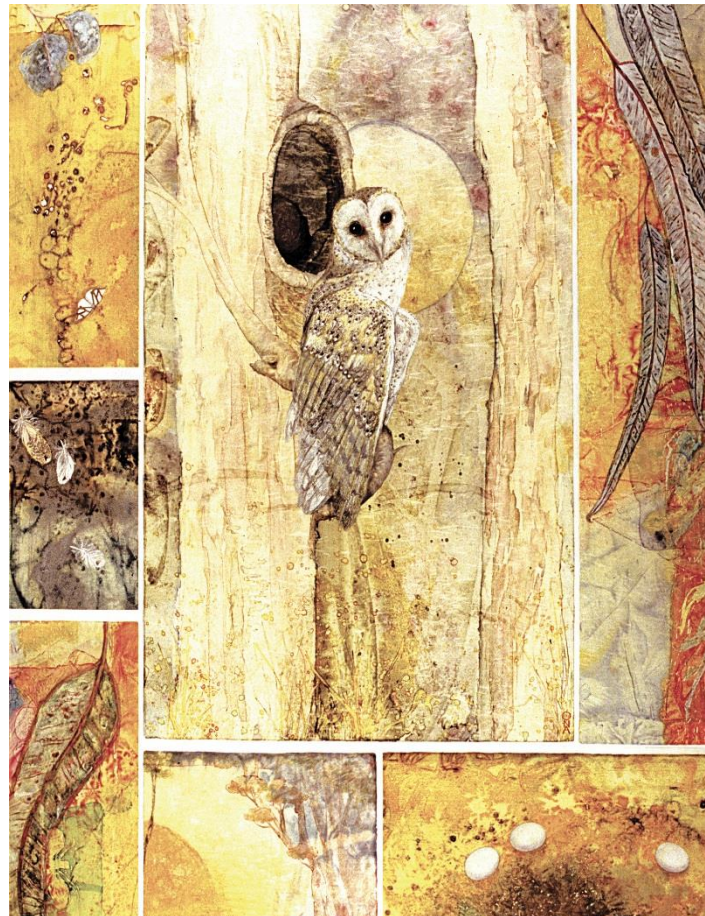


Long-term disaster resilience



Vol. 1 Executive Summary and Recommendations

Vol. 2 Long-term disaster resilience: Full report

Vol. 3 Long-term disaster resilience: Literature review



Gender & Disaster Pod
An initiative of WHGNE, WHIN & MUDRI

Authorship and Acknowledgement

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Our heartfelt appreciation goes to the women and men who participated in this research, sharing their experiences, their expertise, and their intelligent and thoughtful appraisal of long-term disaster resilience. The recommendations in the report emerge from their narratives and suggestions.

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Report written by Debra Parkinson, Alyssa Duncan and Jaspreet Kaur.

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An Australian Government Initiative



Contents

Introduction.....	4
Background and significance.....	4
Aims.....	5
Research design and ethics.....	6
How to read this report.....	12
Resilience – ‘Bloody buzzwords’.....	12
Resilience Scale.....	16
Findings – Part 1: Perceptions of disasters’ significance.....	20
Aren’t you over it yet?.....	20
What happened.....	22
A defining moment.....	28
No getting over it.....	28
Long-term consequences of the disaster.....	29
Findings – Part 2: What helps and hinders resilience?.....	43
What helped resilience?.....	43
What hindered resilience?.....	56
Heightened gender expectations hindered resilience.....	64
Findings – Part 3: Disaster planning for self, family, children and community.....	78
Children in disaster areas.....	78
Family obligations can endanger lives.....	91
Disaster plans.....	92
Discussion.....	99
Conclusion.....	112
References.....	115
Appendices.....	119
Ideas for future preparations.....	130

If blood will flow when flesh and steel are one
Drying in the colour of the evening sun
Tomorrow's rain will wash the stains away
But something in our minds will always stay ...

On and on the rain will fall
Like tears from a star
On and on the rain will say
How fragile we are

(Gordon Sumner, 'Fragile', October 13, 1987)

Introduction

Long-term disaster resilience is influenced by a multitude of factors associated with the disaster itself and the long and pressured aftermath. Other traumatic life events and mental and physical ill-health contribute. Class, gender, race, sexuality and ability will also impact on capacity for resilience. It is clear from the interviews that experiences at the time of the disaster and the way the immediate aftermath is managed have a profound effect on women's and men's resilience.

The literature review identified the dearth of scholarship in long-term disaster resilience, and this study begins to address this absence. It is unique in capturing the voices of disaster survivors as informants spoke of disaster events nine, 10, 30 or 50 years in the past. Memories swiftly took them back to the day of the disaster and the way they felt. Equally vivid were recollections of powerlessness and sometimes anger at how they were treated when they were at their most vulnerable.

This predominantly qualitative research into long-term disaster resilience identifies protective factors and what helps and hinders individual and community resilience in disasters. It documents the experiences and wisdom of disaster survivors nine years after the 2009 Black Saturday fires to more than 50 years after earlier fires and floods in Victoria, including the 1983 Ash Wednesday fires.

The purpose is to identify how individuals and communities understand the risk to long-term health and wellbeing that disaster experience brings, and how to promote resilience over decades.

Background and significance

One in six Australians has a lifetime risk of disaster (MacFarlane, 2005) and one in three experiences disaster warnings (Reser, 2012). The CSIRO (2016) advises that the duration, frequency and intensity of heat events have increased and The Climate Institute (2016) confirms a trend towards increased extreme fire weather and longer fire seasons, noting that 'instead of a 'catastrophic' blaze every 30 years ... [Victoria] could face the prospect of a 'Black Saturday' level event every two or three years'.

Yet, little research documents men's and women's reflections on their own recovery and that of their communities over a span of decades. While much research has been conducted into the mental health effects on survivors, particularly on clinical

diagnoses such as Post Traumatic Stress Disorder (PTSD), research into the social impacts for men and women long after disaster experience is rare. A literature review conducted by Monash University Disaster Resilience Initiative (MUDRI) confirms the dearth of literature on long-term disaster resilience in Australia. (See Volume 3.)

Resilience applies not only to the experience of the disaster itself, but equally to the long aftermath. Many survivors struggle to overcome the layers of pressure and seemingly insurmountable barriers that accompany the loss of family members, community, homes, pets, livestock, property, landscape and sense of place. Further pressure emerges from interruption to services and damaged infrastructure.

This research has the potential to lead to positive change in equipping individuals and communities for resilience in disasters and their aftermath. Equally, it will inform the emergency management sector and its policy directions on how resilience is fostered over decades.

Previous research, up to five years after disaster experiences, suggests that disaster impacts can be severe and long-lasting, and that more salient gender norms exacerbate recovery (Enarson & Morrow, 1998; Enarson & Pease, 2016; Hoffman, 1998; Parkinson, 2017; Zara, Parkinson, Duncan and Joyce, 2016). In the US, the importance of considering long-term recovery in the recovery period is emphasised (Moore, Trujillo, Stearns, Basurto-Davila & Evans, 2009). Employment issues, alcohol abuse, family violence and suicide increase (Zara & Parkinson, 2013). In a rare 2011 study, the authors note that 'strains during a disaster may also influence the individual's future ability to cope and regain physiological balance' (Keskinen-Rosenqvist et al., 2011, p. 181). Leading disaster psychologist, Rob Gordon, points out the difference between psychological clinical research and research into the lived social experience of disaster survivors:

The emphasis on screening and identifying those at risk for PTSD is illness-oriented and may be justifiable for provision of public resources, but if we accept human suffering as our reference point, much suffering does not qualify as PTSD. Having one criterion of intrusive recollections, heightened arousal, numbing and detachment, or disrupted work and social life is enough to spoil a person's happiness. Here we come to the epistemological assumptions that underpin a rationalist, empiricist, scientific worldview and the danger is that it frames our experience in such a way that we do not see what is missed. (Gordon, 2007)

After Ash Wednesday, Beverley Raphael and Sandy McFarlane emphasised the need to assess the different components of disaster to improve understanding of its immediate and long-term impacts (McFarlane & Raphael, 1984) and, following Black Saturday, they reiterated the importance of learning from victims of previous disasters (McFarlane & Raphael, 2009). Lisa Gibbs and her colleagues write, 'Although much is known about individual responses to disasters, much less is known about the social and contextual response' (Gibbs, et al., 2013, 2016).

Aims

The research question underpinning this project is: 'What factors increase or hinder long-term individual and community disaster resilience?'

Specific aims are:

- To document men's, women's, volunteers' and children's (at the time) insights and experiences of resilience in the aftermath of disasters, e.g. Ash Wednesday in 1983, Victorian floods in 1993 and 2010-11 and the 2009 Black Saturday fires
- To contribute to an emerging knowledge-base on long-term individual and community disaster resilience for men, women, volunteers and children.

We anticipate that hearing from long-term disaster survivors will contribute to ongoing policy development and implementation across Australia, and ultimately to a more resilient society.

Research design and ethics

Ethics approval was granted through the Monash University Human Research Ethics Committee (MUHREC), and an Advisory Group was established, meeting four times over the 15 months life of the project.

The methodology was qualitative, inviting informants to speak about what was most important to them in relation to their long-term disaster resilience, and their experience of the disaster and its aftermath. The chief investigator was present at every consultation, and a team of three co-interviewers was drawn upon to ensure there were two researchers present each time. One facilitated and the other asked complementary questions to seek clarification or further detail. Both researchers shared responsibility for consent procedures and recording the interviews using an iPhone app and taking back-up notes. Following ethics procedures approved by MUHREC, consent was obtained for the recording. (See Appendix 1 for Explanatory Statement and Consent Form.) De-identified transcriptions were returned to the informants inviting amendments or further de-identification. The interview schedule is in Appendix 2.

Recruitment and characteristics

Theoretical sampling was used, whereby informants were selected to be part of the sample on the basis of the need to report on particular concepts or theoretical points. Theoretical sampling does not seek to be statistically representative. Invitations to participate were sent through the GAD Pod Communiqué or other organisations' e-newsletters, and advertisements were placed in local newspapers. In both cases, the researchers' contact details were given. In previous research, *Men on Black Saturday* (Zara & Parkinson, 2013), all of the 32 men who participated indicated they would be interested in another interview at a future time. As we did not have the resources to re-interview all of the men, five were randomly selected and accepted to participate in this research. Five women who were interviewed for *The Way He Tells It* also participated (Parkinson, 2011a, 2011b; Parkinson & Zara, 2011b).

Potential informants were required to contact the research team on their own initiative to arrange an interview at a mutually agreed time and place. When informants responded, the research team member provided information about the study to ensure understanding of the purpose of the research and what was required. All informants were offered a voucher to the value of \$100 toward the costs of attending and travelling to interviews.

Criteria included that women and men (including volunteers) were aged over 18 at the time of interview. Disaster experiences included both fire and flood, considered to be significant in magnitude or effect. Experiences included rural, remote or urban

disasters (including the 2003 Canberra bushfires). Map 1 indicates where people were living at the time of their interview, and Map 2 shows the location and date of the disasters they experienced. Of these, 28 of the disasters discussed occurred more than a decade earlier, and 28 relate to Black Saturday in 2009. The timespan was from approximately eight years ago (e.g. 2009 fires, 2011 floods) to floods in 1974 and bushfires in 1943, 1951 and 1962. (See Appendix 3 for details.) Seven informants had experiences of more than one disaster.

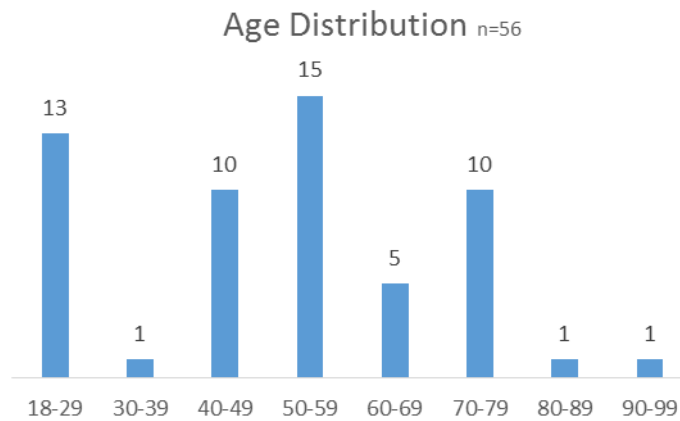


Chart 1: Age distribution of informants

Consultation matrix

Telephone	10
Face-to-Face	46
Total individuals	56 (30 female and 26 male)
Individual interviews	32
Focus groups	3 (5, 6,6) (See infographic below)
Couple interview	3

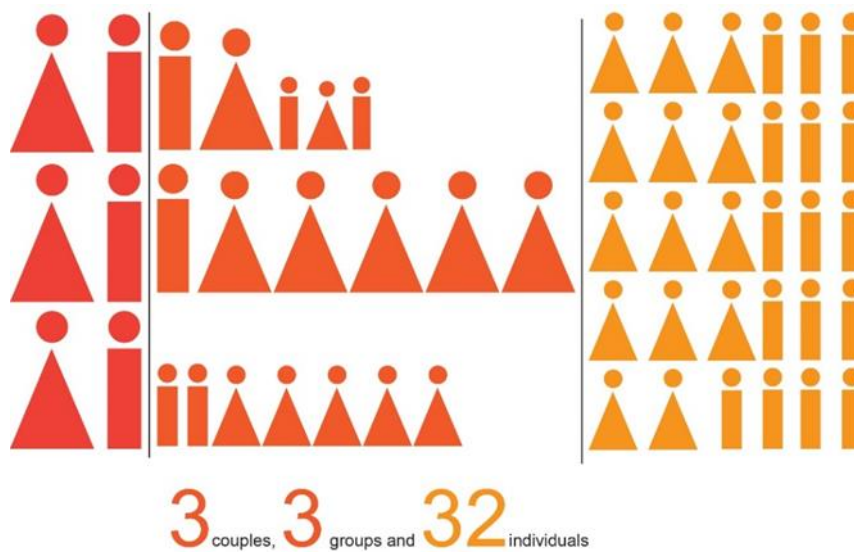


Chart 2: Infographic of consultation modes by gender



Chart 3 Infographic of volunteer proportion in sample

Data collection and analysis

Data was collected through individual in-depth, semi-structured interviews (see Interview Schedule in Appendix 2). Modified grounded theory, following Spradley (1980), guided analysis. Grounded theory offers rules for data collection and analysis that minimise ethnocentrism in the attribution of meaning, combining the theoretical sampling and thematic analysis approach as developed by Glaser and Strauss (1967). Coding was conducted using Nvivo 12 software. Coding validity was enhanced by two researchers coding and developing nodes, and by informant checks.

Ethics procedures

After contacting the research team, when informants chose to proceed, they were emailed or posted the Explanatory Statement and Consent Form and asked to return the consent form either before or at the beginning of the interview. (See Appendix 1.) Several interviews were conducted by phone and in rare instances, consent was taken over the phone and recorded. As it is difficult to ensure confidentiality in the rural, post-disaster context, the limits of anonymity were noted in these ethics documents. Anonymity was enhanced by the use of pseudonyms in this report and by altering minor details that might have otherwise exposed context and hence identity.

Informants effectively led the interview and were advised of the right to stop the interview or refuse to answer questions. Interviews lasted between one to two hours.

Dissemination

This research report will be disseminated electronically to the informants, the Research Advisory Group, a receptive audience of academics as well as to the funding body and representatives of disaster planning, response and recovery functions who have expressed the need for this research to be conducted. It will be uploaded to the Gender and Disaster Pod website www.genderanddisaster.com.au and submitted to the Australian Institute of Disaster Resilience Clearinghouse. Further opportunities for dissemination will be pursued such as conference presentations and journal articles.

Limitations and future research

Although a broad group of respondents was sought, this study does not include the perspectives of people who stated they have diverse gender and sexual identities, as well as First Nations people. Attempts were made to reach these communities through the GAD Pod Communiqué and through two Aboriginal organisations. Most informants stated their ethnic background is Australian or Anglo, so people from culturally and linguistically diverse populations are not well represented.¹ This is due to the demographics of the communities affected by the disasters, mostly rural (except Canberra). Few of the informants left the disaster-affected area (n=5).

We suspect that this research did not engage people who were not coping as a result of their disaster experience. A key indicator of this was that two young men who had initially agreed to be part of the young people's focus group did not attend as, on the day, they were not emotionally prepared to go through with it. It follows that others may have seen the research flyers but felt unwilling to speak about an experience they had not yet come to terms with. In contrast, some people who stated they continue to struggle nevertheless contributed. There was a sense that they did this to help understand their own story and hear of others' reflections, as well as to prevent others suffering in future disasters.

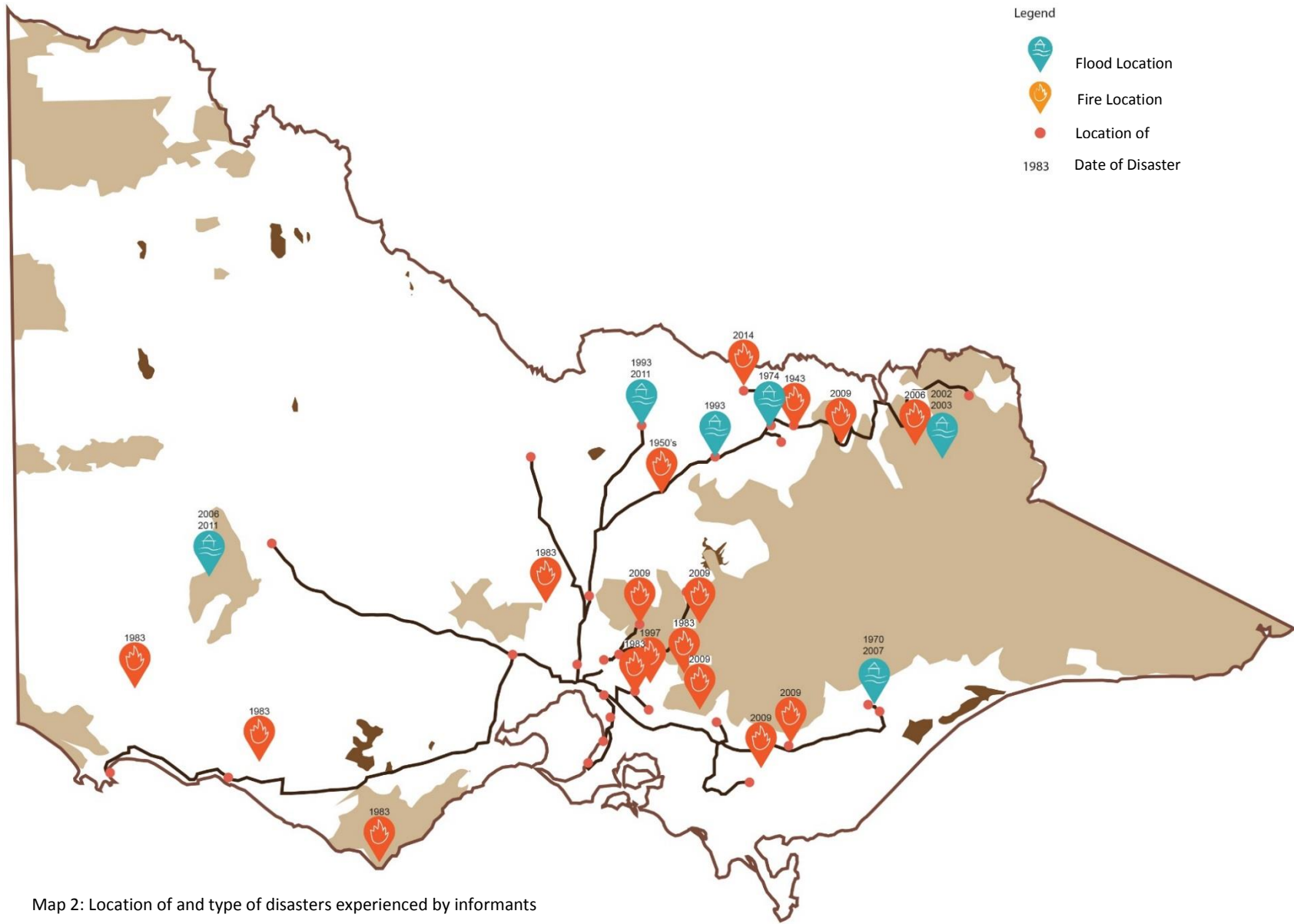
The Resilience Scale was developed about halfway through the interviews, to bring the interview focus to the recovery journey over the years since the disaster experience. It was created as an exploratory aspect to complement the qualitative data. It was a valuable way to hear informants' reflections on how well they self-assessed their resilience at various time points from 'During' to '30 years plus'. In future research, the Resilience Scale could be improved by adding a column on the left called, 'Before' to gauge each informant's self-assessed starting point. One interviewee suggested adding a time point of three years as she considered this to be very significant for many in her fire-affected community.

The literature review confirms the dearth of studies in long-term disaster resilience. While the informants who were interviewed valued the opportunity to speak about their journey, our research was limited by resources and we could not interview many people who responded to advertisements for this project. There is far more to learn, and future research on long-term disaster consequences and resilience is needed to extend our knowledge. For example, the document, *A Monitoring and Evaluation Framework for Disaster Recovery Programs* (Argyrous, 2018), could be further developed to include indicators for long-term recovery. The Resilience Scale offers a valuable tool for the endeavours of future researchers in drawing out survivors' experiences over decades.

¹ See also Bailey, 2018



Map 1: All named locations are the residential location of participants at the time of interview



How to read this report

This primarily qualitative, descriptive research, foregrounds the words of the 56 disaster survivors who participated. It consciously focuses on the lived experience of long-term disaster resilience, to give individuals a voice in a field generally reserved for the emergency management sector. One informant compared her insight to that of people who had never had a disaster experience.

I can guarantee that anybody who has never been flooded or never been through a fire wouldn't have the slightest idea of what it is like – no understanding whatsoever. (Elizabeth)²

This report offers people unaffected by disaster a way to understand the personal impact of disasters. Reading the words of people who survived disasters as they remember their experiences and reflect on their resilience in the years since is deeply moving. At times, the quotations are distressing.

This report is presented in three volumes:

Vol. 1 Executive summary and recommendations

Vol. 2 Long-term disaster resilience: Full report

Vol. 3 Long-term disaster resilience: Literature review

Volume 1 offers a quick overview through the Executive Summary, followed by the full set of recommendations that emerged from the data.

Volume 2 outlines the background and methodology of the qualitative research, and includes a brief illustrative snapshot of responses to a Resilience Scale that was developed to bring out each informant's resilience journey over the years. It is then divided into three parts: Part 1 covers the informants' and society's perceptions of the significance of a disaster experience; Part 2 considers what helps and hinders resilience; and Part 3 draws on informants' experiences to clarify the implications for their own and others' disaster planning into the future. A Discussion section follows, and then the conclusion. References and Appendices are provided at the end.

Volume 3 is the full Literature Review into long-term disaster resilience written by Monash University Disaster Resilience Initiative (MUDRI).

Resilience – 'Bloody buzzwords'

Throughout this research project, we used the term, 'resilience' simply and as it is generally understood, for example, as defined by the Cambridge Dictionary:

'The ability to be happy, successful, etc. again after something difficult or bad has happened' <https://dictionary.cambridge.org/dictionary/english/resilience>

In the Resilience Scale, we asked informants to think of resilience as 'capacity to survive, adapt and thrive despite your disaster experience'. This is adapted from the

² Pseudonyms have been used in this report with one exception, where an informant wanted her real name used.

100 Resilient Cities definition (www.100resilientcities.org). This simple approach is used in full awareness that the concept of resilience is highly contested, as are other words used in a disaster context, such as 'recovery', 'natural' and 'vulnerability'. One reason for the polarity of the term 'resilience' is that it suggests responsibility for resilience sits with disaster survivors, justifying reduced services to people who are already 'surviving and navigating their unevenly borne burdens of capitalist globalization' (Derickson, 2016, p. 162). Resilience can be a judgement of individuals by government and society. A key theme in the narratives of the 56 informants to this research is of feeling judged and silenced when people ask, 'Aren't you over it yet?' The question infers a lack of resilience.

Other reasons for controversy include that the term is understood and extensively theorised by many disciplines, e.g. engineering, geography and psychology. Cote and Nightingale (2012) reflect that resilience thinking 'has mainly evolved through the application of ecological concepts to society, problematically assuming that social and ecological system dynamics are essentially similar' (p. 475). The desire to 'cut across academic disciplines and the interface between science, policy and practice' by use of the word, resilience, is said by Weichselgartner and Kelman (2015, p. 249) to hold 'an inherent danger that the term becomes an empty signifier that can easily be filled with any meaning to justify any specific goal'. (See also, Michael Ungar, 2011, 2013.)

The literature review conducted by MUDRI states:

Resilience has no universally agreed definition as a systematic literature review determined in its analysis of definitions about community resilience related to disasters. No evidence of a commonly agreed definition of community resilience exists (Ostadtaghizadeh, 2015). By adding 'long-term', this definitional conundrum became even more complicated, which had a tendency to conflate with recovery as Camilleri (2007) noted. (Vol. 3, p. 9)

With these reservations in mind, we use the term in its simplest definition.

After reading the draft report, one of the informants, Grace (aged in her 80s) posted back a hand-written note, and this is an excerpt:

Resilience, to me, is being able to cope in extreme circumstances, to get up again and keep going even in the midst of extreme loss. What helps me be resilient is living in a community that shows kindness to neighbours. Knowing you're not the only one going through struggles helps. Having the awareness of the things that you do have, being grateful.

And another informant, Kate, wrote this:

But what do people understand resilience to be? I think I am struggling with the lack of a really good definition of what recovery is, what resilience is and how they inform each other. In my mind, recovery is the end point, the goal. Resilience, the vehicle that determines how fast and how successfully you recover.

Kate suggested the following definitions, linking resilience to external resources as well as individual qualities:

Recovery will be defined as the individually derived goal of each participant and denotes a place where that individual feels sufficiently past the effects of the

incident despite an altered life trajectory. Resilience is defined as the set of intrinsic characteristics that allows an individual to work towards recovery and will contribute to the rate and robustness of the recovery [along with resources]. Resources are defined as the extrinsic factors, such as financial, social and psychological support that contributes to the rate and robustness of recovery and promotes the individual's resilience.

In interviews, informants sometimes reflected on what 'resilience' meant to them.

I don't know that you can put resilience down to any one thing. I think it's a combination of a whole range of things. I think genetics. Some people are just more stoic than others. It's in their DNA to be more resilient. Upbringing and getting a balance in life. Some people can just go through one thing after another and then one day they just can't take anymore. They've just had too much hardship not always of their own making, sometimes just bad luck. I think we've all got a breaking point. Some people don't cope really well from the outset. Mentally more fragile for whatever reason. (Alexia)

Melissa referred to it as a 'hot topic', saying, 'I think getting a handle on what is resilience has proved really difficult'. Feeling less able to survive fire or flood, and protect property and loved ones, worried some survivors. Feeling older reduced their will to do it all again.

Resilience depends on what else is happening in your life and I guess as you get older it's more difficult to cope with everything ... You're also very aware of the work involved and thinking, 'Gosh have I got the stamina to be able to cope with this again?' (Janet)

Research suggests that post-disaster, about a third of people (30%) develop psychological disorders and many others show 'sub-clinical changes in mental health functioning after the event' (Carra & Curtin, 2017, p. 453). Some, however, do better, feeling stronger because of having survived and having been tested. Studies in post-traumatic growth focus on this positive dimension of experience (Carra & Curtin, 2017; Hatch, Cherry, Lu & Marks, 2015; Harms, et al., 2018; See also: <https://posttraumagrowth.net/rhonda-abotomey>).

Individual qualities considered important to being resilient included belief in self and a level of pragmatism and acceptance of what was within personal control and what was not. Two farmers spoke about conscious steps they had each taken to fortify the resilience of their farms.

I've worked for a long time on making the farm resilient. We've worked out our grazing program and our type of farming here. We're trying to make it as user friendly as possible and working within the environmental constraints that we've got because the climate here is really fickle and it's getting worse, whatever else you think about climate change. So I've accepted that and we work towards making our system here pretty resilient. (Peter)

We actually jacked our house up as we live on a floodplain ... We've got a levy bank right around ... I'll tie the small boat up around here ... and move the cattle perhaps ... I worked with [the organisation staff] who monitor all of the water around here. So I know what's going on. (Andrew)

Having a measure of control appears important to resilience, but for many with distressing experiences of previous disasters, the lack of any control was remembered

acutely (also conveyed in *Men on Black Saturday*). They no longer believed that, with enough preparation, people can be in control of their lives, and doubted themselves.

I used to think that we were more resilient or tougher than we actually turned out to be. I mean this event knocked us around more than I thought it would. (Eric)

Informant's views of resilience and the factors that contribute to it were frequently contradictory. Family support and community connections were said by informants to be critical to resilience, while others noted that ultimately, they were on their own:

At the end of the day, it doesn't matter how many supportive people you've got around you, in your head you're always alone. (Peter)

If you don't look after yourself, who else is going to look after you? (Murray)

Childhood experiences and upbringing was considered a determinate – by those who described grounded and loving families, or those who had ethics of hard work and self-responsibility ingrained in them by parents, or conversely, as a consequence of discipline so extreme as to be abusive. It is interesting that some pointed to a happy childhood and some to a deprived childhood as the reason for their resilience.

I think it's part of our upbringing ... you know you got to get up in the morning and you go and do things. (Scott)

It's ingrained ethic in you I think and I'm not sure whether people who haven't had that sturdy upbringing maybe would be as resilient. (Ellen)

I guess you go the nature/nurture thing. The family dynamics that I grew up in was fairly I guess you could say stressful with my father. He was old school kind of discipline. Then I guess when I left home fairly young I had to look after myself. (Murray)

I was probably brought up not to expect everything to be easy. I was brought up with parents that taught life isn't always happy, life isn't always good, don't expect to live like that all the time. Expect to tough it out at times. (Alexia)

A positive outlook was essential for some, but defensive pessimism was also seen as potentially life-saving.

People think being a pessimist is bad - well it's not - it can save your life ... That's the approach underlying our community engagement which is telling people to have a plan B and have a plan C and D. (Ruth)

Having options contributes to resilience, yet some informants saw their lack of choice as forcing their apparent resilience. Forbearance was inferred by those who remembered having no choice – one being forced to keep going by her role as Mayor, needed by the community, and another by her role as single mother, needed by her child. A farmer with 40 kilometres of fencing to replace laughed off notions that he would leave the farm, saying, 'You do what needs to be done'.

Well I guess it's just being able to soldier on rather than come back. You just cope with what life deals you and then being able to still function at a normal level. (Peter)

You've just got to soldier on. You've just got to do it. (Michelle)

Some felt the weight of the 'cumulative toll' of trauma throughout life, reducing resilience bit by bit. The 'Suicide by disaster' section reports on the decisions by some that enough is enough. In contrast, others felt stronger as a result of what they had done in the disaster, that they understood their reactions better, and that it offered a reason for their existence. Some people who survived the fire thought it was for a greater purpose and felt more confident to choose the unknown or follow less-chartered territory.

My brother and I are stronger and more resilient ... It's given us a sense of, 'We're here for a purpose' ... People say, 'You've done such amazing things in your life' and I say, 'because when a door opens I never say no, I just go straight through it with the confidence that I'm here because I'm meant to be here and I'm meant to do it'. (Barbara)

I went through Black Saturday. Pretty much, my life has always been dramas of one sort of another, situations where I've managed to get through it in one piece and I'm still standing so I consider myself a resilient person. (Murray)

Ironically, some identified previous disaster experience as the reason for their resilience in later disasters.

I probably strangely felt fairly calm ... I knew exactly what it would look like and smell like and be like ... Very sad but very familiar so I wasn't perhaps as confronted by it as some of my fellow volunteers because I had seen that sort of scale before. (Melissa)

Some were grateful and lived more fully for having nearly lost their lives.

Look at what you've got that day rather than looking back on what you've lost. (Barbara)

Disaster experience that was life-threatening was a double-edged sword, and there was a palpable sense in the interviews that informants had to draw down deeply on reserves of strength. Many spoke of putting one foot in front of another and taking one day at a time. It is hard work.

There's sort of that feeling that it's the gift we had to have. We made the most of it, because we want to see ourselves as resilient. (Kate)

You try not to dwell on it or you would get depressed. Some things you shut out or you would go mad. People have to put up with all sorts of harsh realities of life. (Alexia)

Resilience Scale

The Resilience Scale (see Appendix 4) was designed to assist informants to remember what happened across the years. The tendency was for people to focus on the disaster and then what was happening now for them. The Resilience Scale asked informants to rate their resilience on a scale of 1 to 10 with 1 being not at all resilient, and 10 being very resilient. Its value lay primarily in drawing forth reflections on each time period from the day of the disaster until 30 years after.

The scale defined 'resilience' as one's capacity to survive, adapt and thrive despite your disaster experience (adapted from 100 Resilient Cities www.100resilientcities.org).

Resilience Scale Analysis

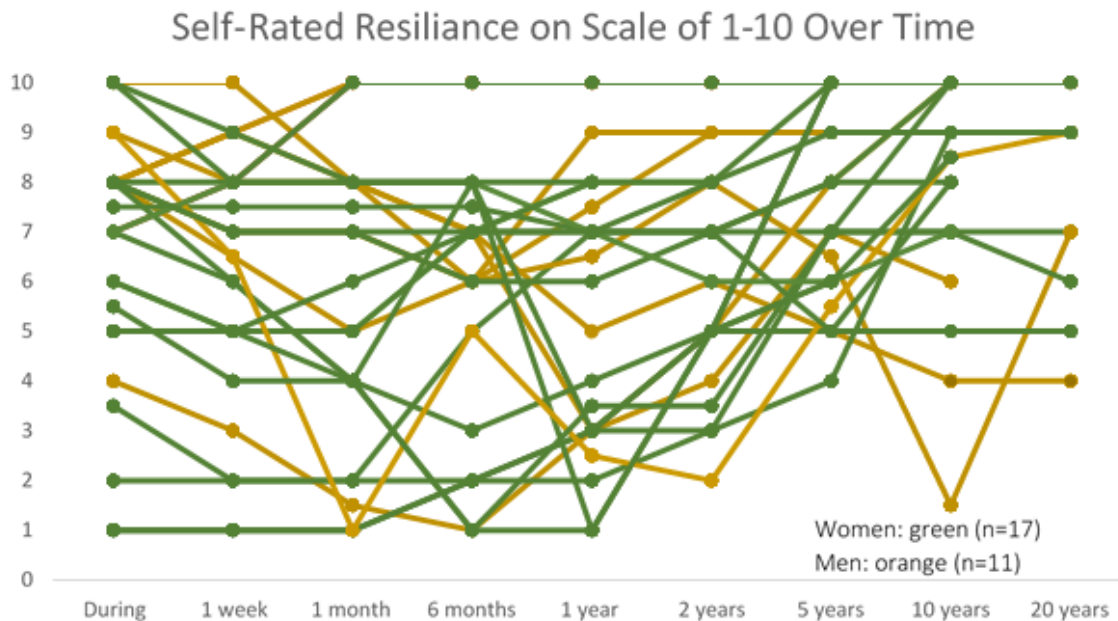


Chart 4: Self- Rated Resilience Scale

Using self-rated resilience scores, Chart 4 illustrates the range of experiences of 28 adult informants in the research. It includes the information from 17 female informants and 11 male informants. There are large variations in informants' ratings at each time interval. However, there are clusters of data at ratings 6 to 8 at six months, 2 to 4 at one year and 5 to 7 at five years. Also, of note is that 20 years after the specific disaster the range in how the informants felt still varied from 4 to 10.

