



## EMERGENCY MANAGEMENT NETWORK NEWSLETTER

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### KEY DATES

- June 21 - Call for Nominations IPCC Scenario Workshop
- June 28 - Climate Adapting to Extreme Heat Workshop

The Newsletter is seeking contributions and comments on any relevant topics, please send any material to Frank Yardley via [frank.yardley@rmit.edu.au](mailto:frank.yardley@rmit.edu.au) or John Handmer via [john.handmer@rmit.edu.au](mailto:john.handmer@rmit.edu.au)

## IPCC Workshop on Socio-economic Scenarios for Climate Change Impact and Response Assessment - call for expert nominations

The IPCC announced it will hold an IPCC Workshop on Socio-economic scenarios for Climate Change Impact and Response Assessment, and has invited the Department of Climate Change and Energy Efficiency (DCCEE) to nominate experts for consideration as participants in the Workshop.

The Department of Climate Change and Energy Efficiency (DCCEE) operates as the National Focal Point for IPCC activities and is inviting Australian experts to nominate as Workshop participants. The workshop has the following goals:

- Identify the key socio-economic factors affecting mitigation and adaptation on different spatial and temporal scales;
- Explore future projections for these factors and associated uncertainties;
- Identify a core set of socio-economic assumptions to be jointly used by Impacts, Adaptation and Vulnerabilities and Integrated Assessment Model communities;
- Identify a set of core policy assumptions and the 2nd best situations to be considered;
- Define (a process to arrive at) narratives using the above;
- Take into account requirements of short and long-term scenarios;
- Explore the coverage of the space of plausible scenarios.

Interested parties are requested to email [climatescience@climatechange.gov.au](mailto:climatescience@climatechange.gov.au) for an Australian Government nomination form. This form will require interested parties to detail their qualifications, areas of expertise, recent publications and contact information. The Australian Government will select nominees to put forward to the IPCC based on selection criteria that will be provided to interested parties. The IPCC Bureau will then select these positions.

The Workshop will be held between October-December 2010, however the venue and dates have yet to be finalised.

Subject to ministerial approval, successful nominees may be provided with grants to support travel and living expenses when attending IPCC meetings. Funding will not cover costs associated with nominees' regular professional engagements such as salaries.

Department of Climate Change and Energy Efficiency nominations close on 21 June 2010, to allow for IPCC nominations to be submitted by 2 July 2010.

Completed nomination forms and any requests for further information should be emailed to [climatescience@climatechange.gov.au](mailto:climatescience@climatechange.gov.au). The IPCC has indicated that late nominations will not be considered.



Image: Sascha Grant

## NCCARF International Adaptation Conference 2010

Climate Adaptation Futures – Preparing for the unavoidable impacts of Climate Change  
29 June – 1 July 2010, Gold Coast Convention Centre, Gold Coast, Queensland.

Full details of the Conference are available on the conference website: [www.nccarf.edu.au/conference2010](http://www.nccarf.edu.au/conference2010). Registrations can be made on-line at [www.nccarf.edu.au/conference2010](http://www.nccarf.edu.au/conference2010), participant numbers are limited and will be closed when the limit is reached. The Network is supporting conference attendance for six students and four

other participants. Some support for this conference is still available for students and early career researchers. Those interested in receiving support should email Frank Yardley via email [frank.yardley@rmit.edu.au](mailto:frank.yardley@rmit.edu.au) setting out a case for the support they need and why they need it.

Day 3 – Open sessions on disaster management  
*Adaptation at the Edge* Convened by Jean Pautikof (NCCARF), John Handmer, (RMIT) and Reid Basher (UN International Strategy for Disaster Reduction)



Image: Glenn Sykes

### Adapting to Extreme Heat

– to be held in conjunction with the NCCARF Conference

A workshop organized jointly by the Human Health and Emergency Management NCCARF Networks. Dr Liz Hanna and Professor John Handmer

Date: Monday 28 June 2010

Time: 13.30 to 17.00

Cost: Free event  
afternoon tea provided

Venue: Gold Coast Convention and Exhibition Centre

Session Chair:

Professor Tony McMichael (Australian National University)

Speakers:

Professor Kris Ebi (Stanford University), Professor John Handmer (RMIT), Dr Liz Hanna (Australian National University).

