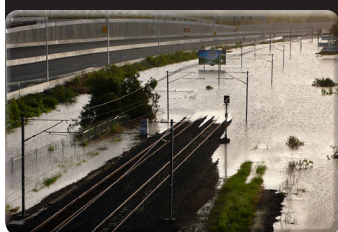**DISASTER RESILIENT AUSTRALIA**

NATIONAL STRATEGY FOR DISASTER RESILIENCE

Companion Booklet

DISASTER
RESILIENT
AUSTRALIA

NATIONAL STRATEGY FOR DISASTER RESILIENCE

Companion Booklet

FOREWORD

The Council of Australian Governments endorsed the National Strategy for Disaster Resilience (the Strategy) in February 2011. Since then, Australia has continued to experience significant natural disasters. In recent times we have seen communities hit by floods, bushfires and cyclones. The emotional, social and economic costs of such events to individuals and communities can never be fully calculated or reimbursed.

However, Australians are resilient and as we recover, all governments continue to support and enhance local capacity to withstand and bounce back from disasters.

This document reports on progress to date under the Strategy. This includes:

• completing disaster risk assessments of priority hazards by all jurisdictions, and the use of these assessments in informing key decisions and planning

• agreeing to key disaster resilience messages which are simple and action oriented to promote disaster resilience concepts and principles

• developing and publishing improved flood risk mapping and modelling data for community and business use

• developing a national approach to improving land use planning controls to manage key hazards in the built environment, and

• identifying and resolving systemic issues that hinder the attraction and retention of emergency volunteers, including certain requirements for accreditation and training.

As work on implementing the Strategy matures, the years ahead will provide new opportunities to strengthen the resilience of governments, business, communities and individuals. While governments will need to continue to provide leadership and support for a range of initiatives, communities and individuals will also need to take greater responsibility for their own disaster planning, preparation and response capabilities.

All governments are committed to building a more disaster resilient Australia and will continue to work together to achieve this goal. It will also be important for governments to engage with business and the not-for-profit sector to complement and support their roles in developing and enhancing community resilience.

The Hon Nicola Roxon MP
Attorney-General
Minister for Emergency Management

The Hon Peter Ryan MLA
Deputy Premier of Victoria
Minister for Police and
Emergency Services
Chair, Standing Council on Police
and Emergency Management 2012

CONTENTS

BACKGROUND – THE CASE FOR RESILIENCE

Across Australia, natural disasters are inevitable and unpredictable.

We have always had extreme weather events in this country, but the changes in the way we are living is making us more vulnerable to such events. The massive productivity gains over the last several decades have provided us with so much more choice in where and how we live, work and play.

Our businesses and communities are much more dependent on technology to function. We use credit cards and carry less cash. Due to 24/7 shopping, we can buy food and petrol whenever convenient – allowing us to buy smaller amounts more often.

We can also live much further from our place of work and commute over increasing distances. Our cities are growing, with more people living in rural, regional and peri-urban settings – often areas prone to more frequent and severe disasters. As a result, we have increasingly urban expectations in rural and regional settings.

While these factors provide us with an improved quality of life, they also mean we are much more exposed to the impact of disasters.

In February 2011 the Council of Australian Governments (COAG) endorsed the National Strategy for Disaster Resilience (the Strategy). COAG also directed that a number of key activities be implemented as a matter of priority.

While the concept of resilience is not new, the endorsement of the Strategy marked a significant shift in Australian emergency management policy. This shift came on the back of several devastating disasters, as it became clear that the Australian community needed to reframe its thinking and commit to a more sustainable approach. This meant rebalancing a 'response and recovery' mindset to one of 'preparation and mitigation'.

The Strategy is about better understanding risk and communicating with individuals and communities to help us all understand the risks we face and empower people to take responsibility.

Applying a resilience based approach cannot solely be the domain of emergency management agencies. In fact, many of the actions needed to improve Australia's disaster resilience sit well outside the emergency management sector.

This is why the Strategy emphasises the principle of shared responsibility between governments, business, communities and individuals. This is distinct from relying on increasing government intervention, which is unsustainable and may actually undermine community resilience. It also acknowledges that achieving a shift to disaster resilience will require long term behavioural change.

The Strategy provides high level guidance on disaster management to federal, state, territory and local governments, business and community leaders, and the not-for-profit sector. It comprises seven strategic priorities for action, and identifies priority outcomes.

The Standing Council on Police and Emergency Management (SCPEM), comprising Police and Emergency Management Ministers from all Australian jurisdictions and New Zealand, and a representative from the Australian Local Government Association, has been tasked with implementing the Strategy.

PROGRESS TO DATE

Fundamental and lasting change takes time and needs to occur step by step. Implementing the Strategy should be seen as a first step in an evolving process to deliver sustained behavioural change and enduring partnerships.

A number of key milestones have been achieved since the Strategy's endorsement. These include:

- reaching agreement on a nationally consistent methodology for disaster risk assessment

- completing a review of the effectiveness of disaster relief and recovery payments

- opening the new Australian Government Crisis Coordination Centre and Australian Parliament House Briefing Room

- developing a National Disaster Resilience Communication Strategy

- making improvements to Triple Zero surge capacity and telephone-based emergency warning systems

- holding successful National Flood and Emergency Warning Forums, to identify new and emerging technologies,

- developing new Smartphone applications such as:

DisasterWatch – which provides users with national information about disaster events, and

Before the Storm – a game that teaches school children about disaster preparedness.

In addition, high level governance arrangements for implementing the Strategy have been developed, including the establishment of the Standing Council on Police and Emergency Management (SCPEM). SCPEM has six key responsibilities – one of which is the provision of national leadership on emergency management and disaster resilience.

This document provides an overview of the seven strategic priorities being delivered under the Strategy. It showcases some of the key achievements being delivered at the federal, state and local levels, arranged under those strategic priorities.

However, there are also many local projects and activities that are underway or planned across the country that promote and support disaster resilience and align with the Strategy. The case studies provided in this publication are a small cross-section of the considerable amount of the disaster resilience work that is taking place across the country – at a national level, at a jurisdictional level and within communities. Not all of this work can be, or is, captured under the Strategy, but it is nonetheless, contributing to the overarching aim of building Australia's disaster resilience.

PRIORITY ONE: LEADING CHANGE AND COORDINATING EFFORT

> Leadership is needed to drive improvements in disaster resilience. The responsibility for leadership should be taken by all partners within their sphere of influence in a coordinated manner, so as to maximise the benefits from limited resources. (National Strategy for Disaster Resilience, page 6)

Why is this important?

Effective leadership is central to developing, strengthening and sustaining disaster resilience. It is also essential for achieving the nationwide behavioural change needed for the success of the Strategy.

Leadership is a common theme across all priority areas of the Strategy, and needs to be developed at all levels and across all sectors.

What has been done?

From the outset, the Strategy has been led at the highest level of government. It was endorsed by COAG and the implementation is being overseen by all Australian Emergency Management Ministers.

In addition, the ongoing commitment and leadership by key ministers and senior officials across governments is proving to be an important factor in driving implementation of the Strategy, particularly within the National Emergency Management Committee (NEMC). Leadership from business and the not-for-profit sector is also vital to disaster resilience (see Priority four).

CASE STUDY - NATIONAL DISASTER RESILIENCE COMMUNICATION MESSAGES

The development of national 'leadership messages' has been an important first step in engaging leaders and helping them promote the Strategy. The messages are included in the Strategy's Communication Plan, and were provided to all federal Members of Parliament in December 2011. The messages are simple, action oriented and relevant to all sectors:

- disasters will happen – natural disasters are inevitable, unpredictable and significantly impact communities and the economy

- disaster resilience is your business – governments, businesses, not-for-profit organisations, communities and individuals all have a role to play and to be prepared

- connected communities are resilient communities – connected communities are ready to look after each other in times of crisis when immediate assistance may not be available

- know your risk – every Australian should know how to prepare for any natural disaster

- get ready, then act – reduce the effects of future disasters by knowing what to do

- learn from experience – we reduce the effects of future disasters by learning from past experience.

