



Research Driving Change Showcase 2017

Day one: Tuesday 4 July 2017

Time	Topic	Presenting
9:00am	Welcome	Catherine McGrath – MC Dr Laurie Hammond – Chair, Bushfire and Natural Hazards CRC Dr Richard Thornton – CEO, Bushfire and Natural Hazards CRC
	National Research Priorities launch	Dr Richard Thornton – CEO, Bushfire and Natural Hazards CRC
9:30am	Communicating and warning: getting the message across more effectively <i>Warnings and information both before and during emergencies are critical elements of modern emergency management. There has been significant progress in legislation, policy, operational practice, research and the use of technology, with a national focus to better engage and empower communities has propelled change and continuous improvement. CRC research is helping to identify the major areas of personal risk and understand human perception of risk. Hear from national leaders about how CRC research is changing public communication and education, from disaster resilience education in the schoolroom to the shape of warnings before and during events.</i>	Andrew Richards , NSW State Emergency Service Fiona Dunstan , Country Fire Service SA Anthony Clark , NSW Rural Fire Service Prof Vivienne Tippett , Queensland University of Technology Prof Kevin Ronan , CQUniversity Tony Jarrett , NSW Rural Fire Service
10:30am	Morning tea	
11:00am	Towards a safer built environment <i>Australian building codes and land use planning practices have evolved over time reflecting advancements in engineering design, our understanding of the cost and benefit of mitigation and community expectations. What once was acceptable practice, no longer is seen that way; so how do we best manage and adapt our buildings and infrastructure to mitigate against natural hazards, to protect lives and reduce economic impacts? This session brings together the spatial mapping of the national building stock characteristics with mitigation approaches for severe wind and earthquake. Examples will be presented demonstrating the application and importance of this research to developing more resilient communities.</i>	Elliott Simmons NSW State Emergency Service Mark Edwards , Geoscience Australia Paul Martin - Mayor of York Shire, WA Jon Harwood - Suncorp





<p>11:30am Supporting Indigenous communities in Northern Australia <i>This is a story of a long-term research program, a complex program that has focussed on working with Indigenous communities and researchers that has brought together advanced technology, data analysis, social governance and the development of culturally appropriate, environmentally sustainable economic opportunities to supporting building the resilience of Indigenous communities in northern Australia.</i></p>	<p>Steve Sutton, Charles Darwin University</p>
<p>12:00pm Lightning presentations <i>Hazards, culture and Indigenous communities</i></p> <p><i>Factors affecting long term community recovery</i></p>	<p>Dr Tim Neale, Deakin University</p> <p>Kate Brady, Red Cross</p>
<p>12:20pm PhD 3 minute thesis presentations</p> <p>An analytical technique for determining the redistribution of structural load effects with increasing wind loads</p> <p>The interactions between emergency responders and animal owners in bushfire: improving community preparedness and response outcomes</p> <p>Web 2.0 in disaster and emergency: a risk assessment of tortious liability</p>	<p>Korah Parackal, James Cook University</p> <p>Rachel Westcott, Western Sydney University</p> <p>Melanie Baker-Jones, Queensland University of Technology</p>
<p>12:30pm Lunch</p>	
<p>1:30pm Building bushfire predictive services capability <i>Predictive services are a key contributor to mitigation activities including fuel reduction burns, community warnings and fire behaviour analysis. With national efforts looking to strengthen prescribed burning practices, the fire danger rating system, and to better engage and empower communities, it is more crucial than ever that best available science actively support the sector. Hear how CRC science is being used to understand the impact of prescribed burning on catchments, the environment and bushfire risk; how satellite and land sensing technologies are helping to estimate fuel loads and soil moisture; and how weather and fire interact to potentially the impact of fires. And charged with this information, the sector is able to better warn the public, fight fires and improve the safety of the public and firefighters.</i></p>	<p>Dr Stuart Matthews, NSW Rural Fire Service John Bally, Bureau of Meteorology Dr Adam Leavesley, ACT Parks and Conservation Service Dr Karin Reinke, RMIT University Assoc Prof Jason Sharples, UNSW Canberra Dr Jeff Kepert, Bureau of Meteorology Dr Mika Peace, Bureau of Meteorology Dr Alex Filkov, University of Melbourne</p>
<p>3:00pm Afternoon tea</p>	





