# NATURAL HAZARDS RESEARCH FORUM



ADELAIDE, NATIONAL WINE CENTRE OF AUSTRALIA, 14-16 MAY 2024

#### Research with Impact – Provoke, Inspire, Challenge, Be Involved

Program includes keynotes, presentations, panel discussions, workshops and networking.

#### Day 1: Tuesday 14 May



Time	Plenary – Hickinbotham Hall		
1:00pm	<b>Welcome</b> Iain MacKenzie, Chair, Natural Hazards Research Australia		
	Welcome to Country Cliffy Wilson, Kuma Kaaru Cultural Services		
	Opening South Australian dignitaries Brendan Moon, Coordinator-General, National Emergency Management Agency		
	Overview Andrew Gissing, CEO, Natural Hazards Research Australia		
3.00pm	Afternoon tea		
3.30pm	Big Thinking – innovation in our sector  Dr Sue Keay, Partner and Director, Future Work Group  Dr Justin Fidock, Program Leader National Security, Defence Science Technology Group, Department of Defence  Prof Andy Koronios, CEO and Managing Director, SmartSat CRC  Brett Loughlin, Chief Officer, South Australian Country Fire Service		
5.30pm	Welcome drinks (5:30pm–7:00pm)		

Program subject to change



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#### Day 2: Wednesday 15 May

Time	Stream 1 – Hickinbotham Hall	Stream 2 – The Gallery	Stream 3 – Exhibition Hall		
9.00am	Risk informed decision making	Situational awareness	Resilient communities and Country		
	<b>Bushfire risk at the rural–urban interface</b> Prof David Bowman, Dr Stefania Ondei & Dr Anna Gjedrem, University of Tasmania	What makes a good fire simulator? Caitlin Symon, University of Melbourne	Community-led recovery: evidence, dimensions and supports for Community Recovery Communities Dr Kate Brady & Dr Colin Gallagher, University of Melbourne		
	Community risk assessment A/Prof Nader Naderpajouh, Amir Pakizeh & Peyman Habibimoshfegh, University of Sydney	Sector partner engagement to enhance severe weather impact predictions Liza Gelt, Rosie Tran & Dr Michael Rumsewicz, Collaborative Consulting	Cultural land management research and governance in south-east Australia A/Prof Tim Neale, Deakin University Oliver Costello, Jagun Alliance Lachlan Beggs, Deakin University		
	Predictions in public: understanding the design, communication and dissemination of predictive maps to the public Dr Chloe Begg, Country Fire Authority Dr Erica Kuligowski, RMIT University	Translation of observed and modelled extreme bushfire behaviours to improve fire prediction Dr Mika Peace, Bureau of Meteorology	Awareness, education and communication for compound natural hazards Dr Gabi Mocatta & Dr Erin Hawley, Deakin University		
	Operationalising Aboriginal Land and Sea Management Shaun Hooper & Kate Brown, Department of Climate Change, Energy, the Environment and Water NSW	Healing country through Wolgalu/ Wiradjuri-led land management Megan Considine, Brungle-Tumut Local Aboriginal Land Council A/Prof Lisa Slater, University of Wollongong Jarrah Bousfield, Brungle-Tumut Local Aboriginal Land Council	Foundations in Indigenous disaster resilience Bhiamie Williamson & Nell Reidy, National Indigenous Disaster Resilience, Fire to Flourish		
	Capturing uncertainty in bushfire spread prediction Dr Michael Storey & A/Prof Owen Price, University of Wollongong	PhD – Remote sensing of fuel to improve fire behaviour predictions Simeon Telfer, RMIT University	PhD – Building community resilience to natural hazards through school education: a social and transformative model of practice Belinda Davies, Monash University		
	Why fly? How do we know that aerial firefighting operations are effective and efficient?  A/Prof Owen Price, University of Wollongong	PhD – Machine learning for humanitarian disaster relief efforts through employing rule-based verification on drone aerial imagery Hafiz Suliman Munawar, University of New South Wales			
10:30am	Morning tea				
11:00am	Risk informed decision making	Situational awareness	Resilient communities and Country		
	Utilisation panel + workshop	Utilisation panel + workshop	Utilisation panel + workshop		
12:30pm	Lunch				

#### Participation at NHRF24:

# Participate in person or online using Slido. Scan the QR code in this program to join. No app is required!

If you run into any technical difficulties, please contact Vaia Smirneos: 0413 419 428, vaia.smirneos@naturalhazards.com.au