The messages were initially developed by communication experts in the Attorney-General's Department, to help influential people and organisations promote disaster resilience concepts and principles.

The messages were subsequently endorsed by NEMC in September 2011, after being refined by State and Territory government communication specialists, and representatives from the NEMC Community Engagement Sub-Committee.

The messages provided a basis for the National Disaster Resilience Communication Strategy and Plan. The Communication Strategy and Plan was then endorsed by SCPEM in November 2011, and work is proceeding.

Case Study 1

CASE STUDY: NSW 2011 STATE NATURAL DISASTER RISK ASSESSMENT

The Strategy emphasises understanding and communicating risk within government and the community. As part of the National Partnership Agreement on Natural Disaster Resilience, the Australian Government provided funding to all states and territories to assess state-wide natural disaster risk.

During 2010 and 2011, agencies in the emergency management sector in NSW participated in the inaugural State Natural Disaster Risk Assessment. Led by the Ministry for Police and Emergency Services, the focus was on stakeholder engagement and ensuring a comprehensive perspective on natural disaster risk management.

NSW agencies that have responsibility for key natural hazards have well entrenched and mature processes in place. The NSW Rural Fire Service has a comprehensive bush fire risk management planning process that covers the length and breadth of the state and is integrated with decision making. The Office of Environment and Heritage also works with local government to undertake floodplain risk management studies, which provide vital information to the NSW State Emergency Service (SES), aiding emergency response planning.

For this reason, the State Natural Disaster Risk Assessment focused on identifying cross-hazard, state level risks that may impact on the ability of agencies in NSW to manage natural disaster risk.

Data collection centred on a series of workshops targeting groups within the NSW emergency management sector. The workshops provided a good opportunity for robust discussion and generating strategies to assist in managing identified risks.

The risks and their associated control or management strategies fell into the following categories:

- community awareness and engagement

- infrastructure capability and capacity

- intra-sector operations

- resource management and volunteer capacity

- capability

- information sharing and knowledge management, and

- governance.

Detailed implementation plans are being developed for a range of projects to address these areas of risk. Once again, this involves a range of individuals from across the emergency management sector. Other work will include a review of the 2010-11 risk assessment process, and the development of an ongoing iterative process for future years. An accompanying public document is also being produced. The current risk assessment documentation is somewhat bureaucratic and does not provide information in plain English. The public document will focus on the community and have a clear resilience building objective. It is scheduled for publication in 2012.

PRIORITY TWO: UNDERSTANDING RISKS

Australia's vast and diverse regions, landscapes and climatic variations mean we will continue to be at risk from the damaging impacts of disasters. Underpinning a disaster resilient community is knowledge and understanding of local disaster risks. We all share responsibility to understand these risks, and how they might affect us. By understanding the nature and extent of risks, we can seek to control their impacts, and inform the way we prepare for and recover from them. (National Strategy for Disaster Resilience, page 6)

Why is this important?

Understanding risk is a critical component of resilience.

Consistent approaches to risk assessment and a better understanding of risk can help governments use their limited funds and resources in the most effective way to mitigate natural disaster risk and build resilience.

Publicly available risk assessments, hazard maps and risk registers, coupled with appropriate community education and information, will provide governments, businesses and the community with the information needed to prepare for and mitigate the impact of natural disasters.

What has been done?

Since COAG endorsed the Strategy, significant progress has been made in building a greater understanding of risk across Australia.

In November 2011, emergency management Ministers endorsed the National Emergency Risk Assessment Guidelines (NERAG) as the nationally consistent methodology for risk assessments. The use of the NERAG will contribute to improved consistency, comparability and quality of future risk assessments in Australia.

NEMC is also developing a training course to increase awareness and understanding of the NERAG by all stakeholders. When coupled with a NERAG practice guide, the course will give emergency risk assessors the tools needed to undertake high quality risk assessments that align with the nationally agreed approach.

In addition, the NERAG is being reviewed to build in lessons learnt from recent risk assessment exercises. The aim is to make it a more useful tool for all jurisdictions, while maintaining its current benefits, including transferability.

Given that understanding risk is critical to building disaster resilience, it has been a priority area of work in the early stages of implementing the National Strategy for Disaster Resilience and will continue to be a primary driver into the future.

CASE STUDY: NATIONAL WORK PROGRAM FOR FLOOD MAPPING

The extensive flooding across multiple states during the summers of 2010-11 and 2011-12 highlighted the need for a greater understanding of flood risk in Australia and was acknowledged in recent disaster inquiry reports. In response, NEMC developed the National Work Program for Flood Mapping.

The Work Program outlines four short term and long term projects to help Australia have high quality, consistent and comparable flood risk maps. These will inform emergency management public policy, planning, and community safety activities. The Work Program will provide a clear understanding of the coverage of existing flood maps and their level of detail, while also providing national guidance on how flood risk mapping should be undertaken. This knowledge will help all jurisdictions to prioritise their flood mapping projects to areas where new or updated flood maps are needed.

CASE STUDY: GET READY QUEENSLAND

Following the significant natural disasters experienced across Queensland during the summer of 2010-11, the Department of Community Safety (DCS) initiated a public education campaign to encourage greater levels of preparedness and resilience in the community. The campaign, themed Get Ready Queensland, encompassed television, radio and press advertisements, public events, social media engagement, a school education program and an extensive news media campaign.

The key messages focused on helping Queenslanders to understand the potential risks facing their communities, as well as encouraged people to prepare a household emergency kit with enough water and non-perishable food to last for a minimum of three days.

One of the elements of the campaign was a statewide mail out of the Get Ready Queensland guide. This guide included information about emergency warnings, key disaster agency contacts and detailed information about disaster events including cyclones, floods, severe storms and tsunamis. It was developed in consultation with a wide range of stakeholders, including state government agencies, non-government organisations and local councils. The guide features advice on how to prepare a household emergency plan, as well as a personal emergency plan template for the householder to complete. It also gives tips on how to prepare a household emergency kit and an evacuation kit.

The guide was distributed to 1.9 million households statewide, and is available through local councils and Queensland-based State and Commonwealth Members of Parliament. It is also available online at www.qld.gov.au/getready.

CASE STUDY - NSW TSUNAMI RISK ASSESSMENT

In work funded under the Natural Disaster Resilience Program, the NSW State Emergency Service (SES) is working with the NSW Office of Environment and Heritage and Geoscience Australia to undertake detailed coastal inundation modelling for selected sites on the NSW coast to better understand tsunami risk. The work has resulted in significant improvements in the application of tsunami modelling techniques. Another outcome of the work is that the new data will be used by the Australian Government Bureau of Meteorology to refine the tsunami warning thresholds used in the Australian Tsunami Warning System.

Another Natural Disaster Resilience Program funded project involves refining the Tsunami Warning and Evacuation Area which is currently defined as land that is below 10m in elevation above sea level and less than 1 km from the ocean shore. The project will use a combination of assessment of tsunami inundation modelling results and analysis of actual tsunami behaviour in other locations, most notably the tragic tsunami of 2004 in Indonesia and the more recent tsunami in Japan. The work will yield more 'logical' tsunami land threat warning and evacuation areas, which will be mapped and then published via the SES website.

Case Study 5

PRIORITY THREE: COMMUNICATING WITH AND EDUCATING PEOPLE ABOUT RISKS

> Risks can be reduced but they cannot be eliminated. Risks should be openly discussed in order to anticipate and manage them. (National Strategy for Disaster Resilience, page 8)

Why is this important?

Knowledge is fundamental to helping communities assess and understand local hazards and risks, and inform preparation and mitigation measures. Effective communication is therefore crucial. All relevant and available information needs to be conveyed during the response and recovery phases of a disaster. Sharing knowledge, including lessons learned from previous events, is also important to promote innovation and best practice.

