



A study of four natural disasters in Australia: how the human response to fire, flood and cyclone contributes to community resilience and recovery.

Research Question:

“What do community members do (and see others doing) after a natural disaster, that helps their community to recover?”

*A thesis submitted for the degree of
Doctor of Philosophy of the
Australian National University.*

This thesis has not been previously submitted to meet requirements for an award at this or any other higher education institution. The thesis contains no material previously published, or any material written by another person except where due reference is made. This thesis and the research it describes are both the original work of the author. The author has been supervised and has complied with all requirements of the Human Research Ethics Committee (Australian National University) in the design and conduct of this research. This thesis is 93,781 words.

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October 2016

All participants in this research have provided written consent for their contributions to be included in the analysis and publication of this research and any subsequent or related research. Participants in Stage 1 of this research have also given permission for their names to be published and for quotations and contributions to be attributed to them. Participants in Stage 2 have given their permission to have quotations attributed to them more generally as a member of a specific community.

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October 2016

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This research is dedicated to the men, women and children from the many communities across Australia who have already experienced, or may in the future experience, the effects of a natural disaster. These people face difficult and frightening circumstances and sometimes suffer enormous loss. Many lose their homes, their businesses, their source of income, beloved domestic pets or livestock, and the wildlife that surrounded their homes and filled their ears on a sunny day. Many lose family members or others they love; who die during the crisis, or in the days and weeks afterwards. Many lose their sense of security, of personal safety, of ordinariness. Some of these losses are temporary while others last forever.

To the 10 leaders and the 112 community members who shared their stories with me, thank you. Thank you for your trust and your willingness to talk to me about this difficult time. I felt honoured to sit with you as you shared your stories, your experience and your understanding.

I am grateful to community members who showed me their homes, their gardens, and the prized possessions they plucked from the ashes, the water, or the broken remnants of their home. They told me that others were 'worse off than them', and reminded me of the ways in which they feel fortunate. I am grateful to these people who shared their experience of one of the most difficult times of their lives. This research is for these participants and for the people in communities who face and survive crisis and loss each bushfire or cyclone season, and through every flood or torrential storm. I hope I do justice to their stories, their optimism, their courage, their trust and their endurance.

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Finally I thank my children, my family and my friends – for their love, their belief in me and for their patience.

ABSTRACT

This research documents a scientific and systematic analysis of community resilience, as demonstrated through the experience of disaster response and recovery in Australia. It focuses on rural and regional communities affected by natural disasters including fire, flood or cyclone. Its aim is to identify whether the people within affected communities lead their community recovery process, what key factors influence that process, whether community leadership is demonstrated during and after disasters, and what lessons can be learned by listening to the lived experience of community members.

Australia's disaster management policy framework has at its core the *National Strategy for Disaster Resilience* (2011), agreed by the Council of Australian Governments (COAG). At all levels in the Australian government and non-government sectors, disaster management policies and frameworks emphasize the central role of communities in disaster recovery, arguing that successful recovery engages communities and empowers community members to lead their own recovery. Such 'community led recovery' is advocated widely, however a systematic literature review has revealed little published scientific research about the community experience of disaster recovery, whether 'community led recovery' is a reality or a myth, or how to build resilient communities.

This research investigated different perceptions and experiences of natural disasters in communities in Australia; identifying factors considered by the participants to be important to community resilience and recovery, and describing specific actions community members and others take to help themselves and one another. This study gathers data from two different groups: initially by interviewing ten individuals who have held disaster recovery leadership roles; and then by conducting fieldwork in four communities across eastern Australia, interviewing 112 community members.

Both groups described their understanding of the key domains of community adaptation or recovery after natural disaster. They described the factors that support or hinder that process of community recovery, within each of these domains. Both groups described their observations and experiences of what occurs within disaster affected communities. In particular community members described their own actions and the actions of others.

Clear findings emerge from the analysis of this data. It reveals substantial evidence of the presence and effectiveness of community leadership, and the significant contribution of community actions and activities in strengthening and supporting community resilience and recovery after natural disaster. It identifies lessons that can be learned from communities affected by disaster. These lessons emphasise the importance of what happens before the crisis, include implications of what happens during the crisis, and describe actions and activities that support the process of community adaptation after the crisis had passed.

A significant feature of this research is that it provides a vehicle for the voices of community members: to share their experience of natural disaster and their powerful narratives about that experience. These narratives are of hope, courage and endurance and demonstrate the power of human connection, compassion and kindness.

The findings of this study have significant implications for how governments, organisations and communities themselves prepare for, respond to, and recover from natural disasters in the future.

FOREWORD

My interest in natural disaster began when I was young. I grew up in western Victoria (Australia) where fire was and remains a known risk each summer. Community members (particularly farmers) were volunteer fire fighters. Trucks stood ready throughout the summer; water tank filled with water; pump and hoses operational. The two-way radio provided information about local fires and was the mechanism for co-ordinating an emergency response.

On 12 February 1977 fire burned across the Western Districts of Victoria. Weather conditions were particularly bad and by day's end fire had largely razed the town of Streatham leaving 350 people homeless, destroying 340 buildings and 116 homes, burning 103,000 hectares and resulting in the loss of almost 200,000 livestock. The cost of this disaster was then \$9 million, with the Insurance Council of Australia normalising this cost at \$101 million in 2011 (Department; 2016). Four deaths resulted from this fire, including a near neighbour who died when he returned to his home to save his family, not aware that they had already been evacuated. As with many crises, there were many more 'close calls' where people miraculously escaped death (McKenzie 1983). After the crisis passed, the community rallied. Farmers helped one another rebuild fences and haysheds. If spared from the fire, they shared their hay to feed their neighbours' livestock. The football club and the local men and women turned out to help.

Almost 26 years later, on 18 January 2003 fire threatened my home in Canberra. In almost total (daytime) darkness, I and another family member protected my home. Like many others, I subsequently worked at the community recovery centre, helping affected community members obtain new personal identity papers, file claims for insurance, and begin to come to terms with their many losses. Again the community rallied to support one another.

This research is about 'community', and what people do in response to a crisis. The research looks for evidence of what actually happens 'on the ground'; to find out whether communities are active and capable, or whether they are passive and dependent on assistance from governments and large non-government organisations. Most importantly this research gives a voice to community members themselves, to describe what they do and see, and what happens to support them as they get their communities 'back on their feet'.

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Chapter 1: Introduction

*"I love a sunburnt country,
A land of sweeping plains,
Of ragged mountain ranges,
Of droughts and flooding rains.
I love her far horizons,
I love her jewel-sea,
Her beauty and her terror -
The wide brown land for me!"*

Dorothea Mackellar (1908)

The need for this research

Since before colonisation Australia has been a land of fire, flood, cyclone, and drought: a land of extremes in geography, landscape and in weather events. Indigenous people lived in such a way that they were able to accommodate the power of at least one of these extreme weather events (fire) to control and regenerate the landscape. Since European settlement in 1788, people have attempted increased mastery over the environment and as population size has increased, so have settlements spread in size and become more and more densely urban. However, such settlement has not tamed the weather. Fire, flood and cyclone are a feature of summer in Australia, sometimes with different extremes occurring simultaneously in different locations across the country. International science argues compellingly that the combined effects of climate change and human settlement patterns are contributing to the increasing frequency and intensity of extreme weather events, and therefore to the magnitude of their impact and their consequences, not only in Australia but also worldwide (Boon, Cottrell et al. 2011, Cox and Perry 2011, Lopez, Thomas et al. 2015).

The human and financial cost of these disasters to households, regions, and nations is also increasing exponentially, and is a complex combination: *direct* costs such as to replace or repair property, livestock, infrastructure and housing; *indirect* costs including business disruption and network disruption resulting in lost production; and *intangible* costs such as dislocation, impacts on physical and mental health, loss of cultural heritage, and damage to the environment. (Gentle, Kierce et al. 2001) There is also the cost of other financial support: including insurance, government subsidies, and donations from the general public.

Numerous methods are employed to estimate the cost of natural disasters in Australia, and these estimates continue to rise each year. In 2008 annual insured losses were

estimated to be more than AU\$1 billion (Crompton and McAneney 2008). In 2013 the cost of natural disasters were estimated to average around AU\$6.3 billion per year and to reach AU\$23 billion per year by 2050 (Harper 2013). In 2014, a different source estimated the overall cost to the Australian economy to be AU\$6.3 billion per year, with that cost expected to rise to AU\$21 billion by 2050 (Economics; 2014). In 2016 that same source found that the social costs of natural disasters in 2015 at least equalled the physical costs, that the economic costs in Australia exceeded AU\$9 billion or approximately 0.6% of gross domestic product. This source now argues that a conservative estimate of the costs of disasters will rise to an average of AU\$33 billion per year by 2050 unless steps are taken to increase resilience, with the implication being to reduce costs (DeloitteAccessEconomics 2016).

Smart phone technology, the prevalence of social media, and the 24-hour news cycle bring natural disasters into homes and hands across Australia and the world, in real time. The details of each disaster include live updates about loss of life, property and livestock with graphic pictures and videos. These come into living rooms and workplaces across Australia every summer.

In spite of our best efforts, we cannot prevent natural disasters from occurring. There will therefore be ongoing human and financial costs. Effective disaster preparation and planning does reduce the physical, economic and social impact and costs of a crisis. A well-prepared and resilient community will also reduce the post crisis costs and increase the effectiveness of disaster response and recovery. There is a strong financial imperative for communities to be more resilient and for their recovery from disaster to be more resource efficient and ultimately more effective. There is therefore a strong imperative to determine how communities themselves behave as part of the system and process of disaster preparation, planning, response, and recovery, and whether (and if so how) this contribution can be more effective and cost efficient.

Added to this context is a cultural and historical identity and heritage that in part defines what is required to survive in Australia, particularly ingrained in rural and regional communities; a combination of self-sufficiency and self-reliance, individual 'grit' and community support and camaraderie. Popular poets, writers and historians from Henry Lawson (1867 – 1922), to Dorothea Mackellar (1885 - 1968), to Russell Ward (Ward 1958) and Don Watson (Watson 2014) have explored and described this combination of qualities that has become the legend of the 'Australian bush spirit' forged in a harsh Australian environment.

The increased frequency, intensity, cost and awareness of natural disasters in Australia and worldwide demands a response. This response emerges in a plethora of disaster management literature, plans and policies: promulgated from governments, from non-government organisations and from academic institutions. It emerges from the United Nations; from national, regional and local governments; and from within organisations who respond to natural disasters, such as the Red Cross. The Australian Council of Governments has responded by developing a National Strategy (Council of Australian Governments 2011), and state and federal agencies have developed disaster plans and policies to provide guidance about how to conceptualise, understand, prepare for and respond to disasters with some inclusion of how to engage with communities along the way (Victorian Government - Department of Sustainability and Environment 2004, Australian Government 2011).

Academic research is also producing an array of researchers and institutes, all investigating the field of natural disasters. This research has produced frameworks and undertaken studies to build a shared understanding of disasters, how they unfold, and their implications. Much of this research is also designed to increase our knowledge of how effectively governments, organisations and others prepare for and respond to the growing number of intense disasters (Quarantelli 1978, Rodriguez, Quarantelli et al. 2006, Raphael and Stevens 2007, Wisner, Caillard et al. 2012).

Even with this extensive knowledge, there are three significant gaps in this academic and policy discussion. Firstly, the voice that is profoundly missing from this burgeoning field of analysis is the voice of the community itself. Little research is focused on *community* resilience or recovery from the perspective of the community itself. Frequently research reflects the perspective of the 'expert' or the organisation with an official role or responsibility for disaster planning or response. Secondly, the aspect of disaster least addressed is that of the *long-term or sustained recovery* of communities. The focus of the majority of the literature is either on disaster overall, the phases of preparation and planning, or on the crisis and emergency response. There is limited research about what those most affected by the disaster actually experience, think or do afterwards, or how they act to heal and renew their communities over time. Finally, the focus of much of the literature is on the negative aspects of disaster: the human and financial costs of disaster, the lack of planning and preparation, inadequate response or ineffective support, and the consequences such as increased domestic violence, increased mental health issues, and post traumatic stress disorder. The existing research lacks a focus on *community strength and action*.

This research addresses these gaps in the literature, by focusing on the strengths and capacities within communities, by engaging with and listening to the community members themselves, and by focussing on the recovery phase and long term community resilience. The evidence gathered reveals what community members themselves do, and what others do with and for them, to rebuild their sense of community after a natural disaster. It focuses on the action taken by community members and others, as this is the demonstration and expression of community agency, community capacity, and community resilience.

The researcher recognises that for some community members, groups and potentially whole communities, the experience of disaster may be too great, the loss too significant, the devastation too severe. For these community members they may not feel that 'resilience' or 'recovery' describes their experience. Individuals and families for whom the experience was too much, may have left the affected community. Others who remain in the community will simply not volunteer to participate in this research. This research in no way underestimates the vulnerability felt by community members before, during and after a crisis. Neither does it underestimate the challenge (economically, socially, and physically) that faces any affected community. The data gathered by this research can only reflect the experience and views of those who participate in it, and cannot reflect the equally valid experiences and perspectives of those who do not.

The aims of this research

The aims of this research are to explore whether community led disaster recovery and community resilience is a reality in Australia, by investigating:

1. whether community leadership exists or emerges from within disaster affected communities in Australia;
2. whether community members from affected communities lead or take action to ensure that their community is able to adapt after a natural disaster such as fire, flood or cyclone;
3. how this community recovery process is experienced and understood by those most affected by it and what the process includes; and
4. what lessons can be learned by listening to and understanding the experiences of members of four communities who have emerged from these disasters.

The core of this research is to reveal how community members understand and reflect on their community recovery process, to identify what they observed occurring in their

community after a natural disaster, and in particular to focus on what happened that they believe significantly supported the resilience of their community.

The research specifically asks the following research question of community members: “what action was taken in your community that supported your community to recover after the natural disaster that occurred here?” Through analysis of the evidence gathered, the research then addresses obvious additional questions about who instigated these actions, which types of actions are effective, whether there are key similarities or differences between different communities, and whether the type of disaster experienced (e.g. fire, flood or cyclone) is relevant to these similarities or differences.

The powerful narrative that emerges from listening to the community members’ answers to this question, is one of strength and capacity, of courage and kindness, of perseverance and of action (both planned and spontaneous). This narrative is repeated in each location regardless of whether the community experienced a fire, flood or cyclone. The communities included in this research faced devastating loss and adversity with determination. While they all describe grief, tragedy and damage that left many of them reeling, they also describe how they found ways to help one another, to face the horror, and to deal with their loss and grief. They describe the complex process of community recovery and they express a desire to share what they have been through, to help other communities who will face similar disasters in the future.

The two stages of this research

This research was conducted in two stages with two different participant types (formally appointed leaders of disaster recovery, and community members from affected communities), to investigate the different observations and experiences of disaster recovery processes from two different perspectives. The first stage involved conducting semi-structured interviews across Eastern Australia with formal leaders of disaster recovery (Stage 1); and the second involved conducting semi-structured interviews again across Eastern Australia with community members from four separate rural or regional communities affected by the natural disasters of fire, flood and cyclone between 2006 and 2013 (Stage 2).

The purpose of both stages of the fieldwork is to understand how the process of community recovery occurs in Australia, to identify the key factors that support or hinder that process, and in particular to identify what actions and activities most support that process, ‘on the ground’ in disaster affected communities.

During Stage 1, ten high profile leaders of disaster recovery were interviewed: including political leaders, leaders of recovery taskforces, and disaster recovery leaders from government, and from non-government organisations such as the Green Cross, the Red Cross, the Salvation Army and the Uniting Church. The purpose of Stage 1 was to identify what these leaders had observed during their leadership of the recovery phase of the disaster (or disasters), and to identify any common themes or domains. Based on these observations, each leader had developed their own understanding of community resilience and the community recovery process. They each spoke about the key elements of that process and they identified what they believe most successfully supports the outcome of a resilient and functioning community. Key themes emerged from interviews with these leaders, and these themes provided additional context, and informed the design of the core element of the research: the community-based fieldwork undertaken in Stage 2. In particular the findings of Stage 1, informed the finalisation of the questions for the interviews conducted in Stage 2.

The purpose of Stage 2 was to identify the actions that community members and others take after a natural disaster, and in particular to identify those that are highly effective in support of community recovery. The community-based fieldwork was conducted during 2013 – 2014 in four different locations across eastern Australia, each affected by a natural disaster:

- + Coonabarabran (New South Wales) as the site of a major bushfire in January 2013;
- + Dunalley and surrounds (Tasmania) also the site of a bushfire in January 2013;
- + the Lockyer Valley which experienced severe flooding in both January 2011 and again in 2013; and
- + the Cassowary Coast (Queensland) which regularly experiences cyclones and in particular Cyclone Larry in 2006 and Cyclone Yasi in 2011.

In each case the fieldwork was conducted no less than one year after the most recent occurrence of a disaster in that location, in order to ensure that the community was not still experiencing the rawest form of shock and grief about what had occurred in their location, and so that affected community members had time to reflect on their experience before participating in this research.

During Stage 2, 112 semi-structured interviews were conducted with community members from these locations: 34 participants from Coonabarabran, 22 from Dunalley

and surrounds, 28 from the Lockyer Valley, and 28 from the Cassowary Coast. These community members shared their stories, observations and experiences of the disaster itself and of the community response and recovery process. They described the actions and activities that made the greatest difference in their community, in the days, weeks, months and years following the crisis that (initially at least) devastated their community.

Important implications can be drawn from this research about the role of community action in the process of supporting a community affected by natural disaster.

Importantly, this research describes what happens 'on the ground' after a natural disaster, and what most supports the process of community recovery, as described in the words of the community members. This research therefore provides compelling evidence about community action; what form this action takes and how this action contributes to community resilience. The research has significant implications for how governments (federal, state and local), non-government organisations, other community organisations and groups, and community members themselves plan and prepare for, respond to, and recover from disasters in the future.

Structure of the thesis

This first chapter briefly introduces the research. It provides an overview of why the research is important, explains that the core of the research is focussed on what occurs in communities that are affected by natural disaster, identifies that this focus emerges from the literature, and outlines that the research that follows is designed and conducted in two stages. This chapter introduces the purpose of each of these stages of the research, and indicates the number of participants who have been included in each stage, and the locations of each community included in Stage 2.

The second chapter provides the context for the research that follows by defining and explaining core concepts that underpin the analysis and understanding of natural disasters and of community recovery. The chapter includes a review of key international and domestic disaster management and community recovery literature, and outlines how disaster is understood and managed in Australia. This chapter clearly demonstrates that while there is a considerable body of knowledge focussed on understanding disasters, including how they occur and their consequences, there is a significant gap in knowledge and evidence about the community recovery process, particularly from the perspective of the affected communities and in a way that identifies the strengths and capacities of those communities.

The third chapter clarifies the challenge that this gap in current knowledge presents, and leads to the research question to be answered. The proposition behind this chapter is that the voice of community members is absent from the discussion about disaster management in Australia, and in particular from the discussion about the process of community recovery, and the effort to enhance community resilience. The methods and design of the fieldwork are described in this chapter, including why this fieldwork is conducted in two stages, the rationale for each stage, site and participant selection, sampling methods, the ethical and practical considerations involved, and a discussion about the known and potential strengths and weaknesses of the approach taken.

The fourth chapter details the findings of the first stage of the fieldwork; semi-structured interviews with ten high profile, sometimes formally appointed, leaders of disaster management and recovery across Australia. This chapter includes the views of leaders such as General Peter Cosgrove, Anna Bligh, Christine Nixon and others. These leaders held political roles, were in charge of recovery taskforces, or held leadership positions in key government or non-government organisations with an active role in supporting community recovery after significant disasters in Australia's recent past. Their views provide a focus for finalising the approach to the community-based fieldwork that forms the central component of this research.

Chapters five, six and seven focus on the community based fieldwork that forms the core of this research, and each chapter provides an important component of the key findings of the fieldwork. The fifth chapter gives a clear voice to the four communities included in this study. This chapter provides the details of the actions and activities that occurred in each affected community and contributed to their recovery process. The observations of 112 community members form the basis of this chapter; including the mayor of each community, various community leaders, and members from across the community. Community members include the unemployed and retired, people employed in retail or hospitality, policemen and teachers, ministers of religion, small business owners, farmers, government employees and others.

This fifth chapter includes descriptions of what the community members themselves did and observed others doing to support the recovery of their community. These actions and activities are divided into categories to assist the understanding and analysis of the information gathered during this community-based fieldwork.

The sixth chapter emerged from the community based fieldwork, and responds to the energy and focus as expressed by the community members themselves. In each community, participants were very focussed on providing 'bottom line' advice to inform key policy makers, researchers and other communities, through the vehicle of this research. Community members were very clear and in some cases quite passionate about what they had learned from their experience, and what they most wanted other communities to learn from them. The concept of a 'bottom line' message resonated with them and these findings are therefore also given a particular focus in chapter six.

The seventh chapter outlines how these community members understand the core concepts that were explored in the first chapter: particularly community, disaster and recovery. It also details how community members see, understand and describe the phases of the recovery process, who is involved in that process and the factors that community members themselves identify as being the most supportive of community resilience.

The eighth chapter discusses and analyses the evidence gathered during both stages of this research; i.e. from both the high profile leaders of recovery and the community members. This analysis identifies the themes that emerge; compares the information obtained across the four community sites; compares the findings of stages 1 and 2 of the fieldwork; and identifies the key findings that emerge from the study as a whole. The most significant findings are emphasised in the conclusion of this chapter to highlight the powerful role that communities play in their own recovery process.

The final chapter explores the key conclusions drawn from this research, and identifies the implications that arise: for policy, for research, for organisations who provide assistance to communities, and for the communities themselves. This chapter identifies future research topics that would build on the findings of this research, and indicates changes to disaster policy that would further recognise and support the role that community members and leaders have in determining their own response to disaster. These future research areas and potential policy changes have the potential to reinforce inherent community strengths and capacities, and to consolidate the ability of communities to face any crisis or extreme weather event more effectively. This final chapter therefore indicates how this research contributes to the creation of more resilient communities across Australia.

Various explanatory and practical documents are contained in the appendices including information about a website established by the researcher as a way of introducing this work to participants and others; ethical clearance and related documentation; interview questions for both stages of the study, and additional details of the actions and activities that occurred in communities, as gathered during the community based fieldwork.

Chapter 2 – The context for this research

Introduction

Since Samuel Prince first published his sociological study of the 1917 maritime disaster in Halifax Nova Scotia (Prince 1920), including identifying the emergent behaviour in the community that followed that disaster, a considerable body of knowledge and research has developed that continually improves the collective understanding of natural disasters and their consequences (Alexander 1993, Abbott 2002).

Many academic fields explore the core concepts relevant to this research. Fields such as psychology (Bonanno 2004), sociology (Mileti, Drabek et al. 1975) and disaster resilience research (Manyena 2006, Paton and Johnston 2006, Norris, Stevens et al. 2008) explore concepts of resilience, community, and disaster. Disaster management policy makers incorporate resilience in their frameworks (UNISDR , UNISDR 1994, United Nations 2005, Aitsi-selmi 2015, UNISDR 2015). Governments espouse a range of concepts and aspects of recovery (including economic recovery, empowering local action, strengthening or rebuilding infrastructure and strengthening social networks and communities) in their strategies and policy responses (Australian Government 2011, Council of Australian Governments 2011). Non-government organisations and others have produced handbooks and manuals building on concepts of resilience and recovery with the intention of supporting and reinforcing resilience and community recovery (Australian Government 2011, Australian Red Cross 2012).

This literature review has been conducted by identifying, accessing and analysing a wide variety of sources of disaster related materials: including Australian and international policy documents and disaster frameworks, Australian and international scientific and academic literature and research, and government funded reports from extensive and numerous disaster reviews and Inquiries. The review of the literature included regular access to an extensive online search capacity within the Australian and international university and online scientific research networks, electronic access to world wide sites such as the Web of Science, detailed searches within international sites such as the United Nations Office for Disaster Risk Reduction, and accessing sites and research repositories within a variety of Australian academic and disaster resilience institutes. Given the extensive literature now available through these means, the literature review and analysis has been limited primarily to key English speaking academics from the United States of America, the United Kingdom, Australia and elsewhere.

Disasters that form an international context for this research are many and include the 2004 Boxing Day Indian Ocean tsunami, Hurricane Katrina in New Orleans (often cited as an example of 'what not to do' in response to a disaster and in order to support recovery), the earthquakes of 2010-2011 in Christchurch, and the earthquake in Nepal in 2015. A significant gap in knowledge and evidence about community resilience and recovery exists, in spite of frequent natural disasters occurring internationally and domestically, and a substantial growth in disaster related literature. In particular there is an absence of knowledge about the process that actually occurs 'on the ground' in affected communities, and any understanding of this process from the perspective of the community members themselves. There is also an apparent focus in the literature on deficit, dysfunction and disorder, exploring the incidence and features of Post Traumatic Stress Disorder (PTSD), rather than the recognition of the potential and actual strengths and capacities of affected communities.

In order to understand and discuss existing disaster related research, and to address this gap in knowledge, it is necessary to develop a shared understanding of core concepts and their definitions. What follows is a discussion of the central concepts of disaster, including a review of international and domestic literature, and an outline of how disaster is understood and managed in Australia.

Key concepts in the literature

A shared understanding of key concepts is essential to realising the value of any scientific inquiry or research: in this case concepts such as community, disaster, resilience and recovery, and social and community capital.

Community

The concept of community is clearly central to related concepts of community resilience, community recovery and community capital. A community is a complex and dynamic system of physical, environmental, economic, political, social and sometimes familial sub-systems. Recent disaster related literature argues that communities define themselves through established relationships between members, a sense of attachment to the place in which they are located (Wills 2001, Norris, Stevens et al. 2008, Cox and Perry 2011), and a degree of participation in and connection to community life. It is recognised that such participation includes the engagement of community members with schools, churches, community groups, and local associations. (Norris, Stevens et al. 2008).

Community members experience a shared fate in the face of crisis, or if not a shared fate, then at least a shared reality (Wills 2001, Norris, Stevens et al. 2008, Cox and Perry 2011). And the members of a community are both mutually affected by large scale events such as disaster, and they may come together to respond collectively to such a crisis or disaster (Boon, Cottrell et al. 2011).

While these definitions imply that community members live in proximity to one another, people may also be very strongly connected to a place in which they do not live. Similarly members of a local community may feel a strong connection to individuals or groups who reside elsewhere. A strict definition of community may not include these individuals or groups, and yet they may in fact have strong links to a community through their own personal or family history or their social networks (Boon, Cottrell et al. 2011). By including this final characteristic, a community is no longer defined by the members who live within it, or by a particular location, but rather also includes those who feel a strong attachment to the core community, and are affected by any significant occurrence or experience that affects them. This more fluid definition of community also begins to recognise that communities are connected to one another and can be somewhat dynamic systems, comprised of individuals and groups.

Disaster

While at one level, the definition of disaster may seem self-evident, it is important to clarify the scale or components of an event that result in it being defined as a disaster. One way of understanding the concept of disaster is to consider the criteria that an event must meet in order to be included in an internationally respected disaster database. Since 1988 the Centre for Research on the Epidemiology of Disasters (CRED) has maintained an Emergency Events Database (EM-DAT). Essential data about the occurrence and effects of over 18,000 mass disasters world-wide is contained on this database, from 1900 to the present. To be included in this database a disaster must meet at least one of the following criteria: at least 10 human deaths, 100 or more people affected, a declaration of a state of emergency or a call for international assistance (www.emdat.be/explanatory-notes). Similarly, the Australian Government maintains a database of disasters that have occurred in Australia from 1622 to the present day. To be included in this database, a disaster must meet at least one of the following criteria: at least 3 human deaths or 20 illnesses or injuries; significant damage to property, infrastructure, agriculture or the environment; or disruption to essential services, commerce or industry that results in a total cost of AU\$10 million or more at the time (www.emknowledge.gov.au/disaster-information).

Another option is to consider the definition applied by an international body such as the United Nations; which defines disaster as a “serious disruption affecting a community or population, causing deaths, injuries or damage to property, livelihoods, or the environment, that exceeds the ability of the affected community to cope using its own resources” (Boon, Cottrell et al. 2011). The Australian Government’s definition mirrors that of the United Nations, stating that disasters require special mobilization and organization of resources other than those normally available to affected communities or the organisations that are found within them (Australian Emergency Management Institute - Attorney General’s Department Disaster Website August 2012).

Seminal academic writers also describe disaster as a disruption of routine, or as non-routine events that create social dislocation and physical damage, destabilizing the physical and social system and requiring intervention to support its return to stability. This focus implies a cycle of stability, disruption, and adaptation or adjustment (Rodriguez, Quarantelli et al. 2006). This view is reflected in many frameworks and policies that describe disasters as essentially linear; a sequential set of largely predictable stages. Much more than a disruption of routine however, disasters are usually traumatic events that are large in scale; experienced collectively; have a specific, acute and often rapid onset; are defined by time; and may be attributed to natural, technological or human causes (Norris, Stevens et al. 2008). Disasters result in significant human hardship and damage, usually overwhelming, and at least initially exceeding the capacity of the community, which needs both time and support to respond and to achieve a new form of stability. (Raphael 1986, Quarantelli 1999, Rodriguez, Quarantelli et al. 2006, Raphael 2007).

Importantly, in addition to being physical catastrophes, disasters are at their essence social events, affecting individuals, families, communities and their social systems, and as such must generate social responses (Quarantelli 1999). Writers have long recognised that communities do respond to disasters themselves and that social networks and connections are integral to that response (Quarantelli and Dynes 1977, Fischer 2008).

The concept of phases of disaster has been a key element of understanding disaster, since the 1930s. The Australian approach to understanding disaster or emergency management has adopted four sequential stages of disaster: prevention, preparedness, response and recovery (Australian Government 2011) consistent with other frameworks that propose similarly sequential phases (Drabek 1986, Drabek 1987, Dynes and Drabek 1994, Neal 1997, Sundness 2014, Clarinval 2015).

Interestingly, some research further describes the recovery phase as having two additional divisions between *restoration* which is usually the first 6 months after the crisis, and *reconstruction* which is usually after that first 6 months (Neal 1997).

Neal reminds us that in reality the stages of any disaster are complex, multi-dimensional, overlapping and importantly non-linear. Some community members will behave in ways that are consistent with different stages simultaneously, they may progress at different paces, activities undertaken in each stage will influence the progress of community members through other stages, communities will work through the stages at their own pace influenced by their own circumstances and history, and that in order to understand this complexity, progress through the stages must be seen in social time (dependent on many of these factors) rather than in actual time (Neal 1997).

A final note about this concept is that a disaster is not the inevitable consequence of an extreme weather event or crisis. Whether an event is experienced as, perceived to be, or described as a disaster is influenced by a number of additional factors. These include the degree of community, physical and personal vulnerability and risk; the scale of devastation and the consequences of the event itself; and the nature and effectiveness of disaster response and recovery agencies. Of course a central determinant of whether a crisis is understood to be a disaster is also the degree of inherent and emergent resilience within the community system that has been affected by the crisis.

Community Resilience

This leads to an inevitable discussion about the concepts of community resilience and recovery. 'Resilience' can describe the capacity of a system to return either to equilibrium or its original form, after a disruption or a displacement (Prosser and Peters 2010). A wide range of fields of science focus on the speed with which the system is restored after a disruption, the persistence of key elements or relationships within the system, or its ability to absorb or adapt to change while still functioning effectively (Walker and Salt 2006). The metaphor is appealing and has been embraced by the social sciences. Respected academics have now developed the concept beyond the idea of 'bouncing back' or 'returning to normal', and now include the adaptive capacities of individuals, families and communities (Norris, Stevens et al. 2008, Cox and Perry 2011) as they find a new way to achieve an effective level of functioning, a new adaptation following a crisis.

Internationally, the *Hyogo Declaration and Framework for Action* defines resilience as 'the capacity of a system, community or society potentially exposed to hazards, to adapt by resisting or changing in order to reach and maintain an acceptable level of functioning and structure' (United Nations 2005). The *Sendai Framework for Disaster Risk Reduction* goes further by outlining seven global targets and four priorities for action, designed and negotiated to support and invest in a reduction in disaster risk globally and to support recovery, rehabilitation and reconstruction in order to enhance resilience (UNISDR 2015). While the focus of international frameworks is necessarily influenced by the scale of global disasters and their consequences, and therefore focuses on the physical and infrastructure aspects of resilience, the resilience of a system also refers to its ability to respond to and recover from disruption, to absorb impacts, instigate adaptive processes, reorganize, change and learn in response to a crisis (Cutter, Barnes et al. 2008), with the result that it achieves an acceptable level of function. There is widespread agreement that individuals and groups cannot return to their previous state but are able to return to pre-crisis levels of functioning (Gow & Paton, 2008; Norris, et al., 2008), and to find a new equilibrium.

Community resilience is enhanced by a number of factors such as having a strong and diverse set of economic resources spread relatively equally across the community; strong social capital including community networks; active community planning for disaster including involving the most vulnerable community members in this process; and developing decision making skills and flexibility in the face of changed circumstances (Norris, Stevens et al. 2008). In a resilient community, different groups collaborate effectively together to identify common problems, agree on what needs to be done to address these problems, and agree on and undertake necessary action thereby adapting to the crisis (Norris, Stevens et al. 2008).

Some government plans and policies appear to focus almost solely on the importance of rebuilding infrastructure and housing ('build it back quickly or better'), as if to represent an investment in physical infrastructure as being a panacea for all disasters. The idea appears to be that if the building codes are strict enough, if the levies are high enough and strong enough, if the preparation and planning is robust and thorough enough, then risk can be mitigated or even removed. Those who advocate the value of social capital know this not to be the case, and propose strengthening the social infrastructure, to maximise community resilience (Aldrich and Meyer 2015). The idea proposed by these writers, is that if communities are developed or supported to be socially resilient, then recovery after a disaster will be enhanced or assisted. The most effective approach is most likely to include a combination of many of these responses.

Some researchers explore the concepts of post-traumatic stress, and there is an extensive body of work that discusses and explores Post Traumatic Stress Disorder (PTSD) as a field of study in its own right and as it relates to disasters (Spurrell 1993, Tedeschi and Calhoun 1996, Steinglass 2006, Walsh 2007, Westphal and Bonanno 2007, Neria, Nandi et al. 2008). PTSD is one of the possible responses that people can demonstrate when affected by a traumatic experience, including a natural disaster. While recognizing the importance of this field of study, PTSD as a consequence of natural disaster is not the key focus of this research. This research reflects a conscious decision not to explore this issue, but rather to focus on a strengths-based discussion about community action and agency. This research will identify and analyse the experience and actions that arise during and after a natural disaster, and will seek to understand the social aspects of this phenomenon, rather than to focus on individual psychology, pathology or dysfunction.

Some explorations of post disaster resilience at the social or community level also raise the potential of post-traumatic transformative change or growth (Tedeschi and Calhoun, 1996; Paton, 2000; Cann, 2010; Obrist, Constanze and Henley 2010). These writers propose that a highly resilient community will do more than withstand a shock or disruption. It will recover from that disruption, and will create and recreate itself, potentially reaching a higher level of functioning or being open to new opportunities (Boon, Cottrell et al. 2011). There is increasing support for the proposition that exposure to disaster might constitute a growth experience for those who respond professionally (Paton, Smith et al. 2000). This research includes community leaders or community members who are not professional and are nevertheless affected in positive ways, and can experience the opportunity for growth after the experience of preparing for, responding to and emerging from the disaster.

It is interesting to briefly compare the research on individual resilience, with that focused on community resilience. Individual resilience has been defined as the ability of an individual to maintain healthy psychological and physical wellbeing despite exposure to adversity, including having a consistent trajectory towards healthy functioning (Bonanno 2004). Survivors of horrific and life threatening personal disasters have been found to share some personal characteristics in common including intelligence, good health, easy-going temperament, self-efficacy, optimism, hope, a reason for surviving, problem solving ability, an internal locus of control, flexibility in goal setting, the ability to adjust goals given new information or circumstances, and the ability to mobilize available resources (Boon, Cottrell et al. 2011). Individuals are seen

as resilient if they have access to sufficient material, financial, social and psychological resources needed to prepare for or respond effectively to a crisis in their own life, their family or their community, and, after a period of adjustment, to continue to function at the same or a higher level. This thinking could easily apply at the community level, and could influence the provision of support to communities, supporting or addressing each area of resource need.

Community resilience is then defined as the community's capacity to withstand major trauma and loss, overcome adversity, and to prevail; having increased its resources, its competence, and the connectedness of members to one another (Landau and Anna Mackenzie 2006). In this way resilience encompasses the concept of distress or disturbance (Norris, Stevens et al. 2008) and is in fact developed, demonstrated and strengthened through the experience of distress or disturbance. This inevitably leads to the conclusion that to become resilient an individual or community actually *requires* the experience of some disturbance and distress in order to develop or demonstrate resilience; and that rather than disaster planning being about the futile attempt to prevent or remove any possibility of crisis, it would be better to focus on the development or demonstration of resilience before, during and after inevitable crises.

Disaster resilience can be seen to be a particular aspect of community resilience, requiring a community to first be aware of the risks of any (natural) hazards, and to prepare for the possibility of a large-scale crisis that would require a community response, including the provision of support and resources from outside the community. To develop a disaster resilient community then, a community must specifically prepare for, seek to prevent or minimise, and then be ready to respond to and emerge from a crisis (Boon, Cottrell et al. 2011).

Importantly, if we see the threat of crisis or disaster as an opportunity to further develop resilience, then we can see as relevant the community's own aspirations for its own future, its ability to develop and put in place activities that build capacity, and the emphasis on the human agency that is possible (Manyena 2006), even including the opportunity to move beyond restoration and towards a new future, through creativity and transformation.

Community Recovery

While used extensively within Australian and international frameworks and strategies, and throughout the disaster literature, the definition and use of 'community recovery' is

not consistent. The concept of community recovery after disaster is controversial and complex, and there have been numerous attempts to define and explain it.

The official Australian government community recovery handbook defines it as:

“the coordinated process of supporting affected communities in the reconstruction of the built environment and the restoration of emotional, social, economic, built and natural environment wellbeing.” (Australian Government 2011)

The concept of community recovery after disaster therefore is highly complex. There are attempts to distil the definition of recovery to one or two essential elements such as ‘repopulation’ by survivors and new residents, and a resumption of daily activities and routines, particularly emphasising the central role of social capital in such recovery (Aldrich 2012). Not everyone is yet convinced about whether this is sufficient (Okada 2014).

Following the experience of a crisis event (fire, flood or cyclone) there is massive disruption of function and it does take some time for the individuals and community that are the affected social system, to adapt. Given that recovery requires the mobilization of resources from within and often from outside the affected community (Raphael 1986, Raphael and Stevens 2007) (Rodriguez, Quarantelli et al. 2006), often political and social organisations intervene and potentially interrupt the ability of the affected community to navigate their own path. Recovery ‘experts’ in the form of individuals and organisations arrive to provide instructions that they espouse will lead to recovery. A power imbalance occurs and a *community led* recovery can become an *expert led* recovery very quickly. This frequently occurs at the time that the community is still experiencing the shock of the crisis event, and is unable to prevent this disempowerment.

The process of community recovery is occasionally explored through the inclusion of case studies, providing an example of a process for bringing the affected community back to a pre-crisis level of functioning (Rubin and Barbee 1985, Rubin, Saperstein et al. 1985, Rubin 2009). Much of the existing literature has focussed on short-term disaster recovery, and there is a call for a redress of a perceived imbalance, as long-term recovery is left largely unexplored (Rubin 2009).

Surely the most effective analysis of what is required to assure community recovery is found in the work of Fran Norris et al, who describe five essential adaptive capacities that must be strengthened if a community is to have the best chance of emerging from a natural disaster. Firstly, communities must develop a strong and diverse economic

base, and this must be distributed as equally as possible. This reduces risk and attends to the needs of the most vulnerable community members. Secondly, local people must be engaged in every stage of the disaster preparedness, mitigation, response and recovery process. Only by doing so can the inherent social capital in the community be activated. Thirdly, 'loosely coupled' cooperative social networks and relationships must be developed within communities before disaster strikes. Effective disaster response relies on these support systems. Fourthly, post disaster interventions are needed that strengthen and protect already existing social support systems within the community. It is through these systems that resources and care will be shared effectively. And finally, while communities must plan ahead, they must also be able to exercise flexibility and be willing and able to vary their plan in response to changed circumstances. Disasters will have elements of the unknown and unexpected, and strict adherence to a plan will not be effective (Norris, Stevens et al. 2008).

It is important to understand that the use of 'recovery' does not fit well with those most affected by natural disaster – the community members themselves. As community members in this research understand it, 'recovery' is usually associated with the medical, general health or mental health systems. In particular they see it as associated with addiction, dysfunction, illness or pathology; where the patient or client has a condition, an addiction from which they seek to recover, or a problem or loss that they are assisted to 'get over'. Recovery in this sense is interpreted to be a process that requires expert assistance, with the patient or client following instructions if they wish to be healed, rather than being responsible for navigating their own path. The patient or client may fail in their initial attempt to achieve a state of recovery and if so, more assistance or treatment is subsequently required, sometimes with stronger intervention from the expert. While recovery in the health or medical world is usually also reliant on the efforts of the person themselves, community members in this research often referred to the more limited understanding of recovery (as a pathology or illness where recovery is reliant on expert intervention) when discussing the term.

As community members described it, unlike the fields of medicine or even psychology, no 'expert' can be trained to fully understand or to effect community disaster recovery in this linear or solution oriented way. Without wishing to oversimplify the complexity of the medical, health and mental health professions, no medication or intervention will affect the entire disaster affected (community) system in a predictable way, resulting in the removal of post disaster symptoms or behaviours across a group or a community. Additionally, the local community members are the most likely to be their own experts,

rather than any external individual or group, because they know their own system, its environment and its practices.

The social or community system that is affected by a disaster is highly complex, with many people and groups forming the community, and behaving in different ways, in different contexts, or at different times within that community. A natural disaster may then affect community members differently compared to one another, and also at different times in the process. The complexity of the community's response to an occurrence such as a natural disaster is bound to be multifaceted because it is a system response (Spruil 2001, Senge 2007).

Clearly the most desirable outcome of any crisis or natural disaster is that a functional community will emerge from the experience. While every community has some vulnerabilities and risks, the desired result is that each community is able to draw on its own capacities and strengths, and with the assistance of others, can adapt and transform itself, to reach an effective level of functioning within a reasonable time. While this sounds straightforward, the process of disaster recovery is complex and involves the interplay of a range of individual, organizational and societal factors, many of these existing well before the crisis occurred. This is in part a psychosocial process and in part a community or system based process of reorientation after disaster. Individual community members and the community as a whole will navigate their individual and collective psychological, social and emotional responses to what has happened and what has been lost, and must adjust to the symbolic and actual changes to the social system and geographic or physical place. This process may continue for decades or may never be fully concluded. Community recovery after a natural disaster or another crisis, is therefore an ongoing and long term process rather than an 'end state'.

Social Capital

While representing an entire domain of study on its own, it is important to understand the concept of social capital in order to consider how it might be part of a community recovery. This concept has been developing since the early 1900s (Hanifan 1916). Social capital is now understood as the social bonding that is built from well-established networks, the social connections and the levels of trust between citizens in a social group or community. Social capital also includes the concept of linking to other groups and systems, to further strengthen these levels of social cohesion and capacity (Coleman 1988, Putnam 1993, Putnam 2000). In a disaster context, social capital can

be expressed through a sense of belonging, a sense of community, place attachment, and participation in civil society (Cox and Perry 2011).

Social capital is a very useful concept that encompasses the positive elements of social systems including the levels of trust that people feel for one another, the social bonds or relationships between people that arise from and reinforce those levels of trust, the networks that these bonds and levels of trust enable, the sense of reciprocity that emerges from such conditions, and the resources that are therefore available to members of a social group or community in times of crisis (Coleman 1988, Putnam 2000, Aldrich 2012). It is also convincingly argued that social capital is reflected by a sense of belonging, a sense of community, and active participation by citizens in their community before, during and after a disaster (Norris, Stevens et al. 2008, Cox and Perry 2011).

International research for some time has indicated that there is a positive relationship between social capital and resilient communities emerging after a natural disaster (Murphy 2007). Recent research supports the views of participants in this research, that social capital is the 'core engine' of community recovery after natural disaster (Aldrich 2012). Australian research is now also beginning to explore the importance of social capital as a mechanism to enhance flood resilience at a community level (Duffy 2013).

It is important to remain aware of the potential negative aspects of how social capital is manifest. Those who enjoy strong social connections and high levels of social capital may, inadvertently or deliberately, exclude community members without strong social links or high levels of social capital. This too occurs in a disaster context.

Community Capital

The final key concept that is relevant to this research is that of community capital. Callaghan and Colton propose that a sustainable and functional community must address the needs of a range of systems that exist in the community, but most importantly must recognize that these systems are interlinked and should not be treated as separate. For them, community capital is the unifying and integrating concept – including the recognition and balancing of environmental capital (the natural and non-built environment), human capital (skills, education), social capital (relationships, values, norms and trust), cultural capital (heritage, traditions), public structural capital (infrastructure, shared spaces), and commercial capital (commercial relationships and activities) (Callaghan and Colton 2008).

This concept provides a very useful means of integrating the previous concepts of social capital, resilience, and community to provide an inclusive and holistic understanding of how to best support communities as they rebuild physically, socially, psychologically and economically after a natural disaster. This concept is also consistent with the study of emergent community action, which has been present in the literature for over 20 years. This is the knowledge that community members (individuals and groups) will emerge through a crisis, and will take whatever action they see is necessary, in the absence of anyone else providing what their members need. It is also the belief that this behaviour does not undermine the formal approach to disaster response and recovery, but rather represents a valid and resourceful contribution to that process of recovery (Drabek 2003).

The International Context

While this research is not focussed internationally, it is important to acknowledge the wealth of international research, the frequency and degree of devastation experienced internationally as a result of natural disasters, and to place this work in the context of international policies and frameworks focussed on natural disasters, community resilience and community recovery.

The last 25 years has been characterised by disaster focussed research and regular international fora for the discussion and negotiation of agreements designed to reduce risk and minimise the consequences of disaster, and enhance the possibility of community and national resilience. In 1990 the United Nations declared the next decade as the International Decade for Natural Disaster Reduction. In 1994, the World Conference on Natural Disaster Reduction was held in Yokohama, Japan and specifically addressed the importance of social vulnerability and disaster risk reduction. By the end of that decade the human dimensions of disaster and risk reduction had emerged as the focus of the international disaster debate. (Cutter, Barnes et al. 2008)

The World Conference on Disaster Reduction held in Hyogo, Japan in 2005, brought together United Nations Member States who expressed their determination to reduce losses of human life, and social, economic and environmental assets worldwide. Those States adopted the *Hyogo Declaration and Framework for Action* which outlines a 10 year plan to reduce disasters internationally and to build the resilience of nations and communities, including a focus on prevention, preparedness, emergency response, recovery and rehabilitation, and in particular emphasizing the need for building local level community capacity (United Nations 2005). This agreement calls

for the empowerment of communities and local authorities to manage and reduce their own disaster risk, highlighting the need for proactive measures to build community resilience, learn lessons from communities, and empower them to establish and maintain their own culture of safety and resilience (United Nations 2005).

The subsequent World Conference on Disaster Reduction held in Sendai, Japan in 2015 again united the United Nations Member States after extensive consultations between 2012 and 2013 and then inter-governmental negotiations between July 2014 and March 2015. The United Nations Office for Disaster Risk Reduction will again have the responsibility for supporting the implementation and review of this latest global framework. This framework is focussed on achieving seven global targets to reduce the consequences of disasters globally and to increase international cooperation and country risk reduction strategies, including early warning systems. The four priorities for action are focused on risk reduction and enhancing governance, preparedness, recovery, rehabilitation and reconstruction (UNISDR 2015).

For over 25 years since the Yokohama “Strategy for a Safer World” in 1994, again at the Hyogo “Framework for Action” in 2005, and most recently at Sendai in 2015, the United Nations has focussed on how to build the resilience of communities and nations through prevention, preparedness, mitigation, community engagement and effective response and recovery (UNISDR 1994, United Nations 2005). Many Nation States have developed their own policies and responses. Australia’s approach to disaster management focuses primarily on the concept of prevention, preparedness, response and recovery (PPRR) and followed the Prime Minister’s *National Security Statement* in 2008 (Rudd 2009) and the Council of Australian Governments’ (COAG) *National Strategy for Disaster Resilience* (the National Strategy) in 2011. (Council of Australian Governments 2011) The National Strategy espouses a focus on community led response and recovery – including this as one of the key principles that should guide disaster recovery efforts.

It is important to place any Australian disaster research into an international context. The regular and increasing instance of natural disasters globally, is reinforcing the ongoing need for an international focus and for collaborative effort in order to improve global effort and systems to plan, prepare and mitigate associated risks, respond, provide humanitarian aid and support recovery afterwards. Large-scale disasters occur elsewhere in the world that have been devastating on an almost unfathomable scale e.g. the Haiti earthquake of 2010 in which 222,570 deaths are estimated, or the 2008 earthquake in China in which 87,476 deaths are recorded. ((CRED) 2009) Compared

to disasters that occur around the world, the human and financial cost of disasters in Australia is small. It is important to acknowledge the scale of loss and devastation that occurs in other locations across the world, the extensive research being undertaken internationally, and the global response to disaster as a complex context within which sits the Australian experience of disaster.

There are numerous examples of international disasters in recent years, with extensive literature and information available about their effect on the landscape, the infrastructure and the social systems and communities where they occurred. What follows is a short description of just four of these recent disasters, in order to provide a brief international context for the Australian experience.

Aceh

In 2004 an earthquake of 9.0 magnitude (on the Richter scale) occurred in the Indian Ocean and caused a tsunami that travelled 3,000 miles and caused devastation and loss of life in 11 countries. It is estimated that over 227,898 people died although the exact death toll can never be known. Countries across the globe were affected by this event including Thailand, India, Japan, Sri Lanka, and Indonesia. Entire villages and regions were destroyed as a result of what is described as the largest earthquake in 40 years, the event receiving publicity partially because of the timing with many tourists recording the event which occurred during holiday season (Keys, Masterman-Smith et al. 2006, (CRED) 2009, Wikipedia 2016).

New Orleans

In 2005 hurricane Katrina (a category 3 hurricane) became the costliest natural disaster and one of the five deadliest hurricanes to occur in the history of the United States of America. New Orleans bore the brunt of the damage and loss of life, most of which was caused by storm surge and levee failure. At least 1,245 people died and the total cost of the damage was estimated at US\$108 billion (Wikipedia 2016). Five years later in 2010 the clean up and physical recovery process was still incomplete. For many, the response and recovery effort after Hurricane Katrina has become an example of how 'not to do it': in particular highlighting the consequences of inadequate preparation and planning, ineffective emergency response, and inadequate support for recovery. This crisis also provides an example of how a disaster is a social experience rather than simply being determined by the scale or size of a catastrophic event (Tierney, Bevc et al. 2006, Kilmer and Ovid 2010).

Christchurch

In 2011 Christchurch New Zealand experienced a magnitude 6.3 earthquake that killed 185 people and injured several thousand. This earthquake was considered to be an aftershock of an earlier earthquake and Christchurch continued to experience earthquakes for months. The central business district of Christchurch was largely destroyed, was closed and was not opened until mid 2013. In 2016, significant areas within this central city district remain unchanged and in disrepair. Restoration of buildings and infrastructure is expected to take several years to reach pre-earthquake standards. The cost of rebuilding after this disaster is now estimated to be NZ\$40 billion (Wikipedia 2016).

