Resilience in NSW:
the need for a comprehensive, coherent emergency planning framework

Peer Reviewed

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Abstract

The NSW Government has committed to the *National Strategy for Disaster Resilience* (Attorney-General's Department 2011) that encourages local communities to prepare for emergencies through disaster risk reduction and by building resilience. However, legislative obligations for emergency management in NSW remain focused on the responsibility of the emergency services organisations for specific hazards while these organisations advocate for community engagement. Community resilience requires individuals and organisations to take on more responsibility for preparing for emergencies. However, an 'all hazards' framework to support planning for emergencies has not been made available. By default, most communities expect emergency services organisations to tell them what to do. This creates a contradictory situation where emergency services organisations promote community resilience but resources to support planning are lacking. This can undermine a commitment to community resilience. Once an incident begins, the Australasian Interservice Incident Management System provides a tried and tested method to deal with emergencies based on the 'all hazards' approach. No similar approach has been developed to help communities make plans prior to an emergency. This paper examines current structures in NSW. It proposes that a framework, developed to address bushfire threats to schools in the Blue Mountains of NSW, could be the basis of an 'all hazards' planning framework.

Community resilience

With the experience of the 'Black Summer' bushfires of 2019–20, and as the number of serious climate-related incidents increases, emergency services organisations are making thorough preparations for managing emergencies. In NSW, many local councils and their local emergency management committees have made efforts to assist businesses and community groups, including schools and hospitals, to put emergency plans in place. For example, NSW Health provides emergency support to medical facilities and, more recently, school authorities have been proactive to assist school leadership teams to have emergency plans in place (McArthur 2019, p.67). In emergency services organisations, the approach has traditionally been 'top down', reflecting their institutional responsibilities. However, this is not the only approach. The Australian Institute for Disaster Resilience (AIDR) promotes disaster resilience (Australian Institute for Emergency Management n.d.a). The NSW Office of Emergency Management has developed a framework of mitigation as opposed to recovery and response (Office of Emergency Management 2017a, p.2). Given the scale and diversity of emergency events, including the COVID-19 pandemic, are these approaches sufficient?

While the COVID-19 pandemic is, at the time of writing, a global and national emergency, the scope of this paper is on the legislative and administrative arrangements that support community resilience in NSW. This paper provides an outline of the administrative framework for emergency management provided by NSW legislation governing emergency services organisations. Much of this legislation predates the concept of community resilience.

NSW emergency services legislation

Emergency services organisations in NSW are funded to meet their legislative obligations. The *State Emergency and*

Rescue Management Act 1989 (SERMAct) and the Acts governing Fire and Rescue NSW, NSW Police, NSW Rural Fire Service and NSW State Emergency Service define emergency management arrangements in NSW. These agencies have discrete, primary obligations as well as general obligations when emergencies require interagency cooperation. These general obligations, which apply more to significant incidents, are not funded by NSW Treasury to the same degree as the primary responsibilities of agencies (McConnell & Drennan 2006, p.63).

The SERMAct defines the architecture of emergency management in NSW. This 30-year-old Act, compared to current discourses and approaches, is distinguished by particular features: no reference to Commonwealth support, interstate cooperation confined only to rescue (*State Emergency and Rescue Management Act 1989*, Sect 58) and the lack of reference to 'resilience'. While the lack of attention to Commonwealth assistance and the limited scope of interstate cooperation may reflect a perspective when the Act was drafted, the lack of reference to resilience, particularly community resilience, underlines that 'resilience' is a comparatively recent development.

NSW Police

The *Police Act 1990* (NSW) defines the mission and functions of the NSW Police and includes 'the provision of essential services in emergencies' and that the provision of police services in emergencies and rescue operations is subject to the *State Emergency and Rescue Management Act 1989*' (*Police Act 1990*, Sect 6). These functions refer to the State Emergency Operations Controller (*State Emergency and Rescue Management Act 1989*, Sect 18), the provision of executive support to regional emergency management committees and operations controllers and the coordination of rescue operations and evacuations (*State Emergency Service Act 1989*, Sect 18, 32, 50, 60L, 61D). While police have very clear functions in an emergency, their obligations prior to an emergency event are to ensure a capacity to fulfil their functions should an emergency eventuate.