Others – to be confirmed

Impacts of average global temperature rise are already unfolding. Our starting assumption is that Climate Change will bring more extreme heat events and we must adapt to avoid loss of life, and system interruption. It is the increase in variability, such as extreme heat events superimposed on gradual global warming that is associated with disastrous effects. Humans have a relatively narrow thermal tolerance. Unprecedented heatwaves are taking

a toll on human life and are limiting our ability to work and function. Vulnerability to heat is locality specific, strongly influenced by the relative anomaly to local temperatures, and also by cultural factors, response capacity and infrastructure integrity. Extreme heat events have now overwhelmed urban infrastructure, and generated fire conditions of a previously unseen severity. Challenges facing emergency service response teams have also escalated.

The demand for adaptive responses to extreme heat events is emerging as a primary concern and crosses several sectors. To date, progress towards adaptation in each sector has been variable, and evolution is occurring in isolation from other sectors. This approach risks maladaptation or reliance on adaptation that fails when externalities are compromised due to extreme heat.

A side event is being held at the NCCARF Conference that will characterise the critical features of

extreme heatwaves, compare progress in developing and evaluating adaptive strategies, and explore ongoing challenges. The first part of the Workshop will involve presentations from experts in the field followed by panel discussion. In the second part of the Workshop all participants will be invited to share their ideas and experiences. The objective of the workshop is to generate some interdisciplinary systems thinking towards developing adaptive strategies.

This invitation is open to all those interested in how we can establish effective adaptation to protect human health and critical social and economic systems, by collaborating with emergency management and infrastructure design. Some lively discussions will be assured, and ought to set the ground for some collaborative thinking and planning.

Please register your interest by sending an email: [catherine.gross@anu.edu.au](mailto:catherine.gross@anu.edu.au)

## Disaster Resilience

Dr Joshua Whittaker, NCCARF Research Fellow (Emergency Management), RMIT University

Building the resilience of people and communities to disasters is fundamental to climate change adaptation. Resilience is now a well-established concept in emergency and disaster management. A great deal of research has examined the factors that make people and communities resilient to natural hazards and disasters (see Pelling 2003). Increasingly, disaster resilience is becoming a core goal of government and non-government policies at all scales. So what is resilience?

The concept of resilience originates in ecological science. It is defined as a measure of the speed at which a system returns to its original state after disturbance (Pimm 1984) or as a measure of the magnitude of disturbance that can be absorbed before a system changes its structure (Holling and Gunderson 2002). Ecological concepts of resilience

have certainly influenced thinking about disaster resilience. The latter is typically defined as the capacity of individuals, communities, societies or organisations (etc.) to absorb and recover from the impacts of hazards or disasters. Disaster resilience, however, extends the ecological concept by incorporating human capacities for learning and adapting to new circumstances, such as those predicted with climate change. The Intergovernmental Panel on Climate Change (IPCC), for example, defines resilience as:

‘The ability of a social or ecological system to absorb disturbances while retaining the same basic structure and ways of functioning, the capacity for self-organisation, and the capacity to adapt to stress and change’ (IPCC 2007, p.880).

Resilience provides a useful framework for the proactive management of emergencies and disasters. The

emphasis on capacities for learning and adaptation is particularly appropriate given considerable uncertainty about the impacts of climate change and the need for flexibility. The form resilience takes is context-specific and ultimately depends on the characteristics of the hazard and the capacities of the people or systems at risk. Nevertheless, research has shown that resilient systems have a high capacity for learning and adaptation and rely on a diverse range of resources that can be quickly mobilised to enable coping and adaptation. They are characterised by non-hierarchical modes of organisation and are therefore highly flexible and adaptive. Importantly, resilient systems have capacities that exceed needs at any given time, as well as a degree of overlapping function that enables the system to change without disruption to essential functions.

### References:

- Holling, C. S., and L. H. Gunderson. 2002. Resilience and adaptive cycles. In *Panarchy: understanding transformations in human and natural systems*, eds. L. H. Gunderson and C. S. Holling, 25-62. Washington: Island Press.
- Intergovernmental Panel on Climate Change. 2007. *Climate change 2007: impacts, adaptation and vulnerability*. Contribution of Working Group II to the Fourth Assessment Report of the IPCC. Cambridge: Cambridge University Press.
- Pimm, S. L. 1984. The complexity and stability of ecosystems. *Nature* 307: 321-26.
- Pelling, M. 2003. *The vulnerability of cities: natural disasters and social resilience*. London: Earthscan.