Nepal

On 25 April 2015 Nepal experienced an earthquake of 7.8 magnitude, in which over 9,000 people died and more than 23,000 were injured. This triggered an avalanche on Mt Everest killing at least 19 people, and another avalanche in the Langtang valley where 250 people were reported missing. Hundreds and thousands of people were made homeless and villages and districts across Nepal were completely destroyed. In May 2015 aftershocks of 7.3 and 6.3 killed a further 200 and injured more than 2,500 people. Economic losses from these earthquakes are estimated to be 35% of Nepal's Gross Domestic Product (Wikipedia 2016).

It is clear that these disasters, and many more like them, cause large-scale destruction of property and infrastructure, and very significant loss of human life. The majority of Australia's disasters are small by comparison. From time to time in Australia natural disasters have resulted deaths in the tens or hundreds of people; most recently in 2009 the Black Saturday bushfires resulted in 173 deaths, and the floods in Queensland in 2010-11 resulted in 33 confirmed deaths. As already stated, a current conservative estimate is that the costs of disasters will rise to an average of AU\$33 billion per year by 2050 unless something changes this projection (DeloitteAccessEconomics 2016).

While the scale of such losses is not the same in Australia as it is elsewhere in the world, the consequences and costs of natural disaster for the affected communities; for the local, state and federal governments; in both financial and social or human terms; are nevertheless significant issues in the Australian context.

The Australian Context

Extreme events caused by weather ('heat-wave', drought, cyclone or flood) or involving the geography and the landscape (landslides, fire) have been part of Australia's history since before white settlement. The effect and scale of these events has changed as human settlement patterns and human engagement with the landscape have changed. While the evidence indicates that the intensity and frequency of these events is increasing, their occurrence is part of the Australian psyche and Australian's think of themselves as regularly facing adversity through extreme natural events or circumstances. (Brown 2002) Significant disasters in recent Australian history include fires (Tasmania in 1967, Ash Wednesday in 1983, Canberra in 2003, and Black Saturday in Victoria in 2009), floods (Tasmania in 1929, Brisbane in 1974, Queensland in 2010-2011, Victoria in 2011 and Queensland and New South Wales in 2013), and cyclones (Mahina in 1899, Ada in 1970, Tracy in 1974, Larry in 2006 and Yasi in 2011).

Australian governments have set the direction for any discussion of natural disasters in Australia, by endorsing a national disaster management policy framework that provides an overview of the key phases of any natural disaster, and outlines the roles to be fulfilled by government, non-government organizations, and communities in each phase. The phases of disaster are clearly articulated as Prevention, Preparation, Response and Recovery (PPRR). (Australian Government 2011, Council of Australian Governments 2011) This policy framework espouses the central role of the community in disaster recovery and argues that successful recovery both engages the community and empowers its members as they emerge from the crisis. Numerous frameworks and guidelines from the non-government sector also emphasize the central role of the community in disaster management and in particular in recovery. When disaster response and recovery follows a crisis event, the process involves local, state and federal governments, and large non-government organizations, all of whom advocate 'community led recovery'.

A National Strategy for Disaster Resilience

The Australian government's response to the increasing frequency, severity and cost of disasters across the nation has a number of elements. Firstly, this includes the establishment of disaster recovery as a national priority for the Council of Australian Governments (COAG). Secondly this priority has resulted in the subsequent development of a national strategy, principles and policy, all of which have been

developed for and agreed at COAG, thereby ensuring their applicability anywhere in Australia. Thirdly, the federal Government has provided funding to State and local governments to support disaster planning and preparedness, and emergency response and recovery, including rebuilding. The government's response also includes the establishment and conduct of various Government Inquiries into disasters, and the establishment of disaster or rebuilding taskforces within government. Finally, individual and family payments and other disaster recovery financial support are made available either directly from the federal government or via state or local governments (Australian Government 2011, Council of Australian Governments 2011).

The "*National Strategy for Disaster Resilience – Building the resilience of our nation to disasters*" (Australia's National Strategy) was ratified by the Council of Australian Governments (COAG) in February 2011. This document is the primary disaster management policy statement for the Australian federal and state governments and is built on a premise that resilience based approaches to emergency and disaster management are a shared responsibility between governments, communities, businesses and communities. Roles and responsibilities at an abstract and high level are outlined in the document that focuses on prevention, preparation, response and recovery from disasters. The national principles for disaster recovery focus on key areas where communities can demonstrate disaster resilience: including disaster planning and preparation based on an accurate understanding of the risks that face any community and including land use planning systems and building control arrangements that reduce exposure of the community to the risk of experiencing a disaster; communities working in partnership with emergency response agencies and other relevant organizations before during and after emergencies; and emergency response and recovery designed to restore communities to a "satisfactory range of functioning" as quickly as possible. (Council of Australian Governments 2011)

The "National Strategy for Disaster Resilience" identifies two important roles for community in the disaster management process: that it is desirable for communities to work in partnership with emergency response agencies and other relevant organizations before, during and after emergencies, and that the design of emergency response and recovery actions and plans must be to restore communities to a 'satisfactory range of functioning' as quickly as possible (Council of Australian Governments 2011).

Australia's National Strategy does not explicitly define community resilience but rather lists four common characteristics of disaster resilient communities, individuals and

organizations; these being 'functioning well under stress', 'successful adaptation', 'self-reliance' and 'social capacity'. The strategy does not further explain these terms, and proposes that resilient communities have strong social support systems, such as neighbourhoods, family and kinship networks, mutual interest groups and mutual self-help groups. The strategy reflects the view that a resilient community will be able to use local networks and resources to support whatever action is required during an emergency and during community recovery (Council of Australian Governments 2011). Australia's National Strategy can therefore be seen to reflect the focus of current research in this field, which is largely at a highly conceptual and abstract level. Even academics who consider the ramifications of the National Strategy and the actions required to implement it effectively, focus on professionalising, investing, and strengthening coordination and data sharing (Barnes 2014). All of these are important but do not explore the role and value of the community members themselves in the recovery process, to create resilient communities.

Disaster Handbooks, Inquiries and Reports

A plethora of detailed reports and handbooks exist in an Australian context, all designed to further knowledge and expertise in relation to successfully managing or engaging with a crisis and the affected community, through all four stages of the disaster. Comprehensive government handbooks have been prepared in relation to emergency management and response, including providing guidance in relation to community engagement processes and how to develop and implement community led recovery (Australian Government 2011). Even when such handbooks specifically discuss developing community resilience so that community led recovery can be achieved, community resilience and capacity are spoken about as possible future states, achievable only if a range of problems is first addressed.

Government inquiries are a common consequence of recent disasters in Australia and take one of three forms: a Royal Commission, an official Inquiry, or an Administrative Inquiry. The decision about which of these options is chosen can be driven by the scale of the loss of human life and therefore the compelling need to understand causes and processes that led to this outcome (Pascoe 2010). Inquiries can be at the national level commissioned by the federal government or the Council of Australian Governments (Ellis, Kanowski et al. 2004), or they might be at the State or Territory level, commissioned by the State or Territory government (Queensland Floods Commission of Inquiry 2012) (Teague, McLeod et al. 2010). They are sometimes operational Inquiries (McLeod 2003), coronial Inquiries (Doogan 2006), or reports of committees or commissions to government (Vardon and Durward 2005, Teague,

McLeod et al. 2010). Inquiries are often led by people of some public prominence, chosen from senior roles in Government (Vardon and Durward 2005), from the military (Cosgrove 2007), from the Australian Federal Police (Keelty 2012), or from their current role e.g. as Coroner in the relevant jurisdiction (Doogan 2006). They are established for multiple explicit or implicit reasons: to find out what contributed to the disaster and its consequent losses, to respond to public outcry, to enable public participation in the process, and to make recommendations that will enable governments and communities to ensure that lessons are learned and the disaster is not repeated. There is an element of some inquiries where this focus becomes the forensic analysis of any contentious issues or details in the hazard itself, or in the emergency response, determining what was overlooked and by whom, what went wrong and therefore 'who is to blame' for the scale and consequence the disaster in question (McLeod 2003, Kanowski, Whelan et al. 2005, Queensland Floods Commission of Inquiry 2012). A government report can also focus on elements of the response such as an analysis of the leadership, management, and operational response to the crisis, with recommendations for greater organizational coordination, communication and collaboration (Vardon and Durward 2005).

While community submissions are often invited and considered by these Inquiries, they do not provide a thorough analysis of the community response to an emergency or to issues of long-term recovery. The focus remains on planning and preparation, leadership and the emergency response, and on the causes and the subsequent progress of key disasters across Australia. They also inevitably focus on who was at fault and who might have been able to avert the crisis if they had acted differently.

Government Inquiries by their nature and due to their timing do not investigate the long-term recovery process. They can also appear to be in opposition to the community, receiving submissions from community members and groups, and making judgements about those submissions and their relevance, strength/accuracy. Government reporting also includes the considerations and actions of Recovery Taskforces and Recovery Authorities. Reports with this focus often refer to a high degree of community engagement and involvement and reflect a strong focus on community recovery (Territory 2003, Cosgrove 2007, Victorian Government 2011), which is at odds with how community members discuss the process.

The business, academic and non-government sector has responded strongly to the occurrence of natural disasters. The Red Cross, the Salvation Army, the Green Cross, and many other organizations now have detailed disaster response policies, programs

and information for the general public. Financial and other support is provided from these sectors to communities affected by natural disasters. Volunteers are coordinated, donated goods are managed and distributed, funds are raised and emergency relief and ongoing support are provided to survivors 'in need'.

An emerging focus - Disaster Research Institutes

Disaster research institutes have been established in many mainstream Australian universities and a growing body of research is now underway e.g. the Bushfire and Natural Hazards Cooperative Research Centre (BNHCRC), the National Climate Change Adaptation Research Facility (NCCARF), the Terrestrial Ecosystem Research Network (TERN) and a range of institutes based at Universities: the Natural Disaster Management Research Initiative at the University of Melbourne, the Disaster Response and Resilience Research Group at the University of Western Sydney, and the Torrens Resilience Institute in Adelaide. Funding for this research exceeds \$190million for projects 2008-2021. The private sector is also funding research e.g. the Insurance Council of Australia. Other organisations also fund or conduct research; such as the Red Cross, the Regional Australia Institute, and the Foundation for Rural and Regional Renewal (FRRR). Approximately one eighth of the available research funding in 2014 was allocated to research focussed on the recovery phase, with the remainder divided equally between the prevention, and preparedness and response phases. For university-funded research over 50% of the funding for research was applied to the response phase, and just over a quarter to the recovery phase (Economics; 2014).

A new development in this arena is the establishment of the Australian Institute for Disaster Resilience. The Australian government has funded a consortium (launched in late 2015) which includes the Bushfire and Natural Hazards Cooperative Research Centre, the Australian Red Cross, the Australasian Fire and Emergency Services Authorities Council and the Australian Government through the Attorney-General's Department (Resilience; 2015). This Institute has as its goal to improve Australia's national capabilities in disaster resilience by drawing together governments, industry, the non government sector, volunteers, schools and the vocational and higher education sectors to develop new approaches to prepare for, respond to and recovery from disasters (Australia 2015, Resilience; 2015).

In spite of this significant activity and investment in disaster research and inquiry in Australia, there remain concerning limitations in current thinking about what research is desirable. Reports focussed on identifying gaps in the research required still fail to consider research about community resilience, or confuse building resilience with

involving the community in emergency planning and preparation (Barnes 2014). Working with the community to prepare and plan for disaster is a necessary element but is not in itself sufficient to build community resilience and capacity.

Recent Australian studies of disaster and recovery

A number of Australian studies of the impact of disaster, or emergency response and recovery after natural disaster have been undertaken in recent years. A study following the Canberra bushfires of 2003 used surveys and interviews to identify and explore the factors that help or hinder community capacity building. This study found numerous adverse responses to the role of government during the recovery process. This study points the way towards further exploring the role of social and community capital, the importance of volunteering, and of commemorative events and social opportunities for community members (Winkworth 2009).

Another study after the Victorian bushfires in 2009 focussed on the support provided by catholic agencies to affected communities, with a key finding that support agencies must harness local knowledge and develop local relationships in order to effectively support disaster recovery (Webber 2013). Like many studies however, this study appears to focus on how agencies can use local knowledge and local relationships to design an appropriate response that is then provided *to* the local community, rather than using these connections to engage with the local community or provide any insight into the existing strengths and capacities of the community, and through that knowledge to enhance the effectiveness of their support *for* the community's *pre-existing* or emerging disaster recovery processes or actions.

Research conducted through a partnership between the Queensland Council of Social Services and the Griffith University has surveyed community members across Queensland to examine whether there is a link between socio-economic disadvantage and community resilience in the context of disaster recovery, finding that there was no such link (Malcolm 2012). The question arises that if socio-economic status is not a strong determinant of effective recovery, what is?

While these studies often refer to the importance of engaging with the community during all phases of a natural disaster (including recovery), they do not describe this engagement in any detail. Frequently discussion about the community in these studies remains at a conceptual or abstract level, or is couched in terms of one specific aspect of the recovery process (e.g. how response organisations engage with the community) or one aspect of the community itself (e.g. its socio-economic status). These studies

do not scientifically investigate or analyse the community's own experience of a natural disaster, or their process of adaptation or recovery from it, nor do they reflect the complex system of factors that together contributes to the ability of a community to adapt, recover and restabilise.

There are indications that some research specifically focussed on the community experience of community recovery is now underway in Australian communities. A five-year study has commenced into the long-term impact of the 2009 Victorian bushfires, with a focus on mental health, wellbeing and social relationships of individuals and their communities. Sixteen communities are participating in a study through surveys and interviews (Economics; 2014). It is hoped that this longitudinal study will highlight some aspects of community recovery in these communities, and that it will adequately reflect the perspective and experience of the community members themselves.

Some researchers have engaged the community in a participative approach to research design and process. A study designed to enhance the resilience of two communities (Broome in Western Australia and Townsville in Queensland) explored with community members how they would prefer to plan for their response and recovery, and prepare their communities for natural disaster. The outcomes of this research included widespread community support for a participative disaster planning approach (Hargroves 2015). The need for more studies of this nature is strongly supported by this research.

While some community based disaster research is underway across Australia, this review of these studies indicates a significant lack of research that engages with community members themselves, providing them with a vehicle to describe their own experience of natural disasters, and the subsequent community recovery processes. There is a clear need for research that builds the evidence base to reflect the complex system that is a community; that gathers evidence based on the experiences of community members themselves; and that identifies the range of factors and elements that contribute to an effective community recovery after natural disaster.

Reasons to undertake this research

The original aim of this research was to determine whether community leadership of disaster affected communities in Australia is a reality (rather than increasingly passive communities who are dependent on governments); whether these communities lead or take action to ensure their own community recovery after a natural disaster; what the community recovery process includes; and what lessons we can learn from listening to

and understanding the experiences of those communities who have emerged from fire, flood or cyclone. Reviewing the literature has validated these reasons for undertaking this research, further highlighting the need to find evidence to answer these questions and to address these gaps and limitations in current research and policy.

This extensive and systematic search of the existing academic literature has found very little evidence or scientific study that describes in any detail the community recovery process after a crisis. In particular no study was found that focussed on the members of affected communities describing their own experience of the disaster recovery process, or that explored whether communities experience themselves as leading the disaster response and recovery in their own community. Similarly no systematic studies could be found of the data about the actions that community members themselves take and whether these actions contribute to the recovery of the community after a natural disaster.

This indicates a clear gap in the evidence base, which led to a research design that focusses on the views and experiences of those most affected by the crisis, and provides these community members with an opportunity to identify the key factors relevant to their community recovery and discuss these factors and the agency of their own community in its adaptation and recovery process.

In addition to answering the research question about what action is taken in affected communities that supports community recovery, this research also achieves three additional goals: to adopt a strengths focus in disaster recovery research; to undertake practically oriented research that has the potential to deliver a changed experience on the ground through changes in policy and practice; and to give the community a voice in the disaster management 'discussion'.

A strengths focus

Existing research often focuses on risk and vulnerability in relation to disaster mitigation (prevention, preparation, and planning) and emergency response. While risk and vulnerability are important aspects of disaster, a sole focus on them will lead to an incomplete understanding of community recovery from disaster. To be complete, the analysis of disaster must include a focus on inherent and emerging capacity and strength. This will expand our understanding of human and community resilience, and of the capacities and strengths that lead individuals and communities to not only cope with adverse conditions but also to respond to crises, increase their competency, and create or strengthen their capacity for adaptive change, growth or even transformation

(Obrist, Pfeiffer et al. 2010). This shifts the paradigm from a response to risk, vulnerability and adversity; to a focus on strengths and capacities; and ultimately to a framework that can support the resources of individuals, families and communities. (Leadbeater, Dodgen et al. 2005)

By including a focus on strengths in this research, we are seeking out existing and emerging community capacity rather than acting as if that capacity does not exist, or is something that can only occur in the future, after the adversity has passed and 'recovery' has been achieved (as if recovery was even possible as an absolute and finite state of being).

The need for practical research

Various researchers have called for research that is focussed at a practical or operational level. Models of community resilience and wellbeing are often conceptual (Patterson, Weil et al. 2010). There is a call within the literature to operationalize existing conceptual models so that common indicators of community resilience are developed and applied within communities. Cutter calls for additional research on metrics of community resilience, so that we can assess what makes some communities more resilient than others, either over time or in different locations. Such metrics would enable us to empower communities and assist them to become more resilient in a sustainable way. (Cutter, Barnes et al. 2008)

In the general community wellbeing field, the challenge is seen in terms of creating and sharing knowledge about which actions are successful in building healthy, just and sustainable communities, with the argument that it is in these communities that members will 'flourish and thrive', reaching their full potential (Wiseman and Brasher 2008). More research is called for, to identify which programs and activities enhance resilience and reduce vulnerability, so that these can then be implemented for individuals, groups, communities and organizations. (Buckle, Marsh and Smale, 2001; Boon et al, 2012)

This research is designed to partially redress this lack of practically oriented research, leading to potential changes in policy and practice, contributing to an enhanced understanding of the community experience of disaster, and having practical application to supporting resilient communities 'on the ground'.

Finding the community voice

Community members are finding their own way to express their views and to find their voice in relation to disasters. Many community members write long submissions to disaster Inquiries, they publish their own stories about their experiences, and they participate in studies and assist authors who write about the community experience of a particular fire or flood (Stanley 2013). A burgeoning number of 'popular' books have been published that showcase one or more community stories of disaster, the story of the emergency itself or the aftermath, and of the recovery process. Frequently these books include the stories as told by local community members, as they seek to have their own experience shared (Lannen 2007, Slattery, Laidlaw et al. 2008, ABC 2011, Hyland 2011, Hansen and Griffiths 2012). These are primarily focussed on the history of the community and the area, the crisis itself, and the emergency response. Factors that support the community are included but the timing of these publications often precludes a detailed reflection on longer-term recovery. This research is designed to give community members their voice as they describe their experience and their observation of the community recovery process in their community. It is also designed to give communities members this opportunity between one and three years after the crisis itself, to begin to explore a longer term view of a resilient or recovering community.

Conclusion

In spite of a substantial body of knowledge about the core concepts and the processes of disaster management, and even though research is now being conducted involving Australian communities, there remains a significant gap in scientific inquiry and the subsequent knowledge and evidence about the key aspects of community recovery.

Studies continue to focus on deficit, dysfunction and disorder, rather than to emphasize the strengths and capacities of disaster affected communities. This literative review did not yield any qualitative or descriptive case study research to explore the range of influences and the relative impact of those influences, from either the 'disaster expert' or the 'community member' perspective. Certainly no studies have been found that focused on providing community members with the opportunity to describe their experience of disaster (preparation, response or recovery), their observations and experiences of the resilience of their community, or the progress of their community recovery. No studies were found that provided community members with a strong opportunity to give voice to their own views and speak in their own words, about their own experience.

This research therefore aims to find out how affected communities define and understand their own disaster experience; how the community recovery process actually occurs in affected communities; whether communities lead their own recovery; whether community members are active during this process; and whether we can learn lessons from those communities who have experienced this process. This research is designed to engage with communities about their own recovery and what works to support the process. It is designed to give community members the voice they often lack, so that the existence of an inherent capacity in communities can be verified and can begin to change the dialogue, the understanding, and the process of community recovery. In this way, this research is designed to contribute to a discussion about how to enhance community resilience.

The research occurs over two stages, designed to contribute to an ongoing discussion about how to define or measure recovery, and what the recovery stage of a disaster is actually like in practice, according to those who experience it first-hand. Some writers refer to separate phases within the recovery phase of a disaster (Neal 1997, Rubin 2009), and this research will explore whether community members themselves also experience recovery as having multiple phases. It will also be important to explore concepts such as social and community capital, to consider whether these factors are apparent in relation to community resilience and recovery from natural disaster.

Chapter 3 – Rationale and Methodology

Introduction

The preceding review and discussion of the existing literature clearly points to a need for new scientific research to clarify the definitions and applications of the concepts of 'community' and of 'community resilience' and 'community recovery' in the context of natural disaster. This review of the literature points to a clear gap in existing knowledge; which would benefit from greater systematic research of the human and community response to natural disaster, and in particular where data collection and analysis is undertaken from the perspective of members of the affected community, rather than the perspective of 'experts' of disaster.

This gap has directly informed the aims of this research: to give the communities their own voice so that they tell their own stories; to find out whether there are strong, active and resilient communities in Australia, leading their own recovery processes after a natural disaster; to further understand what the community recovery process includes; and to identify what lessons we can learn from listening to and understanding these experiences.

After reviewing the literature to identify what is known and understood, and what is less well known or understood in relation to community resilience and the process of community recovery after natural disaster, the following key research questions emerge:

- + What do those who formally lead disaster recovery taskforces and processes at a high level, understand about community resilience and recovery?
- + What do affected community members themselves understand about community resilience and recovery?
- + Is there any difference between these two groups in terms of their experience or understanding of these processes?
- + How does community recovery occur at the community level?
- + Did community based leadership emerge during or after the disaster?
- + What actions were taken in each affected community that supported that community to adapt or recover after the natural disaster that occurred there?

A qualitative research methodology is necessary to explore these questions and to give community members in affected communities the opportunity to speak for themselves. In designing this methodology, it is also essential to recognise the vulnerability of

community members, the severity of the crisis in each community, and the potential variation in responses to that crisis. This research was intentionally designed without any predetermined ideas about the data that would be found; either through any specific interview or from any particular community. The semi-structured interview process was designed to ensure that all community members could share their experiences and perspectives, in a confidential and safe environment, without the scrutiny or influence of their fellow community members. The methodology was designed so that the research findings would be led by the voice and the experience of the community members.

The research was also designed to scientifically examine a credible and compelling body of data. For this reason, the study intentionally included four different communities in Australia, from different locations, who had experienced different types of natural disaster i.e. fire, flood and cyclone. This would allow the research to indicate whether there were significant differences between communities, depending on the type of crisis that had occurred, or the location of the community. The challenge of the research design was to ensure that the conduct of the research would genuinely engage with the community members, enable the collection of their stories, accurately identify the actions and activities that occurred in those communities, and in particular understand what it is about these actions and activities that enabled the community to regenerate and renew: all provided through the words and 'voice' of the community members themselves.

This chapter will outline the methodology employed and will address issues such as the site selection, preparation of semi-structured interview questions, thorough consideration of ethical concerns, community entry and engagement, participant sampling techniques within each site, the establishment of trust with participants, and the secure retention and analysis of data.

This research was designed and conducted in two stages. Both stages are essential elements in the research, and each provides a complementary but different perspective on the issue of community resilience and recovery, given the Australian context and approach to natural disasters.

The first stage was included given the particular approach to disaster management and disaster recovery in Australia. Following disasters in Australia, high profile individuals are appointed to disaster recovery leadership roles e.g. the Chair of a Recovery Taskforce, the Head of a Disaster Inquiry, or a senior position in relation to disaster

recovery in a key government or non-government organisations. These individuals often have a strong public profile and are well known and recognised by the general public. They have a high level of influence in relation to government disaster management policy and in relation to the allocation of resources to affected communities. The occupants of these roles are highly influential in the Australian disaster context. The first stage of this research therefore includes the observations of these (often formally appointed) leaders of disaster recovery processes, from both government and non-government organisations, to identify what they observed to be key factors in community recovery.

The central element of this research however, is the second stage, which obtains the observations of community members from the four affected communities. Obtaining the observations and perspectives of these community members is the core component of this research. This research compares the views of the leaders (or 'experts') with the community's direct experience of natural disaster, and their description of the processes and activities that occurred to assist community adaptation, recovery and resilience.

Existing literature and disaster related policy appears to be predicated on the principle that governments, 'experts' and 'others' define policy and make decisions, for recipients of emergency or disaster services and support. In this way the recipients may be cast in a passive role, as receiving support or following the lead provided by these 'experts'. In not reflecting the views and actions of community members themselves, the current literature about disaster perpetuates this perception of a lack of 'agency' being employed by communities and community members during the process of disaster (in relation to phases of disaster; planning, preparation, response and recovery).

A small number of writers are emerging with direct experience of disaster as community members. These writers argue that the next wave of policy and assistance depends for its success, on collaboration between those affected by adversity with those who are responsible for policy development and implementation. This approach appropriately advocates that community members affected by the crisis must be active decision makers and participants in the recovery process (Leadbeater, Dodgen et al. 2005).

It is important to explore the question of whether communities affected by disaster lead or participate in their recovery and whether they have the necessary strengths and

capacities to do either. The ultimate power of this research is only possible if the methodology employed enables effective and rigorous data collection, thorough analysis of the data collected, and careful consideration and honouring of the experience and grief of the selected communities. It will only be possible if the community members are approached respectfully to find out what they observed and did when disaster affected their community. Time was therefore taken in the careful preparation for Stage 2, to design ways to engage and inform community members so that they could participate in this research and effectively share their experience in a way that respected them individually, respected their community collectively, and most importantly respected their community's experience of the crisis that affected them.

To achieve this outcome, the methodology required that the researcher-participant relationship be based on trust and confidence: from participant to researcher and from researcher to participant. Both parties to this relationship needed to believe that each would treat the information being provided, and the process of the research inquiry, with respect. This meant that the researcher had to demonstrate to the participants that the research methodology had been thoroughly and carefully designed, with due consideration and balance given to objective, scientific, compassionate and ethical concerns. Care was taken to ensure that participants had confidence that the focus of the research was to develop an accurate and complete evidence base about the community experience of both the natural disaster and of the community's response.

Most importantly the research methodology was designed to ensure that the evidence collected expressed the voice of community members themselves, and was not inadvertently distorted or misunderstood by the researcher. This was achieved through careful design of interview questions to explore and unpack elements of the key research question, careful testing and validation of the interview questions with experienced academic advisors, consistent administration of these questions in each site and with each participant, complete and accurate recording and transcribing of all interviews in full, authorisation by each participant of their transcription as a correct record of their statements and their interview, some adjustment by participants if they wished to expand on their interview answers or had further information to add to the process, and thorough analysis of these transcriptions using NVivo software to identify shared themes and key examples of each type of activity or action. The NVivo software was used to analyse the data and identify key themes within each community site, and to enable the researcher to compare and assess the consistency, similarity and variance between responses, within and between sites.

The basis of the research

Assumptions and inclusions

There are a number of beliefs, assumptions or hopes that are implied within this research and in particular through the research question and methodology. There is a belief (or hope) that community members have a voice, have observed and experienced the process of community recovery, have learned from that process, and can clearly and accurately describe those observations and experiences. This research is built on the hope that as the group who actually lived through the experience of each phase of a crisis, and who therefore have that knowledge and experience, these community members will be able to reflect on what they have observed, and then describe and share it through the research.

Almost always, groups and individuals who visit the community or support the community during any phase of the crisis, leave to return to their own community. It is the community members who stay in the community, who rebuild their lives and their sense of community, who have the opportunity to reflect on the experience as the recovery process occurs. This gives these community members a unique perspective about what has occurred before, during and after a crisis; and about what has been most useful over time, in terms of community recovery. It makes their view essential to any attempt to understand community recovery.

It is important to note that some community members do not stay in their community after a disaster. Some community members move away to live in a new location. Some of these people may do so as a positive decision that leads to a healthy and successful outcome for them and for any family. Some may have been going to move anyway, regardless of the disaster that occurred. Some may move away in a traumatised or vulnerable state. None of these categories of people participated in this research, as they were no longer present in the community. Some community members, who stay in the community, are also traumatised or are in a particularly vulnerable situation. These people may not participate in the community recovery as actively as others, and may not choose to identify themselves and participate in any research about that recovery; particularly research explicitly focussed on community strength and community action. This research therefore reflects the observations and actions of those who participated in the research. Many participants were actively involved in the recovery process and many had reflected on that involvement. There is no doubt that there were other community members who chose not to participate, without identifying themselves or providing any reason for this choice. This research

cannot therefore include their observations and reflections. While that seems obvious, it is necessary to acknowledge that this research has only included those community members who stepped forward; given the design of the research methodology, the focus of the research, and their own personal circumstances.

The hypothesis and the research question

The commitment that underpins this research is that the community members themselves will describe their view of disaster and the process of community recovery and ultimately whether community resilience is a reality or not. However, if there is an hypothesis being tested in this research, it is that some community members *are* active in their communities before, during and after a crisis, and that their leadership, participation and action *does* contribute significantly to their community's recovery. Finding out whether the evidence gathered from this research supports this hypothesis, and if so, which actions and activities are considered by the community to be useful, is essential to form a more complete understanding of community recovery and resilience.

This research provides evidence from four communities about what assists each community as they emerge from the experience of a natural disaster. The research has been designed to find out what activities and actions occur in these communities after they have been affected by a natural disaster. The key implication within the research question is that community members within these communities *do* take action and that they see others take action after a natural disaster. The assumption is that these actions and activities may renew the strength, cohesion and connections within their community and that this needs to be identified and described by the participants themselves. The central research question is focussed on what community members themselves perceive as contributing to their community recovery. This enables the participants from each of the communities to describe in their own words the actions and activities that they observed and that they believe, on reflection, helped support the process of community recovery and therefore to demonstrate community resilience.

Consequential questions are about the types of activities that community members undertake: who initiates, leads and participates in these activities; whether these people are from within the community or from elsewhere; whether they are individuals or from groups or organisations; and whether there are any themes or similarities between what worked in one community compared to another, or what worked in a community affected by one type of event, compared to one affected by another (for example fire compared to cyclone or flood).

These questions warrant attention through this methodology, in order to gather robust and scientific evidence, to compare with and either validate or disprove the perspectives of governments or other organizations that currently 'speak for' communities, setting policy and making decisions that primarily affect those communities.

While representing a gap in the existing research, placing such emphasis on the community at the centre of effective recovery is not unique (internationally). The central proposition from a multinational community resilience policy group co-chaired by senior government officials from the UK and the USA (2010) is that for the response to natural disaster to be more effective, citizens must be more involved and even lead local and regional resilience activities before, during and after emergencies. The starting point for effective action in the minds of this group is that centralized government control should be reduced and that governments instead need to understand local realities, support local leadership, leave policy open for emergent responses, and strengthen core capacities and relationships at the local level. They argue that only by shifting the focus to the local level will nations effectively resist and respond to crises, and enhance community resilience to ensure effective recovery when crises do occur. The challenge for governments and communities is therefore to work out what 'local involvement' means, how it can be nurtured, and how governments can transform their role into one of being supportive of community engagement and an enabler of effective community action (Bach, Doran et al. 2010).

This research is designed to identify what occurs on the ground in disaster-affected communities, what community led and other action takes place, and what capabilities already exist. Only then can this evidence be added to the evidence from other related research, to inform a more effective community and policy response and a more effective approach to developing community capability and resilience, to achieve a more effective recovery for communities affected by disasters in the future.

Methods of Inquiry and design of fieldwork

A number of research methods and design elements were considered during the design of this research. Given the underlying assumption that all communities will have some strengths and capacities, it was not considered appropriate to conduct a *comparative analysis of a 'successful' community and an 'unsuccessful' community* in relation to their disaster experience. Such an approach was also not considered to be

appropriate; given the potential consequences for any community in being labelled in this way.

Any research design based on *pre and post disaster testing* of community members has a difficulty of predicting the location and timing of disasters. While some evidence about community strengths is available through data sources at the Australian Institute of Health and Welfare, the Regional Australia Institute or the Australian Bureau of Statistics, this pre-disaster data has not always been collected from community members themselves, and includes standard and fixed measures of community capacity and strength. The post-disaster data collected from participants in any qualitative study could therefore be substantially different to the pre-disaster data collected from existing data sources. Any variation or discrepancies between the pre-disaster data collected from surveys and census processes could, if compared if compared with data collected directly from community members, be explained or critiqued as being due to the differences in methodology.

This study is based on a qualitative approach to conducting research (Maxwell 1996, Bryman 2012), including elements of both grounded theory and inductive reasoning (Strauss 2008). The design of the fieldwork includes intentional sampling of those communities and community members most likely to be able to contribute to the research, a rolling sample process once entry to the community is obtained, and open coding to search the evidence gathered for answers to the key research questions (Strauss 1990). The consequence of this combination of design elements is that the results of the research will emerge from the research itself, without the researcher having designed the methods with any particular findings in mind.

This research is broadly designed to identify the open questions that are being considered, i.e. what factors contribute to supporting and strengthening community resilience and the process of community recovery. The specific data that emerges will therefore be evidence of the voice of the community, without interference or guidance from the researcher. Any models or frameworks that emerge from the research, will emerge from the data itself.

For this reason, *force choice* responses to each question were not given to each interviewee during their semi-structured interviews, rather each was asked the same open-ended question in the same way, without any reference to previous answers from those or other participants, or expected or optional answers. The research design is based on the core principle that the voices that should be heard in order to understand

any experience are the voices of those who were the most affected by that experience, and that their descriptions should not be guided or influenced, but simply heard and accepted as being their truth, representing their reality and reflecting their experience.

The research design is also based on a preference not to use *surveys* to gather data about such a significant and difficult life event. Some studies have been done to understand recovery from disaster in Australia e.g. after the Canberra bushfires in 2003 (Camilleri 2010). The design of this research is intended to mitigate low survey response rates and the potentially limited nature of findings and conclusions, where data analysis relies on highly reliable forced choice survey results. This research provides a method whereby participants can explain exactly what they mean in response to each question, in their own words. While this option is more time consuming, results in more data, and is complex in terms of data analysis, the richness of the data collected is also maximised.

The research design has also intentionally not included the option of conducting *focus groups*. While these are very useful in some contexts, this design has been specifically developed to enhance the opportunity for each individual participant to provide a thoughtful response to the questions, rather than experiencing any pressure to reflect the view of the group, or any reluctance to speak their mind because of the presence of others.

As a result of these considerations, this research has been divided into two stages: the first stage involves interviewing formal leaders of disaster recovery processes and programs, about their perspectives of the community recovery process; and the second stage involves interviewing community members from disaster affected communities about their perspective of their community's adaptation to and recovery from that disaster.

Stage 1 – Rationale and Design

Rationale

In Australia the views of high profile individuals are given high levels of credibility in the media and by key decision makers in both government and the non-government sectors, in relation to many issues including during response and recovery following a natural disaster. These people are appointed to leadership roles in civil society and in government, and they are given leadership roles in relation to disaster recovery taskforces and government disaster inquiries.

Stage 1 of this research was therefore designed to find out what leaders of disaster recovery processes and taskforces, identified to be key factors contributing to disaster recovery for the affected communities. The purpose is threefold: to identify key themes and domains that are relevant to the study of community recovery in communities affected by natural disaster in Australia; to identify the factors that disaster recovery leaders believe contribute significantly to an effective community recovery; and to enable a subsequent comparison between what this group of high level leaders thinks and what community members who live through the disaster recovery experience think.

Design

The first stage is important because of how government and non-government organisations respond to natural disasters and contribute their effort to disaster recovery, in Australia. Often immediately following the occurrence of a major natural disaster in Australia, the federal government declares that this crisis is now recognised as a disaster. This official declaration triggers the provision of a series of supports for those most affected, including financial payments. Within days, a recovery taskforce is usually established under the leadership of a specific trusted and credible individual.

The following individuals were included in the participant sample for Stage 1 because they fulfilled the following roles:

- + General Peter Cosgrove was appointed in March 2006 to lead the Cyclone Larry Recovery Taskforce in far north Queensland. General Cosgrove was a previous *Australian of the Year*, a well-known retired Chief of Defence and was received by the public as a very popular choice – representing strength and calm in the face of adversity. Interestingly, during the community-based fieldwork for this research, 5 years after the Cyclone Larry, community members still spoke highly of his leadership in this role following that cyclone.
- + Ms Christine Nixon was appointed to lead the Victorian Bushfire Reconstruction and Recovery Authority after the Victorian bushfires on what became known as Black Saturday in 2009. Ms Nixon was a former Chief Commissioner of Victoria Police from 2001 – 2009.
- + Then Premier of Queensland Anna Bligh was very visible in her leadership role during and following the extensive flooding experienced across Queensland in 2010-11. Because so much of the state was flooded that summer, Premier Bligh was a significant and visible disaster response and recovery leader as she led daily press conferences, which were telecast across Australia.

- + Major General Richard Wilson became the Chair of the Queensland Reconstruction Authority in September 2011, to continue the work of his predecessor Major General Mick Slater, both of whom were well-respected leaders from the Australian armed forces.

Not only are these people visible in the media as they fulfil their roles, a characteristic of a disaster recovery leader in Australia is that they also visit communities regularly and meet local people informally.

Individuals with significant national disaster leadership roles from organisations such as the Red Cross, the Salvation Army, and the churches were also included in the participant sample for Stage 1, because these organisations also play significant roles in the recovery process after every major disaster. These organisations coordinate the provision of donations, and food and clothing; and provide other social, financial and practical supports to affected communities. State government officials are also included in the research because senior state government officials often contribute to recovery processes and assist the local community, e.g. by establishing a recovery centre in a central location in the affected area to provide a range of social and financial services to those most affected. Other organisations and individuals were included because of their role as advocates and advisors before, during and after disaster, often speaking on radio and working with communities to prepare and plan for disaster, and to assist recovery if disaster occurs.

The Australian approach to many issues includes an egalitarian element, with high level and respected leaders in a range of spheres reaching out to connect with the 'ordinary man and woman on the street'. These disaster recovery leaders have all demonstrated a similar connection to the communities and community members in these disaster related leadership roles, and were included in the sample of participants for Stage 1 for this reason.

Semi-structured interviews were designed and then conducted with each of these leaders, to identify key domains of recovery and to assist the researcher to refine the questions and the methodological approach to Stage 2. Participants in Stage 1 were asked to reflect on their own observations and experiences, given their leadership role in relation to one or more communities, and to respond to open-ended questions from this position. Chapter 4 and Appendix B include the specific questions asked during Stage 1 interviews. These questions were designed to elicit from participants their views about the essential characteristics of a strong and functional community (i.e. pre disaster); the essential elements of an effective community recovery; how community

recovery occurs in affected communities; the most significant emergent action or capability within communities during or after disasters; what types of assistance are the most effective and when such assistance is best provided.

Stage 2 – Rationale and Design

Rationale

It is central to this research, to investigate the views of the affected community members themselves – those who lived in the community before each crisis, lived through the crisis and remained in the community, at least up until the time that the research occurred. Having gathered the views of the recovery leaders it was essential to then juxtapose this with the views of those immersed in the experience, those who lived it. The comparison of evidence gathered would then yield more insight into both perspectives, a more informative analysis than gathering one such perspective on its own.

It is useful to compare the observations, experiences and views of the participants in Stage 1 with the observations and experience of disaster affected community members. Stage 2 of the research was therefore designed to compare the findings of Stage 1 with the views and experiences of community members and leaders, exploring the key domains of community leadership, social capital and community engagement, from the community's own perspective. Stage 2 of the research was also designed to provide an opportunity for the community member to provide their perspective on whether there are other factors that they believe contribute to their collective recovery, and in particular what they and others do that supports their own recovery.

The key rationale for Stage 2 of this research is to explore what the communities themselves consider to be the key factors that contribute to their community recovery, including what they themselves actually do in response to the crisis. Through the next stage of this research communities will be able to describe their own strengths and capacities, and acknowledge their own contribution to their community recovery, and further evidence will be gathered to inform an accurate understanding of community recovery and how best to support such recovery across diverse communities after fire, flood or cyclone.

Design

In this stage of the fieldwork, semi-structured interviews were designed on the basis of the key domains identified in Stage 1. Four communities were identified on the basis of

the following criteria: firstly they were geographically spread from north to south of the eastern seaboard of Australia: they had experienced fire, flood or cyclone (and in the case of one community two of these extreme weather events within 12 months); and importantly, they were a minimum of one year past the experience of their crisis, so that grief would not be raw and to manage the risk of causing any further distress to the community members, and a maximum of five years past the most recent disaster experience, to minimise the effects of memory distortion and bias.

Sampling - Issues and Methods

Sampling of participants in Stage 1 was based on who had held leadership positions during recent disasters across the eastern part of Australia, and who was willing and available to participate in this research. Potential participants were invited to participate in the research, and those who accepted this invitation were included. It was always intended that Stage 1 would be based on a small sample, likely to include less than 12 people.

Sampling occurred at two levels for Stage 2 of the research: the sampling at the community or location level, and then the sampling of participants within each community or location.

Community based fieldwork - sites

Purposive sampling of the communities

Four communities were purposefully selected (Strauss and Corbin, 1990) for the fieldwork, taking a number of issues into account. The research includes the three most frequent forms of extreme natural event in Australia; fire, flood and cyclone. Each site had experienced one (or more) of these with their most recent experience occurring not less than one year and not more than five years before the fieldwork. Australia is a large continent with a variety of geography and topography. Sites were selected to ensure that there was a geographic spread from the far north of Australia to the far south (Tasmania). Sites were included where loss of human life had occurred and where no loss of human life had occurred. In all cases loss of livestock and wildlife was extensive. Loss of or damage to businesses and economic interests occurred in each site. All sites included both towns and farming land. For emotional reasons rather than scientific ones, it is noted that these sites also include some iconic Australian geographic locations: a tropical holiday destination; a national park previously filled with kangaroos, koalas, and extensive wildlife and birdlife; farming land; 'the vegetable bowl' of the country; and a Tasmanian 'holiday' coastal town with a

strong and active artistic community. For Australians these sites will touch an emotional cord because of the cultural and shared value placed on the land, 'the outdoor life', and the coast.

[Cyclone Larry – the Cassowary Coast](#)

Cyclone Larry formed over the Coral Sea on 16 March 2006 and made landfall on 20 March 2006. In that time it had strengthened from a Category 3 to a Category 5 cyclone, and then reducing to a Category 4 before crossing the coastline near Innisfail in far north Queensland. As a result of the cyclone heavy flooding occurred across Queensland. While there was no loss of life, thirty people are recorded as being injured. The banana industry suffered extreme crop loss, accounting for more than 80-90% of Australia's total banana crop of 200,000 tonnes of fruit worth approximately \$300 million. Also destroyed were at least \$15 million worth of avocados. Local towns were devastated: with Silkwood recording 99% of buildings as damaged, Babinda up to 80%, Kurrimine Beach 30%, and Mission Beach 30%. The estimated financial cost of the crisis is AU\$540 million (EmergencyManagementKnowledgeHub 2016).

[Cyclone Yasi – the Cassowary Coast](#)

Cyclone Yasi formed on 26 January 2011 and made landfall on 3 February 2011. It strengthened from a category 3 Cyclone to a Category 5 cyclone on 2 February 2011. The eye crossed the coastline at Mission Beach and then crossed over Tully. Cyclone Yasi was more than twice the size of Cyclone Larry when it made landfall and affected a much broader area of Queensland. To place this in the international context, Cyclone Yasi was also significantly larger and stronger than Hurricane Katrina. Significant rainfall and flooding followed which affected most of Eastern Australia as flooding spread throughout the extensive river systems. There was no loss of human life directly attributed to the cyclone, although one man died of asphyxiation due to using a generator in an enclosed space. Over 90 per cent of Australia's banana crop was again destroyed and hundreds of hectares of sugar cane were inundated. 1000 homes were lost or damaged and hundreds of boats and yachts were also damaged, including 70 that were moored at the marina at Port Hinchinbrook. The estimated financial cost of this crisis is AU\$1.41 billion (EmergencyManagementKnowledgeHub 2016).

[Severe flooding – the Lockyer Valley](#)

In late November 2010 heavy rainfall began falling across Queensland. By January 2011, 95 per cent of the state was flooded and a disaster zone was declared. On 10

January 2011 a wall of water swept through Toowoomba and then through the Lockyer Valley (noting that this was just prior to Cyclone Yasi making landfall as mentioned above). 33 people died in this sudden inland tsunami, and the force and speed of this localised flooding resulted in 3 bodies never being found and one body being located over 50 kilometres from where they were last seen by a neighbour at the moment of impact of the floodwater (Queensland Floods Commission of Inquiry 2012). 3572 businesses were inundated, with thousands of people evacuated from their homes. More than 28 per cent of the Queensland rail network was damaged and displaced. An estimated 28,000 homes needed to be rebuilt (EmergencyManagementKnowledgeHub 2016).

[The Warrumbungle's Bushfire - Coonabarabran](#)

Fire is reported to have started in the Warrumbungle's National Park on the evening of 13 January 2013. Over subsequent days this fire then grew and continued to burn, largely being considered 'out of control', until rain fell in late January. On 29 January, the fire was declared to be almost completely out. 54,000 hectares of land had been burned. The Warrumbungle's National Park was significantly destroyed. There was no loss of human life in the fires. As at 17 January livestock losses were reported at 12,000, 51 homes were destroyed, approximately 100 sheds, extensive machinery, some buildings at the Siding Spring Observatory and infrastructure and buildings at the Warrumbungle's National Park. Almost all wildlife was lost, with some birdlife able to return when the fires were extinguished. The estimated financial cost of this crisis is AU\$35 million (EmergencyManagementKnowledgeHub 2016).

[Bushfire - Dunalley and the Tasman Peninsular](#)

The 2013 Tasmanian bushfire season included a series of bushfires in South East Tasmania starting as early as November 2012 and continuing with major fires in January 2013, and further fires occurring as late as April 2013. Thousands of people took shelter on beaches, in boats and along the Tasman peninsular. There was no loss of human life directly attributed to the fires, although one man died of natural causes when he was approximately 2 kms from the fire front. More than 20,000 hectares of bushland was burnt, and 212 buildings were destroyed, including 203 homes. Dunalley was particularly severely affected with 65 homes, the police station, the primary school and shops destroyed. 15 homes were destroyed in nearby Boomer Bay, 12 in Bicheno and 14 at Sommers Bay. It is estimated that 100 businesses were directly affected and 150 were indirectly affected. Key industries in the region had significant losses. The timber mill has not reopened. While the abalone industry continued to operate, the oyster industry was severely affected suffering damages

estimated at \$3 million. The estimated financial cost of this crisis is AU\$89 million (EmergencyManagementKnowledgeHub 2016).

Community based fieldwork – participant sampling

In each community a purposive and snowballing approach was taken to sampling community members and identifying participants. The research began with a small number of participants in each location and those participants subsequently suggested that other community members participate. The research explicitly identified that diversity of the sample was an intention. Participants were therefore encouraged to consider diversity when encouraging other participants to volunteer. A number of factors influenced the decision to sample participants in this way. One underlying principle for undertaking the research was to cause no further harm to participants. Another was that the participants would decide for themselves whether they would participate in the research. It was therefore essential that the participants were volunteers. The research recognises that people grieve in different ways and take different times with the process. It was important to this research that these differences were respected through sampling and through the process of semi structured interviews. Another underlying principle was that each experience and response is valid and each participant can express their experience for themselves. No-one was asked to represent anyone else's view or experience. Participants were encouraged to recommend the research to anyone who might offer an additional or different experience of the recovery process, or additional or different observations about actions and activities that occurred and whether they helped, for their community.

One potential concern arising from the method of sampling in this research is that 55 of the 112 participants were actively involved as ongoing volunteers in their communities. 51 of these participants were also actively involved in disaster related volunteer roles before the relevant crisis, during that crisis, during the response, or during the recovery stage. It could be argued that the sample is therefore skewed by the inclusion of a large proportion of active community members, or it could be argued that this is representative of country communities or communities who face a large scale crises. Further research would be necessary to answer this question. Regardless of the reason behind this potential skewing of the sample, this does indicate the existence of capable and active community members in each of the sites included in this research, and this can be assumed to be the case for many communities across Australia. This finding represents an opportunity that can be further developed by investing in and supporting such community activity and participation.

Data Collection – Issues and Methods

Community engagement

An essential element of data collection in qualitative and community-based research, is the process of engagement with and entry to each community or location. Effective community engagement is not necessarily straightforward at any time. There are many handbooks and articles written about how to engage with communities and the associated challenges (Brown and Keast 2003, Cavaye 2004, Government 2011). Community engagement was therefore potentially even more difficult when that community had recently experienced a crisis such as a natural disaster. The method and success of community engagement was considered to be crucial to the quality of the data collected, and therefore was carefully planned in relation to each community site.

In each case the first approach to the community was through the local council (local government level) to explore the possibility of conducting the research in the region, and to see if a local community action group existed. The literature review had indicated that local community action or reference groups were often established in affected communities as a consultation mechanism for local or state government. This group was therefore likely to provide a mechanism for contacting community members interested in participating in this research. In each case the council was helpful and employed a disaster manager or officer, or a community contact person. An email introducing the research was provided to council and via council to local community members or local community organisations such as the local Rotary or Lions Club. This email included a link to the researcher's website <https://communitydisasterrecovery.wordpress.com> which provided background information about the research and the researcher. In each community some community members responded very quickly to the researcher's email. The sampling method then became a 'snowball sample' as community members passed on the details and the focus of the research, and more community members sought to be included.

In each community, care was taken that the fieldwork did not occur within 12 months of any crisis. The researcher judged that it would be inappropriate to conduct research in any community within 12 months of a crisis and therefore to include participants who were potentially still grappling with the early and 'raw' emotional and practical toll of loss and grief. It was decided that the research, and the community members who

participated in that research, would benefit from having had adequate time to reflect on their experiences.

In each community, before physically arriving at the community, the researcher made an assessment that sufficient participant numbers were likely to be available in the community to conduct the research. In two of the communities, local community members passed the researcher's details to the local regional ABC radio, and the researcher was interviewed live on radio. In each case additional participants contacted the researcher and participated in the research, as a consequence of hearing that interview.

The researcher stayed in each community for a number of weeks. A target of at least twenty participants per community was set and the researcher began to extract herself from each community when that target looked likely to be reached. In each community, members were very keen to participate in the research and many commented that it became an element of their community's recovery process.

Prior to the interview documentation was given or sent to each participant. This informed the participant about the purpose and process of the research, the background of the researcher, the counselling support that was available should the participant need it, and the interview questions that would be asked.

At the commencement of each interview the researcher confirmed that consent to participate was informed, that the participant was aware that they could withdraw at any time during or after the interview (up until submission of the thesis), and outlined the intended process of the interview. At this point many participants in Stage 2 asked the interviewer two questions: where she came from and who employed her to conduct the research. The researcher informed participants that she grew up in the country and had resigned from employment in order to undertake the research. Many participants commented that they felt more comfortable being interviewed by a country born researcher, who was not employed by any level of government. The commencement of each interview clearly established or confirmed a relationship of trust.

Such was the determination of local community members that exiting from two communities was delayed as additional community members sought enthusiastically to be included in the research. One participant was interviewed during treatment for a terminal illness. This participant had heard about the research, and initially did not

approach the researcher. He did so towards the end of the research in his community, stating that he could not resist inclusion in spite of ill health. He gave his permission for his voice to be included, and has since died. His wife has confirmed his desire to be included and restated their commitment to being involved. This research mattered to those community members included. It mattered a great deal.