Fire and Rescue NSW

The *Fire and Rescue NSW Act 1989* establishes the purposes of Fire and Rescue NSW (FRNSW). The functions of the Commissioner are to 'take all practicable measures for preventing and extinguishing fires and protecting and saving life and property in case of fire in any fire district'. The term 'fire district' under this Act refers to cities and towns. The Commissioner may dispatch units outside fire districts and is required to take directions and to provide assistance in accordance with the SERMAct (*Fire and Rescue NSW Act 1989*, Sect 5A). To support its activities, FRNSW provides community education as part of its fire prevention strategy (Fire and Rescue NSW 2019a).

NSW Rural Fire Service

The *Rural Fires Act 1997* (NSW) defines the activities of the Rural Fire Service (RFS). The RFS functions are detailed in section 9 of the Act and are to provide 'rural fire services' for NSW, which are defined in terms of 'prevention, mitigation and suppression of fires in rural fire districts' and 'the protection of infrastructure and environmental, economic, cultural, agricultural and community assets from destruction or damage arising from fires in rural fire districts'. The RFS is also required to provide 'advisory services' and 'as directed by the State Emergency Operations Controller, to deal with an emergency where no other agency has lawful authority to assume command of the emergency operation'. There are also obligations to assist the State Emergency Operations Controller and to assist other emergency services organisations at their request (*Rural Fires Act 1997*, Sect 9). These obligations empower the RFS to undertake community engagement activities more so than other agencies.

NSW State Emergency Service

The *State Emergency Service Act 1989* (NSW) defines the functions of the NSW State Emergency Service (SES). Section 8 of the Act states that SES functions are 'to protect persons from dangers to their safety and health, and to protect property from destruction or damage, arising from floods, storms and tsunamis'. Like the other agencies, the SES is required to support the State Emergency Operations Controller, consistent with the requirements of the SERMAct, and to support other emergency services organisations at their request. The SES's sole requirement for community engagement relates to its need 'to co-ordinate the evacuation and welfare of affected communities' (*State Emergency Service Act 1989*, Sect 8).

NSW Health

The *Public Health Act 2010* (NSW) defines the responsibilities of the Minister of Health in relation to emergencies. Under this Act, the Minister for Health and Medical Research may declare any part of NSW as a 'public risk area' and may take measures to reduce or remove risks to public health (*Public Health Act 2010*, Sect 7 (3)). However, such declaration and measures have no effect in any part of the state 'for which a state of emergency exists under the State Emergency and Rescue Management Act 1989' (*Public Health Act 2010*, Sect 7(6)). The Act permits the minister to act when an emergency has been declared under the SERMAct (*Public Health Act 2010*, Sect 8). The Act does not lay emphasis on emergencies to the same degree as the other hazards-related Acts. These limited powers were insufficient to address the COVID-19 pandemic and the *COVID-19 Legislation Amendment (Emergency Measures) Act 2020* was passed by the NSW Parliament in March 2020. This Act enables criminal trials to be conducted 'in a way that is appropriate given the public health emergency caused by the COVID-19 pandemic' (*COVID-19 Legislation Amendment (Emergency Measures) Act 2020*, Division 1).

Resilience NSW

Resilience NSW, formerly the NSW Office of Emergency Management (OEM), sits within the NSW Department of Justice. Resilience NSW is the secretariat and delivery arm of the SERMAct (Office of Emergency Management 2019a). Resilience

NSW administers the New South Wales State Emergency Management Plan (EMPLAN) required by the SERMAct and its subordinate sub-plans (Office of Emergency Management 2019b). The EMPLAN and sub-plans are the framework that enables NSW to prepare for and respond to emergencies using a prevention-preparation-response-recovery approach (NSW Government 2018, Sect 110). The EMPLAN specifies that 'Agencies will engage with the community and stakeholders which will improve community understanding of these arrangements and promote disaster resilience' (NSW Government 2018, Sect 116).

