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POLICIES, INSTITUTIONS AND GOVERNANCE OF NATURAL HAZARDS

Annual project report 2015-2016

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Bushfire and Natural Hazards CRC



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Cover: Researchers assessing damage to a house after Black Saturday. Research like this can lead to changes in policy.

Photo: Bushfire and Natural Hazards CRC

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EXECUTIVE SUMMARY

The resilience of a community is dependent on more than just engineering and preparation. Government policies, institutions and governance arrangements fundamentally affect how individuals and communities prepare for, respond to and recover from natural hazard events. Understanding relevant institutions and how they influence disaster management is essential to develop whole of government and whole of community understanding of risks and how to manage them.

This research project will shed invaluable light on current policy, institutional and governance arrangements with a view to developing new approaches to shared responsibility (COAG 2011) to increase community resilience to all natural hazards. This project will deliver:

- Evidenced based suggestions for policy, institutional and governance reforms to improve the ability of communities to actively participate in emergency risk management (Theme 1);
- Information for communities, agencies and government on the perverse incentives and hidden barriers to shared responsibility for emergency management (Theme 2); and
- Recommendations for a revised post event inquiry process to better identify lessons from past events (Theme 3).



END USER STATEMENT

John Schauble, Emergency Management Victoria, VIC

Testing long-held approaches to public policy is never easy, but it is much easier to achieve outcomes that are both considered and capable of implementation in the calm before the storm rather than the hue and cry of its aftermath.

The concept of community in the context of emergency management is slowly shifting from being a largely geographical construct to something that embraces a much broader set of determinants. This arguably makes the task of matching notions of shared responsibility more difficult; it is at least more complex. Bringing some clarity to this dimension will be an important output of this research in the question of building both acceptance of risk and community resilience.

Theme 2 of this project looks at the ways in which different approaches to insurance and urban planning could be used to influence disaster mitigation and offset risk from major emergencies.

The quest for a better way to understand and learn from emergencies and disasters has led the project to examine adapting innovative theories of jurisprudence such as restorative justice.

This research continues to promote some bold and challenging thinking.



INTRODUCTION

The resilience of a community is dependent on more than just engineering and preparation. Government policies, institutions and governance arrangements fundamentally affect how individuals and communities prepare for, respond to and recover from natural hazard events. Understanding relevant institutions and how they influence disaster management is essential to develop whole of government and whole of community understanding of risks and how to manage them.

This project builds on work done by the Australian National University and the Bushfire CRC. Whilst there are many policies and institutions that contribute to and influence hazard management, this project is looking at:

- What is 'community' and how can governments share responsibility with communities as well as individuals?
- How can insurers play a more active role in communicating risk and encouraging hazard mitigation? and
- Is there a better process or institution for effective lesson sharing after natural hazard events?

This research project is aiming to shed light on current policy, institutional and governance arrangements with a view to developing new approaches to shared responsibility (COAG 2011) to increase community resilience to all natural hazards. This project will deliver:

- Evidence based suggestions for policy, institutional and governance reforms to improve the ability of communities to actively participate in emergency risk management (Theme 1);
- Information for communities, agencies and government on the perverse incentives and hidden barriers to shared responsibility for emergency management (Theme 2); and
- Recommendations for a revised post event inquiry process to better identify lessons from past events (Theme 3).



PROJECT BACKGROUND

This project is a multi-disciplinary project involving academics and students from both the ANU College of Law and the Fenner School of Environment and Society. The project, along with our colleagues from the University of Western Sydney and their project on 'Scientific diversity, scientific uncertainty and risk mitigation policy and planning' forms part of the **Governance and Institutional Knowledge** cluster.

The project is working on three themes:

1. Sharing responsibility with community;
2. Perverse incentives in disaster insurance; and
3. Improved institutions for lesson learning.

