncan McLuckie , NSW <i>DCCEEW</i>	'Know your flood risk' simple advice for a profoundly mis- understood learning context Willow Forsyth,	Risks to day-to-day coastal floodplain drainage with rising sea levels Alice Harrison, UNSW Water	9.00am – 9.10am loT hydrometric smart sensors – the good, the bad and the ugly Brany lezzi , <i>Brisbane</i> <i>City Council</i>
		University of Newcastle	Research Laboratory	9.15am – 9.25am Impacts of pre-burst on extreme floods. a case study in southeast Queensland Ash Rasheed, HARC
5 minute	Changeover	Changeover	Changeover	Changeover
9.30am – 9.55am	Changes in rural floodplain management in New South Wales Tim Morrison, NSW DCCEEW	Challenges in providing helpful flood information to Brisbane residents Robert McGlinn, Brisbane City Council	Navigating the future: lessons for risk-based assessment of coastal flooding and erosion Christine Lauchlan Arrowsmith, Streamology	9.30am – 9.40am Environmental modelling of the flood relief channels in the River Thames Scheme Keiko Yamagata,DHI 9.45am – 9.55am Discovering water information for robust modelling Chinee Mercado, Manly Hydraulics Laboratory
5 minute	Changeover	Changeover	Changeover	Changeover
10.00am – 10.25am	Keeping flood funding from drying out Meg Preston, Queensland Reconstruction Authority	What I have learnt engaging with flood affected communities for twenty years Emma Maratea, Rhelm	Influence of climate change on Logan Albert Flood characteristic Janaka Gunawardena, Logan City Council	10.00am – 10.10am Community flood information online - a Lismore City Council case study Cameron Druery, Worley Consulting 10.15am – 10.25am Communicating uncertainty in flash flood events Carla Mooney, Bureau of Meteorology

10.25am - 11.00am Morning Tea + Poster Presentations

Session 6 Plenary

11.00am - 12.30pm

Welcome to Day 2

NSW State Emergency Service Sponsor Address

Water Technology Sponsor Address

Australia and New Zealand Updates 2024

Stantec Sponsor Address

Developing Brisbane's Floodplain: Lessons from History **Dr Margaret Cook**, *Australian Rivers Institute, Griffith University*

TUFLOW Sponsor Address

12.45pm – 1.45pm Lunch + Poster Presentations

YFM Panel Session: The future of floodplain management - where we are headed

Session 7 Concurrent

1.45pm - 3.10pm

	7A: Flood policy, guidance and best practice	7B: New technology and research	7C: Environmental aspects, climate change, coastal hazards and adaptation	7D: Community recovery
Location	Boulevard Auditorium	B1	B2	B3
Chair:	Andrew Thompson			Meg Preston
1.45pm – 2.10pm	The Technical Mapping Advisory Council – shaping US flood risk management practices Doug Bellomo AECOM International Presenter	Use of satellite imagery to produce water level timeseries for ungauged waterbodies Louisa Chen, Jacobs	Partnering with regional communities to develop nature-based solutions to flooding Roslyn Prinsley, Australian National University	After the floodwaters recede - Improving support for flood affected residents Mel Taylor, Macquarie University / Enduring Advantage Consulting
5 minute	Changeover	Changeover	Changeover	Changeover
2.15pm – 2.40pm	The problem with parks Alana Mosely, City of Moreton Bay Young Floodplain Manager	Rip Rap to Rock Bags, physical modelling of high flow cases Dan Messiter, Royal HaskoningDHV	Enabling healthy waterway outcomes in flood risk planning – a nature-based approach John Bucinskas & Nathan Pomfret, NSW DCCEEW	Empowering community-led resilience: a co- design approach to disaster recovery in Wisemans Ferry Prawi Woods, Alluvium Consulting
5 minute	Changeover	Changeover	Changeover	Changeover

2.45pm –	Where do you draw	Building better	The power of	Prioritising properties
3.10pm	the line?	networks, Australia's	innovative technology	for buyback, raising
	(engineering	new ALERT2TM	to deliver carbon	and retrofit – The
	judgement in flood	Flood Warning Alarm	negative flood	evidence base and
	extent delineation)	System	management	approach to the
	Kate Prout, Engeny	Laurens Willems	solutions	Northern Rivers
		van Beveren &	Richard Crowder,	Resilient Homes
		Michael Galloway,	Jacobs	Program
		Manly Hydraulics	International Presenter	Louise Collier, Rhelm
		Laboratory		

3.10pm - 3.45pm Afternoon Tea + Poster Presentations

Session 8	FMA Annual G All FMA Members	3.45pm – 5.30pm	
Location:		Location:	
8A: FMA Annual (All FMA Members	•	8B:	