The EMPLAN and sub-plans address specific hazards and also include 'supporting plans'. Some refer to services like energy, telecommunications and the environment but one refers to health services (Office of Emergency Management 2019c). Under this plan are the *Evacuation Decision Guidelines for Private Health and Residential Care Facilities* (NSW Government 2016). This guideline includes a decision-making 'algorithm' and is the sole document that aims to assist non-government organisations to respond to emergencies. OEM recognises the need to address other community needs and seeks community feedback (Office of Emergency Management 2019d).

Implicit in the NSW arrangements is the assumption that the community (i.e. individuals and organisations) will take directions from the agencies. In an emergency, this may be reasonable but in large-scale situations, particularly during the onset of an emergency, waiting to be told what to do may not be adequate. Resilience is designed to mitigate this reliance but there is an inherent tension implicit in expecting individuals and communities to take responsibility while also expecting them to take directions from authorities (Lukasiewicz *et al.* 2017, p.309).

Community resilience

Community resilience is a relatively recent discourse in emergency management, as evidenced by its omission in the SERMAct and other supporting Acts. A 1998 document for school principals refers to resilience (Emergency Management Australia 1998). In addition, Buckle (1999, p.26) examined Australian disaster experience and argued that understanding resilience within a community would enable targeted interventions to reduce vulnerability. The concept of resilience appears in international literature (Cutter *et al.* 2008; Haddow *et al.* 2011; Council on School Health 2008, p.900; Jimerson *et al.* 2005, p.296; Kano & Bourque 2007, p.215; MacNeil & Topping 2008; Phelan 2008, p.199; Twigg 2009).

In Australia, Holmgren (2009, p.16) reviewed the experience of the communities of Daylesford and Hepburn during the Black Saturday bushfires of 2009 and argued that 'in the final analysis households and communities will be resilient, or not, based on their own motivations and actions, not by the authorities waving magic wands'. The interest in resilience was due to emergency services agencies being found to be unable to provide the level of community protection needed. McLennan and Handmer (2012) questioned the feasibility of resilience, as it related to 'responsibility sharing' between individuals and communities,

and government agencies that are in a better positions to identify and manage risks (McLennan & Handmer 2012).

In 2011, the *National Strategy for Disaster Resilience* established the roles of government, expressed in terms of 'individuals' and 'communities' and 'having clear and effective education systems' (Attorney-General's Department 2011, p.v). The document argues for 'shared responsibility', climate change as a long-term threat, 'resilient communities' and seeks partnerships and networks 'from all levels of government, business, the not-for-profit sector'. This is supported by a Companion Booklet (Attorney-General's Department 2012, p.6). The aim of the strategy is empowering individuals and communities:

- *Local communities are engaged and have knowledge and expertise of local risk, how a disaster resulting from that risk would affect the local community and how potential treatments can be harnessed, to mitigate the risks.*

- *Accurate and authoritative risk information is provided, tailored to the needs of the audience, and the tools to interpret and act on that information, are available.*

- *Communities are aware of vulnerable elements of the community and consider their needs in the development of programs and plans.*

- *The community develops a strong understanding of the financial implications of disasters, options such as insurance are available to reduce the financial burden, and there are more choices and incentives to mitigate financial risks to households and businesses.*

- *Individuals and businesses have a strong understanding of the availability and coverage of insurance, including the risks that are included and excluded from their existing insurance policies.*

- *Information is available to enable individuals to make objective assessments about the defensibility of properties and communities from potential hazards and communicated appropriately.*

- *Programs and activities in schools and the broader community actively encourage volunteering.*

- *Significant providers of goods and/or services to the community undertake business continuity planning.*

(Attorney-General's Department 2011 p.1–10).

The intended outcomes are that communities understand hazards, identify mitigations and have plans (Attorney-General's Department 2012, p.20). The strategy is supported by the *National Strategy for Disaster Resilience: Community Engagement Framework Handbook 6* (Australian Emergency Management Institute 2013).