The Strategy acknowledges that risks can be reduced but they cannot be eliminated. Risks need to be openly discussed in order to anticipate and manage them. Consequently, disaster risk information should be communicated in a clear and authoritative manner, and in a way that communities and individuals can use.

At all levels, governments need to adopt a partnership approach with key stakeholders to convey the disaster resilience message. Communities and individuals also need to take responsibility for their own resilience by actively planning for emergency situations, and being better informed about risks. As a result, there will be less reliance on post disaster recovery efforts and financial assistance.

Providing information on which to make decisions is an important step in the right direction – but this cannot occur in isolation. Most people have a genuine thirst for knowledge and we live in an age where information is easily accessible. However, the information provided needs to be clear and authoritative, and people need to know how to act on it.

What has been done?

One of the ways to promote disaster resilience is through consistent messaging to the community. As noted under Priority One, this is being addressed by the National Disaster Resilience Communication Strategy, which is underpinned by six key messages:

- disasters will happen – natural disasters are inevitable, unpredictable and significantly impact communities and the economy

- disaster resilience is your business – governments, businesses, not-for-profit, communities and individuals all have a role to play and to be prepared

- connected communities are resilient communities – connected communities are ready to look after each other in times of crisis when immediate assistance may not be available

- know your risk – every Australian should know how to prepare for any natural disaster

- get ready, then act – reduce the effects of future disasters by knowing what to do

- learn from experience – we reduce the effects of future disasters by learning from past experience.

These messages can be used by everyone to promote disaster resilience, locally and nationwide.

To ensure the Communication Strategy is effectively targeted and results in behavioural change, jurisdictions are actively considering their current and future resilience focused activities.

CASE STUDY - NATIONAL FLOOD RISK INFORMATION PROJECT

As part of its response to the Natural Disaster Insurance Review, the Australian Government committed $12 million over four years for Geoscience Australia to establish the National Flood Risk Information Project. The Project aims to increase the quality, consistency and accessibility of flood risk information.

The Project will make flood mapping information freely available from a central location through an online Portal. It also aims to improve the quality of future flood information by completing the revision of the Australian Rainfall and Runoff guidelines.

Phase 1 of the project was completed in November 2012. This first phase delivered:

• An upgraded flood studies database, which includes an interactive map interface, details on over 1300 existing flood studies, and direct access to an increasing number of flood study reports. This database will make it easier for planners, the public and insurers to determine flood hazard.

• An initial set of maps for three trial areas showing the observed extent of floods over the last ten years, derived from satellite imagery. This analysis will be useful for understanding the frequency and extent of flooding across large regions, especially in areas where flood studies have not been performed.

• An agreement with Engineers Australia allowing the finalisation of the revision to Australian Rainfall & Run-off, a key document that underpins flood studies.

Phase 2 of the Project will see further enhancements to the database including access to more data and improved functionality. The database will bring together flood studies information with satellite derived flood extents for priority areas across the country. This newly integrated information will be accessible through a spatially enabled web-interface with enhanced functionality. These improvements will enable easier data entry and retrieval for users and data custodians.

This initiative will enhance community awareness of the flood risks they face and create opportunities to improve and better inform decision making in a wide range of areas including emergency management, land use planning and insurance.
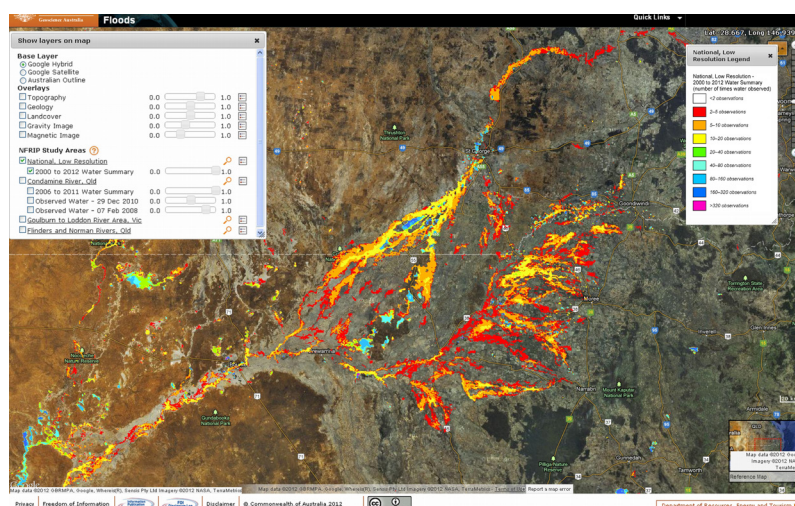
Flood hotspot of the Moree region

CASE STUDY: THE VICTORIAN FIRE LEARNING NETWORK

In Victoria, the Fire Learning Network brings together community and fire agencies to build relationships and to share knowledge through ongoing facilitated conversations – called "strategic conversations". Throughout its four year pilot phase the Fire Learning Network has operated in multiple locations throughout Victoria. The Network contributes to the resilience, safety and wellbeing of Victorians by building community understanding of fire, by strengthening the social networks between people who can be drawn on in times of emergency and recovery and by fostering thoughtful local solutions to concerns of local significance.

Fire touches lives and communities in different ways at different times and so each place or group has a different focus, interest or priority. The Network is composed of a diversity of people discussing a wide variety of interests and concerns, but grounded in a common care for place and hope for the future.

In the year to date issues such as – social connectivity, sustainable community recovery, the interaction between fire and 'phytothora cinnamomi' (a soil-borne water mould), vulnerable people, and the technical aspects of fuel reduction burning were just some of the themes that people in the Network discussed and learned about.

An example of a localised response to local concerns stimulated by the strategic conversations is well demonstrated by locals in the town of Gellibrand, which is located approximately 160 kilometres south-west of Melbourne at the foot of the Otway Ranges.

In their efforts to understand and improve community connectedness they have created their own project, 'Put Yourself on the Map', in which they invite others in their community to take ownership of their place in Gellibrand by identifying themselves on a township map. They have used the opportunity to discuss the shared risks and responsibilities around fire. The group believes that there is value in the personal interaction. Each time someone puts themselves on the map they can be engaged in a conversation about their fire risk with the local Department of Sustainability and Environment (DSE) staff, Country Fire Authority (CFA) brigade Community Fireguard Facilitator and be offered support, information and encouragement to address that risk.

The Fire Learning Network succeeds because the network facilitators strike the balance between supporting local solutions and valuing local perspectives, and at the same time applying a replicable approach which entails strengths-based strategic questioning, connecting people for learning, and accompanying people as they learn.

The Fire Learning Network approach draws on a global practice of community capacity building and has strong methodological links to the Nelson Mandela Foundation's "Community Conversations" approach; the AFFIRM Facilitation Associates' "Human Capacity for Response" approach; and the United Nations Development Program's "Community Capacity Enhancement" model.

## CASE STUDY - THE SPOT - KEEPING CANBERRA INFORMED DURING EMERGENCIES

The ACT Emergency Services Agency (ESA) needs to alert the Canberra community to emergencies that may impact on them and provide any subsequent updates in a timely and accurate manner. The same expectation also exists within government. In addition, given technological advances in consumer electronics, such as smart phones and tablets, the public has a greater thirst and expectation for up-to-the-minute emergency information.

The ESA therefore developed a system designed to point everyone, internally and externally, to one location for all public information during an emergency. The system is called THE SPOT, which translates to 'The single point of truth'. THE SPOT was developed in consultation with senior media representatives and community representatives.