### **#NHRF24**

Time	Stream 1 – Hickinbotham Hall	Stream 2 – The Gallery	Stream 3 – Exhibition Hall
1:30pm	Early Career Researchers	Situational awareness	Resilient communities and Country
	Launch of Early and Mid-Career Academic and Practitioner Network Prof Deborah Bunker, Natural Hazards Research Australia Dr Hamish Clarke, University of Melbourne	Flash flood case studies to improve predictions and communication of uncertainty Dr Carla Mooney, Bureau of Meteorology	Post-flood research utilisation workshop A/Prof Mel Taylor, Department of Climate Change, Energy, the Environment and Water NSW & Macquarie University Dr Darryl Stellmach, University of Tasmania Bhiamie Williamson, National Indigenous Disaster Resilience, Fire to Flourish Dr Erica Kuligowski, RMIT University
	PhD and early career researcher presentations with Q&A Bushfires, trauma and sleep: help me to sleep please – Fadia Isaac, Federation University Response, resilience and recovery of Tasmania's endangered Pencil Pine using a multi-archive palaeoenvironmental record – Sarah Cooley, University of Melbourne Irrigated green firebreaks – Jady Smith, University of the Sunshine Coast PhD poster presentations	Long-range flood outlook for strategic preparedness Dr Navid Ghajarnia, Bureau of Meteorology	
		Developing an integrated predictive capability for extreme rainfall and inundation Dr Carlos Velasco, Bureau of Meteorology	Knowledge user perspectives Pathways to utilisation – breakout discussion groups
		<b>Detecting fire plumes with mobile radar</b> Dr Mika Peace, Bureau of Meteorology	
	Publishing in the Australian Journal of Emergency Management Christine Belcher, Australian Journal of Emergency Management Dr Margaret Moreton, Australian Insitute for Disaster Resilience	Fire case studies Dr Mika Peace, Dr Jeff Kepert & Sam Sauvage, Bureau of Meteorology	
3:30pm	Afternoon tea		
Time	Plenary – Hickinbotham Hall		
4:00pm	Keynote – Personalised natural hazards warnings Dr Sally Potter, Senior Social Scientist, GNS Science New Zealand		
5:00pm	Networking function (5:00pm - 7:30pm)		

Program subject to change



#### Day 3: Thursday 16 May

Time	Stream 1 – Hickinbotham Hall	Stream 2 – The Gallery		
9:00am	Infrastructure – Planning for a resilient built environment	Workforce		
	<b>Evaluating the Resilient Homes Fund</b> Prof Paula Jarzabkowski, University of Queensland	Best practice for tracking and responding to potentially traumatic event exposure Alexandra Howard, Phoenix Australia		
	Modelling impacts of natural hazards on interconnected infrastructure networks  Dr Matt Mason, University of Queensland	PhD – Impact of bushfire smoke on the ocular surface Suki Jaiswal, University of New South Wales  PhD – Smoke exposure profiles of bushfire fighters in the south-west ecoregion of Western Australia Kiam Padamsey, Edith Cowan University		
	Creating resilient and sustainable critical infrastructure using evidence informed policy Cameron Atkinson, University of Tasmania			
	Understanding the resilience of lifelines for regional and remote communities  Prof Lauren Rickards, La Trobe University	Enhanced decision-making in emergency management Dr Peter Hayes, CQUniversity A/Prof Greg Penney, Charles Sturt University		
	Safety of Alternative and Renewable Energy Technologies Research Program Jamie Vistnes, Fire and Rescue NSW			
	Panel – How do we better innovate and be informed by science?			
10:30am	Morning tea			
11:00am	Infrastructure – Planning for a resilient built environment	Workforce (continued)		
	Panel – How do we better invest in resilience and risk reduction? Steve Crowley, Optus Bridie Fennessy, Yarra Valley Water	Utilisation of transformative scenarios in a climate-challenged world Liza Gelt & Rosie Tran, Collaborative Consulting Co		
	Dr Rob Considine, Department of Energy, Environment and Climate Action, Victoria Stephen Martin, Powerlink	Reimagining emergency management volunteering: more than just words Celeste Young & Prof Roger Jones, Victoria University		
	Stream closing remarks Dr Adriana Keating, Fire to Flourish	Recap 2022 workshop and discussion on pathways to impact		
12:30pm	Lunch			
ime	Plenary – Hickinbotham Hall			
1:30pm	Keynote – Future urban planning policy in a natural hazards context Prof Barbara Norman, Emeritus Professor, University of Canberra, Chair of Urban Policy Forum advising Australian Government.			
	Panel Prof Barbara Norman Julia Waddington-Powell, South Australian Fire and Emergency Services Commission Brenton Grear, Department for Environment and Water, South Australia			
2:30pm	Closing Her Excellency the Honourable Frances Adamson, Governor of South Australia			
3:00pm	End of Forum			

Program subject to change

We acknowledge the Traditional Custodians of the land on which the Natural Hazards Research Forum is being held, the Kaurna people of the Adelaide Plains, and we pay our respects to their Elders past, present and emerging. We also acknowledge the Kaurna peoples' continued contribution to the life and culture of the Adelaide Plains region, and recognise that these lands and waters have always been places of teaching, research and learning. In the spirit of reconciliation, we extend this acknowledgment and respect to all First Nations peoples, including any First Nations delegates.

# Join the conversation **#NHRF24**