Certain events were found to affect the final personal resilience scores by some informants more than others. Charts 5-10 analyse the effect of marital or relationship breakdown, loss of home or 'fencing, sheds or fodder', and whether an informant feared death during a disaster.

In Chart 5 (below), the blue line shows the averaged personal resilience scores from informants who stayed with their partners after the disaster (17 informants), compared to the orange line showing scores for those who separated from their partners after the disaster (10 informants). Chart 6 (below) shows the individual resilience scores for the same information. Those who did not have a partner during the disaster were excluded. When the personal resilience scores are averaged, it shows that informants who experienced a marriage breakdown after a disaster rated their resilience, on average, lower than informants who were still together with their partners.

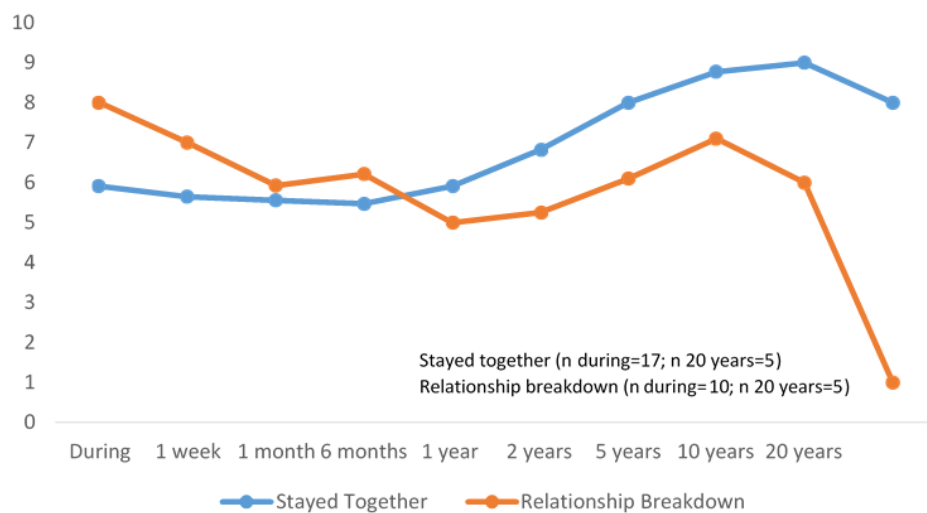


Chart 5: Average of resilience scores by relationship breakdown

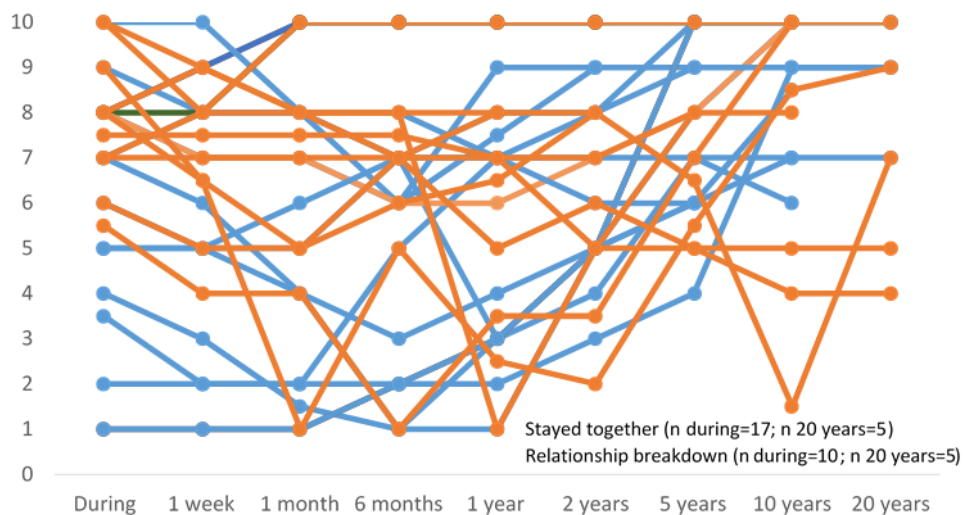


Chart 6: Individual resilience scores by relationship breakdown

Chart 7 (below), compares the average personal resilience scores of informants who feared death during the disaster (8) and those who did not (20). (Not all 56 informants completed the Resilience Scale.)

Chart 8 (below) shows the individual resilience scores. In the first two years after the disaster, the scores are similar. After two years, the resilience scores of those who did not fear death tended to rise. They finish with a higher score suggesting that fearing death can affect long-term outcomes more than short term outcomes.

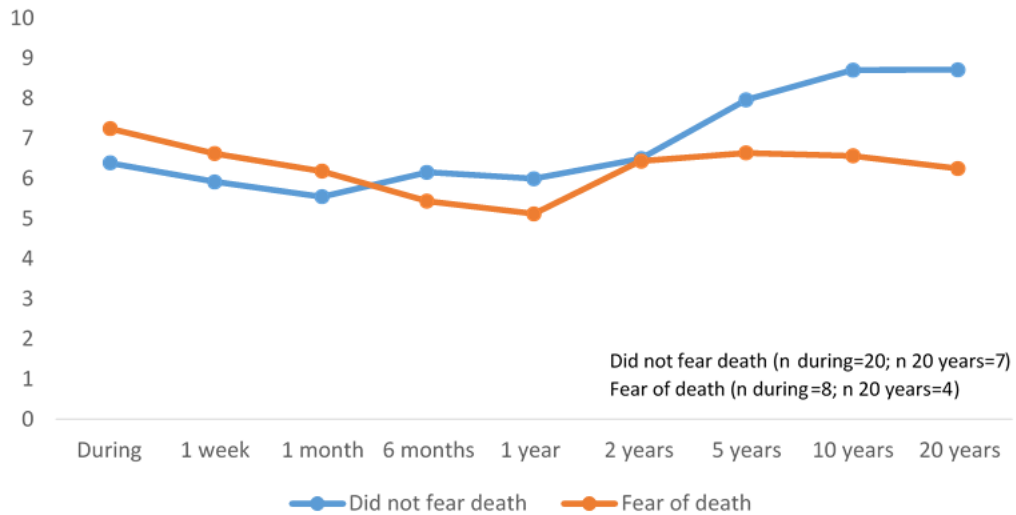


Chart 7: Average resilience scores by fear of death

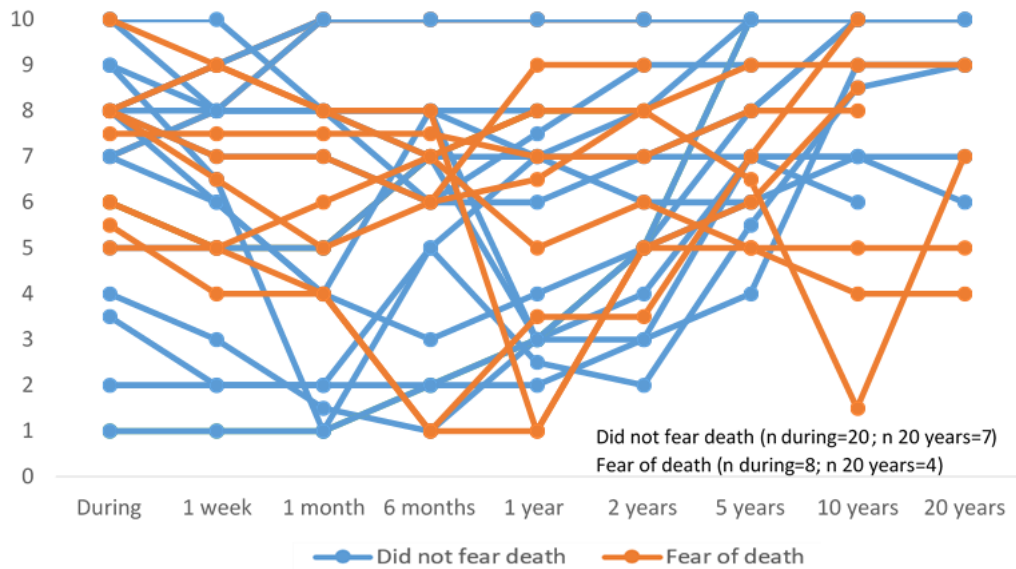


Chart 8: Individual resilience scores by fear of death

Chart 9 (below) illustrates the differences in personal resilience scores of informants who lost their home in the disaster (8), compared to those who lost fencing, sheds and/or fodder in the disaster (4), and informants who lost neither in the disaster (16).

Chart 10 (below) shows the individual resilience scores. It shows that informants who did not lose their home in the disaster generally rated their personal resilience lower in the first six months. After six months, the scores of those who had lost their homes worsened and finished with lower personal resilience scores. This may be due to the pressures of insurance claims and rebuilding six or more months after a disaster.

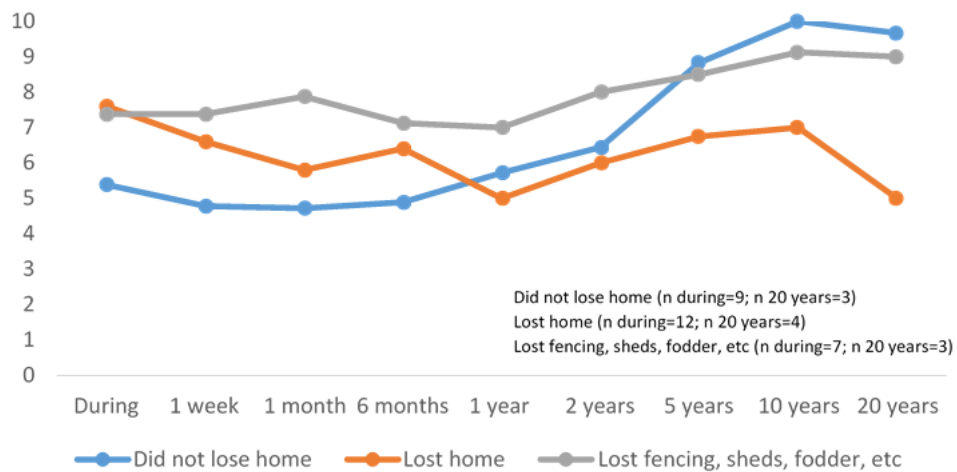


Chart 9: Average resilience scores by loss of home or fencing, shed, etc.

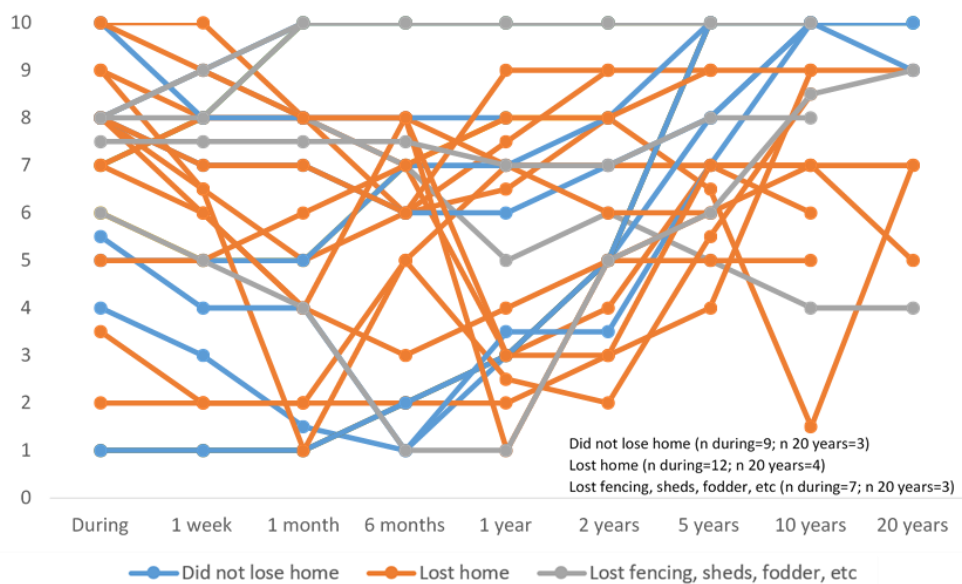


Chart 10: Individual resilience scores by loss of home or fencing, shed, etc.

Findings – Part 1: Perceptions of disasters’ significance

Aren’t you over it yet?

The months following a disaster frequently compound suffering as survivors struggle with post-disaster decisions, recriminations and conflict. The context for many is of shifting ground through temporary homelessness, uncertain employment, and unravelling relationships. Difficulty working with authorities adds another layer of stress.

In ignorance, people ask, ‘Aren’t you over it yet?’ Five words that judge another person’s *lack of* resilience and convey failure. This question was asked of survivors only weeks after disasters, and continues to be asked.

'Oh they just need to get over it'. That's not what you say to people who are still in that distressed PTSD state. And I had it said to me by somebody at a very, very high level, three years ago, and I was stunned, absolutely stunned that they would make this comment. (Elise)

This qualitative research makes no claims about statistics in regard to long-term recovery and resilience. However, the depth of suffering captured in these pages conveys the need for greater attention by all Australians to the impact of disasters on those involved. The Recommendations suggest strategies to begin this education.

Long-term resilience appears to rely on a multitude of factors. The sad and happy things that happen in each person's life sit alongside their world-view, their financial circumstances, their inclusion in society, and their physical and mental health. Lingering regrets, guilt, blame and loss haunt lives, and complicate recovery.

I've seen houses burnt down and people burnt so I guess that's the flashbacks ... You're still dealing with it. You're still running into those visions. (Murray)

Individual context for disaster experience

What was happening to people immediately before the disaster held implications for both the aftermath and long-term resilience.

I was having well more than the triple whammy at the time, I had the floods, I was a victim of Kennett's failed privatisations so I lost my job. My ex-husband dragged me through family court and then my thyroid decided to pack it in because of all the stress. So it was a really, really, tough time and I didn't have the financial resources to get back on my feet for a very long time. (Michelle)

Murray spoke of the effect on his children including a son with Asperger's Syndrome:

[There was] the Black Saturday side and the [name of] fire and then you've got the family breakup as well ... and that happened around the time that their poppy died of cancer. Then my brother died of a heart attack. So it was a really bad time. (Murray)

A cumulative toll

In this research, 14 informants had previous experiences of disasters or previous trauma. Opinion on whether this was an advantage or a disadvantage was split – and not along gendered lines. Some felt more equipped through knowing what would happen, or having a sense of their own strengths in a disaster situation. Previous traumatic experiences sometimes fortified people, and gave them strategies. Others felt more informed in a different way. They had an understanding of the damage that would be done to property, people, families and communities. Knowledge is power, but this knowledge brought dread and fear of having to face another fire or flood.

The 'cumulative toll' (John) came from other spheres as well as the disaster. Earlier life experiences had moulded mind-sets. The way women and men had integrated previous defeats and successes shaped the way they approached and dealt with the disaster at hand. Informants related prior experience of trauma through a lifetime of abuse, combat in war overseas, and 'stabblings, shootings' and massacres on Australian soil, and of attending one tragic road accident after another.

When that happens all your previous trauma shit comes back like a dam bursting. So you're straight back to square one. (Seth)

The indelible nature of a disaster experience may be passed down through generations. Informants often related advice from parents about what to do and what to expect from bushfires. Sometimes the advice did not hold in the circumstances of catastrophic fires. For others, the advice was sound. One informant remembered an neighbour who was 98 at the time of the Black Saturday fires. In the decades before this, he would travel around the neighbourhood, talking about the '44 fires.

His last experience of a major fire was '44. He was telling us then to prepare for a fire and what '44 was like ... so it's going to remain with us. I can now see what he used to say ... We were only young and we'd say, 'He's on about these fires again'. (Warren)

There was serious intent in conveying potentially life-saving advice. Perhaps, in addition to preventing deaths, it was equally meant to prevent a life time of dealing with trauma.

What happened



Chart 11: Infographic of informants at home at the time of disaster (each house=5 people)

There is a great diversity of disaster experiences amongst the sample. For example:

- Bert was 94 when we interviewed him. He recalled fighting a fire when he was 19 years old.
- Grace was 75 and spoke about a fire she fought with her parents when she was 17.
- Barbara was 19 when she fought a fire in 1962.
- Elizabeth spoke of a 1974 flood that destroyed their family home and their business.
- Janet spoke of two life-threatening situations in the '93 floods.
- Ricky and Dylan were 18 when they were interviewed about their experience of Black Saturday as 10 year-olds.

The commonality across every demographic - age, gender, place in society, disaster – is the indelible mark left by catastrophic disaster on the people who were caught up in it. When asked what they remembered:

Everything in minute detail. (Seth)

It's vividly etched in my brain. (Suzanne)

Another two young people pulled out of the interview on the day because the emotion was too raw – almost ten years on.

In answer to the question, 'What happened?' women and men drew on memories that were readily at hand, quickly accessed, and richly detailed, conveying emotion whether 10 years ago or 75 years ago. Some men were surprised by the emotion that brought tears to their eyes or caught their voices.

With me there is no recovery as illustrated today, I still have a tear ... Just a little bit embarrassed I guess in having a little weep. (Alex)

I'm surprised that I can't look back at it now as dispassionately as I thought I could. I thought I was able to sit back and see it's all over there in the corner there but it's still in here. (Bradley)

Whether flood or fire, women and men both described fearing for their lives. In this sample of 56, seven women and seven men were close to death, whether in fire or flood.

Both times we were told it wouldn't flood there was not risk ... We just kept putting [valuables] up as the water rose but there was a limit how high we could get them. (Jillian)

[The flood water went] higher and higher and higher ... We'd put things on top of the bunk beds and I can remember him saying ... 'Oh don't be silly, it won't come higher than this' but of course it did. [And] all of a sudden the cellar erupted. I was still there when that happened. The water shot up out of the cellar. (Elizabeth)

There was that terrifying moment [in the flood water] in a small car that stalled ... probably the most terrifying moment was actually driving in, I couldn't turn back, I had no choice but to go forward through floods ... it was horrifying. (Livianna)

Informants speaking about the '93 Benalla floods wondered if it was just luck that people had not died in this disaster.

They got a great big army truck in to evacuate the people who'd been standing in the water all night and I was watching from up the other side and this huge army truck started to go across the floodway there and it started to tip. Full of families in the back. So it started to tip over and the driver panicked and turned it into the flood water and didn't know there's a great big culvert there and went nose first down this culvert with the whole back of this army truck full of people ... It was too dangerous for boats or anything like that to get across they did take some but it was really dangerous (Michelle)

The families – including informants to this research – were trapped in the truck for two hours until a haulage tow truck came from the army at Puckapunyal.

We got on the back of this truck and there would've been four families. There also were children ... an elderly couple ... the truck was actually washed over onto its side so, two wheels – it just went like that! We were all on the back of the truck [and] the rain was just incredibly heavy. (Ellen)

In bushfires, informants spoke of suffocating smoke and the air on fire, and the landscape reduced to only black and red.

We were running for our lives. (Josie)

We crawled back home on our hands and knees ... You couldn't see your hand placed up to your face it was so dark. The wind was roaring. (Alexia)

By the time I'm standing in the driveway getting everybody in the car ... the fire was 200 or 300 feet in the air, just arcing up over the top of us like this and roaring like several 707s ... We literally drove through the fire ... in front of us it was all on fire. (Suzanne)

They watched houses burn and later heard who had died inside. Hearing of the many who died close by haunted people long after.

Our farm was on the left hand side of the fire and I stopped there and it wasn't until later into the night that I knew there were men burnt. That's the main thing I remembered. It gave me the shivers that I could have been on that side too. (Bert)

I understood that 10 people died in that fire - and close by - and that I was fortunate to escape. (Alex)

Informants told of encroaching bushfires and the weather conditions – the wind, the noise and the heat.

[Pointing at a map] The fire came in this direction, which was westerly. This is our property at the time, and the fire came across here. There was total destruction. There was ... a school here and the public hall here and the fire station a little bit up the road. Totally destroyed ... The fire front was cyclonic and over-headed like a wave. (Alex)

It was a beautiful sunny day, much like this ... We got in the car, came out from an underground car park and turned right to head towards our home which was due south and there was nothing but just black and then underneath it on the horizon just this deep red band ... From that point to where our house was probably about another three kilometres and by the time we got there the smoke was so thick you couldn't almost breathe ... You could actually see when the fire would hit a house, the smoke colour would change and you'd hear the glass break. (Cameron)

We ended up in the spot at night time where the two fronts met. There's a plantation there so the fire came out of the plantation from the south and then also came out of the bush reserve from the north and it surrounded us. So there was probably about four [CFA] units and we couldn't get out, we were totally surrounded. (Murray)

They saw and heard houses and trucks exploding – and defied later advice that houses don't explode.

It was a loud [truck] explosion and you know like in the movies they do that thing where ... you can see the shimmy? You can actually see that. I actually felt the blast and then the shimmy and the guy next to me just dropped to the ground. (Murray)

They heard the last words of people calling for help on the CFA radio. Informants spoke of seeing people fleeing – people who were later found burnt in cars. They rescued badly burnt neighbours or took them out of burning houses.

One woman drove past ... [she] was incinerated in her car because she was blocked by fallen trees. (Alex)

You were hearing reports on the radio and dispatching on the radio and it was terrible. Saying, 'you need to get a unit over there'. It was very full-on. We were hearing people being very emotional on the radio and knowing that those people weren't going to survive or didn't survive. We were hearing the whole thing right up to the last second of their life. (Murray)

[Emergency services] had the walkie talkies and they were blaring out. Oh God I heard some dreadful stuff. (Suzanne)

They heard cattle screaming and saw blackened, dying sheep. Terms like 'Armageddon' and 'a war zone' were used to describe the intensity of the disaster. They looked out over farms and valleys, disbelieving that anyone could still be alive, even as the flames roared towards them.

I thought 'I'm going to fight till the bitter end. We'll do what we can but this is massive. This is a really big fire. No-one's going to survive this' ... It looked like Armageddon. It looked like a different world. It was surreal. (Alexia)

The whole valley just erupted. It was horrendous. It sounded like 10 trains coming up the hill. (Jonathan)

I looked up the valley and we could see these great billowing clouds of smoke ... and it was coming towards us ... the fire was actually moving at 110kmph or something. It came from Belgrave with the wind behind it and it just came like a tornado. (Suzanne)

Any consideration of what constitutes recovery or resilience must be premised on a thorough knowledge of what people experienced. A realistic understanding of what it is like to be caught up in a disaster is critical to identifying protective factors and enacting policies to prevent or minimise loss of life and physical and mental injury. For individuals, when making a fire plan and writing intentions to leave, people themselves need to realise the implications of leaving when a fire or flood is imminent.

There was chaos for many who tried to leave, traffic jams, convoys heading in one direction, only to be turned in the opposite direction. Wind changes and multiple fire fronts removed any certain escape for many of those interviewed.

The wind changed three times and you watched the pattern change three different ways. So just when they thought they were safe it came back again and two of our friends lost their life in a car. (Annie)

The worst part about it was that all the escape routes were across the front of the fire. So you couldn't even flee in front of the fire away from it because you had to run the gauntlet. (Barbara)

It was obviously an extremely hot day and the wind started off I think from the north and then moved around to the south-west ... The first thing we knew was that we saw a heap of emergency vehicles heading south along Maroondah Highway towards Marysville. Then about half an hour later we saw twice as many heading the other way twice as fast ... We could see this huge cloud coming towards us and then we started to hear explosions. (Eric)

I can remember we'd travel along one way and then people would go, 'No, we can't go that way because there's fires up there' and then we'd turn back and they'd go, 'No, we can't go this way'. So it was really chaotic and confusing. I reckon it was a couple of hours driving out because there was this back and forth and then there was a big wind change and everyone screamed and then got back in the cars and we all just kept going in the one direction. (Hannah)

Adrenalin

Both women and men spoke of tirelessly working to save lives and property, and running on adrenalin.

I just fought like hell for 12, 14 hours on one strawberry and a glass of water, 800 degrees. (Aaron)

It was almost like a switch was thrown. The adrenaline cut in and we felt nothing for the whole of the rest of the night. We just ran and did what we needed to do and we knew we were cut off, we knew we were alone so it was entirely up to us to fend for ourselves. (Eric)

During the fire itself there were moments where we actually found it really exciting and exhilarating. It was a real buzz. (Alexia)

The adrenaline that comes back almost reinstates your power. (Jillian)

The adrenaline kicks in and I mean like I said it was full-on and we were surrounded by huge flames ... Days later you've got this buzz, you just can't sleep, you're just wired. (Murray)

Scenes in the immediate aftermath only emphasised the scale of the disaster. Massive trees were uprooted like seedlings, engines and cast iron stoves were turned into rivulets of melted iron. Steel sheds collapsed.

Do not believe a tin shed will not burn, there's no wood in those sheds, it's steel. That was the ferocity of the fire that the heat generated actually collapsed the galvanised steel shed. (Alex)

I drove into Marysville, [it] was two days after the fire and the first thing I noticed ... there were trees ... six foot round and many meters high laying flat that had been uprooted. And they were all laying in the same direction along the creeks and the roads. So that told me that the wind in Marysville was horrendous, and the fire was just being fuelled by that wind. (Jonathan)

An emergency management worker recalled the effect on people displaced by the disaster.

The lost faces and lost people – just not knowing what to do. So you've come to a relief centre and there's nowhere to go afterwards if your house has burnt down. (Nathan)

Struggling to keep pets safe

17 people lost pets in a disaster

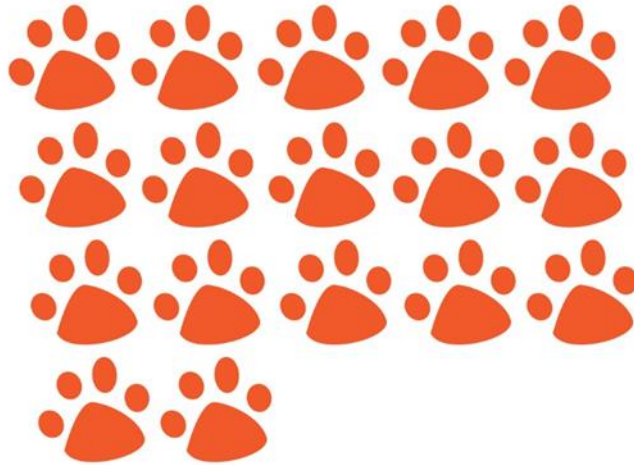


Chart 12: Infographic of informants who lost pets in a disaster

Concern for loved animal companions or family pets was common. Amongst the chaos felt by many as the disaster loomed, people judged the timing to put their pets in the car – on a day with temperatures in the high 40s, exacerbated by the heat of imminent bushfires. Frequently, a car crammed with essential items and other family members, held cats, dogs, birds, and guinea pigs. As always, cats proved elusive, sometimes delaying leaving as people searched for them, or causing people to return to save them.

We shoved all the pets in the car, three cats and little dog. We couldn't find one cat which was of great concern as we loved him very much. (Alexia)

While we were at the horses basically it all just went pear-shaped ... we looked around and saw smoke on the ridge from where our house was situated. So we piled in the car, tried to come home, was met by significant flame, and turned around and thought, 'What am I going to do – because the cats are still at home'. (John)

Decisions to leave pets – in the absence of other options – continued to trouble their owners in the years after.

I said, 'I can't save the cat'. I threw it in the bedroom and locked the door. Two dogs who I had with me until the fire front came through – I had to go, and somehow I left them ... I felt very guilty ... The Chaplain said it was just preservation of life response. (Luke)

I just didn't have time in the end, didn't have time for the dog or the cat either. We lost our dog and our cat. (Suzanne)

One informant was a permanent resident of a caravan park, and reluctantly decided not to evacuate when flood waters invaded as there was no option to take her two cats. In the caravan park, others had cats, dogs, guinea pigs and birds. Owners stayed at personal risk. In the aftermath, there was nowhere to take them, again forcing people to remain in an unhealthy environment.

We were told we had to evacuate because we had no electricity and we were walking in septic water, but it twigged we couldn't evacuate and leave the pets. So we decided not to evacuate. It was a choice but it was not much of a choice. (Jillian)

After the flood, Jillian spoke of an outside dog living in a car with the owner. Another informant displaced through bushfires said:

After the fires, we've got two dogs, two cats and a canary and nowhere to put them which makes life very difficult for us and I felt really bad for them. (Josie)

An informant who was a child at the time of the fire that destroyed her family farm and home remembered the day after the fire. Her pet cow had badly burnt feet and had to be put down:

I had a pet cow and ... her feet had been too badly burnt so she had to be shot. [My father] drove me up in the ute and made sure I got to go and say goodbye to her, [then made sure I] wasn't looking ... and put her down. (Melissa)

Another remembered that the family's horses survived because of a sprinkler system on the property where they were agisted. Free veterinary care was mentioned by some as a much needed and appreciated service.

This section inspired Recommendation 3.1, 3.2

A defining moment

Life changed. The disaster was a defining moment in many people's lives.

We equate a lot of things back to it now. That was before the fires or that was after the fires. (Warren)

I'm not saying life was bad but it just changed completely. It changed completely. (Suzanne)

Everything changed. Absolutely everything. The way you look at life, the way you approach life, the way you deal with crises, the way you look at the future, the way you deal with your children and understanding. And also the way you see the world and your role in it. Everything. (Lena)

No getting over it

The quotations below suggest that even if people feel their resilience is high, it co-exists with the knowledge and sorrow of what they carry with them and, for some, fear of it happening again.

I don't know if things have ever been totally OK again. Well I've never stopped thinking about it. (Elizabeth – 1974 flood)

I don't think you ever recover as in as if it never happened ... recovery is never over ... because you always really feel for the next incident. (Melissa – 1983 bushfire)

One day I'm really poorly and the next day I'm fantastic. I think there's increments all the way along ... I'm reasonably good now but for a long time I

could not bear to be in a forest. I remember driving ... through that beautiful tall forest and I was just creeped out, almost heart palpitations, almost a panic attack. (Suzanne – 1983 bushfire)

Recovery is life long and isn't linear and there isn't a finish line. And if there was, I doubt anyone reaches it. (Jillian – 1993 flood)

Some of our friends and their little babies got killed in the fire ... Those little babies that I was holding in my arms the week before the fire are gone. So that has a big impact. That doesn't go away. (Seth – 2009 bushfire)

I don't know that you ever forget. And it has to have a major impact on you ... I don't think there's any recovery. (Alex – 2009 bushfire)

One informant told of a shocking reminder that happened 47 years after she almost died in bushfires. Despite many years in high stress professional positions in nursing and the Australian Volunteer Coast Guard, she was shocked at her visceral response to seeing the Black Saturday fires on screens at the State Coordination Centre. As a qualified radio operator, she had been asked to go in for training to help specifically for bushfires.

Years and years later you think you're all over it ... so I went in to the centre for training on how a bushfire's managed. And the call comes in, you call up that location on your computer, you overlay the fuel rating, you overlay the wind direction, you have a look for habitable habitation downwind and you escalate it because then they decide whether they'll send a state asset such as Elvis we used to call it or one of the airborne staff down there to support the local brigades in their fire.

Well I couldn't handle the fire videos ...I hadn't realised how deep that trauma had actually gone and I'm sitting there crying my eyes out during the whole thing and I had to give up. I thought I can't work in a fire centre ... We live in great fear of that ever happening again. I don't think that's ever going to go away. It was completely out of left field.

The thing is, I could smell it, I could feel it. My body had that burning feeling as if the whole of my body was back in that experience. I was safe. I was in the state emergency control centre in Spring Street. But you can smell it and feel it and see it and it's almost as if the room disappeared and you're back there. (Barbara - 1962)

Long-term consequences of the disaster

The consequences of catastrophic disasters were broad, deep and long-lasting. They spanned financial, physical and mental health. Many informants lost careers, left church communities, or even marriages, behind. It changed the course of lives.

We had ... friends who had to leave the country because they couldn't cope. One of our friends who actually had to carry dead bodies, he couldn't stay in this country at all. He couldn't cope. He was so severely traumatised. (Annie)

Long lasting financial impacts

Financial loss was immediate and long-lasting. Some reported that it took years to recover – or still being exhausted – with heavy workloads still continuing into the future.

It sort of delayed where we were at financially by probably four or five years ... You feel like you have to be working for at least the next 10 years before you can even consider then scaling back. (John)

What goes on in community and council now, I just block out, I can't deal with it. I'm that exhausted, I can't do it. I mean, Black Saturday, the whole recovery just drained me financial, mentally, emotional, physically, spiritually, financially. So I have to focus on me. I'm supposed to retire in 15 years and I don't know how I'm going to do it. (Chloe)

For others, the journey has been even longer. After 40 years, two informants said they never financially recovered. Another is the same after a decade:

I've had to work extremely hard all my life to keep my nose above water because there was nothing in the bank account. It's always been hand to mouth since then. (Barbara)

We have long been reconciled to never buying new clothes ... It's a compromised standard of living and I'm quite sure people think we're fairly strange. (Elizabeth)

Financially I lost about probably \$250,000, \$300,000 ... I'm living in a shed on my block of land ... I've had to really do it hard over the last eight, nine years. (Aaron)

Homes destroyed



Chart 13: Infographic of informants who lost homes in a disaster

Family homes and belongings within them were lost by many (n=21). One informant continues to live in a shed, and another in a caravan through lack of money for housing. A third informant has substandard rental housing and fears future floods.

I went through the '93 flood and the 2012 flood ... The current flood warnings terrify me because the house I'm in has holes in the floor and parts of the roof might fall in. There's a big irrigation channel nearby. (Jillian)

Getting back to living circumstances and levels of resilience similar to those before the disaster was a very lengthy process for some and sometimes never achieved.

[After the '93 flood, how long did it take for the houses to be back to the way they were?]

Ours still aren't back. (Esther)

Ages. Years. (Michelle)

A long time. (Ellen)

For several people, the loss of mementos such as photos, family heirlooms and trinkets was a cause of great sadness, adding significantly to the loss of the home.

[Because of the flood] we don't have any photos, we don't have any school things, we don't have anything. And every single other thing of household items was gone. Absolutely nothing. (Elizabeth)

The stock and everything else that we lost had a fair impact on me. Not because they were tangible things and materialistic type things as much as the memories that were attached to them ... I've spent a lifetime and I stand for nothing. I've got nothing to describe me. That's what it is. Your trinkets describe you. (Warren)

For Jillian, the loss of everything through flood has had mental health implications, as, along with the negative impact, it resulted in an unexpected positive outcome. She stated that the counselling after the disaster allowed a diagnosis, and subsequent treatment.