THE SPOT is a very simple system designed to:

• streamline the usual internal bureaucratic information flow processes that can lead to out of date, multiple and potentially conflicting messages from various emergency services agencies during emergencies;

• provide all public information from across government through one channel with a streamlined approval process when the ACT Public Information Coordination Centre (PICC) is activated during disasters;

• use technology to distribute emergency alerts and updates to the public and across government through multiple avenues with the push of one button. The alerts and updates then point people to one place (ESA website esa.act.gov.au) where all official information on the emergency situation is located ;

• provide the ESA Public Information Coordination Officer with more time to gain more regular situation reports to provide more timely updates; and

• harvest situational awareness on emergencies from the public via social media postings.

The diagram below explains the system:
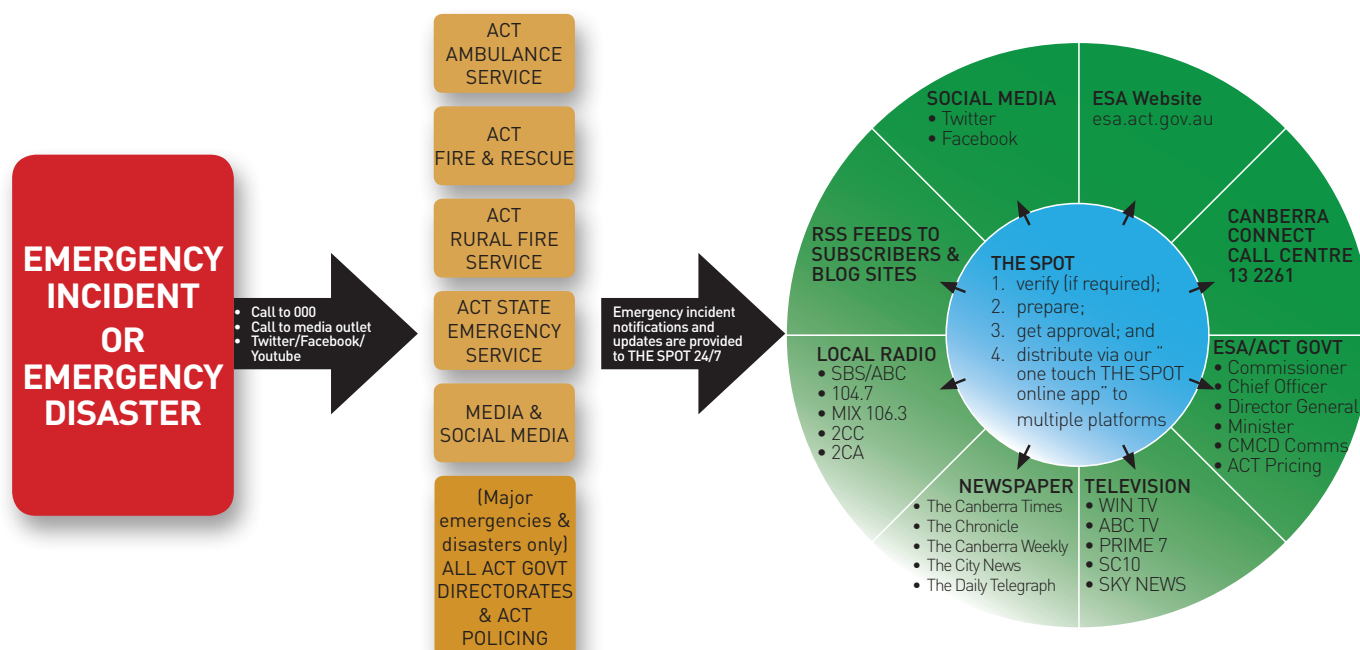
PRIORITY FOUR: PARTNERING WITH THOSE WHO EFFECT CHANGE

Working together and drawing on the expertise and capacity of various partners produces far greater results than do individual efforts alone. Partnerships across and within governments, businesses, the not-for-profit sector and the community, will create a well-informed, integrated and coordinated approach to increasing disaster resilience. The result will be a more resilient nation. (National Strategy for Disaster Resilience, page 9)

Why is this important?

Developing integrated and collaborative relationships across government, business and the not-for-profit sector is well recognised as an important factor in building disaster resilience. The Strategy explicitly recognises that a disaster resilient community is one that works together to understand and manage the risks that it confronts.

A united focus and shared sense of responsibility will be far more effective in improving disaster resilience than the individual efforts of any one sector. As a result, work is actively progressing to strengthen and enhance partnerships between governments, business and the community.

What has been done?

The Australian Government recognises the important role the private sector plays in the community.

Small and medium size businesses are a substantial part of Australia's socio-economic life. It is imperative that such businesses are able to bounce back after a disaster or business shock. The Australian Government is therefore working to encourage small and medium enterprises to undertake better business continuity planning, by giving them the support and information they might need.

The Australian Government also recognises the importance of critical infrastructure. This plays an important part in Australian communities being disaster resilient.

The continuation of essential services in the case of foreseen or unforeseen disasters and emergencies is being achieved through the Australian Government's Critical Infrastructure Resilience (CIR) Strategy.

A significant proportion of Australia's critical infrastructure is privately owned or operated on a commercial basis. In most cases, the owners and operators are best placed to manage risks to their operations and determine the most appropriate mitigation strategies.

One of the strategic imperatives of the CIR Strategy is to operate an effective business-government partnership with critical infrastructure owners and operators.

The best way to enhance the resilience of critical infrastructure is for government to partner with owners and operators, to share information, raise awareness of dependencies and vulnerabilities, and facilitate collaboration to address any impediments.

The Third Sector also has a tremendous role to play, providing vital leadership and services to the community. The Australian Government is working to minimise regulatory compliance costs to the not-for-profit sector, including those in emergency management. Non-government agencies are implementing a wide range of projects to build resilience, such as the Australian Red Cross' REDiPlan.

A Forster Pacific Palms State Emergency Service volunteer works with a National Parks and Wildlife Service crew during a bushfire at Buladelah, NSW **Photograph by Cindy Wrigley, NSW**

Emergency management volunteers also play a significant role in effecting change through their on-the-ground engagement with communities and individuals in times of crisis, and through their ongoing involvement in helping communities to prepare for, respond to and recover from emergencies.

CASE STUDY - TRUSTED INFORMATION SHARING NETWORK FOR CRITICAL INFRASTRUCTURE RESILIENCE

The Australian Government has established the Trusted Information Sharing Network for Critical Infrastructure Resilience (TISN). It is the primary mechanism to build a partnership approach between business and government for critical infrastructure resilience.

The TISN provides an environment where business and government can share vital information on issues relevant to the resilience of critical infrastructure and the continuity of essential services in the face of all hazards, and facilitate the development of solutions to security and business continuity risks.

During the 2011 floods in Queensland, daily teleconferences were held with the Banking and Finance Sector Group of the TISN. This helped the Sector gain an understanding of what was being done to ensure the continuity of banking services, including providing access to cash when ATMs were disrupted and roads were washed away, impacting transport routes.

This information fed into Australian Government decision making processes, including the Australian Government Crisis Committee and the National Crisis Committee.

Members of the TISN, along with jurisdictions, also developed a lessons learnt report on organisational resilience during the 2010-11 disaster season. The report was presented to NEMC in late 2011 and included important information and suggestions for use in future national work.

Case Study 9

![SAVEM - South Australian Veterinary Emergency Management Inc. logo](image)

CASE STUDY - SOUTH AUSTRALIAN VETERINARY EMERGENCY MANAGEMENT (SAVEM)

Following lessons from the 2009 Victorian Bushfire experience, a volunteer group of veterinary practitioners formed the SA Veterinary Emergency Management Group (SAVEM Inc.). The group utilised Natural Disaster Resilience Program funding to develop the SA Veterinary Emergency Management (SAVEM) Plan and enable volunteer animal workers to mount an effective response to emergency incidents involving companion animals, wildlife and stock to triage, treat, rescue and re-unite them with their owners.