WHAT THE PROJECT HAS BEEN UP TO

THEME 1: SHARING RESPONSIBILITY WITH COMMUNITY

A lot of work has been done recently on sharing responsibility, especially by Blyth McLennan and John Handmer. However, in this theme we have focused on what the National Strategy for Disaster Resilience says about community responsibility. Anna Lukasiewicz (along with Steve Dovers and Michael Eburn) has delved into what constitutes a community from a disaster management perspective (outlining different community entities, such as businesses, community organisations, government bodies and households); what specific and implied responsibilities and obligations are placed upon these different community entities; and matching these to available policy instruments. This new direction complements existing knowledge on sharing responsibility and provides clarity when discussing what disaster management expects of community and vice versa. It has been submitted to the journal of Environmental Hazards, and will be presented at a national and international conference (AFAC 2016 and the 6th International Conference on Building Resilience in New Zealand).

Other contributions to this theme include PhD students Susan Hunt and Caroline Wenger. Susan Hunt, a BNHCRC scholarship holder is continuing work on her thesis "Implementing policy for enabling adaptive capacities for disaster resilience in the Australian federation." Susan is working with groups across different levels of government, business and the not-for-profit sector that demonstrate 'good practice' in terms of successful disaster resilience policy to explore what effective implementation of disaster policies looks like in practice. Her thesis is expected to be submitted in early to mid-2017.

Caroline Wenger is associated with the project through her PhD thesis on "Flood management in a changing climate: integrating effective approaches," which among other things includes researching resilience theory and developing a methodology for analysing resilience interpretations to floodplain management. Caroline is in the final phase of her PhD candidature and is currently preparing to submit her thesis.

THEME 2: PERVERSE INCENTIVES IN DISASTER INSURANCE

Work has steadily progressed on the 'Perverse Incentives in Disaster Insurance Policy: Propagating Mitigation' paper and it is currently in the final stages of editing before being submitted to the International Journal of Wildland Fire and is being prepared by Professor Karen Hussey. The paper reviews the arguments in favour of using insurance as a tool to encourage mitigation and identifies some reasons why this is not an attractive option for the insurance industry, even though it is the insurers that are exposed to risk of financial loss for homes damaged or destroyed by fire. Given that insurers will not, or cannot, offer individual risk based premiums, some alternative tools that could be incorporated into insurance to encourage mitigation are suggested, including the concept of a no claim bonus (as widely practiced in motor insurance), rebates for the insured (such as those used in health insurance), asking relevant questions, and using external certification for assessing properties.

Further work related to Theme 2 is being undertaken by Stephen Dovers in the area of urban planning. Key to the governance of disasters are our systems of urban and regional planning. Although this is subsidiary to the main themes of our project and the research cluster, there has been ongoing activity seeking to bring emergency management and the profession of planning closer together. To this end, Steve Dovers with University of Melbourne colleague Alan March have published a conference paper on urban planning and emergencies entitled "Disaster Risk Reduction and Urban Planning: A Case of Uneven Mainstreaming?" in the 2015 State of Australian Cities Conference Proceedings and have a forthcoming book chapter on the same topic.

THEME 3: IMPROVED INSTITUTIONS FOR LESSON LEARNING

Work on this theme is progressing on multiple fronts. Past publications by Michael Eburn and Steve Dovers (Eburn & Dovers 2015) have established the shortcomings of existing methods of post-event inquiries into disasters (i.e. Royal Commissions and Parliamentary Inquiries). Building on from this is the consideration of alternatives to the current ways of doing things. Formulating an alternative type of response to disasters has taken Michael Eburn into the field of justice research where he is investigating adapting aspects of restorative justice (McCold, 2000) to disaster management. This is a novel and very under-researched application of a justice concept (Cooper, 2008) that could prove very useful in improving the process of learning from disasters.

Michael Eburn is also making arrangements with the Australian Institute for Disaster Resilience to present his research findings and proposals to end users in Brisbane and Melbourne.

OTHER ACTIVITIES

Apart from meeting our agreed milestones, members of the project team have made the following contributions to the sector and our understanding of policies, institutions and governance in emergency management.

- Michael Eburn participated as a mentor in the "Issues in Disaster Management" workshop for ANU students on the 16th of March. This interactive event was facilitated by Thinkspace Emergency Management and included a disaster simulation scenario that students had to manage. Events like this expose students (as members of the public) to the intricacies of disaster management
- Michael Eburn, Anna Lukasiewicz, Susan Hunt and Caroline Wenger attended the May Research Advisory Forum in Hobart on the 11-12 May. Michael and Anna presented their research during the formal presentation sessions while both Susan and Caroline exhibited their posters. The whole team then met with end user representatives during the breakout sessions.
- The ANU College of Law held an intensive course on Australian Disaster Law. This course is offered as part of various Masters Degrees and included current legal practitioners from various state and federal departments responsible for disaster management. The course was convened by



Michael Eburn and included presentations from Steve Dovers, Anna Lukasiewicz and Susan Hunt.