Image: Mark Forbes

## Resilience for recovery from climate extremes

Seminar/workshop at RMIT in Melbourne May 24

A group of about 40 researchers, agency personnel, practitioners attended a panel discussion and workshop on "Resilience for recovery from climate extremes."

The panel presented views and experiences from a range of perspectives drawing mainly on experiences last year's Victorian fires and their aftermath. The Panel included speakers from the Red Cross, the Office of the Emergency Services Commissioner, fire agencies, and researchers.

Panel speakers were asked to talk about their experiences and to identify what they see as key issues for research and policy. The aim was

to identify issues and interests for a larger workshop on the topic later this year/early next year. The speakers articulated a number of challenging perspectives on the topic which resulted in animated and engaged discussion and set the criteria and expectations for a stimulating future major workshop on this topic.

The meeting was organised by CRaCS (RMIT's Centre for Risk and Community Safety) on behalf of the NCCARF Network on Emergency Management and VCCCAR, (Victorian Climate Change Centre for Adaptation Research) mail to: [john.handmer@rmit.edu.au](mailto:john.handmer@rmit.edu.au)

## Climate Change Adaptation Research Grants Emergency Management - Update

As previously advised the National Climate Change Adaptation Research Plan (NARP) for Emergency Management, was accompanied by the launch of a research grants program to address the priorities identified by the Plan, with funds for the research available through the Department of Climate Change Adaptation Research Grants Program.

The first stage of the process was a call for Expressions of Interest (EOI) to be followed by an invitation for shortlisted applicants to prepare full proposals.

NCCARF received 103 EOIs and eleven EOIs were requested develop detailed proposals. We are advised those who have submitted successful proposals have been advised. The Emergency Management Network has had no involvement with the assessment process which is handled entirely by the Department of Climate Change and NCCARF. The successful applicants will soon be announced by the Minister.

Congratulations to those researchers who have been successful with their proposals.

## Emergency Network Member Survey

A key goal of the Emergency Management Network is to facilitate a coordinated research effort to address the information needs of decision makers with respect to climate change in the area of emergency management including the identification and sources of research funding and the communication of research outcomes to inform decision

making by government, agencies, industry and communities. With these goals in mind it has been decided to survey the Network members seeking feedback on expectations, information needs and desired outcomes from the Network. This survey will be developed and distributed over the next few months.

## Note Date Change

AFAC/CRC Climate Change Adaptation Workshop Darwin – Wednesday Sept 8, 10am - 4pm  
"Regional Implications of Climate Change for Emergency Management"

Conference early Bird registration closes: June 6th 2010  
<http://www.afac2010.org.au/>  
Please note that there is a \$130 charge by the Conference organisers for this meeting.

## Core Network Partners

- RMIT, Global Cities Institute, Centre for Risk and Community Safety, School of Mathematics and Geospatial Science.
- James Cook University, Centre for Disaster Studies and the Cyclone Testing Station.
- Macquarie University, Risk Frontiers.
- ANU, Fenner School for Environment and Society.
- Monash University, Climate Centre.
- University of Western Australia (UWA), School of Earth and Environment.
- AFAC (Australasian Fire and Emergency services Authorities Council).
- NSW State Emergency Service.
- (FESA) Fire and Emergency Services, Authority of WA.
- NSW Rural Fire Service.
- Planning Institute of Australia.

## General Membership

The Network is open to all interested. Please contact Frank Yardley (Network administrator), [frank.yardley@rmit.edu.au](mailto:frank.yardley@rmit.edu.au) or John Handmer (Network convenor) [john.handmer@rmit.edu.au](mailto:john.handmer@rmit.edu.au) with your details including your area of interest or expertise and we will add you to the database to be included in all notifications of Network opportunities and activities.

## Links, Comments and Contributions

The Network welcomes comments, links and contributions. If you wish to comment or contribute in any way please use the contact details listed above.