In 2014, Emergency Management Australia closed the Australian Emergency Management Institute as a separate facility in Victoria. The subsequent establishment of the AIDR has raised questions about cost and responsibility shifting from the Australian Government to states and territories (Sharma 2014). AIDR is under contract to the Australian Government and began operations in 2015. Its efforts concentrate on knowledge

dissemination and professional development for the emergency management sector (Australian Institute for Disaster Resilience n.d.b). Of particular importance are the AIDR handbooks that include emergency management (under review in 2020). AIDR promotes knowledge acquisition and dissemination in relation to disaster resilience. Its programs include initiatives for schools, addressing primarily children's understanding of emergencies using the Disaster Resilience Education Strategy Group (Australian Institute for Disaster Resilience n.d). In contrast, the New Zealand Resilient Organisations, established under a government grant, takes a different approach to resilience by focusing on how organisations are managed rather than focusing on the emergencies (Resilient Organisations 2020).

Implementing a national policy in NSW

NSW has committed to community resilience and work has been done by the emergency services organisations to this end. FRNSW has community information programs and promotes the use and maintenance of home smoke alarms, bushfire plans and escape plans from homes (Fire and Rescue NSW 2019b). The RFS has established messaging that promotes bushfire planning (NSW Rural Fire Service n.d.a). The SES informs people about 'local risk' (NSW State Emergency Service n.d.). Emergency NSW promotes preparedness in its 'Get Ready' campaign for individuals, local councils, community service organisations and businesses (Office of Emergency Management 2019).

Of these campaigns, the most comprehensive support is provided for businesses in the form of a guide with detailed advice on emergency preparations (NSW Department of Industry 2018). However, regardless of the achievements of these approaches, there is a weakness because these programs are agency centric and lack a common conceptual framework for emergency planning. The work of NSW emergency services organisations is admirable. However, effective emergency plans should address all hazards and all risks. A common response framework can only exist once emergencies begin (Australasian Fire and Emergency Service Authorities Council 2013). A recognition of the need for a more comprehensive approach is provided by a new framework to promote improved capability by the NSW 'emergency sector' (Resilience NSW 2020).

In Australia, a possible national conceptual framework and support materials for resilience are available from the Australian Council for Social Service (ACOSS). These materials are part of a 2015 Resilient Community Organisations initiative and, at the time of print, many of the website links were not active. Regardless, the key concepts in the framework are:

> Step 1: Leadership
> Step 2: Building Networks
> Step 3: Know Your Risks
> Step 4: Manage Your Risks
> Step 5: Preparing Others
> Step 6: Learning and improving (ACOSS 2015).

Resilient Community Organisations used the then current ISO 31000:2009 for risk management and included a plan template (Resilient Community Organisations 2015). This was aimed

at community organisations, but the framework would be transferrable to other organisations using a prevent- prepare-respond-recover framework. AIDR provides resources that support risk assessment including the *National Emergency Risk Assessment Guidelines* (NERAG) that are based on AIDR's handbooks 10 and 10.1. These handbooks refer to AS/NZS ISO 31000:2009 and could supersede the ACOSS online resources (Australian Institute for Disaster Resilience 2016).

A strength of the ACOSS approach is its understanding of the importance of organisational leadership in ensuring that emergency planning is done and kept current. The limitations of the ACOSS framework are its assumptions that other organisations need not know what the emergency services organisations do. While the Australian Government does not provide an up-to-date framework, the NSW Government could develop an emergency planning framework for organisations.

Based on experience and using a case study of the 2019 Hawkesbury Road Project, the planning framework's key elements could be:

· understanding emergencies, including the importance of leadership

· knowing the role of emergency services organisations

· knowing the hazard potential and vulnerability in locations based on history and demography

· conducting risk assessments

· creating emergency management plans based on risk assessments

· negotiating the plan with communities to promote resilience

· testing and improving the plan as a continual, cyclic process.

