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TOWARDS PROTECTIVE ACTION: EFFECTIVE RISK AND WARNING COMMUNICATION DURING NATURAL HAZARDS

Annual Project Report 2017-2018

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Queensland University of Technology & Bushfire and Natural Hazards CRC





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Cover: Flooded house Victoria. Photo: Victoria SES



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BACKGROUND AND STRATEGIC CONTEXT

This project plan draws on three years of interdisciplinary research and end-user engagement that derived evidence-based insights into risk and warning communication during the response and early recovery phases of natural hazards. The research (both completed and in-progress) examines existing and modified communication to community members and business owners that may be affected by natural hazards. Our research findings have been shared with end-users through AFAC Committees, invited presentations, private meetings, conferences, workshops and translated into practice via audits of agency messages.

The original BNHCRC project (2013-2017) focused on the pre-decisional processes of community members and business owners, particularly their exposure to, attention to, and comprehension of emergency warning messages in the response and early recovery phase of multiple hazards. This project (2017-2020) builds on that knowledge and focuses on how the inputs into the pre-decisional process—environmental cues, social cues, information sources, channel access and preference, warning messages and receiver characteristics—inform protective action during the response and early recovery phases of natural hazards.

PROJECT OUTLINE

Following end-user engagement, the project combines interdisciplinary expertise in communication, consumer psychology, marketing, and emergency management to take a multi-method, multi-hazard approach that addresses two core research aims:

1. To develop evidence based strategies that motivate appropriate protective action and support informed decision-making during the response and recovery phases across multiple natural hazards; and,
2. To work with end-users to share research findings and support integration into practice.

These aims will be achieved through three tailored research packages:

- Research Package 1: Encouraging Protective Action and Enhancing Trust with Multi-Agency Risk and Warning Communication Strategies (Associate Professor Amisha Mehta and Professor Lisa Bradley);
- Research Package 2: Overcoming Ambiguity: Conflict between Emergency Warning Messages and Socio-environmental Cues (Dr Paula Dootson); and,
- Research Package 3: Optimising Emergency Warning Messages to Encourage Readiness to Act (Associate Professor Dominique Greer).

New arrangements for formal end-user consultation and reporting were agreed with the CRC in October 2017. Going forward, the project will report through the Communications and Warnings group facilitated by AFAC. The team will provide a brief progress summary each quarter to this group in the form of the Quarterly Report to BNHCRC.

The Lead End-User will continue to be Mr Andrew Richards.

RESEARCH ACTIVITIES FOR JULY 2017-JUNE 2018

This section will review the primary project activities for the period from July 2017 to June 2018.

RESEARCH PACKAGE 1: FOCUS GROUP REPORT

Encouraging Protective Action and Enhancing Trust with Multi-Agency Risk and Warning Communication Strategies is now completed.

Following pilot research in Perth, Western Australia in 2017, focus groups were conducted in Caloundra, Queensland and Wangaratta, Victoria in February 2018 to examine trust, information processing, and multi-agency and –media messaging. The team acknowledges the great support from the BoM, DFES, QFES and VICSES input provision of videos and associated messages for testing. The data and analysis from the report supports RP1.1: Prove – Describe how communities evaluate messages, trust agencies, and take protective action in response to risk and warning communication from multiple agencies. It also informs ongoing research activity for this project.

To complement the technical report the team has submitted a poster to the 2018 BNHCRC AFAC conference showcasing the important research findings obtained that can inform the broader research base, practice and policy, and end-user comments compiled in relation to the research findings and implications for practice.

RESEARCH PACKAGE 2: SURVEY

Phase 1 *Overcoming Ambiguity: Conflict between Emergency Warning Messages and Socio-environmental Cues*, has been completed and is in the final stages of report preparation.

Encouraging people to take protective action during a natural disaster is an ongoing challenge for emergency management agencies due to the uncertainty that tends to surround these events. There is always some degree of uncertainty around the probability of the disaster happening, and it unfolding and having the impact predicted. Uncertainty creates challenges for agencies, as they have to make significant decisions for how the community needs to respond. Uncertainty also creates challenges for people interpreting the information they receive from emergency agencies, because they also tend to get information from observational cues (e.g., looking outside the window), secondary sources (e.g., news, social media), or other informal sources (e.g., peers, neighbours). When there are conflicting socio-environmental cues about the natural disaster, or about what action to take, it creates uncertainty, which can paralyse individuals in seeking protective action.