5.30pm **Close of Day Two**

7.00pm

Conference Dinner & Floodplain Management Australia Excellence Awards, Plaza Terrace Room, BCEC Sponsored by Royal HaskoningDHV

Day Three – Friday 24 May 2024

8.30am

Registration (for 1 Day delegates), Boulevard Auditorium Foyer

Session 9 Plenary

9.00am - 10.20am

Presentation by Winner of FMA - IAG Flood Risk Management Project of the Year Award

Jacobs Sponsor Address

Bridging the gap: Making disaster insurance into an opportunity for risk reduction

Professor Paula Jarzabkowski, University of Queensland

Sponsor Address

VIC Department of Energy, Environment and Climate Action Sponsor Address

2025 FMA National Conference Announcement

10.20 am - 10.50am Morning Tea + Poster Presentations

Session 10 Concurrent 10.50am – 12.45pm

	10A: Flood prediction and warning	10B: Managing growth and land use planning	10C: Infrastructure projects and asset management	10D: 10 Minute Presentations
Location:	Boulevard Auditorium	B1	B2	B3
Chair:	Sue Ribbons	Allan Gear		Fraser Ramsay
10.50am – 11.15am	Townsville's FLASH new flood warning system Alan Baker, Royal HaskoningDHV	Integrating climate change into design criteria: science becomes policy Michael McMahon, HDR International Presenter	Dams and levee system operations, maintenance and emergency management and risk comparison? Malcolm Barker, GHD	10.50am – 11.00am The psychology of flooding, how understanding psychology can assist with emergency management Melissa Blum, Burchills Engineering Solutions 11.05am – 11.15am Community-based flood action plans, an effective way of managing flood risk Jess Carey, Stantec
5 minute	Changeover	Changeover	Changeover	Changeover
11.20am – 11.45am	Real-time flash flood forecasting in Adelaide Trent Laves, Worley Young Floodplain Manager	Is South East Queensland growing into high hazard flood areas? Pradesh Ramiah, Moreton Bay Regional Council	Eight years of working on the Hunter Valley Flood Mitigation Scheme Ben Patterson, Royal HaskoningDHV	11.20am – 11.30am Building back better – Balancing resilience in recovery William Kershaw, Department of Energy and Public Works 11.35am -11.45am Flood evacuation planning the meeting of models, data and logic Damion Cavanagh, BMT

5 minute	Changeover	Changeover	Changeover	Changeover
11.50am –	Flood forecasting and	Managing stormwater	Highway/Freeway	11.50am – 12.00pm
12.15pm	warnings for ICOLLS	flood risk for infill	Environments:	Integrative decision
	Dan Rodger,	development	Understanding and	support tool for flood-
	JB Pacific	Nadia Guterres,	Addressing	informed road
		Sunshine Coast	Complexity	infrastructure
		Council	Nilmini Pannipitiya,	investment
			SMEC	prioritisation
				Gangfu Zhang,AECOM
				12.05pm – 12.15pm
				Flood mitigation
				works – improving
				construction cost
				estimation and cost
				benefit analysis
				Andrew Morris,
				Royal HaskoningDHV
5 minute	Changeover	Changeover	Changeover	Changeover
12.20pm –	New tools assisting	Let your catchment be	Stormwater backflow	12.20pm – 12.30pm
12.45pm	adaptive pathway	your guide – flood	device operations	Interstate Levee
	planning for sea level	sensitive rezoning	during the February	Committee – floods
	rise in NSW	James Ogg,	2022 Brisbane flood-	know no boundaries
	Galen Lewis,	Inner West Council	case study	Phillip Buchanan
	Manly Hydraulics		Evan Caswell,	NSW DCCEEW
	Laboratory		Brisbane City Council	12.35pm – 12.45pm
				Not broken? Don't fix
				it! The cautionary tale
				of Pental Islands
				levees
				Shaun Morgan,
				North Central CMA

12.45pm – 1.30pm Lunch

Session 11 Concurrent 1.30pm – 3.00pm

	11A: Flood damages and insurance	11B: Flood Stories	11C: Modelling and flood data	11D: 10 Minute Presentations
Location:	Boulevard Auditorium	B1	B2	B3
Chair:		Steve Molino		Alana Mosely
1.30pm – 1.55pm	2022 floods in the Northern Rivers: impacts on businesses and their recovery Tariq Maqsood , <i>RMIT University</i>	Effectively engaging with indigenous communities before, during and after floods Neil Dufty, Water Technology	Infragravity wave considerations in small coastal creeks Geoff Newell, Sunshine Coast Council	1.30pm – 1.40pm Contaminants of emerging concern in floodwaters Minna Saaristo, EPA Victoria 1.45pm – 1.55pm A strategic approach to building flash flood forecasting capability in South Australia Myles Fauser, Department for Environment and Water
5 minute	Changeover	Changeover	Changeover	Changeover