I lost everything ... I panic every time there's rain and even though I'm not really worried about stuff I own, after the '93 floods I started hoarding things. (Jillian)

Careers damaged

Financial cost through the loss of family homes, cars and property was compounded by lost jobs or businesses. Careers changed, and with that, the way lives were lived out.

I firmly believed we would've been teaching overseas if the flood hadn't happened. (Scott)

I remember I had a job interview on the Monday or Tuesday and it was just the worst job interview but I could not focus and I was quite distracted and flat. (Hannah)

I had six months to go to finish my studies when the fires happened [in 2009] ... I finished in 2015 ... After the fire, I really wasn't in a good place to be applying for jobs ... the last couple of years I've decided that probably paid work's not going to happen again. (Warren)

[Because of the flood] our income was gone from the shop and we had no means of living ... So for the next 30, 40 years I was on my own with six kids because he was away working. He went back shearing and that was the only work he could get ... He worked away fulltime until he was probably nearly 70. (Elizabeth)

Entire farms were lost. Livestock was injured or lost, and farming infrastructure was damaged or destroyed. After bushfire, costs were enormous for some:

To do all your infrastructure at once on a farm, you've got bores, you've got machinery sheds, you've got machinery, you've got fencing and you've got the water troughs. You've got the tracks. You've got the vegetation, soil, cropping and fertilising and hay and fodder and everything else. (Melissa)

After floods, the loss of topsoil and nutrients was a further expense:

After that '96 flood that meant that I probably needed about a \$10,000 injection of fertiliser to get things back on track but I never had the money ... It put me off the farm eventually ... The bank wouldn't lend any more money and I had to make a decision to sell up to cover debt. (Jim)

Physical health – long-term impacts

The physical health of men, women and children was affected by injuries during disaster events and increased chronic illness in the aftermath. After floods, the residual mould was linked to respiratory illness.

What surprised me of course is what's on the other side of the plasterboard – the mould. The silt comes through. Everyone's got health issues and you wonder if that's impacted because of the breathing [in] the mould. (Scott)

My daughter struggled with asthma which we eventually nailed it down to this building ... My husband took up a floorboard and there was about that much mould on the bottom of the floorboard. (Elizabeth)

Contaminated water caused immediate health problems in infections and fever.

It was probably for three weeks that the toilets were on septic tanks and you were wading around in it and getting infected cuts. My sister got Ross River fever ... Dad was working for about a year after that and then got sick. He got the flu and it went to his heart. The flood probably didn't help. He was probably sick during the flood and had to keep working on. (Jillian)

After bushfires, informants drew a link between the illnesses that emerged in the following years and their disaster experience.

Four years after that fire happened I got diagnosed with Parkinson's disease and I really wonder about whether or not something in that environment that we went through was a trigger. (Cameron)

I know sometimes you can be tough in the head and the heart and your body still picks up other stuff and as stress and trauma can have an impact on people's bodies in ways they don't even know it's happening ... At the end of that year I was diagnosed with Non-Hodgkin's Lymphoma, a type of blood cancer. (Ruth)

More broadly, anecdotally, informants noted that deaths from heart disease and cancer increased in their disaster-affected communities, the connection to the fire suspected by many.

We also saw that weeks and months and years after, an increase in cancer diagnosis, and it was interesting along the road of the fire front between [two towns] maybe every second or third house someone there had developed a chronic illness and quite a few people in the past few years since then have died of cancer. (Ruth)

That thing about people getting ill and dying after the event ... I had a father who passed away after severe fires, the Ash Wednesday fires. It was about three months after he had a severe heart attack. Then you hear these stories of other people in Benalla that have had serious illnesses or passed away. (Scott)

[A friend is] still haunted by the fact that his mate died but also wonders ...was there a cumulative effect of stress post... There's two people I know from that particularly street that are now dead ... they died two years, three years after the fire. It will be interesting to see if what went on was alike, through those areas, whether there's been increased mortality. (John)

The 30th anniversary was interesting in that we all came together as a community and we realised there was a bit of a cancer cluster among the community, which I know has been the case with Black Saturday survivors too. (Melissa)

Mental health – long-term

Equally, deaths from suicide were observed by informants, and seen as a consequence of the disaster and its aftermath.

Something like 76 people committed suicide in the first four, five years after the fires. (Aaron)

We've lost two artists who've lost all their work in fires both of them suicided because they had no way of recovering their life's work ... We've still got lots of people who are going through PTSD and suicide as a result of what happened in 2009. (Annie)

People were dying. In the first six months, a local CFA member – I'm going to call them – came to my house like three o'clock in the morning, was struggling to cope, it was the six month mark and they had already been called out to 28 attempted suicides in our community, in our tiny community who was left here. And he said, 'I can do this, I have the training for this, but I am struggling. Isn't anyone realising what's happening here?' (Chloe)

These suspicions were not only in the first year or two following disasters, but included deaths eight, ten or more years past the event. Mental health issues were community-wide. As whole communities took the force of the flames or the floods, they also faced trauma of some kind as they tried to understand what had happened – to their sense of self, their partner, children, and the resilience of their community. The struggle to understand continues still.

You have courage up to a certain point and then there's usually something that just takes that away from you. No doubt it was losing the dog and losing the home and losing everything. It's the accumulation of stuff isn't it? (Suzanne)

When I think about the disaster it's the feeling of insecurity, of losing the structures and the environment that I felt were familiar and those roles and routines that I felt meant something to me and watching the people around me so grief-stricken, the burden the community members and my family were feeling. It's grief and loss, and it's destabilisation. (Kate)

Mental health issues affected people from the Australian capital to remote Victoria, and informants pointed to lack of understanding of the long-term nature of disasters' impacts – by government, by the health industry and by fellow Australians.

For the community it was a hugely stressful time ... Canberrans were in a huge false sense of security and I think that particular disaster really shook that to its core. (Cameron)

The mental health thing, the stress levels that I went through people shouldn't have to go through ... What governments don't realise, the effect might be immediate but it's the long-time recovering. (Jim)

They couldn't cope with it at the hospital. No-one understood in the medical profession what the trauma was doing to the whole community ... I've looked after a number of people who have come from fire-affected areas ... in the intensive care unit ... then raise that possibly there's an element of PTSD associated with their agitation. People look at you and go, 'Why's that?' You say, 'Look at his address'. And they say, 'Where's that?' And you explain to them. And you talk to the family and they say, 'We lost the house, we lost all the cows, we lost the dogs, he's never been quite the same since'. I think still people underestimate the impact. (John)

The experience unsettled women, men and children at the time, and the memory of the anxiety – if not the anxiety itself – remains.

There was too much change ... Sometimes when I was driving home from work straight after the fires through the blackened landscape I felt that I was screaming inside. (Alexia)

I was not shouting – but inside I was. (Luke)

Things were largely in a state of flux for a really long time, particularly because you try and work out what the heck's going on in your head. (Seth)

My feelings are very similar to Esther and Michelle ... I know I'm far more anxious and fearful than what I was beforehand after the floods. (Janet)

People acted out of character – sometimes way out of line with their own personal and community expectations of well-spoken, respectable business-*men*.

You can't do anything until you get paid for the house, and I'd kept the house insurance up to date. It was probably three plus months and we still hadn't been paid and I just made my mind up, I don't even think I told my wife, I got in the train and I went to the city and I went up into their office, explained who I was, said I wanted my cheque. They said, 'Well it's not that easy Mr Brandon, we can't give you a cheque' and said, 'You bring out someone senior enough to tell me that' and out came a guy who said he had the right title and he gave me the same story and I said, 'Pal, here's what I'm going to do, I'm going to start screaming in about 30 seconds and I'm not going to stop screaming until you give me a cheque'. And I started screaming and I screamed and I screamed. I had a cheque within an hour. But that's what it took and it destroyed me. (Mike)

Mike succeeded and, now with the insurance funds he was entitled to, he was able to move on in re-establishing the family. However, he clearly states the toll this took on his sense of self. The memory stays with him. Another informant referred to it as a scar.

I don't tune it out, I accept it, I know it's happened. It's just kind of like you've been there, done that, get over it. You've got the scars. (Graeme)

Informants spoke of post-traumatic stress disorder (PTSD), and in less diagnostic terms of being traumatised, anxious, depressed, more fragile, stressed, tired and exhausted. Grief also played a part (Harms, et al., 2015). Inability to sleep combined with nightmares wear people down. For many, there are remnants of this deep unsettledness.

It was that sense of hopelessness and it was just like life is just hard. (Hannah)

Just felt like I was going through the motions of life and all that and just wasn't happy ... I just didn't have any enjoyment in things at all really. It just sucked it

all out of me. I didn't have anything in me ... I guess I'm still going through it really. (Murray)

For a long time after the fire, I didn't have the same mental capacity as I did previous to that experience. My ability to enjoy life ... was diminished. (Seth)

I'm not sure that [the disaster itself] was worse than the aftermath because we couldn't sleep, we couldn't eat, we couldn't sit still and we ended up fighting spot fires in the district for probably two weeks or so afterwards. It took a dreadful toll on us and not just us, I mean it took everybody. (Eric)

I had horrendous nightmares for years. And I was always trying to save children and always to do with fire ... after a while I realised this isn't normal because it went on for too long ... and I can still have them. (Suzanne)

Jonathan described the effect of seeing evidence of tragic events:

There was another young couple, I think on holidays ... and their bodies were found in the bush up a dirt road ... the car doors on the car were open and folded back around touching the mudguards. So the wind had bent the doors right open ... There was a lot of tragedy. And, look, you take it in. What can you do? (Jonathan)

Women and men changed under the weight of all they had experienced and memories. They still had to contend with daily life. They were not coping as before with normal routines. Some men, in particular, were confused by their own vulnerability – and some blocked it out.

I've been changed by the disaster ... I had days I'd be sitting on the tractor and suddenly I'd burst into tears. On my own. Nobody there. I really wasn't too sure what that was all about. (Luke)

As a middle-aged tough white man probably one of the warning signs for me is that I would act out at home. So my little boy would be getting in my face as soon as I walked in the door because he wanted attention and I'd start to get agitated about that. I recognised that was because I was full ... It wasn't about my boy or home or anything else, it was about my own stuff. (Seth)

Marcie: He ... lost his temper very easily. He was very irritable and I think he probably at times found it difficult to relate to the kids ... Other people that were our friends were also, 'What's wrong with him? He's really like a bear with a sore head' kind of thing and I'd have to kind of make excuses for him...

Bradley: I was totally unaware of that, totally unaware.

Some people were not carrying out their responsibilities as before, and the sorrow and guilt were carried far into the future. Alexia gave the example of her husband, no longer coping with essential farming duties, and of her own heavy workload preventing her from noticing his neglect of animals on the farm.

My horse starved to death. I cried for a week. There were sheep that starved to death. (Alexia)

Hyper-vigilance also affected mental health

The hyper-vigilance on hot, windy days affected many survivors. Triggers for unease or panic were found in the smell of smoke or dry gum leaves, black landscapes, helicopters overhead or warnings of Code Red Days or increasing flood levels.

The smell of smoke - and even to this day and that's a fair while ago - really heightens my sense of alert. (Cameron)

Even now ... if it's a high fire danger day I like to just be all over the radio and know what's going on ...I live in a suburb of Melbourne now, but it's like, 'OK, I've just got to have it on ABC so I can hear what's happening' just in case. (Hannah)

I'm more tormented by that dry gumleaf smell and I smell it every time I go to a fire. It takes me back to Ash Wednesday actually, it was bad then, you could smell it then. (Jonathan)

I've decided to stay, however I do recognise that I become a little bit obsessive in that I go and look at the sky every hour just to check on smoke. I'll go and check all the equipment half a dozen times. (Luke)

There is a need for recovery authorities to address community-wide trauma in order to improve the resilience of individuals.

Community leaders carried a heavy burden

Women and men who were leaders in disaster-affected communities confronted another level of responsibility. They had to plan, recover and rebuild with their community. They had to be strong and available to give comfort and convey strength in the most difficult of circumstances. They also had to deal with the anger of community members who disagreed with them or were not ready to participate in the recovery but nevertheless wanted a voice in decisions.

Including volunteer hours we did about 65,000 hours across the state and in that time we contacted a lot of people and every one of them was pretty severely traumatised by their experience of the fire. In that process what that probably meant was that myself and the other managers in the project probably had to put our recovery on hold. (Seth)

Recovery committees had so much work to do, consulting with the community, managing the grants, doing the infrastructure as well as looking after their own physical and mental health – it was quite an extra load on these people. (Ruth)

I reckon we've lost an easy 10 years off our life from that, our physical life. Like those first five years, we worked 24/7. And I mean 24/7. I didn't have a day off. And you didn't eat properly, you didn't sleep properly, you ran on adrenalin. (Chloe)

You've handled yourself, you've managed yourself so well through that whole period of time after the fires. I had to, you had to, you had no choice, somebody in my position ... The public didn't need to see people falling to pieces ... Community are looking for certainty –the first thing – and hope. That's what we have to provide for them, as leaders. (Elise)

Informants talked of the benefits of using local leaders in recovery, and the hurt felt by community leaders when they were excluded from decision-making. Ultimately,

however, the large amount of unpaid community work done by community leaders – took its toll for most as they juggled personal, family and community responsibilities – all increased workloads as a result of the damage from the disaster. There was a lack of practical and moral support for these leaders. This is an issue for greater focus in future research and future post-disaster actions and planning. (See box below for suggested training.) Further, it is evident from informants and the literature review that community development pre-exists and follows disaster events and subsequent intervention from outside authorities. Support to individuals and agencies leading ongoing community development would increase resilience.

The long-term consequences of disasters are unquantifiable. Informants experienced significant financial loss, from lost savings or inability to work and physical health declines. The long-term, widespread mental health impacts of the disaster were unimaginable for most informants. The disasters changed the trajectory of most informants’ lives with some never recovering from the impact on their lives and communities.

Leadership training is a really good investment and this is talking about long-term investments and the recovery plans having A, B, C and D ready to go. People also need to build the capacity of community leaders and that’s not necessarily through formal community leadership programs but through other initiatives such as, well the CFA has community leadership initiatives as well, in Gippsland we have the community leadership program, there’s about twelve different community leadership programs around Victoria, that every year have twenty five to thirty graduates so I think that’s building the pool up of potential leaders in our communities. (Ruth)

This section inspired Recommendation 1.4, 6

Toll on family relationships

Relationship breakdown



Chart 11: Informants who linked relationship breakdown to disasters: Yes=8, No=17, Single=16, N/A=7

The cumulative toll of the disaster and its aftermath frequently led to separation and domestic violence. It broke down the fabric of family life through anger, neglect and pessimism.

He left. He walked off the farm ... I wonder how life would have been for me if the fires hadn't come through. Would my marriage have made it? Would we have been that same family unit? (Alexia)

Many spoke of relationship breakdown as common soon after – as well as years after – but nevertheless linked back to the disaster.

About two years later on one of the anniversaries of Black Saturday my Dad said to me, 'The divorces will be starting' and he was right about that, they were ... quite a number of them. (Melissa)

I heard from other people that I knew that had been affected by the fire similar stories, marriage breakups years down the track, depression, mental breakdowns, suicides etc. (Alexia)

His marriage has gone to pieces up too and I'm not saying there's a connection but you look at that brigade and there's quite a lot of divorces going on there. (Murray)

For a lot of people, tension and stress can play out in many ways and sadly this was one of the things I saw ... After a disaster you see everything from alcohol and drug abuse to marital breakdowns ... So, we saw that. (Ruth)

Annie reflected on the impact of two immense disasters on her relationship with Gary, and observed this was widespread in other relationships – and in her community and other communities.

Ash Wednesday in 83 and then 2009 with Black Saturday we were more separate because the understanding wasn't generated for family or husband/wife in many situations. Even I had trouble. I'm a pretty good communicator, I couldn't get through to Gary. He was in his tough man role. Took me a year to get through ... There was this divide and you just watched it everywhere, in every family, in every society, every area like Kinglake and here. (Annie)

Domestic violence increased

There was an observed increase in men's violence against women and children in the home after Black Saturday (Parkinson, 2011a). In this research, four women spoke of violence against them or their children, and other informants knew of it happening as a consequence of the fires. Louise spoke of her relationship before the fires, and how radically her partner changed as a result of their disaster experience.

Before the fires we had the relationship that everyone else wanted to have. [He] was the most doting, loving, kind, generous person and that's not who he is anymore ... I suppose I keep waiting for him to come back. (Louise)

This section relates mostly to Black Saturday as this was the context for the violence reported in this research. Three of the women personally affected who contributed to this research were also interviewed for the original research which exposed the new or increased violence against women (*The Way He Tells It*).³ Now eight years later than their first interview, and together with two other informants, they reflected on what had happened since.

The rants would become a nightly occurrence, I can't even remember but he'd just follow me around screaming at me. Post-traumatic stress just out of

³ Throughout this report, reference is made to our previous reports, *The Way He Tells It* and *Men on Black Saturday*, available <https://www.genderanddisaster.com.au/info-hub/research-resources/>

control. He'd be OK and then he'd unleash again and on and on and on ... It was just literally going through the motions waiting for him to leave ... I just spent the rest of the time waiting under the house, hiding places from him when no-one was home. (Lena)

The violence added to the stress of the post-disaster period. This is a fact overlooked by those who encouraged women to stay silent about the men's violence out of consideration of a man suffering PTSD or out of consideration of the man he used to be (*The Way He Tells It*). The expectation of women was that they not only cope with their own suffering post-disaster while helping partners and children, but accept domestic violence to 'give him some time'.

The thing about, 'What doesn't kill you make you stronger', that's a lie. It's not the truth because post-traumatic stress is cumulative ... I turned to stone for about a year or so. I went through life tip-toeing around because I couldn't actually do or say anything, because everything that I said was a trigger for him ... Don't know how I made it through those years. (Lena)

Authorities did not provide information about domestic violence in community sessions, nor about help available. Yet, through their own observations or roles, other informants knew of domestic violence in their communities linked to Black Saturday.

I know of a number of women that eventually left their husbands. Some were in abusive relationships. (Ruth)

I told you about a couple of cases where I know there's been domestic violence, there's been relationship breakdown and a whole bunch of really bad stuff. (Seth)

Two women who spoke of violence against them, said their partners also tried to sabotage them from leaving, or studying.

I'm worried that if I leave here he's never going to leave and he's just going to make more of a mess of the property ... Like he does things to sabotage it. (Louise)

He didn't cope with me going to uni, very needy and negative. (Lena)

The women spoke about violence against their children – not seen before the fires – and consequences over the years in relation to witnessing or being the brunt of their father's abuse.

Amy told me that he had hit her in the head a few times for no good reason – the reason for her escape seasonal working. He denied this but I did witness him cornering her and kicking her on one occasion. She distanced herself from him for a long time. He fought with the sons - physical punch ups which he hadn't done before ... I saw things. As I mentioned before there was one time my daughter gave him a bit of lip which she shouldn't have done but he got her in a corner and was kicking her and I was like, 'Stop it, stop it'. (Alexia)

The kids did cop a fair bit, not as much as me, and it would be quite random ... the other son got a smack on the face for wearing the wrong shoelaces to school. So, you know, he just became irrational. (Lena)

They also reflected on the children's now adult relationships with their father.

My thought is that [my son] would have just shaken off Black Saturday but the home environment before Mark left was very tense, very very tense. He was witness to some of Mark's aggression towards me and so was Emily and so was Brandon of course. (Kate)

There was a lot of ups and downs and my middle son had a lot of issues that he's still dealing with, like his father, with anger-management ... He's still dealing with that. (Lena)

At the moment actually he's only got one of our children [who seems to care about him]. So that's affected all of his relationships with the kids. (Louise)

Amy didn't speak to him, would not say a word to him for two years. (Alexia)

One informant related her partner's violence against the family dog, and associated violence against his son.

The dog copped it as well. The dog copped it a fair bit. He punched it for burying dog food in the garden, quite severely. And made my other son, hold her while he punched her. (Lena)

Seth spoke of the changes in his friend post-Black Saturday, and how this led to him sexually harassing Seth's wife.

That affected my wife to the degree that she was afraid of going out in case she saw him or if she went to a local party and he was there. So she just stopped going out ... He never would have done that before ... In his state of total disrepair and mental breakdown he thought that that was going to be OK. (Seth)

Family friends observed changes in men.

My friends have all noticed a difference in him and they're just like, 'He's just not the same person he used to be'. (Louise)

In contrast, one of the women spoke of friends' refusal to be complicit in her husband's abusive behaviour towards her five years later, during the separation negotiations.

But luckily he had friends around him that went, 'You know what, that's not OK'. So, we made it through, did a settlement and then I could actually start looking at the rest of my life. (Lena)

Women who observed the increase in domestic violence turned to looking after each other when police did not follow their code of conduct (*The Way He Tells It*). Two women spoke of setting up peer-support for women experiencing domestic violence.

Chloe: We had [women in DV situations] 'under surveillance'.

Elise: Because you had police here who ...

Chloe: 'She's dishing it out too'.

Elise: What about this do you not understand? It's physical and psychological abuse.

Chloe: A man's this big. They're this big. When we identified anyone in these situations, through peer-support, I'd do a ring around [to see] who did actually know this person as well. [Then] if they couldn't reach me or they couldn't reach them, there would be someone available.

Several women, including one of those not previously interviewed, spoke of counsellors becoming complicit with men, a situation reported in previous research (*The Way He Tells It*). Their partners presented in ways to convince counsellors they were not the problem and, in fact, that it was the woman causing marital issues.

He followed the advice of the counsellor for that couple of months ... and then once that was over he reverted. It was almost like while we've got someone to [answer to] he'll behave accordingly.... He went and saw a different counsellor by himself and he just came back saying that she told him that I'm the one with problems. (Louise)

Several women spoke of the immense value of having counselling available through the case management system that was in place after Black Saturday.

They were very, very helpful because the very skilled professional quickly changed the focus from what I could do for Mark to what I could do for myself ... and not blaming myself for what was going on for Mark, not having to accept Mark's aggression and violence towards me as my failure, and coached me through that process of ending the marriage. So that was really critical. He was amazing. (Kate)

During Black Saturday, there was an increase in domestic violence committed against women by their male partners. The violence was sometimes excused by community members – both women and men – as the partners were seen as suffering. This violence affected the partner's relationship with the children. There were mixed responses from counsellors after Black Saturday, with many not having specialist training in domestic violence. Men's new or increased violence became an additional stressor, a hidden disaster in addition to the external disaster, reducing resilience.

This section inspired Recommendation 11.1, 11.2, 11.3

There were some positive consequences

Some informants acknowledged positive outcomes from their disaster experience. Knowing their own strength in the disaster and resilience since has bolstered some survivor's confidence and sharpened feelings of empathy for others.

Mostly positive, liberated. I found my strengths, I found myself again. And I understood millions of people that I never understood before. In war-torn countries, how they feel and what they're going through and looking at all of the things that make us human, and understood how lucky, how absolutely lucky I am. It was just amazing. (Lena)

They felt good for having had a fairly unique opportunity to be part of a significant phenomenon.

I think in some ways it makes you a stronger person because it's another life experience you can tick. (Esther)

I could actually still get up and go to work. I had breakdowns and I'd make mistakes and shit would happen but I still kept on keeping on. I kind of found out how strong I could be as well after all that. (Lena)

There's been a couple of tight spots where we've got into a difficult situation and you've felt that rising panic and I've been able to say, 'Oh yeah, I know what that is, I can deal with it, I've got through it, I can do it again'. (Bradley)

Having been tested, they knew their own strengths and limitations. They took this new knowledge and used it to think about future decisions.

You learn your stress triggers and cope with them better. A bit more personal insight into your own reactions to situations so that you can better manage them. (Alexia)

You go through something like that and you find a core of steel inside of yourself ... 'I've survived this and I managed it and I didn't lose my cool. I'm worthy, I can cope with anything probably'. (Barbara)

That nearly broke me but now I think, 'If I can get through that I can get through anything'. (Josie)

I don't regret it occurring ... I really sit in the space where I thoroughly identify as somebody that's experienced posttraumatic growth. I see myself as capable, as resilient, as strong, as adaptable, and able to deal with what's thrown at me because I've had my limits tested. (Kate)

One informant felt more informed about the dangers associated with driving in rural areas.

I go out in the bush a lot with my four wheel drive and I think it's made me more aware. (James)

Some resolved to take better care of their health.

I don't take my health for granted anymore, I took up meditation, I took up more regular exercise, running going to the gym. So I put more emphasis on my mental and physical health now and looking after that. (Ruth)

Several couples became closer for the near-death experiences they shared.

From a relationship perspective, we probably listen to each other and are a bit more sensitive to each other than we were previously. (John)

It brought us closer together ... In all of this we only had each other to rely on. We thought about that and we were pretty kind to each other. (Josie)

My husband and I still think each other's OK ... And I think in the face of all of that, that's really an achievement. (Zoe)

[We're still together] and that's mostly because my wife is awesome and because we're very intentional about our communication. (Seth)

One informant pointed to changes, weighing up the positives and negatives and considering the different circumstances of survivors who lost loved partners or family members.

Those who have experienced it have a different outlook ... once you've experienced it ... everything changes. You don't look at things the same way again but it's not a negative thing. I think for us the awareness has helped form future decisions rather than being scared of things. So I think it has been a positive thing. [But] you can only make that observation ... where there was no great negative impact. (Nick)

A frequent response was the intention to be better prepared for future disasters, and many informants outlined actions taken to achieve this.

I want to be better prepared, I don't want to be in danger or my family in danger again because people don't tell me what's going on. (Janet)

Several informants resolved further to help their communities be prepared for disasters. They had devoted significant time, effort and intellectual capacity to collaborative development of community plans or resources. Their purpose in this community work is to increase disaster resilience more broadly. (See Appendix 6)

Findings – Part 2: What helps and hinders resilience?

What helped resilience?

The following section discusses factors that assisted informants' resilience. They include supportive family, education, emotional and practical support from others, financial support, returning to work, and connectedness and education in the community. It is fundamental to understand that having financial and other resources prior to a disaster provides an advantage in restoring property damage and giving options in relation to housing, employment and other stressors. How people are situated in relation to class privilege also brings benefits, for example, in negotiations of grants, housing permits, insurance payouts, etc.

Before the disaster

The seeds of long-term disaster resilience are planted in the immediate post-disaster period, and some informants believed that their positive life circumstances before the disaster also helped in their recovery afterwards. Having a good relationship, a supportive extended family, employment, insurance or sufficient money beforehand offered them some ballast and resources to survive a tumultuous time.

One of my favourite statements from Rob Gordon was, 'How well prepared were you for a disaster?' And I think that speaks volumes about how people cope in life. Are you educated? Do you have financial resources, or do you know people with financial resources that will help you? How are your relationships with your immediate partner and your children? ... They're the critical things. (John)

Thank god I had and still have a fantastic husband and supportive kids and siblings and friends, a network. (Ruth)

One informant stated his belief that a tertiary education was an advantage – not for the learnings or potentially higher income, but for the persistence and tenacity that is inherent in dealing with such bureaucracies as universities.

In the immediate aftermath

After such intense experiences as surviving a major bushfire or flood, being safe from danger for self and family took precedence. Once this was achieved, assessment of losses and meeting basic needs of food and shelter followed. Where homes were destroyed or unliveable, regaining shelter was mostly complex, involving temporary accommodation, moving off properties or leaving towns and areas considered 'home'. Frequently, it meant tackling a long and arduous clean-up and rebuild. For farmers, dealing with livestock, fencing, fodder and water presented urgent and weighty problems.

There was a divide between those who took quick action to get life back on track (mentally and financially), and those who needed time to think before committing to action. A sense of equilibrium was achieved for some in early achievements.

One of the things I think that made a difference was that we cleaned up very quickly and we started to rebuild very quickly. We replaced all the fencing and all the infrastructure that had been destroyed and we did that at an early time. (Eric)

We went to the real estate agent, got the place and that was Monday ... [It helped] having somewhere to put our stuff in. So once we moved into the place and then we could bring our animals back there and we'd made a home. (Josie)

I think the first few days you're actually functioning quite well, I was incredibly clear-headed. I remember waking up thinking, 'Well there's thousands of us burnt out, we're all going to be looking for somewhere to live, I'd better get into action straightaway. (Seth)

Others needed time to think things through, or did not have the personal or financial resources to act immediately.

I got no help. I just had to cash in all my superannuation. I had to live off my own funds for pretty much those years and wait for the class action. It's very upsetting, it's emotional, feeling ostracised and left out. I had my house plans drawn up but I hadn't submitted them and it wasn't near lock up so they only really helped people whose house was at lock up. I just fell through the cracks and I've just had to learn to fend for myself. (Aaron)

This section inspired Recommendation 2

Kindness – and practical help

The kindness of people in offering practical help was valued – and remembered.

The good of people, the good of people's hearts to go and help people that were affected that way was amazing. (Ruth)

Individual women, men and children reacted to their experience in ways that reflected who they were, the characteristics that defined them, the skills they could draw on and the resources they had. And people around them helped. In ever-widening circles from those closest to complete strangers, people helped in the ways they could – offering homes or kind words, help with fences or filling in forms. Informants spoke of people 'passing the hat around', and more than that, of 'genuine sympathy'. The kindness of others was not forgotten, even half a century later. As a 17 year-old girl in the 1960s barely escaping a life-threatening bushfire, Barbara recalled the kindness of strangers.

They just opened their arms. They fed us for nothing and gave us something to drink. (Barbara)

Grace remembered a farmer offering a paddock for the family's sheep after a bushfire in 1951 burnt their rural property:

There was a farmer over near Tamleugh East ... They didn't have the fire near them you see. [Dad] said, 'What a kind thought it was of him to offer a paddock for the sheep' ... I remember that little incident. A good-hearted farmer. (Grace)

Thirty years on, Mike remembered that family friends took them in when their house was burnt to nothing more than ashes on Ash Wednesday in 1983.

The husband was about my size and he just divided his wardrobe in half. He just gave me half of everything he had, half his suits, half his shirts, half his underpants, just took his wardrobe and split it in half. (Mike)

Community spirit and the selflessness of neighbours 25 years earlier was described by Livianna.

Our neighbours came in and lifted everything up, we were right next to the Broken Creek and they came in and sort of lifted all the furniture, all the stuff up to higher ground. (Livianna)

In the clean-up, something as simple as help with removing rubbish was invaluable – it solved a major problem. Informants spoke of the difference made by the provision of skips and even cleaning supplies.

Having it clean and tidy –having new fences and new gates and new stuff helped get away from that bloody black. Of course then the garden was beautifully green and the flowers are beautiful. That also lifts your spirits. (Eric)

In some places, community members organised free plant sharing to help people re-establish their gardens.

Local gardeners that felt that the one thing they could do was help people's gardens which had basically been obliterated ... people could go and get free plants. (Ruth)

The Natural Resources Conservation League ... They'd sent up plants and we'd just go along to all the markets ... It was just a rebirthing kind of thing. (Marcie)

Almost ten years after Black Saturday, Kate reflected on the solace she felt in believing the whole nation was with her and other survivors.

There was so much generosity from the Australian public ... I knew that just about the entirety of the Australian population was sat down at the bottom of that dark well with me, barracking for me, barracking for my children, barracking for my town. (Kate)

What predominantly helped was people. Their kindness stayed with survivors long after, giving them something to believe in – a society that they were part of. Gestures and symbols were important. Informants remembered with deep appreciation that Australians who were not affected by the disaster acknowledged the significance of what people had been through. Their sensitivity offered some comfort.

My colleague's son-in-law created a sculpture which sits in our [work] unit, and people walk past and I don't really think anyone really understands the significance – but I do. (John)

We were given quilts, and I've still got a quilt on Emily's bed and it says, 'With love from Albany in Western Australia, 2009. May your recovery be swift'. And you know that is still on her bed. And you look at these things that let you know you weren't alone. So, even though I felt completely hopeless at some periods of my recovery, I knew I wasn't alone. (Kate)

A lovely lady made me a beautiful crochet rug and she said, 'You're doing a lovely job I've noticed it'. And I'm going to start crying now. (Ruth)

Barbara remembered her nursing career at a crossroad as she struggled with her bushfire experience a year or so earlier, and the insight shown by the Matron. Her understanding and the minimal change to workplace arrangements allowed Barbara to contribute as a nurse for many years.

After you'd sit your final exams at the hospital you were put onto night duty ... but they put me into a bedroom that I couldn't make dark and it was very hot and I couldn't sleep. So I had this problem of very heavy responsibility at night but nowhere I could sleep and I wasn't sleeping. So I approached meltdown then and I went to the home sister and said, 'I need a bedroom that's got a blind that makes the room darkish instead of bright light and I need a room that's a bit cooler. I can't sleep in this condition'. She said, 'Tough, you get what you get' ... I remember thinking, 'In that case I'll have to resign' and I only had six weeks to go out of three years of training ... So I went to see the matron which nobody ever goes to do ... She looked at me and she said, 'Are you the lass that got burnt out' and I said, 'Yes'. She said, 'In that case' and so as a result of that I got cut a bit of slack and she put me on a nice quiet ward with a nice kind charge sister and nice patients.

I probably wouldn't have had that consideration if I hadn't been through the fire. So this is what I'm talking about, people pick you up and lift you over the hard spots afterwards. (Barbara)

Access to money post-disaster

Money was important.

It's so important to have bloody good funding. (Kate)

The oldest informant to this research, Bert, remembered 1943 when the bushfires he was involved in killed 10 firefighters. It was one of several fires in the 1943-1944 fire season that killed 51 people and caused widespread destruction (Wikipedia, 2009). He cannot recall any grants, only the kindness of neighbours. He remembers a call for donations in Wangaratta to raise funds for the memorial to the fire-fighters who died. A similar public call for donations by a local church after the 1974 floods was cause for consternation by an informant who was very badly affected. Although she was a member of that church, had six children and had lost both home and business, she received no money at all.

Grants from government and public donations have increased over the years. Informants mentioned receiving \$100 from Red Cross 20 years ago; \$700 for pasture from the dairy company they normally supplied. Grants were appreciated and remembered a decade or more on.

Public donations after Black Saturday were overwhelming, allowing extensive support for most people affected. Sadly, some people who were badly affected have never

received grants or financial assistance. Some did not accept available help, believing others were worse off. Others were unfairly excluded for technical reasons (see Discussion). This feeling of inequity greatly affected the resilience of some informants. Grants available were big and small, for housing, farm restitution, and education, or they were for clothes, food, fodder, tank water. They covered psychological intervention, alternative therapies (after an initial period) and holidays. After Black Saturday, Ruth recalled:

There was practical and psychological and spiritual support ... At the recovery centres, there were different tables - it was a bit like speed dating, so you can go from table to table and see different people and they would give you the support that you needed. (Ruth)

Grants to those deemed eligible were gratefully received, and came from all levels of government, donated funds, e.g. through VBAF (Victorian Bushfire Appeal Fund), through churches, Anglicare, Catholic Care and humanitarian organisations such as Red Cross. In addition, there were low interest loans. Money for study was a life-changing gift for one woman in this research. It allowed her to forge an independent life as provider for her family, and enabled her to help a community she loved and saw was in need after the disaster.