In this research package (RP2), we aimed to measure the extent to which conflict is perceived to exist in the community. Evidence of conflict, and how it might vary across observational cues (e.g., looking outside the window), secondary sources (e.g., news, social media), or other informal sources (e.g., peers, neighbours) was the deliverable for the June 2018 period.

Should a conflict exist, follow up work in this research package will explore ways to resolve this conflict, resulting in evidence-based emergency warning messages that overcome ambiguity caused by conflict between emergency warning messages and socio-environmental cues (e.g., blue sky flooding). This second Phase of the package is due June 2019. The potential outcomes of RP2 may include:

1. Visual and text-based inputs into risk and warning communication that enhance the effectiveness of the message and encourage protective behaviours by the community;
2. Enhanced skill sets of end-users in developing messages, supported by project deliverables;
3. Evidence-based message templates (triggering readiness to act, overcoming ambiguity); and,
4. Utilisation engagement that translates academic findings into practical solutions to meet end-users' needs.

RESEARCH ADVISORY FORUM (RAF)

12-13 April 2018, Sydney Australia. The research findings of RP1 were showcased at the 2018 Research Advisory Forum (RAF). A 20-minute presentation was designed and delivered by both QUT researchers, Professor Vivienne Tippett, Associate Professor Amisha Mehta and Sophie Miller, and end-user partners, Dr. Linda Anderson-Berry from the Bureau of Meteorology (BoM) and Tamsin Achilles from Victoria State Emergency Service (VICSES). The presentation overviewed the phase two of the BNHCRC 2.0 research program; outlined the RP1's aims, design, method and key findings; end-users then communicated how these research outcomes were being applied to and informed the enhancement of their warning communication operations and services being offered to the community.

A/Prof Amisha and the Project Manager/Research Fellow, Sophie Miller, designed and developed the 45-minute workshop that aimed to engage end-users in the next phase of the RP1 design. Amisha facilitated directed the end-users' discussions regarding the direction of the program.

ADDITIONAL IMPLEMENTATION ACTIVITY

All members of the project team have been heavily engaged in additional implementation work over this reporting period.

AFAC/AIDR HANDBOOK

30 May 2018, Brisbane, Australia. Associate Professor Dominique Greer and Dr Paula Dootson completed their contracted research contribution to Australian Disaster Resilience Public Information and Warnings Handbook (ADR Handbook 16) and the revision of companion document *Emergency warnings - choosing your words*. Their contributions have been provided to AIDR as per their required delivery dates and reviewed by their standard process.

Both Dominique and Paula attended all contracted meetings and provided research support directly to Deb Martindale, who was the author of AIDR Handbook 16. In addition, Dominique and Paula held several teleconferences with the client to ensure their needs were met. Dominique and Paula received positive verbal feedback on their contributions.

QFES WORK

Queensland Fire and Emergency Services are currently engaged in development of their 2030 Strategy. BNHCRC researchers are assisting with several aspects of the evidentiary basis for future priority setting. Professor Vivienne Tippett has completed 8 community consultations across the State to explore community expectations of the Service and facilitate community input into the Strategy. Consultations were completed on the 31st May and transcripts are currently being analysed. A final report is due In June 2018.

END-USER ENGAGEMENT FOR THE PERIOD

The QUT team has been involved in a number of utilisation and engagement activities. End-users were provided opportunities to comment on research findings and implications for practice.

DECEMBER 2017

The research conducted at QUT has supported initiatives in emergency communication and warnings at individual, community and national levels. The article 'Better Warnings to Ensure Action' published on the BNHCRC website showcases end-user comments from **Anthony Clark** (Director Corporate Communications at the New South Wales Rural Fire Service), **Fiona Dunstan** (Manager Information Operations, South Australia, Country Fire Service) and **Andrew Richards** (NSW State Emergency Service Manager Community Engagement). The article further outlined the collaborative engagements between QUT and the emergency services sector, namely: **Inspector-General of Emergency Management Queensland, Queensland Fire and Emergency Services, Emergency Management Victoria, Victoria State Emergency Service, Country Fire Authority, the Department of Fire and Emergency Services Western Australia** and the **Bureau of Meteorology**. The article also outlined how **SEQwater** and **ABC local radio in Wide Bay Queensland** has also benefited from the QUT research. Direct end-user quotes from the article are provided below.

Link: <https://www.bnhcrc.com.au/warnings>

"This research is a really important piece of the puzzle. It is a game-changer for us as we had been sending out information and warnings in a format that met the needs of the emergency services. This research tips the process on its head and puts the community first and foremost. Emergency services are forming warning messages with the community in mind, so we can get the best possible response from the community in a time of disaster," said **Anthony**.