The SAVEM Plan is activated under SA emergency management arrangements, establishing Regional Coordination Centres to manage the resources and assistance of volunteer veterinarians, vet nurses, wildlife carers and other animal related organisation staff and volunteers. Communication protocols consistent with other emergency service agencies have been developed to enable flexible and adaptable incident response at state, regional and local levels.

The Plan enables veterinarians to work in the emergency area alongside other agencies to focus on companion animals and wildlife; support and supplement the work of the Department of Primary Industries and Resources of South Australia (PIRSA) concerning livestock and horses; and contribute to human welfare outcomes as well.

As part of preparedness activities, more than 100 volunteers have attended training courses. Initial training was provided to support volunteer field animal care roles. The second round of workshops developed volunteer Team Leaders and provided an overview of relevant legislation. Launched in metropolitan Adelaide in 2011, the program is being extended to regional areas of South Australia in 2012. A public and industry awareness program is underway, and the website, www.savem.org.au, was launched on 12 June 2012.

SAVEM Team leader training workshop

CASE STUDY: TASMANIAN REVIEW INTO THE ADEQUACY OF VOLUNTEERING

In 2010/11, the Tasmania State Emergency Service (SES) led a State Emergency Management Committee (SEMC) review into the adequacy of volunteering within the emergency services sector. While the review highlighted that sector volunteers were well supported by their respective organisations, there were opportunities for greater collaboration between these organisations.

Under the leadership of the SES, a new SEMC sub-committee, called the Emergency Services Volunteer Working Group (ESVWG), was established to strengthen partnerships with the main emergency service volunteer-based government, non-government and not-for-profit organisations.

The ESVWG comprises representation from the SES, Tasmania Fire Service, Ambulance Tasmania, St Johns Ambulance, Red Cross, Surf Lifesaving Tasmania and Volunteering Tasmania. The group's main focus is to better share information across the sector and to better collaborate and coordinate initiatives and ideas for the benefit of the whole sector.

Key work items/achievements to date include: the ongoing development of recruitment materials and web site to support the whole sector - these specifically target potential spontaneous volunteers (when disasters occur) to join now, instead of waiting for the disasters to occur; the ongoing development of an on-line 'library' of relevant research reports from across the sector and the identification of research gaps; and improved learning opportunities and outcomes for the development of effective volunteer leaders across the sector.

Case Study 11

CASE STUDY - THE OPENWHISPIR INTEROPERABILITY WORKING GROUP

In 2011, Whispir (an industry communications platform provider) received $2 million funding from Commercialisation Australia (Department of Innovation, Industry, Science and Research) to support the commercialisation of a suite of secure incident management and event engagement tools. The OpenWhispir project aims to enable organisations to more effectively communicate with stakeholders and the public; source and share information; and build situational awareness during an emergency.

This project is a good example of public-private collaboration which will improve and build more resilient emergency management capabilities. The project will assist with the implementation of the recently developed Australian Government Standard for the Common Alerting Protocol - Australia Profile (CAP-AU-STD). Over a period of eight months, Whispir will lead the work of an Interoperability Working Group, with membership from Australian Government agencies: the Attorney-Generals' Department, the Bureau of Meteorology, and the Australian Broadcasting Commission; Victorian Government agencies: the Fire Services Commissioner, the Department of Sustainability and Environment, the Country Fire Authority, the Metropolitan Fire Brigade, and the State Emergency Service; and Telstra.

The Group aims to improve end-to-end information flow, from information producers to responding agencies and broadcast media, using a number of real-life case studies, utilising the CAP-AU-STD. The Group will publish a whitepaper in mid-2013 to outline lessons learned and recommendations for organisations to improve interoperability.

Improved information and communications technology between agencies and emergency services organisations is important to: increase ability to plan and prepare; reduce risks and improve safety for the public and responding personnel; increase operational resilience; improve effectiveness of command and control; enhance sharing of information critical to decision making and enhance access to community information sources.

The development of the CAP-AU-STD, with funding from the National Emergency Management Projects and led by the Attorney-General's Department, was a collaborative national effort over a number of years. The new Standard will be used, for example, by the national telephone-based emergency warning system, Emergency Alert. The Interoperability Working Group is one initiative of Whispir to bring together industry and government to build on this work.

PRIORITY FIVE: EMPOWERING INDIVIDUALS AND COMMUNITIES TO EXERCISE CHOICE AND TAKE RESPONSIBILITY

Fundamental to the concept of disaster resilience, is that individuals and communities should be more self-reliant and prepared to take responsibility for the risks they live with. For a resilient nation, all members of the community need to understand their role in minimising the impacts of disasters, and have the relevant knowledge, skills and abilities to take appropriate action. A resilient community will understand and have the ability to use local networks and resources to support actions required during an emergency and to support recovery efforts. (National Strategy for Disaster Resilience, page 10)

Why is this important?

Empowering individuals and communities with knowledge and responsibility for their own actions, is fundamental to building disaster resilience. With knowledge and appropriate skills, individuals and communities are better equipped to be self-reliant, and take responsibility for the risks with which they live.

Governments alone cannot achieve this. Work at the community level needs to be progressed so individuals better understand risks, helping to inform their choices and decisions. Better knowledge of risk and mitigation strategies also encourages the implementation of preventative measures. For example, a resilient community will understand and have the ability to use local networks and resources to support actions required during an emergency and recovery efforts.

What has been done?

As demonstrated by the case studies featured below, communities need appropriate resources to assist them in gaining a greater understanding of the risks they face and in order for them to develop appropriate mitigation strategies. A range of resources are being developed by governments, businesses, the not-for-profit sector and communities which can be used and adapted at the community level. To be effective, these resources need to be developed with and targeted at those who effect change, that is communities and individuals.

As noted under Priority Three, a National Flood Risk Information Portal is being developed, along with national guidelines.

This is an important step in building self-reliance. A more informed community is a more resilient one. This initiative will enhance community awareness of the risks they face and provide valuable information to inform emergency management and land use planning decisions.

Important work has also been developed in terms of preparedness, which is crucial to community recovery from disasters. Investing in preparedness now also pays off in the future.

This is why small and medium sized businesses are being encouraged to take steps to understand their vulnerabilities to disaster. This understanding allows business owners to seek resources and materials to mitigate known risks and plan for recovery.

In an initiative led by the Department of Industry, Innovation, Science, Research and Tertiary Education, jurisdictions collaborated to research current business continuity planning across a range of business shocks,

including natural disasters. Findings showed that good business continuity planning that was tailored for a range of business risks and taking an all hazards approach, was of broad value to small and medium businesses and their customers.

Reform of insurance has also taken place. In response to the Natural Disaster Insurance Review, the Australian Government, has implemented new regulations to ensure that a standard definition of 'flood' is used in home building, home contents, small business and strata title insurance policies. Further, consumers must be provided with one page fact sheets which set out key information about the coverage provided under home and contents insurance policies.

The Insurance Council of Australia (ICA) has made changes to the General Insurance Code of Practice relating to providing clear timeframes for claims handling, including during declared catastrophes. The Code also now provides greater certainty for policyholders on the completion of external expert reports, making external expert reports available to claimants, and for a right to lodge a claim to test the question of policy cover. In addition, the ICA board has initiated an independent review of the General Insurance Code of Practice.

CASE STUDY - QUEENSLAND - SURVIVE 3 DAYS PROJECT

In October 2011, Queensland's Department of Community Safety (DCS) took an innovative and experiential approach to its annual storm season launch.

A previous summer of significant flooding and cyclonic disasters had left Queensland facing a major rebuild and had brought into sharp focus the lack of preparedness in many parts of the community.

The Queensland Floods Commission of Inquiry made a number of recommendations relating to public education and increasing resilience in the community. As part of its response to the Inquiry's recommendations, the DCS developed the previously mentioned *Get Ready Queensland* (case study 4) campaign which focused on helping people understand the risks facing their communities, as well as encouraging them to prepare a household emergency kit with enough water and non-perishable food to last for a minimum of three days.