The Hawkesbury Road Project

In 2019, the Hawkesbury Road Project was a collaboration between an RFS Brigade and a school education agency to help school principals decide whether to close or evacuate a school under threat from fire (McArthur 2019, p.67). The project drew on the knowledge and experience of an RFS Brigade in the Blue Mountains to assist local schools to make emergency plans in line with reasonable expectations of the RFS and its understanding of bushfire behaviour. The project culminated in a greatly enhanced mutual understanding between the schools and the brigade.

A key insight of the project was that emergencies arising from natural causes are almost always geographical and can be repeated events. The project's methodology constructed a 'bridge' between the knowledge and experience of emergency services organisations and the community institutions. This bridge served to decrease the schools' dependence on agency 'top-down' direction by building the expertise of 'situational awareness' for school leaders.

If this approach was expanded to a state-wide implementation it would require agreement between emergency services organisations on common hazards messaging. To some extent, NSW emergency services organisations already operate in this fashion. For example, there is common messaging for bushfire

threats developed by the RFS and used by FRNSW (Fire and Rescue NSW 2019c). Within NSW's emergency arrangements, the ideal body to coordinate such an initiative would be Resilience NSW, which would address interagency issues (Granot 1997).

A final element is the adoption of a common framework for the promotion of organisational resilience in emergencies. This requires an acceptance of the legitimacy of responses to emergencies by communities and community organisations. The assumption that communities should wait to be told what to do may not work when communities are partly responsible for their safety (Lukasiewicz *et al.* 2017, p.309). For incident controllers, the decisions of community organisations, (e.g. businesses, welfare organisations, hospitals, aged care facilities and schools) need to be given greater consideration.

Conclusion

In NSW, the framework for responsibilities has been mainly 'top down' and reflects legislated responsibilities. The commitment of the NSW Government to the *National Strategy for Disaster Resilience* requires different levels of engagement with an expanded group of stakeholders. An essential element is an integrated, coordinated framework for community organisations to develop plans that reflect their risks and the hazards to which they are potentially exposed. While observations outlined here refer to the NSW approach to implementing Australia's *National Strategy for Disaster Resilience*, there is value in considering how communities in other states and the territories are supported. In 2020, NSW appointed the former Commissioner of the RFS, Mr Shane Fitzsimmons, to lead the newly established Resilience NSW. The focus of this agency on preparation and recovery is an opportunity to improve the coordinated frameworks for emergency planning and response in NSW.

References

ACOSS 2015, *What is Resilient Community Organisations?* At: https://resilience.acoss.org.au [29 March 2020].

ACOSS 2015, *Disaster Plan for Community Organisations.* At: https://resilience.acoss.org.au/site/assets/uploaded/f7dc0adf-disaster-plan-for-community-organisations-template-final_v12_aug16.docx [29 March 2020].

ACOSS 2015, *Policies and Procedures for Disasters and Emergencies.* At: https://resilience.acoss.org.au/the-six-steps/managing-your-risks/policies-and-procedures-for-disasters-and-emergencies [29 March 2020].

ACOSS 2015, *Risk Management: An Introduction.* At: https://resilience.acoss.org.au/site/assets/uploaded/8c5a265a-an-introduction-to-risk-manaagement.pdf [29 March 2020].

Attorney-General's Department 2011, *National Strategy for Disaster Resilience, Canberra.* At: https://knowledge.aidr.org.au/resources/national-strategy-for-disaster-resilience/.

Attorney-General's Department 2012, *National Strategy for Disaster Resilience: Companion Booklet, Canberra.* At: https://knowledge.aidr.org.au/media/2154/nationalstrategyfordisasterresilience-companionbooklet.pdf.

Australasian Fire and Emergency Service Authorities Council 2013, *The Australian Inter-Service Incident Management System East, Melbourne.*

Australian Emergency Management Institute 2013, *National Strategy for Disaster Resilience: Community Engagement Framework Handbook 6, Canberra.* At: https://knowledge.aidr.org.au/resources/handbook-6-community-engagement-framework/.