Semi-structured interviews

A range of existing frameworks and tools for research and data collection were considered during the design of this research, including a framework for measuring wellbeing (ABS 2004), the Connor-Davidson resilience scale (Connor and Davidson 2003), and other individually focussed tools (Simmons 2013). The use of unstructured interviews about community recovery, as a tool for collecting this evidence, was rejected given the unwieldy data that would likely arise. Highly structured interviews with checklists and forced choice answers, were similarly rejected because of the risk that answers would be too constrained and valuable information would not be identified by participants. Semi-structured interviews were finally chosen as the primary data collection method, in order to maximise the opportunity for participants to answer open-ended but focussed questions using their own language and expressing their own views, without any sense of being guided by an explicit or implicit set of structured questions or a checklist of any kind. Semi-structured interviews also enabled the participants to provide complex interview answers focused on community resilience, thereby illustrating their own understanding of relevant concepts. While this approach has its challenges in terms of data analysis, the richness of the evidence gathered was considered worth this approach.

The findings of this research are based on the evidence gained through a total of 112 semi-structured interviews, with between 22 and 34 participants from each selected community. Each participant was asked the same questions during this research, including being asked to describe what actions they observed that they now think about as assisting the recovery process for the community.

Chapter 5 and Appendix C include the specific questions asked during Stage 2 interviews. These questions were designed to elicit from participants information about their connection and history with their community; what they observed occurring within their community that they now (on reflection) believe was important for the recovery process in their community; whether people adopted leadership roles before, during or after the crisis, and how important this was to the process of community recovery; whether there were other significant factors contributing to their community's recovery;

what they had learned about community recovery; and what they most wanted other communities across Australia to know about community recovery as a result of their experience. The interview questions were designed based on the concepts identified during the literature review (e.g. social and community capital, and that the definition of a community included an 'attachment to place'), and the themes that emerged from interviews conducted during Stage 1 (e.g. community leadership and community action). The intention behind the question design for Stage 2, was to engage the community members in considering these concepts and arguments and to test and validate them by listening to the voice of communities across Australia who have lived experience of natural disaster.

Participants each chose their preferred venue for their semi-structured interview. These interviews happened in homes, in places of work, in clubs and cafes, in public parks and on back verandas overlooking farmland. The participants also chose their preferred day and time. Interviews occurred during the working day, in the evening, on weekends. Prior to the interview commencing, all participants were advised verbally and in writing about the availability of counselling and other support if the interview became upsetting. All participants were advised that the interview could be halted at any stage and that the participant could withdraw from the research at any stage: before, during, or after the interview, up until the time the thesis was submitted. All participants have been sent email updates reminding them of this opportunity, after their interview and before submission of this thesis.

Interview questions were designed to elicit information from participants in a comfortable and non-threatening way. The research was designed in such a way that community members would be provided with the opportunity to share their perspective of recovery by describing what they observed before, during and after the crisis. Questions were included that enabled the researcher to compare the responses of the community members, with the recovery leaders from Stage 1.

All interviews were recorded with the agreement of all participants. Every interview was then transcribed in full. All participants have authorised the use of the information contained in their transcription. Some participants chose to amend their transcript. In these cases, the amended transcription was then used as the basis of their contribution to this research. This was specifically allowed as part of the provision of informed consent, as this research is not focussed on what participants remember at a moment in time, or about the particular language used at that moment in time. This research has been designed to find out what the participants observed within their community

during a particular period of time, and participants were allowed the benefit of reflecting on the discussion and clarifying, adding to, or correcting what they said during the interview.

The researcher did not share with any participant any information provided by other participants in their interview. Each interview was conducted separately, and each was conducted in the same way, as if it was the first interview in the research.

Data Analysis – Issues and Methods

Given the qualitative nature of this research, and the size of the participant sample, a large body of information emerged from the data collection phase, for analysis. All 122 interviews from both Stages of the research (10 from Stage 1 and 112 from Stage 2) were transcribed from audio recordings, with the written and verbal agreement of all participants. Each transcription contained between 50 mins and over 2 hours of interview recording. All transcriptions were then analysed using NVivo (Version 10) software. NVivo software is specifically designed to support the analysis of data collected through qualitative research methods. This software supported the organisation and analysis of the data and enabled the data to be sorted into key themes and domains.

Data from Stage 1 was analysed to identify those themes and domains identified by the participants themselves during the course of their answers to questions. The interview questions were semi-structured to enable themes to emerge, and the transcripts were subsequently analysed seeking common language. Commonly used key words enabled the researcher to search the data from all 10 transcriptions for multiple or similar references and to thereby identify key domains and themes such as community leadership, social capital and disaster planning and preparation.

Data from Stage 2 was analysed in two ways: initially using the themes and domains as identified in Stage 1, and then looking for new patterns of information and new data categories. The first analysis searched for references to the themes identified in Stage 1 e.g. references to community leadership, social capital and planning and preparation. This analysis enables a comparison of the views of each set of participants – Stage 1 and 2 – to these aspects of community recovery. The second analysis searched for additional or new detail that did not emerge from Stage 1. Commonly used key words again enabled the researcher to search the data from all 112 transcriptions for multiple or similar references and to thereby identify additional themes such as individual actions, group initiative actions, and recurring case studies e.g. Blaze Aid.

Data from Stage 2 was then reviewed to identify stories shared by the Stage 2 participants. These stories were organised into categories based on the source or initiation of the action or activity, being described in the story e.g. whether the initiator of the action or activity was an individual from within the community or an individual from elsewhere, a group from within the community or a group from elsewhere. These layers of data analysis, applied to each stage of the research, provided a way of structuring and reviewing the evidence, which then allowed a discussion of the core issues and implications of this research to emerge.

Ethical considerations

Significant care was taken to ensure that this research complied with strict standards in relation to the ethical conduct of research. The research methodology and design (including sampling of communities and participants, design of interview questions, provision of psycho-social support to participants, data analysis and data storage) was considered and approved by the Human Research Ethics Committee at the Australian National University (ANU).

As part of the process of obtaining informed consent, participants in Stage 1 were asked for and gave their permission for their own name and the name of their organisation to be included in the research. Given the reasons for including Stage 1 in the research, the value of this stage would have been significantly diminished if the researcher were not able to indicate which leaders of recovery were included. These participants expressed a high degree of comfort with their views being attributed to them. Each had thought about the importance of their role and had learned from the experience. Each expressed a desire to assist the research and make their contribution. Each interview occurred at a time and place that suited the participant. All interviews were face to face: either at their workplace or office, or at a place of the participant's choosing. One interview occurred over Skype although the researcher and the participant had previously met. All interviews were recorded with the agreement of all participants. Every interview was then transcribed in full. Each participant reviewed a summary of his or her interview, based on a full transcript. Each participant provided permission for the researcher to use the information contained in the summary for the purposes of this research. Each participant was given the opportunity to amend the summary or to withdraw from the research if they wished, at any stage up until submission of thesis for examination.

These key ethical considerations again informed the process of obtaining informed consent from the participants for Stage 2, with the following key differences. All participants in Stage 2 were assured of their privacy and confidentiality. While some participants stated that they would happily be identified and have their contributions attributed to them, a commitment was made to each participant that their identity would be protected. Protecting the identity of some participants has been more difficult within their community, given that some participants chose to have their interview in a public place. A more complex issue arose as some stories were about people who were not participating in the study, and therefore had not given their consent to have their story discussed. However the participants who shared these examples and stories stated that they were publicly and generally known across the community. The researcher has carefully considered each story and in particular, has considered whether sharing that story could cause any offence or damage. The researcher is particularly aware of how frequently people emphasised their desire that their stories be shared with other communities.

As already stated, participants went to considerable effort to ensure that they participated in this research so that their stories were shared. Many offered to give written consent for their name to be published. Many went to significant effort to participate in the research e.g. travelling long distances or rearranging appointments. Many participants spoke of the importance of the community voices being heard in the broader discussion about natural disaster, and expressed the hope that this research could redress the imbalance about who is heard when policies are developed and decisions made that affect communities. Many participants emphasised the importance of other communities learning from their experience: about the experience and effect of natural disaster; about the actions and activities that help recovery, in their own community and in others; and about the courage and strength required to survive and recreate a future.

Many participants also commented on the unusual and positive experience of being listened to with deep respect, and without interruption or the presence of any agenda on behalf of the researcher. The lack of specific hypothesis to test through the questions, was considered to be a positive aspect of this research, by the community members.

As with Stage 1, each interview occurred at a time and place that suited the participant. All interviews were face to face: either at their workplace or office, or at a place of the participant's choosing. All interviews were recorded with the agreement of all

participants. Every interview was then transcribed in full and each participant reviewed a copy of that transcription of his or her interview. Each participant provided permission for the researcher to use the information contained in the transcript for the purposes of this research. Each participant was given the opportunity to amend the transcript or to withdraw from the research if they wished, at any stage up until submission of thesis for examination.

As already described, each participant in both Stages 1 and 2 was given a number of opportunities to control the level and detail of their participation. Participants appreciated this control. Some edited their interview transcripts in order to ensure that the information provided was completely accurate, to the best of the participant's knowledge. All audio files and interview transcripts have been securely retained and will be securely retained until 5 years after the conduct of this research.

Information that was developed as part of developing the methodology for this research is at Appendices A - E. A website was developed to complement this research and many participants explored this website as part of deciding whether to participate in the fieldwork. Details about this website are at Appendix A.

Strengths and weaknesses - design and methods

Strengths

There are some key strengths in how this research was planned and conducted – particularly in relation to Stages 1 and 2 of the fieldwork (i.e the interviews conducted with participants).

Both stages of this fieldwork were planned with care, keeping the wellbeing of the participants as a central focus. While the purpose of this fieldwork was not to dispense psychological first aid, the research had a commitment to cause no harm and therefore the fieldwork design and implementation complied with leading guides and handbooks on the provision of psychological first aid (Vernberg, Steinberg et al. 2008) (Vernberg, Steinberg et al. 2008, Wooding 2012, Society; 2013). Despite some concerns that psychological first aid is unproven (Dieltjens, Moonens et al. 2014), there are many proponents of the use of these principles (Ruzek, Brymer et al. 2007, Plummer, Cain et al. 2008). Psychological first aid remains a highly respected source of guidance for fieldworkers working with survivors of disaster affected communities (Kondro 2011). A leading expert in psychological first aid, loss and grief also advised the researcher on these aspects of the research.

A brochure and a website were created to ensure that participants were well informed about the researcher and the research before participating. Each participant in both stages of the research, was also given an information sheet and the interview questions, in the week before the interview and then at the beginning of the interview itself.

A key strength of Stage 1 of this research is that it is based on the observations and experiences of leaders who have significant experience in relation to disaster management and recovery, and who have demonstrated high level strategic and conceptual thinking skills in relation to their various roles. They have also had significant contact with Australian communities over many decades and bring a wealth of knowledge about community development, community function and community recovery to this analysis.

During Stage 2 of this research, the researcher lived in each community for approximately 3-4 weeks. The researcher was clearly visible in each community, and was easily approached or located throughout the day and evenings, if community members wanted to add themselves to the sample. In two sites, the researcher was approached by the local ABC radio and participated in a radio interview herself about the research. Local newspapers in two sites ran a short story about the research.

Each semi-structured interview was conducted in the same manner by the one researcher. Variation between the approach to and delivery of interviews was minimal, even between sites. As far as is possible, each site was approached as a fresh site with the researcher consciously open to a different experience, and different results, from each interview within and between each site.

Interviews were conducted in a place of each participant's choosing. Some interviews happened in the participant's home, some in cafés or workplaces, some in public parks. In each case the participant was able to choose a venue where they would be comfortable. The interview questions were provided to the participants before their interview, and then placed on the table for easy reference. If a participant became in any way distressed the researcher offered to cease or interrupt the interview.

All participants were informed verbally and in writing about the consequences of providing consent, and provided their consent, prior to the interview commencing. All participants were advised before, during and after the interview that they could

withdraw their consent at any time (up until submission of this research) without negative consequence to them.

Numerous participants commented on how easy it was to talk with to the researcher and to answer the questions. Reference was made in one site to other research where this had not been the case. Interviews ranged from 55 minutes to 2 hours in length. Each participant was advised that the interview would take approximately 1 – 1 ½ hours but that the researcher would allow additional time if the participant wished. Each interview was recorded and later transcribed, and this allowed the researcher to focus on deep listening and ensuring that the questions were each asked in the same way.

A strength of this research emerged from the relationship of trust established between the researcher and the participants, resulting in the willingness of participants to speak openly and to tell their stories from the heart. Trust was established by two questions that were asked by many participants: “who is employ\ing you to be here?” and “where are you from?”. The researcher was able to build trust immediately by advising that they had resigned from their employment in order to undertake this research and that their only income was via a scholarship from the University. In answer to the second question, the researcher was able to advise that they were the sixth of seven children and grew up on a farm in western Victoria. Both of these responses spontaneously resulted in comment from a number of participants that they were willing to trust the researcher to share their circumstances and views honestly and without distortion, based on these two characteristics.

Participants commented on the quality of this relationship, some expressing surprise. More than one male participant advised the researcher that they had not previously shared the information being shared in the interview, that they had not previously felt able to talk about it. Many participants expressed deep gratitude about participating in the research, and identified doing so to be part of their own personal healing or recovery process. As previously mentioned, tears of sadness were often shed, with smiles of gratitude about being able to do so, in a safe interview relationship, and with no judgement. Stories were listened to, loss and grief were honoured, and the researcher expressed a genuine openness to finding out what participants had seen and experienced in the recovery process. There was no specific hypothesis other than that they would have experienced and seen something of value, and no expectation about what participants might say. The research question was genuine in that there was a genuine curiosity about the answers that might emerge, without the researcher

having any preconception about the detail of those answers. The significance of this for participants, cannot be overestimated.

Weaknesses

Many of the strengths of the research can also be seen to be weaknesses. It could be argued that the participants were too comfortable and that their interviews may have been allowed to continue for too long. It could be argued that 'liking' the researcher may have influenced the participants and altered their participation. Given the subject matter, and the experiences of the participants, these concerns are not considered to outweigh the benefits.

A weakness of Stage 1 of this research is that it is primarily based on the observations and experiences of a small number of leaders of disaster recovery in Australia. The number of leaders included in the research is small, and by their nature these leaders have occupied a senior role in relation to disaster recovery. It can be argued therefore that this research provides an overview of the process of recovery without necessarily having a detailed understanding of the community experience. Participants did however cite a large number of examples of communities that they observed or experienced as clearly demonstrating their view of the recovery process. While all of the participants provided examples of specific communities to support their arguments, it can be argued that this research is based on anecdotal evidence.

Some degree of concern about the validity and reliability of the information gathered from both Stage 1 and 2 is justified. Particularly in Stage 2 these community members were speaking for themselves at a moment in time. There is no way to empirically test or retest the validity or accuracy of each participant's view. In any case this research is based on a theoretical model that includes a premise that the view and experience of each or any participant is valid i.e. is their view and experience, particularly at the time it is obtained. Subjects may have misremembered some of the details in their stories or they may change their view over time. They may also have been influenced by their views of one another and of the circumstances surrounding the extreme weather event. This may have resulted in them providing particular details in response to some questions. They may have been influenced by the timing of the interview, in relation to the crisis and their own recovery from it.

This research could certainly be repeated in other communities or in the same communities at a different time. If the research were repeated in other communities, it could reasonably be expected that some of the same types of examples would be

given in answer to the questions. Some new information may also emerge. The same themes could be expected to emerge. If the same participants were asked the same questions at another time, their views may have altered in some ways given the greater opportunity to reflect or consider new information. One of the strengths of qualitative research is that it exposes the richness of human variation. There is diversity, sensitivity, and subtlety in the human experience of trauma and loss. Qualitative research is the only way to reflect this richness.

A word about tears

Community members shared stories and descriptions of actions and activities that for them explained or demonstrated the concepts of community, of disaster and of recovery. There were many occasions when participants became emotionally affected by reflecting on the questions and preparing to tell, or actually telling, these stories. While tears were shed, every participant wanted to continue to share their stories and their experience. When offered the opportunity to cease the interview, a small number chose to have a short break, and these people took the opportunity to show the researcher something; their home, some photographs, the quilts sent to them by strangers, a twisted or melted item from their life before the crisis, or their view of the landscape. Every one of these participants then continued with the interview.

Many participants spoke of their tears being about loss and grief, about the overwhelming nature of what they had been through, and also about gratitude. Some participants spoke of how much they had learned through their experiences, about themselves, about one another, about their community as a whole, about courage and compassion and about endurance and strength.

Conclusion

A key motivation behind the research design and the methods employed in this research, was to create a process that acknowledged and respected the trauma that the research participants had experienced, demonstrated that their experiences and perspectives were of significant value, and provided a process for them to share their experience of community response and recovery, in their own words. In this way participants were able to contribute to the broader policy and academic discussion about community recovery and resilience after disaster.

The success of this research was influenced by the degree of trust that participants had in the research design and the behaviour and approach of the researcher. Key

elements of research design and methodology were: having a clear research question and core hypothesis underpinning all elements of the research design; implementing respectful community and participant engagement; developing thorough and yet relaxed interview question design and delivery; demonstrating consistency in the behaviour and approach of the researcher to each interview and each site; ensuring the establishment of trust and mutual respect between researcher and interviewee; and allowing the participants to control the location, timing and continuation of their interview and participation.

Having established the need for this research, clarified the hypothesis and the question, and outlined the rationale and qualitative methodology for the two stages of fieldwork, what remains is to share the findings of each stage. Chapter 4 will outline the findings of Stage 1: the perspective of leaders of recovery and other experts, and their observations about what contributes to community recovery. Chapters 5, 6 and 7 will then explore the findings from Stage 2: data gathered from the community members themselves. Chapter 8 will analyse this evidence base identifying key patterns, exploring the findings, and proposing new models to clarify our understanding of community disaster recovery. Chapter 9 will draw conclusions from the research and identify potential implications arising from the research: for future directions in policy, in research and for the actions of communities themselves.

Chapter 4 – Findings and Data (Stage 1)

“The community will be the greatest source of ideas, resources, and that intangible but indispensable ingredient, confidence – the kind of confidence that becomes infectious and self-fulfilling.”

General Peter Cosgrove

Introduction

The purpose of the first stage of the fieldwork component of this research was to obtain the observations and experiences of a sample of formal leaders of disaster response and recovery in Australia. This information would then be used to finalise the design of the second stage of the fieldwork by indicating patterns and domains that could be explored further, and could effectively influence the design of Stage 2 questions. Stage 1 would also ultimately provide a basis on which to compare and contrast findings from formal leaders of disaster recovery with findings from community members from four communities, once Stage 2 has been completed.

Ten leaders of recovery processes undertaken in Australia since 2006, participated in Stage 1 of this research. Each of these participants previously held leadership roles in relation to natural disaster response and recovery for one or more natural disasters in Australia – fire, flood or cyclone. In all cases their experience has included extended contact over many months (in some cases years), with a number of disaster affected communities. While these participants came from different backgrounds, all had occupied significant positions of influence and leadership throughout their careers. Participants were from both the government and non-government sectors, including the community sector, the Australian military and the police, and are in some cases well known Australians with a public profile across Australian society.

Each participant had thought about the factors they believed would most assist community recovery and each gave informed consent to have their views clearly attributed to them. The views of these individuals forms part of this research, because they hold considerable influence over the Australian policy approach to disaster recovery, even though a number of them no longer hold active leadership positions in this field. While these ten leaders all held clear views about community recovery after natural disaster, they did not always agree with one another about the nature of the key factors they identified, or which were the most important in relation to community recovery.

Each participant was interviewed for up to 2 hours and was provided with open-ended questions ahead of the interview, to focus the interviews and to enable comparisons between participants. The aim of the interviews was to identify what each participant had experienced and observed during the disaster recovery process, and in particular to identify what they believed to be the most significant factors that contribute to community recovery, based on those experiences and observations. Each participant was asked the same questions without prompts or suggestions from the researcher, so that the research would reveal the views of participants without any suggestions of interference from the researcher. Participants may have views in addition to those they discussed during their interview. It would be interesting to see if there was any greater degree of agreement between them, if the participants were asked to review and comment on or rank all factors identified by all participants.

The participants included in Stage 1 of this research are:

- + Ms Anna Bligh (then Premier of Queensland during the 2010-2011 floods and cyclones)
- + General Peter Cosgrove (appointed to lead the Cyclone Larry Taskforce in 2006 and now Governor General of Australia)
- + Ms Christine Nixon (previous Chair of the Victorian Bushfire Reconstruction and Recovery Authority (VBRRA) established after the 'Black Saturday' fires in Victoria in 2009)
- + Major General Richard Wilson (then Chair of the Queensland Reconstruction Authority)
- + Mr Andrew Coghlan (National Emergency Services Manager at the National Red Cross (Australia))
- + Mr Norman Archer (Director of Emergency Services at the Salvation Army - Eastern Australia)
- + Reverend Dr Stephen Robinson (Disaster Recovery Manager with the Uniting Church)
- + Ms Mara Bun (then Chief Executive Officer of the Green Cross Australia)
- + Ms Colleen Clark and Mr Greg Ireton (Department of Human Services, Victorian State Government)¹
- + Mr Rob Gordon (Consultant Psychologist from Victoria with a particular interest in psychosocial recovery after natural disaster).

¹ These two participants are counted as one because they are from the same organisation and participated in the same interview, providing very consistent answers to each question.

Interview Questions

As already described, participants in Stage 1 were asked to reflect on their own observations and experiences, given their leadership role in relation to one or more communities, and to respond to open-ended questions about community recovery from natural disaster. They were provided with these questions in advance of the interview, and their responses were recorded and analysed. The participants were each asked the following questions:

1. Based on your experience and what you have observed, how would you describe the processes and occurrence of community recovery after natural disaster? What do you consider are the *essential elements* of community recovery and *how does the process of community recovery unfold*?
2. Based on your experience and what you have observed, could you describe what you consider to be the *essential characteristics of a strong, functional community*; that is, a community that you would expect to recover from a natural disaster?
3. Are there *specific communities that you have found to be particularly memorable* in their approach to, and success in, recovery? I am interested in your observations of these communities. I am also interested in your view of what it was about those communities that made their community response and recovery possible.
4. Could you describe what you consider to be some of the more significant actions or activities, individuals or groups that have you observed *emerging from within the community itself* after a disaster? I am particularly interested in the following:
 - a. *what* emerged that *strengthened or supported* community recovery to occur,
 - b. *what* emerged (if anything) that *became a disruption or obstacle* to such recovery.
 - c. *when did these emerge* in relation to the crisis itself – during the immediate crisis and crisis response phases, in the early period of crisis response, or during the first or second year after the crisis, as recovery began.
5. Can you tell me about emergent *community leaders and/or community activities*

that have been particularly memorable to you, and in your view appeared to be particularly effective for community recovery? What do you think was compelling and effective about these individuals or activities?

6. Bringing together your experience, your previous roles, and now with time to reflect on the interplay of disaster response and community recovery:
 - a. What do you consider are the *key elements within each community that assist or strengthen that community's own capacity* to participate in and lead its own recovery?
 - b. *What types of assistance* (ie from outside the community) do you consider can most effectively assist communities to recover after a natural disaster?
7. *When* do you believe such external assistance should be provided to a community, if it is *most likely to be effective* in supporting that community's long term recovery – eg before a crisis during planning and preparation, when the crisis is imminent, in the immediate emergency and crisis response phase, or after the crisis has passed and during response and recovery?
8. Do you have any other insights in relation to community recovery that you would like to share?

These questions were designed to elicit from participants their views about the essential characteristics of a strong and functional community; the essential elements of an effective community recovery; how community recovery occurs in affected communities; the most significant emergent action or capability within communities during or after disasters; what types of assistance are the most effective and when such assistance is best provided.

Key findings

There was a high level of consistency in how participants in Stage 1 spoke about and reflected their underlying definition of community resilience and recovery. Participants were not specifically asked to define community recovery, but they included the concept within their answers and all spoke of community recovery having the following key elements: human and social recovery, economic recovery, and the restoration or rebuilding of infrastructure and physical assets. Most participants then spoke in far greater detail about the rebuilding and restoration of the housing; roads, bridges and public spaces; schools, shops or businesses, hospitals, churches and other significant

community buildings. The references made to the social or human recovery process, were usually included as part of the participants' descriptions of the process of restoring the physical aspects of community life, so that people could live and go about their daily activity or business as they did before the disaster. This emphasis on the restoration of economic and physical aspects of community function may reflect the particular roles of the participants, may reflect the priority these receive in the early stages of the community recovery process, or may reflect a deeper belief that these are the most important elements of community function. Participants did not discuss this in sufficient detail to draw a conclusion.

Participants were asked to identify factors that positively affect community recovery from disaster. Given that these participants had different professional backgrounds, they did not always use the same language to describe key concepts. Each described what they observed and experienced, using their own language. Some participants referred to concepts from the academic literature e.g. using language such as 'social capital' (see Chapter 2). Others described what they observed in more everyday language e.g. referring to interpersonal relationships and social connections between people. The researcher classified these references as referring to the same concept or factor.

Participants independently described a number of domains as important to community recovery after disaster, without guidance or suggestion by the researcher. Participant responses were grouped together during data analysis, if their description of the domain was highly consistent with the description provided by other participants. Where a description of a domain was not consistent with the description provided by other participants, this led to the recording of a new domain. For example all participants spoke about the importance of social relationships and networks, but only six participants then went on to describe how those networks subsequently generated community based actions or activities in the disaster response or recovery stages. These references are therefore included as two domains: social capital, and community based actions or activities. Participants also provided some detailed descriptive information, including examples and illustrations, to explain or illustrate their observations or experiences of the various factors relevant within each domain.

In descending order of agreement between the participants, the domains identified as contributing to community recovery were:

- + community leadership; and social relationships and networks (social capital);
- + community engagement with the disaster response and recovery;

- + how the process of emergency response and early recovery was handled by the emergency services and agencies;
- + community actions and activities that emerged after the crisis and during recovery (emergent disaster response); and government engagement with the communities after the disaster;
- + the history and culture of the community; and the existing relationships or previous experiences between the community and the government; and
- + funding (both amount and distribution); celebrity visitors; anniversaries and memorials; community disaster preparation (prior to the disaster); the scale of the crisis itself and its devastation (including loss of life and property); and a sense of attachment to place.

	Domains contributing to community recovery	Number of respondents	Percentage of respondents
1.	Community leadership	10	100%
2.	Social Capital	10	100%
3.	Community engagement	8	80%
4.	How response is handled	7	70%
5.	(Emergent) Community action in recovery	6	60%
6.	Government engagement	6	60%
7.	Community history and culture	5	50%
8.	Existing relationship with government(s)	5	50%
9.	Disaster preparation	3	30%
10.	Funding	2	20%
11.	Celebrity visitors	2	20%
12.	Anniversaries and memorials	2	20%
13.	Scale of crisis	2	20%
14.	Attachment to 'place'	2	20%

Table 1: Domains contributing to community recovery - see Appendix D for more detailed information about each domain.

1. Community leadership

All participants identified community leadership as a highly significant theme or domain related to community recovery. The presence within each community of community leaders, and their desire and capacity to lead their community recovery, was seen as a significant indicator of the likelihood of a strong community recovery. Such leaders were described as occupying *formal leadership* roles (eg the mayor and the local

council, local members of parliament, community business leaders) or *informal leadership* roles (eg leaders of community groups, music or artistic group leaders, sports coaches, leaders of local associations or community groups). Participants described various qualities of community leadership. In particular, leaders were described as having existing relationships with other community members, strong local knowledge of both people and the environment, a 'can do' approach, and an ability to think quickly and decisively in a crisis.

Two participants spoke of the need for the leadership style in the early stages of response and recovery (including community leadership by emergency services personnel and the local police) to be a 'command and control' style of leadership, changing fairly quickly into a more compassionate and supportive leadership style (often via community groups who focus on the provision of housing, food and other material support).

All participants stated that community leaders emerge from the crisis itself, to adopt a formal or informal leadership role during response or recovery, not necessarily having had such a role or position in the community before the crisis. All participants spoke of this emergent leadership as being a positive factor in relation to community recovery. Participants acknowledged that the ability of a specific individual to fulfil a leadership role that has been planned before the crisis depends on the impact of the crisis and whether that planned leader is both available and capable of fulfilling the role, given that impact. All participants mentioned that community leadership could not therefore be completely planned or organised in advance of a crisis. Participants emphasized that the effectiveness of such leaders depends partially on the degree to which they are accepted as legitimate by the community, and are therefore accepted to represent or lead that community. Two participants spoke at length about people who step forward as potential community leaders but are not accepted in that role by the community. They argued therefore that community recovery could be delayed or negatively affected by either a lack of leadership or a lack of acceptance of that leadership.

A final note about community leadership is that prior to conducting Stage 2 of the research, the researcher wondered if the participants had identified this as a highly significant aspect of recovery, because they were themselves in positions of leadership at the time and therefore were introduced and involved with these individuals during the response and recovery process. Community leaders were perhaps inevitably going to be highly visible in the participants' observations and experiences of disaster response and recovery.

2. Social relationships and networks (social capital)

All research participants spoke of the importance of social capital in relation to community recovery. While most participants used this specific term, the others spoke of the importance of key elements contained in the concepts: interpersonal relationships, family relationships, relationships between neighbours, social connections, levels of mutual trust and reliance, and membership of local community groups or associations. Participants described how pre-crisis community relationships, activities and traditions, participation in sport, church life, and groups such as Rotary, all contribute to higher levels of social connectedness, integration and cohesion, mutual support and levels of trust during and after a crisis. One participant went further to say that the community that 'has fun together' – celebrating Anzac Day, holding Carols by Candlelight, enjoying community events and activities, will respond better to a crisis and recover more effectively.

Two participants described communities where social capital had been created from a crisis where it had not existed before. Neighbours who did not know one another had formed connections and relationships arising from the disaster itself, assisting one another through recovery and often remaining strong supports for one another afterwards.

3. Community engagement with disaster response and recovery

Eight participants identified the speed and quality of community engagement with the crisis (the emergency response and the early recovery process) as an indicator of how effectively communities will recover in the longer term. This was linked to the role of social capital, with participants arguing that a community with high levels of social capital prior to the crisis, was more likely to be active during and after a crisis, was more able to both engage with the recovery process and therefore was more likely to recover effectively in the longer term. Participants reflected on the important role community members fulfil, in providing assistance to one another, listening to one another's stories and demonstrating mutual understanding and support. Participants described specific examples of communities where community recovery was clearly linked to early community engagement in disaster response and recovery efforts.

4. How the emergency response and early recovery was handled by emergency services and agencies

Seven participants stated that while the crisis or disaster is itself the key source of distress for communities and community members, the disaster response and recovery

process can become another source of distress, if not managed effectively. Participants referred this to as a 'second disaster' for the community.

Participants differed in how they described the ideal process of emergency response and early recovery. Most participants spoke of the importance of a *community led recovery* and shared a view that this community led approach needed to begin very quickly after the crisis had passed. This is consistent with government policy in both Australia and internationally, which espouses that communities should be at the centre of the recovery process. However, three participants in this research argued the opposite view, expressing the belief that a disaster-affected community is initially in significant shock and therefore cannot effectively engage with or lead its recovery, at least in the early aftermath of a disaster. These participants argued that disaster and emergency agencies must assume control for a significant period of time until the community is able to participate, and should then continue to maintain a degree of control over long term recovery. Interestingly, the leadership style adopted by each participant reflected his or her views of community led recovery. Those who support the importance of community led recovery described their own leadership style as that of a servant or responsive leader, while those who advocated against (at least in the early stages) community led processes, described their leadership style as authoritative.

One participant advocated passionately *for* community led recovery. It is this participant's proposition that current policy and practice does not include a genuine commitment to community led recovery, but rather espouses this view without implementing it effectively. This participant advocated that communities should have control and authority in relation to all decision making and all management of the recovery process from the outset, partially to ameliorate the damaging politicization that occurs at all levels of disaster response; within governments (federal, state and local), and within and between non-government organisations. They strongly advocated for a deliberative process of democratic decision making in relation to key aspects of the recovery process, including the allocation and monitoring of funding and expenditure, with control and decision-making resting with the community throughout all stages of a disaster. They also spoke about sites where this kind of genuine community led recovery has been demonstrated to be effective (FEMA Region VII 2007, Paul and Che 2010).

Some participants spoke of the damage caused by a very public focus on the *speed* of the recovery, and political or public pressure to *achieve* recovery and to be seen to be

doing so quickly (and perhaps more quickly than other communities). Participants agreed that while public statements to ‘build back better’, ‘rebuild quickly’ or to ‘open all schools within a specified period of time’ (often made by politicians), were understandable in terms of reassuring communities that action would be taken, this was damaging if this publicly stated time pressure became the focus of the recovery process, or an end in itself.

A difference that arose between Stage 1 participants was whether the disaster recovery authorities (and the participants themselves) drew a distinction between those community members who had lost their principal place of residence and those who had lost properties that were not their principal place of residence, and whether they treated those community members differently from one another. One leader strongly defended their publically stated policy not to provide the same financial support to owners of holiday or second homes as was provided to those who had lost their principal place of residence. Others argued that this was divisive and hampered the recovery process within communities where this distinction was applied. One participant described a location where this distinction was seen to be unnecessarily divisive, and was therefore not applied, with resources and support being explicitly provided to those who had lost property, regardless of whether the property destroyed was a primary or secondary residence. Each of these leaders argued for the inherent ‘rightness’ of the approach that had applied in their own jurisdiction, particularly if they were themselves part of the decision making process.

[5. Community actions and activities \(emergent disaster response and recovery\)](#)

Six participants identified that a key factor in community recovery is whether community members and groups become active after the crisis. Participants talked of two kinds of community groups; *pre-existing* community groups and those that *self organise and emerge* in response to the crisis. They described the ways in which community members and groups can support and assist one another, become active in the community and contribute to the recovery process. This community action was described as an important component of both community and individual recovery – enabling community members to make useful contributions, get jobs done, and relieve their own stress and anxiety. Participants cited numerous examples of groups who emerged to operate in this way, providing support and services to fellow community members.

Some of these groups were described as having emerged in response to a natural disaster in their location, and subsequently providing support and services to other communities in other locations. Participants identified *Blaze Aid* and the *Firefoxes* (both community-based organisations established in Victoria after Black Saturday in 2009) as active and beneficial contributors in subsequent disasters across Australia.

6. Government engagement with communities post disaster

Six participants identified the role and response of government as directly influencing community recovery. Participants varied in their views of what was ideal in terms of how governments might engage with communities to maximise community recovery. Some participants referred to the community engagement options of providing information, consultation, collaboration or empowerment and proposed that effective community engagement would include each of these at various stages of community recovery.

Participants emphasised that *early engagement* by government to support the community was important. Participants described examples of community engagement after disasters that took a number of forms: community liaison officers were located in some communities to provide information, services, advice or support to affected community members; community meetings were held in order to provide information and advice and to answer queries; community recovery committees were established to facilitate government and community engagement with one another; or a recovery leader visited communities to provide a connection between community members and the recovery system that governments now provide promptly as part of the disaster response.

One participant advocated strongly for a transformation in the way that governments engage with disaster-affected communities. This participant's view is that governments should provide assistance only when requested by the community, expressing the view that only in this way will community recovery actually be an empowering process. This participant argued that methods of engagement between affected communities and governments must radically alter if communities are to actually lead their own recovery, and become empowered and resilient, that this change is essential for effective long-term community recovery.

In stark contrast, another participant was strongly of the view that communities must *not* be given control of their own recovery because the degree of trauma usually experienced by the community and the impaired judgement that would therefore result.

This participant argued that community members and groups should always be *consulted and included* in the planning and delivery of recovery activities, but that government and non-government agencies with experience in disaster management should retain decision-making roles until recovery is almost complete.

7. The history and culture of the specific community

Five participants identified that community history and a sense of community identity are important factors in community recovery. Participants identified particular communities that in their view demonstrated this link between community history and identity and community recovery: for example, one participant described a community's desire to replace memorial trees that commemorated loss of life during war, and another's request to replace a sports field to enable community members to continue a strong tradition of competitive community based (Australian rules) football. Many communities were described as having a strong sense of community pride even during the very early stages of crisis response, and of demonstrating a desire to share their community's story of history, strength, renewal and recovery. Participants shared stories of communities who wanted to show visitors and the media that they had survived, that their community was still strong, and that they would prevail.

A high degree of pre-existing division *within* communities was thought by participants to delay or cause additional challenges to community recovery. These existing divisions between groups could be exacerbated by the provision of financial or other support received, or by groups or individuals stepping forward during or after the crisis to 'lead' the recovery, only to be challenged in terms of their legitimacy to provide that leadership. Participants described conflict after disaster as a relatively common occurrence, particularly in a community that experienced conflict prior to the crisis. Participants shared examples of communities that had struggled in recovery due to these issues.

Interestingly, competition *between* communities was sometimes seen to assist community recovery, as a sense of competition between communities might be thought to contribute to them focussing early on recovery in order to play sport against a neighbouring community, or have their markets back in place before such a 'rival' community, or to recover as a community in spite of significant funding or attention being provided to another community. In this way communities can define themselves as not only those who live within a geographically defined place, but as distinct from other people who belong to another community in a different place.

8. The existing relationships or previous experiences between the community and government (usually local government)

Five participants identified that existing relationships between community members and local councils, or local or state governments, will benefit community recovery. These existing relationships were seen to be useful for obtaining access to information, services and funding sources for communities: and in relation to providing community members with the opportunity to influence decision-making.

One participant raised the role of flexible and dynamic community governance as a factor in recovery. This participant suggested that those communities with new and flexible governance arrangements (for example a renewed local council, a recently amalgamated council, or a council that regularly reviewed its practices and approaches) would fare better than a community where the council had been in place over a number of years or decades. This participant argued that recovery from a crisis is likely to be more effective if the existing local governance arrangements were inclusive and dynamic, and the council had been able to solve complex problems prior to the crisis.

9. Community disaster preparation (prior to disaster)

Three participants identified community disaster preparation as a key factor influencing community recovery. These participants expressed the strong view that a major indicator of a good recovery is how well the community is prepared for the crisis before it occurs. In their view, a strong preparation is one of the clearest indicators of the likelihood of a strong recovery.

10. Funding (amount available and distribution)

While there was some agreement between participants that funding is a key domain that influences community recovery after natural disaster, there was significant disagreement about whether this is positive, negative or paradoxical.

Two participants identified funding as a factor with a strong positive influence on community recovery. However, these two participants did not share the same views about *how* the provision of funding influenced a strong community recovery. One of these participants held a strong view that without extensive funds being made available to the relevant (state government) Recovery Authority and subsequently to the affected communities, community projects that were a strong part of recovery could not have been undertaken. This participant viewed the strong role of the relevant recovery

authority in the allocation, distribution and monitoring of funds, as an essential and positive aspect of recovery; and the large quantum of funding available for distribution as also essential to a strong recovery. The other participant believed that extensive funding for recovery was detrimental to recovery, with smaller amounts of funding given more freely and with less controls, likely to be more effective.

Other leaders identified funding as complex and paradoxical, with a varied ability to assist, prevent or delay recovery, depending on the circumstances. These participants cited examples of communities in which the provision of funding may have contributed to a sense of dependence on government, some competitive behaviour between community members and community groups, and a deepening of existing divisions within communities. These participants did not view funding as necessarily a positive factor in community recovery. The concept of more limited 'seed' funding was raised as a more reliable way to support community based projects without creating divisions or dependencies. One participant also held a strong view that the controls placed on the allocation and expenditure of funds should be relaxed significantly if communities are actually to be able to lead their own recovery.

11. 'Celebrity' visitors

Two participants expressed the view that a visit to an affected community by a celebrity or an eminent person (for example a member of the British Royal family or the Australian Governor General) was a remarkably successful way of 'lifting the spirits' of community members. The benefits of such a visit were not limited to the potential excitement experienced by community members in seeing such a person in their community. Benefits also arise because these visits provide a community with the opportunity to work together to prepare and present their best community attributes and features to that visitor (reinforcing these things in their own minds). In addition, people often come together from a large geographic area surrounding the place of the visit, and as a result they connect with one another in strong, useful and enduring ways, that further enhance community recovery.

12. Anniversaries and memorials

Two participants identified community memorials, anniversaries and memorial ceremonies as important aspects of community recovery. Those communities that were actively involved in the process of planning and implementing these, were believed by these two participants to fare better in their long-term recovery process. Communities were believed to struggle later, where a decision was taken quickly about the construction of a memorial or the holding of a ceremony, or where a memorial was

'given' to a community, without the involvement, inclusion or appropriate engagement of groups and individuals from across the community.

13. The scale of the crisis itself and its devastation (including the scale of loss of human life and property)

Two participants identified that the scale of the crisis itself is a factor that influences community recovery: particularly the extent of loss of human and animal life; the degree of loss of or damage to property and assets; the way that the crisis itself occurs; and the actual size of the disaster affected area. These participants referred to the extent to which the fires of 2009 and the floods of 2010-11 affected the States of Queensland and Victoria. Both believed that the scale of these crises was psychologically and emotionally overwhelming for those affected, and that at a practical level it also reduced the level of support that could be provided to specific communities, therefore affecting their recovery.

Communities that experience a larger loss of life per head of population, a more significant loss of property, a larger area of devastation, or a more significant loss of livestock, were thought to be likely to recover more slowly and to face more difficult challenges during the process of recovery. Many writers in this field also argue that the consequence of disaster will be influenced by factors related to the crisis itself, including the severity, the duration and the predictability of the crisis or event (Norris, Stevens et al. 2008).

14. A sense of attachment to 'place'

Only one participant spoke of the sense of connection with or attachment to 'place' as a significant factor influencing community recovery. This participant identified a strong connection to place as an important part of the grief process and also of recovery, for many communities and community members.

This finding is perhaps the most surprising, given that the importance of 'place' can be argued to be central to community wellbeing and therefore community recovery after disaster. 'Place' is often seen as an extension of our sense of self, a reflection of our role and our identity, our home and our shelter or safe place, our connection with our history, our connection with our social networks and a symbol of our hope for the future (Cox and Perry 2011). Given these aspects to the significance of 'place', a sense of attachment to place would be expected to be an important element of recovery from disaster and has been the subject of research and analysis in its own right (Cutter, Barnes et al. 2008).

Reflections on leadership, engagement and community led recovery

Participants described their particular personal style of leadership and community engagement, as an inherent feature of their role as a recovery leader, and they reflected their own leadership style through their answers to interview questions. These styles provided a point of difference between the participants, and were also clearly reflected in their views and descriptions about the factors that contribute most effectively to community recovery.

As already stated, the disaster recovery rhetoric in Australian government and non-government policies and publications, emphasises community led responses and working in partnership with the community throughout the recovery process. All leaders in Stage 1 expressed a strong commitment to the concept of working collaboratively with communities in order to support the recovery process. However, when questioned further about what this meant, participants expressed various views about whether community led recovery is possible to achieve and what contributes to effective community recovery. While all participants stated a commitment to the concept of supporting communities and to strengthening them as a result of their own role and contribution, the ways in which specific participants had acted on this commitment varied. 'Placing community at the centre of recovery', using a 'shared model of leadership', or ensuring a 'community led recovery', were interpreted and understood very differently.

Most participants cited similar approaches: including ensuring community involvement in community recovery committees; placing government employees in the affected community to assist them in their recovery; and retaining control of planning, funding and reporting within government. These participants argued that communities need a structure and clear processes through which to prepare plans, apply for and expend funds, and then report on outcomes. They presented the view that this is a well-established and appropriate disaster recovery system with clear roles for government and for the affected community.

One participant described the important balance that must be found when supporting community recovery: judging the timing in relation to when the community needs support and when they are able to lead their own recovery. This participant's view was that this was similar to a weaning process, and that it is essential not to disempower the local community by intervening too much, inappropriately or at the wrong times. Another participant repeatedly spoke about being 'the servant of the people' in the

affected communities. This participant's responses throughout the interview reflected a strong servant leadership style consistent with the work of Robert Greenleaf (Greenleaf 1977) and subsequent writers on this topic (van Dierendonck 2011). Their preferred approach was to use their authority and influence to make things happen that supported the work and the expressed needs of the community. They frequently spoke of their role being to serve the affected communities and provide them with the support and resources that they need.

Even more strongly, another participant was explicitly advocating for a community led recovery. This participant's very strong view is that the community must lead the process (in early stages of disaster preparation and planning, and afterwards through the recovery process) if recovery is to be effective. This participant was the only one within this sample, who passionately advocated for community led recovery, including providing the community with the authority for financial and planning decisions with all funding or expertise from outside the community to be applied in the way that the community determined. This participant proposed a very different model of community recovery, based on principles of deliberative democracy, replacing a 'top down' government lead recovery with a recovery led from the community, or the grass roots. Their preferred model of community recovery would have community members both leading and participating in the recovery activity and process, from the outset. This participant described Australia's current approach to disaster recovery as one that at worst *informs* communities about the response and recovery processes, and at best *consults* them, rather than empowering them to make choices and decisions about their own recovery.

Two participants specifically presented the opposite view - that is, the importance of the community *not* leading recovery. These participants spoke independently of the importance of governments working hand in hand with communities so that information and support can be provided (from the community) to inform decisions based on sound judgement and reliable information (with these decisions to be made by government). Both of these participants argued that the outcome for the community would be more effective under this arrangement.

One of these participants went further and spoke of the risk that community members will personalize their management of disaster recovery and will become judgemental of one another over time; of one another's relative loss, of one another's relative capacity and therefore of their relative need or right to receive financial and other support. This participant described a shift (from generous, magnanimous and inclusive community

connections that are common in the early stages of the aftermath, to a more judgemental and exclusive response as recovery continues) and linked that shift directly to the experience of trauma and to a loss of social boundaries that usually exist within communities. They argued that traumatised community members should *not* make decisions about recovery, but rather they should participate in a process of decision making led by governments and other experienced organisations.

All other participants in this stage of the research raised some degree of concern about whether affected communities are capable of leading their own recovery. These remaining participants expressed concern that the trauma of the disaster experience would render community members unable to make effective decisions or judgements, either for a short while or for some weeks and months. These participants preferred an approach that included a community consultation process, with governments or others consulting with community members in order to involve and include them in the process, but with a clear understanding that decision making and recovery leadership would more effectively rest with either government or with large NGOs, at least for the first stage of the recovery process.

Additional Findings

In addition to identifying the key factors that contribute to community recovery, participants also reflected on other key aspects of disaster and recovery.

Participants spoke about disasters as complex and difficult experiences for those involved, and that responses to disaster vary both over time and between individuals, groups and communities. Such variations were described as arising from pre-existing factors, factors related to the crisis itself, and factors related to the response and recovery. Given this level of difference and complexity, participants advise that no-one can accurately predict how individuals, families, groups or communities will respond to any given disaster experience, or be certain about what support will best assist recovery in all cases.

Six of the participants spoke of the concept of a 'silver lining' for communities in Australia who experience natural disaster, and of the potential for post crisis growth and positive outcomes for individuals and communities. Participants described such positive outcomes as the establishment of strong community connections, relationships and groups; a sense of renewed or revitalised perspective on life and 'what matters'; an opportunity for people to try new activities and express themselves in new ways; an opportunity to build more durable homes or open new businesses; all of these things

strengthening individuals, families and communities in unexpected ways. Extensive literature explores the concept of post-traumatic growth in relation to disaster recovery (Tedeschi and Calhoun 1996, Paton, Smith et al. 2000, Splevins, Cohen et al. 2010).

All leaders referred to stories of determination and recovery and spoke of particular people they had met who had made a lasting impression on them. All spoke of how often people emerged from the worst of the crisis, having lost possessions, homes, livestock and sometimes family members, determined to rebuild their lives (physically and emotionally) and still able to speak about the (greater) losses that someone else had suffered. Some participants described this as a quintessentially 'Australian' characteristic, but another spoke compellingly about this being a universal human trait.

Conclusion

All Stage 1 participants identified key domains relating to community recovery after natural disaster. They also identified key factors in each domain. The high level of independent agreement and similarity of the observations between participants, without any guidance from the researcher about what these domains and factors might be, demonstrates a significant level of alignment between the participants in Stage 1.

All participants (100%) identified the presence and competence of community leadership, and the strength of social capital within the community, as the two most significant domains of relevance in community recovery. There was strong agreement that further domains of relevance were significant factors in subsequent community recovery: including how the community engaged with the disaster response and recovery processes (80% of participants); how the processes of response and recovery were handled by the relevant emergency and community service organisations (70%); community emergent action, including both the speed with which the community can begin to self-organise and the quality of their emergent actions (60%); and engagement by governments with the community and the disaster recovery processes, particularly at local and state government levels (60%).

There is some agreement between participants about the relevance of community history and culture (50%), and existing relationships between the community and government (particularly with local and state levels of government) in relation to subsequent community recovery (50%). There was less mention by participants of the importance of community preparation before the crisis (30%), the scale of the crisis itself (20%), anniversaries and memorials (20%), the presence of celebrity visitors (20%), or a sense of attachment by community members to 'place' (10%).

Some domains of relevance were the subject of a significant divergence of view. Participants did not agree on the importance of funding in terms of promoting and enabling community recovery, and in particular they did not agree about the consequences of a large amount of funding being provided by either government or by public appeal. Views expressed by participants varied substantially ; with those views ranging from one participant advocating that 'more funding for recovery is always best', to others arguing that too much funding is divisive and wasteful and that 'modest funding for recovery is best'. Participants also differed in opinion about whether communities can and should lead their own recovery; one participant advocating that communities must lead their own recovery and be supported to do so, and another stating that communities are so traumatised by disaster that they are unable to lead their recovery at all. The remaining participants expressed the view that while communities are not able to lead recovery in the immediate aftermath, they will be able to do so over time, if encouraged and supported to be partners in their recovery with a government or non-government agency leading the process. There were clear differences of view between participants about the most effective style of community engagement before, during and after the crisis; with views ranging from the best approaches informing and assisting communities, to the best approach always being to empower communities to make decisions for themselves.

There is some alignment between the observations and experiences of participants and the existing literature explored in Chapter 2. For example both the participants and the relevant literature reinforce the important role of social capital in community recovery. A surprising finding from this stage perhaps is that the leaders of recovery do not identify 'attachment to place' as a significant factor in the disaster recovery process.

There are some limitations of this stage in the research. This sample of participants is clearly small. By their nature these leaders have held senior leadership positions. They will therefore view the community recovery process from that perspective. They will also interact in their roles with formal community leaders, and this may well influence their perspective. However, these leaders have also experienced significant and large scale disasters, and have met with many community members during the course of these disasters. They demonstrated significant degrees of personal awareness and reflection on this topic, strong conceptual thinking skills, and significant contact with communities as they have fulfilled their other roles in relation to community development and leadership.

The conduct of Stage 1 of the research has strengthened the original aim of the research: to question community members during Stage 2 about the presence and role of community leadership; about the emergence or existence of community and social capital; about what they observed occurring within their community that assisted their community recovery; and about what they have learned as a result of their experience of the crisis and the recovery process afterwards. By confirming the importance of these questions and providing some insights into the issues from their perspective as formal leaders of recovery, Stage 1 participants have strengthened the importance of talking to community members, and have further informed the detailed planning of the methodology and the questions for Stage 2.

The core focus of this research remains to find out what community members think about the recovery process and to identify the factors that they believe contribute to community recovery. Given the areas of agreement and divergence of view between participants in Stage 1, it is essential to answer the question about what community members themselves observe and experience: to find out what they believe constitutes a resilient community capable of recovery after the experience of disaster; to determine whether they believe that recovery is achieved when the economy and infrastructure is restored; and to learn what they argue contributes to the process of recovery in their community. Stage 1 findings have made the conduct of Stage 2 even more essential, in order to understand any similarity or variance of view between participants in the two stages, and validate or question the findings from this first stage.

Chapter 5 – Findings and Data (Stage 2)

“We all did what we could to support one another.
We will never forget this.”