In South Australia, the Country Fire Service has used the findings to change its warning messages, ensuring they are simpler and easier to understand, explains **Fiona Dunstan**. *"We've looked at our warnings and restructured and reprioritised the content to make sure the critical information was upfront. This ensures timely, targeted and meaningful information is provided to the community,"* Fiona says. Country Fire Service warnings are now much shorter – previously they were three pages long. Now the vital information is on one page.

"We have seen some great outputs in the warnings space from this research. This will help us deliver our message to affected communities



better so we can illicit the desired response during a disaster,” said **Andrew**.

“The study has seen close collaboration between the research team and the emergency services sector, with other organisations to have their warning information reviewed include the **Inspector-General of Emergency Management Queensland, Queensland Fire and Emergency Services, Emergency Management Victoria, Victoria State Emergency Service, Country Fire Authority, the Department of Fire and Emergency Services Western Australia** and the **Bureau of Meteorology**.”

“**SEQwater** has also benefited from the science, and has sought input from the team on how to improve its messaging about releasing water from dams during a flood. Community surveys show that these revised messages are more trustworthy, and achieve more proactive action.”

“**ABC local radio in Wide Bay, Queensland**, is also engaged with the research team, looking at ways it can improve its emergency broadcasting.”

JANUARY TO MARCH 2018

All end-users engaged throughout this period were involved in face-to-face stakeholder negotiation meetings, email correspondence and a teleconference to review research findings. End-user quotes are provided below to highlight the collaborative relationships fostered with QUT and usefulness of the research-practice informed process.

Hayley Gillespie (Executive Manager, Media), **Mark Halverson** (Manager, Compliance and Prosecution Unit) and **Shannon Sagaidak** (Senior Media Officer), Queensland Fire and Emergency Services (QFES)

On review of the focus group report, the following comments have been compiled in relation to the research findings herein and implications for practice:

- “The research suggests consideration be given to increasing alignment to intentions by reducing conflict within messages. The bushfire message was perceived to start strong with a focus on leaving but, for some, that effect was diluted by information about what to do if people do not leave. QFES will review options for rephrasing the ‘If you are not leaving’ section in its warnings to ensure the focus on leaving remains strong throughout the message.”
- “The research supports QFES’ approach to only feature uniformed personnel when delivering important safety messages via video to reinforce authority and assist in gaining trust as well as attention. Further, the research suggests consideration be given to adding features to existing videos to support communities. Specifically, videos could be

strengthened with visual cues, such as maps in the background to locate the event. QFES will explore opportunities for presenting information via maps during videos.”

- “The research also supported QFES’ approach to personalising its messages to the community, particularly through emphasis on words in the message such as ‘you’ and ‘your’ and including statements about wanting ‘you and your family to be safe’.”
- “The research suggests consideration be given to creating videos for multiple time points during response. One suggestion is to involve the use of videos that demonstrate how to undertake protective actions. QFES will consider options for filming these videos pre-season and will evaluate their use, if used during an incident.”
- “The research suggests that Emergency Alert content be revised and structured so that they can reasonably stand alone. QFES will provide this information, particularly the value of including a call-to-action and clarity of time frame, as part of the overall review of Emergency Alert, which is currently underway.”
- “The research also supported QFES’ current approach to working with the media during response to support community verification processes. QFES ensures the media is provided accurate and up-to-date information throughout incidents, and will continue this approach.”

“The report is detailed and professional and hopefully contributes to the ongoing development in respect of all public warnings.”

Tamsin Achilles (Senior Advisor, Readiness & Intelligence), **Jacob Riley** (Public Information and Warnings Advisor) and **Peter Wall** (Public Information and Warnings Advisor), Victoria State Emergency Service (VICSES)

“The QUT research provided VICSES important and useful research findings that will be used to support and improve delivery of public information and warnings during emergencies. Specifically, based on the research, VICSES plans to review and refine warning products to ensure nomenclature within the content of warnings is consistent, and by exploring options to improve targeting of warning products. Second, VICSES intends to explore new resources to aid comprehension and verification of warnings through the development of pre-prepared videos, as well as guidance notes, training and resources for personnel. Third, VICSES will review intuitiveness of Emergency Alert messages and supporting templates. This work will be supported by the research findings and is designed to enhance the likelihood of protective actions being undertaken by the community and achieve the VICSES vision of ‘building safer communities – together’.”