Those who had positive experiences of insurance payouts were able to move on to re-establishing homes and lives.

Our insurance company was very, very, very good. They contacted us immediately after the event, came here and did an assessment, went away and paid us out immediately, rang us about three months later and said, 'Is there anything you'd forgotten'. And we had and they paid us out for that immediately. Then about a year later rang us a third time just to make sure we were OK and we were by then. So we had the wherewithal to rebuild most of our destroyed stuff pretty much straightaway. (Eric)

Sometimes extended family provided significant funding or property to help with re-establishment. Or money for the bare essentials was self-sourced in the absence of other options:

I got all my superannuation out, built a shed, built a dwelling with a shower, toilet, kitchen and all that sort of stuff. (Aaron)

However funds were found, progress in re-establishment helped enormously. After several years' work, John and his young family were finally able to move back into their property.

Once we moved in there was relief that we were back in our own space, and we were in a house that pretty much functioned perfectly ... it was worth the effort .. When the house was up and you could step on the balcony and see the view, you're like, 'Yeah, that was worth it'. (John)

Michelle was relieved when she was able to buy a block on the higher side of the road, and build a house high above any danger of flooding. She makes her home available to people in her street when floods threaten.

I couldn't get rid of the fear so hence built this above flood level because I love this area and I don't want to leave it. (Michelle)

The class action – although eight years later and problematic in many ways– allowed a measure of financial relief for those who shared in it.

Shires and councils supported different community events and initiatives, including an Art Exhibition for the worst affected shires.

They had artists in-residence that came into school and the students did beautiful bollards about their interpretation of the fires ... Some of the affected bushfire communities have done amazing artwork. (Ruth)

Emotional and social support

The importance of appropriate emotional support in the recovery process was acknowledged by many people as key to recovery. This support came from many sources including workplace counselling, professional guidance, group support and self-help, while others found support in helping others.

Workplace counselling

Employee support was an option for some through their workplaces, particularly large bureaucracies including emergency service organisations. Within organisations, formal counselling was offered in a number of ways. It spanned one-on-one supervision, psychological counselling and formal peer programs, sometimes by phone. Some organisations offered counselling as a proactive strategy to employees who had witnessed distressing scenes.

They take it very serious I think because there have been several suicides within the [organisation]. (Jonathan)

My supervisor was a very astute guy. If I was struggling I'd knock on his door in Melbourne, bottle of red and we'd sort of talk about it ... I did that about three or four times. I was obsessed in telling the story and I'm sure many people were sick to death of me telling this story ... [Later] he came up and stayed with me for three months. I would have suicided I think if he hadn't have been there. (Luke)

Emotional guidance and professional expertise

Within the community, at times, people saw others suffering, and organised appropriate help.

People would come up and say to me ... 'Bill hasn't moved out of his house for a week, I'm worried he's going to top himself'. So I'd have a quiet word to the support counsellors and there might be an older pastor [who could] drop in and see how he's travelling. Also, he didn't need a DHS new graduate who had done social work but didn't know country people. He needed someone that was his age and that could go in and say, 'How are you going Bill? Can we have a cuppa?' (Ruth)

'Emotional help', 'moral support', 'spiritual guidance' – however named, both men and women found solace in telling their story. This resonates with our experience in interviewing people about their experiences. Having someone to listen and accept is appreciated by people with a story to tell.

Psychologists and professional counsellors helped people through. (See Discussion.)

It took me ages to get through that and had the counselling and [my counsellor] really talked me out of a dark hole. (Aaron)

I got a few sessions [with a psychologist] and that was particularly useful so I kept doing that. (Seth)

One informant drew on her professional life to advise not pathologising behaviours and instead 'acknowledging that trauma as part of who you are' (Hannah).

[People] needed to normalise different people's responses to an abnormal situation, that people might experience this – that's normal but you're all different *how* you experience it ... It started being this affirmation around behaviours not being pathologised, so starting to understand that. (Hannah)

Another pointed out that the context post-disaster for individuals trying to achieve psychological wellbeing is, in fact, community-wide struggling.

[At about three years after, people are feeling] drained, disillusioned, disappointed, frustrated, suffering ... Their world is upside down and everywhere they look, it's upside down. (Chloe)

Rob Gordon's presentations to community groups was greatly valued by many. Just knowing the way they were feeling was to be expected, and that is was a natural reaction to an extraordinary experience helped.

When Rob talks to you about recovery and resilience, because you know he's got huge amounts of insight and research into it, you listen. (John)

Having Rob Gordon go around the communities was such a fantastic initiative of having someone say, 'You're here but you're going to get here'. To pull them into a future that is not all about bush fires ... People would come out of the woodwork to come and listen to this softly spoken psychologist who knew his stuff because he'd been through Ash Wednesday but he also had a great way of normalising what was going on for the community. (Ruth)

Other invited speakers to disaster-affected communities were inspiring and remembered many years after for the positive effect they had. One informant was invited to speak about his disaster experience at service club meetings, and to write about the disaster as a lasting legacy for the benefit of future generations.

Emotional help from groups

Several people, both men and women, sought refuge in support groups, including their usual friendship groups. They spoke of informal support from work mates and colleagues, and groups that formed organically in response to particular events.

We keep an eye on each other, especially after a bad one. People ring you up and, 'How are you going' and, 'How are you handling it'? They see how you are ... That's something. The camaraderie – that's a big thing. So you know if you're having trouble you can go to them and talk to them and have a beer or whatever and just chill out and debrief ... They're people I trust, people I work with, people I know that have been through the same sort of thing ... You pretty much know the answer yourself all the time anyway. It's just a chance to vent, just to talk about it, just to get it out of your own head and talk about it. (Murray)

Sources of support were both immediate and short-lived, or spanned decades.

The safety of being in a group of people who have experienced the same set of circumstances leads to a freedom of speaking that may not necessarily be there if you're a one out talking about something that's happened to you that no-one else has got any concept of. (Mike)

There are times when you try to talk about it and then you actually get into a group, express your feelings and literally be an understanding or a sounding board for others who have never done it before. (Graeme)

There were friends who had gone through the same experience that I had and being able to sit down and process those experiences with those people that just knew was so important. (Kate)

I think it was one to two years later. [One of the guys who was] in the fire truck with me, he and his wife, we were all good friends, we decided that we needed to create some catharsis ... We put a tape deck on the table and a bottle of wine or whatever and we just sat around and talked. (Bradley)

Anniversaries allowed a chance to get together with people who, to some extent, shared the disaster experience.

Connecting with some of the kids that I went to school with ... around anniversaries [of Ash Wednesday] ... we'll talk about stories. (Hannah)

Two informants suggested a formal, systematic approach to community peer-support. Their advice was to use existing community members as opposed to qualified facilitators brought in from outside the local area. This would improve the resilience of communities, leading to better outcomes.

Peer-support can cover [so much] if you've got all these people in your communities trained up in emergency response, mental health first aid, suicide intervention. They are going to cross paths and be able to support people in a huge range of issues. That covers domestic violence, it covers mental health, it covers drug and alcohol, it covers suicide intervention. (Chloe)

Emotional self-help

The complexity of disasters' aftermath has been well recognised and documented up to five years after (Gibbs, et al, 2013; Zara & Parkinson, 2015). For many people, the layers of stress that accompany recovery after disasters demand attention if they are not to lead to ill-health. Self-help and self-care is important – Kate referred to it as 'putting the burden down'. The way individuals did this varied in the immediate post-disaster years and the techniques used remained in use in the years since. Some identified physical exertion through work or exercise as critical to stress release. Physically working to replace or repair the family home helped two-fold:

[It helped when] we built the house, we actually did what we could for the house. For instance my husband dug the foundations, I painted and stained everything. (Elizabeth)

[I started to feel OK when] I started making alterations to the property. I built on an extra lounge room and front porch and I built a massive big three berth carport. (Mike)

The release of adrenalin through strenuous exercise at the gym was, and remains, another way to cope with stress:

The exercise and the endorphins that you get from doing weights ... it just puts you in a different mindset I guess, it switches the mind off kind of thing. I have a bit of an overactive brain, it doesn't shut down ... I like swimming and kayaking and I find that therapeutic. (Murray)

Some sought adrenalin release in more extreme ways through motorbike riding or, in one case, through buying and owning a gun:

I don't even know why I wanted a gun. I didn't have any stock. So why did I want a gun? ... How do you put your life together? ... Guns have a kind of emotional connection, especially for men [and ...] for me it meant I wanted to have a gun. (Luke)

I got into racing motorbikes and that really helped with my post-traumatic stress, keep me in the here and now. (Aaron)

In complete contrast, others turn to quiet times with family, reading, holidays, turning the phone off, and solitude with hobbies or nature.

I would go up and sit on a rock and gaze out to Mt Buffalo and everywhere, it was a lovely place to sit for two hours every afternoon. The cattle would eat for two hours and then they'd get restless and then I'd put them back in and I used to think it was so peaceful. (Elizabeth)

Recharging the body or soul ... with the walking and the kayaking ... Listening to the birds chirping and the kookaburras and driving in the green bush. (Murray)

We want our koalas and kangaroos and echidnas. (Annie)

I booked four days up at the snow and I remember seeing white for the first time and getting out of the black landscape and I had tears coming down my face as I drove up that white mountain because I was out of the black zone. (Ruth)

When things got too hard for me, I could retreat into my spirituality as a way of trying to understand what had happened. (Kate)

At times, the person closest played an important role in allowing venting.

You can't underestimate the power of a good support structure ... My mum copped some of the most horrible behaviour out of me that anybody has ever copped because she was my safe person and I knew that I could absolutely crack the shits and scream and have a massive tantrum and she'd still love me at the end. [Sometimes now] I say, 'But Mum, it was totally out of line'. She goes, 'I totally understand'. (Kate)

The techniques that people used to alleviate stress or otherwise help them recover were diverse – emphasising the individuality of the people interviewed. For example, people were helped by breathing exercises, yoga, reiki, tai chi, neurolinguistics, compartmentalising, focusing, and meditation. They benefited from therapies including music, gardening and dog or horse therapy. They used their hands to make mandalas. They healed through making art, writing and poetry. The variety of

techniques used reflect the individuality of disaster experiences and what contributes to resilience.

We formed a group that did several community art projects including after school art for children, building an adventure playground, doing the thousand hands project in the main street of Marysville, doing the wildlife projects, and it just brought us together as a community, using art as a vehicle to re-identify ourselves ...It gave us more of a purpose, a common cause. And it gave us something to put our shoulders into which wasn't eating our own hearts out. (Kate)

Something really amazing happened towards the end of 2009 ... a local woman called Rita Seethaler, who is Swiss had played in Europe and in the Caribbean, in Caribbean steel bands. Rita decided that music therapy, which is her interest and her passion, could probably help a lot of people ... who had been traumatised by this experience ... So she started a steel band, brought a friend from Switzerland who was a maker of these instruments and formed a steel band ... It helped us rebuild psychologically and diverted us from the events that had occurred. So that was one of the biggest things, we found music therapy it worked, for us it worked a treat. (Eric) (See Appendix 6.)

Returning to work

Just like finances, employment was often disrupted by disasters. What happened early on after disasters set the scene for long-term recovery and people's resilience. Returning to work helped many people. Some who returned early to work, then chose to take extended time off later in recognition of the need to attend to individual health and wellbeing and to improve family functioning. Others took time off immediately to re-establish at least the bare minimum of life's essentials. Where finances allowed extended leave, some prioritised their own or their family's wellbeing. Often, it was women who left careers to provide additional care to the family unit or extended family (*The Way He Tells It*).

At one level, a return to work helped financially and this was frequently a priority for those affected by disaster. At another level, it was identified as helpful to recovery. Where employers were flexible and colleagues empathic – at least for several months – this was valued and positively affected informants' resilience.

Initially my workplace was really good ... [My boss] said, 'Just give me a call when you're ready to come back to work'. Which was helpful ... People were pretty reasonable and sensible for that first six to eight months. People almost tippy-toed around you a bit. (John)

Community

People found that helping others helped them too.

We did four months nonstop of raising money for the little friend of ours whose life was saved and she was months in the Royal Children's ... Our new collaboration is as a result of the bushfires and only wanting to work as artists together with healing themes. We're exploring these ideas, I'm getting choked up, to express an uplifting lightness for us that hopefully translates to other's wellbeing too. And then we had a whole lot of poems that went with all these. (Annie)

To be able to get out of my own bucket of shit and start to try and focus some energy or some pain out into the community, and become purposeful and

derive some meaning as far as helping to rebuild the town and making sure that others were getting the support that they needed – that was really important. (Kate)

I went to work, and I could help others, and in that I found strength. (Lena)

It was just good to be able to do something for someone else. To offer some very small measure of help. To stop the fires spreading to try and prevent further destruction, suffering and hardship. (Alexia)

The role of community in emergency management is increasingly recognised and formalised in policies and manuals (AIDR, 2018, EMV, 2017). Its role in long-term disaster resilience is complex. At any stage of disaster, from prevention through to long-term resilience, some people will gravitate to leadership positions, some will be quiet contributors, some enthusiastic participants and some will be less connected and less social.

Informants reflected on the changing nature of communities over time.

The way communities are structured is very different now. We don't connect the same way that we always have ... The café culture has replaced church a little bit where people go and see people and mingle ... The way we're able to volunteer is different now too ... We have made it a little bit harder for people to just become involved in their community. (Melissa)

You just kind of expect communities to hang together. I guess in days gone past people probably relied on their faith and whatnot more so whereas now you've got a much more pluralistic society so it's not always the case. (Cameron)

The immediate response to disaster is for communities to come together, privacy concerns allayed, enmities forgotten. Stranger or friend alike, people worked 'shoulder to shoulder' to help each other.

You see the good and the bad but the majority of people were just wonderful and I think it very much united all of us that went through it to that we all had that shared experience, relied on each other talked to each other and looked after each other. (Michelle)

One community after another has examples of extraordinary initiative to resolve life and death situations, not waiting for government to do everything. This is now formalised with messages from the emergency management sector that they cannot be everywhere they're needed. Rural and urban communities alike show the same initiative and cohesion in the face of disaster.

I'm a great believer in running those sorts of things from the bottom up, from the community level up. But the community has to be educated to be able to do that. (Warren)

Canberra has always been accused of having no soul because it's full of public servants but everybody really pulled together after [the fire] ... There was a really strong sense of community and that sense of community stuck around for a very long time because they'd all been through a common experience. (Cameron)

Genuine community consultation

Research has long identified that disaster exacerbates what is happening in a community before it hits (Domeisen, 1998, Seager, 2006). Sincere community consultation leads to better resourcing, infrastructure and resilience before disasters, and if disaster affects the community, the processes, knowledge and assets previously developed allow it to cope better with the increased demands. A simple example is having community buses and places to meet, as well as established trust.

Importantly, community engagement at its best can prevent some disasters. This is the most effective way of achieving long-term resilience. Prevention of fires has been achieved in one shire (and proven through reduction in fires over recent years) through a concerted and authentic effort 12 months a year. The trust of the wider community was gained by genuine consultation, through a community-wide survey and active participation by many people in committees and working groups.

We already had those community groups, they'd been going for a long time. We already had that trust that the people in the progress association could deal with this and they formed a subcommittee, a recovery committee after the fire. Whereas if you have got to start from scratch in traumatic times that's bloody hard ...

I'm passionate about reminding people about what happened on Black Saturday and that we do need to be prepared with climate change that there will be more events like that in the future ...

That's fewer house fires, unregistered burns and false alarms that we need to go out for; we hardly get any of them now. Fewer turnouts for people burning off when permits have come in. In the past people would have just copped a fine whereas for the last couple of years we've haven't had virtually anyone doing that because they know now that they can't burn off when a fire restriction has come in ...

We were able to just swing into action after the fire, we had done the community consultation in the easier times rather than post disaster so we knew what the community wanted for priorities ... 15 communities had been involved in developing the community plans ... So when the local government grants come out there's an evidence base behind what the community wants rather than two randoms that are really loud saying 'we need this'. So, this is part of the preparation. Preparation is not just having your own fire plan, communities need to be prepared as well. (Ruth)

This section inspired Recommendation 1.3

Educate community

Local government works alongside the CFA to ensure high levels of knowledge about fire behaviour and fire planning. There is a multi-faceted approach to prevention of fire through door-knocking, community meetings, events to flag the annual fire season start, open days, a community newsletter, local newspapers and increasingly, through information provided at fetes and community events. There is targeted education of new people coming from the city to live – an essential service.

The findings from informants show that efforts by emergency services to increase awareness of communities is effective and should be supported.

Community decision-making in the aftermath of disasters

When fires and floods do threaten communities, it is critical that emergency managers from outside the area consult with local community members. They have the local historic knowledge of fire paths and flood levels. The ideal approach involves

combining knowledge from locals and outside experts. Likewise, community must be involved in recovery efforts.

If it's not at the community level it's not going to work. (Warren)

If I was to be deployed to central Victoria because of a nasty flood then I can go and help but you're not going to rely on me as having the intelligence of whether the rising river will reach the first step of the town hall or whether it'll flood the main street. It's the local people and the local community that have got all of that intelligence ... You may have somebody who's been involved in the council say for 30 years or whatever and they're aware of all the council facilities for instance that can be opened. The school can be opened up if there's a flood, the local scout group. (Nathan)

In the aftermath, support of local communities through administrative assistance can sustain community decision-making and long-term resilience. After disasters, most affected people reach exhaustion at some stage and this simple step can be invaluable to prolonging their resilience.

The best example I saw of that was when I went to a bushfire support meeting ... where the council officers were there... They said, 'Right, this is the meeting of the local bushfire guys, you're here, this is what you've decided, here's your mission statement' and they read it out. 'Just to remind you our job is just to take the minutes, pay for the building and help you get things done'. And they stepped back and they let it all happen. It was bloody awesome. (Seth)

This was affirmed by Ruth, who identified the need for this in post-disaster contexts:

For a lot of the community and people, accounting's not their strong suit ... they want to build a barbeque shelter or memorial without having to cross the t's and dot all the i's. So if they could employ a grant administrative person to manage ... that could be really helpful and you would get the probity happening without that administrative burden. (Ruth)

Leadership also benefited from sound structures to ensure broad contribution to decision making.

Having good, strong leadership in the town. There was a section 83 committee set up which was put in place with community members to help rebuild the town. And that was very representative of the different sorts of people that were within the town. Through that committee there was a lot of disbursing of funds going on that made a lot of sense to community members. So having those good disaster-relief structures made up of community members. (Kate)

If there's something that's to be set up for the community it needs to involve the community. So if you've got a working group of maybe five or six people then you certainly need to have half your community involved. (Nathan)

Women and men in this study described achievements in getting their lives back, regaining some level of control, replacing essential and sentimental possessions, and doing 'normal things' as markers in their recovery.

Informants attributed their resilience to many factors, ranging from practical, social, emotional and financial support, and returning to work. Involvement in the

community and effective consultation with the community by recovery organisations played a significant role in personal recovery and resilience.

This section inspired recommendation 10.4, 10.5

What hindered resilience?

Loss of security or belief in government at times of catastrophic disaster continued to trouble informants, denting their resilience or trust in the role of government in future disasters. In earlier disasters, long-term resilience of survivors was hindered by survivors' feelings of being exploited, and the lack of genuine financial assistance. In any significant disaster, it seemed that media attention was assured, and not always helpful as it added to a sense of survivors' suffering being exploited. In the reconstruction period, community members became cynical when consultation appeared to be undertaken to appease them, and when their preferences were overruled by government employees.

In the fire-affected areas, people will just roll their eyes, and say, 'If it's council, I'm not interested'. [Councillors need to] get out there and start talking to [people], respond to them, answer their questions. If you don't have the answer, say, 'I don't have the answer but I'll go and get it and I'll bring it back to you. It may take me some time'. Follow up with it. (Elise)

Exploitation

Many informants spoke of their disaster-affected area being immediately inundated with media coverage. Journalists sought out 'sooty heroes and women with babes in arms'. Politicians addressed the media in terms of 'community spirit' and 'Australian resilience', whilst people looked on, devastated at their loss. It's important to recognise the devastating consequences disaster often brings to survivors. Young and old informants felt let down by rhetoric and promises of help that did not eventuate. Both government officials and media need to recognise the loss and consequences of disaster.

What was amazing was the politicians that came in and blew their own trumpets and told everyone how good of a job they did – but then there was nothing. (Scott)

Every time you looked at something in the paper or on TV there was Shane Warne and there was Mel Gibson and there was somebody else visiting the area and they got paid to do that. And there were people who had lost absolutely everything and they're paying celebrities to swan around and shake hands with them. (Elizabeth)

Although every politician in Australia came and visited us and wanted to have their photo opportunity and made promises, [they] went away and did nothing. So I'm a bit cynical about things like that. (Eric)

Informants close to their community sometimes felt unsupported by local and state governments.

We're running community stuff here and we need to, it keeps changing and we can't trust what government tell us, it just kept getting blown out of the water. Whatever they promised never happened and it was unrealistic and just irrational really. (Chloe)

We talked to [Opposition members] about recovery and how bad it was going. They got in, 'Oh if we get into power, we'll do something'. They got into power and no, nothing's changed. (Elise)

It's important to recognise the emotional consequences disaster often brings to survivors.

Recovery has some really unpleasant, difficult, dark moments in it and people don't really want to see that ... A lot happens in responses. Lots of lights and sirens and lots of media and lots of politicians and lots of things happen in that initial couple of weeks. Recovery itself is very quiet. Very, very quiet, and a bit lonely. (Melissa)

Some informants saw an educative role that the media could play to support survivors and prevent future deaths by showing Australians the reality of disasters.

Her uncle had been on the phone to his son saying, "We're only five minutes away, we're coming down to the community hall now". Well, he never made it out the door. It's having the stories and we've got the media now to be able to do this and bring those stories to life without being macabre but to have people aware and to be able to then make a decision. (Sandy)

The media's not into educating really though. I mean it's whatever's dramatic really. So the person sitting on their roof with floodwaters around them in North Queensland that's the sort of stuff that they'll have there ... Responsible media always has a position because that's what we rely on – if they could do something. (Nathan)

This section inspired Recommendation 5

Financial loss

It was apparent, particularly in disasters before Black Saturday, that donations for fire or flood-affected people were collected but not distributed to those in need. Once such case was of a religious organisation collecting funds for flood relief in the town, and this money was never distributed to the community. Elizabeth, a parishioner with six children, was very badly affected as the flood destroyed their home and business.

[There was] a table set up outside the church and they accepted donations and gave receipts and everything. To my knowledge not one person got a cent out of that collection. (Elizabeth)

Governments announced relief measures, but informants amongst the worst affected did not receive these funds.

'Well where did that money go'? It turned out that that money was given to the council to be disbursed and they just put it in their bank account... Whenever there's a disaster or fire or anything I say to people, 'Don't give money to a public appeal, find someone yourself to give it'. (Elizabeth)

What was being donated to the fund ... I don't know where that went. My family didn't get them anyway. (Barbara)

We heard things on the radio about how much the government was giving. Well you didn't see a cent of it. I don't know where it went. (Alexia)

Local Government, too, was seen as refusing to offer monetary aid

The Kennett government refused to give aid ... they said they were in trouble financially. Well, that's just rubbish. (Scott)

Even after Black Saturday where the amount of donated funds was high, one informant who suffered great financial losses was refused, and worse, was told to beg for money.

I ... was told to 'Go and shake your tin out the front of Bunnings' by one of the people in the council... Just treated like you were some sort of criminal, just after a big money grab ... It was like a circus. They just made you jump through hoops ... and made you fall through it, and just kept treading on you ... Anyone to do with the government or anyone to do with the council, anyone [who] wasn't traumatised or wasn't involved or wasn't here on the day, had just no idea what we were going through. (Aaron)

One informant spoke of his insurance company being very helpful, and unfortunately this was not the case for many others. People with insurance frequently had delays in payouts, or accusations of trying to claim things they had not owned.

I think there was some frustration with insurance companies because payouts didn't come through. (Cameron)

The insurance company said, 'We want evidence that you actually had a refrigerator'. This is the nonsense that went on after the fires. (Barbara)

We were insured with this company and the assessor came out, looked at the rubble and he said, 'Couldn't possibly have been worth what you said it was worth'. (Suzanne)

Those affected by the Benalla floods still grapple with insurance premiums being unaffordable. They also remembered that after the flood, there were quibbles from one company as to the source of the flood water. It seemed like a device to avoid paying out. Another remembered the quotes given for flood insurance impacting on her resilience to another disaster in the future.

The shop was absolutely devastated and there was a fight going on whether it was flood waters that flooded her business or storm water. (Livianna)

People have just been through a flood and it's going to cost you \$10,000 for flood insurance. (Scott)

Policy and Procedures

People in civil society look to governments to fulfil their obligations to citizens. Lack of warning or adequate information, and perceived lack of expertise in managing catastrophic disaster, unsettled people. It removed a sense of security and resilience.

The ferocity of disasters like the Canberra bushfires showcased the lack of resources and knowledge. People were unaware of the danger or of what to do, which ultimately led to the death of four people and almost 500 people sustaining injuries (Allen, 2013)

I think at times you do have to have mandated evacuations ... If they had known beforehand how far, how bad the impact on the suburbs would have been, they could have enforced mandatory evacuations to protect life. (Cameron)

In 2018, as Benalla faced a serious flood risk, six neighbours in one of the worst affected streets in previous floods stated they would have appreciated more information from local emergency management authorities, for example, about sand bags and evacuation centres.

I was thinking well if it's going to be that bad then there'd be sand bags around that we'd be informed about, which we were in the past. That hasn't happened. And ... they haven't taken the fence down outside the showgrounds. So you look at that fence not going down and think maybe it's not going to be that bad ... you can't deny that you're anxious about it. I think the information ... that we've got access to is probably a lot better than it was in 1993. I mean obviously the radar since last night, I've been checking and looking at what's coming. (Scott)

While weather information has improved, uncertainty about reliance on emergency management authorities revived anxieties from previous disaster experiences.

In the aftermath, lack of confidence in authorities was compounded by an observed insincerity in government dealings with disaster-affected people. Governments often showcase the inclusiveness of their processes through community engagement. This is a point of contention where people are asked for opinions which are then disregarded, leading to community members feeling ignored and patronised.

I'm more than suspicious. I mean it [community consultation] was cosmetic, unquestionably cosmetic. (Eric)

Good process and good systems about community consultation? They weren't adhered to because of the sense of urgency. (Seth)

And even though they did all the community consultation stuff, the dominant feeling is that that was all bullshit and the large post-it notes that were stuck around the room did nothing but go into somebody's [car] boot and stay there. Because there's nothing that we asked for ever really made it in any sort of meaningful way... 'You were asked what you wanted, we just chose to ignore you'. (Kate)

Whatever happened to that warehouse full of butchers' paper and stick-it notes, because there must be one by now. We've had that much consultation. Where did it all go? What happened to it? Because nothing's happened. (Elise)

Informants spoke of trying to meet the 'top down' directives of how to attract funding into their communities, and to demonstrate how donated money was used. Their efforts were not always respected.

DHS came along, actually it was VBRR in the beginning, and said, 'What you guys need to do is put on a community event because we've got all this money ... and unless you spend it you're going to miss out'... So it's up to you to design a community consultation process and make it happen'. So we did that... The night before it was going to happen, the people in government sacked our consultants, took it over and decided to run it themselves. (Seth)

It remains problematic for many survivors in areas affected by Black Saturday, that preferences of local people for how community buildings should be rebuilt were overridden by government decision-makers. The long-term consequences for rate-payers are that it is more expensive for them. The physical presence of buildings many people did not want continues to rankle.

Committees and community got told, 'We're not doing that, you're getting this' by government people ... We got a huge list of new assets that sent the rates sky-high. (Elise)

Murrindindi Shire now has financial milestones around its neck that it probably will never pay off. This was a consequence of decisions being made that did not involve the local people ... A multi-million-dollar basketball stadium in Marysville that the community didn't want but got. It costs more to keep the doors open than they could possibly ever in a million years make. (Eric)

We've got this massive hall ... this great thing ... it's all sitting there now and let out for weddings ... Just doesn't really contribute anything to the district ... At some of the supposed community consultations ... I started to see that this thing was just not what we wanted ... I started to see these things going off the rails ... Before the fires, people's houses were often little ancient weatherboards and the people were scratching to pay for that. Now they've got this 40 square solid brick mansion. They're going to have to run it and if they were having trouble running the little weatherboard house, they're going to have bigger trouble running the big house. (Warren)

Informants pointed to long and arduous procedures when applying for grants, with time being a key factor. Their focus in the immediate aftermath was on providing a safe space for families and re-establishing normality. Grants – essential as they were – were problematic. The requirement that applications be completed in short timeframes added to the pressure.

You're only given a certain period of time to apply for grants and you've got to send in evidence from photos and things like that. (Jim)

Stipulations and regulations also proved to be a burden with many people having to meet new standards to re-build housing. While this is essential in fire and flood affected areas, it did not appear to be uniformly required or monitored and this was cause for delays, increased costs and difficult bureaucratic processes.

They were saying, 'You need to build to at least 40, blah de blah'. My neighbour's house was well advanced at that stage. I said to them, 'So, how can you explain that to me?' and they went, 'We can't' and I said, 'So, are you going to do anything about it'. They said, 'Well, you'd have to complain'. And I said, 'So, you're up here, you recognise there's something wrong, but you want me to overtly piss off my neighbour' ... But the crux of the matter is that if everybody built properly, and was supported to build properly then [there wouldn't be a problem]. (John)

People wanted to get back on with their lives and in some instances I know people that were basically hamstrung for want of a better word because their house was either gone or badly damaged for up to 18 months: 'That kind of put my life on hold'. [It] really, really does people's heads in. There was a real sense of frustration probably six months afterwards. (Cameron)

A lot of people threw up their hands and have left the area, they have said 'I can't do this. It's too much red tape and bulldust.' (Elise)

People deal with [council] for a very long time with very difficult discussions about rebuilding and permits ... If I had an observation about how can we not stretch people's resilience, I think if anything we've made it longer and harder to recover ... it's two or three years before people have been able to rebuild ... It's about meeting all the regulatory requirements ... It means you're renting ... you're living away from your home ... you're commuting to and from school or work ... our outcomes [years ago] were better because we were ... in the new house and moving forward [earlier]. (Melissa)

Community

The often lauded 'resilience', 'Australian spirit' and communities working together in times of disaster are, in reality, short-lived. An informant spoke about no-one coming out unscathed from disasters (Hannah), and another (Melissa) said that, after initial media attention, very soon, 'the media and people outside your community don't care about the emergency any more'.

People often said if you can bottle that experience of community and working together, what can be done now. But everything quickly goes back to people doing their own thing. (Scott)

Other people that I knew had been affected by the fire similar stories, marriage breakups years down the track, depression, mental breakdowns, suicides, etc. Whilst in the short term communities come together, it seems that it has an after-effect felt for years. (Alexia)

Thefts were noted:

Someone had taken all the copper piping, all of the tool heads like the axe heads and things which could have been recovered had been gone ... Anything that was recoverable had been removed. (Barbara)

As this is the reality, it seems counter-productive to only acknowledge the immediate cohesion of communities. Media saturation in times of disaster fails to educate Australians that recovery will be a long and difficult task for communities, and acknowledge the depths of despair of people with great losses as a consequence of the disaster. Indeed, much research outlines the anticipated ups and downs of communities as they move through stages of recovery.

What happens in the disaster and its aftermath sets the scene for long-term disaster resilience, and one informant observed that the initial resilience of disaster communities is quashed by government policies that replace their work with outside professionals taking over.

It's how you respond that initiates the recovery ... When people get told '... You go away, we're going to do this recovery.' No, you want to minimise that. And that's happened everywhere that I investigated. The same thing happened after Cyclone Tracy ... the floods at Shepparton ... Ash Wednesday ... Toodyay in Western Australia, in the Lockyer Valley after the floods in Queensland, in Dunnally after the fires, apparently after the fires in Tathra – probably happening there now. (Elise)

The sense of being at the whim of government decisions was clear from the narratives. Community members reported having little power over key community decisions. (See 'Genuine Community Consultation'.) Two informants suggested that a critical hindrance to recovery and resilience was the cessation of services after two years. They noted an increase in suicides around three years post-disaster, and linked this to the withdrawal of support.

There was a sense of community wanting support ... and wanting to help themselves in a lot of cases, and other people wanting to help them, but it was squashed ... They felt powerless in their own lives of being able to go forward. And it really hit a lot of people in that two, three, year period [when] they got told that funding had stopped for psychological help. (Elise)

Year three was the year of the suicides. We had five in a row, in six weeks, completed suicides ... just suicide, suicide, suicide up here on the mountain. Just bang, bang, bang, bang, bang. I was brought to my knees ... That was probably when the community was at its absolute worst, at year three ... Exhaustion, frustration. That's when everyone absolutely lost the plot. I think services were pulled out then. (Chloe)

In rural communities, everyone knows everyone and there can be problems pre-dating disasters. Communities are full of cliques and can be alienating to people who don't fit in.

If they were in the football team or the football club or they were in the cricket club and they were in the netball club all were intertwined in together ... In the event it alienated a lot of other people. (Graeme)

Before Black Saturday it was a very [CFA] tight brigade, it was a very family orientated brigade and afterwards it fragmented. It went into little cliques, little groups of people that were not dealing with each other. (Murray)

There were meetings being held that the majority of the community groups knew nothing about. They were shut out because there was a clique that formed. (Elise)

Conflicts lasting generations can divide families and towns.

You can have personalities and leadership and then can have the 'Hatfield and McCoys' old battles that have been there for years. (Ruth)

There can be conflicting values between old and new residents, farmers and tree-changers, activists and the old guard. A shared disaster experience can dissolve such animosity.

Ironically ... there would be the lifestyle hobby farmers and the more traditional farmers, and they would be talking to each other and never before did they have a reason to have a chat if not for the fire and recovery that they had in common. (Ruth)

Or it can explode veneers of civility as people seek to blame someone for the damage wrought by the disaster.

In my town, I'm no longer anonymous. Everyone knows me as that guy that came round and cut their tree down or did this or did that. So that means that

you've got to watch your back a little bit. It means the friends that you have, good friends you keep them close. (Seth)

Unfairness

Deep divides in community emerge through perceived unfairness of who received grants and who didn't, or who took resources they had no entitlement to. This led to fractures. In one community, the long-standing annual celebration of the football grand final stopped, with Josie commenting, 'Well that would never have happened before the fires'.