(Participant from the Lockyer Valley)

Introduction

This chapter details key examples of community action or activity as described by community members and based on their observations before, during or after the crisis that occurred in their community. This information was provided by community members who participated in Stage 2 of this research, in answer to the question “what action was taken in your community that supported your community to recover after the natural disaster that occurred here?” This evidence clearly illustrates what community members observed, that they believe contributed to the recovery of their community.

Interview Questions

Participants in Stage 2 were asked to reflect on their own observations and experiences, as community members in an affected community, and to respond to open-ended questions about community recovery from natural disaster. They were provided with these questions in advance of the interview, and their responses were recorded and analysed. The participants were each asked the following questions:

1. Can you tell me a little about your *connection to this community* – eg what role do you have now or have you had in the past, how long have you lived here, how connected do you feel to this community?
2. Can you tell me what sorts of things happened in your community before, during and after the crisis, that you now believe were important to the recovery process for your community? That is, *what did individuals or groups do* (before, during or after the crisis) that has most assisted the recovery process or made it more difficult?
3. Were there people who adopted *leadership roles* before, during or after the crisis – how did this happen, how important were they to the recovery process and what did they actually do that assisted recovery?
4. Were there any other *significant factors* that worked in support of your community’s recovery, or hampered it? If so, what were they?

5. Given your experience of disaster, and what you have learned from that experience, how would you describe *the process* of community recovery? Does it have particular characteristics or phases? If so, how would you describe these?

6. Are there any particular things that *other communities need to know or do*, to give them the strongest chance of recovery from a disaster?

These questions were designed to obtain from participants information about their connection and history with their community; what they observed occurring within their community that they understand to be important for the recovery process in their community; whether people adopted leadership roles before, during or after the crisis, and how important this was to the process of community recovery; what individuals and groups did that most assisted recovery; whether there were other significant factors contributing to their community's recovery; what they had learned about community recovery; and what they most wanted other communities across Australia to know about community recovery as a result of their experience.

A significant quantity and quality of data has been obtained from this process with the vast majority of participants having well-formed views and providing detailed information in answer to each of these questions. Participants shared stories in order to illustrate examples of community leadership and the actions and activities that occurred in their communities as a result of this leadership. They spoke of these stories and examples as encapsulating the key factors in community recovery and what they had learned about recovery.

Quantitative data summary

In summary, 93 of the 112 participants were able to provide more than 200 instances of community led actions or activities that they had observed. In many cases more than one participant described the same actions or activities. The remaining 19 of the 112 participants did not describe any specific actions or activities. These participants did one of two things: 15 of these 19 spoke in general terms about what helps recovery (e.g. speaking about the importance of community leadership or community action); the other four participants could not speak of anything other than the crisis itself and what had happened to them. It must be noted that even for these four participants, they thanked the researcher for the opportunity to participate in this research and expressed

sincere gratitude for that opportunity. It is not at all clear that they were aware that they had not been able to provide examples when answering questions.

Data has been collected as a result of fieldwork conducted in four community locations, during 3-4 weeks spent in each. Fieldwork was conducted in the following communities under the following circumstances of timing (see Table 2):

Community	Fieldwork	Date of most recent crisis	Elapsed time since that crisis
Cassowary Coast	June/July 2014	February 2011	3 years 4 months
Coonabarabran	May 2014	January 2012 January 2013	2 years 4 months 1 year 4 months
Dunalley	April 2014	January 2013	1 year 3 months
Lockyer Valley	March 2014	January 2011 January 2013	3 years 2 months 1 year 2 months

Table 2: Fieldwork site and crisis (timeframes)

Participant numbers in each community (by gender) were as follows (see Table 3):

Community	Men	Women	Total sample
Cassowary Coast	14	14	28
Coonabarabran	17	17	34
Dunalley	10	12	22
Lockyer Valley	16	12	28
Total Sample	57	55	112

Table 3: Fieldwork site (participant numbers and gender)

The youngest participant across the entire sample was 22 years of age and the oldest was 94 years of age.

The distribution of ages across the sample (by community) is as follows (see Table 4):

Community	20-29	30-39	40-49	50-59	60-69	70-79	80+	Total
Cassowary Coast	0	1	3	9	13	2	0	28
Coonabarabran	2	2	3	11	13	3	0	34
Dunalley	0	2	1	9	4	5	1	22
Lockyer Valley	2	2	5	8	8	2	1	28
Total Sample	4	6	12	37	40	12	2	112

Table 4: Fieldwork site (distribution by age)

The sample was similar or diverse in a number of ways: 105 participants were non-Indigenous and born in Australia, four identified as Indigenous Australians, and three

were born overseas. Participants included individuals who were unemployed, small business owners, farmers, local government employees, aged-care workers and managers, students, volunteers, ministers of religion, chaplains in schools, school-teachers, school bus drivers, policemen/women, national parks employees, astronomers, artists, retirees. Participants included married couples, people in partnerships and relationships, and individuals who identified as single, divorced and widowed. Some participants were parents. Some lived alone, some lived in families, some lived as couples or in shared accommodation. Some participants had lived in their community only a few years, others had a long history of connection to the community through generations. Indigenous participants described their connection to the land and to 'the place' in hundreds of years and many generations. In each community the Mayor of the local council participated in the research.

Key Finding: Community actions and activities

The key finding of this research is that community led actions and activities form a core component of community resilience and therefore contribute significantly to the process of community recovery after natural disaster. The community members who participated in Stage 2 of this research have provided extensive data and case studies of actions and activities that demonstrate this community resilience.

Participants made it very clear that the examples shared were a sample only and that more action or activity occurred than could possibly be captured in their relatively short interview. They also made it clear that these actions and activities formed the core of the community recovery process as it occurred across their community, and therefore also exemplify the essence of community resilience and recovery as they experienced the process.

Given the volume of the data that has been collected, it is necessary to analyse the nature of the stories initially, to identify a suitable structure within which to present the evidence that has been collected. Without such a structure, this evidence would be simply overwhelming in volume.

The stories told through this study were initially sorted into four categories, with a number of subsets within each category. These categories allow the types of actions and activities that occurred in each community to be more clearly understood and are as follows:

1. Actions initiated *from within the community itself*
 - a. by individuals;
 - b. by local groups and community organisations; and

- c. by local businesses and organisations such as the local Council (sometimes with outside assistance or support).

2. Actions initiated *from outside the community*

- a. by individuals, (including ordinary community members, and celebrities or VIPs from across Australia);
- b. by networks or community organisations and groups; and
- c. by larger organisations and businesses, non-government organisations, and federal or state governments.

The actions and activities described by community members all involved community members at some stage, even those that were initiated from elsewhere. Some were a combination of these categories, with individuals and groups from within and from outside the community working together to plan and deliver an activity or action and to achieve the intended outcome. However, as a way of initially sorting the data, it is useful to identify who initiated and led the action and activity and that initial source of leadership in each case either came from inside or outside the community.

The following figure provides a framework for classifying and organising these actions and activities.

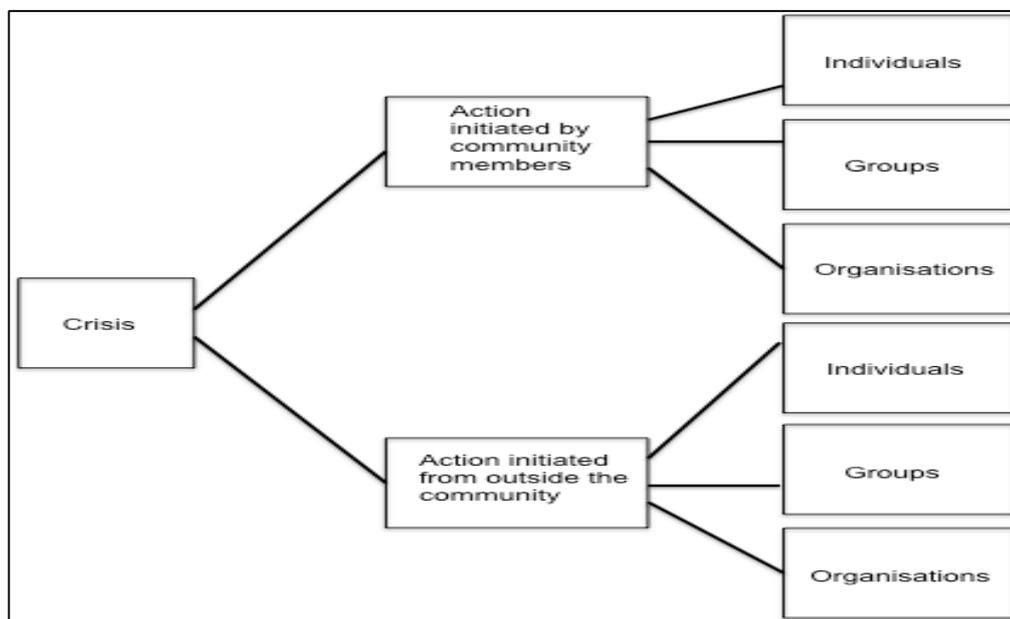


Figure 1: Framework for classifying and analysing the actions that follow a natural disaster or crisis event.

A brief overview of some of the key actions or activities, organised into the categories introduced in Figure 1, is as follows (see Tables 5 and 6):

Action initiated within the community	Action or activity - description
Individuals within the community	<ul style="list-style-type: none"> + Young girls made brownies and distributed them to all the business owners in the main street of one site + Numerous local café owners from all sites distributed hot coffee to people in the early days after the crisis + Community members organized numerous community events for months after the crisis, from teddy bear picnics and race days, massage and beauty days, rodeos and 'working bees'
Groups within the community	+ Racing clubs, women's groups, men's sheds, woodworking clubs, gardening groups, reading clubs organised social events, fundraising events and other activities related to their shared interest
Organisations within the community	<ul style="list-style-type: none"> + Indigenous Rangers, Rotary and Lions Clubs, local businesses and local churches provided funding, practical assistance and a range of other support to locals affected by the crisis + Bendigo Bank local branches were active in all communities

Table 5: Key community actions and activities (initiated within the community)

Action initiated outside the community	Action or activity - description
Individuals from outside the community	<ul style="list-style-type: none"> + Individuals turned up to help, donating time, skills or money to assist affected community members + Individuals (sometimes together in small groups of friends or in clubs) made quilts, rugs and other gifts or who offered their homes or property as a holiday destination for affected community members and their families + Celebrities and VIPs visited the community to make sure everyone knew that they were not forgotten + Farmers and others from all over Australia sent tools and hay to affected farming areas
Groups from outside the community	+ A wide range of groups from across Australia coordinated their efforts and offered goods, practical assistance or other support e.g. Blaze Aid, quilting groups, knitting groups, men's and women's groups, and Rotary and Lions Clubs
Organisations from outside the community	+ A wide range of organisations from across Australia raised funds, and provided a range of support and assistance to affected families and communities including the Red Cross, the Salvation Army, churches from all over Australia, some insurance companies, government agencies, and large private sector retail companies e.g. providers of hardware supplies or groceries

Table 6: Key community actions and activities (initiated outside the community)

The following table summarizes the number of activities described (sometimes by more than one participant) identifying who initiated the activity; whether they were an individual, group or organisation; and whether they were from within the community or from elsewhere (see Table 7).

Initiator of the activity or action	LV	Coona	CC	Dunalley	TOTAL
Individual community members	15	25	15	22	77
Groups in the community	4	5	5	13	27
Organisations within the community	6	9	7	8	30
Individuals from outside	6	5	11	9	31
Groups from outside	4	4	2	7	17
Organisations from outside	4	4	8	4	20
TOTAL	39	52	48	63	202

Table 7: Initiator of action or activity – ordered by community (LV = the Lockyer Valley, Coona = Coonabarabran, CC = the Cassowary Coast, Dunalley = Dunalley and surrounds)

A complete summary of the data collected is at Appendix E. Appendix E provides details for all actions and activities that were described in each community included in this research.

Specific actions and activities

What follows are many of the examples and stories of actions and activities as shared by the community members who participated in this fieldwork; organised by and described within these categories.

Action initiated from within the community

Individuals ('locals')

There were many examples of actions taken by local community members, and activities organised by local community members. Participants frequently mentioned these examples first when asked to name actions and activities that helped the

community, and also frequently expressed emotion as they described these actions and activities; thereby further demonstrating their significance.

Participants described local community action as very important at different stages of a crisis: particularly before a crisis occurs, during the very early days following that crisis, and in the longer term. The actions also focused on particular areas of need such as the need to secure housing and property, the need to obtain food and resources, the need to communicate and share information, the need to restore community access and egress, and the need for community based businesses to reopen as quickly as possible.

Locals helped one another prepare their property, protect or defend property, and even leave property. Neighbours provided assistance to properties where the owners or occupiers were away at the time. Sometimes community members, who have not known one another well before, helped one another as the crisis approached. In the immediate time afterwards, they described helping one another to clear away debris, protect possessions that remain, find a place to stay, obtain food and clothing.

Food from freezers and refrigerators is cooked and shared on communal barbecues. Many participants in each location talk of feasting in the immediate days after a crisis as the lack of electricity means that all perishable food must be eaten. Barbecues are 'borrowed' from a private home often where the community members are away, and are used to feed whoever remains in the location. A simple act of two young girls in one community baking brownies and sharing them along the street as people cleaned up their businesses after the crisis had passed, brought one participant instantly to tears, which they then explained as tears of gratitude. A similar decision by a coffee shop owner to provide coffee to her neighbouring businesses at no cost through the early days after the crisis in that community is recalled with gratitude by a number of fellow business owners over a year later.

Locals offered one another a place to stay immediately after the crisis had passed. Empty homes on properties or in towns were offered to families or people in need, often for many months after the crisis. Local holiday homes owned by people who lived elsewhere were made available to locals to use until they had long-term accommodation organised. Social media or local networks were used to make sure homes or accommodation was offered to those in need.

In each location, some locals found that their home had either largely or completely escaped damage. These homes were sometimes surrounded by devastation that defied any logic or rational explanation. By luck the property had been spared. Some of these community members appeared in the research sample and spoke of their feelings of guilt and confusion about why they had been spared the loss of their home. In many cases these community members worked tirelessly to support others who had lost more. They opened their homes, which then became community drop in centres, or shared accommodation. They became active in some way or another to support those who had lost their homes. Many of these community members described 'survivor guilt' and struggled to some degree with these feelings. In one site a particular couple were mentioned by many for opening their home, providing impromptu meals and beds, for anyone in the town who just needed someone to talk to and somewhere to go. This community support continued for months and transformed community relationships in the long term.

Community based communication mechanisms were established quickly after the crisis had passed. In one community a local began to share information via mobile phone message, telling friends and family members who was safe and where they were. These messages were then passed on to others. Within days a 'phone tree' was established which continued to operate and was still in use when this research was undertaken, over a year later. By that stage a database of people had been developed and everyone on the database pass messages on to an established list of community members or friends and family. In this way information is passed around the community. Large road-side blackboards were also established in this community, which again have endured for more than a year, and messages and other important information was written on these each morning, particularly during the early recovery as this was a key source of community information.

One man in far north Queensland cleared a major road into and out of a stranded community, with his truck and his chainsaw. Participants described the long line of vehicles that filled the road when his efforts became known. Others assisted him, after he instigated this action that helped a large section of the community. There are endless examples of individual community members who assisted one another during the early days and weeks following the crisis, and in longer term.

The local hotel (or 'pub') often became a rallying point in the community. In two sites, the pub became a community rallying point for community members as soon as the crisis had passed. Food, drinks and shelter were offered immediately. People

gathered at any central building that had survived, in order to find one another and begin to self organise. This was often the pub because it could provide food and drink, a place to meet and talk and a place to stay. The value of the pub as a meeting place continued well beyond the early response stage. Hotels were often the venue for social or sporting events throughout the first year or more after the crisis (with one publican even hosting and organising a rodeo for his community).

Local small business owners were also mentioned regularly throughout this research. Local pizza shop owners or managers who made the decision to provide pizza in the early days to those who had lost their homes, and those who were volunteering and helping. Local coffee shop owners who provided free coffee and cake to workers and to other business owners through the clean up stage. Local tradespeople who offered their services without cost to other businesses to help them reopen their business. Local owners of hardware or farming supply businesses, who offered significant discounts on supplies or credit so that other businesses and farmers could recover and re-establish themselves. Many local business people spoke of the economic loss their business had sustained, but argued that their investment in their community's survival was more important than that loss.

One participant spoke with particular gratitude towards the tradespeople who had assisted her to reopen her business. She had suffered considerable property damage to her business, and tradespeople had rallied to provide service that assisted her to open her business quickly. She still provides free Valentines' Day flowers to tradesman for them to give to their 'sweethearts'. She expects to continue this practice until she retires from her business; such was the depth of her gratitude to the people who helped her.

Local supermarkets were described by participants as being a central part of community recovery in each site. Participants spoke of how community supermarkets or food stores opened accounts for people; delivered free baskets of essential supplies to people so that they did not have to come to the supermarket and could focus on clean up; provided groceries prior to payment to the Blaze Aid effort in their community; and in at least one community acting as guarantor for other community based businesses to assist the Blaze Aid effort and the community recovery effort in general.

Locals organised working days and other events to provide practical and social support across the community. Sometimes it might be a 'help the town' day where a number of jobs were listed and undertaken and the local people worked together to coordinate

their efforts and to get things done. On these days it was also common that community members would organise food and refreshments for those who arrived to help. These events require considerable logistical effort and coordination with local individuals stepping up to fulfil this role.

In another site a local Indigenous elder worked to support a picnic day for the town, including a teddy bear hospital and 'orphanage'. The idea arose because people had donated teddy bears to the local community, and many children had lost toys. Rather than deliver the donations to families, or ask families to come to a shed and go through the donations, a picnic day was held and this included a teddy bear hospital where damaged bears or toys could be repaired, and an orphanage where toys and teddy bears could be chosen to 'go to good homes and loving families'. A community member shared a story of a young boy whose teddy bear had been 'taken away by the water'. He arrived at one of these events and was encouraged to go and stand in front of the table of teddy bears needing a home, to see if a teddy bear chose him. He stood at that table for some time and then reportedly picked out a bear, saying that the teddy bear wanted him to look after him. These are simple moments with a potentially profound impact.

These simple acts of kindness and generosity are remembered and have changed behaviour social connections within communities. Local businesses such as plumbers, electricians and painters in more than one community, talk of providing services or discounts to specific clients because of their generosity during or after their most recent natural disaster. Many participants talk of their deep gratitude and debt to their neighbours and friends, and how the crisis changed their community for the better, and strengthened their ties to one another.

Groups

In each community local groups took action and organised events and activities to support the local community. The purpose of some events was to raise funds to support local individuals and families or to fund the restoration of some element of community public infrastructure such as a community building, a playground or a park. These events included horse racing events, concerts, markets and community festivals, and art shows.

Other activities were focussed on providing a place for locals to gather and either talk about their experiences or simply participate in a dinner or a social evening. Local clubs offered people an opportunity to come along to participate in an event, to take

their minds off the problems facing them, or to develop new skills. These groups included racing clubs, women's groups, men's sheds, woodworking clubs, gardening groups, and local reading clubs.

Some groups formed within communities in order to offer practical support to those affected by the crisis. One group of local men called themselves "Dad's Army" and formed so that locals who needed assistance with small jobs around the house, could obtain such help from a group of local men who offered their skill, tools and time to assist others. This had the dual benefit of supporting locals as they repaired or rebuilt their homes, and it also provided a useful role for the men involved.

Community based organisations

Local Neighbourhood and Community Centres operated as drop in support centres and in all sites became central to long term recovery. These groups organised social events, and provided extensive practical support, counselling and a range of other services.

Rotary Clubs and Lions/Lioness Clubs were present and active in all four sites. The actions and activities undertaken by these groups varied. These included organising food vouchers; preparing and distributing food parcels and household hampers; providing and organising logistical support and catering for Blaze Aid crews; and working with fire fighters and locals to organise a 'wood chop' day in one site where wood fire heating was the primary source of heating during winter. Wood was in short supply due to the devastation of the fires in this community, and so teams of men and women chopped over 70,000 tons of wood for the community and delivered this wood to individual homes.

A local community organisation in one community partnered with the community mental health unit within the State government to develop an ESKIE – an Emotional Support Kit In an Emergency. This kit includes a board game and toys for the kids, things for them to do after the crisis. During community work focussed on disaster planning and preparation, this community organisation has developed the slogan 'don't forget your Eskie'.

Action initiated from outside the community

Individuals

Case Study – Christmas Decorations

One story told frequently in one community in this study, involved a significant gift that was given to the children of the community. A participant interrupted her interview to retrieve a very beautiful and intricate Christmas decoration from her bedroom, in order to share this example. A woman from the mainland had contacted the primary school in this town not long after the crisis had passed. The town has been particularly badly affected by the crisis and the primary school was completely destroyed. The woman requested the first name of each of the children who attended the primary school and the school agreed to provide this information to her. Over the coming months, this woman created individual handmade Christmas decorations with the first name of each child in some way incorporated onto a design on each decoration. After months of work (these were no mere baubles) she carefully wrapped each of these decorations, packed them together and sent them to the school. In the final term of the year the school erected a Christmas tree and each child hung their own decoration on that school tree as part of a community ceremony. At the end of the year the children took their decoration home for their own family tree. Each person who shared this story expressed gratitude that someone had been considerate enough to think about that first post-crisis Christmas, and had prepared something for each child, with a view to perhaps softening the experience of that first Christmas, with none of the family's usual decorations. As far as anyone was aware, this individual had no specific connection to the community, other than seeing the destruction of the town and the primary school on the television news.

People in all affected communities spoke of the generosity and contribution of strangers from outside the community. This contribution took many forms, including practical support to community members to restore housing or the physical environment, or to demonstrate emotional or social support in some personal way.

In more than one affected community a group of young men would simply arrive in that community with their tools, their own food and bedding, and set up camp nearby while they did odd jobs for locals who had been affected. Sometimes the same groups of young men would return on subsequent weekends and work again in the community.

Some groups collected money from their own communities, and brought it with them to give directly to community members they were assisting.

In one community group of women turned up each week with food or freshly baked goods and distributed them to locals. In another community a participant spoke about a woman who arrived with a gift of her grandmother's teacup, saucer and plate. She knew that all such mementoes from previous generations had been lost in the fire, and she wanted to find someone to give this gift, from her family to theirs. Women gave beautiful teapots to other women who had lost all of their treasured family possessions. The community members often do not know or remember the names of these people, but they know and experience the compassion in the gift, long after it is given.

In one community a research participant spoke of the gift of a piano to a young girl in the community. An elderly man elsewhere in the state was moving from his family home into a retirement village. His wife had been a piano teacher and he could not take her piano with him. He decided that he would like to donate it to a family or a young person learning to play, from the disaster-affected area. Contact was made with a local church Minister to find out how this could be done. A young girl had witnessed the deaths of three people during the crisis. Her own piano had been destroyed in the event. A local Minister made the approach to her family and it was agreed by everyone that the piano would come to her. The Minister then arranged for the piano to be transported and the removalist did so at no cost. The Minister then organised a piano tuner who tuned the piano, also at no cost. The research participant described how this process helped the elderly man who gave, the girl who received the piano and everyone who had played a part.

Another participant talked of a gift that arrived for his daughters. Two young girls who had experienced the devastating fires in Victoria in 2009 had been given a china doll each, to help them at that time. These girls wanted two other girls to have such a gift of love and so they sent their china dolls on, with a note attached.

Farmers and townspeople alike, organised hay and fodder drops to farmers in affected areas, so that their remaining stock could be fed. All local supplies of hay and grass had been destroyed in the fires. The ABC broadcast the plight of these farmers who had no feed for their surviving animals. As a result other farmers and suppliers from across Australia provided fodder.

Previous community members

Participants referred to the actions of people who had previously lived in the community and had moved away to work and live elsewhere. In one community someone who had grown up in that community is now a musician. They organised a concert in the local area involving a range of musicians to come to the community to both entertain the local people and to raise funds for them.

In another community an artist who grew up in the community returned with some of her own paintings and with additional paintings from fellow artists, all donated. She held an art exhibition and everyone who had lost their house in the crisis was invited to a private viewing and was ultimately able to take away an original artwork for their new home (as a gift from the artists).

VIPs

56 participants identified visits by VIPs as being valuable for community recovery. Not everyone who identified this factor was personally supportive of such visits, however those individuals described them as contributing to 'a greater good' because others appreciated them in the community. Some participants spoke of wishing that the funds taken to arrange such a visit could have been provided directly to the community.

The VIPs who were universally positively received were Prince William and the (then) Governor General, Ms Quentin Bryce. People spoke with warmth and delight about visits by these two individuals. Politicians at both the State and Federal levels had a more mixed response. Participants did acknowledge that the Prime Minister, other government Ministers and Premiers, would have been criticised if they did not visit, and there was some satisfaction that the politicians did at least see for themselves the damage the crisis had caused. Some participants praised the personal style and compassion of these people, when they were out of the eye of the media.

One participant spoke of a visit by Prince William during which a local man began to cry. He was speaking with Prince William and was overcome by the emotion and by his loss. The participant describe his own initial discomfort about this, and how that was replaced by a sense of respect for the Prince and an understanding that this experience was probably important for the distressed man. Prince William remained with the man, gently acknowledged his situation and softly patted him on the back, all the while listening to his story. Only when the man had recovered himself, did Prince William move on.

“He (Prince William) was fantastic. He came and sat down, and he just talked to all our ‘little’ people. I’ll never forget it. He sat for a long time and wanted to know about the bush, the cattle.. It gave us a lot of faith.”

(Participant from the Lockyer Valley)

Another participant spoke of a visit by Ms Quentin Bryce to a community, during which there was a community event. Ms Bryce sat with a family and spoke with the children (as she had a habit of doing), while they shared lunch. The event went well and the community remembered the day with gratitude and affection. Some time passed and a government official visited the community for another event. During this event that official spoke on behalf of Ms Bryce who had been unable to attend and sent her apologies. She asked if a particular boy would come forward, which he did. She then presented him with a cricket bat that had been signed by the Australian men’s cricket team, as a gift from the Governor General. The boy later explained to his (somewhat shocked) parents and grandparents, that she had asked him if he had lost anything of value in the crisis and he had talked with her about his destroyed cricket gear.

Other communities spoke of Ministers of Parliament, Premiers and Prime Ministers, Mayors and other public figures with a mixture of positive regard and disdain. Some participants felt that the visits were a media event, without real depth or care from the visitor. Sad stories of specific visits to specific communities were shared, someone arriving by helicopter and having a photograph taken in front of a particularly damaged street and home, and then leaving again, without really making any connection with the local residents who were still in shock and experiencing the grief of losing their homes.

In each town the VIPs who were spoken about most highly were those who made a genuine and personal connection to the local community members, demonstrated compassion or emotion in some way, or who just ‘got dirty’ helping the community. A number of participants in one town described their local MP in glowing terms as he had turned up and joined in the effort in ordinary dirty clothing and without any media presence. He was reported to have done so for many weeks.

Action initiated by community-based organisations

The single most frequently mentioned action or activity observed in communities after a natural disaster, and described throughout this study, was the work of Blaze Aid. 44 separate participants across all four communities included in this study, independently identified Blaze Aid when asked to describe activities or actions taken within their community that made a positive difference to their community.

32 separate participants made independent reference to the value they experienced in being able to help others in their own community, by volunteering to participate in or support the work of BlazeAid.

Community members described Blaze Aid as not only rebuilding fences but also rebuilding hope and confidence within the community, and strengthening connections between the local community members.

Case Study – BlazeAid

“By lending a hand in true Aussie style, BlazeAid volunteers not only built fences, but helped to restore the spirits of fire survivors who lost family and friends, pets, stock, homes and property to the inferno.”

BlazeAid.com

BlazeAid is a volunteer-based organisation that works with individuals, families and communities across Australia after natural disasters such as fire, flood or cyclone. Working with affected families or individuals, BlazeAid volunteers help to rebuild fences and other structures that have been damaged or destroyed by the crisis. BlazeAid volunteers often work in a disaster-affected area for months. Local community organisations (including the local council and local businesses) provide catering, accommodation and other support to the volunteers.

BlazeAid was established after the ‘Black Saturday’ bushfires in Victoria in February 2009. The fires affected a farming couple at Kilmore East destroying fencing on their property. Needing to quickly secure their livestock (1,500 sheep) they sought assistance from family, friends and local volunteers to help rebuild their fences. Within a week, the fences were completed, a task that would have taken them months to do on their own. Grateful for the assistance they received they decided to help others. Since 2009, thousands of long- and short-term BlazeAid volunteers have travelled from all parts of Australia, as well as New Zealand, Switzerland, England, Afghanistan, Canada, Germany, Austria, America and France, to help local communities affected by natural disaster. Blaze Aid assisted all four communities included in this research. Community members describe the replacement of fences and the social and personal benefits that have arisen during this work.

Rotary Clubs and Lions/Lioness Clubs from all over Australia raised money to send to local areas affected by disaster, and this money was often turned into vouchers so that locals could purchase what they needed to re-establish their homes, from local business and thereby support both themselves and their local economy in one action. With the help of the Lions clubs across the nation, some local community members in one community established a communal laundry for use by the local community. Rotary or Lions Clubs were often the organising group behind the Blaze Aid effort in communities; providing extensive and complex logistical and practical support for this work.

The Salvation Army and the Red Cross were named in two of the sites as a source of assistance for families and those affected. One participant provided an example of heavy good quality raincoats donated by the Salvation Army for affected community members and for volunteers.

Participants in two of the sites reported a visit by a group of women called the *Firefoxes*. The *Firefoxes* formed in response to the Victorian Bushfires of 2009. These women regularly visit communities affected by disasters and speak about their own experience. Participants reported that these visits were very positive and that it is a profoundly helpful and healing experience to be heard by someone who has experienced a similar loss.

Participants in one site spoke of a program for children, called 'Storm birds'. This program has been developed by an organisation called "Good Grief" for children and young people and is based on the belief that change, loss and grief are a natural part of life. Community members reported that through this program their children and young people were supported to understand the feelings and changes they experienced as a result of the disaster. They develop or improve problem solving, coping and decision-making skills. Parents reported that this program assisted their children to cope with and understand the emotions and changes they experienced in the months after the crisis had passed.

[Small groups across Australia](#)

In three of the four communities, patchwork quilts were clearly visible as bed coverings in the homes of those participants who chose to have their interview in their own home. 21 participants in the research specifically talked about the gift of these quilts, sent from quilting clubs across Australia. The Cassowary Coast was the only community where quilts were not identified as an action that assisted recovery, and no quilt was

visible in the home of any participant visited within this community. This is possibly because this community is in far north Queensland and even winters are not particularly cold. Participants in each of the other communities spoke of the importance of the quilts that come from quilting groups all across Australia. These quilts are described as both practically useful and emotionally comforting. Recipients spoke of how these quilts often came with short notes from the women who had made them. They spoke about how having a quilt on their bed (indeed in many homes these quilts were on every bed in the new house) created a sense of warmth and kindness and of being cared about, at the beginning and end of every day. For many participants these quilts became even more important during difficult days, as they signified comfort and care and gave community members a sense of not being alone. In one site crocheted rugs were also delivered as gifts for the local community.

In one community a symphony orchestra travelled to the community to provide a free concert for the locals in one of the few remaining buildings. Music was provided, along with free refreshments.

Action initiated by larger organisations

Businesses or companies

Growcom is a peak representative body in north Queensland that represents horticultural farms and primary industries, particularly fruit and vegetable producers and others who have an interest in the future of horticulture in Queensland. After the cyclones in Queensland, Growcom employed Recovery Officers – often someone from the local area. A participant described these as being partially funded by the Queensland Department of Communities to provide support to primary industries affected by the crisis. Some months after the cyclone, a ‘pit stop day’ was organised so that men could attend a health clinic that provided services in a similar way to a car ‘tune up’ – each man spent 7 minutes in a booth checking the oil pressure (blood pressure), the duco (skin cancer checks) and so on. This style of event was successful in encouraging men to attend what might otherwise have been advertised as an emotional and physical health day, likely to have less success.

A business in Townsville is credited with sending a group of young male employees to the Cassowary Coast to help after the cyclone, all on full pay. Bunnings was reported by participants to have donated brooms and gum-boots by the pallet. Woolworths was reported to have offered vouchers and even in one community free groceries for those worst affected for the first days after the crisis event. Participants had mixed feelings

about vouchers that took community members away from local businesses. However, everyone appreciated the initial demonstrations of care and support. A number of participants mentioned the Bendigo Bank as being actively involved in the community before, during and after their crisis. Community members described the Bendigo Bank as providing funds and other support to the community recovery.

Government – local, state and federal

One local government council organised a land swap where those in the worst affected area were able to have a block of similar size allocated to them from an area that was not affected and was not likely to be affected in the future. In this way locals could use their insurance money (if they had any), or their remaining financial resources to rebuild their homes in an area that would not be affected by a similar crisis in the future.

State and Federal government funding was applied to residential site clean ups in one community – the home sites were literally cleared with bulldozers and the rubbish and remnants of property removed so that community members could then rebuild. While not all residents took up this offer, those that did reported that this was a positive action for the community.

Churches

Church groups from across Australia provided a range of forms of support to those affected. Participants reported the provision of spiritual and emotional support. Some reported practical assistance in the form of food, clothes, or bags of tools to assist with cleaning up after the crisis and to help in the longer term. Others had family holidays provided (with expenses paid) so that families could take time away from the community during the first year after the crisis. Many families found constantly looking at the devastation to be very difficult and a holiday at the beach was very beneficial. In two communities participants reported that school chaplains were particularly helpful in supporting primary and secondary school students and their families, during the first year after the crisis. Two school chaplains participated in the fieldwork, as did two church ministers. All reported examples of activities that supported their communities and all supported non-church attending students or families.

The ABC

The important role of the ABC was raised in each site. Local community members talked about the importance of having reliable and regular information and

communication before, during and after the crisis, such as that provided by the ABC radio in their local area. Numerous participants expressed gratitude for the reliability of local ABC radio.

Action initiated by communities of interest

Wildlife Rescue

Participants in all four communities identified the wildlife as being an important part of their lives before the crisis, and a similarly important aspect of community recovery afterwards. Sometimes the reference was as simple as the return of native birds or fauna, or the first buds of growth of the flora, as being a supportive aspect to community recovery. Regeneration of wildlife would frequently prompt artistic or social events to celebrate, and locals saw this regrowth as importantly symbolic of the return of life or the emergence of new life.

In two sites specific actions were reported in the fieldwork, as being part of the recovery process and centred on wildlife (flora and fauna). Ozark is an Australian wildlife information, education and communications network. The Ozark network provided assistance to two members during Cyclone Yasi in far north Queensland. These community members were described as fleeing the path of the cyclone with a car loaded with injured and other wildlife including mahogany gliders and other native animals. These community members ended up travelling thousands of kilometres to ensure the safety of these animals. A network of people provided practical and quite specific medical and food support to them and to the animals during the long road trip, all organised through social media and the support of Ozark.

In another community a men's group built wildlife boxes for the National Parks. These boxes were used to provide any surviving native animals with sleeping holes given the destruction of logs and other natural sleeping locations during the crisis.

A creative response

In all four sites, a creative or artistic response to the crisis emerged. Participants in all sites identified art as being an important aspect of community recovery. Art exhibitions were held in all sites in the months and years following the crisis. The creative response included photography, painting and drawing, glasswork, sculpture, textiles, jewellery and fashion. Participants described how local artists expressed their own experience of the crisis and their response to loss and destruction through their art. Significantly participants also described this expression as assisting their recovery,

even if they were not themselves artistic or creative. Participants discussed how the artists expressed the myriad of emotions that they had experienced, including loss and destruction, grief, hope, and awe. Participants in one community in particular, talked about how significant the work of artists, and their subsequent exhibition, was to the recovery of the entire community. Community members flocked to the exhibition, and even 'tough men' shed a tear as they talked about the significance of seeing their experiences and feelings represented in artistic form.

In one community, community members themselves provided their own photographs of the crisis and the aftermath, for an exhibition that was well attended not only by those affected, but also by people from a nearby city and tourists and others from further afield. Participants described the experience of being part of such an exhibition as an important part of recovery for everyone involved; organisers, locals, photographers, and attendees.

In one of the communities, a local community member wrote a book about their experiences. This book was launched at a local venue, and again participants reported this as a positive part of recovery for everyone, not just the author but also those who attended the event and those who purchased and read the book.

Gender

In all four sites some activities were organised to support men and women separately, based on a belief that there are gender differences in how people respond to and recover from such an experience such as a natural disaster. As previously mentioned the Firefoxes visited and held meetings with the women of the area. Women from within the communities or from elsewhere, organised massage and beauty days or weekends away for affected women. Local men or existing Men's Sheds organised woodworking groups, established tool libraries to share a pool of tools around the community, and held working bees to undertake small 'handyman' jobs for local community members.

Interestingly, some activities organised with a specific gender in mind had an unexpected benefit for the other gender. In one community massages were organised for women, and some men accompanied their wives or girlfriends and enjoyed the experience. In another, a woodworking club was established, and a number of women sought to join in and found it to be a very helpful activity. In both communities, participants reported joy and humour in the unexpected benefits experienced by those men and women.

Conclusion

Clearly there are many actions and activities that community members participated in or observed occurring in their community (before, during or after the crisis) that on reflection they identify as making a positive contribution to the restoration and recovery of their community. The actions and activities shared in this research were declared by many participants to be a sample only of what actually happened on the ground in these communities. These actions and activities fall into key categories:

- + those actions and activities initiated from within the community and those initiated from outside; and
- + within those two categories; those led by individuals, groups, or organisations.

This forms a powerful data set that demonstrates the ability of communities to organise themselves, and for community leaders to emerge from within these affected communities to both lead and support these demonstrations of community resilience and the process of community recovery.

The interview questions used in Stage 2 of this research reflect the original aims of the research outlined previously, and asked participants to share

- + information about their connection and history with their community;
- + what they observed occurring within their community that they understand to be important for the recovery process in their community;
- + whether people adopted leadership roles before, during or after the crisis, and how important this was to the process of community recovery;
- + what individuals and groups did that most assisted recovery;
- + whether there were other significant factors contributing to their community's recovery;
- + what they had learned about community recovery; and
- + what they most wanted other communities across Australia to know about community recovery as a result of their experience.

As a result of the design and delivery of these questions during the interviews with community members, a wealth of data has been obtained, with the vast majority of participants having views and providing detailed information, general narrative and specific stories in answer to these questions.

In particular, participants shared many stories in order to illustrate examples of community leadership that existed or emerged in their community, and of the actions

and activities that occurred in their communities as a result of this leadership. They described these stories and examples as encapsulating the essence of community resilience in their community, and their view that community leadership is about what people do to support one another, particularly in difficult times. Participants shared these examples and stories to demonstrate the key factors that they believe contribute to and support the process of community recovery after natural disaster, and to share what they had learned about community resilience and recovery through their experience.

Chapter 6 – Findings (Stage 2): “The most important thing...”

Introduction

As the final question in their interview, participants in Stage 2 were invited to sum up their experience by providing their ‘bottom line’ in relation to what they had learned from their experience, for the benefit of other communities who will face similar crises in the future. For many participants this question related to the most difficult things that they had faced, the most surprising things that they had learned, or the new perspective that they had gained, from their experience. Participants leapt on this opportunity to share the most important thing, from their perspective. Most participants needed very little time to identify their key message to other communities. They would frequently lean forward and become quite animated about this being a very important message to others. This question provided an opportunity for the participants to reinforce what they had done or not done, or what they knew to be the most important thing to learn, having been through the experience. Many answered with conviction or intensity, repeating themselves to emphasise the point they made. Many participants said that they saw their participation in this research as an important vehicle for sharing this most important information.

‘Bottom line advice’

Responses from participants fell into the following categories of things to remember or know: general remarks; planning and preparation; in the early days and weeks afterwards; throughout the experience; how to think about it; key messages for governments and organisations; and a few ‘pleas’ that the participants hope will be heard.

General advice

The majority of participants said that the most important thing that they had learned was to live life to the full and to enjoy their family and their home; in the present. Many talked about learning not to take life and relationships for granted, stating that they had learned that lives could be fundamentally changed by one event, in one moment. Participants also talked about the importance of practicing flexibility throughout our lives, to practice coping with disappointment and having a ‘Plan B’. Participants often referred to people in their community who were struggling to cope with the shock and

the loss, sometimes including themselves, as not having learned how to come up with an alternate plan, to cope with disappointment or loss, to have a 'Plan B'. A key message from participants to community members everywhere is not to wait until a crisis forces choice into your life, but to practice gratitude and flexibility now.

A number of participants spoke of the importance of not waiting for some future time, to enjoy what you do, what you have or what you own. Laconic male farmers, who have seen the harshest elements that the environment and life can offer, shed tears because their wives had lost tea sets or dinner sets that were "too special for every day". These big strong farmers would turn to the researcher and say, "when you go home, use your best things, every day!" This was seen as a metaphor for living "Don't wait for a good day to use your best crystal. Make sure you live every day and enjoy what you have, because you never know."

Many participants emphasised the importance of understanding that people will respond in a variety of ways, differently from one another and at differently at different times in the process. Many participants took this opportunity to emphasise that accepting this and being flexible with people, is most important.

"Know that everyone will respond or react in their own way and we have to accept that in each other. Part of resilience is to be able to accept that after the event, life will inevitably be different and what is normal will not be the same as what was normal. So the best way we can help each other is to accept that we each have to travel through it ourselves, in our own way, without requiring other people to travel it the same way as us, but to do it together, even if we do it very, very differently, to do it together."

(Participant from the Lockyer Valley)

Participants spoke of practical things that they wanted other communities to know. At an environmental level, participants made a plea to everybody to get to know their environment. Participants told stories of community members who did not know the risks of fire, flood or cyclone; did not prepare; did not know to watch and listen during high risk seasons; did not know to take warnings seriously; did not decide on a course of action early and did not know the ways of exit from their location. Long-term residents in communities expressed frustration and concern that newer residents were not aware of the environment in which they lived and how to live safely in that environment. Conversely, some new residents expressed frustration and concern that long-term residents had an unrealistic view that the fire/flood/cyclone would be smaller than it was, based on their previous experience. Some of these long-term residents were then 'caught by surprise'.

At a personal level, the most commonly shared practical advice provided by participants was to keep personal photographs and important documents scanned and stored 'in the cloud'. The loss of these things was considered to be a significant difficulty after the crisis and yet was also very easy to avoid, by this one simple precaution.

At a community level, the most common advice was for all community members to get involved in their community, without waiting for a crisis. Participants argued convincingly that a strong and well-connected community is essential to recovery after a crisis, in fact this entire research project has reinforced this view. Advice was consistent across all sites and all age groups, to get to know one another, to extend the hand of friendship in your community, to 'join the local pony club, craft group, or community centre'. Some participants suggested that if no existing community or social clubs are of interest to community members, they should feel encouraged to start up a new club in their area, and to find their own way to get to know other community members. Knowing community members was seen to be advantageous in two ways: so that people would know who in their community is an organiser and well connected to others, and who is more vulnerable and might need additional assistance. Participants argued that knowing which community members are in each of these groups is essential to support a strong community response and recovery process.

Planning and preparation

Many participants talked of the profound implication that loss of (human) life has for community recovery. Three of the sites had no loss of life within the community, that was directly attributed to the crisis. The Lockyer Valley experienced significant loss of life and significant trauma associated with their crisis event. In each of the three communities without loss, participants frequently became emotional about the residents of the Lockyer Valley or the residents of Marysville and surrounds (referring to the 2009 Black Saturday bushfires in Victoria). These participants repeatedly spoke of the importance of ensuring that preparation and planning occurs, to prevent any loss of life. They spoke of this issue being central to recovery for their own community.

Participants focussed on the importance of disaster planning and preparation: at the community level, the street or neighbourhood level, the household and family level, and at an individual level. Participants advocated that effective preparation and planning depends on an accurate knowledge of the general environment, the specific location, the property being protected and the family or individuals involved. Preparation and

planning should include preparing homes and properties for whatever crisis is likely at this location i.e. whether it is fire, flood or cyclone. Participants were very aware that home preparation methods are readily available from a variety of sources; from organisations including government and non-government and from many websites that specialise in providing this information. Their argument is not that insufficient information is available, but rather that community members everywhere do not currently take the threat of disaster seriously and prepare accordingly. Community members should know their environment; understanding the likely risks from that environment and keeping the environment as well maintained as possible with an eye to reducing disaster risk. Community members should know their own home and ensure that it is as crisis proof as possible, given its construction, and its physical orientation and location. Families and individuals should have a fire plan and be ready to act according to that plan. Participants in this research spoke of how essential it is for communities to take the risk of natural disaster seriously and to accept that this could happen in their community and to them. Many participants ended their interview with some comment similar to “Don’t underestimate the power of nature. Don’t think it can’t happen where you live.”

Participants had a number of very practical suggestions for other communities who might face a crisis – including preparing not only for the crisis itself but also for the days and weeks immediately afterwards. A sample of practical ideas includes property owners having a generator (or access to one); having a life jacket if living on a flood plain; clearing the area around housing and other property if living in a fire zone; having batteries, a torch and a battery powered radio; ensuring that the family disaster pack is prepared and includes a mobile phone charger; having tins of food and a can opener; filling sealed containers with fresh water if fresh water might be hard to find immediately after the crisis passes; and having an up-to-date first aid kit (with all of these things stored together and kept ready to go). Some participants talked of the importance of ensuring off-site storage of and access to important papers – passport, birth certificate, licence, insurance documents, and bank or mortgage documents. Others emphasised the importance of storing precious things together in a container, so that they can be evacuated quickly and easily when people have to leave their property.

As participants inevitably shared their own experience of the crisis itself, they emphasised the importance of deciding about staying or leaving their property, well before anything happens. People spoke of the fear and trauma of making that decision as the crisis was upon them, and being in fear for their lives and for the lives of their

families and friends (and sometimes their pets). Participants spoke about how quickly the speed of the impending crisis and scale and experience of that crisis can change, and 'suddenly' threaten lives and property. Participants emphasised the importance of knowing exit routes and deciding early whether to stay or leave.

Participants with children, spoke of the importance of talking to the children before, during and after the crisis. Participants were divided in their views about children, with some expressing the view that they would ensure that the children were safe even if they then defended their property, and others saying that under no circumstances should parents separate the family as each would then spend considerable time in fear for the others. Participants who raised issues about the children, agreed that it is important to practice what you and they will do in the crisis, beforehand.

The early days and weeks

Participants spoke about what they had learned from their experience of the early days and weeks after a crisis has passed. In the immediate crisis and the early hours afterwards, participants emphasised the importance of knowing the most suitable place in the community that people can come to. At many stages in the research, participants emphasised that it is not possible to plan for everything, as many responses will depend on the scale of the disaster, and the locations of greatest damage or loss. It is not possible to know all relevant details until the crisis has passed. However, a good knowledge of the community's best options for a gathering place, mean that community members will know where it is likely to be. Such a gathering place forms a natural recovery centre or support centre. Participants in each site spoke of the importance of people coming together as the crisis passed; simply to find one another and determine the extent of the loss and damage. Participants then described that with this information community members will spontaneously organise themselves and take individual and collective action to assist and support one another.

Again participants provided quite specific and personal advice to community members who might be affected in the future. At a personal level, advice included ideas such as:

“Get a notebook and write things in it. Get a folder or a file and keep your paperwork together. There will be a lot of paperwork. That way you can remember what you are advised, and what you think of, and what you have to do or decide”

(Participant from the Cassowary Coast)

At a social or community level, advice included setting up small groups of people prior to the crisis, with specific roles to support the community over the early days and weeks following the crisis. Connecting people to one another and giving people useful roles was seen to reinforce the positive effect of having a strong system of community connection and support. Such support might include helping with insurance claims (make sure the group is good at this), catering for volunteers or events, looking after the kids or helping the elderly.

Participants in each site raised a concern based on their experience, and that is to make sure that a few people do not carry the entire workload in the early days or later. Sharing the load between the community members was seen as important throughout the weeks, months and years after the crisis. This not only protects people from overwork and collapse, but also provides more people with the opportunity to help others; itself a protective factor.

“Don’t underestimate your ability to help. Everybody has something to offer. It is a team effort, and that not about doing big things. It’s about doing little things consistently to help the whole community.”

(Participant in Coonabarabran)

Long term recovery

This leads us to the advice provided by the participants with the explicit intention of being useful over the long term. Paramount for participants in this research is the need for community members to understand and prepare themselves for recovery to take a long time, individually and collectively. Participants recommended that everyone be prepared for this so that they don’t expend too much energy early in the process and become frustrated or exhausted. These participants advise that community recovery is a large and long term task. They suggest that community members set small goals and take small steps. They confirm that progress will sometimes seem particularly difficult. As one participant stated, “Just nibble away at the tasks.”

Participants also raised the concept of maintaining perspective and keeping things in proportion. At a personal level, they advise that as community members, people will not have control over many aspects of their own community recovery. Others will lead or participate in processes and decision-making, not everyone will agree with one another, things will get difficult, and many people will be tired and emotional. Participants advise that everyone’s feelings, emotional responses and levels of energy will vary from time to time. The best advice participants in this research can give about coping with this, is to have patience, to communicate with one another, to share information and feelings, and to think and act as a community wherever possible.

Unity is not going to always be possible, but the closer communities can come to unity, the better, according to these participants.

Participants highlight the benefits to everyone of looking after one another. As already described in detail through this research, participants shared many examples of neighbours both needing one another and helping one another. Their advice to other communities is for community members to check on one another, and to share responsibility for ensuring that everyone is safe and supported; before, during and after a crisis and particularly in the long term. Many participants, as demonstrated through the stories shared in this research, advocate the value of helping others in the community, even in very small ways. Participants reiterated this in answer to this question about 'bottom line' advice to other communities. They state that small acts often help in large ways, they advise that no-one should underestimate the value of what they can offer, and they suggest that people should be encouraged to offer any help, however small it seems, to their neighbours and community.

Participants also offered very practical advice about how everyone can help disaster-affected communities; both community members and others. This advice includes spending money in businesses in the local community. Buying locally to support local businesses is seen to be very important, because the community needs these businesses if it is to survive economically in the longer term. Donations of money that can be spent at local businesses are considered to be more beneficial for the local economy, rather than large amounts of donated groceries or goods, or vouchers to be spent elsewhere.

Participants recommend that effort be taken within and between communities to connect people and organisations together during the recovery process. They stated that there is a risk that the recovery effort can become disconnected and can even be hampered by groups and individuals not coordinating their planning and their effort and potentially duplicating effort. These participants advocate that recovery will work more effectively if effort is well coordinated at the local or community level.

A couple of participants advocated (independently of one another) that community members "be prepared to be a nuisance". By this, these community members explained that they were advocating that community recovery in any affected community will be more effective if some community members are prepared to champion the cause of the community; and if necessary are prepared to actively

participate in community meetings and to take steps to 'bother' governments and organisations who lead the disaster recovery process.

One participant stated firmly

“Your community will do better if people are prepared to agitate.”

(Participant from Dunalley and surrounds)

The disaster experience

Participants expressed the wish that key messages be communicated to other communities across Australia, through this research. They wanted their experience to be of value to other communities and community members who might face disaster in the future. Their key messages are quite simple: become involved with your community, know one another and help one another; don't rush big decisions; stay flexible and be patient; don't judge others; try not to be greedy or jealous or focussed on blame; don't expect anyone else to fix things; and no matter how strong and capable you are, reach out to others, talk about it, and get help early.

