# NATURAL HAZARDS
## RESEARCH FORUM

ADELAIDE, NATIONAL WINE CENTRE OF AUSTRALIA, 18–20 JUNE 2025

Natural
Hazards
Research
Australia

## Transformation to Be Ahead of Ready – using research to act big and bold

Sessions include presentations, panel discussions and engagement opportunities

## Day 1: Wednesday 18 June 2025

# #NHRF25

| Time | Hickenbotham Hall | Stream 2 – Exhibition Hall |
|---|---|---|
| 7:30am – 9:00am | **Pre-Forum workshop sessions** (light breakfast, workshop starts at 9am and concludes at 12pm) | |
| 9:00am – 12:00pm | **Support integration of Recovery Capitals in service plans for communities with different levels of social disruption** – Prof Lisa Gibbs, University of Melbourne | **PhD student symposium** |
| 12:00pm – 1:00pm | **Lunch on arrival** | |
| 1:00pm – 3:00pm | **Forum opening including smoking ceremony.** This session will be live streamed. <br> **Plenary session: keynotes and panels** – critical issues and opportunities <br> **Session chair** – Andrew Gissing, Natural Hazards Research Australia <br> Iain MacKenzie, Chair Natural Hazards Research Australia <br> Brendan Moon AM, Coordinator-General, National Emergency Management Agency <br> Prof Ariella Helfgott, Foresight Director, South Australia Futures Agency <br> Tiahni Adamson, Wildlife Conservation Biologist, 2024 Young South Australian of the Year | |
| 3:00pm – 3:30pm | **Afternoon tea** | |
| 3:30pm – 5:00pm | **Plenary session: keynotes and panels.** This session will be live streamed. <br> **Centre showcase** – research impact <br> **Session chair** – Rob Webb, AFAC | |
| 5:00pm – 5:30pm | **Centre awards** | |
| 5:30pm – 7:30pm | **Networking drinks and nibbles** | |

Program current as of 12 May and subject to change

*Day 2 and 3 on the next pages*

For more information and
details on how to register visit
**naturalhazards.com.au/nhrf25**
**OR SCAN THE QR CODE**

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## RESEARCH FORUM
ADELAIDE, NATIONAL WINE CENTRE OF AUSTRALIA, 18–20 JUNE 2025

## Transformation to Be Ahead of Ready – using research to act big and bold
Sessions include presentations, panel discussion and interaction with delegates