- Caroline Wenger took part in the annual 3 Minute Thesis competition in 2015, where PhD candidates have literally three minutes to explain the entirety of their research project. Caroline won the peoples' choice award and was the runner-up in the ANU College Heats and progressed to the ANU Finals and also gave her presentation the 2015 AFAC Annual Conference. Footage of her presentation is available on the BNHCRC website.



PUBLICATIONS LIST

Our publication list includes articles and papers that have been submitted, which reflects the quite significant amount of work that has been done in the last few months.

BOOKS AND BOOK CHAPTERS

- March, A. & Dovers, S. (forthcoming) Mainstreaming Urban Planning for Disaster Risk Reduction. In: Vella, K. and Sipe, N. (eds). *Australian Handbook of Urban and Regional Planning*. Taylor & Francis.

JOURNAL ARTICLES

- Lukasiewicz, A., Dovers, S. & Eburn, M. (under review) Community, Shared Responsibility and Policy Instrument Choice for Disaster Resilience. Submitted to *Environmental Hazards*.
- Wenger, C. The Oak Or The Reed: How Resilience Theory Is Translated Into Policy. (under review) Submitted to *Ecology & Society*.
- Neale, T., Weir, J.K. & Dovers, S. (2016) Science in motion: integrating scientific knowledge into bushfire risk mitigation in southwest Victoria. *Australian Journal of Emergency Management* 31 (2), 13-17.
- Hunt, S. (2015) Building Adaptive Capacities For Disaster Resilience: What Role For Government? *Australian Journal of Emergency Management* 31 (1), 31-36.

CONFERENCE PAPERS

- March, A. & Dovers, S. Disaster Risk Reduction and Urban Planning: A Case of Uneven Mainstreaming? In S.: Burton, P. & Shearer, H. (eds). *State of Australian Cities Conference 2015: Refereed Proceedings, Gold Coast: Urban Research Program at Griffith University on behalf of the Australian Cities Research Network*, ISBN: 978-1-925455-03-8.

POSTERS

- Wenger, C. (2016) Policy Transfer: Between Countries, Between Disciplines. Presented at BNHCRC Research Advisory Forum, Hobart, 11-12 May.
- Hunt, S. (2016) Implementing Policy To Enable Disaster Resilience: Making It Happen In A Federal System, Hobart, 11-12 May.
- Wenger, C. (2015) Is 'Resilience' the Same as 'Adaptation'? Presented at AFAC Annual Conference, Adelaide, 1-3 September.

CURRENT TEAM MEMBERS

CLUSTER LEADERS

Cluster research leader, Professor **Stephen Dovers**, Fenner School of Environment and Society, Australian National University.



Cluster lead end user, **John Schauble**, Emergency Management Victoria.



CHIEF INVESTIGATOR

Associate Professor **Michael Eburn**, ANU College of Law, Australian National University.



RESEARCHERS

Dr **Anna Lukasiewicz**, ANU College of Law, Australian National University.



Associate Professor **Karen Hussey**, Global Change Institute, University of Queensland and Fenner School of Environment and Society, Australian National University.



Associate Professor **Jamie Pittock**, Fenner School of Environment and Society, Australian National University.



PHD STUDENTS

Susan Hunt, *Growing community disaster resilience: are our arrangements for implementing the National Strategy for Disaster Resilience fit-for-purpose?*



Caroline Wenger, *Flood management in a changing climate: integrating effective approaches.*





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- 1 Cooper D. *Thinking about justice "outside of the box": Could restorative justice practices create justice for victims of international disasters?* New Eng. L. Rev. 2008; 42: 693-700.
- 2 Council of Australian Governments (COAG). *National Strategy for Disaster Resilience*. 2011: COAG, Canberra.
- 3 McCold P. *Towards a holistic vision of restorative juvenile justice: A response to the Maximalist model*. Contemporary Justice Review 2000; 3(4):357-414.