Some key messages were more complex. One participant was very clear that a decision to rebuild her home was urgent given her circumstances. She was in her 90s and was aware that if she did not rebuild her home quickly she would need to leave the community to live in aged care accommodation. She was very happy with her decision to rebuild. Other participants wanted to encourage those affected by loss as a result of the disaster, to take time before making such personal decisions. These participants wanted the research to share a message of being patient and taking time with big decisions. Their view is that as affected community members they had a tendency to want things to be resolved quickly, and therefore they made decisions, earlier than was (perhaps) wise. One community member spoke about wishing she had waited longer before deciding on the rebuild of her home. She regretted decisions that she made in haste, and potentially while still experiencing the shock of her losses and of the disaster experience. Her advice was as follows:

“If it is bothering you, let it bother you a bit longer. Don't hassle. It will come right”.

(Participant from Dunalley)

Key messages for organisations

A number of participants talked about the role of governments (including local council, and state and federal governments) and other disaster related organisations including both emergency services organisations and welfare organisations.

The following selection of messages reflects the views of many participants:

“Let us back into our community as quickly as possible.”

“Trust us to know who we are and what we need – help us take control of our own community recovery.”

“Listen to us – we know one another, we know our area, we know what we need.”

“We need help, we are not helpless.”

“Walk beside a person. Don’t walk in front of them. Never push them from behind. People who think they are doing the right thing are often doing a totally wrong thing.”

(Participants from all four sites)

These participants are clearly reflecting a desire to be included more in the decision making processes and trusted with information and action. They want to participate in the process of response and recovery, and some want communities to be supported to lead this process in their own location.

A plea from the community

Inevitably when research is focussed on finding out what works well after a situation or event, participants will also point out what does not work well. Participants in this research expressed strong views about what has not worked effectively in relation to the response and recovery process within their communities.

Participants in each site referred to the same key areas that do not assist the community’s experience of response and recovery. Donations of second hand goods are frequently sent from across Australia in such volume that it is overwhelming to communities. Donated goods may be collected by national organisations or by networks of smaller community groups. In two of the sites, donated goods were still stored in large sheds, years later, as they could simply not be utilised by the community members.

While community members shared stories of gifts that were very well received and became important as examples of compassion and care, most participants described donated goods or vouchers from large department stores or large national or multinational businesses, as not being supportive of community recovery. These types of support were described as discouraging community members from buying locally and by doing so supporting the local economy and local small businesses. Community members in more than one site travelled over an hour out of their community in order to use vouchers for groceries or for the purchase of home-related goods. In one site, baby products and formula arrived in such quantities that those families with young

babies did not need to purchase any of these goods for over 12 months. Local community members described this as having a negative effect on the local business that usually supplied such goods.

Participants widely agreed that the best way to support affected communities is to provide money to the community, so that the community members can purchase what they need from local businesses. Any donations should be in the form of hand-crafted gifts or specific and highly personal items that people will not be able to afford or will not think to purchase e.g. with examples of gifts as outlined in this chapter ranging from a piano to a special teapot.

Conclusion

All participants were invited to sum up their experience by providing their personal 'bottom line' in relation to what they had learned from their experience, for the benefit of other communities and community members who will face crises in the future. This relates to one of the key aims of this research: to identify the lessons that can be learned from listening to and understanding the experiences of communities who have emerged from disasters including fire, flood and cyclone. This element of the study gives the members of affected communities their own voice to identify and share the most important learning, for the benefit of other communities.

This chapter has outlined a small amount of what participants had to say when provided with this opportunity. All participants were very quickly able to identify their key message to other communities and other community members. During the research it became increasingly clear that this question transformed from being what was intended as a concluding question designed to draw the interview to a close, to being seen as a significant opportunity for the participants to reinforce what they knew to be the most important thing to share, from their own experience. Many participants answered sincerely and with passion, leaning forward to emphasise their point. Some shed tears as they realised the personal significance of their 'bottom line' message, to themselves and potentially to others. Many commented that this was their opportunity to provide guidance or advice to others, so that some further benefit could arise from their loss and their grief. Many emphasised their desire that their experience not be lost or forgotten, and expressed the view that by sharing what they had learned, they would both assist others and continue to make meaning from their experience.

Chapter 7 – Additional findings (Stage 2): Key concepts

Introduction

The focus of this research is to find out whether community leadership and community action contribute to community recovery, what that recovery process includes, and what lessons can be learned about community resilience and recovery. However, important additional findings emerged from the research. While participating in Stage 2 of this research, for example, community members expressed strong views about the official language of disaster and community recovery and expressed a clear desire to clarify and discuss how core concepts are understood and used both broadly across Australia, and by their own community in order to make meaning of what had happened to them.

This chapter outlines how community members themselves define core concepts such as community, disaster, and recovery. It also includes a discussion about the phases of disaster and whether community members believe that the phases as outlined in disaster policies apply in their current form, or require adjustment. This discussion identifies who is involved in disaster recovery from the community's perspective and touches on which factors assist the process of recovery.

In this way, Chapter 7 provides an introduction to a more detailed analysis of the findings of this research, contained in Chapter 8.

Key concepts

Numerous participants spoke about the key concepts of community, disaster, resilience and recovery. They understood that governments and others have definitions as part of various disaster management frameworks, and they were determined to provide definitions of their own.

Community

“This community has a heart and a soul, and it’s because of the people who are here. Some of the big farming families, they’ve been here for generations, a hundred years or more. ... If you combine the history of the past and bring new people, new information and you create opportunities, you have a lovely community with a great heart.”

(Participant from the Lockyer Valley)

“The most important thing is our connectedness to one another really.
That is the most important thing.”

(Participant in Coonabarabran)

The most common observation about community, made by participants in this research, is that in a community people know one another. Participants shared a clear sense that in a community people will know who you are, whether you have historical connections to the area, whether you have current family in the district, what your role is or has been, and whether you have children. Families are seen to be a key element of community; it is the families who go to school, go to church, are involved in community events and play sport.

Participants were clear that community members talk and laugh together when going about daily tasks such as shopping, that they recognize and greet one another. Different interest groups also exist within each community based on religion, creative interest, business connections, sport, music, a desire to contribute to the community (e.g. Rotary or Lions clubs), or an industry and livelihood connection such as farming. Community members acknowledged that their community is not always united or harmonious; that it can be quite fragmented and that there will be particular issues that will highlight or exacerbate this fragmentation. In spite of differences of view and occasional conflict, participants described their community as being based on a sense of connection and cooperation ‘when it matters’, built on personal and familial relationships and a sense of trust.

Some community members talked about the connections in their community also being based on history; a sense that the buildings, the shops and the location itself belong to the community, and that the community members of today arise out of a past, and are caretaking for the next generation. There is a sense in these communities that some families have long histories with the area that have prevailed over many generations. In some communities this sense of history extends to the natural environment with participants talking similarly about rivers, mountains, valleys and the surrounding or nearby ‘Australian bush’.

Participants talked about how a crisis can “cement” the sense of community because members of the community have been through something and have relied on one another. The way this is demonstrated in a crisis is that people turn up to help one another. They may or may not need to be asked e.g. a participant in one community was about to lose his unbaled hay because of heavy rain, and locals realised this and turned up (without being asked) to bale that hay before the rains arrived, making the

difference between financial ruin and financial survival. Many participants described a sense of having a shared experience after the disaster that affected their community. They spoke of a deeper sense of empathy and camaraderie in spite of the shared loss and fatigue. Participants described working through the night, the days or the weeks together: working with volunteers, emergency personnel, members of the local Council, and one another. This understanding of the shared experience of a community was consistent across all sites, and is also consistent with the definitions of community as discussed in the literature review in Chapter 2 of this thesis.

Community members expressed an attachment to the intrinsic beauty, seasons and features of the natural landscape surrounding where they live. They described an emotional attachment to communal places, locations or landmarks in the natural or built environment. They talked about the memories that had developed by living in their community and participating in community activities with family and friends. Personal and family history, sometimes over many generations, connects them to the place that locates their community. Celebrations and past events also reinforce this strong sense of community and of connection – a sense of place, of history and of home.

Interestingly community members express a paradox about the definition of community. On the one hand, communities are likely to describe themselves as being about made up of people who 'belong' and who live in the community. Then again, as discussion continues, community members will talk of 'outsiders' who some see as community members and others do not. These 'outsiders' may holiday in the community and may have done so regularly over years or generations; they may have lived in the community previously; they may have family or friends who live in the community; or they may simply feel a connection to the community because of some feature of the community e.g. an industry or national park or some other well known icon that they visit or enjoy. This research supports the view that these 'outsiders' can see themselves as being part of the community, and that some people from within the community share this view. Community members in this research described examples of these 'outsiders' providing support and assistance and demonstrating that they too 'belong to' this community. In one community, someone who had never visited the community before arrived to volunteer and was still living in the community at the time of the fieldwork, with plans to stay permanently.

For many community members, the concept of the community is flexible and permeable and includes relationships with other communities, with the families and friends of community members, with previous community members, and even with strangers who reached out to them. For these community members there is no solid boundary defining who is or is not a member of the community, and in particular when a disaster occurs the definition of who belongs to a community can become quite fluid as people and groups enter or engage with the pre-existing community, to respond to the crisis and its consequences.

A common element of the discussion of community membership in each of the four communities included in this research is the emphasis placed on action. Existing community members are likely to describe a relatively new community member or even a visitor, as belonging to the community if they were actively working to support and assist the community to recover, and if that action was genuine and supportive of the priorities as set by the community, rather than intrusive or something imposed on the community.

Many participants also spoke of seeing themselves as part of a broader community across Australia. Because of the support provided between communities from different parts of Australia, and the actions that people from these communities took, participants from affected communities felt connected to people they had never met. They also felt connected to communities where groups of community members from a previously affected community (e.g. from the Victorian fires of 2009) visited their community to offer support or assistance. The common experience of disaster, bonded people quickly to one another across the usual community boundaries; even if the experience of disaster was at a different time, or place, or even as a result of a different type of disaster. People spoke about belonging to a broader community, where they felt connected by common experience and common values, and understood the common fate that we all share if a disaster occurs where we live. This sense of a broader community was described by participants as meaning that people all across Australia are connected and will find ways to help one another in times of need.

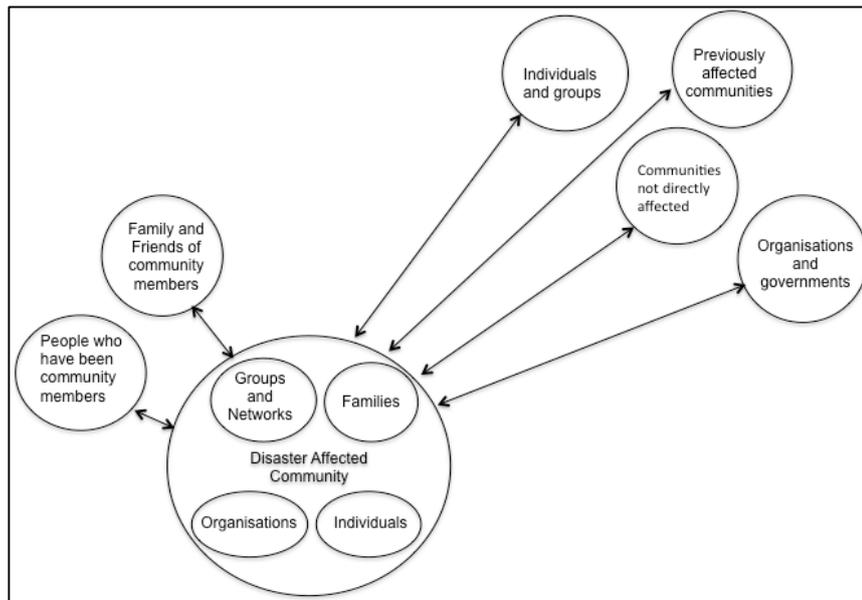


Figure 2: A broad Australian community with a range of elements and smaller communities connected to one another.

In this way the community members who participated in this research have endorsed the view expressed in the review of the literature in Chapter 2 particularly by Norris et al: that community exists where people have social, personal and historic connections to one another; have a shared connection to the place in which they are located; a shared understanding of their community identity, even if they do not live within the community, and have a shared fate. This understanding of community was consistent across all sites and regardless of the particular form of natural disaster they experienced i.e being fire, flood or cyclone.

Disaster

Participants agreed that the disaster that affected them was an event that changed their lives forever: affecting, damaging or destroying (partially or completely) their homes, properties, incomes, relationships or marriages. No research participant had any doubt that what he or she had been through could be called a disaster. Similarly, no participant felt unaffected, even if they had not lost their home, their employment or any member of their family or close circle of friends.

Participants listed the following factors that particularly define or constitute a disaster for them: the loss of (or significant damage to) home or property, loss of livestock or wildlife, damage or destruction in the physical environment that surrounds them, the extent and scale of loss to the community as a whole, fear and trauma from the experience, isolation from one another and from families and other communities, personal stress and distress, financial loss and loss of jobs and income.

“Our lives completely changed – whether we lost possessions or stock or homes. Even if we emerge with most of these things, we have lost the community we grew up in; we have lost our sense of safety. Everything has changed and we have a strong sense of grief.”

(Participant from Coonabarabran)

Participants from all communities were in agreement that loss of life is a particularly significant element of any disaster. Many participants in the communities where no loss of life had occurred, commented that their long term community recovery was enhanced or made easier by the knowledge that no-one had died from their community. Often a participant in these communities would express sorrow and compassion for other communities where lives had been lost. While not underestimating or under representing the loss and grief felt by participants who lost homes, livestock, property, or their sense of safety and love of their environment, many participants did talk about the most devastating loss being the loss of human life.

This understanding of disaster was broadly consistent across all sites and all disaster types i.e. fire, flood or cyclone. The only variation about the concept or definition of a disaster was between Far North Queensland and everywhere else. Many community members from Far North Queensland would laugh when discussing what makes an extreme weather event into a disaster. Cyclones occur almost every summer in this area, certainly Cyclones of Category 1-3. The ‘tolerance’ of local community members to this regular experience of an extreme weather event, and to the subsequent loss and damage to property and homes, was high. Many of these participants joked that ‘southerners are soft’ and that with a generator and a chain saw, even Category 3 and 4 cyclones can be cleaned up within a day or two, not constituting a disaster at all. A Category 5 was seen as a serious cyclone that can result in a disaster that requires outside intervention and more significant effort from within the affected community. Participants from Far North Queensland declared that anything less than a Category 5 cyclone, “is just strong wind” and with proper preparation should not constitute a disaster.

Community members in all sites also argued that they did not wish to be ‘labelled’ as a ‘victim’ of disaster.

“This is a bad thing, the system turns you into a victim, and you don’t want to be a victim, you aren’t a victim.”

(Participant from Coonabarabran)

Many participants described examples or occasions where the language of 'disaster victim' had been used (usually in letters or speeches by government and non-government agencies). Community members in all sites objected to this language and either described themselves as 'survivors' of the disaster, or as having been 'affected by the crisis'. They then described many examples of actions and activities (as included in this research) that demonstrated their strength rather than their weakness, as might be expected if they were 'victims'.

Community members included in this research are therefore confirming the validity of the definition of a disaster as contained in the academic literature and international and domestic policy documents reviewed in Chapter 2, i.e. being a crisis that is beyond the capacity of the community to cope with on its own, at least in the short term.

The key point of difference between the view of community members and the review of the literature, is in relation to the definition of what is 'beyond the capacity of the community' to cope with (a key element in the definition of 'disaster' as explored in Chapter 2). A number of participants (across all communities) expressed the view that some or all of the community could be actively involved in or able to lead their response and recovery from a crisis, at an earlier stage than government and non-government organisations or others 'experts' might currently think. They were therefore of the view that the timeframe for which a community might be 'overwhelmed by the crisis', might be quite short. This in no way suggests that disasters are not catastrophic or overwhelming, but rather opens the question of how long this remains the case and whether there is capacity for the community to be more actively involved at an earlier stage in the post-disaster response and recovery.

Recovery

"If your community members are socially connected, and there's good levels of social interaction and support, then you will all fare better. You have a security blanket and can look out for those vulnerable people in your community who don't have that."

(Participant in the Cassowary Coast)

Throughout all elements of this research (including the review of the literature, the interviews in Stage 1, and the community based interviews in Stage 2), the term 'recovery' has been controversial. Recovery is understood by community members to be a complex and multidimensional process. There are many ways in which recovery is experienced and achieved, and there will be variations in how communities will experience the process of recovery. It is unlikely to be a linear or standard experience

for all communities, vulnerabilities may be triggered at later stages, and indeed not all community's believe that they can achieve a 'state of being 'recovered'.

Many community members spoke compellingly about this concept, stating that they do not like the term 'recovery'. Many talked about recovery as something that is not actually possible as an 'end state'. There was a strongly held and repeated view across all sites, that recovery implied 'getting better', 'moving on', 'having something wrong with them in the first place', and ultimately reaching a state of being called 'recovered'. These participants argued that the disaster was not like an illness or an accident that could be recovered from. Rather they expressed a strong view that what had occurred would always be part of their lives and their memories. They spoke of incorporating and absorbing the experience as part of their history and identity, rather than recovering from it.

Participants spoke of their lives before the crisis (event), and their lives afterwards. Memories were often discussed as being about before the crisis or afterwards. They talked of how the crisis defines a point of time in their lives, even if it does not define who they are. Some talked of the crisis having been 'the crucible that will define them forever'. These participants spoke of how the crisis event and the subsequent period of time had taught them about life and priorities; and had changed how they saw the world and their place in it, and the value of their friends and families.

Many participants spoke of recovery as being a complex and multi-dimensional process, taking various forms; from person to person, from community to community and from one time period to another. Participants declared that governments and large organisations do not understand recovery. In the words of many participants "recovery is a long-term process that is never complete". These participants described trauma or distress as remaining just below the surface, easily triggered, sometimes continuing for years.

"You think you are sailing along wonderfully and then something will trip you up and you've got to stop and take stock."

"I don't know if recovery will ever happen, if it will ever be a total recovery. I think that my life from here, and other peoples' too, will always revolve around what happened here in this fire."

(Participants from Dunalley and surrounds)

For many, recovery is coming to realize that you have emerged with a whole new perspective on what matters and what life is all about, realising that the disaster has resulted in a recalibration of life, on a grand scale.

Participants had evocative metaphors for understanding the process of recovery. One participant described the process as being like a tide – “At one moment things are going along in a certain direction, the next they are washing back the other way”. Another described it as being similar to a jigsaw, rather than a linear process with sequential stages. She described the jigsaw pieces slotting into place but not in order, and then at a point in time realising that it is all in place.

Many participants talked about communication being the key element of any effective recovery process as community members and communities move forward. They talked of the need for the community to spend time together and to talk about what happened. Other participants talked about needing to talk less in order to ‘move on’. One participant even defined recovery as reaching the point where no-one needed to talk about it any more. Many participants recognised the complexity of recovery and in particular that community members travel the path in their own time and in their own way.

Community members described the relationship between the progress made by individuals and the progress made by the community as a whole, as being both significant and complex, with a recognition that not everyone will think about it in the same way and not everyone will progress in the same way or in the same timeframe. Recovery was described as being a balance between incorporating and accepting the disaster experience as being part of the community’s experience, while also not holding onto it as the defining feature of the community.

Many participants struggled to identify a term that could replace ‘recovery’. No participant found a word that they thought was completely appropriate. Terms like renewal and regeneration were explored. The search for a word that captures the character of what a community does after the experience of a crisis or extreme weather event, the subsequent experience of a disaster, and the engagement of that community and of other communities, groups and individuals, to reclaim their strength, and build their future (physically, socially and emotionally) must continue. Until that word is found, ‘recovery’ remains the term in use.

‘Recovery’ is a term that is also contested within the literature (as reflected in Chapter 2) and the participants in this research would encourage academic researchers and policy makers to continue to move away from a concept of recovery as being an fixed ‘state’, and rather to view it as a complex and multidimensional process that may in fact never be completed.

“The experience of our disaster is just part of life, and life isn’t something that we recover from. We simply experience it, learn from it, and keep going as best we can.”

(Participant from Dunalley and surrounds)

Phases of Recovery

“I think it is very difficult to say “the community is at this stage, and its time to move to the next one”, because there will be people left behind, and there will be people running ahead. So it is very difficult to categorize a stage for the community.”

(Participant from Dunalley and surrounds)

Community members frequently expressed the view that recovery is not a linear process. Many community members shared the desire to replace the current linear model of sequential disaster phases (i.e. planning, preparation, response and recovery) with a more dynamic model. Other community members acknowledged the prevalence of the current model of disaster phases, and some found thinking about phases as useful. While there was a lack of clarity about whether the term recovery should be replaced by ‘renewal’ or ‘regeneration’, community members are strongly of the view that the recovery phase must be seen as a long-term endeavour, and that it could also have an early and a long term component within it.

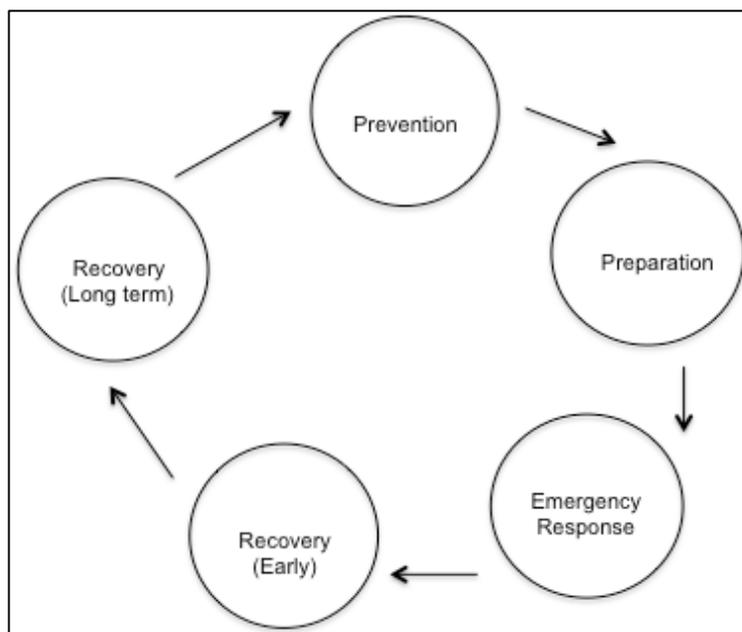


Figure 3: A variation on the usual phases of disaster recovery: prevention, preparation, response and recovery – with recovery divided into early and long-term recovery.

In the same way that planning and preparation are recognised as two phases of pre-crisis disaster mitigation, community members experienced recovery as having two recognisable phases that occur after the crisis: these being early recovery and long-term recovery.

Community members described early recovery as focused on meeting first order needs not dissimilar to those outlined by Maslow (Maslow 1943) ensuring housing and food or other survival needs, then progressing to the need for security, human love and connection. In this early recovery phase, community members are focussed on finding and securing a safe place for themselves, their families and for others; there is a focus on organising housing; of coming to terms with the losses suffered and the initial feelings of shock and grief; of understanding who has been affected and in what way; of coming together as a community to share information and provide support to one another; and in this way beginning to understand what has happened, where and to whom. Many community members reported that this phase is characterised by short-term thinking with a focus on the need to meet practical and survival needs.

In addition to these practical and survival needs however, community members also participate in recovery activities and processes in ways that reinforce their feelings of security, building and rebuilding their sense of safety and self esteem, and ultimately meeting their need for self expression, self actualisation and the need to find meaning in relation to this crisis event. This focus particularly emerges through their long-term involvement in the ongoing and complex process of the regeneration and recovery of their community. In this long-term phase of recovery activities continue to be social in nature, while developing a focus on creative endeavours and long-term health and wellbeing. They include future planning for the community, and enable community members to find ways to make meaning out of what has occurred. During this long-term recovery phase, community members also reported that the nature of conversations and discussions change as people seek to understand the effect of what has occurred: for them individually; for their families, friends and networks; and for their community as a whole.

A system of community engagement

From a community perspective there are many groups and individuals who become involved with the community as a result of the crisis. It is these groups and individuals who form a system of support as they become part of the recovery process in some way. Community members in each site in this research have been able to identify

positive contributions made by these individuals and groups, in relation to community recovery.

Participants in Stage 2 identified that actions and activities are led by different groups and individuals; some internal to the community, some involving people who have a previous connection or a history with the community, and some involving people from elsewhere who have not previously been familiar with the community at all. Figure 4 illustrates the various sources of positive leadership or contribution that supports community recovery: from people from local and distant businesses; led by individuals from within and outside the affected community; by governments at all levels; by groups and clubs either within the affected community or from elsewhere; or from other non-government organisations.

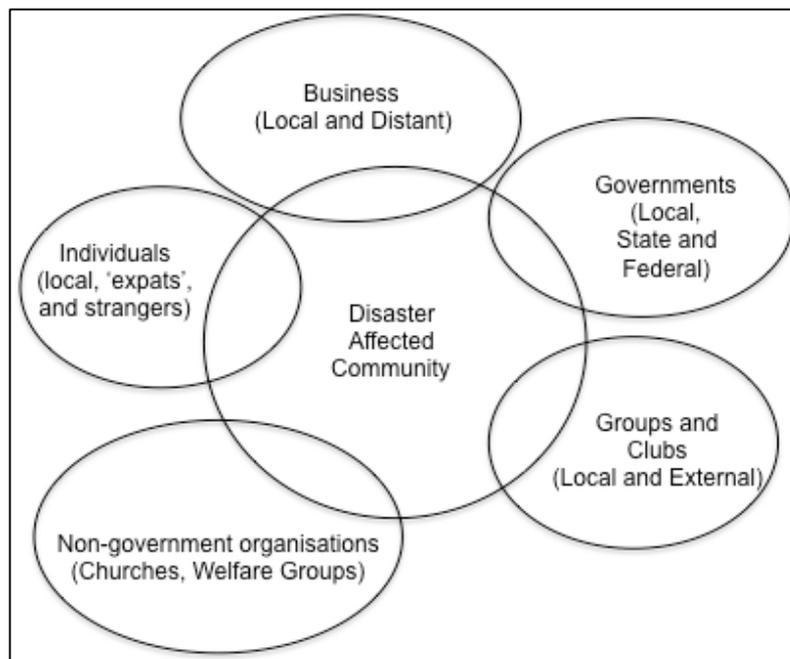


Figure 4: Various groups and individuals who become involved in community recovery after a natural disaster – as identified by community members.

Factors supporting community recovery and resilience

Community members from all four communities identified the same factors that support community recovery and resilience. There was no significant difference between communities or types of disaster (i.e. fire, flood or cyclone) in relation to the factors of community recovery that were identified.

In descending order of agreement between the participants across all four communities (i.e. total number of participants being 112), the factors identified as contributing to community recovery are listed in the following table (Table 8).

	Factors contributing to community resilience and recovery	Number of respondents who identify this as positive	Percentage of respondents who identify this as positive
1.	Community leadership	112	100%
2.	Community engagement	110	99%
3.	Attachment to 'place'	110	99%
4.	Social capital or social connection	109	98%
5.	(Emergent) Community action in recovery	93	83%
6.	How the response and recovery are handled	86	77%
7.	Community history and culture	51	46%
8.	Funding	43	38%
9.	Disaster preparation	36	32%
10.	Scale of crisis	24	21%
11.	Celebrity visitors	16	14%
12.	Anniversaries and memorials	14	13%

Table 8: Factors contributing to community recovery and resilience (See Appendix D for more detailed information)

The community members in each community clearly see their own community leadership, their engagement with the disaster response and recovery process, their attachment to the place in which they live, the demonstration of social capital and connection in their community, and their community's emergent action, as central to their community resilience and the trajectory of community recovery experienced in their case.

Characteristics of community actions

Community members identified what they considered to be the most important characteristics of the actions and activities taken by individuals, groups and organisations, regardless of whether they were initiated from within the community or from elsewhere. Particular characteristics were described as having contributed to the effectiveness of the action or activity, and therefore to supporting community recovery. There is a very high level of consistency between community members (both within and between sites) in relation to identifying the key characteristics of successful community actions and activities.

In descending order of frequency, the following characteristics were listed by participants, as being those features of any actions or activities that most effectively support the process of community recovery and strengthen community resilience.

	Characteristic of actions or activities that support community recovery	Number (and %) of respondents who identified this characteristic
1.	Reflecting a core component of human kindness and compassion, providing care and support to others	112 (100%)
2.	Including or fostering active support and care from family or friends	112 (100%)
3.	Actively focusing on the visible effect of the crisis on the physical environment or place – whether that focus was the natural or built environment, or associated with the community’s history	112 (100%)
4.	Having a practical application or focused on meeting or improving daily living needs	96 (86%)
5.	Including a social element	96 (86%)
6.	Involving a creative or artistic element	22 (20%)
7.	Involving a sporting outlet or element	14 (13%)

Table 9: Characteristic of actions or activities that support community recovery

A smaller number of participants also mentioned other features of some actions and activities, such as a focus on assisting locals to get away from the area for a holiday or a ‘break’, having counselling provided at a time that was appropriate, having had a previous experience of disaster to provide a context for the current experience.

Conclusion

The key focus of the fieldwork conducted during Stage 2 was to identify whether communities led or participated actively in their own community recovery after natural disaster, what that recovery process included, and what lessons can be learned. By participating in this research however, community members were also provided with an opportunity to identify key concepts and phrases that offend them, that they disagree with, or that they had simply been thinking about, because of their experience of disaster.

Many participants expressed a preference not to be labelled by the authorities (or anyone else) as being a ‘disaster victim’, and to move the discussion away from the concept of ‘recovery’. There were many aspects of ‘recovery’ that they objected to (as

already described in this chapter). At the very least many participants described recovery as a varied, complex, dynamic, multidimensional and potentially unending process, rather than as a linear process which takes community members through clear phases, from a crisis to a resolution or a final 'end' state.

The majority of community members prefer to be described as having 'survived' or 'been affected' by the disaster, and they assert that this second label applies to everyone who is part of the community; whether they had been present on the days of the crisis; and whether they had lost family or friends, property or livestock; or had not.

It is important to note that these participants defined or understood some key concepts differently from participants in Stage 1. For example, 'community leadership' is defined by Stage 1 participants in terms of the formal roles adopted by community leaders, and by Stage 2 participants as demonstrated by those community members who led an action or activity or lifted the spirits of the community by participating in actions or activities.

Similarly 'community' is defined by participants in Stage 1 as being those people who live in a location, whereas participants in Stage 2 defined community more broadly; sometimes including people who do not live in the location but have a strong connection to the place and the people who live or had lived there. They also talked about a sense of community at times existing between strangers, i.e. people and groups from other places.

Participants in both Stages recognise that a 'disaster' is something that is at least temporarily beyond the capacity of the local community to address without outside assistance. It is the nature and duration of that external assistance that is a matter of ongoing discussion, and this issue will be further explored in the next chapter.

Chapter 8 – Data analysis and discussion of the findings

Introduction

The evidence gathered from the community members who participated in Stage 2 of this research was profoundly moving and powerfully demonstrated the role of individual and community action, human compassion, the capacity of communities to help themselves, and the capacity of communities to assist one another after the occurrence of a natural disaster.

The key findings of this study, demonstrate that communities themselves are central to their own recovery and that individuals (from both within the affected community and from other communities across Australia and internationally) make an important contribution, whether they step forward adopting a leadership role, and whether their action initially appears to be large or small.

It continues to be important to acknowledge that this research is based on the experience and observations of community members who participated in the recovery process in some way, in their affected community. This participation enabled them to observe community leadership and community actions and activities, to have experiences of community resilience and the community recovery process, and to subsequently participate in this research.. The research specifically focuses on community strength, capability and action, without denying the experience of vulnerability, distress or inaction. In no way does this research intend to minimise or misrepresent the profoundly difficult experiences that communities and individuals have faced, as a result of a natural disaster affecting them and their community.

Clearly, some members of the community did not step forward to participate in this research. Many had left the community before, during or since the crisis. In spite of a focus on the strengths and capacity of the communities and of the community members, some members of the community were reported by participants to be struggling to cope with the aftermath of the crisis. These and other community members either did not know about the research, or chose not to be involved in the research process for reasons of their own. The researcher respects these choices and did not pursue any individual to encourage them to participate.

For those community members who participated in this research, they have described what felt at times like overwhelming challenges for them, their families and their community. They have then described the actions that they and others took, to overcome those challenges and facilitate and support the process of recovery in their community. It is these stories and these examples that form the core of this research.

This chapter contains the following **comparative analysis** of the evidence obtained from both Stages 1 and 2 of this research:

1. A comparison of data obtained between Stages 1 and 2 revealing a high degree of consistency of view about the key factors that contribute to community recovery and some key differences in definition those factors; and
2. A discussion about the important role of community leadership.

This chapter also provides an **analysis of the evidence gathered during Stage 2** of this research, including:

1. A comparison of key site and crisis characteristics between the four communities revealing that the primary differences between how the participants in each location describe and reflect on their experience are related to the degree of disaster preparation, and the loss of (human) life;
2. An outline of key domains of community recovery that emerge from this analysis (e.g. inherent community characteristics, preparation and planning, the nature of the crisis and the crisis response, the nature of the approach by outside individuals and groups to the community), with key factors for and against recovery indicated in each domain;
3. An analysis of the types of actions and activities that occur in each disaster phase (before, during and after the crisis), including the focus of each action and who instigated that action;
4. A discussion of the factors that support or hinder community recovery, and the interplay of these factors in each of the four community sites;
5. A discussion of those factors identified by community members as having particular significance, including:
 - a. *pre-crisis factors* such as community planning and preparation, and (inherent) social and community cohesion;

- b. *post-crisis factors* such as (emergent) social and community capital, community leadership and participation, partnerships between individuals, groups and organisations, and acts of kindness and human compassion;
6. The features of successful actions and activities as identified by the community members;
7. An exploration of the complexity of resilience and recovery, as illustrated by the observation by participants that a negative experience can become positive and a positive experience can become negative; and
8. Two consistent notes from participants across all four sites, about the value of human kindness and the role of hope.

Comparative analysis - Stages 1 and 2

Consistency and difference

Some clear alignment and some key differences emerged between the observations and descriptions from research participants in both Stage 1 and Stage 2. Areas of alignment were strongest in relation to the role and importance of community leadership, community and social capital, and community engagement and action, in relation to a positive and strong recovery process. Participants in both stages of the research identified these factors as central to community resilience and recovery.

In some cases language was used differently by participants in each stage to describe the importance of key factors; the value of actions and activities; the factors that contributed to their success; or the benefit of actions to the community. Participants in Stage 1 had a less specific and detailed view of actions and activities that occurred and tended to use broad statements rather than describe specific actions or activities. Participants in Stage 2 had many detailed examples of beneficial actions and activities. This difference is readily explained given the views of each group reflect the role they played and their level of exposure to the detail of the community recovery process.

The most significant difference between the two groups of participants is the significance that they attribute to a community's connection to place e.g. the connection to the natural and built environment, and the connection to their place in the past i.e. their community history. Few participants in Stage 1 mentioned these factors,

while almost all of the participants in Stage 2 saw a connection to the physical place as being highly relevant to the success of the community recovery process, and a significant number of them saw a connection to history as being important.

The most controversial issue with the most differences both within each participant group, and between participant groups in the two stages of the research, is whether the recovery process is community led or not, and whether this is desirable or not. With a couple of key exceptions, the majority of Stage 1 participants do not believe that community led recovery is actually possible or desirable and prefer a model of community engagement or participation, at least in the early stages. These participants believe that it is in the best interests of the community for experts to lead the recovery process, with the active involvement of the community members. A minority of participants in Stage 1 believe in the absolute desirability of community led recovery, as outlined in Chapter 4.

In contrast, the majority of participants in Stage 2 believe strongly in the value of community led recovery, but do not experience the recovery process as being led by the community. They hear the recovery being described as community led by the government officials and key non-government officials involved in the process. Community members believe that it is these government and non-government officials who actually lead the recovery process. The majority of community members interviewed believe that for a recovery process to be successful it must be led by the community.

Interestingly, while the community members who participated in Stage 2 do not experience themselves as leading their community recovery, what they described as actually occurring in their communities, is a myriad of ways in which community members and leaders *are* leading the recovery of their community. They described the important role of the action taken by community members, and individuals and groups from other communities, in terms of influencing recovery. It can be convincingly argued, based on the evidence gathered in this research, that community members *are* leading their own recovery, by the nature of their own actions and the activities that they organise and participate in.

The following table (Table 10) summarises the key factors identified by participants in both stages of the research, and identifies whether participants in each stage identified the same factors (acknowledging that there was some variation within the participant group from each stage in relation to some factors):

Key factors identified as relevant to community recovery	
Stage 1	Stage 2
Social and community capital	Social and community capital
A high level of community engagement	A high level of community engagement.
The process of community engagement by emergency services and agencies – whether community members were well informed and treated respectfully.	The process of community engagement by emergency services and agencies – whether community members were well informed and treated respectfully.
Community actions and activities before, during and after the crisis.	Community actions and activities before, during and after the crisis.
Community leadership - with the description of leadership referring to the local Mayor, local business leaders and leaders of local organisations and community groups.	Community leadership – with the description of leadership referring to local community members, with a particular focus on the actions that they took, and what they did to help others.
Disaster planning and preparation was mentioned by some participants as being important to recovery.	Disaster planning and preparation was mentioned by the majority of participants as being essential to recovery, including having a strong understanding of the physical environment and the risks associated with living in that environment.
The identity, history and culture of the specific community were mentioned by some participants as being important to recovery.	The identity, history and culture of the specific community was mentioned by the majority of participants as being important to recovery.
A small number of participants mentioned the scale of the crisis and its devastation as a factor in recovery.	The majority of community members believe that the scale of the crisis and its devastation is a highly influential factor in community recovery. They specifically mention the loss of human life, the loss of domestic pets and livestock, and the destruction to wildlife and the general landscape.
Celebrity visitors were seen to have a positive effect on the community's morale.	Community members varied in their view of celebrity visitors – ranging from them being a necessary thing to

	tolerate, a complete waste of time and money, or a wonderful experience and a positive contribution to community recovery. The most popular celebrity visitors were the Governor General, Prince William, and sports teams/heroes. Community members commented that these people had no political agenda and had nothing to gain by visiting the community, and as a result they were perceived as being more genuine than politicians.
A sense of attachment to place was mentioned by one participant as being a factor that supported or strengthened community recovery.	Many participants described a deep connection to the land and an attachment to place, as being critical to the success of the community recovery process.
Anniversaries and memorials were seen as an important acknowledgement of the crisis, the losses suffered by the community and the progress made since.	Communities varied in relation to their view of anniversaries and memorials. In far north Queensland participants were in agreement that anniversaries are not relevant to them. Most participants in communities where there was no loss of human life felt that anniversaries and memorials are unnecessary. These communities believe that if they had lost lives, they would feel differently. The community where lives were lost spoke of the important role that anniversary events and memorials play in the recovery process for them.

Table 10: Key factors identified as relevant to community recovery - where there is a level of agreement between participants in both Stages 1 and 2.

The following table (Table 11) summarises the key factors identified by participants in both stages of the research where participants in each stage varied in view:

Factors where findings varied between participants in Stages 1 and 2	
Stage 1	Stage 2
Government engagement with communities post disaster was described as an important factor in community recovery – particularly through community consultations and community recovery groups. While participants identified ways in which community consultation and engagement could be improved, most viewed existing community engagement as positive. Only one participant argued that current community engagement processes are disempowering.	Government engagement with communities post disaster was described by community members as disempowering and overwhelming. Community members questioned the choice of, and the process of choosing, the community representatives. These processes were seen to hinder rather than assist with recovery. Those chosen to represent the community were often described as <i>not</i> being representative of the community.
Emergency and recovery funding (amount and distribution) was thought by the majority of participants to be beneficial for recovery. The minority of participants thought that funding was divisive.	While emergency payments to households were referred to as positive for those who need it, in general the provision of funding (both the amount and the method of distribution) was thought to be divisive and disempowering by the majority of participants.
The existing relationships or previous experiences between the community and the levels of government were seen to be an important factor.	Community members did not mention existing relationships and previous experiences between the community and various levels of government as being either positive or negative factors for recovery. Some community members talked about their previous experience of local council members or the local member of (state) parliament – some reflecting a positive view and others a negative one.

Table 11: Key factors identified as relevant to community recovery - where findings vary between participants in both Stages 1 and 2.

The important role of community leadership

Participants from both stages of the research agree that community leadership is an important aspect of community recovery. They varied, however, in how they explained the concept and the expression of that community leadership.

Participants in Stage 1 explained leadership in the more traditional terms of formal hierarchical or information based positions of authority i.e. positions held by the Mayor, leaders of community groups, or business leaders. Some participants in Stage 1 explicitly argued that the most appropriate leadership style for disaster management at any phase of a crisis (preparation, planning response or recovery) was a 'command and control' leadership style. Others argued that this was only true in the response stage and in the early days or weeks following the crisis.

One participant proposed strongly that an authoritative style of leadership is required during the disaster response and recovery phases, in order to ensure that funds are appropriately distributed and managed and that fair and defensible decisions are made about projects that are funded or supported by government or by publicly raised funds. Another advocated a servant leadership style as soon as the crisis phase was over. This participant preferred an approach that supported the local community members and community leaders and specifically provided whatever support and assistance they thought was necessary.

A third participant advocated that community based leadership (real rather than espoused) should occur as early as possible after a crisis, with community leaders and members being quite capable of understanding their own needs, undertaking complex problem solving, and taking charge of their own recovery. Yet another participant expressed the view that communities are significantly traumatised following a crisis and are unlikely to be capable of leading their own recovery successfully, being much more able to participate and provide input rather than lead, at least in the early stages.

When community members described leadership during Stage 2 of this research, they described community leadership as being informally and relationally based and ascribed to people based on trust and on their actions. They provided examples of a wide range of community members, who volunteered to take responsibility for tasks, organised or participated in activities, set an example for others, or encouraged others by their own contributions and behaviour.

Community members placed high value on the actions of people in these 'informal' leadership roles, rather than on the words of people in a 'formal' leadership role. The credibility of community leaders was based on whether they worked alongside others, rather than on any formal role, title or external recognition.

"You need to have good, strong leaders and you need to have people who understand. But you need to have people who can connect with the people who are most affected. You can't have somebody sitting up on the top level just giving directions. They need to be down there and part of what's happening. They need to have their feet in the clay with the rest of us."

"Leadership doesn't mean taking charge of things, but actually doing things quietly behind the scenes."

(Participants from Coonabarabran)

Analysis of key findings - Stage 2

1. Comparative discussion between communities

It is useful to compare the four communities and to reflect on the reasons for any variations. There are two aspects of each community that can be compared to identify any differences that might be attributed to location: the site characteristics; and the findings in each site.

Comparative site characteristics

Two of the sites had experienced one major crisis in the 5 years before the fieldwork occurred. The other two sites had experienced two major crises in the same time period. Some participants in the Coonabarabran sample also advised that there had been an additional minor flood in the same time period, but that this was not considered by the locals to be a major disaster, as it only resulted in temporary isolation, rather than any long-term destruction of property or any loss of livestock at all. Similarly the far north Queensland site indicated that category 1-3 cyclones had occurred in this time, but that these were really just 'windy days' and did not warrant attention as a disaster.

The fieldwork occurred in each site between one and four years since the most recent major disaster in that location. The fieldwork took place on the Tasman Peninsular site 15 months after the fire that affected Dunalley and surrounds; in Coonabarabran 28 months after their first fire and 16 months after their second fire; in the Lockyer Valley 38 months after the 2011 flood and 14 months after the 2013 flood; and on the Cassowary Coast 40 months after Cyclone Yasi, which was the most recent Category 4 or 5 cyclone to make landfall in the area.

The Cassowary Coast site had a number of features that differed from the other sites: many more community members had generators and chainsaws and spoke of actions that occurred in the preparation phase of their crisis. Power (electricity) was restored more readily in the cases where people were able to utilise their generator. A number of participants joked about how “reliant Southerners are” on government or other assistance. One man in particular was quite clear that living in far north Queensland meant that he and his neighbours knew that each summer would bring strong winds or a cyclone. Part of living in the region is being prepared for that, and knowing what to do and how to do it. Almost all participants from the Cassowary Coast talked of ‘being prepared’ being one of the most sensible things to do to ensure a quicker recovery. Very few participants from the Cassowary Coast thought anniversaries were a useful part of the recovery process. Participants from this community pointed out that each summer constitutes a cyclone season and that by the time each anniversary arrived, another cyclone would be occurring. Acknowledging anniversaries would mean that there would need to be many such anniversaries each season.

The Lockyer Valley was the only site where community members died as a direct result of the crisis. Participants in other sites referred to this site and to the Black Saturday fires in Victoria in 2009, as being disasters far more devastating than their own. Participants in the Lockyer Valley also talked about their loss of life being a major factor in what they were experiencing as a slow and difficult process of community recovery.

The Lockyer Valley and Coonabarabran were both sites where formal Inquiries were still ongoing during data collection in Stage 2. Participants in both locations stated that they believe that ongoing Inquiries or coronial inquests delay the ability of the community to move on. In both sites there were questions about whether someone was responsible (either solely or partially) for the disaster occurring or for it escalating to the extent that it did. Some community members were seeking clarity about who was responsible for the disaster and could not rest or discuss other aspects of the process, without returning to the issue of blame, accountability and the potential for financial compensation.

[Comparative site findings](#)

The data gathered, the narratives shared, and the findings from each community, were highly consistent across all sites i.e. regardless of the type of crisis experienced of fire, flood or cyclone.

The only evident difference between sites was when community members spoke of being more effectively prepared in far north Queensland, than they perceive other communities to be, in other parts of Australia. They described the increased likelihood of community members owning generators, of having plans, and of preparing their homes and communities for cyclones. They explained the difference as being the result of the frequency of these events, and therefore the familiarity of community members with the experience of disaster. This community experiences cyclones regularly and therefore prepares for these events carefully at the beginning of each season.

There were no other substantial differences between the evidence gathered from each site; either in relation to the types of actions or activities described as effective, or in the understanding of what contributes to community recovery. In terms of the actions and activities that occur and the themes that emerge, there are marked similarities in all sites, regardless of whether they had experienced fire, flood or cyclone, as already described in this chapter.

2. Key domains of community recovery

Key domains and factors emerge from an analysis of the experience of community recovery. Community members from all four sites identified these key domains relating to recovery.

Key domains identified in Stages 1 and 2 emerged repeatedly throughout this study and include:

- + inherent community characteristics (i.e. pre-crisis);
- + preparation and planning before the crisis;
- + the nature and scale of the crisis and the crisis response; and
- + the nature of the external response after the crisis i.e. the approach to the community by those wishing to support community recovery.

The following tables (Tables 12 – 15) include factors that were identified by community members across all sites, as they described the factors that assist them and the factors that work against them through the community recovery processes. These factors are organised into the key domains identified.

Domain – Inherent community characteristics	
Factors that support community recovery	<ul style="list-style-type: none"> + Strong social capital and community cohesion pre crisis – including a shared sense of community identity + Multiple sources of community leadership both formal and informal + Many active individuals and groups across different sectors of the community + Strong attachment to local history + Strong attachment to the environment and the 'place'
Factors that hinder community recovery	<ul style="list-style-type: none"> + Divided or poorly connected community pre crisis + Reliance on one or a few community leaders – and an emphasis on the formal leaders + Reliance on few community members to be active in many social and community contexts + Few community groups active in the community + No or limited knowledge of the community history or attachment to the 'place'

Table 12: Inherent community characteristics - factors that support or hinder community recovery

Domain – Preparation and planning	
Factors that support community recovery	<ul style="list-style-type: none"> + A shared understanding across the community of the environment and the inherent dangers of the environment e.g. cyclones in far north Queensland, floods along rivers and in valleys, fires in fire prone areas + Well understood and practiced preparation and planning across the community (including personal preparation, property protection, local knowledge of the environment and safety areas, and evacuation procedures)
Factors that hinder community recovery	<ul style="list-style-type: none"> + A poor understanding of the environment in which people live or its inherent dangers – particularly if people are new to the region or community and have had little experience of the local risks + Poor preparation and planning for risks or a crisis

Table 13: Preparation and planning – factors that support or hinder community recovery

Domain – The nature of the crisis and the crisis response	
Factors that support community recovery	<ul style="list-style-type: none"> + The lack of suspected human causes or contributions to the crisis itself or to its escalation + No loss of human life + Limited loss of property or livestock + Limited loss of wildlife and damage to the natural environment + Emergency services are respectful and supportive of community members throughout crisis response + Community members being allowed to return quickly to their properties – to secure, protect, and retrieve valued stock or property + Clear and regular communication about the crisis, its progress and its effects – both generally and to those most affected
Factors that hinder community recovery	<ul style="list-style-type: none"> + Potential or suspected human cause of or contribution to the crisis or its escalation + Loss of life – particularly if seen to be avoidable + Extensive loss of property + Extensive loss of livestock and the need to euthanize stock + Extensive loss of wildlife and damage to the natural environment, particularly if highly visible daily + The emergency response is experienced as over-riding or ignoring local knowledge and expertise + Community members are not allowed to return to their homes and properties + There is poor communication about the crisis and its effects + Specific community members learn of the fate of their property via the media

Table 14: The nature of the crisis and the crisis response – factors that support or hinder community recovery

Domain – The nature of the approach to the community	
Factors that support community recovery	<ul style="list-style-type: none"> + There is respectful entry to and engagement of the community by outside individuals, groups and organisations + External support is focused on finding out and responding to what the community actually needs – practical assistance, social activity, in a timely way + There is an understanding of and respect for community capacity and agency + Any community recovery group or committee adopting a multi-disciplinary and participatory approach to community recovery – including having a community place to come to and community mechanisms to share and plan together; welcoming ideas for men, women and children; creative responses such as art, photography, music and dance; supports for businesses, primary and other industries, households and families. + Donations are of time, money, or special gifts – not general goods (and particularly not second hand goods) + Having a shared commitment to a <i>long term</i> view – allowing people and communities to set their own timelines for specific actions and outcomes e.g. building property or restoring infrastructure + Having a shared commitment to reducing red tape and requirements – to provide simple processes wherever possible, recognising the temporary effect of trauma on the ability of people to think and make decisions as well as they usually do
Factors that hinder community recovery	<ul style="list-style-type: none"> + A ‘rescue’ model of arrival in community – with a lack of respect for community capacity and agency + Limited engagement with the community about when to arrive, what actions are most needed, and what the community needs are in general + A lack of understanding by outside individuals or groups, of the community – its identity and composition + The external agencies adopt the ‘we know what you need’ approach + A failure to engage the community in all its diversity and variety + Poorly timed actions and activities that are out of sync with the community’s needs

	<ul style="list-style-type: none"> + Organisations, groups and individuals providing the community with what they (think they) need, without confirming that this is useful + An overwhelming donations of goods – including second hand goods + Key people referring to how quickly the community will be returned ‘to normal’; announcing deadlines for building the first house, or clearing all affected blocks etc + Providing counselling quickly with a view to restoring individuals and the community quickly + Require paperwork and forms to be completed for a range of payments, for insurance, etc.
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Table 15: The nature of the approach to the community– factors that support or hinder community recovery

3. Key phases of community recovery

An analysis of the data gathered through both phases of research, results in key factors being identified that influence community recovery and in particular a community’s recovery trajectory. Some of these factors were inherent within the community before the disaster occurred, and others emerge afterwards. It is therefore logical to consider what this research highlights about what occurs to support the process of community recovery, through each phase of a disaster.

It is useful to analyse actions and activities by examining the stage of the disaster in which the activity or action occurred; the focus of the activities or actions in each case; and who instigated or lead the activity or took the action (i.e. from inside or outside the community, an individual or group, a business or government). Applying this simple structure to the actions and activities, allows some clarity to emerge about who instigated action in each stage, and the focus of the activities and actions in each stage. Further analysis of the focus of action and activity suggests key domains that apply to each stage – ranging from survival, practical, interpersonal, social, economic, environmental, creativity, and the importance of making meaning of the crisis (see Table 16). It is important to note that these words and concepts are also based on the interviews with the community members, as many community members spoke of the importance of these domains. It is also important to remember that the actions and activities described by participants are in answer to the question about ‘what works’ i.e. what is effective in supporting the community to recover, rather than just reporting things that occurred.