While this campaign included 'traditional' channels – such as television and radio advertising, a targeted news media campaign, and a statewide mail out – the DCS Media and Corporate Communications Branch wanted to try something new to capture people's attention. It was decided to harness the power of social media through an experiential marketing project in a highly visible location in Brisbane's CBD.

With the help of SES major partner NRMA Insurance, a mock living room was built in Reddacliff Place, a high profile site directly outside the Treasury Casino at the river end of the Queen Street Mall.

Brisbane comedian Stuart Fisher and NOVA radio personality Dave Zwolenski were engaged to spend three days living in the 'box' with only an emergency kit and basic rations, to simulate the experience of being isolated for a few days after a natural disaster.

Stuart and Dave shared their experiences with the public via Facebook and Twitter. Experiences ranged from the mundane preparation of meals using a gas cooker, to the scary when a severe thunderstorm hit the CBD, and the humorous as their adopted pet guinea pig "Guinea Grylls" became the star in a number of entertaining YouTube videos.

The audience responded, growing from 100 Facebook followers on the first morning of the event, to 3,800 by the end. The SES Facebook page recorded more than 350,000 page views over the three-day week. The number of Facebook followers as of March 2012 exceeds 17,000.

The prominent public location was also the perfect place for SES volunteers and community partners from the RSPCA, Red Cross, the Salvation Army and Bunnings to engage directly with passers-by and deliver important storm preparedness information.

CASE STUDY: ACT – 'GRAB AND GO' KIT

This project encouraged a range of community sectors to prepare an understand what to do when an emergency occurs, connect with neighbours, and know how to seek help from case workers. The intended outcome was to improve the resilience of the more at-risk residents of Canberra and surrounds.

Two linked products were conceived. An attractive practical calendar showing key information on natural hazards, with a pocket to hold an emergency plan. Then there is a hanging 'Grab and Go' kit incorporating a booklet with spaces for emergency numbers, medical information and emergency evacuation advice as well as a Neighbour Card to exchange emergency information with friends, relatives or those next door.

More than 40 organisations were involved including Neighbourhood Watch, the local Division of General Practice, senior citizens, mental health and nursing groups, as well as the traditional not-for-profit and faith-based community support organisations. Multicultural, indigenous and migrant services were also co-opted.

Community services staff and volunteers discussed emergency preparedness with vulnerable members of the ACT community as part of their normal interactions with them, for instance while delivering meals on wheels, running seniors activities or undertaking client service visits.

Vulnerable individuals were encouraged to consider their personal approach to planning for emergencies and to work with their neighbours, family and friends for mutual support in an emergency – essentially developing their own support network.
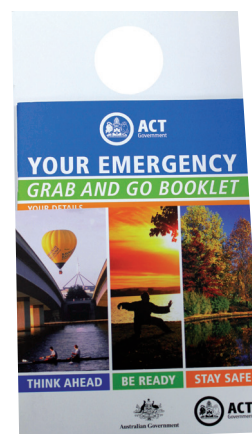
CASE STUDY - SOUTH AUSTRALIA - EMERGENCY REDIPLAN

Red Cross is partnering with the Adelaide Hills Council to pilot implementation of the Emergency REDiPlan in the Council area. A Project Reference Group consisting of representatives from Adelaide Hills Council, SA Country Fire Service, State Recovery Office and the SA Local Government Association has been formed to oversee the project.

Red Cross Emergency REDiPlan is an award winning national community education program that aims to improve the resilience of communities to the impacts of a broad range of emergencies by assisting individuals and communities, in particular those most vulnerable, to be better prepared. REDiPlan is based on four simple steps, BE INFORMED, MAKE A PLAN, GET AN EMERGENCY KIT and KNOW YOUR NEIGHBOURS.

The aim of the project is to build a sustainable all hazards community education program that strengthens the resilience of those more vulnerable to the impacts of emergencies in the Adelaide Hills Council area. This is being achieved by:

- recruiting and developing a base of volunteer Community Educators

- identifying vulnerable community groups and individuals through consultations with Adelaide Hills Council and other key stakeholders

- running REDiPlan information sessions and home visits and providing resources to local community services such as Home and Community Care (HACC) and independent living retirement villages

- improving emergency preparedness for special needs groups through targeted and tailored information and resource provision, and

- strengthening individual's coping strategies, community networks and social capital.

Red Cross has engaged the Torrens Resilience Institute to develop monitoring indicators and conduct an external evaluation to assess the impacts of the program on participants. Advice on this aspect of the project is also being provided by Professor Douglas Paton of the University of Tasmania.

The project outcomes are to develop processes, procedures and a volunteer workforce development strategy and to establish a sustainable model for future implementation of REDiPlan in other council areas across the state and country.

Case Study 15

PRIORITY SIX:
REDUCING RISKS IN THE BUILT ENVIRONMENT

Having knowledge and understanding of hazards and risks is of little use unless the information can be translated into relevant controls and mechanisms for dealing with them. Planning approaches that anticipate likely risk factors and the vulnerability of the population can reduce future possible impact of disasters. Responsible land use planning can prevent or reduce the likelihood of hazards impacting communities. Building standards can mitigate the likelihood of loss of life, as well as damage to and/or destruction of property and infrastructure. (National Strategy for Disaster Resilience, page 11)

Why is this important?

Reducing risk in the built environment will help increase disaster resilience. However, it does involve challenges.

The regulation of land use, development, building and infrastructure is complex and subject to a range of different pressures. Land use planning is regulated at a state and territory level and implemented at a local level – so it is challenging to produce nationally consistent change. Town planners are asked to integrate a myriad of economic, social and safety concerns, while also considering regulations, long term effects and actions of other parties.

Changes to planning and infrastructure regulations can also have significant financial implications for land and building owners, including all levels of government, private industry and individuals. This is true for prospective buildings and developments, as well as for existing building stock. As a result, changing regulations or planning processes or even the release of hazard information has legal liability implications for government.

What has been done?

In view of these challenges, work has focussed on developing a national action plan and identifying the key barriers to change. The main body conducting this work has been a Taskforce of state and territory planning officials led by Queensland and Victoria, which included Australian Government and local government representation. The Taskforce presented the *Enhancing Disaster Resilience in the Built Environment Roadmap* to SCPEM in June 2012.

There has been significant consultation about risks in the built environment across all jurisdictions. The consultations considered the current state of planning legislation, policy, governance, processes, technology and education, and the extent to which consideration of hazard risk is incorporated into each. Jurisdictions also provided their perspective on perceived gaps and barriers, and examples of improvements that are planned or have been effected.

One key principle that has emerged is that the regulation of land use planning and building codes is only as good as the hazard data and risk assessment technology on which it is based. Indeed, many jurisdictions identified that while consideration of some hazards is mandated by state level planning policies, the lack of consistent and reliable hazard maps prevents this policy from being implemented locally. Improvements in regulation of the built environment are therefore very closely linked to work on hazard modelling and other activities on understanding risk (Priority Two).

While national action is proceeding, there have been many good examples of improvements at the state and local level.

CASE STUDY - TASMANIA - FRAMEWORK FOR MITIGATING THE IMPACT OF NATURAL HAZARDS THROUGH LAND USE PLANNING

The Tasmanian Government is currently consulting with local government, industry and other key stakeholders on:

• foundation principles for the role of government in mitigating the impact of natural hazards through land use planning, and

• a comprehensive guide to translating risks from natural hazards into land use planning controls.

The state will use the guide throughout 2012 to identify appropriate land use planning controls and manage ongoing risks associated with key hazards such as landslide, flood and bushfire. Once completed, the Tasmanian Planning Commission will implement state-wide planning directives for key natural hazards to ensure that use and development controls are applied consistently across all planning schemes in Tasmania.

The development and implementation of the principles and guide is a key component of a broader state project to develop a comprehensive framework for mitigating the impact of natural hazards through land use planning.