<p>3:30pm</p>	<p>PhD 3 minute thesis presentations</p> <p>Attribution of active fire using simulated fire landscapes</p> <p>Preventing youth misuse of fire in New South Wales: an empirical evaluation</p> <p>Child-centred Disaster Risk Reduction: achievements, challenges and scope</p>	<p>Bryan Hally, RMIT University</p> <p>Kamarah Pooley, Queensland University of Technology</p> <p>Mayeda Rashid, CQUniversity</p>
<p>3:40pm</p>	<p>Lightning presentations</p> <p><i>The DELWP emergency risk research program</i></p> <p><i>After the fire – learning from experience</i></p> <p><i>Resilience research centres – an international view</i></p>	<p>Hamish Webb, Department of Environment, Land, Water and Planning Victoria</p> <p>Anthony Clark, NSW Rural Fire Service</p> <p>Prof Gavin Smith, University of North Carolina – Chapel Hill</p>
<p>4:15pm</p>	<p>Panel - Making a difference - how is CRC research influencing our business.</p> <p><i>A reflective discussion on why emergency management organisations invest research, how that research is benefiting the practice and policy of natural hazards emergency management and the value it contributes.</i></p>	<p>Greg Nettleton, Chief Officer, Country Fire Service SA</p> <p>Mark Smethurst, Commissioner, NSW State Emergency Service</p> <p>Chris Arnol, Chief Officer, Tasmania Fire Service</p> <p>Stuart Ellis, CEO, AFAC</p>
<p>5:00pm</p>	<p>Close day one</p>	
<p>5:30pm</p>	<p>Showcase - Social gathering</p> <p>Exhibition Hall - National Wine Centre of Australia</p>	

*Agenda subject to change.





Day two: Wednesday 5 July 2017

Time	Day 2	
8:30am	Opening day 2	Catherine McGrath - MC
8:45am	<p>Panel: Getting value from research investment: experiences in taking research to practice</p> <p><i>A reflective discussion on the key characteristics of projects that successfully transition from research into practice (and hopefully impact) and pitfalls to avoid.</i></p>	<p>Dr Noreen Krusel, Manager Research Utilisation, AFAC</p> <p>Amanda Leck, Director Information and Community Safety, AFAC</p> <p>Ed Pikusa, Department of Environment, Water and Natural Resources South Australia</p> <p>Neil Cooper, ACT Parks and Conservation Service</p>
9:15am	<p>Enhancing capability in emergency management</p> <p><i>Events associated with natural hazards are increasing in complexity, duration, and require involvement of an increasing number of agencies. At the same time financial constraints from government, declining volunteer numbers, an aging workforce and workforce restructuring are presenting agencies with significant challenges. If we are going to ask people to work in these increasingly complex environments, then we need to provide them with the skills and tools to be able to do so effectively. Hear from practitioners about how CRC research is helping incident controllers to determine how teams are performing in real time and to identify any teamwork issues that might lead to impaired performance; to improve how organisations learn from evidence and implement changes in practice and to identify opportunities and barriers to adoption of these tools and providing strategies that agencies can use to overcome these barriers.</i></p>	<p>Heather Stuart, NSW State Emergency Service</p> <p>Dr Chris Bearman, CQUniversity</p> <p>Mark Thomason, Country Fire Service SA</p>
9:45am	<p>Lightning presentations</p> <p><i>Catastrophic and cascading events: planning and capability</i></p> <p><i>National mental health and wellbeing study of police and emergency services</i></p> <p><i>Diversity and inclusion: building strength and capability</i></p>	<p>Andrew Gissing, Risk Frontiers</p> <p>Rob Heaslip, beyondblue</p> <p>Celeste Young, Victoria University</p>
10:15am	Morning tea	