Stage	Focus of actions	Instigator	Domain
Before the crisis	To prepare to defend, to protect life or property, or to leave	Locals. Emergency response personnel.	Defence
During the crisis	To defend, to protect life or property, or to leave.	Locals. Emergency response personnel.	Survival Defence
During the early response	To organise food, shelter, or housing. To act out of kindness and care, and to support and help one another.	Locals. Disaster response officials. Disaster response organisations and groups.	Practical Interpersonal Kindness and compassion
During the community clean up	To restore homes, businesses, towns, and properties. To act out of kindness and care, and to support and help one another.	Locals. Previous community members. Family and friends. Strangers. Groups.	Practical Interpersonal Social Community Economic Environmental Infrastructure Kindness and compassion
During the first months after the crisis	To support the ongoing restoration of homes and properties, to plan for rebuilding. To provide financial support through vouchers and financial donations (given and received). To care for flora, fauna and land. To organise, support or attend social and community events. The making and sharing of gifts. To activate or establish community or social clubs and groups. To help one another, and act out of kindness and care.	Locals. Previous community members. Family and friends. Strangers. Groups. Organisations.	Practical Interpersonal Social Community Economic Environmental Infrastructure Kindness and compassion
During the first year after the crisis	Continued effort to restore homes and properties, to plan for rebuilding, and to commence that process. To provide financial support through vouchers and financial donations (given and received). To care for flora, fauna and land. To organise, support or attend social	Locals. Previous community members. Family and friends. Strangers. Groups.	Practical Interpersonal Social Community Economic Environmental Infrastructure Kindness and

	and community events. The making and sharing of gifts. To continue to support community or social clubs and groups, organizing and attending events such as concerts, community days, picnics etc. To help one another, and act out of kindness and care.	Organisations.	compassion Creativity and expressions Actions to make meaning
At each anniversary of the event	A ceremony or event to acknowledge the passing of each year.	Locals. Groups. Disaster officials and government.	Making meaning Acknowledging loss and survival
Beyond the first year	To continue to support many actions and activities across the community – aiming for self-sufficiency and some sense of ‘normality’. New relationships and groups of friends have formed within the community and with people who met one another through the experience of crisis, response and recovery.	Locals. Groups. Organisations.	Practical Interpersonal Social Community Economic Environmental Creativity and making meaning Kindness and compassion

Table 16: Activities that support community recovery – organised by the focus, the instigator and the domain for each stage of a disaster.

The results of this simple form of analysis form an important basis for understanding the focus of each phase of the crisis and the implications of what occurs during each phase. The primary need before and during a crisis, as expressed and described by community members during this research, is defence and survival. Immediately following the emergency response, and then through early and long term recovery, kindness and compassion are crucial. Throughout the first year after a crisis, understandably the focus expands to include the domains of social, economic, environmental, infrastructure and the importance of making meaning.

4. Factors that support or hinder community recovery

Community members are clear that actions and activities either work to support the process of community recovery or they work against it. The way these forces emerge and then apply to each community varies according to various internal and external characteristics, and the ultimate progress towards recovery will be influenced by whether there are more or stronger forces for or against recovery.

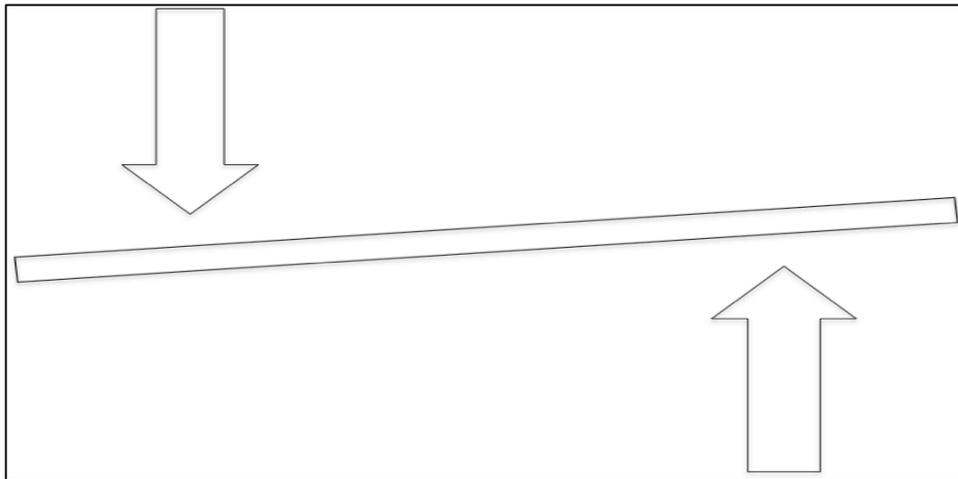


Figure 5: Forces that contribute to or work against community recovery

Key forces *for* community recovery as reported by community members themselves include: a high level of preparation and planning prior to the crisis; involvement of highly respected local community leaders early in the community engagement and regeneration process i.e. during crisis response if not before, and then in an ongoing way; pre-existing community and social capital being activated so that community members engage early and often in the process of recovery and regeneration; the timeliness and appropriateness of external assistance being provided to the community i.e. when the community is ready to utilise that assistance and identifies it as a need; ongoing and long term support and assistance from organisations, individuals and governments i.e. without a time limit; appropriate recognition and acceptance of the losses suffered while also reinforcing progress and the future (the degree of this needing to be set by the community rather than by outsiders).

Key forces that work *against* community recovery as reported by community members themselves include: pre-existing community divisions and dis-unity; lack of preparation for the crisis; lack of warning about the progress and escalation of the crisis; scale of loss of human life; scale of loss of animal life (both domestic and wildlife); scale of devastation including loss or damage to property and businesses; any possibility of human error being a contributing factor in the crisis; discussion and actions to seek compensation or apportion blame in relation to the crisis; the arrival of external agencies (government or non-government) to assume control and leadership of the recovery process; insurance and government paperwork and bureaucratic processes in relation to claims or requirements such as building permits; ongoing and long term official Inquiries into the crisis; and events, statements or actions that continue to reinforce the loss and the problems being experienced.

Clearly the desired outcome for each disaster affected community is that they are able to: come to terms with and accept what has occurred, including the losses experienced and the factors that contributed to that loss; take steps to build a new future that neither denies what has occurred nor dwells on it excessively; and to generate a high degree of community functioning (socially, economically, physically), finding new strengths and opportunities both from the original community capacity, and what has emerged from the crisis. The likelihood of any community achieving this outcome, and the progress of that community towards this outcome will be influenced by the interplay and balance of the forces for and against success. Each of these forces will affect a community differently due to the complex interplay of internal and external forces, and inherent and emergent community characteristics.

A generally positive trajectory is desired, while expecting to experience some difficulties or challenges that may cause a regression in this recovery process. The aim of any recovery process is clearly to minimise the number and severity of the periods of regression, and to support the community to continue to experience a positive trajectory of community recovery.

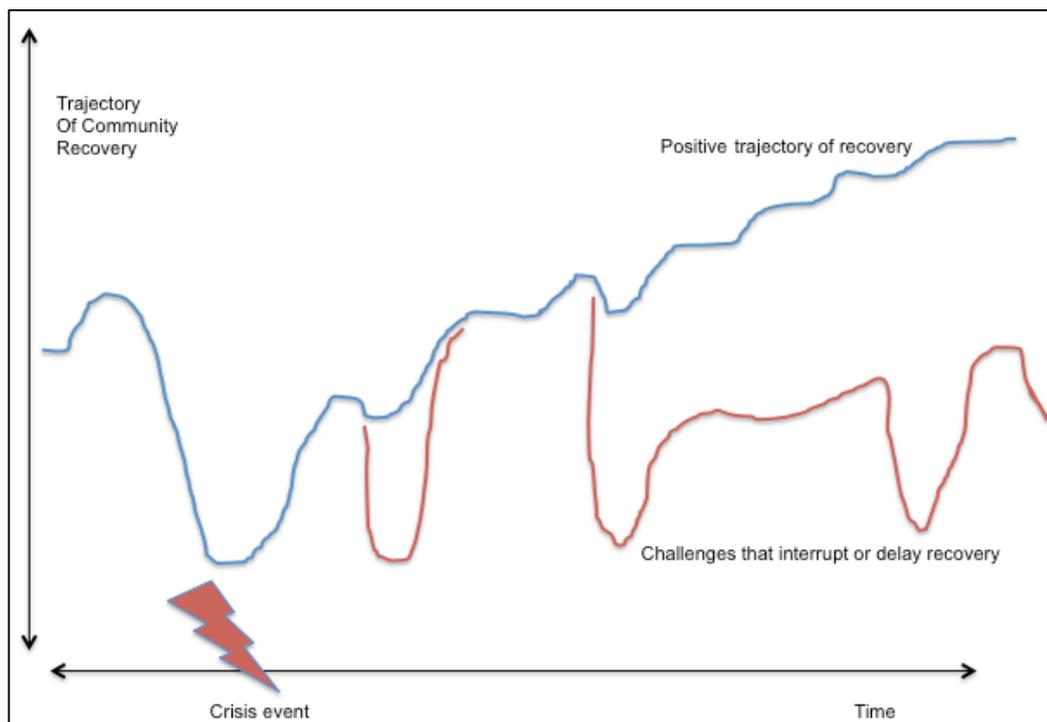


Figure 6: A model illustrating the possible trajectory of community recovery over time following a crisis event.

The four communities in this study exhibit and describe their own balance of these forces for and against an effective community recovery, have experienced their own version of the process of community recovery, and can therefore be understood to be in different stages of the process of community recovery.

What follows is a compilation of key information from the participants from each community, brought together as a description of that community, based on the observations and evidence provided by the majority of those community members. Not all community members in any community will agree with how to describe their community, whether disaster affected or not. These descriptions are a compilation of what the majority of participants said during their interviews, rather than representing the views of all participants in each community.

The Cassowary Coast

Participants across this community consistently described it as being well prepared for disaster. Extreme weather events occur regularly in this environment and there is a recognised 'season' for these events. Participants were of the view that most individuals, families and communities were well prepared and well practiced in what needs to be done as a cyclone event approaches and a crisis develops. While this does not reduce the devastation of the event in some elements of the community e.g. the natural environment and the wildlife are severely damaged and there are very minimal ways to reduce this; it does reduce the damage to the built environment and can prevent loss of human and domestic animal life. This means that the community recovery process can begin at an already higher level of community function as many community members are well prepared and quite experienced about what needs to be done. Practical things like generators and chainsaws are commonly owned items. Even a bulldozer is available and quickly on the road clearing debris.

In this community small groups of neighbours were well prepared and connected prior to the crisis, ready to support one another through the crisis, during the response phase and afterwards in early and ongoing phases of early and later recovery. However, participants also described this community as characterised by disunity prior to the crisis, so that while localised groups prepared and worked very well together, connections across the broader community were not as strong. In this community forces against recovery include the high level of destruction to the natural environment and to property and local industry; these pre-existing community divisions and indicators of dis-unity; difficulties with completing paperwork and complying with processes required by both the government and insurance companies; and disagreement across the community about priority setting, funding, and planning for the future, after the crisis had passed.

In addition to being well prepared and having well developed localised community capital, forces for recovery in this community included: clear and active community

leadership at the local level with local business owners and community leaders moving quickly to support local community members and provide access to supplies and services; ongoing community action and engagement as community leaders and members worked on projects and activities to support one another, and in particular in this community the involvement of the local Indigenous community who were mentioned by many participants as having provided significant support across the entire community to regenerate the land and natural environment. Visits by important 'celebrities' such as Prince William, the Premier of the State, the Governor General of Australia were largely seen to be positive, as was ongoing support by organisations and individuals from across Australia and internationally.

The Lockyer Valley

By contrast participants from this community described it as poorly prepared for the crisis that occurred. There was little or no warning of the crisis bearing down upon this community and for many community members the first they knew of the disaster was when the crisis event was actually happening around them. This community was also characterised by disunity and low levels of community cohesion prior to the crisis and this continued to influence behaviour and opinion afterwards. In addition to these factors the human death toll in this community was high. People quite literally did not have time to escape. Local community members often watched helpless, as a neighbour or family member was swept away by the fast moving flood. This combination of factors meant that for this community they emerged from the crisis event with a much greater degree of shock, a high level of loss and grief, and potentially a lower level of inherent capacity to know what was required, or how to implement what was required, to begin a process of community recovery.

Other factors working against community recovery in this site included the identification publically of the possibility that human error had contributed to the scale and consequence of this disaster; anger that warnings were not given and that officials did not predict this event or did not listen to those who did predict the event and its consequences; concerns that emergency response and recovery assistance was unequally applied across the community with a perception that some groups or locations were favoured over others; and most significantly (and mentioned by many participants) the ongoing official Inquiries into the causes of and ultimate accountability for this event.

Over time, some factors for community recovery emerged in this community. The local council offered a land swap to affected community members so that they could physically relocate to a new home in a different area of the community and for many

community members this innovative response was a significant boost to individual and community recovery. Community leaders who had been less directly affected by the disaster emerged and established some services and supports for local community members. Community centres and places to gather to eat and comfort one another were set up. A variety of activities and actions then occurred; instigated both by local community members and groups, and by individuals and groups from elsewhere. Strong support arrived from outside this community, including from individuals, groups and organisations.

For this community, visits by important 'celebrities' were described as a mixed blessing as many community members felt that the loss of human life made such visits less appropriate as the community members attempted to come to terms with their grief. For some members of this community having an annual anniversary and the construction of a memorial to acknowledge what had occurred and what had been lost, was an important aspect of recovery, while for others it was not.

The two remaining communities shared some characteristics that influenced their trajectory to community recovery, and possess others that made their situation unique.

Coonabarabran

Coonabarabran had prior warning of their crisis; and therefore had some time and opportunity to prepare for it. Other factors working for their community recovery included: a strong connection to their unique community identity based on having a large national park with rich stocks of native flora and fauna and a nationally and internationally renowned observatory in their community; having a number of community members who were well respected by the entire community and were described by many to selflessly lead activities and actions during response and recovery in spite of their own losses of home, livestock and property; receiving strong support from outside the community; and an enduring sense of history and connection to place for many community members. This resulted in a continued sense of community identity for many, including some community members who had moved away prior to the crisis and found ways to support family and friends that they had left behind.

For this community there were also factors that community members described as hindering the recovery process. These included the scale of devastation and in particular the destruction of almost the entire national park including all flora and fauna; being locked out of their homes and properties some of which were destroyed well after the crisis had passed because of smouldering embers; questions raised during

and after the event itself about the contribution of human error and judgement, to the scale of the crisis, and the roles and responsibilities for crisis management when a national park is involved; emotional and detailed claims for compensation and formal Inquiries being established to determine responsibility and lessons that could be learned from the crisis that were still not resolved a year later; and difficulties with completing paperwork and complying with processes required by both the government and insurance companies.

Dunalley and surrounds

The communities of Dunalley and the surrounding area had little warning or time to prepare for their crisis event. However unlike the other three communities, these participants described their community as having already been diverse but cohesive, and they appeared to be unified and integrated as a community, following their crisis. Community members did not necessarily know one before the crisis, but they described connections between them that were quickly established following the crisis. They variously explained these connections to be because of the environment in which they live, the reasons they had chosen to live in this environment, and their shared experience during the crisis itself. The built and natural environment was completely devastated and it was widely considered to be a miracle that no lives were lost. People fled during the crisis, and many described the process as both chaotic and frightening. However, because of the natural location and the environment, some of those who fled did so together, and were very quickly able to return to the community (again together), while outside agencies and government took longer to arrive. This delay in the arrival of outside assistance meant that local community leaders emerged from the crisis and were able to quickly establish mechanisms to find and support other local community members.

Other factors that supported community recovery in this community were that some community members became active quickly and remained active through the response and into early and later recovery. Community members helped one another from the onset of the crisis. There was no question of human responsibility for the crisis in this region. Support and action for community members came from within the local community, from neighbouring communities, from across the state and from across Australia. Generosity of spirit and the presence of multiple social connections were a feature of how community members described this community and its response to the crisis.

While a creative response occurred to a small degree in other communities in this study, for this community a creative and artistic response was a primary feature of the

recovery process. Visual art, photography, writing, music and performance were all part of this community's identity before the crisis and an active part of community recovery afterwards. Many participants spoke of creative activities as being key to the recovery of this community, even if they did not consider themselves to be creative.

Another factor in this community's recovery was the very early focus on children. As is the case frequently in Australia, this crisis occurred during summer, and the local school was destroyed (along with most of the buildings in the community). A community member very quickly realised that the children might all be separated from one another to attend schools in Hobart or across Tasmania, if action was not taken quickly to replace the school buildings. This community quickly agreed that the replacement of the school was a high priority, and developed a shared vision of ensuring that a local school was available for the children when the next school term began. If this action had not been taken, a likely option was that the children would have left the community (with or without their families) to attend school elsewhere, and the community leaders quickly identified this as something that was to be avoided. The participation of community members in this research indicates that this shared vision across the community was a significant factor in the community's trajectory of recovery.

For this community, the factors working against community recovery were the scale of the disaster which remained visible in the natural environment surrounding the towns for over year; the very extensive loss of property including substantial local businesses; the subsequent loss of employment for many locals; the arrival of external agencies 'to establish necessary recovery mechanisms' after a period of time where the community had established their own quite effective recovery mechanisms, thereby leading to a disempowering of the local community leaders and members; and the ubiquitous difficulties with insurance claims and government paperwork.

5. Key factors pre and post crisis

Having discussed the factors likely to work for or against recovery, and having identified those factors described by community members as affecting their particular community, it is important to understand the critical role of particular factors that occur before the crisis, and after the crisis, again as identified by the community members in each site.

Pre-crisis factors

Community members in all four communities consistently identified both the *degree of community preparation* and the *degree of community cohesion* before a crisis, as key

factors in the recovery trajectory for that community after a crisis. Figure 7 provides a model for understanding the interplay of both of these pre-crisis factors, creating four different ways of conceptualising the recovery trajectory of any disaster affected community.

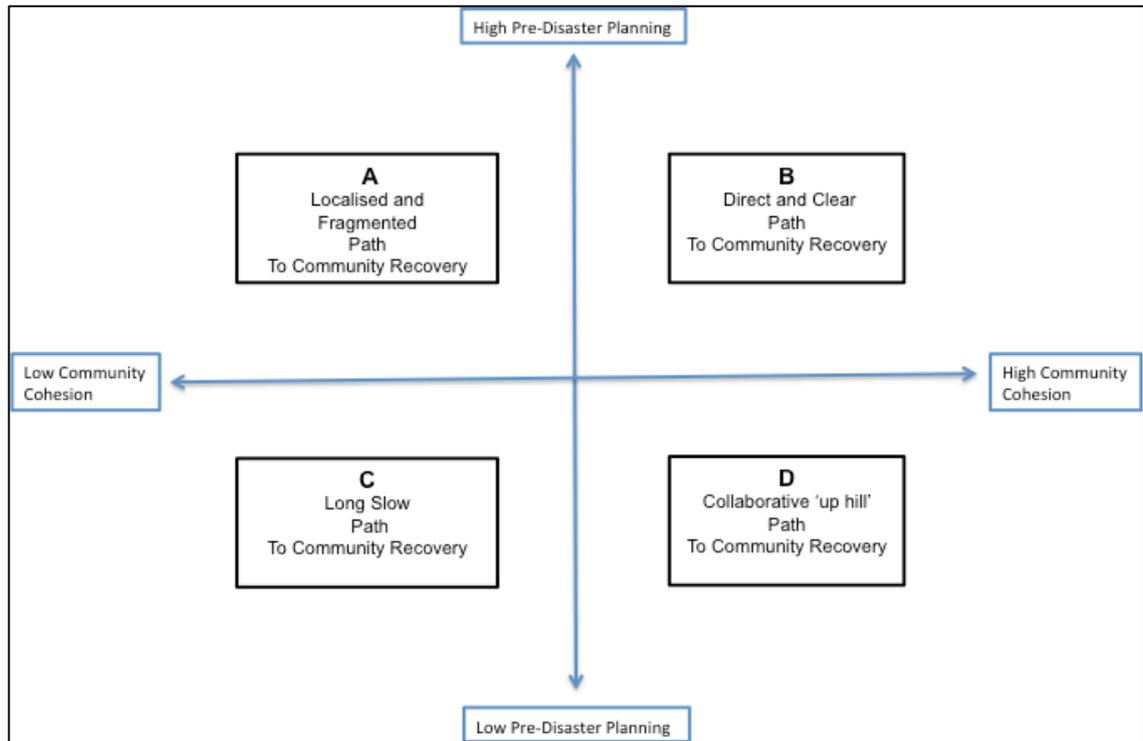


Figure 7: Disaster planning and community cohesion quadrants.

The ideal combination of these factors would be a community that exhibits a high degree of community cohesion and integration and is well prepared for a crisis or disaster, before that crisis occurs (i.e. Quadrant B). While this does not necessarily prevent a disaster or even minimise the devastating effects of such a disaster on a community, this type of community can reduce the immediate and long term impact of a disaster, and will have a more direct path to regenerating and returning to a functional state. None of the communities included in this study consistently reflected a view of themselves as falling into this category of having a high degree of both pre-crisis factors (reflected in the upper right hand quadrant of Figure 7). All communities indicated that this would be the ideal to which to aspire.

One community described itself as having a high level of community cohesion but not feeling well prepared for the crisis before it occurred (i.e. Quadrant D). This community exhibited a stronger recovery despite the extremely large-scale devastation to their community. They shared examples of actions taken after the crisis, that demonstrated a highly collaborative and cooperative approach to dealing with the crisis and its consequences. Within a very short time this community rallied and worked together to

assess the extent of the damage and to find and support one another. This level of community engagement and support continued throughout the first year and showed signs of continuing beyond that timeframe, with the community exhibiting many highly functional characteristics.

Another community described itself as having low levels of community cohesion before the crisis, this situation continuing since the crisis, although they had achieved a high degree of preparation and planning prior to the crisis (Quadrant A). This community spoke of having been able to minimise the damage in some cases and quickly respond to the devastation in others. However this community also spoke of different segments of the community being favoured or neglected, and participants reflected disagreement across the community about the appropriate response and approach to the recovery process. The recovery process was therefore fragmented and localised with some degree of dissatisfaction and disagreement across the community.

A third community similarly had some degree of preparation before the crisis and some degree of community cohesion, however neither of these was particularly high or low (perhaps positioning it in Quadrant A but more towards the centre of the each axis). This community had an additional factor of a perception that human behaviour contributed to the crisis itself: both the crisis occurring in the first place, and the ultimate scale of that crisis and of the devastation. These factors combined to similarly limit and to some degree localise the recovery process. Some specific areas of the community felt abandoned and less supported than others. Some segments of the community did not feel that projects or ideas that would assist them were supported.

Finally the fourth community demonstrated a low level of community cohesion across the affected community, and they had very little or no warning of the crisis bearing down upon them (placing it in Quadrant C). This community also had some concern that human error may have contributed to the extent of damage and losses experienced. This community has experienced a considerably slower recovery process and a long and for some community members very painful process of regeneration and recovery.

In addition to disaster planning and preparation, and community capital including both community cohesion and community capacity, community members identified a third core element that assists with the process of community recovery and regeneration, and yet precedes the crisis occurring. A strong sense of community identity likely to arise from the history of the community or some aspect of its connection to the

environment or the place in which it resides, is this third protective factor. For one community (not included in this study) this final element is demonstrated by their connection with the first World War and their desire to replace the avenue of trees planted in honour of community members who died at war, for another (included in this study) it is the national park and a desire to restore the environment there, for yet another it is the presence of mahogany gliders and the beauty of the tropical forest in which they live.

Post-crisis factors

In addition to these pre-existing factors, community members identified three essential elements that support an effective community recovery, that emerge *after* a natural disaster. These are the basis of many of the actions and activities that community members shared as examples of effective support for a strong recovery.

Firstly, the activation of inherent social and community capital; this can include the continuation of pre-existing social and community capital, and the emergence of new social and community capital, and is expressed through activities and actions of networked and connected community members. Secondly, actions, events or activities delivered through partnerships between individuals, groups and organisations inside the community and individuals, groups or organisations from outside the community. These relationships work only if they are partnerships, rather than the frequent occurrence of assistance being provided *to* or for a community without their active engagement, involvement, or leadership. This leads to the third element, which is community leadership and participation. Sometimes this leadership is from people who occupy formal or identified leadership positions such as the head of the local Rotary Club, and sometimes unexpected people step forward and offer leadership to their community.

It is important to note that a key feature of all of these elements is the presence or expression of humanity through the action or activity. The stories shared by community members all have a feature of human kindness, care and compassion; sometimes from someone known to the community, sometimes from a complete stranger. The quilts that are donated to affected communities are not simply quilts: they are an expression of comfort and support when the recipient gets into bed at the end of a difficult day. The group of friends that turn up each weekend to help clear the after-cyclone debris, are not just doing a task: they are showing care and support. The man who is moving to a nursing home in a large city, and donates his family piano to a girl he does not know who lost her home (and piano) in a flood: he is not just getting rid

of a piece of furniture, he is giving a gift from his heart. The recipients of these acts see and describe them in this way. It would be interesting to find out whether the people who gave these gifts, actually had this intent. Examples of this element were often shared with a drop in tone, a hushed voice or a 'catch in the throat' and a tear (described as a tear of gratitude or humility in the face of such generosity). These were the actions that were gifts from the heart, often occurring spontaneously because of the particular circumstances. People spoke of this element as sustaining them through the darkest of times.

There is also an element of creativity in many of these actions. This can be as simple as when children bake brownies and share them along the street, a stranger from another community makes Christmas decorations for each child in the community, groups of women across the country making quilts. Sometimes creativity also forms a part of the community's own actions to support recovery, with art exhibitions and photography exhibitions, by both practicing artists from the region, and from the 'ordinary person' who is finding the outlet of photography helpful in their own recovery process.

These elements come together in the following model which represents the interaction of inherent community characteristics, the emergence of characteristics in response to a crisis, and the process of becoming a recovering and (increasingly) resilient community (see Figure 8).

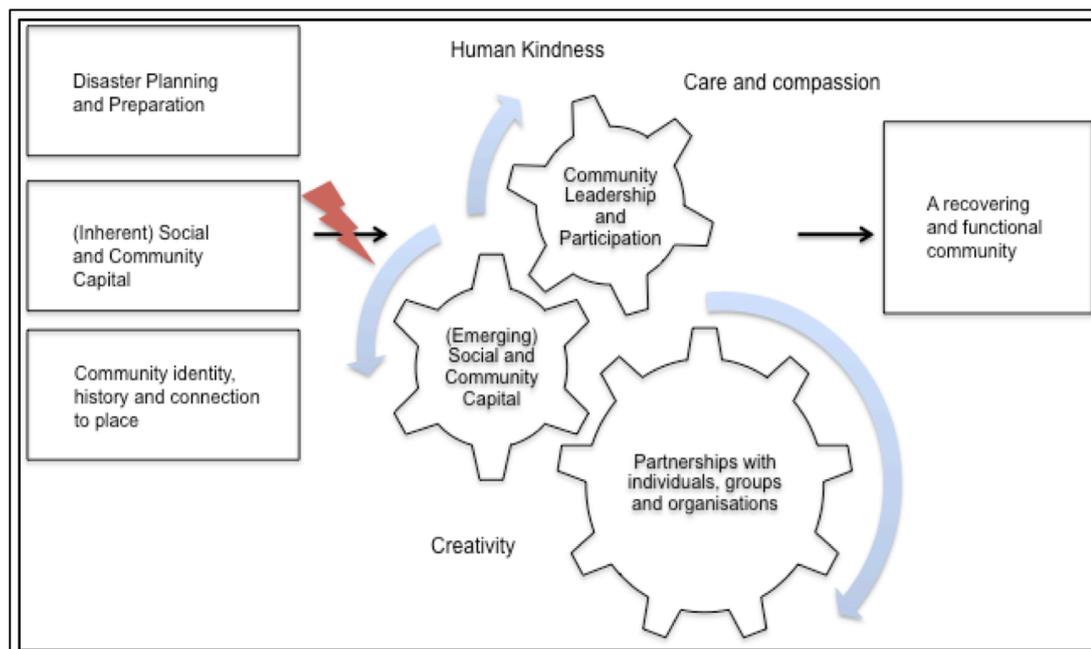


Figure 8: Key factors that contribute to community recovery – before and after a crisis.

6. Features of highly successful actions and activities

What becomes very clear through this research is that action and activities that occur on the ground before, during and after a crisis, are crucial to the recovery of any disaster-affected community. Given the prevalence of action, and the domains in which these occur, it is important to understand more about the characteristics of the most successful actions, and to understand what makes them beneficial for and supportive of a strong community recovery.

Participants described hundreds of actions and activities that occurred across communities and were significant in relation to their disaster recovery process. Participants were asked to reflect on what it was about these activities and actions that meant that they were effective or 'worked'. Participants identified key aspects of the actions or activities that they believed to be the reason for their effectiveness.

The most frequently mentioned individual activity across all sites was the work of BlazeAid. Participants identified a number of essential elements that contributed to the success of the BlazeAid effort, in their view. The key features that were understood to contribute to the success of this effort are as follows:

- + **The community member had a practical need** that was real and was identified by them as a priority for them i.e. replacing fencing that had been lost or damaged in the crisis.
- + **Volunteers were focused on the provision of that practical assistance** to the recipient, not on counseling or meeting some other need that the community member had not identified.
- + The result of **the activity provided a visual result** – the community member had a boundary to their property again which kept livestock in or out of their property. This visual result then reinforced the sense of progress and recovery, simply because the property owner and other community members could see the results of the activity.
- + The **volunteers with BlazeAid were not professionals**. The volunteers were not counselors, or government employees and they did not present themselves as being any better or more highly educated than the people they were assisting. Participants frequently commented that the volunteers were just ordinary people like them, with no agenda other than to help them.
- + The **engagement and involvement of the broader community was necessary** to obtain the benefit from the activity. The BlazeAid projects require

significant logistical support as large numbers of volunteers need to be fed and housed while the activity is undertaken.

- + **Volunteers and community members all gained from participating** in the activity. This research included volunteers who worked with or for BlazeAid and recipients who had fences rebuilt by BlazeAid. Both sets of participants described the benefit of being able to talk to one another and share the experience together.
- + There was a **strong sense of shared compassion and understanding** for what had occurred. Each group felt that it was an honour to be able to sit with the other and share in the experience of loss and grief and survival.

The founder of BlazeAid also describes an essential element of the success of this activity, as being the requirement that the community contribute funds before BlazeAid will come to the community. The first step before BlazeAid will deploy to a community, is that the council or some other organisation commits to providing funds to the project. When funds are committed and a core number of local community members are identified as being committed to participating in the project, then BlazeAid will enter the community and assist. The founder of BlazeAid argues convincingly that it is this local commitment that heralds success for the activity.

A key factor for success in a number of activities described, including the BlazeAid activity, is the demonstration of compassion and care, and the power this has for local community members. Participants described this care as being manifest in a number of ways: the physical and emotional care provided to one another; the physical and emotional care provided by strangers from outside the community; the care and gentleness demonstrated towards injured or affected animals and wildlife; the respect and care shown for the location whether it be parks or farming land or beaches and community areas. The connection of locals to the place in which they live, and therefore their response when others demonstrate care for that place, was often mentioned during the interviews.

Many participants described the mutual and restorative value of helping others. They described many examples of when others provided care and help to them, and the positive effect this had on their community recovery. However they equally described the benefits of them assisting others. Part of recovery as described by these participants emerged from the opportunity to give as well as to receive assistance. Many participants described their own desire to help their community and to give something back to the town, the environment, and the people around them. They also

described the beneficial effect they experienced, when they were able to do so. Still others described the cumulative effect of this kind of action on the community as a whole, as people were uplifted and supported by people, and were then able to give similar support to others.

Participants spoke of the importance of listening to one another, to hear and honour everyone's experience of the crisis and everyone's loss. Many participants spoke of the importance of not comparing degrees of loss and grief, or types of loss and grief, and acknowledging that everyone was affected in some way. Participants spoke of this listening and acknowledgement of loss, as being most useful when it is incorporated as part of another activity, rather than the stated purpose of an activity. Many participants stated a preference not to have activities where they were expected to share their feelings or talk about the experience. Rather, they preferred to join activities that had another purpose, and to find themselves sharing with one another, spontaneously and when they choose to do so.

Participants spoke of the importance of being able to think about something else (other than the crisis) and not to always focus on the event and its aftermath. Many participants spoke of the value of 'getting away' and these participants went on holidays or visited family or friends elsewhere, so that they could have a break from seeing, hearing or smelling the effects of the crisis afterwards. Music, art, a community or family celebration, or a social or sporting event, were all considered valuable as a temporary means of lifting the spirits of community members and distracting them briefly from the constant awareness of what had happened, or the day to day focus on the overwhelming number of things that needed to be done.

7. The complexity of recovery

'Negative' and 'Positive' experiences

"In some ways the disaster has brought the town together. All the different groups and people have worked together."

(Participant from Coonabarabran)

"Cyclone Yasi has brought not only the aboriginal community together, but the broader community as well, because we have all helped each other. The cyclone does not discriminate whether you are black or white. It doesn't matter, so why should recovery be any different."

(Participant from the Cassowary Coast)

"I want my broken old kitchen back. I want the uneven floorboards. I don't want all this new stuff."

(Participant from Dunalley and surrounds)

Whilst it is important to analyse community recovery and seek to illustrate and understand any patterns and trends, it is also important to remember the complexity of the process and its likely variations given the many variables that can affect each crisis and how it unfolds. A recovery trajectory can be a process of progress and regress, a key factor may emerge that delays or hastens the process in one community, and yet the same factor does not have the same effect in another community. And importantly a number of participants shared information that they initially thought was negative, but they came to see as positive over time, and vice versa.

Participants raised issues that might initially be experienced as negative, but became positive in relation to recovery. For example, in each community participants who had not lost their home, or experienced little or no actual loss or damage to property, raised the topic of survivor guilt. These people would describe that they initially felt relief and happiness that their home was not destroyed, which then transformed to a feeling of guilt because others had experienced such devastating loss of home, property, family, livestock, while they had not. These participants were often very active in the days, weeks and months after the crisis had passed, and worked tirelessly to support the community as a whole, or particular segments of the community. In one site this group of people called themselves “those left standing”. They formed a support group of their own to share their experiences and provide support to one another. They also often instigated actions or activities that assisted others in the community.

In each site a small number of participants would also confide that they viewed the final outcome of the disaster as positive for them and for their community. While these participants did not wish a disaster on their community or any other, they did confide that they believed themselves and their community to be stronger, more connected and with a fresh approach to living that was not present before the crisis occurred.

In contrast, other participants spoke of the grief and feelings of loss when they realised that their home had been destroyed. Grief was profoundly felt, and was focussed on the loss of the home itself, personal possessions, of their home or garden as a means of personal expression and creativity, their sense of safety and security in their environment, their own sense of personal history and family. Some of these participants however, then confided that they experienced feelings of liberation and freedom and have enjoyed the process of ‘starting over’. A number of participants described that they now believe that the experience was an opportunity for change that they celebrate, personally and for their community. No-one wished for a disaster to

occur (either in the first place or again), however many acknowledged the positive outcomes that have occurred, and the opportunity that emerges from a crisis.

8. The value of human kindness and a word about hope

“The kindness and the generosity of people is just overwhelming. Just the goodness of people. I was only saying the other day, “Look. If everybody could be this kind to strangers all over the world, we wouldn’t have a problem, would we?””

(Participant from Coonabarabran)

“This act was one of the most beautiful things that I saw. It was an act of kindness and generosity. Just such a generous and thoughtful thing to do. It means mountains really.”

(Participant from Dunalley and surrounds)

The value of human kindness cannot be overstated. The thread of human kindness has pervaded this research from the beginning. The central theme in each community was the value of such kindness: including small individual acts from neighbours or strangers; coordinated group or community activities; or gestures from VIPs who visited.

When asked to describe what actions or activities assisted recovery in the strongest way, participants in each community would recall an example of an act of human kindness, and recount that. A simple act by two young girls of baking brownies and sharing them with business owners along the main street, brought tears of gratitude over a year after the event. Many in another community, with similar tears of gratitude, described the kindness of a stranger, who made Christmas baubles for every child in the primary school. People included in this research could not provide the stranger’s name or details, but expressed their thanks for the hope and kindness she shared through that gift.

In times of deepest despair, hope is essential for recovery and renewal. Hope is how we find energy to rebuild our lives, revise our dreams, renew our attachments, or create new possibilities for our lives. Communities must face what cannot be changed, what cannot be undone. An essential element of moving on from a tragedy is the ability to accept what cannot be changed, identify what can be done and seizing or creating opportunities for something good to come from the devastation (Walsh 2007). Hope requires a belief in the possibility of a future that is better than the present. Without hope communities would not be able to rebuild physically or socially, to reconnect to one another and create a desirable future.

Conclusion

Participants in Stage 1 of this research provided evidence and reflections based on their knowledge, expertise and observations of the community recovery process and the demonstration of community resilience. This evidence assisted the final design of the methodology for Stage 2 of this research. It is Stage 2 that gives structure and power to the voice of those community members who participated in this research, compares their observations and experiences to that of the disaster recovery leaders who participated in Stage 1, and informs the development of a framework for understanding the process of recovery at a community level, including identifying and understanding the factors that support or hinder that process of recovery.

This research clearly identifies a range of factors that support or hinder community recovery. These factors interact in a complex way within each affected community. The particular interplay of factors will vary from community to community depending on the particular physical environment and a range of other variables related to the community's history, location, degree of disaster preparation, and existing and emerging social and community capital. Some factors are inherent in the community or can be planned and developed before the crisis; while others can be developed or encouraged during and after the crisis has passed. It is clear that the actions and activities that occur within affected communities, before, during and after each crisis, are seen by community members to be an essential and positive element of their community recovery.

Key domains of recovery that have emerged from this analysis include:

- + inherent community characteristics;
- + disaster preparation and planning;
- + the nature of the crisis and the crisis response;
- + the nature of the approach by outside individuals and groups to the community; and (because of the data speaking for itself, rather than participants necessarily being consciously aware of this)
- + how the community itself engages in the recovery process.

Key factors for and against recovery are indicated in each of these domains. Stage 2 participants identified the key factors that they believe are the most likely to support a strong community recovery, as follows:

- + the existence of multiple sources of community leadership across the community, both formal and informal;

- + strong evidence of social and community capital and cohesion;
- + a strong attachment to place or to local history evident across the community;
- + community members with a clear understanding of the environment in which they live, and the potential for extreme natural events in that environment, particularly before the event;
- + community-wide disaster preparation and planning for the crisis, prior to the event;
- + no (or minimal) loss of human life from the crisis;
- + a sense that the scale and the traumatic circumstances of loss or damage to property, livestock and wildlife, was also minimised during the response phase;
- + clear communication and respectful engagement by emergency services and other responders towards local residents and community members before, during and after the crisis;
- + external support being provided to the community in a way that responds to what the community needs and when it is needed (rather than providing an externally prepared and pre-determined solution);
- + participatory, inclusive and multi-disciplinary recovery processes; and
- + that the community has a sense that it is leading its own long term recovery and building a long term future for itself.

Participants in Stage 2 clearly identified that a deficiency of these factors will in contrast, *hinder* a strong community recovery, arguing that the degree to which these factors are lacking is directly related to the degree of delay or interruption in the recovery trajectory.

The comparison of data obtained from the four community sites has revealed the primary differences between how the participants in each location describe and reflect on their experience and whether they see their own community recovery as being on a positive trajectory. These differences are related to the degree and success of community disaster preparation to mitigate against losses, the degree of community cohesion (before and after the crisis), and whether there is any or significant loss of human life. By analysing the information obtained from all four sites, it has been possible to develop a model (see Figure 7) for potentially predicting or at least understanding the possible trajectory of community recovery for any community, based on the two factors of disaster planning and community cohesion.

Different combinations of strengths and weaknesses in each of these two factors has led to four potential archetypal trajectories for community recovery:

- + Firstly, a long and slow path (arising from a low level of cohesion and low level of planning);
- + Secondly, a localized and fragmented path (arising from a low level of cohesion and high level of planning);
- + Thirdly, a collaborative 'up hill' path (arising from a low level of planning and high level of cohesion); and
- + Finally a direct and clear path (arising from a high level of planning and high level of cohesion).

There will be many potential variations of the combination of these two factors, in the real world. This model distils possible variations into these four archetypes, in order to present a conceptual model for understanding the consequences of having different levels and combinations of these two factors of recovery.

A further model (see Figure 8) has been developed from the analysis of the data collected during this research:

- + Prior to any crisis, protective factors for any community have emerged as being the quality of disaster planning and preparation; the levels of social and community capital present in the community; and the degree to which there is a sense of community identity, history or connection to place; and
- + During the response, early recovery and long-term recovery, the three strongest positive factors for community recovery have emerged as community leadership and participation, emerging social and community capital, and partnerships with individuals, groups and organisations.

This model reflects the views and examples provided by participants in Stage 2, where they describe a combination of these factors, in an environment of care and compassion, human kindness and creative expression, as being likely to lead more effectively to a recovering and functional community.

Finally, mention must be made of the long term and significant value of this environment of care, compassion and human kindness and the role of hope. These things pervaded every interview, every story, and every example of what community members do and describe as being done, to support their community recovery and demonstrate the existence of resilience in their community. The value of care, compassion and hope cannot be underestimated or overemphasised.

Chapter 9 – Conclusion

“We needed help, but we weren’t helpless. We needed someone to come along and hold our hands, with the tools and support that we needed, but knowing when to take their hands away. We didn’t want people to come in and take over. Part of going through the process was to feel that we had some strength.”

(Participant from Dunalley and surrounds)

“Get prepared, and don’t be blasé. Don’t think that it won’t happen in your community. Take it seriously.”

(Participant from the Cassowary Coast)

Introduction

Participants in Stage 1 of this research have contributed their observations and perceptions of the disaster recovery process, from their perspective as leaders of formal, high level recovery taskforces or processes, occupying either government or non-government leadership roles. Through their participation in this research they have generously given their time and expertise, to reflect on community recovery as it has occurred in disaster affected communities.

The core of this research has been the contribution made by community members during Stage 2, often based on their own experiences of a frightening and distressing event in their lives and the life of their community. This experience is often one that they shared with one another, and then agreed to share more broadly, through their participation in this research. The participants have variously described this experience as horrifying and difficult, initially beyond their capacity or their community’s capacity to deal with, one filled with loss and grief, complex and exhausting over time, in some cases and at some moments something that still seems overwhelming, or that might also be liberating, rewarding and renewing. The experience varies within and between communities, due to the differences between the crises themselves, the personal circumstances of participants, and the characteristics of affected communities and individuals.

And yet the experience of different communities and community members also shares some common elements: phases that may apply to the experience of disaster; factors that assist community recovery or hinder it; qualities of those actions that are the most successful and supportive of community resilience and recovery; and most importantly, the strength and endurance of the human spirit and the importance of a human connection, between friends and neighbours and between strangers.

There is no doubt that participants in both Stages 1 and 2 of this research have genuinely and honestly described what they saw occurring in communities following the natural disasters of fire, flood or cyclone. The participants outlined their observations of these actions and activities and how they contributed to a positive trajectory of community recovery, also identifying what they considered to be the key factors influencing this process. Participants have formed their own views based on their experiences of what recovery involves, and what supports or hinders the process.

Participants in Stage 2 described the actions and activities that made the greatest difference in their community, in the days, weeks, months and years following the crisis that devastated their community. These are stories of courage and of kindness, of spontaneity and of generosity. Individuals and groups from within each community become active, sometimes surprising even themselves. Individuals and groups from across Australia also reached out to assist. The communities in this study are recovering in uneven and complicated ways and sometimes in ways that they did not expect. They are finding ways to rebuild physically and socially, and to emerge from their loss and grief, in many cases with renewed strength and capacity. These communities have been assisted through the provision of practical support, through creating places to reflect and talk, through art and music, through social and personal connections and through heart-warming gifts and gestures.

This research provides compelling evidence that community leadership and community action are key contributors to community resilience and recovery, and that these are not necessarily formally identified or officially organised. Such community leaders and community action are frequently spontaneous, and emerge either from within the community, or from elsewhere. It is clear that community led actions and activities (i.e. from within the community) play a significant role in the process of community recovery after a disaster. It is also clear that the actions of other people (individuals, groups and organisations) from elsewhere are also significant.

Importantly this research identifies that the actions of officials and others may either assist or hinder that process of community recovery. This research therefore has significant implications for the action taken in the future; by governments (federal, state and local), non-government organisations, other community organisations and groups, and individuals and community members themselves, if they are to support the process of community recovery and enhance community resilience.

Key findings of this analysis

This research has clearly identified key components of a successful community recovery, from the perspective of the community members and the formal leaders of community recovery who participated in this research. While other communities and other individuals may differ in their experience and their views, this research represents the views of its participants, at the time of their participation.

Community recovery

Community recovery emerges from this research as a nuanced, multidimensional and complex concept. The research indicates that preparing and planning well for an emergency before it happens enhances community resilience and supports community recovery. It indicates that creating a strong and connected community i.e. with strong social and community capital connecting the various groups and individuals within the community before a crisis event occurs, also supports community resilience and recovery.

Community recovery is further enhanced by the qualities and actions of community leaders who emerge before, during and after the crisis has passed, and take action to help themselves and others. It is supported by the actions of strangers from other communities across Australia, who come to assist personally, who send money, or who make gifts for those who are most affected (such as quilts or Christmas decorations). Community recovery is supported most strongly by the actions and activities of ordinary men, women and children, individually or in groups, particularly where these actions strengthen community and social capital and demonstrate care and compassion for one another. Such acts of kindness and care are highly effective, whether we already know one another or not.

What also emerges from this research is the likelihood that community recovery is not about returning to 'normal' or to the way things were. It is not even about creating a 'new normal'. The community members interviewed in this research spoke often about how the concept of 'normal' now feels foreign to them.

Community members did however speak about how their lives and memories are defined by whether they occurred pre or post the crisis event. They recognise that the crisis has changed their lives forever. These ordinary people describe community recovery as being about accepting and understanding the loss and grief that has occurred because of what happened,, understanding that some things will never be the

same again, and finding ways to recreate and adapt individually and collectively, to celebrate who they are and to incorporate the disaster experience into how they live. These community members do not talk of recovery as a finite state or an 'end' point, they talk about it as a process.

This research demonstrates that communities do find their own ways to regenerate and recover. Minimal variation was found between communities or disaster types in this research; particularly in relation to how participants have described their understanding of community resilience, the types of actions and activities that occur after a crisis, and the factors that support or hinder the community recovery process. The particular expression of these varied between communities, and reflected the character, identity and context of each community e.g. with community members in far north Queensland more likely to own generators and chainsaws and to provide one another with active support quickly after a cyclone has occurred, because of the regularity of these events and the shared understanding of locals about the imminent consequences of rotting plant matter.

These communities have been shaped by the experience of disaster, but they do not allow that experience to constrain them or define them. They are defined instead by their response to what has happened, and the courage and compassion inherent in that response. Community recovery then, is about entering a long term process focussed on creating a shared future that acknowledges and incorporates each community's past (including any disaster events) without being constrained or limited by that past. Community recovery has been described by many participants from all communities in this research as a process that occurs over decades without the likelihood or even need to reach a 'recovered' 'end' state.

Community led recovery

"It's very easy for people external to the community coming in and telling them what they need, and the community needs to be able to voice what they need and not have people telling them what they need. "

(Participant from Dunalley)

Given the centrality of the concept of 'community led recovery' in the Australian policy and emergency context, it is important to again reflect on this concept. Initially this research appeared to indicate that these communities do not lead their own disaster recovery. In spite of all key national and state, government and non-government frameworks and policies stating that community led recovery is the goal of all levels of

government, participants in Stage 1 of this research, varied in their views about whether community led recovery was achievable or desirable. Furthermore, participants from each community in Stage 2 of this study spoke about feeling disempowered by the bureaucratic response that is applied to each community immediately after the crisis event in any natural disaster. Consultation mechanisms and community reference groups as established by local councils or state governments, have not resulted in community members from these four sites describing their community as leading its own recovery, and being assisted to do so. Community members expressed frustration that their efforts to lead their own community recovery were not supported more effectively by the various levels of government and by non-government organisations. The most generous community members express gratitude for the efforts of government and non-government officials to include them in the official recovery process. The less supportive community members expressed frustration about that process and did not necessarily attribute good intentions to the officials involved. While participants in Stage 1 held a range of views, all participants in Stage 2 agree that the formal leadership of the official disaster recovery process currently rests with the various levels of government rather than resting with the affected community.

“Then the (emergency response and government) organisations came in and took over. It screwed it all up. Excuse me. We were not allowed to have a voice after that.”

(Participant from Coonabarabran)

This research has demonstrated that while the formal and official leadership role in relation to decision making about the recovery process rests with the government officials, (even when they think they are enabling and supporting a community led recovery), communities *do* lead their own recovery in terms of actions and activities that actually occur on the ground in the community. When asked to describe what contributes most to community recovery, all participants in Stage 2 of the research describe examples of community leadership and community led action.

“The sense of community, and what community people do, makes all the difference. There’s people here who just work in the background, absolute pillar of strength in the community.”

(Participant from Coonabarabran)

This research then, supports the view that community leadership of recovery is central to whether a community will recover and how effectively. Community led recovery is not only about participating in government led reference groups or community action groups. Community led recovery is about what the community actually does on the ground in their (or another) community to enhance community resilience and support

the long term process of recovery. The data gathered in this study demonstrates that community leaders and members identify things that need to be done, and they do them or ensure that they are done. They identify ways that they can help one another and they do those things. They act in a myriad of ways to support one another, and they understand a great deal about the complexity of their experience and of the recovery process. In many cases they also reach a point of acceptance of what has occurred and what has been lost, an ability to integrate this loss into their lives and their community, an ability to renew their hope in a possible future for themselves and their community, and a demonstrated capacity to rebuild and renew their community (socially, economically, physically).

Community leadership and capacity

This research indicates that many community members from these four communities wanted to be in charge of their own recovery and they believed that they had the capacity and the capability to do so within their community, with temporary external assistance. The disasters that occurred were initially overwhelming, as the earlier review of the literature describes (Chapter 2). Very quickly however, community leaders were able to step forward and they were able to make effective decisions and take effective actions to guide their communities. Many examples are included in this research, of community members and leaders doing this, stepping forward into leadership roles in their community, often spontaneously and sometimes to their own surprise. They do need help, but they do not need to be told who they are, or what they need, and they do not need to be told what needs to be done. They know these things and they find ways to act, based on a deep understanding of their own community.

Community members demonstrated a high level of self-awareness about their community strengths and weaknesses, and about how these contributed to its recovery. Communities with strong and broadly based community leadership, and high levels of community and social capital before a crisis, were able to recover more effectively after a disaster. A diverse and yet unified community also recovered more effectively.

The importance of planning and preparation

Participants from all sites emphasised the importance of disaster planning and preparation. When crises occurred with little warning, as in the Lockyer Valley, those participants recognised that without a chance to prepare and plan, the losses were greater and the community recovery more difficult. The Cassowary Coast had the

strongest and clearest focus on preparation and planning, most likely due to the frequency of extreme weather events. Participants across both Stages 1 and 2 strongly agree that the degree of individual and community preparation and planning is a strong predictor of community resilience and recovery after a disaster.