There was a lot of people in the town where they had really old, falling down houses and the fire missed their house and their neighbour's house got burnt down so the neighbour got a brand new house and they didn't. So I know that there was a lot of divide in the community. (Hannah)

This observation was repeated often and a cause for reassessing people within the community, and despairing about human nature. It sometimes resulted in changed friendship groups or avoidance of community. (See Discussion.)

One of the disappointing things post fire was a bit of a split from the community. So there were people that thought that they'd lost everything and they were more deserving of more aid than other people. (John)

One informant moved away with her family after nine years because rifts over the deserving and undeserving continued and conversation focused too heavily on the fires. Another observed that, 'Even now [a decade on], I know that there are a number of people who have shifted out of the area'. A third informant moved away with her family six years after Black Saturday.

Our own individual recovery and our recovery as a family didn't take place until we moved away from Kinglake ... We talked about the fires, don't get me wrong, oh God, to the point where it just made you sick. You'd just think, 'Is there not another topic in the world that we can connect to?' (Zoe)

Changed community after disaster

There was a tendency to blame decision-makers.

I did know of some community leaders that, through stages of grief like shock, denial and anger, that in the anger stage some people would take that out on the nearest targets which could be the community leaders stepping up. (Ruth)

This resulted in an immense burden on community leaders, whose roles included managing media, problem solving and very long hours of work.

I was carrying a fair bit of grief ... But it's my community I wanted to be there for them 100% and people were suffering and traumatised ... I was taking phone calls sometimes ten or eleven at night. (Ruth)

Communities changed as a lot of people moved away. There were many reasons, and sometimes, it was to avoid having to face another disaster like the one they had survived. One informant referred to what the community had been through as a 'baptism of fire'.

In communities like this one where there's a number of life stylers and dairy farmers ... so with new people that are coming in there might be a fifty percent

churn every five years [and there are people who] haven't been through Black Saturday, the baptism of fire ... You can't just expect people to be aware of the potential damage of bushfires as there can be complacency because they've moved from Melbourne. (Ruth)

We've lost some of our really, really very valuable, very able people, friends. New people have come in and they're good but it's different. Yeah, the community has changed. (Eric)

There were about probably 5,000 or so ... in the Kinglake area before the fire. Now I reckon there'd be flat out being 1500. (Seth)

Communities changed through people leaving and new people coming in. Changes in real estate values or fears of safety following a disaster can lead to a different kind of community. In addition, the lower connectedness in communities reduced resilience to a future disaster as local knowledge is lost.

It was a town where you lived there forever. Once the fire happened property was cheap, so in addition to the other problems, we also got kids that came from really poor backgrounds move up because it was cheap property. So it became different problems as well. (Hannah)

The feel of the caravan park changed because families with children moved out and stayed out because of the flood, and it wasn't the same afterwards. (Jillian)

Well we had that little house which we adored, the view we adored. We really loved where we lived and we had good neighbours and we played tennis at the little country tennis club. Yeah, we had all those connections. [After], well I'm not saying life was bad but it just changed completely. It changed completely. (Suzanne)

The number of people struggling with mental health issues changed friendships and communities.

The evidence that's always around you and the effect that you saw on people in the town, even close people that we knew that were friends before the fire went crazy ... They lost their minds and in doing so lost their personalities and became someone I couldn't recognise (Seth)

Heightened gender expectations hindered resilience

The different ways in which women and men responded to, and were affected by, the experience of disaster had implications for short and long-term resilience. A striking finding is how gendered expectations of strong, stoic men and nurturing, protective women became more salient during and after the disaster. Gendered expectations lowered the resilience of men and women. This led men to denial, not talking about the disaster, having angry outbursts and not identifying when they needed help. In comparison, women held families together and were responsible for the emotional health of the family – often at great cost to their own health and wellbeing. Their contributions were often invisible. (See also, Gender in Fire Planning.)

Grown men don't cry

Gendered expectations increase in and after disasters (Aguirre, et al, 2000).

I think it does relate to the man wants to protect his castle per se and the woman would go and guard the children. (Ellen)

I know this is stereotyping. Men are protectors kind of thing. It's what we get brought up to be ... The provider, the protector. So we go rushing out, brain's switched off, just go rushing out. Where women are more the nurturer, they're looking after the kids. (Murray)

it's conditioning. Men, traditionally ... they're the provider. They go out, they provide the money so mum stays home, raises the children ... So dad's always, in your mind, the big tough bloke, the protector [and] that's where *he* believes he's at. (Chloe)

Survival for me as a middle-aged white man is that I have to provide for my family ... Now who's my nearest role model? That's right, my 90 year old grandfather. So I've got to be that guy from the 40s. That's what happens to people. They turn into these stereotypical examples of what they believe a man or a woman should be. (Seth)

All I know is that I had felt this pressure to be this happy, in control, 'it'll be all right, I've got it covered' individual and it wasn't what I was feeling internally. (Mike)

The implications are profound for long-term disaster resilience. Affirming the '*Men on Black Saturday*' research, this new research also finds that men are cast in the 'protector and provider' role. In the height of the disaster expected to protect the family, and often the community. In the aftermath, expected to provide a secure home and regular income.

I was rushing in to a dangerous situation and totally oblivious because it was all about the adrenaline and doing the right thing. (Murray)

I can only imagine the sense of responsibility he felt because he was outside fighting the fire to protect everybody that was in the house. (Zoe)

I'm the male of the family, I'm the one that's employed, I've got to maintain bringing income in ... and generally be the man around the house. (Mike)

He had to find a job that paid enough to pay for this house we had borrowed money for ... It was probably harder on him than everybody. (Elizabeth)

Their destiny on the day of disaster was to protect the family or the family home – and it felt like a test.

It's probably the greatest test anybody could ever have in their lives outside of war probably. (Eric)

In the aftermath, some men spoke of not being asked how they were going. Our society seems to assume men are self-sufficient and resilient. One middle-aged informant was surprised to be asked about himself by community counsellors after bushfire affected his farm.

It was the first time in life I'd ever had anyone ask me actually, 'How are you going'? I've never had that before. (Peter)

In *Men on Black Saturday*, Todd spoke of offering solace to those around him, but, pointed out that no-one offered reassurance to him.

I was just trying to convince them I wouldn't let them die, especially the little girl and she was bloody terrified [I said], 'I promise you I'm not going to let you die' and I just kept saying that over and over again. There's nobody around to say it to me is there (Zara & Parkinson, 2013, p. 19).

In this research, several men indicated they shared this feeling, specifically stating they were expected to be the protector and to fulfil this role unstintingly. The expectation that men don't cry is perhaps stronger for emergency service personnel. One fire fighter was surprised to be asked about himself:

I saw one of those fire fighters and I just remember asking, 'How are you going?' and he started tearing up and I had always just seen him as a really strong man and he started tearing up so I'm thinking, 'Oh my gosh if people like that are affected on that level, then there's people like that everywhere'. And he just said, 'I'm OK, I'm OK' but he wasn't. (Ruth)

The task on Black Saturday was beyond human capacity, and survival frequently came down to the wind change. In many locations, the endurance of those caught up in the 2009 fires, is to be commended. Alex saved his son and grandson, and his own life, in a place and in circumstances where others died. When the steel shed melted around them, they lay on the road and survived against the odds, through his knowledge and skill. Alex reflected on the long-lasting impact on him.

My second eldest son was with me, and grandson. No, they don't talk about the fire. I often think, why didn't it affect them as it has affected me. I come back to the family unit where I was the father figure and they had me to lean on, or felt I was their protector. So they didn't have the fear that I had. I was not at the peak, but I was at the apex and I was the one ... at the forefront. (Alex)

Informants' own decisions to stay and defend their own homes and farms sometimes had the same outcome. Several said they had arranged for their wife and children to go to safety while they stayed behind. Women sometimes deferred decisions to the man.

I overheard some people commenting about the 'bad fires at [place name]' so I informed my husband and then didn't think anything more of it. Then he got a telephone call from my son to say the fires were heading straight for our farm. (Alexia)

The notion that men 'protect' women and children, although disproved (Elinder & Erixson, 2012) and disappearing, retained its potency for some men. One saw his value as being his strong male body – a concept challenged by an accident:

'Am I OK, am I a good enough person?' because my whole world has been built by my ability to do stuff with my body. (Seth)

A natural loss of strength as men and women grow older may be exacerbated where men have felt the expectations of society bring them close to losing their lives in disasters. Men felt the pressure of responding to requests for help both within and outside their family. The consequences of their decisions in the disaster affected the years that followed, sometimes changing their personalities or their lives.

My main thing ... after the fires is the changes in my husband and I've found trying to do things to make him happy doesn't work, only short term ... There's been a lot of marriage breakups and they don't talk, don't sort of express themselves. Talking to a lot of my friends, they all comment on how different their husbands are and we've all sort of got to the point where we're just getting on with our own lives now. Whether we're staying with them and just letting them do what they want. They don't seem to be participating in family things. (Louise)

Expected to be stoic, men developed ways to maintain this.

Maybe I just developed being able to listen to myself. Sometimes you just feel overwhelmed and the old white ute out there it's become my best friend. I would just drive to the most isolated spot I could find on the farm and I would lie down on the seat for an hour and have a sleep. I would just withdraw and that was my coping and then I'd be fine. (Peter)

Embodying masculinity as prescribed – protectors, strong, silent, and unaffected by the disaster – was something men wanted to do. Anything less was assessed as a failure by their own, and society's standards. There appears to be no consideration by society of exceptional circumstances that are not accompanied by consequences for failing to meet this impossible standard. (The one exception seems to be in sporting contexts such as when a football team loses an important game.)

I internalised that I could handle this, that I was the head of the family and therefore I had to remain strong and I couldn't show any weakness. So all emotion went inside. (Mike)

Mike described the effect on his body of trying to appear in control the day after Ash Wednesday. He was driving home to find out what had happened to his family, knowing his home had burnt to the ground. He spoke of being completely unaware that his body was shaking.

[I drove] about 10 minutes and I turned the car around and came back to the dealership and I said to them, 'Guys, you're going to have to give me another car, there's something wrong with this one. It really has got an enormous wheel shudder' ... One of the mechanics took the car out for a test drive ... and he came back about 10 minutes later and they said, 'I'm not quite sure how to put this to you Mike but there's nothing wrong with that car, not a thing' ... I'd lost the plot completely. (Mike)

Expected qualities for men include mental and emotional strength interpreted in a way that declares men should not cry. It seemed that penalties were either imposed by workplaces, or the fear of that was enough to prevent men expressing emotion this way. The assumption was that men not expressing emotion were stable.

That could happen that if somebody's really not coping ... we won't send you out on jobs until we all think, including yourself, you're OK. (Nathan)

There was a point in the interview where I started to cry and I said, 'Look I need you to leave that out because of certain things' and they said, 'Of course' and of course they put it in, the bastards ... The very next day one of my clients came to me and said 'you know Seth I thought you were more of a man than that'. Now you might say he's a stunted individual but that's the country, that's the

country. That meant that I couldn't deal with that client. So it meant I couldn't do my job. (Seth)

[A local CFA member] said, 'We did everything we could on the day, and we're still expected to continually arrive at emergencies on this mountain, and do our job.' He said, 'I'm falling over'. [I asked him], 'Have you got debriefing?'. [He said], 'We can't call them because if they identify us as struggling, we're stood down'. (Chloe)

If there is a weakness perceived there'll be someone sitting around to take advantage of it and that's a business culture ... If there's a perceived weakness, bang, go for it. Get rid of them. (Warren)

In workplace policies, it appears there is an assumption that men who ask for psychological support are a greater risk than men who do not acknowledge they may benefit from counselling. The silencing of men seeking help echoes the silencing of women asking for help with domestic violence after Black Saturday. At every level and at every turn, women were silenced about violence against them from men who were 'good blokes', and suffering from the trauma of their experience in the fires (Parkinson, 2017; Parkinson & Zara, 2011a). Asking for help became impossible for one man:

I often think, you know how you've got those deep sea fishes that are so many fathoms underwater with all that pressure? You take them out of the water and they explode because they've got nothing to hold them together. I sometimes feel like I'm like that. (Murray)

Murray had taken up the informal support available to him through casually seeing colleagues at the CFA shed. However, what he spoke about was limited.

If I tell someone in the brigade that I'm feeling a certain way, they might likely take me off the rescue. So it's like that holds me back. (Murray)

Not wanting to risk his volunteer roles, he tried calling Lifeline on one occasion. He said he won't do it again, as his confidentiality was breached when they acted on 'duty of care' responsibilities, calling in emergency services to check that he was not going to harm himself. Where professional and volunteer emergency service organisations have completely confidential telephone counselling (e.g. Employee Assistance Programs), they should be promoted and easily accessible to those who are seeking support for psychological health and wellbeing.

Bradley turned his experience of 'embarrassment and shame' into an example for other CFA volunteers to accept normal human reactions. He and wife told the story:

Bradley: So here we are, the four of us in the truck, the fire hadn't got to us at this point. It was hot and smoky. One of the others got on the radio and called for help. I don't know what they said. I can't remember. I don't know whether it was 'mayday, mayday, tanker two' or whatever. I don't know what I was thinking. All I remember and this is the thing that really affected me later was I leant across, grabbed hold of the microphone, this is crazy and basically spilled my guts over the radio. Flat out panic. I didn't know this would happen ... Then the front hit and there were flames going over the top of the tanker... It got to the point where I thought, 'Oh well this is going to be my last breath, this is it' ...

It wasn't on the day but looking back – that was the thing that I felt so bad about, which was spilling my guts over the radio ... not being in control, I guess, showing my emotions to the rest of the members of the brigade.

Marcie: You had nightmares for months afterwards ... He'd jump up in bed and try and grab the radio or something and then he'd get really distressed ... He did that night after night for a few months ...

Bradley: I'm captain of our brigade now. I use this story to talk to people about how they need to think about how they're going to deal with difficult situations and that it's OK to stuff up.

Boys don't cry

Informants spoke of the way boys are brought up and the way this influenced judgements of them during the disaster.

Dad ... always tried to toughen me up, go down and give me a ... big knuckle like that and they give you a thump to make you tough and all this bullshit, to toughen you up ... And he did that for many years. He'd try to frighten you. (Gary)

That was just the way of males in Australian society back then ... This is a little sensitive arty type, we better make him strong for the world. (Anne)

It's probably the way they were raised that they're not allowed to talk about their feelings. I don't know. Kind of that thinking that when you have to be the strength of the family. (Louise)

Even for young men today, the imperative to toughen up still resonates. An informant spoke of her son's attempts to guide a younger brother in the years following Black Saturday, after their father had left the family home.

Chris would make comments like, 'It's a tough world out there. I've got to toughen him up, he's too soft'. And Chris was exhibiting this hyper-masculinity sort of values around what a man needs to be and how tough he needed to be. (Kate)

Society shapes baby boys into men in a particular way. Gary also spoke of dissonance between who he was, and who he appeared to be. He played the expected role but never fitted in.

I played football for seven years, heavy duty. I was a misfit in there but I did seven years. I got into the firsts and it was a federal league which was a really tough league. And I couldn't relate to the people. They always thought I was gay. (Gary)

Ways to cope for men in society without losing face, included withdrawing, not talking, or being angry.

He had become incredibly closed off [and...] impatient with people and emotions. He didn't know what to do with them. He didn't know what to do with his own and he didn't know what to do with ours. (Zoe)

Oh absolutely bottle up ... it's just lack of communication, there's no conversation, there's no description ... [The Vietnam War] was my learned experience and so that's how I handled Ash Wednesday. (Mike)

Within relationships, some men spoke of not speaking (and therefore not crying) in order to protect their family.

I didn't let her see that because she would get upset then with my grief.
(Graeme)

[30 years later] I look back on it as being a time of intense pressure, pressure to get my family secure again, pressure to find somewhere to live, pressure to put up a smiling happy face ... pressure to be someone that I really wasn't feeling like being. (Mike)

Instead, men spoke of their hair turning grey. Too often, this coping mechanism was accompanied by lack of affection and lack of engagement with the family.

My husband, he's a typical bloke who isn't great at expressing his feelings. So he just launched into work and we just never saw him. He didn't have any time for anybody. (Zoe)

Informants spoke of denial, blocking out what potentially threatened idealised masculinity.

He wouldn't talk about the [2009] fires, he wouldn't talk about his experience ... Even to this day, he wouldn't participate in this conversation. He's just like, 'Nuh, I don't want a bar of it'. (Zoe)

I can remember ... this big burly guy ... talking about what had happened to him, and he ended up sobbing, absolutely sobbing his heart out. He was prepared to sit and talk with other people. I can remember saying, 'Have you spoken to somebody, a counsellor?' ... [He said] 'Oh, no, no, I'll be right, I'll be right' ... It took a lot of breaking down [for men to realise] that it isn't so bad after all to admit I've got a problem. And my husband was one of them. (Elise)

Keeping busy and being deliberately unaware of their own wellbeing allowed men to live up to the appearance of masculinity society demanded of them. While fulfilling the traditional male role of breadwinner, some informants recognised it was an avoidance strategy. Although an income was important, there was deliberately little time for introspection or family. This behaviour delayed any reckoning of what had happened – or hope of resolution.

If I was active and doing something I felt OK but if I wasn't ... I had to face my inner world. (Seth)

I just keep distracting myself with work, with kids and one thing or another.
(Murray)

[Men] didn't have the same mechanisms to process that we did ... They were back on the farms, or back on the fire trucks or doing the things they needed to do to provide that male orientated support to the family. (Kate)

So I think my way of handling it was to just make myself busy. I was doing that for probably the next two years ... Well there was some reality in it as well but I certainly didn't have to bury myself in busy-ness seven days a week. (Mike)

I was busy, yeah. Well that's one of the secrets. (Peter)

Women often recognised the signs of stress, tiredness and exhaustion, and felt compassion for their suffering.

It's much harder for men to talk about their internal angst and suffering. (Ruth)

He needed help but he wasn't seeing it ... The kids said to me, 'Mum you've got to get Dad to a doctor' and I said, 'How? How do you get him to a doctor? He won't go. He doesn't recognise he's got a problem'. I knew he needed to go but you couldn't pick him up and carry him. I tried to talk to him on many occasions when I felt that he would be open to hearing me. And then he seemed to be at the time but then he wouldn't follow through. (Alexia)

I don't think that he was that fragile before. I've said to him many times, 'do you want to go and talk to somebody about it' and he's like, 'No, I'm fine'. (Josie)

Women wondered if it was pride or ego or associated stigma that prevented help-seeking. Men wondered if they were trying to be too tough, thinking they could handle it alone. One implied that it was not his role to understand himself.

I've never thought of it as how it affected me or anything like that. Other people would have to tell me that. (Bert)

Whatever the reason, it seemed men rarely sought support.

Even when there were things in place the men didn't go. They did do men's groups for them to go up here and talk but no-one went. When they offered the free counselling services the men didn't go. (Louise)

On the other hand, some informants assessed their own role harshly, taking on blame.

I'm still, back to the day of Black Saturday, 'Oh, it'll be ok', and clearly it wasn't, it was my fault ... [my partner] was agitating to leave much earlier, and I'm like, 'I'm watching it'. (John)

Maybe some of them did have regret about staying and defending or having screaming matches and leaving it too late ... You don't often hear them saying 'I stuffed up and I shouldn't have done that' – though I have heard quite a few blokes saying that. (Ruth)

Several informants spoke of an acute need to confront or somehow understand their response to the disaster.

I'm not going to let that define myself ... but at the same time that's not the same thing as saying 'stiff upper lip, if you'd just look the other way it'll all disappear' ... There's real power in self-honesty and reflection. If you bullshit yourself you're not going to grow ... so I need to be deadly honest with myself and accept advice ... have a long, hard look at myself here and get the tools to respond. (Seth)

Probably my proudest achievement is recognising who I had been and doing something about it ... Understanding why I was angry. (Mike)

Two informants defied gender role socialisation. One described emergency service workers consoling each other in a particularly tragic incident.

Something you don't do on a scene like that which I did was give him a man hug and he appreciated it. Three of us all standing there hugging each other ... There's so many macho people around you who think, 'Oh yeah you're weak'. But we know ourselves what we need to do and we do it. (Graeme)

It made me cry. I guess I'm a little bit different. I'm very fortunate because my dad and my then father-in-law were of the same opinion. We all felt that crying was not a weakness. That it was actually a strength. That in crying you were actually able to a) vent your feelings and b) that you had enough courage to be able to own them. (Cameron)

A precursor to getting help was, as one informant identified, knowing you need it and having the strength to ask.

I knew I was in a bad place and I had to get help. Some people aren't strong enough to admit it ... I probably ended up having about four or five different counsellors. They were all helpful and they were all supportive. Sometimes you just need to vent your concerns and frustrations and things like that and they're trained to listen and try to be supportive. (Aaron)

Some men refused to seek any kind of help, ostensibly preserving their role as successful 'male' in our society. They were 'too tough'. In reality, the deeper their fear, the less likely they were to speak to anyone, for fear of breaking down. While some women seemed (from the men's accounts) to accept their withdrawal, many women tried to get help for the man

I said 'I think it's probably a good idea if maybe we look at getting some help with that'. And that was just the worst thing you could have said. He lost it completely ... It was clear, 'Don't you ever talk to me about that ever again'. (Lena)

Informants acknowledged that there were individual and men's group counselling available after Black Saturday. (Fewer such programs were available for survivors of previous disasters.)

There were plenty of counsellors available to the community and many people availed themselves of that opportunity but an awful lot of people didn't and you're talking to one of them and I probably should have. (Eric)

Interestingly, one man knew of the counselling but wanted to be 'spoon-fed', making the point that his state of mind was a persistent blocker to accessing help. Social constructions of men as invulnerable meant men were likely to try to tough it out rather than admit to needing help.

It wasn't that no-one tried to help but it wasn't very obviously help, you had to seek it out ... I really do think I needed to be spoon fed, and I often wonder would I have sat down and talked to someone? I'm not sure I would have. I think I was still caught up in that whole thing about, 'I can handle it, I've got to be stoic, I've got to be on top' but certainly in hindsight I needed to talk to someone and I didn't. (Mike)

Others spoke of being cajoled or tricked into attending counselling. In these cases, it was almost like a permission slip that made it acceptable. They had not decided to have counselling, it was thrust upon them. They were doing it to pacify their partner or family and that made it more acceptable.

I didn't intend to have counselling until my wife and son were detecting signs which I wasn't aware. I was obviously projecting something to them which I wasn't aware of ... unbeknown to me they arranged counselling ... I can't identify those signals but obviously they recognised something there. (Alex)

Sometimes women were able to persuade their partner to try counselling when it was couched in terms of relationship counselling, and in the context of women stating they were unable to continue in the relationship otherwise.

He refused, 'Nothing wrong with me, I'm fine'. But the anger and the emotion would just explode. And it took me to leave, I said, 'I'm leaving' and I left. I left for seven days and said, 'I'm not coming back until you agree to go to counselling. (Elise)

He only goes because I tell him that if he doesn't sort out what's going on with him and go and get some help that I'm going to leave. (Louise)

Sometimes men complied, but gave only lip-service to counselling services, saying 'all the right things' or misrepresenting their state of mind.

We did do some counselling together, for a little while there ... During the counselling I didn't realise, he was just trying to show the counsellor that it was all me, it was just text book, it was bizarre. (Lena)

Successful strategies for engaging men seemed to be those fashioned around work. Working 'shoulder to shoulder' allowed a more natural conversation, particularly with people skilled in counselling.

I think getting together with other men would have been, should have been a much stronger side of things ... They needed opportunities to get together and do something ... getting them involved with the repair and the day-to-day stuff is really important for men so they can do something so they can find their strength again. (Lena)

We attended men's groups and things like that to try and get things going. I was involved in setting up a men's shed in Kinglake and a bunch of other stuff and recognised along the way that for some people it's a long process. I think we actually had better results by being in someone's yard doing tree work and sitting down with them and starting to talk about what sort of chainsaw do they own. People would start to open up ... Yeah or on their property or fixing a fence or digging a hole or fixing a gutter. (Seth)

Women as nurturers

Going through my catalogue of my observations of men and my observations of women, their roles are very, very different, post disaster. (Kate)

Reiterating the conclusions in our previous research (*The Way He Tells It*), women are expected to make sacrifices to look after traumatised partners, children and elderly parents. Women gave up paid employment to care for family members who were struggling after the fires, and to manage the paperwork and bureaucracy involved in re-establishing their lives, e.g. insurance claims, red tape, rebuilding and grants.

It was the women who were expected to access Centrelink help and keep an eye on the washing and cleaning up and know where the kids are. (Jillian)

I negotiated some time off and then I decided I wasn't going back to work because I became the project manager really for all the grants, for all the other stuff. (Josie)

The women who I knew were affected and impacted by the fire like it affected their farm or their property were just so flat out surviving that, trying to do the right thing but also trying to look after their husbands and their kids that I don't think they had much time for themselves ... so I knew quite a few that did stop doing paid work because they had to do the other work. (Ruth)

It is not the case that women like this, or even undertake these roles willingly.

I didn't want to go sit in these meetings after meetings and meetings and meetings talking about bloody red tape – because that does my head in. (Chloe)

The expectation is that women are the nurturer for the family - partner, children and parents.

Without being too stereotypical about this, women have more caring responsibilities the evidence is there as they're usually the one's looking after the kids or the grandparents, so elder care and child care. (Ruth)

There was almost like a hyper-femininity that developed as well around women caring for their children. Being absolutely focused on their children and rebuilding those structures that were relevant to children. Being the mouthpieces for children ... The mothers noticed that the children's needs were being over looked, so the mothers got together and built the adventure playground as a way of making sure that children stayed central to the development of structures within the town. (Kate)

I knew my wife was hurting, I certainly knew that our youngest daughter was hurting. I knew my wife needed to be there for the kids ... I just knew that those kids needed their mum. (Mike)

I also had elderly parents that lived in town and they require a lot of support ... so much of it fell to me. (Alexia)

Women also offer protection to men's health and wellbeing before and after disasters.

[They are] often the protector of men in the aftermath in encouraging them to seek help. (Ruth)

With me going back to teaching was probably good in that I was a bit worried about him working too. Remember the work situation wasn't good either and that was one of the reasons I wanted to work and you stayed at home with the kids and I think that helped a lot and that probably helped you. (Marcie)

Researchers have written on the myth of 'women and children first' in the context of disasters. *The Way He Tells It* documents a number of examples where this was not the case in the 2009 bushfires. An informant in this research remembered an earlier occasion:

There wasn't any room in the Land Rover for me so I stood on the towbar at the back and held on to the bar and my brother was in the front seat. This was really scary. I'd noticed something that I'd forgotten on the ground and I jumped off to get it and dad took off

without me and left me behind in the fire. Well the fire was roaring up the hill by this stage. Luckily for me my brother looked in the rear vision mirror and saw me still running behind the car with the flames behind me. (Barbara - 1962)

Although presented as *being* protected, women are mostly the protectors of children in disaster, driving them out from bushfire danger (Parkinson & Duncan, 2018).

So if it wasn't for Mum we wouldn't have got to the fire shed that quick. Mum was the one who got us all together to go, in the car. (Brooke)

However, what is often overlooked is the strength women display in extreme situations. At other times, women protected children while trapped at home. Suzanne gave an account of her neighbour:

She realised she was trapped, so she shut up all the house. She said, '... I wet all the blankets and I made a tent of blankets and we were under ...' – her and her little girl – but she thought they were going to die. She had a hammer, and she thought, 'When the blankets start to burn I'm going to hit her over the head with the hammer'. (Suzanne)

In 1993, Janet described saving her two children from flood waters:

It was about four in the morning ... Anyway I had the two kids because [my husband] went to our elderly neighbours to wake them... We've got a picket fence outside our house, and I had to hold onto the picket fence with my two children clinging onto me so we weren't washed away. (Janet)

As illustrated in *Beating the Flames* (Parkinson & Zara, 2011a) escaping bushfire is fraught with danger. Even packing to leave is complicated by extended responsibilities. Suzanne packed four children, a friend and her child, a neighbour and animals into her car.

[On Ash Wednesday, my husband] was in Sydney, he wasn't even in the State ... I drove up to my place [with a friend who was unwell] ... I got her water and cold towels and I put her down on the bed]. And then of course I had three little kids and I had a dog and a cat and chooks and all that sort of thing. (Suzanne)

Suzanne described a chaotic situation as she managed a set of complex interactions, while getting insurance papers from the filing cabinet, which in the end 'saved their bacon'. Yet, the role for women that society is comfortable in imagining in disaster is for them to be safely somewhere else, and worried.

My wife, I was phoning her from the fire front to say we were safe. She was worried because reports were coming out over the radio. (Alex)

We had the listening set to hear what was happening and ... we had to lie on the floor because the smoke was so thick ... We were traumatised. (Annie)

While women and girls can cry with impunity (within limits), they are expected not to be angry.

In Grade 4 I did something and the teacher told mum that he thought I was an angry girl. So I got to go off to some counsellor to assess whether I was angry ... There was a massive divide in the boys in our school and the boys could be loud, they could be obnoxious, they could do whatever. (Hannah)

Women had reason to be angry in the aftermath, as, in line with other research (Hoffman, 1998), women found that progress in gender equality takes several steps backwards in disasters. Men left the home quickly to return to work, leaving women to deal with the fall out.

Once the men could get back to where they were working, they put it behind them and got back to their regular routine, but a lot of the women were stuck there - the mums - and the men would just come home and a meal was cooked for them. The women were still doing the ongoing getting things back sorted out and working out what had to be replaced. (Jillian)

It seemed that women looked after themselves – although it is unclear how universal this is.

Women look after themselves more. I mean my wife does yoga and jumps up and down and walks a lot. (Eric)

It appears watching my wife, is that women are really good at talking about their emotional lives. (Seth)

Almost without exception amongst informants, it is widely agreed that women help each other through turbulent times.

Another friend ... lost her house and she wasn't coping very well. The group of friends around her, we all supported her, talked her through it, made sure she was OK every day, did things to help her ... We do that, we support each other more, whereas the blokes are like, 'Oh yeah, you'll be right'. There's not that, I don't know, that deeper level I suppose of talking about feelings. (Kate)

Women deal with disasters better than men in some ways because they get together, and support each other. And also women do understand they are not more powerful than nature. You know, bleeding, giving birth, nature is stronger than you. But a man's role is to protect, build, protect. And when that was taken away from them, they were emasculated (Lena)

Like men, some women also kept busy in order to cope with their disaster experience. The long-term effect on women's resilience depended on the individual.

I'm on call but I probably do more shifts than I need to. It's probably why I do the job I do. (Hannah)

I became really task-focussed, 'I just need to get through this bit. I just need to get through this bit. I just need to get through this bit. (Zoe)

Women suffered from discrimination

Women's contributions seemed have lower value, and were not rewarded in the same way men's contributions were. One informant drew attention to this.

I got an Order of Australia as a consequence of that but I should cut it in half because my wife earned it as much as I did. She was a pillar ... She was an enormous pillar of strength day and night, week in, week out. (Eric)

An image of men working and women chatting is frequently evoked in descriptions of who did what in the disasters.

We're solving problems and you're just worrying about your girlfriend or whatever. (Andrew)

Yet, excluded from central roles, women did the often-invisible work.

I would have been thinking, 'Right what can we do here? What is there to help?' Whereas a man is more hands-on. Andrew was getting out there and actually doing something ... I heard on the radio during the floods Telstra weren't charging you for phone calls for that month so I rang Telstra straight away, no bill for the month. I heard that they were giving hay and I think this is a girl thing too. I got onto the hay donation. (Tricia)

This work supported the resilience of the family. In other ways, women felt discrimination against them. Josie owned her property and cattle before meeting her partner, yet when assessors came, their discussions were with her male partner.

They separated [us] and they spoke to him because as soon as they got there ... they could see they were going to have problems with me. So a woman dragged me over there and then they [my partner] aside and they said, 'What are going to feed them, how are you going to get water for them, what are you going to do with them'.

[How much involvement did he have in the cattle?]

None. (Josie)

Within emergency management, discrimination was equally apparent. Some discrimination relates to social conditioning and people's belief in a gender schema where women provide the great majority of unpaid care. Despite women's contribution to family income, ABS Statistics confirm women still undertake the majority of unpaid care. (ABS, 2011a)

The CFA the average member I think is a 57 year old white male so they've got quite a lot that they got to do there in encouraging more recruits. It is a very responsible job to be a captain or lieutenant, so you need to be on call 24/7 and a lot of women may carry the majority of caring responsibilities in their family ... therefore the vast majority of captains and lieutenants are male. (Ruth)

Career penalties for women are considered to be acceptable due to the generalisation – often unfounded – that they are looked after by the partner who has an uninterrupted career. However, this gender schema is outdated where divorce runs at one in two marriages and where government policy increasingly leans towards self-funding in ever longer retirements. Older women are the biggest group of homeless people in Victoria (ABS, 2011b). Relationship breakdown had a significant effect on individuals' resilience, as shown in Chart 2.

In terms of women volunteering as fire fighters, some brigades led the way early and there were shifts in gender roles:

We were one of the first brigades that actually changed the whole look of how women and men interact before, during and after a fire. After that ... our fire brigade [chief] was a lovely strong woman ... for quite a long time ... [She] just said, 'We're going to have men and women equal. Any women who want to join this fire brigade, come and we'll all learn'. (Annie)

Gender's a weird construct – borne out of laziness and ignorance – that we lean on to explain stuff that has no place explaining. (Seth)

Judith Butler writes of the damage cause by imposing strict male and female identities and roles, instead proposing acceptance of a multitude of gender expressions. This is directly relevant to men's and women's long-term disaster resilience as a major stressor in failing to meet hegemonic masculine standards, or sacrificing, nurturing feminine roles would no longer be relevant:

[T]o 'be diagnosed with gender identity disorder is to be found, in some way, to be ill, sick, wrong, out of order, abnormal, and to suffer a certain stigmatization as a consequence of the diagnosis being given at all ... [Such a diagnosis] continues to pathologize as a mental disorder what ought to be understood instead as one among many human possibilities of determining one's gender for oneself. (Butler, 2004, p. 76)

Findings – Part 3: Disaster planning for self, family, children and community

Children in disaster areas

Children's experience during the disasters often resulted in mental health issues and a changed life course. Schools played an especially important role in determining children's post-disaster resilience.

Twenty informants spoke about the presence of their children on Ash Wednesday, Black Saturday, in the Benalla floods, and in other disasters where they came close to losing their lives. Fifteen shared their own memories of what it was like being a child in a disaster.