Dr. Linda Anderson-Berry (Hazards Risk and Resilience), **Hilary Buxton;** (Community Outreach) **Melody Horrill** (atg State Manager – Victoria) and **Sally Lowenstein** (Public Affairs), Bureau of Meteorology (BoM)

“The focus group report produced by Assoc. Prof. Amisha Mehta, Prof. Lisa Bradley and Ms. Sophie Miller from QUT provided noteworthy research reflections, findings and future application for the Bureau of Meteorology. The research confirmed community trust in the Bureau and its challenge and ability to communicate risk and uncertainty and showed how videos enhanced community knowledge (e.g. in areas like fire danger ratings and reliable information sources). The research reinforced the need for localised information on maps and supported our thinking around the role of visual cues (e.g. images, graphics, and text style) in gaining attention and supporting action.

Based on the research conducted, the Bureau will likely explore greater flexibility in communication style, options for working with media and other agencies to incorporate visual footage (particularly television), and the possibility of interactions between multi-agency and media messages.

The Bureau is appreciative of the opportunity to work closely with QUT researchers in better understanding community responsiveness to our warnings communications and to provide guidance for enhancing our services to the community.”



CONFERENCES AND FORUMS

The team have disseminated BNHCRC research package findings at numerous national and international conferences. In addition, the team have also been invited to facilitate panel discussions. The following section outlines these conferences, forums and panels.

2017 AFAC CONFERENCE

4-7 September 2017, Sydney Australia. Associate Professor Amisha Mehta delivered her presentation 'Evidence-based risk communication: An industry-academy research collaboration that enhanced dam messages' at the 2017 AFAC conference.

BUREAU OF METEOROLOGY (BoM) CONFERENCE

29 November 2017, Australia. Associate Professor Amisha Mehta presented at the BoM conference.

PANEL MEMBER

7 August 2017. Associate Professor Amisha Mehta was a member of the AIDR panel alongside Craig Fugate (pro bono work).

1-3 May 2018, Sydney, Australia. Associate Professor Amisha Mehta was invited to moderate the panel discussion on '*Best practices in crises communications in the connected world*' (i.e., the Crisis Communication and Planning panel) at the Emergency Management Leaders Forum.

QUEENSLAND FIRE AND EMERGENCY SERVICES (QFES) STRATEGIC FORUM 2030

13th March 2018, Australia. Professor Vivienne Tippett attended the QFES Strategic Forum 2030.

INTERNATIONAL CRISIS AND RISK COMMUNICATION CONFERENCE

13th March 2018, Orlando, Florida USA. Associate Professor Amisha Mehta was accepted to present at the conference.

AUSTRALIAN AND NEW ZEALAND DISASTER AND EMERGENCY MANAGEMENT CONFERENCE 2018

21-22nd May Gold Coast, Australia. An abstract submitted by Associate Professor Amisha was selected for a 30 minute Oral Presentation at the Australian and New Zealand Disaster and Emergency Management Conference (ANZDMC).



Link:

<https://astmanagement.eventsair.com/QuickEventWebsitePortal/2018dmc/anzdmc-program/Agenda/AgendaItemDetail?id=5e049a40-8f5c-4c3b-9823-51b37615ff52>

PARLIAMENTARY FRIENDS OF SCIENCE FORUM 2018

22nd May 2018, Canberra, Australia. Professor Vivienne Tippett was invited to contribute to a panel session hosted by the Parliamentary Friends of Science.

SHINE DOME 2018

22-23rd May 2018, Canberra, Australia. Professor Vivienne Tippett was selected to present a 25 minute Oral Presentation at the Australian Academy of Science's Science at the Shine Dome 2018 one-day event. The event showcased the latest scientific research in the area of natural hazards and extreme weather events.

Link: <https://aas.eventsair.com/QuickEventWebsitePortal/science-at-the-shine-dome-2018/science-at-the-shine-dome-2018/Agenda/AgendaItemDetail?id=9019f9a6-27e3-40ef-97b6-cb03b68d3852>

AUSTRALASIAN NATIONAL HAZARDS MANAGEMENT CONFERENCE 2018

28-21 May 2018, Wellington, New Zealand. Associate Professor Dominique Greer was invited as a distinguished speaker at the workshop 'Unpacking Complexity: The Social Science of Emergencies, Disasters and Resilience' jointly organised by QuakeCORE, the BNHCRC, and Fire and Emergency New Zealand as part of the Australasian Natural Hazards Management Conference. The objectives of the workshop were to explore the wide array of research undertaken within this topic area, and the potential opportunities for further bilateral collaboration. From a national point of view, the jointly led event also aimed to build platforms and linkages across two nations (i.e., Australia and New Zealand), leading to a wider discussion around where the future of this space lies. Additionally, the workshop examined the role of evidence informed practice, and vice versa, the role of practice in informing evidence. The latter of which sees co-collaboration embraced to develop work streams, in conjunction with relevant end-users such as agencies and stakeholders.