The importance of social and community capital

This research also reinforces the value of social and community capital in the development of resilience and the resulting community recovery. While the practical preparations and planning steps (at the individual, the family and the community levels) have been emphasized by participants, the stories told about what happens after a crisis is past, and the factors identified as central to the effectiveness and the trajectory of the community's recovery, are all stories about the value of relationships, networks, and social groups. These are the key elements of social and community capital as outlined by the literature in Chapter 2. They are also stories of the human spirit and the demonstration of human care and compassion. This research supports the view that the focus of the disaster recovery, government and non-government sectors should include a focus on enhancing social cohesion and connections and deepening community trust (Aldrich and Meyer 2015). It also reinforces the importance of family, friends and neighbours in the recovery process (Camilleri 2010).

The centrality of community action – in every disaster phase

The key finding of this research is that the actions and activities that occur in each community before, during and after a natural disaster or crisis, are central to that community's ability, or lack of ability, to recover, and the trajectory of that recovery. In each community, community members were able to reflect after the crisis had passed and recovery was underway, and identify a wide range of actions and activities that had assisted community recovery. As described in this thesis, people from outside the community initiated some actions and activities. Local community members initiated others. Regardless of who initiated the action or activity, the support of local community members was essential for an action or activity to occur and for the consequences to be beneficial.

This research confirms that actions and activities occur at each phase of the disaster: including before the crisis occurs, during the crisis event, immediately after the crisis passes, in the early days and weeks afterwards, and in the longer term. The purpose, focus and balance of the actions and activities changes from one phase to the next, with the focus expanding from meeting immediate individual survival and information needs, to an emphasis on longer term social and community needs, and finally to a

process of creative expression and making meaning of the event and its consequences. Some participants have taken an even longer term-view, beginning to consider and discuss the importance of incorporating the experience and the stories of these actions and activities (during the crisis, the response and the recovery) into the ongoing identity and history of the community. These participants see these actions and activities as an important element of shaping the identity and the history of their community, becoming valuable stories of community resilience.

At every stage, there are actions and activities that are individual in focus, and some that include and support family, friends and the broader community. Even in the midst of overwhelming crisis, community members think of and act to support their neighbours and fellow community members.

Factors that hinder or assist recovery

This research indicates that three factors or disaster characteristics will work against a strong community recovery, more than any others: loss of human life; the extent and scale of the crisis and the impact of that on the physical environment (both natural and built); and any suspected or proven human responsibility or intent in relation to the crisis itself. If there is any blame or any error in judgement that lead to the crisis or contributed to its impact, the community can easily become divided and recovery is delayed as some community members seek compensation or restitution.

Communities welcome assistance and support from outside the community and would like that support to engage with them in a way that recognises their own capability and capacity. Actions and activities that are initiated from outside the community and work in genuine partnership with the community are very successful in supporting recovery. This is a key reason that BlazeAid is a successful externally supported intervention or activity and is mentioned repeatedly in all four communities in this study as an example of a successful activity. BlazeAid successfully balances the involvement and leadership by the local community, with support provided from outside that community.

This research also demonstrates that human kindness, care and compassion are essential elements of any recovery process. These are a feature of so many of the actions and activities that community members described in this study. Every community had examples of acts of kindness that continue to sustain community members and have become known across the community, as symbols of what matters in that community. These are the stories that strengthen the community and enable it

to move forward. Each opportunity to share a story and talk about these examples reinforces the benefit of the original action or activity.

Practical assistance is also highly valued by communities after crises. Many participants shared stories and examples of practical assistance provided by individuals, groups or organisation, in response to what the community itself identified that it needed. Such practical assistance that is respectful of the timing and the process of engagement with the community is highly beneficial and supportive of community recovery.

A (nation-wide) network of community support

This research revealed an informal and emerging network of communities and community groups, indicating the potential for a web of social and community capital across Australia. This network includes Rotary and Lions clubs, communities of interest, churches, even an extensive network of quilting or craft groups. It also includes groups such as the Firefoxes from Victoria or Blaze Aid. These ordinary people connect quickly to one another and find ways to support communities devastated by natural disaster. This network is an expression of the importance of practical support combined with the expression of human kindness, care and compassion.

It has become clear that communities want to help one another. Some of the communities that responded to the crisis that occurred in each of the four sites included in this research had experienced disaster previously e.g. the Black Saturday fires in Victoria in 2009. Some communities had not experienced such a crisis, but responded to what they saw and heard via television, the news or some other information source. It is now clear that the support and assistance provided to communities comes from all over Australia and sometimes from overseas. Being cared about by people they know, is a key source of comfort to those affected. However, being cared about by people they don't know, is also a source of comfort and strength for affected communities. Sometimes the effect of this second category of support is even more profound for its unexpected nature.

In return for this support, affected communities want to reach out to other communities, to share what they have experienced and learned, in the hope that their experience will help these other communities, if they ever face a similar disaster. This explains the clear desire of the participants to have their 'bottom lines' shared widely (see Chapter 6).

The community's view of disaster

There are a number of issues that were repeatedly raised by community members who participated in this research. Community members in each of the four sites expressed a desire to change the language of disaster. There were numerous concepts that community members wanted to discuss.

Firstly, they advocated for moving away from 'recovery' to language such as 'renewal', 'recreation' or 'regeneration'. As already discussed the term recovery was felt to imply pathology, illness or weakness, and the participants stated that this did not fit with their experience. While many participants talked about this issue however, no-one has identified a word that resonated with them or with their friends and family. Some participants expressed a reluctance to generate another 'buzz word', and so 'community resilience and recovery' has remained the language of this thesis.

Secondly, some participants expressed frustration and a desire to move away from considering these events to be 'unprecedented'. These participants believe that there are regular disasters in the Australian and international contexts, and that preparing for and responding to these disasters is a frequent occurrence.

Thirdly, communities and community members argued that community members considered by governments and large non-government organisations to be 'unaffected' by the disaster, can be significantly affected. Participants argued that anyone with an emotional or social connection to a community was likely to be affected by what happened to that community. People from within the community and from elsewhere may be affected by the damage to the environment, the loss of or damage to property, the fear and trauma of the event itself. People are diverse and the reasons for their responses will also vary. Participants argued that it is unnecessarily divisive to attempt to identify and label people as 'affected' or 'not affected'.

Community members expressed discomfort about what they see as a bureaucratic tendency to label people and processes and to develop models of understanding disaster or recovery that label people and outline phases of recovery or disaster. Participants found this tendency to be limited in its usefulness. Participants would sometimes comment on the need that governments and academic institutions appear to have, to reduce experience to a model or to a simple set of concepts, while they described their experience of life as a combination of a more straightforward and

practical approach, while also recognising that real experience is often more subtle, multidimensional and complex.

We must continue to refine our understanding of disaster, to recognise that disasters do differ from one another, in scale, and in consequences. Communities and individuals differ from one another in terms of how effectively they prevent, prepare, respond to or recover from disasters. The community view expressed by the participants in this research was that it would be beneficial to all if governments and bureaucracies were to identify those who are *significantly directly affected* by defining these as people who have lost family members or friends, their home or property, or a significant proportion of their asset or income base. Others could then be described as *directly affected* or *indirectly affected*. Even more beneficial, would be if people were able to describe their own state themselves, rather than having a label attributed to them. It is possible that the focus on whether or not community members are affected by the crisis or not, arose primarily for the purpose of allocating support such as disaster payments. If the allocation of disaster payments or other supports continues to be provided to a subset of any community, then language and definitions about the provision of that support should not include whether or not people have been 'affected'.

In addition to the issue of disaster language, community members spoke of the importance of practical assistance. Simple actions were described that have long term beneficial consequences. Community members also spoke of the variety and complexity of the community recovery process, with progress being influenced not only by the scale and intensity of the crisis event itself, but also by a variety of factors that may not be specifically disaster related. These factors include the roles played by specific individuals in the community, the history of the community, factions or subgroups within the community, particular industries or families that have operated in the community, the significance of the natural or wild environment to the community, and the level of trust between the local Council and the community.

Community members talked about the importance of *not* applying rigid phases or timelines to recovery, but of allowing affected communities to travel through the process in their own time, according to their own needs. The communities involved in this research have demonstrated that they are well able to define what they need and when they need it. It therefore seems reasonable that communities determine their own phases and timing, without the unnecessary complication of externally based judgement about whether progress is sufficient at predetermined points of time e.g. one year or two years after the crisis event.

Implications for future policy

There are many ways that policy surrounding disaster management can be improved. Pre-existing disaster research has already identified some key policy implications for both government and non-government organisations. There is an entire field of study about the design and planning of community spaces and buildings; and how these can strengthen social capital and build community resilience (Ostrom 1990, Oldenburg 1999). There is already the plea that policies and programs be focused on deepening networks and community trust (Aldrich and Meyer 2015). It is well accepted that social events and activities build trust and social cohesion in communities, with examples of successful community projects internationally (Aldrich 2010). Innovative ideas have been suggested and implemented internationally to encourage community members to help one another. The practices of time banking and community currency are being explored as ways of providing incentives or rewards for those who volunteer to assist one another. Participants in these programs receive labour, currency or credit from participating businesses, in exchange for their labour and assistance to someone in need. These programs are said to increase levels of trust, social connections and the creation of a 'virtuous cycle' (Lietaer 2004, Richey 2007, Lasker, Collom et al. 2011). There is no doubt that there is already an awareness that there is much to be done to improve the development and application of disaster policy.

The policy implications of this particular research are more specifically focussed on social and community recovery. This research confirms that community members themselves believe that disaster preparation and planning (before the crisis) is an essential component of a strong community recovery. This would suggest that a widespread approach to community preparation and planning may be an important investment in community recovery. This research would also indicate that community members support this preparation and planning phase being led at the community level. The challenge is in developing communities who are motivated to plan and prepare well. Community members in this research are aware that their direct experience of a disaster has now motivated them to plan and prepare more effectively for the future. Many participants commented that they did not plan or prepare as well as they might, in spite of being encouraged to do so by various levels of government or by non-government organisations.

A new method of community engagement may be needed, so that communities understand the importance of preparation and planning, and take the lead in relation to such action. It is important that community engagement and disaster preparation and

planning be community led rather than imposed by any level of government. Some community groups have emerged from recent Australian disasters (e.g. the Firefoxes in Victoria) and community members respond well to information provided to them by these community groups. Communities could be supported to provide advice and information directly to other communities as part of a preparation and planning process prior to each summer in Australia (as the peak disaster 'season'). Participants in this research expressed a willingness to be involved in such a process.

Perhaps the greatest challenge for policy makers is to provide incentives and opportunities for communities to lead their own approach to disaster planning and preparation. An approach that develops this policy change collaboratively with the community, or is led by the community, is more likely to succeed, than a policy that is developed by governments or large non-government organisations, and subsequently disseminated or imposed. The deliberative democracy movement could be one way forward that does offer a practical methodology for achieving community led recovery (Carson 2011). An important component of any community based disaster planning policy or process must be to find ways to enhance social and community capital in each community, strengthening community capacity through practices of inclusion to strengthen social cohesion, all in a way that is reflective of the particular community's identity and history, thereby enhancing a range of protective factors, simultaneously.

There are a number of key findings in this research that if adopted or incorporated, would enhance disaster management policy and practice in Australia. Developing the three key pre-crisis protective factors identified in this research (i.e. planning and preparation, community identity and connection, and community and social capital) prior to a crisis, is highly desirable and is likely to be an effective investment that supports community recovery if a crisis occurs in the future.

Similarly, developing community leaders or potential community leaders will also be a useful protective factor, given the emergence and importance of such leadership after a crisis. However, these community strengths and attributes are potentially best developed if the community is able to determine and then lead that process. Communities are well able to identify their own community leaders, and community members already know who is active in their community and who might have potential. Community strength and capacity exists (as demonstrated by this research), and this is unlikely to be further developed by imposed solutions. Rather, developing this strength and capacity is more likely if the community leads this process.

The existing mechanisms of consultation and community engagement must therefore be disrupted and reversed. A question that emerges from this research is to wonder what would happen if:

- + Communities across Australia accepted the likelihood that a natural disaster will occur at some stage in their location;
- + Communities could decide for themselves how to prepare themselves for such a calamity;
- + Communities could seek support and assistance from governments and others to develop and implement their plans and ideas;
- + The decision making power for this planning and preparation rested with the community; and
- + The role of government became to support and advise.

It is at least possible that, should this approach be taken, community leadership and capability would be developed and strengthened, before it is needed in a crisis.

Other policy challenges emerge from the process and findings of this research. It has become clear that the healing power of human connection and compassion (acts and gestures from within and outside affected communities) cannot be underestimated. Similarly the power of listening to community members and allowing them to talk about their experiences cannot be underestimated. The process of conducting this research became part of the recovery process for the participants and their communities. Some participants explicitly stated that this was their experience and that a process like the semi structured conversation that is the basis of this research would be beneficial for the community, and should be considered as a post disaster activity for each affected community. This is an idea worth considering for a post-disaster policy standpoint.

Communities do have capacity to deal with a natural disaster, to connect to one another and to rebuild their community; socially, economically and in relation to their infrastructure. Participants in this research repeatedly stated that what they need after the crisis has passed is assistance and support to navigate the processes and regulations required. They need assistance with the bureaucracies of insurance companies and governments. They may not need as much assistance to locate one another or assist one another to make decisions about their future.

This research demonstrates that communities and their members may need help but they are not helpless. Individuals, groups, organisations and government agencies, most importantly need to understand this. Governments and non-government

organisations that have or aspire to have a role in relation to disaster recovery need to see communities as capable and resourceful, as having adaptive capacity, enabling them to respond and recover after an extreme crisis (Norris, Stevens et al. 2008). This research reinforces the view that governments and decision makers should invest in programs that build social connections within and bridges between groups in communities (Aldrich and Meyer 2015). This research suggests that this should be done in a way that allows the communities themselves to determine what they need to do to strengthen these bonds.

Implications for future research

There are many ways in which future research could build on the findings of this research. Key elements of this research could be explored in further detail. For example, it would be of great interest to further explore the role played by a community's level of social capital in terms of its disaster resilience and recovery: both the trajectory and the process of recovery. A comparative study would be of significant interest: that identifies and measures the social capital present in a number of communities prior to a disaster; and then follows up such communities after the experience of a natural disaster to assess the impact of that experience on post disaster levels of social capital; or the impact of pre-crisis levels of social capital on the process of community recovery. This would continue to build on the research and theories of Putnam and others (Putnam 1993).

It would be of great interest and value to conduct a longitudinal study of disaster affected communities, ideally including an analysis of the inter-generational aspects of disaster and recovery. Tracking the experiences and perspectives of participants over decades would provide a much-needed understanding of the long-term effects of natural disasters on the psychological, social, and economic outcomes for disaster affected individuals and communities. The observations and experiences of young children were not a feature of this research, largely because of the ethical considerations of conducting research focussed on a potentially traumatic experience affecting young children who live in a disaster affected community. The information that did arise in this research about activities for young children, was raised by their parents. A potentially important study would be a longitudinal study of children from disaster affected communities, measuring wellbeing or other indicators at key points in their lives. It would be of interest to see whether the long term impact of a natural disaster occurring in childhood was significant in terms of a range of life outcomes.

The communities included in this study are rural or regional communities. It would also be of interest to study community recovery after natural disaster in primarily urban settings. Natural disasters have occurred in urban settings and it would be of great relevance to know whether the factors that contribute to recovery are similar or different between regional, rural or urban communities. Comparing the characteristics and responses of urban communities with rural or regional communities could further inform our understanding of community recovery, potential policy responses, and the preparations and actions of communities in each setting.

Arising from one of the aims of this research (to give the community members a voice), would be to conduct action-based research with the involvement of a community; to document the process of a community led disaster preparation, community strengthening activities, and a disaster recovery process. This would necessitate forming an early relationship with one or more communities, documenting their preparation and planning processes, their community strengthening processes, and then if a natural disaster were to occur, their community recovery processes. Research such as this could provide an extremely rich evidence base for understanding community led recovery.

Implications for communities

In addition to implications for policy and research, there are also implications for communities as a result of this research. It is important that communities realise the importance of disaster preparation and planning, the importance of community cohesion and capital, the significant role of community leadership and action, and the healing powers of kindness and compassion. Community members who participated in this research, acknowledged that they did not themselves take these issues seriously, until they had experienced a crisis. They expressed the view that information about disasters needs to be shared, beyond the current focus on the horror of the event itself and the courage frequently demonstrated during the emergency response.

Community members called for the sharing of the evidence about community strength and capacity and the process of community recovery after disaster. They acknowledge that gaining the attention of a community as yet not directly affected by disaster will be challenging. Many participants expressed a desire that their stories and experiences be used as a way of gaining the attention of these other communities and of building a more accurate understanding of disaster recovery and the factors that assist and support that resilience and recovery.

It is important to emphasise the uniqueness of people and communities. Communities and those who assist them must remember that they cannot simply do what another community did elsewhere. What will work best for them will emerge from reflecting on their own history, their own location and geography, their own skills and industries. In a desire to replicate success, individuals and communities may be tempted to simply duplicate the activities or actions of a successful community elsewhere. Successful community recovery is more likely if what is duplicated is the opportunity for people to create their own actions and activities, and do things for one another based on the uniqueness of what has happened and where it has happened. The most important elements in each success story were the genuine care and the ideas and thought that went into the actions, the activities and the gifts, not only the actions, the activities and the gifts themselves.

The challenge for communities is to understand the reality of ongoing and regular natural disasters in Australia, to take such a possibility seriously at a local level, and to take action to prepare themselves for it based on the evidence of what works as provided by this and any other emerging research.

Implications for ‘helping’ organisations

When asked to identify actions and activities that supported community recovery, community members did not identify large NGOs or government actions as frequently as they mentioned smaller groups or individuals. We cannot conclude that large NGOs and governments do not assist in any way, as they are an active part of the Australian disaster response system. However participants most frequently discussed actions that were instigated by ordinary people – either from within the community or from elsewhere. During this research the participants focussed on the human response to the crisis and the care and support people gave to one another.

Participants indicated a high level of trust in the intentions and the actions of ordinary people and small groups. This was not as evident in how they spoke about the support provided by large organisations and governments. Participants responded positively to the spontaneous arrival of support by ordinary people, but were sometimes less positive about the arrival of support from large NGOs, private sector organisations and governments. This difference was sometimes in terms of what support was provided, and in how or when it was provided. Large NGOs, private sector organisations and governments were often described as arriving with a solution; not considering the psychological, social, or economic impacts on local community members or businesses; dismissing, replacing or over-riding the ideas and efforts of local

community members; and providing the support as they had planned, rather than seeking to understand what was needed and then discussing with the community how and when to best assist.

The challenge for organisations that wish to assist disaster affected communities, is to find ways to engage with communities during the planning and preparation for disaster, and to work collaboratively with community leaders and members if a disaster occurs, to ensure that the assistance provided is most likely to support community resilience and recovery. Further research focussed on exploring the specific assistance provided to disaster affected communities by these organisations, may further assist in understanding what role these organisations take and how they can improve their ability to support a strong community recovery.

A community response, resilience and recovery framework

A practical and useful framework for understanding and facilitating community response, resilience and recovery has emerged from this research. This framework can support and inform the efforts of community leaders, community members and those organisations who wish to assist community recovery. Whether adopted by the community itself, or by organisations who provide assistance to them, this framework will enhance the likelihood that both community leaders and the community members themselves will:

- + prepare for and experience a more effective and community led recovery;
- + influence the trajectory of community recovery for their community; and
- + demonstrate and enhance both inherent and emerging community resilience.

The framework emerges from this research and therefore draws on the contribution of participants from both Stage 1 and Stage 2. However, the strength of the framework particularly arises from the voice of the community members who participated in Stage 2 of the research as it is their direct experience that has informed its development most strongly.

There are **five essential elements** that will strengthen community response, resilience and recovery. Each of these will have a greater effect on the recovery trajectory if they are considered as early as possible during community planning and preparation for disaster:

1. The first element is the ***inherent characteristics of the community itself*** including;
 - a. The *attachment of community members to the 'place'* in which they live;

including the environmental features of the area i.e. whether it is in the mountains, on a plain, near the coast, or on a peninsular. Understanding the significance of these geographic, physical or natural characteristics to the community members themselves, is essential to inform a complete understanding of the community, to prepare for disaster, and to support the processes of community response and recovery. These physical and environmental characteristics must influence all disaster stages: preparation, planning, response and recovery.

- b. *The presence and the role of community leaders.* A community with active and effective community leadership prior to a crisis is highly likely to respond and recover more effectively after the crisis.
 - c. *Inherent levels of community and social capital.* A community with strong community and social relationships and cohesion, and an active network of groups and individuals is highly likely to respond and recover more effectively.
 - d. *The role of community history and identity* cannot be underestimated. For some communities their sense of community identity and their particular local history will strengthen their resolve and focus their disaster planning, preparation, response and recovery effort and activity.
2. The second essential element is the ***effectiveness of disaster preparation and planning*** at the individual, family and importantly at the community level;
- a. It is important to be *inclusive during the disaster preparation and planning effort*, as the inclusion or exclusion of individuals and community groups during that process can influence the recovery process for the entire community. This research includes examples where individuals and community groups who felt included in the pre-disaster community activity were active during the recovery phase. They were active within their social networks, and they participated in the broader community recovery by making connections with other individuals and groups during the recovery phase. In contrast, individuals and community groups who felt excluded from the pre-disaster community planning and preparation processes, or from the broader community itself, participated less during the community recovery process, and in some cases they resisted the recovery efforts of others. It should be noted that this resistance may not have been conscious or intended, and these individuals or groups may believe that they were working to support community response and recovery. The importance of engaging all elements of the community in disaster preparation, planning,

response and recovery cannot be underestimated as a factor influencing the subsequent trajectory of community recovery.

- b. The *level of understanding of disaster planning and preparation across the community*, will influence community recovery after a disaster occurs. In those communities where disaster preparation and planning is well understood and frequently practiced, as part of the 'normal' community behaviour during cyclone or fire season, community recovery commenced more quickly, was more inclusive and had a more positive trajectory over time.
3. The third essential element is the ***nature and scale of the crisis itself and its consequences***. In many ways the nature and scale of the crisis event may be seen as out of the direct control or influence of any individual or group. This element is strongly influenced by the weather conditions and the landscape. However, even aspects of this element can be influenced by community members e.g. by participating in mitigation activities to reduce the scale and intensity of events, by preparation and planning so that community members have some idea of what to expect, and by community members understanding the importance of decisions they make, to stay or leave ahead of a crisis.
 - a. The experience of the crisis itself and its immediate aftermath, is both experienced and then talked about by community members. *The stories community members tell of this experience* will continue to affect them and those they interact with for years (and possibly decades) after the event. This experience is shaped by the effectiveness of the preparation and planning for the event before it occurred (both their own and that of others), whether they have experienced any event like it previously, and whether they have previously experienced loss of life or some other tragedy or crisis in their lives.
 - b. The effect of the crisis event and its consequences in the community, is influenced by *whether human life was lost*. Loss of human life directly affects a community's recovery trajectory. Whether this loss of life is witnessed by others, whether it includes children or is large in number, are additional factors that increase the negative effect that this can have.
 - c. The *scale of the loss of wildlife or domestic animals, and the extent of the damage to the environment*, are also key factors that influence community recovery. Again whether community members observe or experience the animals attempting to flee the actual event, or whether they observe the dead animals or the scars in the physical landscape after the event, the loss

of wildlife, domestic animals and the devastation of the physical environment, become a daily reminder of the event itself and this too affects community recovery.

- d. The *scale of the property loss* is the fourth aspect of this element of the community experience. The trajectory of community recovery is influenced by the scale of the loss of property and whether this property loss includes schools, industry, private homes, or historic or significant properties.

4. The ***nature and the approach by outside individuals and groups to the community*** is the fourth element that will affect community response and resilience. The lack of effective community engagement can interfere with the process of community response and recovery by becoming a distraction in how community members discuss the disaster afterwards. The three important elements of engagement are:
 - a. *Whether the community was engaged in the processes of preparation, planning, response and recovery* by individuals such as formal community leaders, or organisations such as the local council, the State Emergency Service or the Red Cross.
 - b. *The timeliness of that engagement* with the community. The earlier the engagement the more effective it will be.
 - c. *How emergency response agencies engaged with the local community* immediately before, during, and immediately after the crisis event also affects the recovery process, and ongoing community resilience. It is important that the community members experience this engagement as respectful of their local knowledge.
5. The final element that affects the trajectory of the community recovery process and ongoing community resilience, is ***how the community itself engages in the response and recovery process***. In particular this refers to:
 - a. *Whether community leaders, groups and community members emerge and take actions* to help themselves and one another, and if so the scale of their engagement.
 - b. *Whether other communities engage in the process* of recovery by visiting the affected community, volunteering to assist them, or sending appropriately focussed community support or gifts.
 - c. Finally, *the kinds of actions and activities reflected in this research* are particularly effective and support community resilience and recovery. These actions and activities are either generated by locals who have a clear

understanding of the kinds of things that will work in their community, or they are generated by other individuals, groups and communities and are characterised by being practical, creative, reflecting a personal gift or action based on human compassion or kindness, or are in response to a locally based request.

The final word

The aims of this research have been successfully achieved: the evidence gathered through this research demonstrates that strong community leadership exists (and emerges) in disaster affected communities across Australia; and that communities do lead and take action to support their own community recovery after a natural disaster. An extensive and creative array of actions and activities have occurred in affected communities to lead and support community recovery; and this research represents a community based understanding of the community disaster recovery process, gained through listening to the voices of 112 affected community members. Significant lessons have been learned from listening to and understanding the experiences of these 112 community leaders and members, from four communities who have emerged from fire, flood and cyclone.

All four communities included in this research had already passed the first anniversary of their crisis event at the time of the fieldwork. All participants had experienced loss and grief, and yet they sought inclusion in this research. Their willingness to participate, and their courage to share their stories, describing the actions and activities that they observed occurring in their communities after natural disaster, have contributed to this strong data set of examples of community leadership and community action.

The community voice has been given a vehicle through this research, and what has emerged is evidence of community leadership, community strength and capacity, human courage and kindness, and community perseverance and action (both planned and spontaneous). Participants in every site have described community leaders who existed or emerged in their community: leaders of many kinds and in both formal and informal roles. Some of these community leaders may not describe themselves in this way, but others from their community have described how they strengthened and led the recovery of their community, through their actions. Many have forged a new place in their community following the natural disaster. While the specific examples vary from site to site, community leadership and community actions and activities have

occurred in each location regardless of whether the community experienced a fire, flood or cyclone.

This research has identified how community members describe and understand the community recovery process and has clearly identified lessons that can be learned from and shared, for the benefit of other communities who will face natural disaster in the future.

It is noted that Stage 2 of this research was conducted at a particular 'moment' in the recovery process for each community and for each community member who participated. These participants have reflected, through their participation, their own level of awareness of their individual and community recovery, and this may have changed since that moment in time. Participants in both stages of this research may have more to add if asked at a future time to discuss the questions inherent in this research. They may have remembered additional actions that they observed. They may have recalled experiences or reflections that they did not mention. They may have achieved new insights since their interview, that may alter their views or their contribution. However, the systematic analysis of their stories through this research, has captured their perspective and reflections at the time that they participated. It was an honour to sit with them and to listen to and learn from their experience.

The challenge remains to continue to listen to the voice of those most affected by disasters; to conduct much needed research about how we can improve the strength of communities and their ability to prepare for, respond to and recover from natural disasters; with a particular focus on learning from communities themselves. Enhancing our understanding of community recovery is essential, given the clear evidence that natural disasters will continue to occur and continue to effect communities across Australia. We must also respond to what is learned by enhancing how governments (at all levels) and communities prepare for and respond to disaster, and how community recovery can be planned and led by any affected community to achieve a adaptive and sustainable future for that community.

It is fitting to conclude with advice from a community member:

“Have the courage to have a voice, and voice it loud and strong. Pull together. Know your environment and connect to one another. Take some ownership over what happens in your community and in your home. Come together collectively and have a voice.” (Participant from Dunalley and surrounds)

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Appendices

Appendix A: Research website details

A website was created to introduce the research to potential participants. It became a form of embellished business card and many participants found it very useful as a means of understanding the research and the researcher, and building trust. The website provided an overview of the research, introduced the researcher, outlined the two stages of the research process, and outlined the privacy and intellectual property aspects to the study.

<https://communitydisasterrecovery.wordpress.com>



The screenshot shows the homepage of the 'Community Disaster Recovery ~ across Australia' website. The header includes a navigation menu with 'OVERVIEW' (highlighted), 'CURRENT RESEARCH PROJECT', 'ABOUT ME', and 'PRIVACY AND IP POLICY'. A search bar is located in the top right. Below the header is a large banner image depicting a coastal scene with a fire, flood, and cyclone, with the words 'flood', 'fire', and 'cyclone' overlaid in white text. The main content area features an 'Overview' section with the following text:

Overview

I am undertaking research into community recovery after natural disaster – by interviewing key leaders of recovery, and by conducting fieldwork in 4 communities affected by natural disaster. I am now in my fourth year of the research and hope to write up my findings during 2015.

The purpose of this website has changed over time. Originally I envisaged that it would enable people across Australia to share their experience of their community's recovery from natural disaster and to participate in my community based research. I hoped that this website would be for the benefit of all communities – to enable us to support one another, by sharing stories and information, and by doing so, to support the development of a stronger, more connected and more resilient Australia.

During 2013 I interviewed key leaders of disaster recovery across Australia. During 2014 I visited 4 communities affected by natural disaster:

- * The Cassowary Coast (Qld) – the site of Cyclone's Larry (2006) and Yasi (2011)
- * The Lockyer Valley (Qld) – the site of severe flooding (in both 2011 and 2013)
- * Dunalley (Tas) – the site of fires (2013), and
- * Coonabarabran (NSW) – the site of fires (2013) and flash flooding shortly afterwards.

I spent time in these four Australian communities and interviewed residents about their disaster and disaster recovery experience. I have found that creating and maintaining the website has been useful as a way of introducing myself and my research to those I meet.

By participating in my research, community members have had an opportunity to [share their experience](#) of community recovery – with other communities, with governments, and with non-government organisations. By sharing their experiences, they are contributing to a discussion

On the right side of the page, there are two sidebar sections: 'RECENT POSTS' and 'ARCHIVES'. The 'RECENT POSTS' section lists four posts with titles like 'Thanks to the communities of the Cassowary Coast' and 'Thank you to the residents of the Cassowary Coast'. The 'ARCHIVES' section lists months from May 2015 to August 2012. Below these is a 'CATEGORIES' section.

Appendix B: Stage 1 - Ethics documentation

Brochure

The following picture is of a brochure that was prepared and distributed to potential participants in Stage 1 of this research. It was designed to describe the research, introduce the researcher and attract participants.

Community Recovery after Natural Disaster
The experience of Australian communities as they recover from fire, flood or cyclone

Who am I?
I am undertaking research at the Australian National University. I grew up on a farm in Western Victoria and first experienced fire and 'disaster response' in my childhood. I also experienced the Canberra fires in 2003 when I successfully protected my home.
After a career of almost 30 years in Public Service, I am undertaking this important research – to understand what emerges from within communities, and what effectively supports communities, as they recover from natural disaster. I am undertaking this research with the active involvement and support of senior academics and other colleagues at the ANU.

How can you participate?
You can participate in this research.
I would like to receive information or hear stories about what assists the community recovery process, and in particular any actions or activities that communities have taken, to assist their own recovery. I am interested to find out about community leaders, community members, or others who have actively contributed to your community's recovery.
To participate in this research, please follow the process outlined on this website.
www.communitydisasterrecovery.wordpress.com
Margaret Moreton
PhD Scholar
Margaret.Moreton@anu.edu.au

The focus of this research
The research will identify what emerges from within a community after natural disaster:
Those actions and activities of the community (its members, leaders and groups) that significantly support long-term community recovery.

"The community will be the greatest source of ideas, resources, and that intangible but indispensable ingredient, confidence – the kind of confidence that becomes infectious and self-fulfilling."
General Peter Cosgrove

We have a long history of natural disasters in Australia.
Recent years have shown us that we can expect that this will continue, and that the fires, floods and cyclones we experience may be more intense than ever.
There is a likelihood of an increase in the number, regularity and severity of natural disasters due to changed weather patterns and climate, worldwide.
This research has become urgent – we must gather the wisdom and experience of communities across Australia so that we can learn what we can do to help ourselves, and how we can support one another. Then we can be reassured that our communities are strong and resilient and able to recover if a disaster strikes were we live.
The benefits of this research will flow to communities across Australia as we share what we know about those actions, activities, individuals and groups that emerge to support community recovery.
In this way, we can contribute to more resilient communities and a more resilient nation.

Participant Information – outlining the research

The following participation information sheet was prepared and distributed to each participant in Stage 1 of the research. This information accompanied the brochure, the consent form (indicating informed consent) and the interview questions. Each participant received these documents prior to the interview, and the researcher also explained the research at the beginning of the interview. This process ensured that each participant was fully informed about the research and its potential consequences, before they consented to participate.

Community Recovery after Natural Disaster Interviews with Disaster Recovery Leaders or Experts

College of Medicine, Biology and the Environment
Australian National University
Researcher ~ Margaret Moreton

Participant Information Sheet

Researcher:

The researcher's name is Margaret Moreton. She is a PhD scholar undertaking research at the Australian National University. After a career of almost 30 years in the Australian Public Service, the researcher is embarking on this research – to understand what emerges from within communities, and what effectively supports communities, as they recover from natural disaster. This research includes the active involvement and support of senior academics and other colleagues at the ANU.

Project Title: Community recovery after natural disaster: Interviews with key national, state or regional community or disaster recovery leaders, and other disaster recovery experts.

General Outline of the Project:

This research involves gathering the observations and perceptions of up to 12 key national, state and regional community or disaster recovery leaders or experts.

The data collected from this research will be collated and analysed for key themes and insights about the process of community recovery, and in particular the actions, activities, individuals and groups that emerge in communities to contribute to the community's recovery, from the participant's perspective.

The data may be used to inform the development of:

- a range of publications arising from this research, including articles, presentations, and the researcher's PhD thesis;

- modification to the researcher's website <http://communitydisasterrecovery.wordpress.com>; and
- future research projects that the researcher may undertake.

The researcher will provide participants with a copy of a summary of the findings of this research, if participants request this.

NB: The data collected during this research will directly contribute to community-based research being planned by the researcher. This community-based research will gather the observations and perceptions of communities themselves about their own recovery after the experience of the natural disasters of fire, flood and cyclone.

Participant Involvement:

Participation in this project is **voluntary** and participants may, without any penalty, decline to take part or withdraw from the research at any time without providing the researcher with any explanation. Participants may also refuse to answer any question. If participants decide to withdraw from this study, their data will be destroyed and will not be used in any way.

The researcher will collect data during a semi-structured interview with the participant. The researcher will provide questions to participants at least 2 days before the scheduled interview. The interview will be held at a venue and a time convenient to the participant. The interview will last approximately 1 hour and will only be longer if the participant agrees. Participation in this research is expected to include one interview per participant, unless participants are interested in being available for further discussions. Participants may choose to send additional information to the researcher before or after the interview, for use in this research.

The interview will be recorded if participants agree. The recording will then be transcribed and summarised, identifying key themes and insights. Participants may request a copy of the full transcript of the interview or a summary of the interview.

The interview is highly unlikely to cause the participant any distress or discomfort of any kind. If discomfort or distress does occur, the researcher will interrupt or cease the interview, according to the wishes of the participant.

The participant may wish to access support from one of the following services:

Lifeline	13 11 14	http://www.lifeline.org.au
Personal Counselling	1800 331 441	http://www.personalcounselling.com.au
Relationships Australia	1300 364 277	http://www.relationships.org.au
The Salvation Army	1300 36 36 22	http://www.salvos.org.au
Mensline	1300 789 978	http://www.mensline.org.au

Exclusion criteria:

The researcher is not required to use any of the material discussed in the interviews and will have complete discretion over whether the information obtained from this interview is actually included in any publications, subject to the other assurances below.

Confidentiality:

All participants' personal information and all data arising from this process will be kept secure, private and confidential in accordance with the storage details outlined below and participant preferences as indicated on each participant's Consent Form. Only the researcher and her supervisor will have access to the specific information and data arising from participation in this research, unless a participant clearly specifies otherwise or unless there is a legal requirement to provide information to another party.

Data Storage:

Data obtained from participants before, during or after an interview will be kept in a document or on a spreadsheet, that is then stored in a password protected computer or hard drive. The relevant computer and hard drive will either be kept with the researcher or it will be stored in a secure location at all times. Backup of the research data will occur using an additional password protected hard drive that is kept in a locked cabinet in a locked building on the ANU premises, when not in use. Data from this research will be kept under these (or equally) secure conditions for 5 years from the date of publication.

Queries and Concerns:

If you wish to request any additional information about this research, or if you have any queries regarding the study, please contact the researcher at Margaret.Moreton@anu.edu.au or on (0416) 283 195. You may also wish to contact the research supervisor at Beverley.Raphael@act.gov.au

Ethics Committee Clearance:

The ethical aspects of this research have been approved by the ANU Human Research Ethics Committee.

If you have any concerns or complaints about how this research has been conducted, please contact:

Ethics Manager
The ANU Human Research Ethics Committee
The Australian National University
Telephone: +61 (0) 2 6125 3427
Email: Human.Ethics.Officer@anu.edu.au

Consent form

The following consent form was prepared and distributed to each participant in Stage 1 of the research. This form accompanied the brochure, the information sheet and the interview questions. Each participant received these documents prior to the interview, and the researcher also explained the research at the beginning of the interview. This process ensured that each participant was fully informed about the research and its potential consequences, before they consented to participate.

Community Recovery after Natural Disaster Interviews with Disaster Recovery Leaders or Experts

Australian National University
Researcher ~ Margaret Moreton

CONSENT FORM FOR RESEARCH PARTICIPANTS

Name of participant: _____

1. I consent to participate in this research, the details of which have been explained to me. I have been provided with a written plain language statement, and a brochure, about the research.
2. I understand that after I sign and return this consent form, Margaret Moreton – PhD scholar, ANU - will retain it for at least 5 years.
3. I understand that my participation will include participating in a semi-structured interview. My participation may also include (at my discretion) sending additional information to Margaret Moreton e.g. via a website or via email.
4. I consent to this interview being taped (please tick appropriate response) **yes**
 no
5. I consent to being identified by
(a) My name **yes**
 no
(b) My organisation's name **yes**
 no
6. I understand that any information provided by me to Margaret Moreton, during or after this interview, may be used to inform the focus or design of her research.
7. I understand that any information provided by me to Margaret Moreton may also be included in future publications by her (including articles, her PhD thesis and on her website) and may be shared with or used by communities to inform their community recovery or community development activities.
8. If I have requested that I am not identified by name or organization in Question 5 (above) I understand that this information will be as far as possible de-identified to protect my privacy. However I also understand that while Margaret Moreton will do all possible to protect my privacy, it may still be possible for people to identify me from the information that I provide to her.

9. If I agree to being identified by either name or organization in Question 5 (above), I understand that any quotation attributed to me or my organization in any publication by Margaret Moreton will be checked with me. No quotation will be published without my specific consent to the final wording of that quotation.

10. I acknowledge that:

- (a) the research is for the purpose of enhancing community (disaster) resilience and for related research that may occur over subsequent years;
- (b) the possible effects of participating in this research have been explained to my satisfaction;
- (c) I have been informed that I am free to withdraw from the research at any time without explanation or prejudice;
- (d) I have been informed that I will have access to a summary of research findings, and any particular information attributed to me in the publication of this research, should I request this.

11. I would like to receive a full transcript of this interview **yes**
 no

I would like to receive a summary of this interview **yes**
 no

I would like to receive a summary of the research (Phase 1) **yes**
 no

I consent to participation in this research **yes**
 no

Participant signature: _____ Date: _____

Interview Questions

The following interview questions were distributed to each participant in Stage 1 of the research. These questions accompanied the brochure, the consent form (indicating informed consent) and the information sheet. Each participant received these documents prior to the interview, and the researcher also explained the research at the beginning of the interview. This process ensured that each participant was fully informed about the research and its potential consequences, before they consented to participate.

Community Recovery after Natural Disaster – the community experience.

Margaret Moreton ~ PhD candidate ~ 2013

Semi-structured interviews with key national, state and regional community or disaster recovery leaders, and other disaster recovery experts

Questions to facilitate discussion

I am interested in your perceptions and observations of community recovery after natural disaster. I have approached you given your senior leadership role supporting Australian communities through and after the experience of a natural disaster.

The following questions are intended to provide a focus for our interview and to open up a discussion of your perceptions and observations, based on your experience.

Thank you for your willingness to share your experiences and your perspective. Your participation in my research will be confidential and I will not reveal your identity during or after this research without your permission. If I wish to use or publish a quotation obtained from you during this interview, I will only do so with your agreement and your clearance of the specific quotation. All other information provided by you will not be attributed to you.

1. Based on your experience and what you have observed, how would you describe the processes and occurrence of community recovery after natural disaster? What do you consider are the *essential elements* of community recovery and *how does the process of community recovery unfold*?
2. Based on your experience and what you have observed, could you describe what you consider to be the *essential characteristics of a strong, functional community*; that is, a community that you would expect to recover from a natural disaster?
3. Are there *specific communities that you have found to be particularly memorable* in their approach to, and success in, recovery? I am interested in your

observations of these communities. I am also interested in your view of what it was about those communities that made their community response and recovery possible.

4. Could you describe what you consider to be some of the more significant actions or activities, individuals or groups that have you observed *emerging from within the community itself* after a disaster? I am particularly interested in the following:
 - a. *what* emerged that *strengthened or supported* community recovery to occur,
 - b. *what* emerged (if anything) that *became a disruption or obstacle* to such recovery.
 - c. *when did these emerge* in relation to the crisis itself – during the immediate crisis and crisis response phases, in the early period of crisis response, or during the first or second year after the crisis, as recovery began.
5. Can you tell me about emergent *community leaders and/or community activities* that have been particularly memorable to you, and in your view appeared to be particularly effective for community recovery? What do you think was compelling and effective about these individuals or activities?
6. Bringing together your experience, your previous roles, and now with time to reflect on the interplay of disaster response and community recovery:
 - a. What do you consider are the *key elements within each community that assist or strengthen that community's own capacity* to participate in and lead its own recovery?
 - b. *What types of assistance* (ie from outside the community) do you consider can most effectively assist communities to recover after a natural disaster?
 - c. *When* do you believe such external assistance should be provided to a community, if it is *most likely to be effective* in supporting that community's long term recovery – eg before a crisis during planning and preparation, when the crisis is imminent, in the immediate emergency and crisis response phase, or after the crisis has passed and during response and recovery?
7. Do you have any other insights in relation to community recovery that you would like to share?

Thank you.

Margaret Moreton
PhD Candidate
Australian National University

Appendix C: Stage 2 - Ethics documentation

Brochure

The following picture is of a brochure that was prepared and distributed across the communities that were included in Stage 2 of this research. Potential participants in each community were able to obtain a brochure, and consider their participation in Stage 2 of this research, before making any contact with the researcher. The brochure was designed to describe the research, introduce the researcher and attract and inform participants.

Community Recovery after Natural Disaster
The experience and strength of Australian communities as they recover from fire, flood or cyclone

How can you participate?

You can participate in this research.

I would like to receive information and hear stories about what you think assists the community recovery process - in particular **what communities themselves do to assist their own recovery**. I am interested to find out about community leaders, community members, or others who have actively contributed to your community's recovery.

To participate in this research, please contact me at the email address below, or follow the process outlined on this website.

communitydisasterrecovery.wordpress.com

Margaret Moreton
PhD Scholar
Margaret.Moreton@anu.edu.au

Who am I?

I am undertaking research at the Australian National University. I grew up on a farm in Western Victoria and first experienced fire and 'disaster response' in my childhood. I also experienced the Canberra fires in 2003.

After a career of almost 30 years in Public Service, I am undertaking this important research - to understand what emerges from within communities, and what communities do, as they recover from natural disaster.

I am undertaking this research with the active involvement and support of senior academics and other colleagues at the ANU.

The focus of this research

The research will identify strengths and assets that emerge from within communities affected by natural disasters. In particular it will address the question: "What do communities in Australia do in response to natural disaster that they believe contributes to their recovery?"

"The community will be the greatest source of ideas, resources, and that intangible but indispensable ingredient, confidence - the kind of confidence that becomes infectious and self-fulfilling." General Peter Cosgrove (2007)

We have a long history of natural disasters occurring in Australia. We can expect that this will continue, and that the fires, floods and cyclones we experience may become more intense and frequent.

Local, state and federal government and non-government organizations are actively working to prepare for and respond to disasters.

My research is focused on collecting information from community leaders and community members who have actually been affected by fire, flood or cyclone. I want to give a voice to Australian communities themselves: to gather examples and evidence about what communities do themselves that supports the recovery of their community.

I hope that through my research, communities can learn from and support one another - to work together to build stronger and more resilient communities so that we are all more able to recover if a disaster strikes where we live.

Community leaders or community members in any community can participate in this research.

Participant Information – outlining the research

A participation information sheet based on the following example was prepared and distributed to each participant in each site included in Stage 2 of the research. The only difference between the information sheets circulated within each site is the community's name, and the list of locally available support services. This information sheet accompanied the brochure, the consent form (indicating informed consent) and the interview questions. Each participant received these documents prior to the interview, and the researcher also explained the research at the beginning of the interview. This process ensured that each participant was fully informed about the research and its potential consequences, before they consented to participate.

Participant Information Sheet ~ Cassowary Coast

Researcher:

The researcher's name is Margaret Moreton. She is a PhD scholar undertaking research at the Australian National University in the College of Medicine, Biology and the Environment. After a career of almost 30 years in the Australian Public Service, the researcher is embarking on this research to understand how communities contribute to their own recovery from natural disaster: including what factors they believe best support them as they recover. This research includes the active involvement and support of senior academics and other colleagues at the ANU.

Project Title: Community recovery after natural disaster: community based fieldwork.

General Outline of the Project:

- **Description and Methodology:** This research involves conducting community-based fieldwork in at least four communities across Australia. The purpose of this research is to identify the capacities existing within and emerging from communities that contribute significantly to the community recovery after natural disaster. In each community, data will be collected through semi-structured interviews culminating in the completion of a questionnaire and the collection of any relevant case studies about specific actions or activities that are particularly significant.
- **Participants:** Approximately 30 participants from each community will be involved in the research, therefore resulting in approximately 120 participants in total across four communities. Participants will be chosen on the basis of their role in the community. A full list of roles will be made available to participants if they are interested. Identified roles include employees and councillors from local government; community members and employees from the service sector including medical practitioners, and the aged care, early childhood, youth and disability sectors; small business owners and workers including primary industry, hospitality, pharmacy, and

other small businesses in the community; and a range of community members and community groups including sports groups, religious or faith based groups, environmental groups, parents etc.

- **Use of Data and Feedback:** The data collected from this research will be collated and analysed in order to identify key actions and activities that occur within disaster affected communities, particularly where these actions and activities contribute significantly to that community's recovery after a crisis, as identified by those communities. The data will also be analysed for further insights about the process of community recovery, and in particular how communities contribute to their own recovery after the experience of the natural disasters of fire, flood and cyclone, again from the participant's perspective. The data may be used to inform the development of:
 - a range of publications arising from this research, including articles, presentations, and the researcher's PhD thesis;
 - modification to the researcher's website <http://communitydisasterrecovery.wordpress.com>; and
 - future research projects that the researcher may undertake.The researcher will provide participants with access to a summary of the findings of this research, if participants request this.
- **Project Funding:** This project has been funded by the researcher herself. Funding to support the community-based fieldwork will be sought from the ANU.

Participant Involvement:

- **Voluntary Participation & Withdrawal:** Participation in this project is **voluntary** and participants may, without any penalty, decline to take part or withdraw from the research at any time without providing the researcher with any explanation. Participants may also refuse to answer any question. If participants decide to withdraw from this study, their data will be destroyed and will not be used in any way.
- **What will participants have to do?** The researcher will collect data during a semi-structured interview with the participant.. The researcher will record the interview on a digital recording device, and will rely on these recordings to finalise a record of the interview. The participant will be provided with a copy of that record for consideration and signature as soon as is practical after the interview. The participant will have the opportunity to amend any information that is recorded on the questionnaire, prior to signature. The researcher will accept any change that the participant would like to make. The participant's signature will then be taken to indicate their agreement that the researcher may use the data in the research, unless the participant withdraws their consent at a later time.

The researcher will provide questions to participants at least 2 days before the scheduled interviews to enable participants to consider their answers ahead of the interview.

Participants may choose to send additional information to the researcher before or after the interview, for use in this research.

- **Location and Duration:** Interviews will be held at times and venues within the community at the convenience of the participants. The interview will last approximately 1 hour and will only be longer if the participant agrees.

Some follow up interviews may occur if participants are particularly interested in being available for further discussions, or if the researcher seeks further information. These additional interviews will be voluntary and at the discretion of the participant.

- **Incentives:** No payment, gift or other incentives will be offered to participants.
- **Risks:** There is a possibility that participation may trigger memories that may cause some distress or discomfort for the participants. If discomfort or distress does occur, the researcher will interrupt or cease the interview, according to the wishes of the participant.

Participants may wish to access support from one of the following local services:

Community Support Centre - Tully

54 Bryant Street

Tully QLD 4854

(07) 4068 1004

Community Support Centre – Innisfail

13-17 Donald Street

Innisfail QLD 4860

(07) 4043 8400

In addition, additional counselling and other support services located on the Cassowary Coast or in far north Queensland can be found at:

<http://www.localdirectories.com.au/Cassowary-coast,QLD/Counselling-Services/list>

http://www.mycommunitydirectory.com.au/Queensland/Cassowary/Information_Counselling

<http://www.fnqmedicarelocal.com.au>

Counselling support is also available by phone from the following national services:

Lifeline 13 11 14

<http://www.lifeline.org.au>

Personal Counselling 1800 331 441

<http://www.personalcounselling.com.au>

Relationships Australia 1300 364 277

<http://www.relationships.org.au>

The Salvation Army 1300 36 36 22

<http://www.salvos.org.au>

Mensline 1300 789 978

<http://www.mensline.org.au>

- **Implications of Participation:** Participants may decline the invitation to participate in this research, or may withdraw from the research at any time. If a potential participant declines to participate in the research, or a participant withdraws from the research, then another community member with a similar role, background or set of characteristics may be invited to participate. The researcher will respect any request from any participant to decline to participate, or to withdraw their participation from the research, at any stage in the research, up until submission of the research for publication. Any data already collected from this participant would be destroyed and would not be used in the research.
- The only data used in the research will be that contained in the final signed questionnaire, or any later update of that questionnaire that is signed at a later date. All data will be de-identified so that no-one will be able to identify any individual participant as a result of this research.
- Participants will not be able to change any information provided to the researcher, after any thesis, article or other publication has been submitted for publication or assessment.

Exclusion criteria:

- **Participant Limitation:** The researcher is not required to use any of the material discussed in the interviews and will have absolute discretion over whether the information obtained from this interview is actually included in any publications, subject to the other assurances below. This is only likely if the information gathered is not directly relevant to the purpose of the research or might cause embarrassment or harm to any person.

Confidentiality:

- **Confidentiality:** All participants' personal information and all data arising from this process will be kept secure, private and confidential during the collection and the publication phases of this research, with all data protected in accordance with the storage details outlined below. Only the researcher and her supervisors will have access to the specific information and data arising from participation in this research, unless a participant clearly requests otherwise (in writing), or unless there is a legal requirement to provide information to another party.

Specific information and data about participants in this research will not be provided to any local, state or federal government organisations or agencies, or to any non-government organisations or agencies, unless this is approved in writing by the relevant participants.

When any aspect of this research is published the confidentiality of all participants will be maintained unless a participant has either requested to be identified, or has approved such identification by the researcher, in either case this approval or request will be in writing to the researcher.