CASE STUDY - LOCAL GOVERNMENT – STRENGTHENING GRANTHAM PROJECT

Lockyer Valley Council's Strengthening Grantham Project is a strong example of public, private and community organisations working effectively together to deliver a significant infrastructure project. Grantham, population approximately 360, was devastated by Queensland's floods in January 2011, when floodwater swept through the valley.

In total, 119 homes were significantly damaged, 19 homes were damaged beyond repair and 10 were completely destroyed. Ten Grantham residents lost their lives, while two remain missing, presumed dead.

In the days immediately following the disaster, the Lockyer Valley Regional Council met with senior staff, planning experts and residents to address the immediate disaster response and develop a reconstruction plan.

The Master Plan was developed by council in consultation with Cardno, Deike-Richards and the Queensland Reconstruction Authority (QRA) to ensure planning, design and environmental issues were managed appropriately. Cardno was tasked to manage the delivery of the project, managing the process through the planning, engineering and construction phases. Funding support from the Queensland and Australian Governments, totalling $18 million, met the costs required to fully fund the voluntary land swap initiative and future development. This allowed council to direct its own financial resources towards other vital services and infrastructure required for the region. The planning process was fast-tracked by the QRA and completed in four months. It continues to be one of the most concentrated reconstruction projects associated with the January 2011 floods.

For flood-affected residents, the benefits of the reconstruction process are numerous – a safe land lot upon which to rebuild, the provision of essential services and peace of mind that the community is now better protected for the future.

Overview of the masterplan for Strengthening Grantham project - the red outline indicates the new settlement on the hill above the 2011 flood level

Case Study 17

PRIORITY SEVEN: SUPPORTING CAPABILITIES FOR DISASTER RESILIENCE

Disasters can stretch the capacity of our emergency services agencies and overwhelm communities. Development of remote community and industrial centres, extent of isolation, and reliance on emergency service volunteers, all present challenges. We should, therefore, pursue greater flexibility and adaptability within our emergency services agencies and communities to increase our capacity to deal with disasters. (National Strategy for Disaster Resilience, page 12)

Why is this important?

There is scope to adopt a more holistic approach to disaster management and resilience. This approach minimises the exposure to and impact of, disasters as much as it supports community recovery and encourages a nationwide effort to manage disaster risk.

Translating improved knowledge into improved decisions on capability development however will not alone deliver greater community resilience. Significant human and physical resources will be needed to build and sustain capabilities and community resilience and those capabilities will need to be sustained within an ever changing future.

What are we doing?

Since the introduction of the Strategy, significant progress has been made to support and strengthen disaster resilience capabilities at the national level, including information sharing, technology and volunteers. Increasingly, work under the Strategy will transcend specific priority areas as linkages and connections become more obvious.

Under the Natural Disaster Resilience Program, the Australian Government is providing states and territories with $110 million over four years for disaster mitigation.

The Australian Government has established the National Emergency Management Projects (NEMP) grant program to fund emergency management projects of national significance. Projects carried out under the NEMP support measures to strengthen communities, individuals, business and institutions to minimise the adverse effects of disasters on Australia. Specifically, such projects are designed to improve the ability to prevent, prepare, respond to and recover from disasters across social, economic, environmental and governance elements.

CASE STUDY - VOLUNTEERS

Work continues at national and state levels to support capability development in the emergency management volunteer sector. A range of programs and policy initiatives are in place to support recruiting, retaining and resourcing emergency volunteers and local groups.

The third National Emergency Management Volunteers Summit was held in May 2011. It provided a forum for volunteers to share experiences, consider issues and develop strategies to maintain the ongoing vitality of the sector. A series of recommendations emerging from the summit will also help individuals, volunteer organisations, agencies and governments in building a stronger emergency management volunteer sector, and contributing to a more resilient nation.

A National Emergency Management Volunteer Action Plan (Action Plan) and accompanying Summary of Achievements: Stocktake against priority actions identified in the National Action Plan for the Attraction, Support and Retention of Emergency Management Volunteers 2009 have also been published, showcasing the enormous contribution volunteers and volunteer agencies are making towards disaster response and recovery. The Action Plan has been written in accordance with the Strategy and highlights how volunteers are building disaster resilience by supporting communities to better prepare for, and bounce back from disasters.

Disincentives for volunteer training have also been identified and are being addressed. This was thanks to a successful dialogue NEMC coordinated with the Vocational Education and Training Sector and the Standards Council of Australia. Disincentives had inadvertently arisen from changes in jurisdictional training and Occupational Health and Safety Regulations. Bringing all stakeholders together helped to resolve the issues by allowing an objective assessment of the problem, and identifying 'pressure points' where targeted action can be taken.

A massive wall of fire erupts while back burning during a large bushfire on Mount Archer, Queensland. The scale of the flames illustrates the enormity of the task faced by volunteer fire fighters **Photograph by Chris Ison, The Morning Bulletin, Rockhampton, Qld**

CASE STUDY: ALERT SA

The Alert SA project was introduced in line with the National Emergency Warning System, Emergency Alert.

The Alert SA project aligns with the National Emergency Warning Principles endorsed by emergency management ministers. The project supports emergency services capabilities by providing coordinated, authoritative, consistent and reliable processes, procedures and IT systems to support timely dissemination of information using a diverse range of transmission methods.

The Alert SA project aims to:

- provide Emergency Service Agencies with the ability to manage inbound telephone requests for emergency information via a virtual call centre capability and interactive voice response solution. The solution also aims to provide recorded information to inbound callers via text to speech conversion technology

- maintain the Emergency Alert telephone warning system for South Australia and implement enhancements being made to Emergency Alert to provide a Location Based Solution for alerts, and

- establish an Alert SA website to support the provision of coordinated information to the community.

The project seeks to enable agencies, in delivering messages to the South Australian community, to be able to manage incoming enquiries to support public safety. This project is an important capability that seeks to meet community expectations and support our emergency services in getting critical safety information out to the community.

The Alert SA website was launched on 7 March 2012. This site currently collates social media feeds from police and emergency services to provide a consolidated picture of information needs and sources during significant emergencies. It also provides links to the Bureau of Meteorology weather warnings for South Australia. Plans are underway to further enhance the website to include intermittent information feeds as an emergency situation evolves (e.g. power disruptions, transport, recovery).

LOOKING AHEAD

Much has been achieved since the Strategy was endorsed – and much has been learned. There is now greater understanding across all levels of government of the interconnectedness of disaster resilience work. There is also greater awareness and appreciation of the breadth of the work being done within and beyond the emergency services sector, including across the broader community.

In addition, there is more clarity about roles and responsibilities, and where those responsibilities intersect. New partnerships have been formed and old ones strengthened. A notable example of this is on 25 July 2012 New Zealand was made a full member of the NEMC – now called the Australia-New Zealand Emergency Management Committee (ANZEMC) – to ensure the closest possible coordination and cooperation on emergency management issues.

There is an increasing appetite for directing more effort towards disaster preparedness and mitigation.

Agreement being reached on nationally consistent approaches to hazard mapping and risk assessment will ensure decisions and investment in future risk management and mitigation is better coordinated and informed by lessons learnt. The National Flood Risk Information Project will also mean that interested parties can access consistently high quality disaster risk information relevant to their needs.

Importantly, discrete risk projects started in 2011 will be linked and become part of a more integrated national disaster risk policy platform. These include revising the National Emergency Risk Assessment Guidelines and related resources, work on the use of risk registers and their application to publishing state-wide risk assessments and implementing the National Flood Mapping Work Program.

Challenges

Not surprisingly, given the challenges inherent in rolling out such a broad policy initiative, a number of significant issues have been identified and will need to be addressed as the reforms continue to be implemented. Many of these issues hinge around people – in terms of expertise, resourcing, organisational and behavioural change, and establishing, strengthening and sustaining partnerships.