Australian Institute for Disaster Resilience n.d.a, *About AIDR.* At: www.aidr.org.au/about-aidr/ [29 March 2020].

Australian Institute for Disaster Resilience n.d.b, *AIDR Strategy 2018–2021.* At: www.aidr.org.au/media/5683/aidr-on-a-page.pdf [29 March 2020].

Australian Institute for Disaster Resilience 2016, *AIDR eLearning.* At: http://elearning.aidr.org.au/index.php [29 March 2020].

Australian Institute for Disaster Resilience (n.d.), *Australian Resilience Handbook Collection.* At: www.aidr.org.au/about-aidr/ [29 March 2020].

Australian Institute for Disaster Resilience n.d., *Education for Young People.* At: www.aidr.org.au/programs/education-for-young-people-program/ [29 March 2020].

Australian Institute for Disaster Resilience n.d., *Emergency Planning Handbook.* At: www.aidr.org.au/about-aidr/ [29 March 2020].

Buckle P 1999, *Re-defining community and vulnerability in the context of emergency management. Australian Journal of Emergency Management, Summer 1998–99, pp.21–26.*

Council on School Health 2008, *Disaster Planning for Schools. Pediatrics, vol. 122, p.895.*

Holmgren D 2009, B*ushfire Resilient Communities and Landscapes: a discussion paper for Daylesford and Hepburn townships.* At: https://holmgren.com.au/wp-content/uploads/2013/02/Hepburn-BushfirePlan5.2.pdf.

Cutter SL, Barnes L, Berry M, Burton C, Evans E, Tate E, Webb J 2008, *A place-based model for understanding community resilience to natural disasters. Global Environmental Change, vol. 18, pp.598–606.*

Emergency Management Australia 1998, *Emergency/Disaster Planning for Principals. Canberra.*

Fire and Rescue NSW 2019a, *Prevention and Community Preparedness.* At: hwww.fire.nsw.gov.au/page.php?id=9189 [29 March 2020].

Fire and Rescue NSW 2019b, *Community Fire Safety.* At: www.fire.nsw.gov.au/page.php?id=879 [29 March 2020].

Fire and Rescue NSW 2019, *Bushfire and Emergency Information.* At: www.fire.nsw.gov.au/page.php?id=9209 [29 March 2020].

Granot H 1997, *Emergency inter-organizational relationships. Disaster Prevention and Management: An International Journal, vol. 6, pp.305–310.*

Haddow GD, Bullock JA & Coppola DP 2011, *Introduction to emergency management. Butterworth Heinemann, Burlington, MA.*

Jimerson SR, Brock SE & Pletche, SW 2005, *An Integrated Model of School Crisis Preparedness and Intervention: A Shared Foundation to Facilitate International Crisis Intervention. School Psychology International, vol. 26, pp.275–296.*

Kano M & Bourque LB 2007, *Experiences with and Preparedness for Emergencies and Disasters Among Public Schools in California. NASSP Bulletin, vol. 91, pp.201–218.*

Lukasiewicz A, Dovers S & Eburn M 2017, *Shared responsibility: the who, what and how. Environmental Hazards, vol. 16, pp.291–313.*

MacNeil W & Topping K 2008, *Crisis management in schools: evidence-based prevention. Journal of Educational Enquiry, vol. 7, pp.64–94.*

McArthur T 2019, *Lessons learnt: two schools in a major bushfire. Australian Journal of Emergency Management, vol. 34, no.3, pp.67–72.* At: https://knowledge.aidr.org.au/resources/ajem-july-2019-lessons-learnt-two-schools-in-a-major-bushfire/.

McConnell A & Drennan L 2006, *Mission Impossible? Planning and Preparing for Crisis. Journal of Contingencies and Crisis Management, vol. 14, pp.59–70.*

McLennan BJ & Handmer J 2012, *Reframing responsibility-sharing for bushfire risk management in Australia after Black Saturday. Environmental Hazards, vol. 11, pp.1–15.*

NSW Department of Industry 2018, *Get Ready Business.* At: www.industry.nsw.gov.au/__data/assets/pdf_file/0008/167831/Get-ready-disaster-tool-brochure.pdf [29 March 2020].