So we got everything in the car, grabbed what we needed, and we just drove up to the main street ... Every car in Kinglake was there ... There was like a big car out the front of the police station, caught on fire, and everyone's belongings in there. Just full on ... There'd just be kids running around screaming, parents ... We ended up sleeping in the car for two days ... because we couldn't get out. (Courtney)

My two oldest children were with me at the time and they were in the car. And even that was pretty hairy. We drove around the fire back in and back out again, and basically the fire was chasing us ... There was lots of wind, and there was lots of debris flying ... A couple of [times, my wife and daughter] were extremely emotional and hysterical in the car. (John)

Older teenagers – both female and male – helped in packing cars and preparing the home to survive fire and ember attack from the impending fire. Sometimes it was just assumed that all family members, including children, would help protect property.. The children were seen as part of a family unit, rather than as individuals with lives ahead.

One informant reflected on how he had coped in the moment.

I wasn't panicking but it was pretty crap. I'm in the moment going, 'Nick, Nick, you need to do better'. (Nick)

Others were clearly terrified as children.

The six year old twins they were petrified. They didn't want me to drive into that smoke ... and they didn't like the fact I stayed behind [and] the other kids stayed behind. (Cameron)

It was a really hot day but the sky was clear blue and really sunny ... and then seeing the sky, rolling massive black clouds, and then it just turned to night time all of a sudden. And then just being in the CFA shed waiting it out with everybody else and it was terrifying and people were screaming ... We were there all night. (Brooke)

Decision making for children by parents

Young people spoke of absolute faith and trust in parents.

Obviously as a kid I didn't really have any say in the decision making ... Maybe there's a level of naivety there, being kids but also just trusting in mum and dad that they know what they're doing. (Nick)

As frightening as it was, [my daughter] just said that she believed that her dad was a superhero and she just believed always that she was with her mum and dad so she was always going to be OK. (Zoe)

We just followed Mum like sheep ... Mum definitely took charge, 100%. [And were you confident in her?] I had to be. Yeah nah, I was, I trusted her. (Courtney)

Where parents were clear and in agreement of what to do in a fire, children had more reason to be confident in the decision-making. Anecdotally, the children of those who had fire plans and followed them were less affected by the experience.

[My son said] 'From you and [Dad] what you did at the time of the fire, you were calm we had jobs to do so we weren't impacted that way', whereas at school the kids where the parents fought about leaving, there was trauma afterwards. (Ruth)

Mum ... heard about the wind change ... so she decided just to get in the car ... Dad's a bit stubborn, he's like, 'It's not that bad'. (Brooke)

A particular burden for children was watching parents argue about what to do, delaying action while in danger. A decade on, this haunts one young woman.

So we had photos, clothes, food, water in the back of the Subaru, had the cat in a carrier and it was just sort of like waiting for [Mum] to prompt. My dad was adamant, he's like, 'If anything's happening, I'm staying'. So there was a bit of a fight between my parents on what decision was going to be made, staying or going. My mum didn't want anyone staying behind but it was just very much waiting for that prompt from Mum I dream about things happening and me trying to get them to go and they're like, 'No, no, let's just stay and have a coffee', and I'm like, 'We need to get out of here'. That's a frequent dream that I have. (Samantha)

Children in danger

In this and our previous research, informants told of partners or ex-partners taking children, including young children, into fire zones unnecessarily. (See also Richardson, et al., 2016). In *The Way He Tells It*, a woman 'recounted that her partner took her

young son (his step son) with him in his car — without her knowledge or permission - as he drove back up the mountain and into the fires’:

Poor Tom [not real name] still can't go in a car that hasn't got a lot of petrol in it cos he freaked out on the day. He thought [they] was going to run out of fuel ...And at the same time, that's what gets me, it's not the fact that they literally nearly died three or four times just by getting caught up in stuff and making split second decisions, it's the fact that he didn't even have to go there and didn't have to do it that makes me cross ... They tried to save a few people and couldn't, and they pulled over and tried to get a guy out of his car but they couldn't, it exploded and caught on fire, and it was all a bit traumatic. (Angela) (Parkinson, 2011b, pp. 101-102)

This, and other examples given by informants, involved the driver making a decision to drive towards known fires with children in the car. At times, this was in an effort to save homes, rural properties, livestock or cars.

We took a car each despite she being only 14 and unlicensed ... I looked back and I saw that she'd crashed into the ditch and the fire was licking at her heels so I ran back and got her out of the ditch.

After a second bushfire some three weeks later, [the informant and her daughter] were at a local recreation centre when it was announced that it was to be used as an evacuation centre as a fire was heading towards the town. Her farm was amongst the areas said to be at risk.

Once again we jumped in the car and drove toward home. We got to the edge of town and we thought, 'Oh my God this is shocking'. The smoke was thick. We had the conversation to stay or try to get home and we decided on the latter. Visibility was disappearing. I felt that it was still safe to make it. We did feel this time that it was a risk but I couldn't have stood not knowing what was going on.

They tried to save livestock and eventually managed to crawl back into the house. They looked out the window over the valley and doubted anyone would still be alive. The informant related that they felt so close to death, they phoned relatives to say goodbye.

It was incredibly hot especially in our full gear and we hugged each other and prayed to God to make it a quick death – not too much pain and agony.

Other children, too, were witness to parents calling 000 to notify them to look for a certain number of bodies or giving the names of those present (*The Way He Tells It*).

The risks of taking children back into fire zones were often not well understood. This informant was highly aware of the possible effects on her daughter and subsequently undertook measures to heal the whole family, over many years, and clearly spent time talking through it with her children. She reported that after these efforts, her children are all going well as adults.

You pop your grief over there, set it down by the wayside and continue driving on your way. The ideal didn't happen so you make the best of it ... The children have grown up, got families of their own. I look back and see a lot of good things ... We still talk about 'the fires' – they were a defining moment in all our lives.

Separation in disasters – and the dangers of staying together

As other research has found (Gordon & Maida, 1989; Richardson et al, 2016) children (like women) did not like the family to be separated. Similar sentiments were conveyed here.

Even though they knew it was still a dangerous situation I think they were happy that we were all together and that we were going to face it all together.
(Cameron)

However, in extreme circumstances where lives may be lost, surviving separately is preferable to dying together.

Everybody understands now ... you have to know what you're doing and you've got to get yourself safe because if we can't all get together, it's no good trying to all come to one place because it might be too late. (Sandy)

John described the circumstances where one of his children was with another family. He described the complexity and anxiety associated with being dependent on others for the safety of his child.

Listening to the radio with John Faine saying, 'If you're in the Kinglake area you need to leave, there's a fire approaching' ... We had that anxiety of where's Matt? ... Our friend is eminently sensible and she's going, 'Oh, it's fine'. And we're going, 'What do you mean, it's fine?' Our area looked like Mordor at that stage, you know it was just terrible. (John)

My poor son's girlfriend [was here] from downtown. Her father was screaming at me on the phone to get her off the mountain and I'm like, '... I can't'. And then we couldn't get through to anybody because the phones weren't working.
(Zoe)

Beccy was away from home for the day, and as a result, she didn't hear anything until 2.30am when her parents were able to call her.

I asked Mum and she told me, 'Yes, that person had passed away'. And I remember quite clearly the gas bottles in the background going off at everyone's house. You could hear it. (Beccy)

She was prevented from going back into the area for weeks after Black Saturday. Such long lasting separation after disaster is difficult for families. Policy review to enable family members to rejoin the family unit is important for long-term resilience. Going back as soon as possible after a catastrophic disaster is important (Barton, 2017).

Adults who left in or before the disaster needed to go back home afterwards to assess the level of damage and destruction.

Well we didn't know if we were going to be able to get back up there anyway and it would have been easier without children for us to be able to get through any barriers. See this is the thing, you don't care that there's going to be barriers. I now work for CFA but it was CFA that blocked every road but of course we knew all the ways to get in and we did which was stupid but we did.
(Sandy)

Informants reflected on the impact of seeing familiar areas where destruction was widespread and people had died. Sometimes their own street had been devastated.

While important for emotional reasons that children are not taken back in, potential danger goes beyond emotional harm to contaminants in the air. Children must not be exposed to this – despite their requests.

Mum and dad and one of my uncles made the decision they were going to go back up. The fire was essentially out at that point in time and they didn't know what they were going to go back for ... I remember being quite pissed off that I wasn't allowed to go. I was made to stay there in [Melbourne]. (Nick)

Children's experience of disaster was determined by their parents' decisions. A clear fire plan and decision making by the parents resulted in less risk and better outcomes for children.

This section inspired recommendation 1.2.2

Consequences for children – mental health issues

For many children, the disaster experience was a defining moment in their lives. One informant had a tattoo of the date of Black Saturday just above her wrist. The group of young people confirmed the significance for them, and spoke of others commemorating it in ways including having car licence plates with the date '070209', they remembered with affection the wristband they wore in the aftermath and the stickers on cars to identify locals. Parents reflected on the long-lasting effects of the disaster on their children.

We think it's had certain impacts but we don't fully appreciate or understand what that's done. (John)

Babies were affected, and toddlers were observed to grow to be hyper-vigilant older children and adults. Informants remembered being children and watching for warning signs of fire in the sky, and smelling for smoke. Older siblings and parents observed panic in children in their families. Every time it rained, a three year old asked if it would flood, and a child so young she couldn't remember the fire asked where the fire was whenever she heard a helicopter. This lasted for several years after. Many referred to triggers for children's anxiety.

I can remember a lot of kids were on high alert ... My sister was terrified of the wind. (Hannah)

A quarter of a century after her childhood experience of Ash Wednesday, Hannah recalls driving and seeing helicopters on the day of Black Saturday.

I remember [my partner] and I were driving and I started crying to him, like I could not regulate myself. (Hannah)

Anxiety, depression and trauma emerged for some children. One remembered the blackness, including some 'mental blackness'. Anguish was carried well into months and years after, sometimes becoming apparent through physical symptoms. John spoke of his son being 'physically and emotionally a wreck' at one stage, having a diagnosis of shingles, an illness that is related to stress. Another father described his five year old son as completely changing:

He had an awful lot of trouble. Looking back he was depressed ... He'd been a bright and sunny kid and he became dark and morose ... Our neighbour had said to me, 'I'm sorry but I don't want your son to stay here anymore'. Her younger

son ... said that our son was either talking about or acting out killing himself.
(Bradley)

For another child, the trouble emerged much later, and resulted both from the fire experience and the subsequent disruption to family life through marriage breakdown.

He went from a very sunny, open child to a child that was very sad a lot of the time and, in recent years, he developed very significant depression and has had some suicidal behaviour around choking himself and some self-harming behaviour around cutting and burning himself. We also have had to commence him on anti-depressants and he has had quite a deal of psychological intervention as well, just as a way of trying to help him deal with some very full-on feelings around emotional pain and loss. (Kate)

Consequences for children – changed life course

Other children were affected in ways that disrupted the course of their lives. Some informants spoke of studies being affected even years after the disaster, and schooling derailed.

A friend, she would get picked up from class years later, and if it was a really windy day it would trigger anxiety and she'd have to go home because it would just stress her out too much. (Dylan)

A mother remembered her daughter's struggle at school:

Our eldest went through a whole period of time where she had day mares. She'd be sitting in class and looking out the window and she'd just see the fire coming towards her ... It had negative long-term impacts, definitely. (Suzanne)

Beccy spoke of a friend who did not complete secondary school as a direct result of both the fires and the way other students related to those affected by the fires. (See also Schools, below.)

She started to rebel. She turned. She was a really good student, really smart. Then she started wagging school, didn't go to class, she started smoking, moved schools at least three times, didn't finish high school, just completely changed ... Completely thrown her off her ambitions. (Beccy)

Zoe's son went from a high achiever to radically changing plans – he left school and the area and has not returned.

My son, he'd just started VCE, he's an incredibly smart kid, he was studying to be a pilot, had all these big plans and he finished VCE barely passing. He moved from home immediately, he never ever returned to Kinglake after leaving home ... He now lives [overseas]. I don't think the path that he's taken would ever have happened if the fires hadn't happened ... He never ever flew again. (Zoe)

Parents and children helping each other

In disasters' aftermath, informants spoke of children – either themselves or their children – becoming parentified, taking on adult responsibilities and trying to resolve conflict or soothe tensions. One informant spoke of trying to be 'the good child' for her parents in the stressful aftermath. Another said:

I just wanted to sort of sit back from it all and tried not to talk about it. I didn't want to talk about anything with anyone because I didn't want to risk upsetting anybody. (Samantha)

Some spoke of the ways children were helped to recover, e.g. by making sure they had time to play, and talking through what had happened.

We kind of made house rules that no statement was invalid, no feeling was invalid. (Cameron)

Sometimes children were left alone with trying to come to terms with the disaster experience. One parent vividly remembered a game the little children played to resolve what was in their minds. She observed that her three-year old was struggling to understand what happened, all in the context of instability because of the 'chaos' of the adults' lives. She remembers feeling unable to give her daughter what she needed at that time.

I remember her quite clearly playing this game, it was called 'Evacuation'. She was playing it with another group of little kids (three and four-year-olds). The game was to run into the room and pack absolutely everything that she could find into a bag and then run out again screaming 'evacuation'. And that was how she was processing what had happened. (Kate)

Adam remembered awkwardness after Black Saturday and feeling 'so much different'. It appears he and his friend were unable to talk through their experiences of the disaster with each other, and were left alone with this. Almost a decade later, he still remembers.

You'd see a friend, he probably lost as much as you did, so you don't really talk about it, because they're not saying they're comfortable talking about it ... Yeah 'cause we were 10 or so, you don't know what to do or what to say. (Ricky)

For several young people, the consequences were felt several years later, as they began their independent life. One parent described watching his son's struggle and wanting to help.

He hit a bit of a speed bump, in the early years of uni so [three years later] he was confronted with some of his own inner – I don't know, he doesn't really talk to anyone much about it – but ... he was concerned and took himself off for assessment ... I was trying to work out what was going on. They said, 'We can't tell you anything, he's an adult'. Like, 'He still lives with me, I'm still worried about him'. But he seems fine now. (John)

Children took on adult responsibilities

Childhood was truncated as children took on parental responsibilities, sharing the heavier workload that resulted from the disaster and offering the family emotional support.

We were expected to be more responsible as a kid. So you were fairly sheltered from adult stuff ... Up until the fire, you were a kid in the back. That's probably the first time that I can recall having any sense of responsibility over [my sister]. Then, when my brother was born he was almost like my child. (Hannah, 8 at the time)

Emily (aged 3 in 2009) now feels very responsible for maintaining her dad's emotional state and is always checking up on him to make sure that he's OK. She looks after her brothers, sits with them. I've heard Emily coaching Brandon around making sure that he takes his medication. (Kate)

In some cases, the children had to take over, and the children did. And the children became more resilient ... There were some children that were holding the house together. (Elise)

For some young people, the responsibilities were enormous, bridging both practical and emotional support of parents. In recalling and narrating the examples below, both mothers felt the weight of remembering the burden their children carried.

I remember one day my son, Paul, coming in exhausted. He was working all the time, at school then footy training and afterwards he was on the farm helping my husband. But one day he came to me and said, 'Mum I can't keep doing this' ... He was living on no sleep. I said 'I'll talk to your father'. Then my husband came in and he said, 'I can't keep going, I can't do anymore and I haven't watered the sheep' and my son said, 'It's alright Dad, sit down, I'll go and do it'. For many, many months Paul continued to work without a break. He'd get in from the farm at four o'clock in the morning, after carting water, feeding all night then he'd go to bed for three hours, get up at seven o'clock, go to school. (Alexia)

There was a degree of parentification of Chris as well. So, because he was the eldest, some well-meaning but bloody stupid relatives said to him after [their father] left, 'You're the man of the house now, you're going to need to ...' I said, 'No you're a child in the house, you can continue to rely on me as always' ... That must have seeded at some sort of level because Chris in his own very, very immature 11-year-old sort of way did try to parent the other children. (Kate)

The worry people felt in relation to children's involvement in and after disasters was a barrier to their recovery and resilience. This was the case whether the children were pre-teens or middle-aged at the time of the disaster, and whether they were their own or others' children.

It was a really, really, tough time and I didn't have the financial resources to get back on my feet for a very long time. So, you know, my son lived that. (Michelle)

I had a son with a disability who was only five or six at the time and I was thinking, 'How am I supposed to do what I need to around the house [in the flood] with my son?' So I went to the council and I was close to being in tears. I was nearly hysterical and just saying I need someone, who can care for my son? (Esther)

I struggled with guilt for a long time because of not saving the two little children ... To be quite honest, this is what gave me nightmares for years, because I didn't take [my neighbour's] kids. I can't work out why. I think it was that I didn't have enough seatbelts, it was just one of those bizarre decisions. (Suzanne)

One informant said the worst part for her was guilt about her son. Seventeen years old, he had a shoulder reconstruction the week earlier. Forty people had come to their house on the night of Black Saturday (community people they didn't know) as

their house is at the end of the road, and no-one could get out. One of these people was another teenage boy who had asthma and no asthma pump with him. Zoe asked her son to take care of him, to allow her and his father to defend the home. Her son told her that he felt the entire responsibility of another person's life. She feels deep remorse, despite herself being in this same position with 40 people in her home. She and her son have spoken of this but the guilt remains for her. She said, 'Oh my God, this was probably, for me, the saddest part'.

Schools

Schools affected children's recovery over the months and years after disaster. The success, or otherwise, of the schools' handling of the post-disaster period, and the longer term sensitivities of survivors, stayed with people well into adulthood.

Schools appeared to understand the need to address the challenges facing disaster-affected children more after Black Saturday than earlier disasters. Both parents and students remembered programs run in schools using local artists, such as the Festival of Healthy Living (www.rch.org.au/mental-health/festival-for-healthy-living/). Those who were students remembered fun activities, bowling, movie nights, holidays. One school had a 'Wellbeing Centre' especially for students affected by Black Saturday.

They had beanbags in there, little nibbles, chuck a movie on, or have activities like, 'Yeah, let's go play basketball'. All the kids would just hang out and if you want to talk about it, you do. They'll have a private counselling in other room and you book in to go see them whenever you want. But a lot of the teachers ... just thought it was an easy way out. But it actually did benefit a lot. (Courtney)

Counselling was offered in schools, beyond the usual school counsellor, with others coming in from surrounding schools. These were valuable to children, and some parents expressed their relief knowing support was provided to their child.

The school did a lot of really good work in terms of counselling, allowing children to express what they felt. (Cameron)

However, children who moved away missed out.

There was definitely kids who didn't come back to the area that weren't offered any help at all really. (Kate)

Sadly, a complaint about schools' limited recognition of the toll that disaster experience takes on students in 1983 echoed one 25 years later, in 2009. After Ash Wednesday, an informant said:

I had this teacher sitting there across from us saying, 'I don't really understand what's going on with your daughter, she used to be such a good student and she's not keeping up with the homework and she's not doing this and she's not doing that' and I just looked at him and I said, 'Excuse me, do you realise what's happened to her? Do you realise that we had total loss, that we don't have a home, she's living in a caravan and she doesn't have any books?' (Suzanne)

After Black Saturday, Courtney describes almost the same situation.

It's hard to explain but like your maths teacher just thought it wasn't a reason for you to be behind and that you should just know and you should be up-to-date ... She's like, 'Look, you're failing', and I'm like, 'Well I've been away for a

month, I don't know what to do'. She's like, 'We're going to have to bring your mum in'. (Courtney)

Some schools did well, and the difference was perhaps explained by leadership and empathy, and sometimes shared experience by principals and teachers. A father and son described the school principal as 'essentially brilliant'.

Even though he was fire-affected ... he rocked up to work on the Monday in the only clothes he had with him basically and said, 'Alright, what do we do?' So he organised to open the school. (John)

Our teachers lost their house and property [... and] that teacher, she knew what we'd all been through and she was really good. And the chaplain, he was really good too. At first he started in this little shoebox sort of office ... and it was a good place to just talk to the same people that had been through what you went through. (Samantha)

At a very basic level, there was room for closer attention to the needs of student survivors. Even in 2009, some students spoke of not having the uniform of the new temporary school, and therefore being immediately identifiable as a fire-affected student. Some spoke of not having the books everyone else had. At a more complex human relations level, intervention was needed to educate unaffected students in consideration of others' feelings. It appeared that many students displayed an immaturity and insensitivity also noticed in adult workplaces (Men on Black Saturday), where fire-affected people were targeted out of curiosity or by bullies.

It was difficult to go back to school and I was only in year 7 so they're all sort of immature and you get kids come up to you and say, 'You live in Kinglake, you were in Black Saturday' but with no emotion, just stating it. They don't understand anything. (Brooke)

Obviously we were gone for a long time but they had no idea what went on. And when we come back, you know, the immaturity, like, 'Oh your clothes smell'. (Courtney)

[My son] was with a group of traumatised children and some of the behaviours he was experiencing as a result of that seemed to be less than helpful at times. So the kids were quite stressed and there was several children that in their distress started to exhibit quite pronounced bullying behaviours. ... They weren't like that before the fires, they just became like that after the fires. (Kate)

One of my close friends, she lost pretty much everything ... She had no nothing, no uniform, books or anything. So she came to school in casual clothes, she didn't give a shit. And she just walked in and someone made a comment like, 'Where's your uniform? You smell like smoke, your house burnt down, haha'. She turns around and goes [fist sound] smack into his, he was like a young boy, like probably 14 and he was just mouthing off. And she got in trouble for it. (Beccy)

Samantha remembered a lot of schoolyard bullying after Black Saturday, and hurtful comments at a memorial where balloons were released for each person who died in the fires.

You'd hear... 'Do you think anything really happened to them? I can't believe we have to take time out and go stand in the rain to go release balloons'. Some people were quite negative about it, would joke about it and make quite inappropriate jokes around things and you couldn't say anything because they're going to turn on you. (Samantha)

Friendships changed as rifts formed based on comparison of disaster experience and loss.

I remember having a fight with my best friend because we didn't understand each other's stories I guess. She wasn't up here while it happened but she lost her house. Whereas I was here but didn't lose as much so she didn't think I had anything to really suffer about. (Brooke)

A strong memory for many informants was the different treatment of students at school – particularly around whether houses were burnt down. Students whose houses weren't destroyed felt their experience was minimised.

Our house wasn't burnt down, so there was a big divide. If you didn't get your house burnt down you didn't get this, this, this and this ... I've been talking to some of my girlfriends since and they're like, 'I just wished our house got burnt down'. (Hannah)

I had all these kids coming up to me and like, 'Oh at least the good thing about bushfires is you get a sick new house'. And I'd just stare at them like, 'Really?' (Matt)

Young people changed schools – through primary to secondary transition, change of home location, or because of changed relationships that meant children were unhappy, or feeling like their status as disaster survivor interrupted their learning.

School changed and people's opinion changed very quickly because they thought you were damaged. (Beccy)

Lucy struggled. After year 7 she decided that she needed to swap schools because she didn't want to be one of those 'bushfire kids'. (John)

So my kid's friends at school, some of them were quite traumatised and anxious for months and years. (Ruth)

In schools in badly affected areas, inevitably most of the children were impacted by the disaster in one way or another.

[After Ash Wednesday] there was a school full of traumatised kids and the goal was never academics ... [in] the classrooms there were a lot of people triggered and really fairly volatile kids ... it wasn't uncommon to have kids going off in classrooms ... I can remember our principal carrying kids out of classrooms (Hannah)

Once we got into high school and all the schools in the area came together probably 50% of my class were from the fire affected area. I think I had three kids that lost their houses, one lost a family member. It was confronting because they were still affected and that was three years on and they were only just rebuilding. So it brought back a lot of memories. (Cassandra)

For about five or six months later, and that was just quite a tense environment. There were even members of the school that had passed away ... I think the way they were approaching some of those things were bringing up a lot of stuff for some people. So you'd get a lot of people storming out of classrooms, getting upset in classes. (Samantha)

Informants were looking to the school environment to provide some normality, to have 'that one stable thing' when everything else is chaotic.

Everyone was taking time off to deal with it. And when everyone did come back, we had all these activities put on and there were a lot of cameras and a lot of charity drives and everything like that. So it was not quite the normal school environment. (Samantha)

The nation's attention on the worst affected areas exacerbated lack of normality. The media made celebrities of some young people, and the omni-presence of cameras and microphones, together with a circuit of celebrities and entertainers, added to the tumult of life post-disaster.

This poor kid ... was all of a sudden a celebrity because her house burnt down. It was the one in the middle of everybody else's houses who was OK ... the kids all thought that was wonderful. She didn't like it. (Sandy)

It was just a lot of cameras. There were news crews set up around, a lot of people trying to jump on people to get their side of the story. Very much people became more of a story and less of a person. (Samantha)

Schools play a large role in the resilience of children after disaster. Informants spoke of differing levels of understanding between schools leading to differing responses depending on the school the Informant attended. The disaster-affected the school community, sometimes leading to divides between those who fire affected and, in some cases, bullying.

This section inspired Recommendation 4.2.6 and 11

Effect of perceived unfairness on children

Children, like their parents, were exposed to people behaving badly during the recovery effort. Echoing the feelings of many adults, young people reflected on the greed of people in taking grants or donated goods they were not entitled to. It altered their faith in human nature, changing the way they see people.

It also affects the community as well, because you see a lot of greed and you don't want to be around those people that are greedy. (Courtney)

The horrible nature of some people that are just free money, free this, free that, take it. (Samantha)

Monitoring by the community to ensure the eligibility of recipients could be equally harmful. One young woman spoke of being encouraged to take something at the donation centre.

One of the people there was saying, 'Go on, take the windcheater, take the Roxy windcheater, here's a pretty one, take that'. And she's saying, 'No, no, no, I don't need it.' And the lady's saying, 'Take it, take it'. And she said she picked it up and then she put it down at the entrance because she was too

embarrassed to take it. But somebody had seen her take it and rang my son and said, 'What's Sophie doing taking clothes from the Recovery Centre, she didn't lose anything'. (Zoe)

The Class Action for Black Saturday was resolved in 2018 – nine years after the disaster. The families of the young people in the focus group had not participated in the class action, but they spoke about knowing contemporaries who had received large payouts. While supportive of their parents' motives in protecting them from emotional harm, and respectful of their parents' philosophical position of recovering financial losses independent of payouts, they nevertheless reflected on a situation that seemed unfair.

Our mum and dad, at the time, they didn't put us through it because they didn't want us to go through the trauma of reliving all those questions that we'd already been asked beforehand. So we didn't do it but people I know got a hundred thousand dollars and put deposits on houses. (Brooke)

Our parents would probably sit there and say they a hundred per cent disagree that they didn't do it now. The money that people are being given, they said, 'We should have just done it' (Beccy)

Awareness after childhood experiences of disasters

Where the end result of the disaster was that homes were saved and no lives lost, informants spoke of their efforts as children contributing to their vigilance of potential disasters in adulthood. For some, the experience led to an adulthood characterised by self-belief and leadership qualities. Cassandra said her experience as a 11-year old changed her 100%.

I ran a 'Before and after school program' so I was in charge of 30 kids ... It impacted my thinking of, 'I know what happens'. I've got families that are city-slickers wanting the tree life that have come up the hill and don't know anything, and have actually purchased houses on the streets that did go up. They don't know anything. (Cassandra)

Cassandra remembered a fire where she phoned the parents, and their response was predominantly that they were at work and unable to collect their children. She felt a sharp distinction between their complacency and her insight through lived experience of what could happen to the centre and everyone in it.

Positive changes were noted by others:

I can grasp the genuine suffering ... [It] ... teaches you to be kind. It's actually important to be kind because often when there's a disaster there's literally nothing left, all you have left is being kind really. (Melissa)

Learning a lot about how to help other people, how you deal with things yourself, about the community, about what you have and it was just being really proud of how everyone sort of really sympathetic of everyone there. Being able to come together and become more aware of each other as people, and what each other needs to be able to get through things. (Samantha)

It changed my values and opinions on life'. I was a little rat back then, I was in Year 9 so I was getting into a bit of trouble. And then straight after that it made me respect my family, respect what I have. (Courtney)

[My daughter has] managed to become an extremely resilient person ... she is extremely strong and able to cope. (Kate)

Family obligations can endanger lives

A significant and life-threatening issue is where family members are called upon in emergencies to either assist in driving relatives to safety, or to help protect property in bushfires. In doing so, they put their own lives at risk, and worse, the lives of children in their care. Alex described being asked by others to assist, and consequently facing life threatening circumstances that continue to haunt him.

On the day of the fire my son phoned me and said, 'Come'. So we foolishly did ... Absolutely zero opportunity or chance of saving the property because of the ferocity of that fire ... The heat generated actually collapsed the galvanised steel shed ... We got down in here and when the whole thing started to collapse then got out. We got out onto the cleared area and then got out onto the bitumen road and later on just laid down on the road ... [The next morning] the fire brigade reached us and took us out. As we were driving out we found [a neighbour] standing under a tree ... He was badly burnt, he'd been in a water trough. But he died subsequently ... I thought I was fairly tough. I served in National Service, not my wish but my number turned up ... I was okay for about a year. I was guest speaker at a Rotary Club dinner meeting ... and someone mentioned 'bushfire' and I started to cry ... I can't even recall what I was talking about ... I had to apologise and say, 'I'm very sorry' ... They understood. But it's embarrassing for a grown man to do that. To me it is ... I understood that 10 people died in that fire - and close by - and that I was fortunate to escape. And I can't imagine how. (Alex)

Another man with a military background reflected that there is no way to prepare for certain tragic sights, and that involvement in disasters can injure people's mental health as well as threaten lives. This kind of trauma is not forgotten, and coloured future years and relationships with mothers, fathers and siblings. Exposing family members to this potential for harm needs to be considered with awareness of the potential 'assault'.

There's no way you could prepare anybody through training for what we see ... The magnitude of Black Saturday, Ash Wednesday and other disasters was such that people who were not involved could never fully appreciate the assault to women, men and children. (Murray)

Informants who asked family members to help them protect the family home or farm sometimes later felt guilty. Warren asked his adult son, and later reflected on the potential this held for him to lose his life. He did not want that for his son. Neither did he want his son to face a lifetime dealing with trauma.

My son felt obligated to stay with me. I didn't feel at that stage that he should feel obligated because it was my choice to stay. I put him in danger and that's a bit iffy afterwards ... When you sit back and reflect afterwards, it's mmm. (Warren)

The same would apply to those feeling responsible for the decisions of particularly older relatives. Brooke, only 11 years old on Black Saturday remembers her mother trying to get her father and grandmother in the car to escape the impending fires.

We got Dad and our dog and Nan in the car. Nan was a bit hard as well. She got in the car, then she went back because realised she left her purse in the house. So she went back inside, or she didn't lock the door or something, so she had to go back. Just wasting time that we didn't have much of. (Brooke)

It is common to hear of elderly men (and frequently elderly women) deciding to stay on their properties in the face of serious bushfire threat. A CFA volunteer remembered:

One older lady had family in Melbourne that wanted her to leave and stay with them to be safe but she wouldn't. They were begging us to make her go. (Alexia)

It is disturbing to hear of their much younger relatives attempting to persuade them to leave, even to the extent of driving *into* bushfire threatened zones to personally take them out of danger (Men on Black Saturday).

The consequences of such actions can be death or mental anguish that persists long beyond the event and its immediate aftermath. Our research and others' (Carra & Curtin, 2017) finds long-lasting consequences for mental health following experiences of bushfires where lives are at risk and any sense of control is lost.

The bottom line is, go. Don't pretend you can save property. You can't with the ferocity of that fire. You may with a grass fire, but they're different. (Alex)

Long-term disaster resilience may be compromised by feelings of resentment that others exposed them to a fire event, and these feelings continue to negatively affect their health and wellbeing. Compulsory evacuations are rarely, if ever, used in Australia, and people can make an informed decision to stay (Eburn, 2014). This is a choice, but one that should be made without involving others.

People are allowed to make their own decisions. They're adults. As long as they're not putting anyone else's lives at risk then that's their decision. (Nick)

Disaster plans

Having accurate and reliable information about the disaster was vital in the days leading to it, and as people watched flood waters or flames approaching. CFA and SES volunteers in the sample spoke of their multi-dimensional approach to informing people.

We know some very vulnerable streets and areas. So there's a conscious effort to go and speak to those people over time ... They need additional attention so that you can [tell them] what can happen. (Nathan)

Part of resilience is to have the facts that you need to make good decisions. (Luke)

The starting point is governments have an obligation to protect their citizens as best they can and that includes providing them with information and advice that enables them to make an informed decision. (Cameron)

In the period shortly after the disaster, information was needed on how to access help to defend oneself, or one's family, property or community.

Flood plan and preparation

Informants with experiences of floods spoke of the need for better information. Coincidentally, the focus group of six neighbours met with interviewers on a day when severe floods were predicted for the next day. They remembered better information preceding the '93 floods than they received for this predicted flood. Some spoke of cleaning gutters, moving things out of the way, or up high, including furniture and electrical goods, and ensuring important documents were safe and at hand. One had alternative housing in a motorhome they had moved to higher ground. In contrast, one seemed overwhelmed:

I have a shop and a house full of things so I would not have a clue where to start. (Livianna)

Michelle's plan was formalised through her role in an Incident Management Team, and involved leaving the key out for her neighbours to come to her house, now built high above the flood plain. The uncertainty of what was likely to happen was palpable in the group. Plans and fears for the future 24 hours were informed by memories of past floods in 1993 and 2011. Ellen remembered roads being cut, which had left the street 'like a little island in here'. As in a fire, her family had had to decide whether to stay or go, and they reflected on a lack of the information they had needed to make that decision. In 1993 Scott had stayed and had inadvertently become separated from his wife and children who had climbed into the back of an army truck to be driven out. His wife, Ellen said, 'It was just raining so heavily and it was so dark'.

I wouldn't do it again, if we had enough information in the morning yes I'd get out and just come back and sort it out later. (Scott)

Ellen expressed frustration at the lack of such information, even in 2018 as we waited to know how high the flood waters would rise:

You can't stop the water and you can't stop the flood but you can help people get better prepared and you can help people from falling back ... to again being lazy with information. (Ellen)

No one said anything that particular time because they were frightened people were going to panic. And that's the part that annoyed more people than anything else because most of us woke up to it, stepping out of your bed and there was water. (Scott)

Previous experience did not necessarily help with decisions about what to do. Rather than preparation and good judgement laying foundations for disaster survival and subsequent resilience, some suggested good fortune was responsible, and that things could have easily gone wrong.

We're going through these things and, again, you don't know. Everyone says, 'Oh no one died'. And that was just [luck], I knew of a friend – he got knocked over by the water and the only thing that saved him was he put out his hand and grabbed the towbar of his car. You hear of Ellen and the kids being knocked over in the flood, you hear the truck going. I mean, for the grace of God we could've lost about 20 or 30 people. (Scott)

One informant who survived a life threatening flood, said adamantly, 'There's only one clean up in me'.

I've said it at the time and I still say it, 'I've only got one clean-up in me'. It took me everything I could and I just don't know what I would do if it happened again because I can't do that again. I'm 24 years older than when it happened. Physically, mentally, emotionally everything, I couldn't do that again ... I think I would absolutely fall apart. (Michelle)

The complexity of fire planning

A fire plan is not only complex, but is implicated in resilience.