<p>10:45am</p>	<p>Understanding the value and challenges of risk mitigation <i>Despite future risk being a function of today's decisions, we still spend less than 3% of the annual costs of disasters on mitigation activities. How can we understand the potential benefits of mitigation investment in a complex political environment? This session draws together research on understanding risk ownership, quantifying intangible values, and identifying and searching through the myriad options available for spending the limited mitigation dollar in an uncertain environment across multiple hazards. Hear from policy makers, planners and land managers putting the research into practice to help understand the options available to them while at the same time maximising bang for your buck.</i></p>	<p>Ed Pikusa, Department of Environment, Water and Natural Resources South Australia Celeste Young, Victoria University John Schauble, Emergency Management Victoria Dr Fiona Gibson, University of Western Australia Tim Groves, Department of Environment, Water and Natural Resources South Australia Richard Pieper – Office of Emergency Management Western Australia Graeme Riddell, University of Adelaide Mike Wouters, Department of Environment, Water and Natural Resources South Australia</p>
<p>11:45am</p>	<p>Lightning presentations</p> <p><i>Urban planning for natural hazard mitigation</i></p> <p><i>The Australian Natural Disaster Resilience Index</i></p> <p>PhD 3 minute thesis presentations</p> <p>Network disruptions during long-duration natural hazard events</p> <p>Flood management in a changing climate: integrating effective approaches</p> <p>Implementing policy to enable disaster resilience in the Australian Federation</p>	<p>Assoc Prof Alan March, University of Melbourne Dr Melissa Parsons, University of New England</p> <p>Emma Singh, Macquarie University</p> <p>Caroline Wenger, Australian National University</p> <p>Susan Hunt, Australian National University</p>
<p>12:30pm</p>	<p>Lunch</p>	
<p>1:30pm</p>	<p><i>Sustainable volunteering; transformation not decline</i> <i>Volunteers play a fundamental role in emergency management preparedness, response and recovery. Recent changes to the physical and social landscape in Australia, shifting demographics, political climate and urban rural fringe and climate change, are having the direct effect on emergency management, forcing organisations to reconsider the traditional notion of volunteers. The net effect of this is a need for a genuine shift to change outdated paradigms towards transformation in the</i></p>	<p>Paul Davis, Emergency Management Victoria Deb Parkin, Inspector-General for Emergency Management, Victoria Dr Blythe McLennan, RMIT University Dr Michael Jones, University of Wollongong Georgina Goodrich, Department of Communities and Social Inclusion South Australia</p>



emergency management sector. In this session, hear about the CRC research into volunteer values and leadership and alternative models of volunteering and how agencies can adapt to this new paradigm. There will be also be a diverse range of end-users that will help you make sense of this research and provide tangible examples of how this research works on the ground and importance of this research for resilient communities now and in the future.

Lightning presentation

Enabling sustainable emergency volunteering

Dr Blythe McLennan, RMIT University

2:15pm

Water, water everywhere: living with flood and coastal threats

Australia loves coastal living! Our intensely urban environments are focused along a thin coastal strip that has continually changed over to reflect long to short term influences such as climate change, sea level, sediment supply, storms, and human intervention. Living in this dynamic environment requires the development of tools that help land use planners and emergency managers to forecast how the coast will respond to these factors. This session will provide an overview of how end-users are benefiting from new approaches to predicting flood heights, extreme coastal water levels and the coastal sediment response to clustered storm events.

Miriam Middelmann-Fernandes, Geoscience Australia

Robert Schwartz, Department of Science, Information Technology, Innovation and the Arts, Queensland

James Guy, Department of Environment, Water and Natural Resources South Australia

Yuan Li, Monash University

2:45pm

Lightning presentations

Improved predictions of severe weather

Dr Jeff Kepert, Bureau of Meteorology

Forecasting impact for severe weather

Dr Jane Sexton, Geoscience Australia

3:00pm

Afternoon tea

3:30pm

Influencing the policy and practice of disaster resilience

In response to a shifting risk profile, where more Australians are being exposed to risk, the emergency management sector is under pressure and a greater emphasis on enabling community resilience, the emergency management sector are making changes to ensure the approach to policy and legislation is current and in line with sector and community needs. But what does this look like? How can this truly work in practice? In this question

John Schauble, Emergency Management Victoria

Prof Stephen Dovers, Australian National University

Dr Jessica Weir, Western Sydney University





and answer session, you can listen to researchers discuss how policy can be more adaptable and flexible while still being based on science and evidence. There will also be a discussion on how the sector can start using the inquiries and royal commissions as a lessons learnt process, rehabilitating the sector to be prepared and ready for further disasters. A range of end users will also be there to talk about how they have used this research in practice and how you can too.

<p>4:00pm</p>	<p>Panel introduction</p> <p>Panel: A changing world - where to for Australian emergency management research? <i>The emergency management landscape is continually evolving. Looking five to ten years into the future, the focus of this session is to provide an organisational/sectoral view of the big questions facing the sector and the importance of research to support the operational and policy needs of sector stakeholders.</i></p>	<p>Dr Laurie Hammond – Chair, Bushfire and Natural Hazards CRC</p> <p>Malcolm Jackman, CEO, South Australia Fire and Emergency Services Commission</p> <p>Elizabeth Quinn, Assistant Secretary, Disaster Resilience Strategy Branch, Attorney-General’s Department</p> <p>Stephanie Rotarangi, Chief Fire Officer, Department of Environment, Land, Water and Planning Victoria</p> <p>Major General Richard Wilson, Chair, Queensland Reconstruction Authority</p> <p>Doug Smith, Deputy Commissioner and Chief Strategy Officer, Queensland Fire and Emergency Services</p>
<p>4:45pm – 5:00pm</p>	<p>Close day two</p>	<p>Dr Richard Thornton – Bushfire and Natural Hazards CRC</p>

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