2.00pm – 2.25pm	Benchmarking the 2022 and 2023 DT01 Flood Damage Tool(s) to Seven Sub- Catchment(s) Martin Griffin, Stantec	FRMSPs when few buildings are inundated: the Boggabri case study Hayden Guse, WRM Water & Environment Young Floodplain Manager	Changing flood magnitudes through flood frequency analysis Russel Haque, Goulburn Broken Catchment Management Authority	2.00pm – 2.10pm Brisbane's future flood resilience blueprint: mapping synergy of studies and technology Simon Otero, Brisbane City Council 2.15pm – 2.25pm Using Failure to Make Informed Engineering Decisions Simon Tang, Engeny Australia
5 minute	Changeover	Changeover	Changeover	Changeover
2.30pm – 2.55pm	Rising waters, sinking coverage: Innovative strategies for managing insurance hydrologic assessments Carson Ly, Engeny Australia	Update published: Climate change considerations chapter in Australian Rainfall and Runoff Guidelines Leanne Wilkinson Department of Climate Change, Energy, the Environment and Water	2.30pm – 2.40pm Leveraging distributed sensor networks for enhanced flash flood monitoring lan Atkinson Lixia 2.45pm – 2.55pm Aligning design rainfall and FFA flow estimates on the NSW south coast Luke Evans, Rhelm	2.30pm – 2.40pm Flood forecasting and flood management, Thailand Greg Whyte, DHI Water & Environment 2.45pm – 2.55pm MoretonAlert - automating flood warning messages Elton Chong, City of Moreton Bay

3.00pm **–** 3.30pm

Conference Wrap Up with Afternoon Tea

POSTER PRESENTATIONS

Poster displays will be available for the duration of the conference. Authors will be available at their poster to discuss and give a short presentation at the following times:

Morning Tea – Wednesday 22 May - Hard Copy		
10.20am		
	Greg Whyte, DHI Water & Environment	
10.23am	FRT - A land use based approach to flood damages assessment for	
	Queensland Luke Joseph, Royal HaskoningDHV	
10.26am	TUFLOW-FEWS Integration: Direct Rainfall Simulations through DELFT-FEWS	
	Eranda Perera, <i>BMT</i>	

Lunch – Wednesday 22 May - Electronic		
12.45pm	El Niño does not mean we're on vacation from floods Aoife Soden-Taylor, <i>Brisbane City Council</i>	
	Aone Soden-Taylor, Brisbane City Council	
12.48pm	Nature's Fury: Assessing the March 2023 flood impacts at Lawn Hill Gorge	
	Hong Vu, <i>Arup</i>	
12.51pm	Dollars and sense – an outcome driven way to prioritise limited budgets	
	Joshua Eggleton, <i>KBR</i>	
12.54pm	Come Rain, Shine (or Wind): Differences between Wind and Solar Stormwater	
	Management	
	Ramya Srinivasan, <i>Engeny Australia</i>	

Morning Tea – Thursday 23 May - Electronic		
10.40am	Who Benefits? Using FloodAdapt to Support Equitable Flood Risk Management Simone De Kleermaeker , Deltares	
10.43am	Increasing flood resilience using flood intelligence software in the Hunter Valley Adrian Milne, NSW Department of Climate Change, Energy, the Environment and Water	
10.46am	Enhancing Floodplain Resilience and Climate Adaptation: Ross River Environmental Flow Paths Project Wesley Bailey, <i>AECOM</i>	

Lunch – Thursday 23 May - Electronic		
1.05pm	Juggling Competing Interests in ICOLL Management - The Byron Bay Experience	
	Steve Twohill, Byron Shire Council	
1.08pm	An overview of renewable energy guidelines for flood risk assessments across	
	Victoria Jorja Strack, Water Technology	
1.11pm	Gemfields flood triggers for spatially varying design events	
•	Anthony Densten, Stantec	
1.14pm	Review I: current Wivenhoe Dam Flood Manual – a mixture of understandings	
	Greg McMahon, Integrated Project Management	
1.17pm	Review I: current Wivenhoe Dam Flood Manual – a mixture of understandings	
	Greg McMahon, Integrated Project Management	

Afternoon Tea – Thursday 23 May – Hard Copy	
3.20pm	Improving Floodplain Connections
	Tim Morrison, NSW Department of Climate Change, Energy, the
	Environment and Water
3.23pm	RegioFEM – a floodplain evaluation method to support future-oriented flood risk
	management
	Markus Eder, WMAwater

Morning '	Tea – Friday 24 May - Electronic
10.40am	Effect of mesh and roughness coefficients on mountainous terrain in 2D-flood modelling Oshini Peramuna, <i>RMIT University</i>