UTILISATION

Through discussions with end-users, various opportunities were pursued for utilisation using the research conducted on this project. Provided herein is a summary of the utilisation activities completed during this annual reporting period.

CRC SHOWCASE

4-5 July 2017, Australia. Professor Vivienne Tippett, Dr Paula Dootson, Associate Professor Dominique Greer and Associate Professor Amisha Mehta all contributed to the CRC Showcase.

17 October 2017, Northern Territory, Australia. Professor Vivienne Tippett participated in the CRC showcase.

28-21 May 2018 Auckland NZ. Associate Professor Dominique Greer presented at the NZ CRC showcase.

DISASTER MANAGEMENT ENGAGEMENT GROUP

27 July 2017, Queensland Australia. Associate Professor Amisha Mehta presented CRC 1.0 findings to Disaster Management Engagement Group, Queensland (pro bono work).

WORKSHOPS

8-9 August 2017, Australia. Professor Vivienne Tippett and Associate Professor Amisha Mehta designed, developed and facilitated the AFAC National Flood Warnings Workshop.

18, 20 and 21 August 2017, Brisbane, Sydney and Melbourne, Australia. Associate Professor Amisha Mehta collaborated with Associate Professor Brooke Liu to design, develop and facilitate a national risk and warning communication AIDR workshop to emergency management professionals (pro bono work). Associate Professor Brooke Liu is from the University of Maryland, USA. The workshops were delivered to 160 participants across three Australian cities. Of the participants, 54% strongly agreed and 36% agreed the workshop was useful to their professional role; and, 40% strongly agreed and 40% agreed that it improved knowledge and skills in designing effective risk and warning communication. One participant commented: "I thoroughly enjoyed the seminar and thought the process between the two presenters worked well. Topics were different to fire with Tornado and Terrorism examples discussed and it challenged us to think away from our core business. I really enjoyed that, and discussions with multi-agencies for different real life experiences."



PRESENTATIONS

8 September 2017, Western Australia. Associate Professor Amisha Mehta and Professor Lisa Bradley presented to the Department of Fire and Emergency Services (DFES) in Western Australia (pro bono work).

AFAC NATIONAL WARNINGS GROUP

16 November 2017, Australia. Professor Vivienne Tippett reported to the AFAC National Warnings Group.

LOCAL GOVERNMENT ENGAGEMENT

3rd May 2018, Lockyer Valley Regional Council, Australia. Associate Professor Amisha Mehta conducted a 30 minute Oral Presentation at the Local Disaster Management Group covering current research on:

1. How communities use and share information;
2. How to build and measure trust; and,
3. How to develop and adapt messages.

Amisha Mehta was assisted by Sophie Miller who briefly spoke about the Research Package 2 when comments/questions were raised regarding conflicting cues.

MEDIA ENGAGEMENT

4 September 2017. Associate Professor Amisha Mehta was interviewed on live ABC Perth radio.

4 December 2018. Professor Vivienne Tippett discussed emergency messaging in the face of predicted extreme weather events that don't eventuate with Ben Deacon from the ABC Emergency channel.

6 January 2018. Professor Vivienne Tippett provided expert commentary on the Australian Broadcasting Corporation (ABC) News article titled 'Emergency announcements alone during disasters not reliable in saving lives'. The link to the new article is located at: <http://www.abc.net.au/news/2018-01-06/emergency-announcements-alone-during-disasters-not-reliable/9304666?pfmredir=sm>

9 January 2018. Associate Professor Amisha Mehta conducted a live interview following Alert SA app failure on ABC Radio Perth. She spoke about how research can help improve emergency communications. While the podcast is no longer

available online, the program link is:
<http://www.abc.net.au/radio/perth/programs/breakfast/breakfast/9299986>

14 March 2018. Professor Lisa Bradley was interviewed by Andy Toulson as an expert on ABC North Queensland radio following the blog '*Risk and Warning Communication that Supports Women during Disasters*' that was published on QUT Business School's online newsletter and reposted on BNHCRC's website/social blog. This blog was published to coincide with the UN's International Women's Day and aligned with the Australian Committee's theme of *Leave No Woman Behind* (<https://unwomen.org.au/campaign/international-womens-day-2018/>). She shared findings that can encourage women to be better prepared for and evacuate safely in response to natural hazards. The program podcast link is not available as the interview was not recorded by the ABC.