The researcher will not include or attribute any direct quotation from a participant, in any publication of the research, unless the participant has agreed in writing to such an inclusion or attribution. The researcher will advise the participant if she wishes to include any quotation from the participant. The wording of that quotation will be agreed (in writing) by the participant prior to its inclusion.

Data Storage:

- **Where:** Data obtained from participants before, during or after an interview will be kept in a document or on a spreadsheet, that is then stored in a password protected computer or hard drive. The relevant computer and hard drive will either be kept with the researcher or it will be stored in a secure location at all times. Backup of the research data will occur using an additional password protected hard drive that is kept in a locked cabinet in a locked building on the ANU premises, when not in use.
- **How long:** Data from this research will be kept under these (or equally) secure conditions for 5 years from the date of publication of the primary research thesis.
- **Destruction of Data:** All data collected during this research will be destroyed after 5 years from the date of publication of the primary research thesis.

Queries and Concerns:

- **Contact Details for More Information:** If you wish to request any additional information about this research, or if you have any queries regarding the study, please contact the researcher at Margaret.Moreton@anu.edu.au or on (0416) 283 195. You may also wish to contact the research supervisor at Beverley.Raphael@act.gov.au

Ethics Committee Clearance:

The ethical aspects of this research have been approved by the ANU Human Research Ethics Committee. If you have any concerns or complaints about how this research has been conducted, please contact:

Ethics Manager
The ANU Human Research Ethics Committee
The Australian National University
Telephone: +61 2 6125 3427
Email: Human.Ethics.Officer@anu.edu.au

Consent form

The following consent form was prepared and distributed to each participant in Stage 2 of the research. This form accompanied the brochure, the information sheet and the interview questions. Each participant received these documents prior to the interview, and the researcher also explained the research at the beginning of the interview. This process ensured that each participant was fully informed about the research and its potential consequences, before they consented to participate.



**Community Recovery after Natural Disaster
Community Based Fieldwork**

Australian National University
Researcher ~ Margaret Moreton

CONSENT FORM FOR RESEARCH PARTICIPANTS – COMMUNITY BASED FIELDWORK

Name of participant: _____

Name of community: _____

1. I consent to participate in this research, the details of which have been explained to me. I have been provided with a written plain language statement, and a brochure, about the research.

2. I understand that my participation in this research will include participating in a semi-structured interview, which will be digitally recorded and subsequently transcribed onto a standard format. I understand that I will indicate my confirmation of the information provided during this interview by signing that transcription. I understand that I may amend that information before I sign the transcription, and that I may provide additional information to Margaret Moreton (via other physical or electronic means).

3. I understand that I can withdraw my consent to participate in this research at any time up until submission for publication or assessment, of any article or thesis arising from the research. Any such withdrawal will be without any penalty and all data pertaining to me will subsequently be destroyed and will not be used in any way.

4. I understand that my participation in this research will be treated as confidential and that the information I provide as part of this research will be protected and treated as confidential. I understand that the information will be de-identified to protect my privacy.

5. I understand that any information provided by me to Margaret Moreton may be included in future publications by her (including articles, her PhD thesis and on her website) and may be shared with or used by communities to inform their community recovery or community development activities.

6. I acknowledge that:

- (a) ~~this~~ research is for the purpose of enhancing community (disaster) resilience and for related research that may occur over subsequent years;
- (b) ~~the~~ possible effects of participating in this research have been explained to my satisfaction;
- (c) I have been informed that I am free to withdraw from the research at any time without explanation or prejudice;
- (d) I have been informed that I will be provided with access to a summary of research findings, and any particular information attributed to me in the publication of this research.

7. I understand that after I sign and return this consent form to her, Margaret Moreton – PhD scholar, ANU - will retain it for a minimum period of 5 years. She will also retain a copy of my interview transcription and any other information that I provide to her, for a minimum period of 5 years.

I consent to participation in this research yes no

Participant signature: _____ Date: _____

———— Australian National University – College of Medicine, Biology and the Environment ————

Interview Questions

The following interview questions were distributed to each participant in Stage 2 of the research. These questions accompanied the brochure, the consent form (indicating informed consent) and the information sheet. Each participant received these documents prior to the interview, and the researcher also explained the research at the beginning of the interview. This process ensured that each participant was fully informed about the research and its potential consequences, before they consented to participate.

Community Disaster Recovery [Insert Community Name] Community Members

The purpose of this research is to gather the stories and experiences of community members from communities that have been affected by disaster in Australia since 2005.

These stories will contribute to a greater understanding of community recovery and in particular will identify what communities and community members themselves **do**, before, during and after a crisis, to assist their own recovery.

We have about **1 hour** for this interview, so it will help if your answers can focus on the most important elements in your response to each question.

1. Can you tell me a little about your *connection to this community* – eg what role do you have now or have you had in the past, how long have you lived here, how connected do you feel to this community?
2. Can you tell me what sorts of things happened in your community before, during and after the crisis, that you now believe were important to the recovery process for your community? That is, *what did individuals or groups do* (before, during or after the crisis) that has most assisted the recovery process or made it more difficult?
3. Were there people who adopted *leadership roles* before, during or after the crisis – how did this happen, how important were they to the recovery process and what did they actually do that assisted recovery?
4. Were there any other *significant factors* that worked in support of your community's recovery, or hampered it? If so, what were they?
5. Given your experience of disaster, and what you have learned from that experience, how would you describe *the process* of community recovery?

Does it have particular characteristics or phases? If so, how would you describe these?

6. Are there any particular things that *other communities need to know or do*, to give them the strongest chance of recovery from a disaster?

Thank you
Margaret Moreton
Margaret.Moreton@anu.edu.au

Appendix D: Data Summary from Stage 1 – List of factors that assist recovery

Stage 1 of the research involved interviewing key leaders of disaster recovery processes from across Eastern Australia. This stage focused on identifying the key factors that these participants identified as assisting community recovery after a natural disaster. The following table provides data from Stage 1 in summary form. Each interview with participants in this Stage of the fieldwork was recorded in full, and subsequently transcribed both in full and in summary. The participants authorised the use of the full and summarised transcripts in the data analysis. These transcripts were analysed using NVivo software identifying and collating key words and phrases. This analysis then resulted in the following key domains being identified, and the factors contained within each domain. The factors are listed in the way that the participants described them.

N equals the number of participants (out of a possible total of 10) who spontaneously included the relevant domain in their answers to interview questions. Domains are listed in descending order of whether participants mentioned them as significant in relation to community recovery after disaster. At no stage were participants given the opportunity to review the list of domains and indicate whether they would identify these domains as significant factors in relation to recovery. The intention of this was to identify which domains and factors were indicated when the researcher does not prompt the participant. There may well be domains that if asked, the participants would also agree with or embellish. This data is discussed in further detail in Chapter 4 of this thesis.

	Key domains – including factors within each domain as identified by the research participants	N (%)
1	<u>Community leadership</u> <ul style="list-style-type: none">• Active engagement by community leaders before, during and after the crisis• Quality of community leadership before, during and after the crisis• Whether more than one community leader could be identified and was active• Whether such community leaders appeared to be supportive of one another	10 (100%)

	<ul style="list-style-type: none"> • Whether community members appeared to trust these community leaders and accept them as legitimate and representative of the community in their leadership role 	
2	<p><u>Social relationships and networks (social capital)</u></p> <ul style="list-style-type: none"> • Whether community based networks or community groups existed before the crisis • Whether those community networks or groups appeared to become active and support one another during and after the crisis • Whether community members appeared to trust one another • Whether community members appeared to assist one another – before, during or after the crisis • Whether community members spoke of how their relationships and networks had helped them 	10 (100%)
3	<p><u>Community engagement with disaster response and recovery</u></p> <ul style="list-style-type: none"> • Whether the community engaged quickly with the crisis and one another, particularly during and after the crisis • Whether the community was actively participating in its own recovery – e.g. attending meetings, suggesting ideas, volunteering to help one another • Whether the community already had or quickly developed a focus on disaster risk mitigation and the management of vulnerabilities to future crises 	8 (80%)
4	<p><u>How the process of emergency response and early recovery was handled by emergency services and agencies</u></p> <ul style="list-style-type: none"> • Whether emergency services and other agencies were thought to have provided assistance to community members promptly before, during and after the crisis • Whether the emergency services were thought to have engaged respectfully with community members during and after the emergency phase • Whether communication with the community was managed well by relevant services and agencies 	7 (70%)

	<ul style="list-style-type: none"> • Whether community members were included in plans, discussions and decisions about the emergency response, disaster recovery and the future of the community 	
5	<p><u>Community actions and activities (emergent disaster response)</u></p> <ul style="list-style-type: none"> • Whether community members and community groups took visible action in response to the crisis – establishing activities and events that provided support to other community members • Whether these individuals and groups were from diverse sections of the community and therefore were meeting the needs of different sub-groups • Whether community members appeared to have communal or easily accessible places to meet in order to talk, to engage with one another, and to do things together that had a positive impact on their recovery 	6 (60%)
6	<p><u>Government engagement with communities post disaster</u></p> <ul style="list-style-type: none"> • Whether all levels of government were seen to be engaged with the community quickly after the crisis • Whether local councils held meetings to provide information to and communicate with community members, promptly and regularly after the crisis • Whether government processes (e.g. the application process for funding) were explained to community members and whether engagement was facilitated in any way to make it easier for community members and groups to work with government • Whether any community action committees or groups were established and whether these appeared to be supported by the community members • Whether community hubs or other central ‘one-stop-shops’ were established and were considered to be effective in assisting community members 	6 (60%)
7	<p><u>The history and culture of the specific community</u></p>	5 (50%)

	<ul style="list-style-type: none"> • The specific history of the community influenced which actions were taken promptly or had a positive impact on community recovery e.g. replacing an avenue of trees that had been lost in the fires, to honour community members who had died in war; or restoring a key sports field so that a proud history of competition in a sport could continue quickly • Cultural factors in each community can delay or enhance recovery e.g. whether different cultural or social groups were in conflict with or disconnected from one another before the crisis, or whether the community was inclusive and diversity was celebrated by holding street events, providing culturally appropriate food publicly, or organising festivals and events to celebrate the unique nature of diverse elements of the community 	
8	<p><u>The existing relationships or previous experiences between the community and government (usually local government)</u></p> <ul style="list-style-type: none"> • Pre-existing relationships between the community and local council members, or other key individuals in any level of government can have a negative influence or be advantageous to a strong community recovery, depending on the nature of the relationship • The ability to obtain information quickly, or access assistance, can be affected by such pre-existing relationships • The ability to trust the advice and guidance that is provided about community recovery, can also be affected by pre-existing relationships 	5 (50%)
9	<p><u>Community preparation for disaster (prior to crisis)</u></p> <ul style="list-style-type: none"> • Risk mitigation and disaster preparation across the community prior to the crisis affects community recovery – with greater preparation and planning leading to more effective recovery • Whether response and recovery plans had been prepared before the crisis and easily and effectively activated during or after the emergency 	3 (30%)

	<ul style="list-style-type: none"> • Whether communication mechanisms (formal and informal) were prepared before the crisis and easily and effectively activated during or after the emergency 	
10	<u>Funding (amount available and distribution)</u> <ul style="list-style-type: none"> • The quantum of funding provided was thought to be an important factor influencing recovery. Participants expressed different views about whether more funding is always best or always divisive, or whether smaller amounts of seed funding are better, in terms of enabling community recovery • Whether the process of obtaining funds and then fulfilling expenditure reporting and accountability requirements, is complex and difficult, or simple and straightforward will affect recovery • Whether the funding has been perceived to be allocated transparently and fairly and to the most appropriate community members and groups will also affect recovery 	2 (20%)
11	<u>Celebrity visitors (eg the Governor General, Prince William, State Premiers, Local Members of Parliament or the Prime Minister)</u> <ul style="list-style-type: none"> • Whether such visitors were perceived to be visiting in order to boost their media profile or personal interests, or whether there was a sense that they had come to see the community members to offer compassion or assistance determined whether they were seen as a valuable contribution to community recovery • Whether the community experience of these opportunities is to show such visitors ‘the best’ of that community’s spirit and character will influence the value of these visits • Whether community members are able to travel from surrounding areas to participate in such a visit and also to reconnect with other community members in the process 	2 (20%)
12	<u>Anniversaries and memorials</u> <ul style="list-style-type: none"> • The degree of community participation and engagement in the planning and decision making 	2 (20%)

	<p>processes about anniversaries and memorials affects their significance in community recovery</p> <ul style="list-style-type: none"> • The timing and physical location of anniversaries and memorials will benefit recovery if the community has been involved in determining these • The private or public nature of anniversaries and memorials and whether dignitaries and the media were invited will affect how they are perceived, and this may vary from one community to the next 	
13	<p><u>The scale of the crisis itself and its resulting devastation (including loss of life, livestock and property)</u></p> <ul style="list-style-type: none"> • The degree of damage and loss – especially loss of (human) life and loss of livestock and damage to housing and infrastructure • How the community perceived and understood the relative degree of damage compared to how they perceived and understood other communities or areas that had been damaged or affected by the same crisis or by different crises in recent history affected their recovery 	2 (20%)
14	<p><u>A sense of attachment to 'place'</u></p> <ul style="list-style-type: none"> • Whether community members felt a deep attachment to the geography or history of the affected area and whether this exacerbated their distress and trauma, or enabled them to reconnect and engage with their sense of 'place' as it regenerated and recovered • Whether community members were able to salvage any reminders of their attachment to 'place' and whether they were able to talk to one another to strengthen and recover given their attachment to the geography or history of the area 	1 (10%)
<p>Total number of participants N = 10 (100%)</p>		

Appendix E: Data Summary from Stage 2 - List of actions and activities described

The following table provides key data gathered during interviews in Stage 2 – the community based fieldwork. 112 participants were interviewed in this Stage of the research. Each interview was recorded and transcribed in full detail. The participants authorised the use of these transcripts. Some participants amended these transcripts before authorising their use in the analysis stage of the research. These authorised transcripts were then initially analysed using NVivo software identifying and collating key-words and phrases. This analysis then resulted in the following examples of actions and activities being identified.

Community members described the following list of actions and activities as examples of what occurred in their community that they believe contributes to the recovery of that community. The actions and activities are listed in the way that the participants described them. These actions and activities are a sample only of what occurs in communities across Australia, affected by extreme weather or other crisis. Community members commented that the examples they describe are only some of the actions and activities that occurred during or after their particular crisis. This list is organised by whether the actions and activities occurred in all or most communities, or just one community; and according to when the action or activity occurred i.e. during and immediately after the crisis, or in the weeks and months that followed.

While individual community members, community groups, and communities as a whole, obtain valuable support from governments (federal, state and local) and from organisations that are active in response to disasters, this response is initiated from outside the affected community, and forms just part of community recovery. People also become active themselves and this research only began to uncover the action that community members themselves take, as they respond to what has occurred, and assist the process of community recovery in a way that is very important to the affected communities. This data is presented in further detail in Chapters 5, 6, and 7, and then analysed and discussed in Chapter 8 of this thesis.

Actions that occurred in all (x4) communities

Action/Activity	Key features
<p>BlazeAid was present in all four communities in this research. 44 separate sources made 110 references to BlazeAid when asked to talk about the actions and activities that most assisted the community. 32 sources made 47 references to the value they experienced in being able to help others in their own community by volunteering to support the work of BlazeAid.</p> <p>BlazeAid emerged in response to the Black Saturday bushfires in Victoria in 2009. A local farming couple in Kilmore began with rebuilding the fences on their own property assisted by neighbours, friends and family. When they had rebuilt their own fences, they then volunteered to rebuild fences on other fire-affected properties. This community-based response has grown and now BlazeAid volunteers respond to disasters anywhere across Australia.</p> <p>BlazeAid operates as a community based organisation that brings together a number of elements:</p> <ul style="list-style-type: none"> ➤ local volunteers who co-ordinate the entire BlazeAid response and effort for the community ➤ volunteers from all over Australia who come and form teams to rebuild fences on properties affected by the event ➤ local volunteers who provide all catering and other support to the BlazeAid volunteers ➤ local businesses who support the effort by providing food and supplies to what can become a large number of volunteers and a large fence building effort ➤ local clubs such as Rotary or Lions were able to provide significant assistance to the process – usually organising the local volunteers and the provision of food 	<p>Non–government support</p> <p>Non-professional volunteers</p> <p>Practical support of rebuilding fences</p> <p>Social and emotional support (importantly without this being the primary focus)</p> <p>Local community activation – the project will only come to the community if the locals are actively involved.</p>

<ul style="list-style-type: none"> ➤ the local council who provide funds and support to the effort and supported the work of the local coordinators and volunteers ➤ Local ABC radio who provide profile to the work so that donations of supplies and other support can be enabled 	
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Actions that occurred in 3 out of 4 communities (i.e. excluding far north Queensland)

<p>21 separate participants across three of the communities included (from 112 participants in total) made 95 references to the provision of quilts to their community. Quilting groups from all over Australia make quilts and send them to communities affected by natural disaster.</p> <p>Participants described or presented the quilts to the researcher with great affection, stating with some emotion and awe that they provide comfort and warmth, take considerable care and attention to detail to produce, and represent love and support ‘sent from strangers’. This kindness of strangers provides a strong sense of comfort and support to the recipients. Many participants described the great comfort of sleeping under these gifts, even if they would not normally choose a similar quilt as a home decorating item. The quilts represented much more than a functional or decorative household item.</p>	<p>Care taken to make something complex and beautiful</p> <p>Symbolizing comfort, warmth and care</p>
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Actions that occurred on the Cassowary Coast

During crisis and immediately after:

Action/Activity	Source of assistance
<ul style="list-style-type: none"> ➤ Local community members who were able to respond immediately used their own chainsaws, tarpaulins and other equipment to open roads, create shelter and generally assist neighbours clearing up and stabilising their situation. Some of the locals who were most active helping others, had lost their own homes. 	Local individuals
<ul style="list-style-type: none"> ➤ Local community members who had access to front loaders and large machinery, turned up immediately and began to clear the roads of sand and rubbish, began to organise the beach and the main street. 	Local individuals
<ul style="list-style-type: none"> ➤ Local supermarkets and individual community members cooking up all their food and feeding everyone (in the early days) before it all spoiled due to lack of electricity. 	Local businesses Local individuals
<ul style="list-style-type: none"> ➤ Local businesses e.g. cafes and pizza places delivering coffee and pizzas to feed locals and volunteers when everything else had run out. 	Local businesses
<ul style="list-style-type: none"> ➤ Ozark and a network of wildlife enthusiasts helping to share information and care for wildlife during the crisis and then afterwards. 	Ozark External individuals
<ul style="list-style-type: none"> ➤ Two local women were engaged to greet everyone as they arrived at the Recovery Centre. The idea was that locals would feel more comforted if they saw a familiar community member who then introduced them to one of the service providers or agencies present. 	Local individuals Recovery Centre
<ul style="list-style-type: none"> ➤ Two locals distributed bread around the community and checked on everybody. 	Local individuals

During the weeks and months after the crisis:

Action/Activity	Source of assistance
<ul style="list-style-type: none"> ➤ A primary production business established Industry Recovery Officers to provide support to the industry covering a range of aspects of the business and the recovery e.g. financial, social, personal. 	<p>Growcom (Funded by the State Government)</p>
<ul style="list-style-type: none"> ➤ A local individual coordinated “Pit stop” day. This was a men’s health clinic that presented a male health promotion activity in the form of a car tune up. Each man spent 7 minutes in each booth - the ‘oil pressure’ booth checked blood pressure, the ‘duco’ booth checked for skin cancer. 	<p>Local individual Local business</p>
<ul style="list-style-type: none"> ➤ Prince William met with the locals. During the ‘meet and greet’ one man began to cry about what he had lost. Prince William stayed with him and listened to his story. He provided a listening ear and comfort, patting him on the back until he regained control of his emotions. This encounter was reported to the researcher more than once. It was experienced very positively. 	<p>VIP</p>
<ul style="list-style-type: none"> ➤ Individuals and businesses from elsewhere in Queensland offered holidays to families affected by the cyclone. Sometimes this came through the local church and sometimes to an individual or a group e.g. Rotary or Lions clubs. 	<p>External individuals External business Church Rotary / Lions Clubs</p>
<ul style="list-style-type: none"> ➤ People turning up to help recover the environment and care for or treat any injured domestic or wild animals (Wildlife organisations – Ozark, International Fund for Animal Welfare veterinarians, rangers with National Parks, and particularly the Giringun Rangers). 	<p>External individuals Local organisations External organisations</p>
<ul style="list-style-type: none"> ➤ Volunteers from within the community, from nearby towns or cities, across the State, from other States or 	<p>Local individuals</p>

<p>Territories across Australia, and even backpackers and tourists from overseas, volunteered and helped people recover their gardens and tidy up their houses, fix fencing, clearing trees off fences and roads. Some volunteers were redirected to Volunteer websites such as www.volunteeringaustralia.org https://govolunteer.com.au https://volunteer.com.au or through the Red Cross www.redcross.org.au . But some locals were concerned that those volunteers would not be allocated to their area, and they therefore did not refer them on to these groups, but organised and allocated these volunteers directly, introducing them to a local community member who needed help.</p>	<p>External individuals</p>
<p>➤ “Help Silkwood” day – advertising and then organising a volunteering day at a particular town – tasks included registering people who arrived and allocating people to tasks and properties based on skills and equipment etc. People also brought food (sandwiches and cakes) to feed everyone.</p>	<p>External individuals and businesses</p>
<p>➤ Young men arrived in the community and volunteered to assist with the clean up. They were self-sufficient and had their own bedding and food, and some chainsaws and equipment.</p>	<p>External individuals</p>
<p>➤ Another group of young men arrived in the community to assist with the clean up. Their employer had sent them (with pay) to help in any way they could.</p>	<p>External business External individuals</p>
<p>➤ A local woman volunteering to manage donated goods that began arriving in the area, but opening an empty shopfront up and creating an ‘op shop’ style location. She organised for more donations to arrive and for them to be accessible to the local community members.</p>	<p>Local individual</p>
<p>➤ The Lions Club gave fuel vouchers to people to assist with the cost of fuel for generators, which needed to be relied on for many weeks.</p>	<p>Lions Club</p>
<p>➤ Local community members formed the Cardwell District Community Futures Forum and from this forum the produced a Cardwell Strategic Action Plan.</p>	<p>Local individuals</p>
<p>➤ Local community members formed the Cardwell Going Forward committee – to look at the Cardwell they wanted to create in 20 years time. This group became active and worked to influence planning and</p>	<p>Local individuals</p>

decisions.	
➤ Weekly or monthly movies were held at the town foreshore – to create community spirit and give everyone a chance to socialise and relax.	Local individuals
➤ A Sheik from Dubai donated \$300,000 to the area to build cyclone shelters.	International assistance
➤ A local group began a newsletter to enhance community communication. It began as a printed document that was handed out to a circulation of approximately 50 community members. It is now emailed to almost 1000 community members and others from outside the community.	Local individuals
➤ A local with connections with the community bank organised for a local business to have access to funds, so that community members could go to that shop to access their own money, until the banks were able to operate and the ATMs were replaced.	Community Bank Local individual
➤ The local Tully Support Centre organised a range of activities to support local community members; massage days, beauty and make up sessions, yoga, Tai Chi and dances. These were very well attended – up to 70 people each evening.	Local organisation
➤ People who knew people in the area organised to send furniture and goods to them, for sharing amongst those who needed it most.	Local individuals External individuals
➤ The local Girringun Indigenous Rangers helped locals clean up yards and homes. They offered equipment, a workforce and some socialising over a cup of tea. Rangers from other Queensland communities also arrived to help with this process.	Local individuals External individuals (Indigenous)
➤ Indigenous health workers arrived in town and set up camp at the local Indigenous service. They then provided health care advice to the community.	External organisation
➤ Individuals who knew particular community members came to the community to offer their services and time to assist. They often brought their own food, supplies, and equipment to look after themselves.	External individuals

Actions that occurred at or near Coonabarabran

During the crisis and immediately after:

Action/Activity	Source of assistance
<ul style="list-style-type: none"> ➤ Many local community members were members of the local fire fighting brigade and were able to use their local knowledge to respond and protect some property and housing during the crisis. They were then able to use their own water tanks, tools and equipment to open roads, and assist community members. Some of the locals who were most active helping others, had lost their own homes. 	Local individuals
<ul style="list-style-type: none"> ➤ A local woman volunteered to request and organise the receipt of clothing, toiletries and other personal items for local people and families in the community. This involved publicising the need, organising the process for making physical donations, obtaining a premises for storage and then organising an 'op shop' with volunteer staff, so that families and individuals could access the items. This process became enormous. 	Local individual and volunteers
<ul style="list-style-type: none"> ➤ Local community members arrived at the accommodation of those who had lost homes and property, with gifts of food, clothes, or other items. 	Local individuals
<ul style="list-style-type: none"> ➤ With guidance and oversight from a teacher, an assistance from parents, school children in a local high school used the school domestic science kitchens (on the school premises) to cook muffins, biscuits and to make sandwiches for affected locals and volunteers during response and early recovery. 	Local youth School teacher Local individuals
<ul style="list-style-type: none"> ➤ Motels let people who had lost their homes stay in the motel rooms until they had another option. 	Local businesses
<ul style="list-style-type: none"> ➤ Local community members organised to 'billet' those who were most affected or offered them cottages or other accommodation to live in e.g. spare cottages on farms. 	Local individuals
<ul style="list-style-type: none"> ➤ The local vet sent creams to farmers and locals, to use to treat injured animals during the crisis – at no cost. 	Local businesses

➤ A church group organised bags of tools to be organised and delivered to each property – these included sieves, rakes, picks, and shovels – to help sift through the burnt remains of homes and to begin to clean up afterwards.	Samaritan Group – Anglican Church
➤ Local community members who had access to large machinery gave their time to help other locals to bury animals etc.	Local individuals
➤ Local community members gave their time to help others with cleaning up and washing the ash from houses – inside and out.	Local individuals
➤ Community meetings were held weekly to share information with the community about the crisis, issues and next steps.	Local council and recovery committee
➤ A local community member organised and conducted a letter drop to advise those more isolated farmers about these community meetings.	Local individual
➤ Local community members mentioned Country Energy and how quickly they restored the electricity poles and supply.	Energy Company

During the weeks and months after the crisis:

Action/Activity	Source of assistance
➤ A local naturopath offered her services to the community, providing free massages and advice about nutrition and stress management.	Local business
➤ A local volunteered to coordinate the BlazeAid effort and with the assistance of two other local coordinators, established BlazeAid camps and organised volunteers over many months to rebuild fencing on properties	Local individuals External individuals

across the Valley. Volunteers came from other parts of Australia to help restore fencing.	
➤ Local community members (individually and in social or community groups) volunteered their time to provide catering for Blaze Aid and other volunteers for months after the crisis.	Local individuals and groups
➤ Local farmers provided livestock agistment, feeding and keeping cows for neighbours who were burned out until their fencing and property was in a state to have their surviving cattle returned.	Local farmers
➤ Locals with the necessary equipment organised to bury and clear away the livestock and wildlife after the fires. This was a very large task that continued for many weeks.	Local farmers and individuals
➤ Local community members provided childcare for families at the local Recovery Centre, to enable them to complete paperwork and seek support immediately after the crisis.	Local individuals
➤ Local community members organised gift vouchers for food, clothing and household goods, from local businesses and gave these to affected community members, as personal gestures of support. Some locals also shopped and simply arrived with new personal or household items to give to those most affected.	Local individuals
➤ A local community member gave a gift to someone who had lost her home, of her grandmother's teacup, saucer and plate. She wanted the recipient to have something of personal value and with history. Others made sure sewing machines were replaced or prize personal possessions. These gifts were very significant not only to the recipient and others who heard about them.	Local individual
➤ An artist who grew up in the area but had moved away, organised a number of artists to donate artworks, she brought those to the community and held an exhibition for the locals and then those who had lost their homes during the fires, were able to identify which works they liked the most and they were donated to those individuals and families as gifts.	'Expatriot' community member Artists
➤ Quilting groups from all around Australia sent hundreds of quilts to the community. ➤ 500 - 600 crocheted rugs arrived in the community to be provided to those who had lost their homes.	Quilting or crocheting clubs from across

	Australia
➤ Individuals and businesses (both locally and from across Australia) organised hay drops for local farmers and horse owners.	Individuals, farmers and businesses eg Horseland
➤ Local and external businesses sent medicines for the ongoing treatment of animals.	Local veterinarians and Horseland
➤ A local group organised a race meeting to raise funds for those most affected and to show support for the bush fire recovery volunteers and those most affected (the group was hoping to raise \$10,000 and raised \$80,000).	Local group
➤ People in other States offered free holidays for affected families.	Businesses (external)
➤ Some locals organised a 'tool box' so that people who had lost their tools in the fire could borrow shovels, chainsaws and so on.	Local individuals
➤ A local school bus driver made it his business to connect with all the kids on the bus and listen to their issues and problems. He was concerned about the effect of the landscape on the school children for many months afterwards and so made sure he acknowledged all their worries and concerns as important for the next school year. It is reported that this approach was beneficial and has not ceased.	Local individual
➤ Rotary Clubs from all over Australia raised funds to be sent to Coonabarabran for the local Rotary Club to provide to those most affected. The Rotary Club in Coonabarabran then opened a bank account and organised a system so that affected people could apply (or be directly approached) and could be given funds to help them.	Rotary Clubs across Australia Local Rotary Club
➤ Some children in the Primary School and the High School participated in a program called "Stormbirds". This program is based on the belief that change, loss and grief are a normal and natural part of life, and	External business Local individuals

gives children and young people an opportunity to examine how natural disasters, such as bushfires, floods, cyclones and earthquakes have impacted on their lives. At least one local school chaplain was trained to deliver this program. www.goodgrief.org.au/stormbirds	
➤ A local café owner provided vouchers or discounted meals so that locals could afford to come and have 'a night out'. The café also held fundraising dinners and was a donation point for people wanting to donate money to those who needed assistance.	Local business
➤ A free concert was organised at a local venue so that locals could socialise and relax together.	Local individuals
➤ A local community member is organising to make digital books of photographs and images from the crisis and the period of time since. She is planning to print some hard copies and place them in each of the local libraries and the schools.	Local individuals
➤ A local community member researched the creation of nesting boxes and found a kitchen company who would flat pack and deliver them. She then organised the local men's shed to build the bird and animal nesting boxes to house wild birds and animals because of the destruction of the national park. These nesting boxes were placed all across the National Park.	Local individuals Men's Shed
➤ The local community usually have a season of 'flicks in the sticks' movie nights. Local community members subscribe to the season of these movie nights. Those who lost homes were invited for no cost.	Local individuals
➤ A local community member built a pizza oven before he had completed his house. Neighbours would drop by when he 'fired up' the oven, and socialise over pizza.	Local individuals

Actions that occurred at or near Dunalley

During crisis and immediately after:

Action/Activity	Source of assistance
<ul style="list-style-type: none"> ➤ Local community members, who had fire fighting equipment and water tanks available, put out spot fires or ember flares for local home-owners who were not there, saving numerous homes in this way. 	Local individuals
<ul style="list-style-type: none"> ➤ Locals helped one another obtain generators, get them up and running, clear out homes, fridges and freezers and clean up all the rubbish left by the fire. 	Local individuals
<ul style="list-style-type: none"> ➤ Locals cooked food in the early days to make sure it was not wasted, and shared it amongst everyone present in the community – locals and volunteers. Some locals also delivered food to people across the community. 	Local individuals Local groups
<ul style="list-style-type: none"> ➤ Locals first on the scene organised a makeshift recovery centre – borrowing a marquee from the nearby Falls music festival, erecting it in “The paddock” near the Hotel, organising food with the Hotel owners, setting up tables and registration processes to begin to record who was where. This process then grew into a recovery centre on the first day and was well established before any other organisations arrived on site. 	Local individuals
<ul style="list-style-type: none"> ➤ ‘Absent home owners’ offered their houses to locals who lost their primary residence – in particular many of the “shackies” who had holiday homes in the area and lived in Hobart offered these properties indefinitely to locals who had lost their primary residence. 	Individuals connected to the local area
<ul style="list-style-type: none"> ➤ People with family in Hobart offered their homes to locals who lost their primary residence. 	Local individuals
<ul style="list-style-type: none"> ➤ A local couple whose house was not lost to fire, opened their home immediately and for many months afterwards, as an informal drop in centre, including offering food and drinks and accommodation to locals 	Local individuals

and to volunteers who came to the community to assist in the Recovery centre. Friday night food nights were often held at this home.	
➤ The local publican opened the hotel rooms and kitchens immediately and for many months afterwards so that locals and others could gather, eat and drink together and talk about their experiences.	Local business
➤ Locals established and maintained a 'phone tree'– initially this was a spontaneous idea to locate people and let others know who had been found. Then the system became more formalised and was used for many months to communicate and share information as widely as possible about the crisis, important response information, support that was available, news about locals, community meetings and social events and activities. The system was eventually supported by software and reached over 300 people.	Local individuals
➤ A couple of local community members built, set up and then maintained a system of large blackboards by the side of the road coming into and leaving Dunalley. These blackboards were updated daily with essential news and information to assist everyone. Initially electricity and phone lines were not in place in all locations and this form of communication was essential. These blackboards were still being used for more social or inspirational quotations when the researcher was in the community more than a year later.	Local individuals
➤ A local café opened immediately and made sure people knew that it was a meeting place, a food distribution place, and free food was provided. A local yoga teacher offered free yoga for anyone who wanted to come for 6 weeks.	Local business
➤ An individual wanted to contribute so went to Harvey Norman two days after the fires, purchased two new lounges and organised with a local community member to store them in their shed until someone who needed them was ready to take delivery. That took many months, but the lounges were then delivered to a family who needed them.	External individual
➤ A local church based community organisation organised regular pallets of fresh food with Second Bite (secondbite.org) based on their previous relationship with that organisation.	Local organisation Second Bite

➤ People from Hobart organised food and emergency supplies and delivered them by boat because the only road into the area had been blocked.	External individuals
➤ A young woman in Hobart established a social media site that began to connect people with one another – enabling people to keep up to date and find out what was needed. Families offered and accepted offers of accommodation through this site.	External individual

During the weeks and months after the crisis:

Action/Activity	Source of assistance
➤ Women from another State arrived and volunteered their time to help to restore people's gardens where these had been burnt.	External volunteers
➤ A local church based community organisation used donated funds to create 100-200 tool bags and deliver them to those affected. These bags contained a selection of tools that would be useful for people to clear up their properties. This group also purchased white goods and donated them to families.	Local church group
➤ Teams of prisoners helped farmers rebuild their boundary fences. The Lions Club organised the tool boxes and fencing equipment and the teams were supervised by prison officers.	Lions Club Local prison
➤ Women from Hobart contacted the Neighbourhood House and then worked with local women to provide free massage days for locals – these were held in the town hall or a local home.	Local individuals External individuals
➤ Numerous art exhibitions were held both locally and in Hobart featuring the art work (glass work, drawings, paintings, and photographs) of local artists and of the crisis.	Local individuals and artists
➤ A community member wrote their story of the crisis and published a book – both telling the story and raising funds to help the community.	Local individuals

<p>➤ A tool library was sent to Dunalley from Victoria and a local community member managed it. The tool library provided local community members with access to tools (including lawn mowers, electrical tools, shovels, and chainsaws). They were able to borrow, use and then return them, during the months after the crisis.</p>	<p>Lions Club and a local individual</p>
<p>➤ A local group have set up a community laundry so that locals could have access to washing machines and dryers (for months after the crisis).</p>	<p>Lions Club and local individuals</p>
<p>➤ A local 'wood chop day' was held to assist the locals by chopping sufficient wood for heating through the winter. The local Rotary club, local fire fighters, someone from the Forestry Department, and a group of local volunteers all worked together and with 150 chainsaws and numerous trailers and vehicles, produced and delivered 70,000 tons of wood.</p>	<p>Rotary Club, fire fighters, forestry, Local individuals</p>
<p>➤ A local organised a system of obtaining and delivering hay from elsewhere in Tasmania to local farmers to feed stock that survived the fires. The Lions Club supported this effort and also organised hay and grain from elsewhere in Tasmania.</p>	<p>Local individuals Lions Club</p>
<p>➤ Food hampers were prepared and distributed both at the time of the crisis and on subsequent occasions e.g. the following Christmas.</p>	<p>Lions Club</p>
<p>➤ Funds were raised by clubs around Australia and sent to local Rotary or Lions Clubs. Vouchers were then organised and distributed for locals to use at the local hardware business and other local businesses – this happened early in the process and then again a year later.</p>	<p>Lions Club Rotary Clubs</p>
<p>➤ The Hobart Symphony Orchestra gave a performance in the local church on the first year anniversary of the fires. The concert was free and refreshments were also provided free.</p>	<p>Hobart Symphony Orchestra</p>
<p>➤ Social events were held regularly for the first 18 months e.g. local barbeques and picnics. Local businesses, or local community groups provided food. This enabled community to gather, enjoy a free meal and socialise and talk about the crisis and recovery or not. Often these events were to thank volunteers or fire fighters.</p>	<p>Local individuals Local groups</p>

➤ A hairdresser from a neighbouring town went to Dunalley and offered free hair washes during the first few weeks, because people did not have the means to wash their hair. This was possible through a local community centre.	External business
➤ Concerts were held at the local hotel and seen as opportunities for the community to get together.	Local business Musicians
➤ Schools from elsewhere raised money for the school and sent it to Dunalley. Some groups also came to the school and cooked morning tea for all the children.	External schools External groups and individuals
➤ Numerous local groups were formed by local women or the Neighbourhood House so that men and women could come together and share time, food and drink and sew or garden or participate in some other activity together.	Local individuals Neighbourhood house
➤ A woman from Flinders Island donated boxes of books to the primary school. She knew someone in Australia Post and delivery was arranged free of charge.	External individual Australia Post
➤ Lions supplied first aid equipment for the primary school, so that excursions could occur.	Lions Club
➤ An individual heard about a family who lost everything and they organised to get a new car, drive it to the family and give them the keys.	External individual
➤ The Recovery Taskforce organised painters, architects, HIA master builders, plumbers and others to be available in the Town Hall on particular days so that locals could come to one place at one time to find out what they needed to know about rebuilding their homes.	Recovery Taskforce Council
➤ While many fees and levies for rebuilding were waived for those affected by the crisis, a training levy was legally required. After some negotiations between Councils and the State Government, this levy was collected and the money used to fund young local people as apprentices with some of the companies that were rebuilding the homes.	Council State Government

<p>➤ Those locals who had lost their homes formed a group called the “Homeless Society”. This group met regularly (and continued to meet for over a year after the crisis), shared their grief and loss, and began to plan and share information about rebuilding. Men in particular attributed a significant part in their ability to recover and remain in the community, to the operation of this group.</p>	Local individuals
<p>➤ Those locals who did not lose their homes also formed a group and met regularly. They shared their ‘survivor guilt’ and their response to the damage done to their community. They also identified ways that they could assist the rest of the community e.g. holding barbeques, making meals and jam and delivering it to those more affected, opening their homes for meetings and meals, helping at the Neighbourhood house.</p>	Local individuals
<p>➤ Locals decided to start a library and the local ABC radio advertised this. People sent books and the locals set up a library.</p>	Local individuals Local ABC radio
<p>➤ The local County Women’s Association (CWA) organised a ‘preserving’ day. Chutney’s and jams were made from apricots, pears, cherries, strawberries and other fruits. These were bottled and then delivered to one of the remaining homes in the town. The phone tree was used to send out messages to everyone, and people dropped by to collect a bottle or two. This led to a cup of tea or coffee, a chat, and a social connection.</p>	Local CWA Local individual
<p>➤ A local community member organised a working bee to build a fence and garden for a much loved community couple. This involved locals with excavators, backhoes, trucks, tip trucks, and post-hole diggers. Locals organised food for the labourers, and the garden was created.</p>	Local individuals
<p>➤ A local organised what was known as “Dad’s Army”. They did jobs for locals e.g. building garden fences, building chicken coops, setting up gardens, and fixing garden gates. They became known around the community and did odd jobs for community members for many months after the crisis.</p>	Local individuals
<p>➤ Two girls from the Victorian fires (2009) sent two china dolls to two girls in Dunalley, to help them after the fires.</p>	Children

Actions that occurred in the Lockyer Valley

During crisis and immediately after:

Action/Activity	Source of assistance
<ul style="list-style-type: none"> ➤ Community members who were unaffected by the crisis offered individuals and families a place to stay – either welcoming them into their home or giving them access to a home of their own indefinitely. 	Local individuals
<ul style="list-style-type: none"> ➤ Local community members responded immediately to set up an impromptu recovery point, begin to take the names of those who were present and provide tea, warmth and support to those who began to arrive in need of care. This began a process of accounting for everyone and providing ongoing community support. In the first days this changed as a marquee arrived, table and chairs were set up and counsellors, chaplains, and local services began to arrive to provide support and advice. Over time this developed into a Community Recovery Centre and was seen by many locals as a very important part of the community response and healing. 	Local individuals
<ul style="list-style-type: none"> ➤ Many local farmers and community members assisted neighbours, or community members more broadly, to clean up homes, shops, streets or businesses. People offered themselves and whatever machinery, tools and equipment they had available. Groups of community members helped to clean up public spaces such as cricket fields and parks. 	Local individuals
<ul style="list-style-type: none"> ➤ Numerous local cafés provided free coffee and food to businesses, locals and volunteers in the area for the first days or weeks after the floods. These places became drop in centres for people to come and find out news of the community and the crisis. This was not a small thing as it cost the business financially and it was difficult to re-establish a food supply. At least one café delivered free food to some families who had 	Local individuals Local businesses

lost everything.	
➤ Two local children (8 and 9 years of age) made brownies and brought them to the businesses in the main street – ‘to cheer them up’.	Children
➤ A local young mother helped by making sandwiches each morning in her home, for delivery to various sites for volunteers. The local supermarket delivered all ingredients and then collected and distributed the sandwiches. ➤ Elderly women similarly made sandwiches for weeks, to feed volunteers and those who needed it.	Local individuals Local business
➤ A group of young men travelled from Melbourne to assist with clean up. After a month had passed the same group came back again with money they had raised and gave it directly to those who had lost their homes.	External individuals
➤ Bunnings donated brooms and gum-boots to the local community members and businesses to assist with cleaning up after the floods.	External business
➤ An individual from outside of the community heard the local BlazeAid coordinator on the radio and rang to donate an 8tonne truck of fence posts to assist the BlazeAid project. He subsequently delivered the fence posts himself.	External business/individual
➤ The high school home science class made food for the Blaze Aid volunteers.	Children
➤ The local supermarket established ‘accounts’ for those families who had lost everything so that they could shop for what they needed (with no money up front). The Churches and the local community care services then paid the accounts afterwards with the supermarket, so that they did not become insolvent. The local supermarket then did the same thing for BlazeAid, not only in their business but also with a range of other businesses in town. In order for BlazeAid to easily purchase necessary supplies, the supermarket agreed to guarantee payment if each local business set up a trading account. This meant that the supermarket was prepared to guarantee the funds so that BlazeAid could spend money in local businesses.	Local business Churches Local community care services
➤ The local Member of Parliament (MP) spent the first weeks in the local community physically helping with	VIP

<p>the clean up, without the media present. He occasionally used his influence to solve immediate problems, and he “Got dirty along with everyone else.”</p>	
<p>➤ A doctor from Nambour Hospital drove to the valley with a 4WD filled with medical supplies. He was a friend of a local community member and together they visited the elderly and isolated and provided medical assistance as required. They conducted health checks for senior residents, re-stocked medications, and gave tetanus shots. They liaised with the local pharmacy in relation to prescriptions and supplies. They provided transport if residents wanted to leave their homes. They also delivered fresh fruit and milk as they went around isolated areas in the Valley.</p>	<p>External Medical Practitioner Local individual</p>

During the weeks and months after the crisis:

Action/Activity	Source of assistance
<p>➤ A local community member organised a Teddy Bear’s picnic so that the community would come to spend the day together. The picnic included a hospital/medical centre where teddy bears had a ‘check up’ and minor surgery when needed. Some of them had major surgery. There were games, a tug of war, egg races, spoon races, and ‘ring a ring a rosie’. There was teddy bear story time. The volunteers at the local Pioneer village provided a barbeque.</p> <p>➤ The first Teddy Bear’s picnic was so successful that there was a second. This one involved a medical centre (Kambu Medical Centre) and more people (all ages) came with teddy bears. Each Teddy Bear received a medical certificate that outlined medical issues and recommended follow up medical attention (or not). Careflight donated Teddy Bears to be given to people who had lost bears in the floods. Funds were raised by the community to give to Careflight to thank them for their involvement in both floods in the Valley.</p>	<p>Local individuals Local medical service Careflight</p>
<p>➤ Numerous local businesses helped one another repair and rebuild by offering their services to one another</p>	<p>Local businesses</p>

e.g. plumbers, electricians, and painters. They did not charge one another for their services, preferring to offer the same response in kind. A florist who was assisted by numerous tradesmen now provides flowers and gifts every Valentine's day free of charge to those tradesmen to give to their partners.	
➤ A local started the Grantham Community Flood Fund because people from outside the wanted to donate to the community, but did not want to do so through a large non-government organisation or the government. A governance arrangement was established so that funds could be donated and distributed by locals. Almost \$1m was collected and distributed to the worst affected, with community involvement in decision making through community meetings.	Local individuals External individuals Local group
➤ Bunnings donated barbecues and a local woman organised men to have pizza cooking evenings for the community.	Local individuals External business
➤ A group of women in Brisbane baked food and brought it to the Valley and donated it to volunteers and locals.	External individuals
➤ Computers were donated to the community centre and volunteers assisted community members in preparing letters for solicitors, insurance companies and related to rebuilding.	Local individuals
➤ Young men (22-32 years of age) who were carpenters, plumbers and electricians from the Gold Coast, loaded their utilities with supplies and went to the Valley every weekend for over 12 months. They donated their services (time and supplies) to anyone who needed assistance.	External individuals
➤ People would just arrive and ask if there was something that they could do to help. People did that for a long time and local community members would send them to visit someone they knew needed assistance.	External individuals
➤ The local supermarket organised for their staff to visit people who were isolated or unable for any reason to do their own shopping, to obtain their shopping list, and do their shopping for them and deliver it to them.	Local business
➤ A race meeting was organised to raise money for those most affected by the floods and it was the largest attendance they had experienced.	Local club

<p>➤ In an isolated part of the Valley a group of people were isolated for weeks by badly damaged road, and they created a 'community' car by having a family member park their car on the town side of the damaged road, where it could then easily be used get to town. Community members could access the car, past the damaged road by foot, and then borrow the car to go to town.</p>	Local individuals
<p>➤ A publican in a small town held a bull ride. A number of young men organised it and it brought the community together to socialise and 'let off steam'.</p>	Local individuals
<p>➤ A local community member organised 'movies under the stars' for the community. The Golf Club provided their grounds. Someone provided a fairy floss machine and people brought chairs and blankets and rugs.</p>	Local individuals

Particularly Compelling Stories from each site

The following stories of community capacity and strength provide more detailed accounts of things that occurred in the affected communities. Community members described these actions and activities in greater depth than the other actions and activities outlined during the interviews conducted in Phase 2 of the research. The storyteller often recounted their story with significant emotion and personal emphasis. The stories provide evidence of those things that occur in communities affected by extreme weather or other crisis that community members themselves judge to be particularly significant and supportive of the community. Community members commented that these stories are the kinds of stories that they want to share with other communities in the hope that they will demonstrate what can be done at a local level to strengthen the community after such a crisis.

(Refer to whoever said that the culture of a place or a people is created by the stories we tell and retell one another.)

Community	Story of community capacity	Themes
Cassowary Coast	<ul style="list-style-type: none"> ➤ The owners of a local wildlife sanctuary rescued injured and other wildlife by removing them from the area before the cyclone made landfall. Through the use of social media and the support of Ozark (www.ozarkwild.org) and individuals in the towns that they drove through, they were able to adequately care for the wildlife and avoid the cyclone, returning to their home and sanctuary after the cyclone had dissipated. They then began the process of providing long term support to both the rescued wildlife and the wildlife that has survived the cyclone, to restore their sanctuary over many months. 	Wildlife – Ozark Social media External individuals
	<ul style="list-style-type: none"> ➤ The Indigenous rangers who work as part of the Girringun Aboriginal Corporation (www.girringun.com.au) worked with community members and the environment, to recover the land and the community for both Indigenous and non-Indigenous community 	Indigenous rangers Environmental

	<p>members. Community members described the healing power of listening to these young rangers singing and calling out as they worked to restore the environment, the local wildlife and people's homes and properties. The CEO of the Girringun Aboriginal Corporation saw this role as an opportunity to promote reconciliation and to fulfil the role of the aboriginal people in caring for country.</p>	<p>recovery Community support</p>
Dunalley	<p>➤ A gift from a woman on the mainland of handmade Christmas decorations, each carrying the first name of a child from the local Dunalley Primary School. She has contacted the school at the beginning of the school year to find out all the first names and she made each child a decoration during the year. Then she sent them to the school at the beginning of the final school term so that each child would have a decoration to place on the school Christmas tree, and to then take home to their family.</p>	<p>Children Craft Long term thinking</p>
	<p>➤ The then Governor General (Dame Quentin Bryce) visited the community and spoke with a young boy whose family had lost their home to the fire. When she asked him what sport he liked most, he talked to her about losing all his cricket gear. She then organised for the Australian Cricket team to all sign a new cricket bat and sent it to the then Premier of Tasmania so that someone could present it to the young boy on her behalf.</p>	<p>VIP Children Australian Cricket team</p>
	<p>➤ A local community member rang a phone number in Marysville (Victoria) in order to find someone who might help her to think about how best to help her community after fire. She was given a person's name and they exchanged phone numbers. The Marysville community member then travelled to Dunalley and brought the President of Lions Clubs in Victoria, to stay with the local woman. These Marysville community members then spoke with locals about their experiences and what they had learned after the 2009 fires in Victoria.</p>	<p>Local individuals Individuals from a previously affected community Lions Clubs</p>

Lockyer Valley	<ul style="list-style-type: none"> ➤ “This little boy came, and I said, to him where's your teddy bear? "Oh. He says. He's lost." I said, "Oh." He said, "The waters took him away. I don't have a teddy." We had donations of teddy bears. And I said to him, "See those teddy bears over there on that table? They need a new home. If you go and stand in front of that table, a teddy bear will pick you." He stood there, and he stood there, and he stood there, and his mom came over, and I said, "No. Let him. This is for him." He came up and he said, "That teddy bear wants me."” (Story exactly as told by an Indigenous Elder in the Lockyer Valley) 	Children
	<ul style="list-style-type: none"> ➤ A piano was given to a young girl who saw three people drown and who lost her piano in the floods. A man from Brisbane donated the piano because he was going into a retirement village and he wanted to help someone who had been affected by the floods. The local Minister was contacted and identified the young girl as being suitable. Someone agreed to transport it from Brisbane to the Lockyer Valley – free of charge. A piano tuner heard about this project and tuned it – free of charge. 	Local individual Church External individual Local businesses
Coonabarabran	<ul style="list-style-type: none"> ➤ The men’s shed in Coonabarabran built bird boxes and animal nesting boxes from flat packs, for the remaining wildlife after the wholesale destruction of the Warrumbungle’s national park 	Local men’s group
	<ul style="list-style-type: none"> ➤ Local and neighbouring community members who had old cottages and second homes on their properties offered them to others who had lost their homes in the fires 	Local individuals
	<ul style="list-style-type: none"> ➤ The ex-patriot artist who organized an art exhibition including work from a number of artists who all then donated their work to those locals who had lost their homes 	Ex-patriots Artists
	<ul style="list-style-type: none"> ➤ Farmers and veterinarians from all over NSW (and further) who donated hay, fodder and veterinarian ointments and supplies to the farmers who had suffered losses in the fires 	Farmers