The need to direct expert resources to real time emergencies can reduce focus on implementing the Strategy. There are also a lot of stakeholders in this work with varied levels of capacity and expertise – and maintaining commitment can be difficult when leadership and staff changes occur.

The Strategy also has a range of short, medium and long term objectives – all of which need ongoing support if the desired level of behavioural change is to occur.

Longer term reforms

Conscious of the above mentioned issues, all governments are committed to advancing an extensive suite of activities over the next year, and beyond. To achieve the best outcomes, governments will need to consider where and how to most effectively influence and support nationwide change.

Government

Future government activity for implementing the Strategy will continue to occur through a wide range of policy levers and innovative approaches. For example, the report on the Review of Relief and Recovery Arrangements highlighted the opportunity for reforming disaster payments policy to ensure it supports disaster resilience. COAG endorsed the report in April 2012, and NEMC is now working to implement the recommendations.

Given the importance of leadership as a 'change agent', governments need to recognise and support the efforts of those who take responsibility for leading change at the local level. This will involve identifying and engaging existing/potential leaders at the organisational and community level, and supporting them in conveying the disaster resilience message. Capitalising on existing government funded leadership programs may also provide opportunities, such as the *Volunteer Leadership Program (Attorney-General's Department).* This program is conducted by the Australian Emergency Management Institute in partnership with the Australian Emergency Management Volunteers Forum. It aims to develop volunteer leaders, or those who aspire to a leadership role, to meet demands within the volunteer environment.

Building disaster resilience is already occurring in many areas, both separate to, and as part of the Strategy's implementation. Identifying, connecting and collaborating with existing networks will help maximise reach into the community. This may require developing a wider range of guidance material tailored to particular audiences.

Business

Business plays a seminal role in helping implement the Strategy. The whole business sector, from small businesses to large corporations and industry groups, needs to play its part in improving Australia's resilience to disasters. The Australian Government will continue supporting programs that engage the private sector in building a disaster resilient Australia.

The Insurance Council of Australia is actively involved in this area. In addition to the work they are doing specifically around insurance, the Council also developing a building materials resilience rating tool, which is initially aimed at helping homeowners and homebuyers assess the resilience of their current properties and potential property purchases to the major climate risks faced in each region of Australia. It is proposed that this tool will be publicly available in May 2013.

The Australian Government will continue implementing programs to provide better resources to the small and medium business sector so they are equipped to deal with disasters.

Work will continue to support the critical infrastructure sector. Under the Critical Infrastructure Resilience (CIR) Strategy, business-government partnerships will continue to be strengthened to enhance the resilience of Australia's critical infrastructure and the continuity of essential services they provide.

A range of initiatives is being progressed in this regard, including developing and promoting an organisational resilience body of knowledge. Organisational resilience needs to be better understood and integrated into an organisation's everyday life, philosophy and culture. This will ultimately help ensure organisations survive in times of adversity.

Community

The not-for-profit sector continues to be critical in building resilience across the wider community. Key organisations such as Australian Red Cross play an important role in providing volunteer support during disasters and in the immediate and longer term recovery period.

Red Cross has developed Emergency REDiPlan, which is a community education program promoting resilience in households and communities to the impacts of an emergency or disaster. Red Cross also coordinates a program where volunteer community speakers deliver interactive REDiPlan presentations, and facilitate discussions on emergency household preparedness.

Red Cross is also establishing a National Disaster Resilience Advisory Roundtable to promote the participation of the not-for-profit sector in building disaster resilience. Membership will include groups and parties with an interest, experience or expertise in disaster resilience. This will include representatives from key non-government organisations, research institutions, peak bodies, industry groups, professional associations, experienced practitioners, individuals and communities.

The Roundtable is expected to explore a range of issues, including shared responsibility, funding for sustainable long term initiatives, social capital development, influencing cultural change and community engagement.

SCPEM will continue taking into account the issues of Indigenous disadvantage, access to services, gender equality, and inclusion for persons with disability, as well as the specific needs of regional Australia, in pursuing its priority issues of national significance.

Evaluation

There is a need to better understand emergency hazards, how they affect communities and how we can best prepare for and respond to them. While there is a wide range of excellent research underway in Australia, there are opportunities to better link and focus future projects.

Being able to evaluate and make informed judgements about the success of the National Strategy for Disaster Resilience will be important for developing future directions. However, it may be too early to ascertain with any degree of scientific rigour, whether Australia has become a more disaster resilient nation as a result of the Strategy. This in itself will be a complex task, requiring multiple levels of analysis and evaluation.

In 2011, the Australian Government funded Monash University to undertake a comprehensive and holistic thematic analysis of a selection of recent Australian disaster inquiries and reviews in the context of the National Strategy for Disaster Resilience. The review concluded that the Strategy provides a contemporary framework for disaster resilience and is consistent with international trends.

Since then, a number of other inquiries have been completed, including the Queensland Floods Commission of Inquiry and the Victorian Floods Review. SCPEM will ensure nationally significant findings arising from these and future disaster enquiries are tested against the Strategy. This will serve as an ongoing barometer of the Strategy's relevance in Australia's dynamic emergency management environment. It is worth noting that the experience of the 2010-11 and 2011-12 Queensland floods has reinforced the need to focus as much on disaster preparedness and mitigation as disaster recovery.

Another complementary approach includes the development of indicators for measuring disaster resilience at a community level and encourage communities to self-assess and take steps to improve areas where gaps are identified. Developing definitions and indicators for measuring resilience is an ongoing area of applied research with a number of activities currently being funded by the Australian Government, under the NEMP program.

For example, the Torrens Resilience Institute is developing a practical tool for communities to assess their resilience in the face of major disasters or emergencies. Whether the community is hit by an extreme of weather, wildfire, a major industrial or transportation emergency, or other assault on services or threats to health and safety, the resources and attitudes in place prior to the event will determine the speed with which the community resumes normal life patterns or even leaps ahead. This tool will provide communities with substantial insight into their level of resilience and will assist in identifying opportunities to improve.

Conclusion

The philosophical shift in both our thinking and approach to hazard and disaster policy in Australia has already ensured a much greater focus on prevention and preparedness.

The Strategy, which provides high-level strategic direction and guidance for developing new or ongoing disaster resilience work, does not operate in isolation. Rather it is, and will continue to be, complemented by a number of other initiatives at both national and state levels.

The timing and coordination of actions under each Priority will need careful consideration to ensure the expectations of the emergency management sector and the wider community can be met and supported. These actions will evolve over time as implementation of the Strategy progresses.

Strengthening Australia's disaster resilience is not an activity that can be achieved in a set timeframe, nor can it be achieved without a joint commitment and concerted effort by all sectors of society. It is a long-term evolving process which requires sustained behavioural change. By working in partnership with all levels of government and the non-government sector, we can build on our current strengths and capabilities and continue to enhance our disaster resilience.

Effects of the 2009 bushfires at Kinglake, Kinglake, 3 months on **AUTHOR - Earthsharing Australia**

Glossary of acronyms and terms

ATM	Automated Teller Machine
CBD	Central business district
CFA	Country Fire Authority (Victoria)
CIR	Critical infrastructure resilience
COAG	Council of Australian Governments
DCS	Queensland Department of Community Safety
DSE	Victorian Department of Sustainability and Environment
ESVWG	Emergency Services Volunteer Working Group
HACC	Home and Community Care
NEMC	National Emergency Management Committee
NEMP	National Emergency Management Projects
NERAG	National Emergency Risk Assessment Guidelines
QRA	Queensland Reconstruction Authority
SAVEM	South Australian Veterinary Emergency Management
SCPEM	Standing Council on Police and Emergency Management
SEICCC	State Emergency Information Call Centre Capability
SEMC	State Emergency Management Committee
SES	State Emergency Service
The Strategy	National Strategy for Disaster Resilience
TISN	Trusted Information Sharing Network for Critical Infrastructure Resilience