2 April 2018. Associate Professor Amisha Mehta, Professor Lisa Bradley and Sophie Miller conducted research that informed the '*Natural disasters expose women's emergency preparedness gap*' Op Ed piece that was published by the ABC News. Link: http://www.abc.net.au/news/2018-04-02/helping-women-overcome-disaster-preparedness-gaps/9549862?pfmredir=sm&user_id=d679219a086daf5a14c07ee9f75ee0e0caf4b4fa3c4189cc43e540618071ddd4

REACH

5 April 2018. Research conducted by Associate Professor Amisha Mehta, Professor Lisa Bradley and Sophie Miller was featured on the United Nation's (UN) Prevention Web. The Prevention Web is the global knowledge sharing platform on disaster risk reduction, managed by the UN Office for Disaster Risk Reduction (UNISDR). Their knowledge base is updated daily and features over 45,000 entries, including news, publications, events, training and job vacancies. The UN's Prevention Web audience includes specialists working at local, country and regional levels, as well as non-specialists – teachers and students, citizens and journalists. The site receives an average of 100,000 visits per month. Link: <https://www.preventionweb.net/news/view/57732>

9 to 11 May 2018. Mr Peter Hillcoat from the Lockyer Valley Local Disaster Management Group sought approval to use Associate Professor Amisha Mehta's research slide at the IGEM forum in Townsville. Mr. Hillcoat's presentation will overview their whole-of-council community engagement and how they communicate with them during disaster events. Almost 70 local and State disaster management practitioners will converge on Townsville for the third annual Disaster Management Officers' Network Forum. Link: <http://statements.qld.gov.au/Statement/2018/5/3/townsville-to-host-key-disaster-management-forum-next-week>



AWARD RECOGNITION AND ACHIEVEMENT

Outstanding achievements have been recognised through receiving awards and recognition. A summary of these achievements during this annual reporting period are outlined next.

SUSTAINED PERFORMANCE AND OUTSTANDING ACHIEVEMENT ENGAGEMENT LEADERSHIP

2 February 2018, Brisbane, Australia. Associate Professor Amisha Mehta was recognised by QUT for consistently engaging with industry and for engagement with BNHCRC that received extensive coverage in 2017. As a result, Amisha was awarded for 'Sustained Performance and Outstanding Achievement Engagement Leadership' by the School of Advertising, Marketing and Public Relations.

2018 EMERGENCY MEDIA AND PUBLIC AFFAIRS (EMPA) AUSTRALIAN AWARDS

5 June 2018, Australia. The inaugural EMPA Emergency Communication Awards recognised QUT for their leading emergency research on communication and warnings of natural hazards.

BNHCRC Link: <https://www.bnhcrc.com.au/news/2018/animal-research-awarded>

AFAC Link:
<https://www.afac.com.au/auxiliary/publications/newsletter/article/updates-from-the-bushfire-and-natural-hazards-crc-june-2018>

ORDER OF AUSTRALIAN MEDAL

11 June 2018, Australia. The outstanding efforts of Professor Vivienne Tippett were recognised through receiving the Order of Australian Medal for efforts relating to medical education and the BNHCRC. The Order of Australia is the principal and most prestigious means of recognising outstanding members of the Australian community at a national level for achievement or meritorious service.



PUBLICATIONS LIST

CONFERENCE ABSTRACT – PEER REVIEWED

Mehta, A., Tippett, V., Greer, D., & McAndrew, R. (submitted 2017, June). Evidence-based risk communication: An industry-academy research collaboration that enhanced dam messages. 4-7 September 2017 AFAC conference, Sydney, Australia.

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PROJECT STATUS AND EMERGING RISKS AND OPPORTUNITIES (PROJECT LEADER TO COMPLETE)

The research program for CRC 1.0 is now complete. Results are being prepared for submission to high quality, peer-reviewed academic journals. Over the next couple of months the team will also summarise the results of CRC1.0 into a series of short format reports [Hazard Notes or similar] for distribution to end-users.

In relation to CRC 2.0, significant delays are being experienced in the contracting process for extension work. This delay places the researchers in a difficult position and threatens the ability of the CRC to be seen to deliver timely responses for end-users.