## Day 2: Thursday 19 June 2025

| Time | Stream 1 – Hickenbotham Hall | Stream 2 – Exhibition Hall | Stream 3 – Gallery |
|---|---|---|---|
| 7:30am – 8:45am | **Workshop** <br> **Storing and sharing qualitative data** – Lyndsey Wright, Altometer | **Workshop** <br> **Bushfire information database – scoping study** – A/Prof Nader Naderpajouh, University of Sydney | |
| 9:00am – 10:30am | **Research project presentations – Enhancing and adapting situational awareness** <br> **Session chair** – Alen Slijepcevic, Country Fire Authority <br> **Fire case studies** – Dr Mika Peace, Bureau of Meteorology <br> **Capturing uncertainty in bushfire spread prediction** – Dr Michael Storey, University of Wollongong <br> **Identifying and defining landscape dryness thresholds for fires** – Dr Jane Cawson, University of Melbourne | **Research project presentations – Guiding future governance, strategy and leadership** <br> **Session chair** – Matt Watson, Department of Fire and Emergency Services WA <br> **Foundations in Indigenous disaster resilience** – Dr Bhiamie Williamson and Lucy Connole, National Indigenous Disaster Resilience and Monash University <br> **Evaluating the Resilient Homes Fund** – Queensland and NSW – Dr Katie Meissner, University of Queensland <br> **Why fly? How do we know that aerial firefighting operations are effective and efficient?** – Dr Matt Plucinski, CSIRO <br> **Operationalising Aboriginal land and sea management** | Research project presentations – Planning for a resilient built environment <br> **Session chair** – Amanda Leck, NSW Reconstruction Authority <br> **Effectiveness of land-use planning flood controls on buildings** <br> **Insights into temporary and emergency accommodation** – Nikhila Madabhushi, Monash University <br> **Strengthening energy networks to withstand severe wind and storms** – A/Prof Matthew Mason, University of Queensland <br> **Safety of alternative and renewable energy technologies** – A/Prof David Lange, University of Queensland |
| 10:30am – 11:00am | **Morning tea** | | |
| 11:00am – 12:00pm | Research project presentations – Enhancing and adapting situational awareness <br> **Session chair** – Steve Muncaster, Victoria State Emergency Service <br> **Flash flooding case studies to improve predictions and the communication of uncertainty** – Dr Carla Mooney, Bureau of Meteorology <br> **Long-range flood outlook for strategic preparedness** – Dr Christopher Pickett-Heaps, Bureau of Meteorology <br> **Flash flooding case studies to improve predictions and the communication of uncertainty** – Dr Carlos Velasco-Forero, Bureau of Meteorology | Research project presentations – Applying data science, technology and management <br> **Session chair** – Dr Jane Sexton, Queensland Fire Department <br> **Managing earthquake risk: unreinforced masonry building database** – Dr Hossein Derakhshan, Queensland University of Technology <br> **Modelling impacts of natural hazards on interconnected infrastructure networks** – A/Prof Matthew Mason, University of Queensland <br> **Computational-based approaches to critical infrastructure research** – Cameron Atkinson, University of Tasmania | Research project presentations – Supporting safe, capable and thriving workforces <br> **Session chair** – Jeremy Smith, Tasmania Fire and Emergency Service <br> **Best practice for tracking and responding to potentially traumatic event exposure** – Alexandra Howard, Phoenix Australia <br> **Smoke exposure profiles of bushfire fighters in the south-west ecoregion of Western Australia** – Kiam Padamsey, Edith Cowan University <br> **The role of trust-building for effective collaboration** – Syed Adeel Akhtar, University of Tasmania |
| 12:00pm – 1:00pm | **Lunch** | | |

| Time | Stream 1 – Hickenbotham Hall | Stream 2 – Exhibition Hall | Stream 3 – Gallery |
|---|---|---|---|
| 1:00pm – 3:00pm | **Research project presentations – Workforce-leadership connections**<br>**Session chair** – Daniel Austin, NSW State Emergency Service<br>**The human capacity demands of an emergency manager in Australia** – Dr Russell Dippy, Charles Sturt University<br>**Emergency management volunteering: more than just words** – Prof Roger Jones, Victoria University<br>**Healing country through Wolgalu/ Wiradjuri-led land management** – Dr Lisa Slater, University of Wollongong<br>**Colonial load and cultural conflict** – Dr Bhiamie Williamson & Zoe Schultz, National Indigenous Disaster Resilience & Monash University<br>**Cultural land management research and governance in south-east Australia** – A/Prof Tim Neale, Deakin University<br>**Panel** | **Research project presentations – Infrastructure – society connections**<br>**Session chair** – Andrew Coghlan, Australian Red Cross<br>**Support integration of Recovery Capitals in service plans for communities with different levels of social disruption** – Prof Lisa Gibbs, University of Melbourne<br>**Natural hazards and resilience in complex urban systems** – Dr Annette Kroen, RMIT University<br>**Understanding intangible flood costs and impact** – A/Prof Tariq Maqsood, RMIT University<br>**Community risk assessment** – A/Prof Nader Naderpajouh, University of Sydney<br>**Heatwave resilience and impacts** – Dr Sue Heatley & Dr Olga Anikeeva, University of Adelaide<br>**Panel** | **Research project presentations – Mitigation – adaptation connections**<br>**Session chair** – Daniel Willetts, South Australia Fire and Emergency Services Commission<br>**Integrated solutions for bushfire-adaptive homes** – Dr Mittul Vahanvati, RMIT University<br>**Conserving and reconnecting floodplains to mitigate flood risk** – Dr Jason Alexandra<br>**Bushfire risk at the rural–urban interface – bushfire behaviour and mitigation strategies** – Prof David Bowman & Dr Grant Williamson, University of Tasmania<br>**Nature positive disaster risk reduction solutions** – Jongsok Oh, Suncorp<br>**Panel** |
| 3:00pm – 3:30pm | **Afternoon tea** | | |
| 3:30pm – 5:00pm | **Plenary session: keynotes and panels – learning local and global.** This session will be live streamed.<br>**Session chair** – Andrew Gissing, Natural Hazards Research Australia<br>A/Prof Susanna Jenkins, Nanyang Technological University, Singapore<br>Dr Richard Smith, Resilience to Nature's Challenges, New Zealand<br>Distinguished Prof Christine Kenney, Massey University, New Zealand<br>A/Prof Melissa Parsons, University of New England<br>**Panel** | | |
| 5:30pm – 7:30pm | **Networking function** | | |