NSW Government 2016, *Evacuation Decision Guidelines for Private Health and Residential Care Facilities.* At: www.emergency.nsw.gov.au/Documents/publications/guidelines/Guideline-Evacuation-Decision-Making-Guidelines-for-Health-and-Aged-Care-Facilities.pdf [29 March 2020].

NSW Government 2018, *New South Wales State Emergency Management Plan, Sydney.* At: www.emergency.nsw.gov.au/Pages/publications/plans/EMPLAN.aspx.

NSW Health n.d., *Emergency Management Arrangements for NSW Health.* At: www1.health.nsw.gov.au/pds/ActivePDSDocuments/PD2012_067.pdf [19 May 2020].

NSW Rural Fire Service n.d.a, *Plan and prepare.* At: https://www.rfs.nsw.gov.au/plan-and-prepare. [29 March 2020].

NSW State Emergency Service n.d., *Enter your suburb.* At: www.ses.nsw.gov.au/your-local-risk/ [29 March 2020].

Office of Emergency Management 2017a, *Emergency Risk Management Framework, Sydney.* At: www.emergency.nsw.gov.au/Documents/publications/ERM-framework.PDF.

Office of Emergency Management 2019a, *About Us.* At: www.emergency.nsw.gov.au/Pages/about-us/about-us.aspx [29 March 2020].

Office of Emergency Management 2019b, *Plans.* At: www.emergency.nsw.gov.au/Pages/publications/plans/Plans.aspx [29 March 2020].

Office of Emergency Management 2019c, *Supporting Plan.* At: www.emergency.nsw.gov.au/Pages/publications/plans/supporting-plans/supporting-plans.aspx [29 March 2020].

Office of Emergency Management 2019d, *Community Service Organisations.* At: www.emergency.nsw.gov.au/Pages/about-us/about-us.aspx [29 March 2020].

Office of Emergency Management 2019, *Get Ready.* At: www.emergency.nsw.gov.au/getready [29 March 2020].

Phelan TD 2008, *Emergency management and tactical response operations: bridging the gap. Butterworth-Heinemann/Elsevier, Amsterdam.*

Resilience NSW 2020, *A Capability Development Framework for NSW Emergency Management Sector [25 August 2020].* At: www.emergency.nsw.gov.au/Documents/Capability%20Development%20Framework%202020.pdf.

Resilient Organisations 2020, *Resilience.* At: www.resorgs.org.nz [29 March 2020]

Sharma M 2014, *Mount Macedon disaster training campus shut down, The Australian, 19 May 2014.* At: www.theage.com.au/national/victoria/mount-macedon-disaster-training-campus-shut-down-20140518-38hyp.html [29 March 2020].

Twigg J 2009, *Characteristics of a Disaster-Resilient Community: A Guidance Note. Version 2. Interagency Group, London.* At: https://discovery.ucl.ac.uk/id/eprint/1346086/1/1346086.pdf.

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Emergency Planning Handbook

The economic cost of emergencies in Australia over the past decade averages $18.2 billion per year, and the real cost in terms of human suffering and environmental damage is larger. A key to minimising the cost and effects of emergencies, after all reasonable risk reduction measures have been taken, is effective emergency planning.

Emergency planning plays an important role in the development of Australia's disaster resilience capability. The *Emergency Planning* Handbook reflects changes in the field of disaster risk reduction, emergency management and more broadly in society since the publication of the previous *Emergency Planning Manual* (2004).

The handbook provides nationally agreed principles for good practice in emergency planning and draws on and complements current practices. The handbook introduces the strategic context and importance of emergency planning, the emergency planning process, the potential elements of an emergency plan, the actions needed to implement the plan and to monitoring and evaluation.

Access the handbook at https://knowledge.aidr.org.au/resources/emergency-planning-handbook/