You can't control what happens, but you've got some idea of what you *can* control. And I think in some ways that's beneficial. (John)

Even 50 or more years after a life-threatening fire experience, the threat inherent in a hot windy day sparks anxiety and fear in women and men. Disaster resilience is predicated firstly on believing a future disaster experience is manageable or avoidable. Having a measure of control appears vital to resilience. In theory, fire plans offer a degree of control, and so, are central to surviving the event and having some sense of personal agency during and after it.

In fact, only 5% of people have a written fire plan (McLennan, 2015) and this figure is not increased by a previous experience of bushfire. Even Black Saturday survivors barely increased their rate of having a fire plan. Amongst our sample, many spoke of their uncertainty despite – or possibly because of – their knowledge and awareness of what is at stake. For many, the complexity involved prevented having an agreed, written and practised fire plan.

You've got to have a fire plan but a fire plan's actually a complex thing. (Bradley)

Those caught up in a catastrophic fire recognise the outcomes for people rarely related directly to their knowledge, preparations and actions. Many people who lack disaster experience wrongly assume that people who lost their lives or property in bushfires were necessarily 'to blame' – for lack of preparation or for not leaving early enough.

There were people in Kinglake who thought they had the best fire system in the world and they are dead now. (Josie)

In Victoria, unlike in the ACT, NSW and USA, evacuation is not mandatory (Loh, 2007). The policy of the Victorian Government is 'Leave and Live'. It was adopted after the devastating 2009 Black Saturday bushfires and the Royal Commission that followed. It replaced the 'Prepare, Stay and Defend or Leave Early' (known as 'Stay or Go') policy in recognition that that former policy, at least in the way it had been applied, did not work in catastrophic fires. The new policy more-clearly prioritises lives over property. Some informants agreed:

The house is a thing. Everything in it is a thing and is replaceable. Obviously memories you're going to have and there's special items in your house but at the end of the day they're just a thing. As long as you've got every life whether it's person, dog, whatever that's more important. (Cassandra)

The Leave and Live policy, like its predecessor, is complex for many people, as reflected in the very low rates of completed and practised fire plans.

The CFA is correct in that if you're not there you're safer than if you are there. But it's a case of a calculated risk. (Warren)

Everything comes with risks and danger. You've got to weigh up what you're prepared to tolerate. (Annie)

Peri-urban areas are sometimes at high risk (Buxton, Haynes, Mercer & Butt, 2011). Yet such areas attract residents in part because the costs involved in buying or renting houses are more affordable than closer to the city. Lower-income residents have fewer options for leaving, and for staying away during dangerous fire conditions. For those with jobs in the city, or some distance from outlying suburban areas, the dilemma is reversed. When, and under what circumstances should they go in to work?

I do have significant amounts of sick leave available to me so if there's a hot bush fire day, I'll be calling in sick. (John)

Complexity includes the practical difficulty of how people can leave early when day after day is categorised Code Red (in Victoria). Families with babies, or children at school, or children or adults with disabilities – where do they go, day after day in extreme heat conditions? The significant disruption incurred to their daily routines and financial burden in the extra expense of days away from home add complexity to what is ostensibly a simple life-saving strategy of leaving and living.

But where do you go? That's the controversial point, because they don't tell you where to go. They just don't want you to be there. But are you going to a better spot or a more dangerous spot? Even though we don't have an authorised spot, most people, we believe, will congregate at the footy oval. However it's west of most people so they've got to travel towards the fire to get to it. Leave on the day, and not when you see the fire. Alright, so you wake up, let's take someone, Black Saturday started at about 11:30 or quarter to 12 at Kilmore somewhere. So you mean to tell me that nine o'clock that morning someone would get up and go, 'Oh, today's going to be a bad day, let's go for a drive somewhere. Let's go to Marysville for a drive'. What are they doing? They're putting themselves in a more dangerous spot. Let's go to Preston, it's still above the bloody line ... your earlier question is whether I would stay, yes, I think I would stay because some of these deaths I've seen, if you make the decision too late to leave then you are more likely to get caught in it. And this goes back to my army training, better to fight the enemy on the ground you know than on the ground that he chooses. And if you see some of these burnt out cars, you might have full intentions to drive down this road, but you don't know when you're driving through that smoke that someone stopped in the middle of the road because he's hit a tree, and then you run up the arse of them and then your car's disabled, you're trapped, in the fire, exposed, on the ground that the fire has chosen, not what you've chosen. Your house might not be the best thing to defend but it's sometimes the best place to be. (Jonathan)

And for CFA fire-fighters

If we have a fire near home, do I go off on the truck or do I stay and defend my home. And I still haven't made up my mind. (Jonathan)

Fire-prone areas are often beautiful places to live for most of the year, as the trees and undergrowth that ramp up fire danger are idyllic and appealing to people. Kinglake, Marysville, the Dandenong Ranges, the Otways, and many other picturesque locations are amongst the most bushfire dangerous places to live. The nature of winding mountainous roads increase the danger in driving out in fire situations. The isolation of some locations attracts people who feel disaffected from society, or people who choose a more solitary lifestyle. Staying away may not be a feasible option for them. They may not have someone to stay with.

People live in these areas for a variety of reasons and one of them is because they don't want to have anything to do with people. (John)

Experience of life-threatening fire, when combined with ongoing high risk, compromises resilience. The locations where many people live in Victoria and across Australia can be dangerous. Some areas even lie within a known 'footprint' for fires, or in floodplains.

There's a book called Victoria: A State of Fire and in that it talks about the fires that start in exactly the same place, they go round the hill, it ends up with the south westerly turns it and brings it up where we are. So we're right dead smack in the path. (Sandy)

Black Friday 1939 came through this area and I got hold of the map of the Black Friday fire footprint and put it over Black Saturday and they were virtually identical ... But people get complacent because they say it looks green but they don't realise if it's a 45 degree day with 2% humidity it's going to burn and there's still a lot of leaf litter in the forest that can burn so that will go up. So it's reminding people it has happened before in the old timers' memory, it's happened in living memory before so it will happen again. (Ruth)

As part of the CFA I could see the potential danger some people were in. The fires in some parts were impossible to control until rain came and it wouldn't take much for those people to be wiped out. (Alexia)

Then you've got areas like where I live that it should be a case of, 'Well you should only be living there if you really need to live there because it is inherently quite dangerous'. (Warren)

Remnants of the former 'Stay or Go' policy are potent, and informants know that houses have a greater chance of surviving where informed, prepared and capable people stay to extinguish embers before and after the fire front has passed. However, the 'Leave and Live' policy recognises that 'Stay or Go' was not viable in the conditions of Black Saturday. One informant said, 'Black Saturday changed complacency forever'. Others said:

People come up here and go, 'Did the fire come through here? Did it really come through this property?' I go, 'Yes, this house was a rebuild since 2009, it's only seven years old.' [They say] 'So, what should we do if another fire comes?' 'Get the frigging hell out of the joint if you can' ... It's become really complacent. (Chloe)

They don't know, they have no idea, none whatsoever ... You don't know what you're going to face until you actually see it come over the hill and you go, 'Shit, that's not what they talk about'. (Josie)

As it came over the last ridge my son said, 'Fuck I think we might have done the wrong thing'. But it was a case of we've made the decision, it's too late. (Warren)

Other fires, too, were equally formidable to those caught up in them, altering fire plans:

In early days we were up there we were going to stay and fight the fire, and after seeing the Ferny Creek and the fires in '97 – that changed our decision-

making. It was, 'Pack up the kids, pack up everything we need and get out of there. Make sure the house is insured, that's it'. (Barry)

Assessing risk

In contrast, some who barely survived bushfires nevertheless consider staying in a future fire. This is in full recognition of the danger. As Eric says, 'The thing is it's a hell of a dangerous thing to do and very traumatic'. With one exception, these were older people who found the thought of having to start all over again too much, having already done it once.

The other thing is people are older. That which we did fairly easily then would now be almost impossible for us ... But where would we go? I'd hate the feeling of sitting ... on the footy oval effectively watching our hard-won property burn. (Eric)

I know my physical limitations. I know I can't go out and fight fires now. I'm over 70. I can't go out and fight fires and drag fire hoses around. (Graeme)

Several informants – both young and old – spoke of not wanting to survive a future fire like the one they survived, ostensibly choosing the risk of death over the pain of re-establishing.

'I'm not leaving the property,' I said, 'I will die before I go back through that again.' (Josie)

I was talking to an older lady in the district sometime after. Her husband died about 30 years ago. Their place was similar, it was just razed, there was just nothing left. She said 'I'm still not going. I will not be going next time because [this place] has a lot of meaning to me'. (Warren)

I believe much more in staying. I'm 75 now and I'm going to stay again if a fire comes ... If you go to a [Community] Fire-guard meeting it's, 'You must go'. They can't make you go. But in their meetings now, the phrases are, 'You're going to go out in a body bag'. Well I didn't go out in a body bag. I survived. I have a plan. I suppose at my age I'll take the risk ... These volunteers out on the trucks, they're taking the risk and I don't expect them really to come and save my house. (Luke)

Luke's comment was made in full awareness of the role of the CFA. He didn't want them to take risks for his home, and wanted the responsibility for his own decision in the fire and his own life. Having a lifetime's knowledge of bushfires and having barely survived fires in 1999, he is effectively choosing his destiny, not expecting others to help. As a single man not involving others in his decision, he feels this is his right.

Better prepared

Many informants have stayed in areas where they lost homes and almost lost lives. Some had limited choice given the cost of moving to another location and enjoying the same standard of living. Some stayed because of their strong connection to place. Informants who stayed were required to meet new building standards, called BAL (Bushfire Attack Level). Features include sprinklers, ember proof eaves, concrete construction, etc. Some went further, installing large capacity water tanks to ensure water would be available for fire fighting and investing in fire-fighting or property-protection equipment, including easy to start diesel pumps. Costs and bureaucracy aside, there was uncertainty and almost a curiosity about how much the new BAL

rated buildings could be relied upon to provide protection in a future catastrophic fire. The question was whether it really would be safe to stay.

My son tells me he's built a fireproof house ... He says it's safe. Well, his wife says it's not. (Barbara)

In the new house he put this whole massive sprinkler system ... I think he thinks now, 'I've done the best I can but I don't know if it's the best'. (Josie)

People without a plan

A Canberra fire survivor said:

I know the Chief Minister at the time he was very deeply affected by the bushfires and particularly how slow some government agencies were to move. I didn't know the man but from what I saw in the media I got a very strong sense that he felt very badly about the fact that four people lost their lives. Now those four people that lost their lives basically all decided to stay but they didn't really have a plan ... I think we all had a very false sense of security about our city ... [The fire] matured us a bit and woke us up and made us realise that we were susceptible to the same things that everybody else in this country is. It definitely made us more fire aware. (Cameron)

Predicting exactly which conditions will bring catastrophic fire threat is impossible. Almost ten years after Black Saturday, Europe is experiencing unprecedented heat and wildfires, and Victoria and other parts of Australia face a farming crisis due to prolonged drought conditions. Fire planning is less certain as climate change brings more frequent and more severe weather events.

I know that on a normal summer's day, 30 to 40 fires around the state start ... We've just got through 10 years of drought up here ... You look at '83 [Ash Wednesday] '82 was a big drought, everything was dry come '83. And it's the same again ... '37, '38 were droughts, '39 worst bushfire Victoria ever had ... '51 was a drought and we had a big one up here in '52. All those fires, '65, when the ground's so tinder dry, it burns with such fierceness. (Jonathan)

Fire-fighter Jonathan went on to say, 'You can plan all you like and it will always come a different way'. For emergency management, warnings have become a cause of blame. Some people in communities blame government authorities for inadequate warnings, but also for warnings where the expected threat does not result in a major fire or flood. Weather and disaster prediction is not an exact science, yet some in threatened communities have unreasonable expectations. At a community level, they ask how they can believe warnings when the EM sector 'over reacts' (Noonan, 2017).

Involvement of gender in fire planning

Underlying the practical considerations is a largely unacknowledged barrier to having agreed, written and practised fire plans.

Women are more likely to think 'I'm going to be leaving here early' and sometimes when you're down at the table they'll both simultaneously say, she'll say 'I'm leaving early' and he'll say, 'I'm going to stay and defend' and they'll sort of look at each other like that and I say, 'You need to sort that out now because you don't want a screaming match in the car with the flames coming over the hill'. (Ruth)

[Over the years, the] logistics all change, that scenario is different. My desire to stay is that I can't be bothered rebuilding, and Emma said, 'Well that's ridiculous'. I go, 'Well no, we worked so hard to build this place the way we wanted it'. (John)

Gendered expectations of the man as the 'protector' by defending the family home and woman as the 'carer', driving children out to safety are even more stringent in times of disaster (Parkinson & Duncan, 2018). Complications for men are heightened through expectations that they also protect the community by joining the local CFA brigade, and prioritising this service over leaving early with their family. The same holds true for career fire-fighters and their families.

There is a lack of recognition in the community of the importance of a written fire plan and the complexity of negotiating the plan during an unpredictable disaster. Gendered expectations were mirrored in fire plans resulting in large pressure on men to protect property and women in high risk situations when evacuating with children alone.

Discussion

This Discussion elaborates on the key themes in the findings, and focuses on areas where policy and practice change can deliver improved outcomes for the long-term disaster resilience of survivors. Importantly, it takes advice from informants to help formulate disaster-*prevention* strategies, both for the individual and for the emergency management sector. Throughout the Discussion, reference will be made to the Recommendation section for suggested actions. Underpinning positive change is the challenge, for the sector and all Australians, to understand the impact of disaster experience on individuals, families and communities. To stop asking, 'Aren't you over it yet?'

Informants to this research had experienced major fire and flood disasters since 1943. Six had experiences of more than one, and some had experiences of many fires, flood and other traumatic events through their CFA or SES volunteer roles. While all 56 acutely remembered specific events or images, as if they were seared into their being, the aspects they spoke about were qualitatively different some ten or more years after the disaster, than when survivors were interviewed soon after the event (*The Way He Tells It, Men on Black Saturday*). The deep angst, felt in the first two or three years regarding critical issues survivors faced, were omitted or mentioned only in passing in this long-term research. These were issues such as drug and alcohol use, temporary housing, and frustrating levels of bureaucracy associated in rebuilding.

Now, having overcome these issues, what stayed with survivors in the long-term – also covered in the early research – related to reflections on the impact of the experience to themselves, their family and community, and how this informs future actions.

It is in this *personal* realm that long-term resilience is determined.

Protective factors identified by informants were not wholly intrinsic to their character, but were also physical, such as essential resources provided in the immediate aftermath, and psychological and community support offered in the long-term. Given that the trauma of extreme disaster experience can emerge or re-emerge many years

on, such support for disaster survivors should be available to them at any time across their lifespan.

Major findings outlined in this section include the unpredictability of the course and impact of natural disasters on people, and the importance of sound information to allow planning for disaster. The extent of responsibility to family members is considered, followed by the responsibility of adults to protect children in disaster. Themes of resilience and assistance are discussed, followed by mental health and wellbeing, suicide by disaster, fairness and kindness.

Catastrophic fires – a challenge to accepted wisdom

The catastrophic Black Saturday bushfires forced a policy revision of how bushfires are thought of in this country (Teague, McLeod & Pascoe, 2010). The distinction between grassfires and wildfires (as they are known in the US) and the impossibility of containing fires like those on Black Saturday was apparent to all. Those who survived frequently spoke of the wind change that either saved or endangered them:

Then the wind changed ... and the house was saved. (Alexia)

The wind changed, the fire was like a tidal wave breaking over us. (Eric)

Then the wind changed so all of a sudden – the catastrophe. (John)

We'd always been told that the fire was going to come from the north or the west because that's your northerly or your westerly wind. The fire that burnt our farm came from the south. (Jonathan)

Many observed the capriciousness of what burnt and what didn't, who survived and who didn't. A military man, farmer and long-time CFA volunteer noted widespread bewilderment amongst people with long-standing knowledge of bushfires, and observed 'the randomness of how some people die and some people don't' (Jonathan). Few felt they were in control on Black Saturday despite solid preparation, good equipment and sound training. Indeed, even the best prepared and most knowledgeable people put their survival down to the wind change, or to luck. Experienced fire-fighters and those caught in the fire-front equally questioned their previous knowledge of what to do. They spoke of headwear flying away in cyclonic winds, water turning to vapour as it left the bucket, and ploughed breaks counting for nothing with a fire and gale-force winds. Good advice for grass fires does not hold for catastrophic fires.

This new knowledge challenged informants, and caused uncertainty for their actions in future fires. In contrast, the flood-affected informants were able to use their disaster experience with some surety that the flood waters would follow a similar course. The notion of 'informed decision' is therefore central. Provision of accurate information and disaster warnings is not an easy task, hence the advice to 'Leave and Live'. In 2009, what was considered to be thorough preparation frequently did not prove to be effective in the ferocity of the Ash Wednesday and Black Saturday fires.

This idea that people say 'you need to be prepared' that's utter bullshit. I saw so many examples of people that were prepared in every way you could imagine and they still got burnt up and died. I saw people who had no preparations and survived and had a different experience. (Seth)

A friend of ours ... was a scientist, he's a fire expert, bushfire expert and he was of course just a young man back then ... and they were prepared. They had a

male friend staying with them who was prepared to help. But I remember him talking a few days later, 'We were so close to death'. And they were young and very fit, they were the sort of people who climbed mountains, and he said, 'We were so exhausted. We had the water, we had mops, we had wet towels, we had blankets, we had the house prepared as much as it was physically possible to prepare a house and it was still burning'. (Suzanne)

Disaster plans

Fire planning is fraught, yet tightly implicated in disaster resilience. In response to the Black Saturday fires, the Victorian Government changed the policy of 'Prepare, Stay and Defend or Leave Early' (known as 'Stay or Go') to 'Leave and Live'. This presents complications for many people who have livestock or horses, or commute long distances to work, and for those with caring responsibilities, for example with a number of dependent children, variously at childcare, kindergarten, primary or secondary school. However, the experience of Black Saturday or Ash Wednesday, for a great many people, was that there was no fighting that fire, and no getting over it. This new knowledge of the unpredictable nature of fires elevates the critical need for written and practised fire plans.

The same learning, that there is no getting over it, was true for flood survivors, whose planning for future floods involved fear of being able to cope with both the flood and the clean-up afterwards. Lack of insurance through the exorbitant and unaffordable premium costs left informants fairly powerless to prevent financial disaster in another disastrous flood.

My insurance put me up to \$10,500 a year ... I couldn't find anybody that would do it for less ... I sent them the plans [for the new house above the flood line] ... and then they very generously took it back to \$5000 a year so I said, 'No thank you very much'. (Michelle)

Michelle hints at the involvement of authorities in causing vulnerability through policies that prioritise the private sector and profit over people's wellbeing.

We know that irrational land use policies, non-compliance with building codes, poor governance, and bad planning in general work together to put more assets and people in harm's way. (Olson, 2018, para 3)

In the aftermath, survivors are judged by those closest to them – or by their work colleagues, or by organisations providing grants, or by insurance companies – as to how deserving they are of empathy or practical assistance. Even those within the emergency management sector seem ready to put disaster losses down to people's unwillingness to respond to their communications. Why don't they have a written fire plan? Why don't they leave early? Sadly, these judgements limit recovery and hinder resilience.

In fire and flood situations, roadblocks are established to keep people out of danger, but these are not taken seriously. One after another informant, in this and our previous research, speak of knowingly evading roadblocks. Education and imposition of penalties are clearly required to ensure people comply. The corollary is that policing must consider local knowledge and conditions, and review policies that keep family members out of disaster areas for weeks at a time, so that people trust the decision-making of authorities.

While fire or flood planning is promoted, its success is enhanced by the commitment of local groups, and championing by influential individuals. Ideally, this community-wide planning would occur before a disaster event and would be ongoing. (See Community models in Appendix 6 and refer to post-disaster reports by Lyn Gunter (2011) and Daryl Taylor and Helen Goodman (2015).) However, most planning is at a practical level and would benefit from families, neighbourhoods and communities going deeper to explicate the motivations of people in what they plan to do. In particular, gender plays a key role in both fire and flood experience, and should be explicitly recognised and addressed in plans. Gendered roles and expectations are so ingrained that ‘choices’ – of staying to defend property by men, and leaving to protect children by women – can remain unnamed and unexamined. Whether these assigned roles are logical needs to be examined. Christine Eriksen writes:

When the gendered dimensions of wildfire are investigated in the context of hegemony, a paradox also emerges between women choosing not to take control of their own wildfire safety and women being denied the opportunity to take and be in control. Men, on the other hand, often take control and perform protective roles that many have neither the knowledge nor the ability to safely attempt to fulfil. (Eriksen, 2014, p. 39)

Conflict between heterosexual couples is a recognised issue when making and enacting fire plans (which are mostly in their heads rather than written). For example, women and children frequently escape bushfire alone, and are sometimes delayed in leaving either through lack of autonomy or through loyalty and love, trying to convince men or other relatives to leave. In this research, it appeared that women also escaped dangerous flood waters with children in tow.

It is likely that the high rate of female deaths on Black Saturday (42%) and over the previous 50 years of bushfires in Australia (40%) would be reduced if the current gendered behaviour of men staying to protect assets and women escaping, often late with children, is changed. Naming the problem is the first step (Parkinson & Duncan, 2018).

Research indicates this gendered behaviour in bushfires is not biologically driven but the result of social roles (Bateman & Edwards, 2002). In many cases in our previous research, men who had intended to stay and defend on Black Saturday, left only minutes after their partner and children left without him. Sometimes, years after the initial disaster, couples reversed their intentions in fire plans as a result of their experience. Men who stayed last time now plan to leave early, and women who left now plan to stay.

[My wife] point blank refuses to leave again ... which then puts a bit of pressure on us for next time because I won't go [and I don't want her to risk her life]. Even now I won't go. So I don't know where we're going to get with that one. (Warren)

The question is whether it is preferable to stay in a life-threatening situation together (accepting the possible consequence of dying together), or separately leave danger zones for safety. As long-term resilience for both women and men is compromised by feelings of failure in caring for family members, disaster plans should take into account planning when family members are not together, ideally prioritising individual safety over being together in life-threatening circumstances.

This section inspired Recommendation 1

Family obligations

This and other research, as well as anecdotal evidence, finds that women, men and children may be placed at great risk in disasters through the implications of choices of others and family obligation. In *Men on Black Saturday*, an informant said he drove towards the fire with his teenage son to try to persuade his elderly father to leave his home. It took some time and they did not manage to leave before the house was on fire. By coincidence, two CFA trucks were sheltering in the driveway in survival mode and Lee, his son and elderly father battled zero visibility and the fire front to reach the CFA vehicle:

‘The CFA driver poked his head out of the window and said, ‘Fuck this, we are going to die here’. [The local fire station had said], ‘We’re not coming up there to get you, it’s not safe’. The ... crew declared a mayday, as the comms said ‘No, no-one’s coming up there to get you’. We just didn’t think we were going to get out of there. The truck driver was crying. (Zara & Parkinson, 2013, p. 9)

Indeed, indications are that people have lost their lives in this way.

Most of the blokes would have said, 'This is my bloody house, I built it, I worked my arse off the last 25 years, I'm not leaving this joint ... we'll be alright'. And I know a few families that perished like that. (Lou)

I have first-hand knowledge that there are women, wives, on Black Saturday who wanted to leave town and their husband said, ‘No, we’re staying to fight this’. And they stayed to fight and they both died. (Brad) (*Men on Black Saturday*, Zara & Parkinson, 2013, p. 25)

In this research, men were conscripted by other family members to go and help in dangerous situations. To protect people who are currently safe, and away from fire zones, disaster warnings could make it clear that the policy of ‘Leave and Live’ extends to *not* allowing people to drive *in* to areas that are in the expected path of a bushfire. This would permit people to legitimately refuse requests for help that endanger their lives.

The sticking points are two-fold. How to ensure others are not endangered by your own disaster plans, and how people can be fully informed about the possible life-long burden of disaster trauma. For a great many, long-term resilience after disaster is compromised by feelings of guilt. They felt that:

- They failed to save family, friends, neighbours, strangers.
- They failed to warn them beforehand, or check on them later.
- Their judgement was misplaced and their decisions wrong.
- They failed to live up to the man (mostly) or woman they thought they were.

This underlines the critical importance of flood and fire-plans that force people to consider their approach with the people closest to them – before disaster strikes.

This section inspired Recommendation 4

Roadblocks and livestock

Farmers spoke of the concern they felt for their livestock in the immediate aftermath of disasters and how this continued to play on their minds. Two shared their

reflections on how the requirements of safety could be met, along with accommodating farmers' obligations to their livestock.

There needs to be a review of access to property subsequent to the fire where it is known there is livestock. I think the police should review ... their control measures [to] enable the owners of livestock who know that there are livestock there that may have been injured to escort them in and allow them to take the stock out for treatment. (Alex)

In the fires of late they were stopping people from going down the road to their properties and I'm thinking that's not correct. Go down at your own risk. Basically if you've got a property down there if you have a rough idea of what's going on, and you're not straight from Brighton or Melbourne, get down and see what's happened. (Andrew)

He's the local vet and he was stopped from going down to his place. He wanted to go down because he was concerned about his animals that were needing attention - whether to be shot and put out of their misery or needed vet attention. (Tricia)

This section inspired Recommendations 1.1, 1.2, 4.2.1, 4.2.2, 4.2.3, 4.2.4 and 8.7

Suicide by disaster

Self-assessments of resilience were sometimes premised on future ability to either avoid or deal with a disaster. Some informants spoke of not wanting to survive if it happened to them again. It was too much to think of going through that experience a decade or more later in their lives, or of having to replace belongings, homes and farms, or indeed, not being able to replace things of great significance to them.

Balancing quality of life against simply surviving had both women and men questioning the wisdom of doing it all again. At what point does resilience become living without sufficient resources or support while tormented by memories of the disaster or the physical and mental consequences of it? When is it resilience without purpose?

Suicide spikes after disaster (Barton, 2017). The responsibility of society is to ensure the cause is not lack of caring and the role of government is to ensure sufficient information and resources are provided for planning and recovery. Beyond this, individual choice remains a value held strongly in our society.

While hard work and persistence was evident in people demonstrating resilience, it was equally evident in others who could not 'bounce back'. In addition, a person's resilience – as judged by others – can be a reason to condemn or blame them for their situation. For some, enough is enough. Without a viable and enjoyable future, it can be a rational decision to choose suicide.

I'm 75 now and I'm going to stay again if a fire comes They can hold a gun to my head. I'm not going ... If it's going to take me five years to recover and that'll make me 80 I'd rather go now. I don't want five years of recovery. (Luke)

This dilemma is central to disaster planning. With suicide legal and individual choice a value in our society, a person's decision to stay in the face of imminent disaster threat must be respected. The caveat is that others must not be implicated.

This section inspired Recommendation 1.2.1

The protection of children

Responsibility for children has long been recognised as a significant factor in people's decision to leave early (Bateman & Edwards, 2002). However, Haynes et al.'s (2010) analysis of bushfire deaths indicates that 17% of those who have died in bushfires between 1900 and 2008 were children, with this figure dropping to 15% in the most recent 50-year period to 2008. On Black Saturday in 2009, 35 of the 173 who died were aged under 18 years. This is 20% of total deaths.

The majority of the child deaths in Australian disasters occurred as a result of parent's decision (Haynes, 2008). Late evacuation was the most common cause of death for children in the past century (Haynes, 2008). Young people in this research spoke of absolute faith in parents, yet the evidence of past disasters suggests such faith can be misplaced. Should parents have a right to risk the lives of children? There is a strong argument for attention to be paid to the rights of children in disasters. The protection of children in Australia is evident from monitored and enforced compliance with seatbelt legislation for babies and children. In addition, there is legislation regarding the age and conditions under which children can leave school (Year 10), drive, buy cigarettes, drink alcohol, gamble, get a tattoo, or sign a mobile phone contract (18). Other legislation extends to protecting children from 'junk food' advertising in children's viewing times, or excluding children from education without vaccination. New Victorian legislation prevents child abuse through use of the internet or digital technologies (Attorney General, 2017).

The same attitude shift that allows us to unthinkingly harness children into car seats is now needed in disaster situations to ensure children are not taken *into* danger, nor used to help defend property. This requires community information and education about current legalities regarding children, and their rights (UNICEF, n.d.). Equally, the responsibility for the safety of a child should not rest entirely with their mother, as prescribed by gender stereotypes, but be the responsibility of both parents.

In the long-term, the resilience of both children and parents will be improved by removing the guilt felt by so many when they reflect on disaster experiences. Australians' heightened awareness that children are not to be taken into danger or negligently exposed to disaster would save lives. It would also prevent recriminations that plague the resilience of survivors, and simplify parents' decision-making in the urgency of disaster.

Making the lives of children and other dependants the priority and the equal responsibility of both parents may indeed save lives and prevent trauma as the emphasis for each parent shifts to escape rather than protecting property.

This section inspired Recommendation 1.1.2, 1.1.4, 4.2.3 and 4.2.4

Self-reliance and resilience

Informants reflected on the CFA and the role it plays in community safety. In recent years, it has become the norm for the emergency sector to impress upon people that they will be required to look after themselves in a catastrophic disaster as no other option is possible. Catch phrases like, 'It's up to you for 72' emphasise that people need to be prepared for no assistance to be provided for up to three days.

The CFA have had a shift because in the last few years when they come up for those community talks and they say, 'We won't be coming here, we can't get trucks here' and the first time they said that was a bit of a bombshell to everybody standing on that street corner because prior to that it would be you listened for the sirens, look at the sky. We will get here but we're not going to come and knock on your door. Then all of a sudden it shifted to, 'We won't be here'. So I think you need that honesty and that way you can trust. (Sandy)

Wherever possible, the CFA has managed to save homes, but increasingly community expectations have been pulled back from expecting a CFA truck in every driveway (reported in *Men on Black Saturday*). As Warren notes in this research:

In outlying rural environments people are generally and should be far more independent and you should have no expectation of the authorities coming in and saving them. (Warren)

Although somewhat of a shift back to self-reliance in disasters is inevitable, it must have limits. Under the social contract (see for example, the philosophical theories of Hobbes, 2017, Locke, 2011, Rousseau, 1969), people have a right to expect some level of government help when at their most vulnerable. It was notable that while our informant, Bert, did not remember government assistance in 1943, neither were there layers of bureaucracy that were problematic, as were apparent in the aftermath of more recent disasters. In the current day, and in line with prevention of disasters, people need to abide by new regulations designed to ensure greater safety for residents, such as building houses to BAL ratings or accepting rezoning of flood areas or buy-back programs where private land abuts forests.

Given the requirement to meet these necessary but demanding regulations, when affected by catastrophic disasters, people deserve essential government help. After Black Saturday, the early withdrawal of the army prevented services that were necessary to survivors, such as water tanks. Flood survivors appreciated the skips that allowed them to clear away rubbish. Key tasks that are impossible for many individuals could be provided by government to all who need them, along with prioritising essentials such as power, food and water, and mobile connections. There is a direct link to resilience.

Not be put into a box, and be told, 'You're going to now return to back normal'. What's that? I haven't got a home ... or I haven't got power, I haven't got water. (Elise)

The worse thing they did was pull the army out ... It was the two-week mark, at the big top tent in the main street, we all get told to go home, go back to normal. The joint is still burning, half the bodies haven't been found, we've got no power, no water, and, 'Go home, go back to normal'. (Chloe)

Cameron correctly notes that 'Government can't do everything ... People have to get involved and do things for themselves', and John accepts the increased risk that comes with the location people choose to live in.

Living on a flood plain or in a fire footprint fires often brings increased risk as well as reduced access to health services. In some isolated areas 'you're pretty much up shits creek without a paddle' (John).

Yet, individuals' resilience will have a chance if the basic necessities of life are reinstated for those affected. If government-funded services can quickly reinstate

essentials such as water, power and communications, individuals, families and communities are in a good position to build on this.

Suspicion of the concept of resilience creeps in where it appears as if government is devolving responsibility to the individual, and those who don't 'bounce back' are judged to have failed. Perceived deficit in individual resilience may be used in this way by government to relinquish responsibility to the most vulnerable in the community.

Individual responsibility for pets is not always possible after disasters as people are displaced from home. This causes even more suffering as pets and owners are separated, or people stay with their pets in unhealthy localities.

This section inspired Recommendations 2 and 3.1

Mental health and wellbeing

In the sample of the present study, of 56 informants, nine believed they were close to death during the disaster. In a study following the Black Saturday Bushfires (Bryant, Waters, Gibbs et al., 2014) fear of death, and losing a loved one were found to be associated with psychological distress. Other stressors in the aftermath, such as lost homes and jobs, and disrupted relationships are also likely to increase the risk of mental health difficulties (Bryant et al., 2018).

This research was conducted by social researchers from a sociological perspective. Similarly, other social researchers in the disaster field write that catastrophic disaster survivors are at increased likelihood of mental health issues (Norris, Friedman, Watson, et al., 2002). As trauma is recognised as central to the emergence of many aspects of mental ill-health, such as anxiety or depression, as well as PTSD, it must be addressed holistically in the post-disaster context. Rob Gordon (2007) details the importance of the 'social worlds' of those impacted by trauma, consideration of which is central to recovery.

In this and previous research, informants questioned the individual nature of much of the counselling provided, when the situation itself was of such great magnitude, and affected whole communities. In previous research, an informant 'joked about putting anti-depressants in the water' because everyone was taking them (*The Way He Tells It*, p. 112). Rather than pathologising individuals, there were examples of professionals in the mental health field supporting social interventions and community strengthening initiatives to prevent and address mental health difficulties resulting from trauma. The role played by qualified psychologists, psychiatrists, counsellors and other mental health clinicians was critical in the period after Black Saturday, and indeed, some psychological interventions were offered in group settings.

I went and sought out a psychologist ... We were very intentional about recognising our own warning signs. We also had a psychologist come in and visit to work with our guys as a group. (Seth)

Although the wealth of research on post-traumatic stress disorder within the psychology discipline has not been central to this research, it is useful to understand the psychological approach often taken. In considering what causes mental suffering, those in the mental health profession commonly draw on Engel's (1977) biopsychosocial model (Wade & Halligan, 2017) which points to the interaction of:

- biological factors (e.g. illness, drugs, genes)
- psychological factors (e.g. experiences of trauma, grief, abuse)
- social factors (e.g. social setting, systems and expectations, finances, individual and community relationships).

Alongside this, Weerasekera (1993) proposed a model of individual and systemic factors, to be used to help understand a person's difficulties. This approach includes exploring predisposing, precipitating, perpetuating, and protective factors contributing to the individual's experience (Weerasekera, 1993).

These models help illustrate why traumatic events impact people in different ways and to varying degrees. For example, survivors of a natural disaster vary in the complexity of predisposing factors they hold, which may include previous trauma, and will subsequently affect how they process the traumatic event.