# PROGRAM

## **Day 3:** Friday 20 June 2025

| Time | Stream 1 – Hickenbotham Hall | Stream 2 – Exhibition Hall | Stream 3 – Gallery |
|---|---|---|---|
| 7:30am – 8:45am | **Workshops**<br>**New research projects showcase** | | **Workshops**<br>**Assisted Relocation Community of Practice** – Andrew Gissing, Natural Hazards Research Australia |
| 9:00am – 9:45am | **Plenary session: keynote – do governments trust communities?** This session will be live streamed.<br>**Session chair** – Kate Vinot, Natural Hazards Research Australia<br>Mark Duckworth PSM, Deakin University | | |
| 9:50am – 10:30am | **Research project presentations – Enhancing and adapting situational awareness**<br>**Communicating flood risk** – A/Prof Jen Seevinck Queensland University of Technology<br>**What makes a good fire simulator?** – Caitlin Symon, University of Melbourne<br>**Bushfire risk at the rural–urban interface – community-centred risk reduction** – Dr Sharon Campbell, University of Tasmania | **Community engagement relating to floods**<br>**Session chair** – Oshanna Alexander, South Australia SES | **Research project presentations – Enabling equitable community resilience**<br>**First Nations women, cultural fire knowledge, wellbeing and memory** – Dr Bhiamie Williamson and Nell Reidy, National Indigenous Disaster Resilience and Monash University<br>**Evaluation and monitoring for impact: developing a framework for risk prevention programs** – Celeste Young, Victoria University |
| 10:30am – 11:00am | **Morning tea** | | |
| 11:00am – 12:00pm | **Research project presentations – Enhancing and adapting situational awareness**<br>**Predictions in public** – Dr Chloe Begg, Country Fire Authority<br>**Awareness, education and communication for compound natural hazards** – Dr Erin Hawley, Deakin University<br>**Multi-hazard public information and warning platforms for the future** – A/Prof Paula Dootson, Queensland University of Technology | **Indigenous experiences of flooding and implications for community engagement practice**<br>**Session chair** – Oshanna Alexander, South Australia SES | **Research project presentations – Enabling equitable community resilience**<br>**Session chair** – Craig Savage, Energy Networks Australia<br>**Exploring the role of civic technologies in community decision making in the face of climate change and disaster** – Phoebe Quinn, University of Melbourne<br>**An online cognitive-behavioural intervention for treatment of insomnia and nightmares in bushfire survivors** – Fadia Isaac, Federation University<br>**Multi-agency collaboration in disaster recovery after bushfire** – Louise Mitchell, University of Sydney |
| 12:00pm – 1:00pm | **Plenary session: Tropical Cyclone Alfred – lessons for Australia.** This session will be live streamed.<br>**Session chair** – Prof Cheryl Desha, Natural Hazards Research Australia<br>Jai O'Toole, Australian Red Cross<br>Liz Drumm, Local Government Association of Queensland<br>Dr David Henderson, Cyclone Testing Station, James Cook University<br>Glen Dolan, Energex | | |
| 1:00pm | **Light lunch, Forum conclusion** | | |

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