Informants to this research spoke about the many people who died by suicide following the disaster. This is a significant indicator that more needs to be done to support the mental health and wellbeing of the community following a disaster. During the aftermath, one informant reached out to phone support lines in hopes to have a conversation that would be confidential. Ultimately, this conversation was not kept confidential, with police officers arriving one night at the informant's house in a small town. For him, this breach of privacy could have led to career penalties. It definitely led to him believing there was no-one to talk to.

They trace the phone. I had a policeman knocking on my door one night ... I never said that I'm going to hurt myself. Of course they've got to do something about it. I understand it. But from my aspect you don't really have many people to turn to or talk to. Plus like I said a small town, rumours get spread really fast. (Murray)

Many informants talked about the negative impacts of media, with politicians and actors using it as a means to gain popularity. People were often left devastated, whilst politicians and actors walked around doing 'photo ops' in landscapes of destruction. A disaster zone was looked at as a spectacle with one informant talking about family and friends calling and staying at her house during this time, never to be seen after the initial disaster period.

One of my biggest memories is friends of mum and dad's - people they hadn't seen for years - wanted to come and visit, to see what it looked like. (Hannah)

From politicians, to media, to friends and acquaintances, it is clearly essential to mental health and wellbeing that community connections be strengthened both before and after disasters, and for Australians to be educated in a greater understanding of the impact of disasters.

This section inspired Recommendations 4.1, 4.2.6, 4.2.7, 4.2.8, 5, 6, 7 and 8

Mental health of men

Our sample includes men aged from 18 years old to 94 years old. The generational change of accepted gender roles holds for some changes and not others. While being a married woman in full-time employment is no longer illegal (as it once was for

teachers, public servants, etc.) nor a slight on a husband's standing in society, the deep seated notion of what a 'real man' is still resonates. The shock men felt in 'falling short' of what they expected of themselves in the disaster, and what society expected of them shook their sense of self. People are vulnerable in the face of extreme weather events and disasters – and this includes men. Recognising men's vulnerability in disasters as part of the human condition would begin to alleviate ramifications from society and self-imposed regrets.

The world described by informants is one where men are judged as not resilient, not man enough, and incapable of doing their job if they ask for psychological help or express emotion (apart from anger). In relationships, too, men withdraw, and relationships wither. Neither women nor men have their needs met without purposeful and persistent effort.

The reconstruction period saw locals excluded from clean-up contracts (Zara and Parkinson, 2013; Zara, Parkinson, Duncan and Joyce, 2016). There was support for bringing in large-scale teams to quickly accomplish major reconstruction tasks such as the clean-up and rebuilding homes. Where local qualified and ticketed tradespeople are not included (ideally in a part-time capacity while they re-establish), there are benefits in programs to up-skill locals to improve their chances of employment when they are ready to return to work. The advantage extends to the community, which then has more skilled and certificated people contributing to the ongoing re-establishment of infrastructure, e.g. in working bees for schools and kindergartens.

There were people in the community that had skills that we could augment by getting them their chainsaw qualifications and things like that. We could help them with OHS training so ... they were more employable for a start but also we built a bank of skills in the community that would then stay in the community.
(Seth)

This section inspired Recommendations 5, 8.7, 8.8 and 8.9

Unfairness

Leading disaster psychologist, Dr Rob Gordon, urges understanding that it is not possible to ensure fairness in emergency situations, and it is equally not always possible to judge who is deserving (Gordon, 2013). In a 2013 video interview, Dr Gordon recalled that in the 1980's "getting material aid or actual assistance just was so difficult because the whole government approach was we need to make sure that nobody gets anything they are not entitled to. But what we have seen is a shift that this disenfranchises people who have an entitlement because it's too hard. So it's better to bias the thing in favour of a few people getting something they're not entitled to ... I don't think the small number people who take advantage of the situation is going to actually mean that anyone who really deserves it didn't get it".

While perceptions of unfairness characterised so many aspects of life after disaster, e.g. in grants, insurance, and available goods and services, the class action took this to a new level as those who were part of it received significant sums. The personal or family circumstances or mental health of some survivors in the early years meant they did not join the class action. Their reluctance to re-traumatise themselves or their families, and philosophy of self-autonomy also played a role. The result is that some disaster survivors who were deeply affected missed out on any share. It may be that this injustice is easier to remedy than immediate grants, where attention to adhering to strict criteria of entitlement in the past meant those in need missed out. This approach has wisely been discarded in more recent disasters (Gordon, 2013).

Maybe they've lost possessions that we don't know about, maybe they've lost opportunities which change their circumstances. Everyone is in a state of high adrenalin and... our brains getting to a very efficient way for dealing with ... problems ... we become very quick to judge ... In a way, we move to a very simple black and white judgement way of thinking. (Dr Rob Gordon,2013)

The procedure of the class action itself was reported to sometimes cause further trauma to those giving evidence.

During the Class Action, they were getting everyone in to go through their story, and it was absolutely heart-wrenching, but there was no support offered afterwards. 'Yeah, come in, tell us your story.' You pour your heart out, 'Off you go then'. People were just crumbling. My son went in as a representative of teenagers and it was incredibly brave of him to do this, and he was only about 15 at this stage. He had a complete breakdown after that. And there was just no support for that. I think that's a big bad thing. Because he really had a hard time after going through that process ... poor Benny. He came home and he was just a mess. He had a few little relapses and it was just really awful. (Lena)

This section inspired Recommendation 9.2

Kindness

The financial generosity of Australians towards disaster survivors appears to have increased steadily over recent decades, perhaps reflective of the poverty of Australia in the earliest disasters referenced in this research. The kindness of people towards survivors has always been a feature of disasters' aftermath. Informants spoke movingly of how much the kindness of others contributed to their feeling of not being alone in their sadness and trauma. Knowing others cared and sometimes even understood was important to people and helped their recovery and resilience.

The flipside is the unsympathetic attitude reported by informants, that people should 'be over it' by a certain time. It is critical that those who have not experienced catastrophic disasters do not assume to know what people have been through, how they experienced it, what they've seen or heard, or when they 'should be over it'.

The bullying and insensitivity of fellow students and some teachers described by the young people interviewed is unacceptable. Existing programs run in schools address these behaviours and seek to sensitise young people to the needs of more marginalised students. Programs like Respectful Relations and Safe Schools could be adapted and run in schools in disaster-affected areas every year, on an ongoing basis.

This section inspired Recommendation 2.2, 4.2.6, and 9

Gendered expectations

This long-term disaster resilience research confirms other research findings that gendered expectations of strong, masculine men and nurturing, protective women become more salient during and after the disaster. One informant, Kate, observed that 'the situation sat so far outside anyone's experience that people had no reference for behaviour - maybe that is why we see a return to the gender normative behaviour'.

Men

Men felt the pressure of responding to requests for help both within and outside their family. It felt like a test during the disaster, and after, it changed some men's

personalities. Gendered expectations led men to denial, not talking about the disaster, having angry outbursts and not identifying when they needed help. In comparison, women often held families together and were responsible for the emotional health of the family – sometimes at great cost to their own autonomy, health and wellbeing. Their contributions were often invisible.

The notion that men ‘protect’ women and children, although disproved (Elinder & Erixson, 2012) and disappearing, retained its potency for some men. One saw his value as being his strong male body: ‘Am I OK, am I a good enough person?’ because my whole world has been built by my ability to do stuff with my body (Seth).

Men wanted to embody masculinity as prescribed – protectors, strong, silent, and unaffected by the disaster. Anything less was perceived as failure by their own, and society’s standards. Some spoke of dissonance between who they were and who they appeared to be. Ways to cope for men in society without losing face, included keeping busy (or away), withdrawing, not talking, or being angry. Status for men was threatened if they were seen crying or expressing emotion about their disaster experience. Penalties were either imposed by workplaces, or the fear of that was enough to prevent men expressing emotion this way or asking for psychological help.

Men’s reluctance to seek help was affirmed in this research, and the direct link to workplace consequences offers the rationale. It appeared that organisations assumed men who asked for psychological help were less able to continue work than others. It appears to be assumed that men who did not seek psychological help were actually fit for work, rather than assuming that they were simply lacking the insight that they needed help, or fearful of the work penalties that would follow. Occupational health guidelines appear to over-ride such considerations. In relationships and the home, men also struggled to maintain the stoicism required. Their partners or adult children frequently stepped in to persuade and cajole men to seek help.

Successful strategies for engaging men seemed to be those fashioned around work. Working ‘shoulder to shoulder’ allowed a more natural conversation, particularly with people skilled in counselling. New theorising (Pease, in press) encourages men to identify their own vulnerability. This re-imagining of masculinity offers a step forward in healthier human beings and a planet that is less endangered through men’s attachment to invulnerability and being ‘in control’.

Women

Reiterating the conclusions in our previous research (*The Way He Tells It*), women are expected to make sacrifices to look after traumatised partners, children and elderly parents. Women gave up paid employment to care for family members who were struggling after the fires, and to manage the paperwork and bureaucracy involved in re-establishing their lives, e.g. insurance claims, red tape, rebuilding and grants. The myth of women and children first was exposed again in this research, with girls in danger and this largely unrecognised. Also unacknowledged is the high rate of female deaths in bushfires through women’s socially determined role as carer of children, driving them out from bushfire danger (Parkinson & Duncan, 2018). Lack of women’s autonomy contributed to the danger, and inability to quickly persuade male partners or others to leave. This research reaffirmed that women are expected to cope with complications and urgency of driving out of danger zones with children, pets and neighbours.

Women experienced further discrimination in lower valuing of their contribution and lack of regard for the emotional support they offered to family, friends and communities.

Domestic and family violence

In recent years, domestic and family violence has been addressed at the highest levels, with announcements of funding and commitment from Prime Ministers and Premiers. Australians are just beginning to see this problem as the epidemic it is. For women experiencing violence from their male partner in the aftermath of Black Saturday, the response from legal, community and health professionals was one of silencing and neglect. A recovery worker told us in 2010:

There was a lot of family violence ... It was interesting because workers in another service were saying there's lots of family violence in Kinglake and the cops were saying they were not getting reportsThe local police are part of the community. It was that enmeshment in community of, 'They are the good guys who helped out with the fire even though things might be happening [like family violence]'. (Parkinson & Zara, 2011b, p. 140)

The violence was excused by community members as the men were seen to be suffering, and the women were asked to accept the situation, to 'give it some time', and to be 'better wives'. In this research a decade on, women had left violent relationships and one was in the throes of it, having tried for years to 'give it some time'. If messages that women and children have a right to live free from violence – even in disaster – can infiltrate the belief systems of our society, and if communities are prepared to include statements that 'Disaster is no excuse for family violence', women may be more willing to speak out the violence against them and their children after disaster, and health, community and legal professionals may be more willing to listen and act.

Conclusion

This research drew on the experiences and insight of 56 disaster survivors to understand resilience, what it is, what contributes to resilience over time, and its limits. Informants reflected on the disasters and their lives since. For the 28 who recalled Black Saturday, almost 10 years had passed. For others it was longer – more than half a century for some. Each survivor had a unique lens through which they reflected on their experience. However, the individuals' relationships with our social institutions, and their trust in institutions in times of disaster recovery and reconstruction, emerged as a central theme and critical to ongoing emergency management and practice.

The timeframe in our earlier research asked women and men to speak about recent events, recent in that they had occurred no more than three years prior to interview. There was immediacy in their words. Raw emotion fuelled their narratives as they spoke of the immense pressures they were mostly still living through. Challenges to their equilibrium were everywhere in the early post-disaster years. People spoke of drug and alcohol use, PTSD diagnoses and medication almost community-wide, conflict verging on violence in community meetings, hyper-masculinity, relationships now troubled or separated, and increased or new violence against women and children. Further stressors were described in perceptions of unfairness and dealings with bureaucracy. In the midst of the turmoil, the post-disaster period sat alongside the disaster itself in terms of intensity.

In this long-term disaster research, the rawness and intensity remained when informants spoke of the days of the disaster, and the disruptive effects on their sense of self, their close relationships and their trust in institutions which traditionally form the cornerstones of our society. Equally, informants in this long-term disaster resilience research remembered the ongoing assault in the aftermath, as these relationships unravelled or had to be redefined. Informants described the ongoing assault as continuing to unfold disruptively over long periods, through ten and sometimes 25 years.

In contrast to this unravelling, the use of collaborative community preparation for disaster has proven to work in at least one community, as expounded by an informant to this research (Ruth, Appendix 6). Trust was built by authentic consultation in a variety of ways and involving significant numbers of the community. In this way, community plans were developed before the disaster, allowing its implementation in the aftermath when community members were overwhelmed with recovery and reconstruction efforts. This model would exist in various forms in other communities and could be widely adopted and adapted. The impact on individuals' relationships with institutions in disaster response recovery and reconstruction, characterised here as institutional trust, is central to these findings and consequently a key insight for emergency management policy and practice.

Sociologically, a deeper approach to understanding disaster resilience could see explicit recognition of the negative impact of gendered expectations. Discussion in disaster planning from the kitchen table to COAG (Council of Australian Governments) would ideally consider the following:

- Challenge the assumed gendered expectations of men protecting the home and women protecting children. Identify these as outdated notions that put people's lives at risk.
- Men must not be expected to exhibit invulnerability in all circumstances, nor inhabit prescribed masculinity – as historically and romantically defined.
- Women's rights to autonomy, employment and freedom from violence – even after disasters - must be unconditional.

As guilt and resentment both inhibit resilience, two Australia-wide discussions are needed: (1) on the imperative for those choosing to stay in disaster zones to do so only without implicating others, and (2) on safeguarding children in disasters – given the high rates of child deaths in bushfires and in light of Australia's support of the UN Convention on the Rights of the Child.

Two opposing notions emerged strongly through the informants' words – 'Aren't you over it yet?' and 'There's no getting over it'. The intensity of a disaster experience can re-emerge unexpectedly or in combination with other traumas, thereby compromising resilience. If Australians understand the damage we do in expecting people to 'get over' disasters, and stop asking this question, people's sense of being resilient will be enhanced. This education could begin with community and political leaders and the media. In the initial coverage of disasters, catch-cries of 'Australian spirit' and 'community pulling together' could be replaced with more realistic and accurate statements, recognising the losses borne by survivors and the difficult times ahead. This calls for wider support and empathy. Critically, school children must be educated to eliminate bullying of disaster-affected students.

This research indicates that increasing long-term disaster resilience is a task for all Australians and our leaders, not just for survivors. Many recommendations emerged from this research, and provide workable starting points for what appears to be broad-scale social change.

Resilience may be a mix of individual characteristics, intersections of privilege, and the legacy of a lifetime's experience. It is equally a twist of fate, and the difference between surviving with resilience, and not, appears to lie outside the survivors themselves. In acknowledging that long-term resilience is premised on effective disaster prevention and management, it sits with government to provide expert advice on areas of safe human habitation, and after disaster to promptly re-establish essential services. It sits with Australian women, men and children – led by those involved in emergency management – to engage in explicit discussions of gendered expectations, realistic expectations of government services, and human rights in the disaster context. Underpinning resilience is the central importance of kindness.

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Appendices

Appendix 1 - Explanatory Statement and Consent Form

Appendix 2– Interview schedule

Appendix 3 – Sample characteristics

Appendix 4 – Resilience scale

Appendix 5 – Table of resources

Appendix 6 – Models of good practice in community engagement

Appendix 1 - Explanatory Statement and Consent Form



EXPLANATORY STATEMENT

(Long-term survivors of disasters/bushfires/floods)

Project: 'Long-term disaster resilience – identifying protective factors for men, women and volunteers'

Chief Investigator: Dr Debra Parkinson

Monash University Disaster Resilience Initiative

Phone: 0423 646 930

email: debra.parkinson@monash.edu

You are invited to take part in this study. Please read this Explanatory Statement in full before deciding whether or not to participate in this research. If you would like further information regarding any aspect of this project, you are encouraged to contact the researchers via the phone numbers or email addresses listed above.

What does the research involve?

The aim of this research is to identify how individual and community resilience is enhanced in and after disaster by hearing survivors' insights. This may include people (over 18 now) who were children at the time of the disaster.

Specific aims are:

- to document men's, women's, volunteers' and children's (at the time) experiences of resilience in the aftermath of disasters such as Ash Wednesday in 1983, the 2009 Black Saturday fire, the North Eastern Victorian floods 1993, the Victorian floods of 2011 (and others)
- to contribute to an emerging knowledge-base on long-term individual and community disaster resilience for men, women, volunteers & children.

Participation in this project will involve you being interviewed at a mutually agreed time and place for approximately one to one and a half hours. If you agree, your interview will be digitally audio recorded as a back-up and for transcriptions. All information remains anonymous as your name and location will not be attached to any of your responses. While it is not possible to guarantee absolute confidentiality as people who know you may recognise your story, the anonymity of your participation is strengthened by our process, in which you will be given the opportunity to approve the notes produced from your interview, and it is your right at this stage to make corrections and deletions. Recordings and notes from interviews will be destroyed once they have been written up and checked. The content of our discussions will be treated confidentially. Coded and de-identified data is stored in a locked filing cabinet at WHGNE for seven years and then destroyed.

Once you understand what the project is about and if you agree to take part in it, you will be asked to sign the Consent Form. By signing the Consent Form, you indicate that you understand the information and that you give your consent to participate in the research project.

An option is to bring photos of the disaster/bushfire/floods that do not identify people, e.g. of the damage or reconstruction. This will be an additional option on the consent form. If you are interested in being filmed at a later stage for a short film, you can indicate this during or after the interview. This is also a separate option and not required for participation in this research.

You will be given a copy of the Explanatory Statement and Consent Form to keep as a record.

Why were you chosen for this research?

As a long-term survivor of a disaster, flood or bushfire such as Ash Wednesday or Black Saturday, 1993 or 2010-2011 flooding (and others), you are able to contribute to new knowledge about what contributes to, or hinders, long-term disaster resilience. You must be over 18 at the time of the interview.

Source of funding

This research is supported by the Victorian Government and funded through the Natural Disaster Resilience Grants Scheme CF/17/4132.

Consenting to participate in the project and withdrawing from the research

Participation in this research project is voluntary. If you do not wish to take part you are not obliged to. If you decide to take part and later change your mind, you are free to withdraw from the project at any stage until the report is finalised, and your information will not be used. Only de-identified data will be used and false names will be assigned.

Before you make your decision, a member of the research team will be available to answer any questions you have about the research project. You can ask for any information you want. You will be asked to read this Explanatory Statement, and sign the Consent Form after you have had a chance to ask your questions and you are satisfied with the answers.

Possible benefits and risks to participants

We cannot guarantee or promise that you will receive any benefits from this research. However, possible benefits may include a sense of contributing to improvements for others. People usually participate in research like this for three reasons: to raise public awareness; to help others; and to contribute to their own wellbeing. In this research, participants have an opportunity to speak about their experiences and through this research, potentially improve disaster recovery for individuals and communities.

There may be short-term risks in participation as it is possible that some people may be upset when recalling their disaster experiences many years ago. Although the focus of the interviews is on resilience, interviewees will also be asked about what hinders resilience at both the individual and community level. There is a possibility that recounting past experiences may trigger trauma associated with that experience. You may feel upset by talking about your situation or you may feel that some of the questions we ask are stressful. If you do not wish to answer a question, you may skip it and go to the next question, or you may stop the interview immediately.

If you suffer any distress as a result of this research project, you can contact Lifeline on 13 11 14 or Beyond Blue on 1300 22 4636.

Payment

An amount of \$100 will be given to you in a Coles Myer credit voucher to reimburse you for costs associated in your participation.

Confidentiality

Any information obtained in connection with this project will be de-identified. In any publication, information will be provided in such a way to minimise the possibility that you will be identified. Information gathered through interviews will be coded to maintain anonymity.

Storage of data

Digital tapes will be deleted once transcribed and checked. The data will be stored in a locked cabinet at Women's Health Goulburn North East (WHGNE - the lead agency for this research project) for a period of seven years and will then be shredded. Only the research team and the CEO of WHGNE will have access to the data.

Results and use of data for other purposes

The de-identified research findings will be made available in a published research report available from the webpage of the GAD Pod (www.genderanddisaster.com.au). Links may be made from others' sites, e.g. WHGNE and Women's Health In the North, Monash University or through links from our newsletter and newsletter of interested organisations such as Victorian Council of Social Services or Emergency Management Victoria, DELWP, etc. Following this initial release, conference presentations, journal articles and other methods of making the research findings accessible will be pursued. Only compiled de-identified data will be made public in these ways.

Complaints

Should you have any concerns or complaints about the conduct of the project, you are welcome to contact the Executive Officer, Monash University Human Research Ethics (MUHREC):

Executive Officer
Monash University Human Research Ethics
Committee (MUHREC)
Room 111, Chancellery Building E,
24 Sports Walk, Clayton Campus
Research Office
Monash University VIC 3800

Tel: +61 3 9905 2052 Email:
muhrec@monash.edu Fax: +61 3 9905 3831

Thank you,



Debra Parkinson
Chief Investigator



CONSENT FORM

(Long-term survivors of disasters/bushfires)

Project: 'Long-term disaster resilience - Identifying protective factors for men, women and volunteers'

Chief Investigator: Dr Debra Parkinson

I have been asked to take part in the Monash University research project specified above. I have read and understood the Explanatory Statement and I hereby consent to participate in this project.

I consent to the following:	Yes	No
Participation in the research	<input type="checkbox"/>	<input type="checkbox"/>
Audio recording during the interview	<input type="checkbox"/>	<input type="checkbox"/>
Willingness to be contacted in relation to any questions that require clarification	<input type="checkbox"/>	<input type="checkbox"/>
Potential inclusion in the report and/or published materials of a copy of the photos that I have brought to the interview	<input type="checkbox"/>	<input type="checkbox"/>
Being contacted in relation to video recording at a later date after the interview	<input type="checkbox"/>	<input type="checkbox"/>

Name of Participant _____

Participant Signature _____ **Date** _____

Appendix 2– Interview schedule

1. Why did you decide to participate in this research?
2. What do you remember about the disaster? Did you bring any photos? Can you tell us about them?
3. Do you feel that you've been changed by this disaster? And if so, how?
4. Are there any things that more important to you now than before, or vice versa?
5. Do you think there's anything different in the disaster experience for women than men?
6. Has it changed how you view yourself? (And your family?)
7. Has it changed how you view your community?
8. Has the whole experience brought about a change in your friendship networks?
9. Before the disaster, in what ways did you express what was important to you, e.g. enjoyment? Were you still able to do these after the disaster? And since?
10. When you think about getting over the disaster, what was significant to you? OR
What were important times in the recovery process? When were they? What happened?
11. Were there times that set you back? Can you tell us about those times? OR
Were there times or things that made recovery difficult? Can you tell us about that? (If so, 'What could have been done better?')
12. You've mentioned some people and services that were important. How did individuals, or groups or services help? If you didn't use formal services, can you tell us why not? (Prompt: Anything different for men and women?)
13. When you think about your recovery and resilience over the years since the disaster, were there ups and downs? Can you tell us about that?
14. What do you feel most proud of when you think back over the years since the disaster?
15. Is there anything else you'd like to tell us?

Appendix 3 – Sample characteristics

	Age	Gender	Child	Volunteer	Disaster	Home during Disaster	Lost House	Lost Live-stock	Lost Pets	Rural Property	Lost Fencing/ sheds	Disability	Marriage Break - down	Fear of death
1.	60-69	F	x	x	Black Saturday	✓	x	-	-	-	-	-	x	-
2.	60-69	M	x	x	Black Saturday	✓	x	-	-	-	-	-	x	-
3.	18-59	M	x	x	Black Saturday	✓	✓	-	✓	✓	✓	x	x	✓
4.	18-59	M	✓	x	Black Saturday	✓	✓	-	✓	✓	✓	x	S	✓
5.	70-79	M	x	x	Black Saturday	✓	✓	-	-	-	-	-	x	-
6.	50-59	M	x	x	Black Saturday	-	✓	-	-	-	-	-	x	-
7.	40-49	M	x	x	Black Saturday	✓	✓	x	x	✓	-	✓	S	✓
8.	60-69	M	x	x	Macalister River	-	x	x	x	✓	✓	x	x	x
9.	60-69	F	x	x	Macalister River	-	x	x	x	✓	✓	x	x	x
10.	70-79	M	x	x	ASH Wed	-	✓	-	-	Regional	-	-	x	-
11.	70-79	F	x	x	ASH Wed	-	✓	-	-	Regional	-	x	x	✓
12.	70-79	M	x	✓	Black Saturday	-	x	x	x	✓	✓	x	-	✓
13.	80-89	F	✓	x	Longwood Fire	-	✓	✓	x	✓	-	-	-	-
14.	60-69	M	x	x	Mitta Valley Floods & Fire	✓	✓	-	-	-	-	-	S	-
15.	50-59	M	x	✓	ASH Wed, 1993 Floods, Black Saturday	✓	x	✓	x	✓	✓	x	x	✓
16.	70-79	F	x	x	1974 Floods	✓	✓	-	-	-	-	-	x	-
17.	70-79	M	x	x	Black Saturday	-	✓	✓	x	✓	✓	x	x	✓
18.	30-39	F	✓	✓	ASH Wed, Black Saturday	✓	✓	✓	x	✓	✓	x	S	✓
19.	50-59	M	x	x	Canberra Fires	-	x	x	x	Urban	x	✓	✓	-
20.	70-79	M	x	x	Boweya Fires	-	-	-	-	-	-	-	x	x
21.	40-49	F	x	x	Black Saturday	✓	✓	✓	x	✓	✓	x	x	✓
22.	20-29	F	x	x	97 Dandenong Fires	✓	x	x	✓	Peri-Urban	-	x	x	✓
23.	20-29	M	x	x	97 Dandenong Fires	✓	x	x	✓	Peri-Urban	-	x	x	✓
24.	20-29	M	✓	x	97 Dandenong Fires	✓	x	x	✓	Peri-Urban	-	x	S	✓
25.	20-29	F	✓	x	97 Dandenong Fires	✓	x	x	✓	Peri-Urban	-	x	S	✓
26.	20-29	M	✓	x	97 Dandenong Fires	✓	x	x	✓	Peri-Urban	-	x	S	✓
27.	70-79	M	x	✓	Fire 1990	✓	✓	x	✓	✓	✓	✓	✓	✓
28.	50-59	F	x	✓	ASH Wed	-	x	-	-	-	-	-	x	-
29.	50-59	M	x	✓	ASH Wed	-	x	-	-	-	-	-	x	-
30.	90-99	M	✓	x	1943 Tarrawingee Fires	-	x	-	-	✓	✓	x	-	x
31.	40-49	F	✓	x	ASH Wed	-	x	x	x	x	x	x	-	✓
32.	50-59	F	x	✓	Flood, Fire & Drought near Grampians	-	x	✓	x	✓	✓	x	✓	✓

33.	70-79	F	✓	x	1962 Christmas Hill Fire	-	✓	x	x	✓	✓	x	-	✓
34.	40-49	F	x	✓	Morwell, Delburn Fire & Black Saturday	✓	x	x	x	Town	✓	✓	✓	✓
35.	70-79	M	x	✓	ASH Wed, Black Saturday, etc.	-	x	✓	x	✓	✓	x	✓	x
36.	40-49	M	x	✓	Black Saturday	-	-	-	-	-	-	-	x	x
37.	50-59	M	x	✓	Black Saturday, etc.	-	x	-	-	-	-	-	x	-
38.	50-59	F	x	x	93 Benalla Floods	✓	✓	x	✓	Town	✓	x	S	✓
39.	50-59	F	x	x	93 Benalla Floods	✓	✓	x	✓	Town	✓	x	-	✓
40.	50-59	F	x	x	93 Benalla Floods	x	✓	x	✓	Town	✓	x	x	✓
41.	50-59	M	x	x	93 Benalla Floods	x	✓	x	✓	Town	✓	x	x	✓
42.	50-59	F	x	x	93 Benalla Floods	✓	✓	x	✓	Town	✓	x	S	✓
43.	50-59	F	x	x	93 Benalla Floods	✓	✓	x	✓	Town	✓	✓	-	✓
44.	40-49	F	x	x	Shepparton Flooding	-	✓	x	✓	x	x	✓	S	x
45.	40-49	F	x	x	Black Saturday	-	✓	-	-	-	-	-	✓	-
46.	40-49	F	x	x	Black Saturday	✓	x	✓	✓	Semi	✓	x	x	✓
47.	20-29	F	✓	x	Black Saturday	x	-	x	x	Semi	-	x	S	x
48.	20-29	F	✓	x	Black Saturday	✓	-	x	x	Semi	-	x	S	x
49.	20-29	F	✓	x	Black Saturday	✓	-	x	x	Semi	-	x	S	x
50.	20-29	M	✓	x	Black Saturday	✓	-	x	x	Semi	-	x	S	x
51.	20-29	M	✓	x	Black Saturday	✓	-	x	x	Semi	-	x	S	x
52.	20-29	F	✓	x	Black Saturday	✓	-	x	x	Semi	-	x	S	x
53.	40-49	F	x	✓	Black Saturday	✓	-	-	-	Semi	-	x	✓	x
54.	50-59	F	x	✓	Black Saturday	x	✓	-	-	Semi	-	x	x	x
55.	50-59	F	x	x	Black Saturday	✓	x	x	x	Semi	-	x	✓	✓
56.	40-49	F	x	x	Black Saturday	x	x	✓	✓	Semi	✓	x	x	x
TOTAL		M=26 F= 30	Y=13 N= 43 n/a= 0	Y= 13 N= 43 n/a =0		Y=30 N= 5 n/a = 21	Y=24 N=19 n/a = 14	Y=9 N= 28 n/a = 19	Y=17 N= 22 n/a = 17	Semi= 11 Rural= 16 Regional= 2 Peri/Urban = 6 Town = 7 N = 2 n/a = 12	Y=23 N= 3 n/a = 30	Y=6 N= 36 n/a = 14	Y= 8 s= 16 N= 25 n/a = 7	Y=27 N= 16 n/a =13
Legend		✓ = Yes		x = No	- = n/a	S = single								

Appendix 4 – Resilience Scale

Resilience Scale

Thinking about the disaster that affected you the most, how would you rate your personal resilience during each time period? By 'resilience', we mean your capacity to survive, adapt and thrive despite your disaster experience (adapted from 100 Resilient Cities 2016).

If you cannot remember how you felt at that time, do not worry. You are welcome add comments about what was affecting your resilience at the time.

	Resilience Scale										Comments
	1 (unable to cope)	2	3	4	5 (somewhat able to cope)	6	7	8	9	10 (coping very well)	
During											
1 week											
1 month											
6 months											
1 year											
2 years											
5 years											
10 years											
20 years											
30 years											
30+ years											

Appendix 5 – Table of resources

Organisation	Type	Description
<ul style="list-style-type: none"> - Drouin West Fire Brigade - CFA 	Letter	Captain Bruce Jewell talks about the contents of CFA Property Advice Visit - Document Pocket
	Flyers	'Staying and Defending' – A summary that helps people to consider whether defending the property should be part of their fire plan.
	CFA Property Advice Visit – Document Pocket	Well Prepared Property Flyer – Image of a property with information on how the property should be prepared for fire Information Sheet – Information on how to prepare for fire season; misconceptions and myths; fire danger rating Property Assessment Form x2 – A checklist of things that should be done before fire season Your Guide to Survival Booklet – Information on what to do before, during and after a fire Leaving early Planner x2 – A booklet that helps to plan when you are leaving early
- Callignee Bush Fire	Newsletter Article	Account of the 2009 Black Saturday Fires and its impact on Callignee
	Images	Image 1 – Burnt out truck Image 2 – Overlooks a property with a burnt shed
<ul style="list-style-type: none"> - Callignee and Traralgon South Emergency Committee - CATS Emergency Committee (CATS) - Latrobe Community Emergency Management Forum (LCEMF) 	Letter	Talks about the content that has been given to this research
	USB	Four commercials about fire planning
	Policies	Leave and Live Policy – Presents views on CFA messaging for the community's response to fire danger Terms of Reference – Explanation of terms used within policies Neighbourhood Support System – Specifies a system for effective community engagement Resilient Recovery – Response to the discussion paper 'Resilient Recovery' by EMV
	Letter	Informs the resident of changes in the second edition of the community emergency Handbook
	Magnet	A4 magnet with emergency contact details and spaces to input personal address and number
	Handbook	Community Emergency Handbook –Raises awareness of the risks posed by emergencies and how to develop practical emergency plans
	Pamphlet	Are you and your Neighbours ready for summer – Information on different topics (livestock, clothing, etc.) and how to prep/dixare for fires Are you Ready for a Long Hot Summer – Information on heat stress, pets & stock, and preparation for fire season
	Calendar	2014 – Key Dates for Community meetings and community 2017 – Key Dates for Community meetings and community
Yarra Institute for Religion and Social Policy – Dr Lisa Jacobson	Booklet	Working with Disaster Clergy and Bushfires –Research of the support needed by clergy at the frontline of bushfires
CFA	Booklet	Fire Ready Carers Kit – Information on how to prepare for the fire season
	Book	Stay and Defend – information on how defend your property Prepare. Act. Survive – information about risk

Appendix 6 – Successful strategies

(1) See forthcoming video of Ruth McGowan, speaking on community planning before disaster, and defensive pessimism. www.genderanddisaster.com.au

(2) Bushfire preparations

The CFA have had a shift because in the last few years when they come up for those community talks and they say, **'We won't be coming here, we can't get trucks here'** and the first time they said that was a bit of a bombshell to everybody standing on that street corner – because prior to that it would be you listened for the sirens, look at the sky ... Then all of a sudden it shifted to, 'We won't be here. (Sandy)

Defensive pessimism is the approach of having a plan B: What could go wrong and what could I do to address that. It underlies much of the CFA's approach now to communities. So, if you're going to defend, this is what you're going to need which is 10,000 litres of water at least, you're going to need an independent electricity supply if the power goes off. You get people thinking what's the worst that can happen ... how can I be prepared for when it happens and that's underlying our community engagement which is: **Have a plan B and have a plan C and D.** Because you might think I'm going to leave early but what happens if ... you're stuck at home? What do you do? (Ruth)



Image: CFA Pamphlets and brochures

The best thing that's come out of what we're doing in community engagement in the CFA is called **property advice visit (PAV) services**. The PAVs enable us to knock on the door of everyone in our catchment. We've done 95% of people and we've got two more roads to do, so that's 95% of people over four years that live in this area. We knock on their door, we sit down, **talk through them and say, 'What are you going to do - are you going to defend or get out and leave?'**

Then we say, 'Well if you're going to stay and defend, you'll need this, this and this, two able bodied people, water supply, big tank of water ... The **CFA has produced ... pamphlets and brochures** on it and we basically say, 'If you're going to stay and defend, you really need to be prepared' ... We go through that with people sitting around the kitchen table and then if people say, 'No I'm going to leave early', we say, 'What's your time to leave early and what are you going to take with you?' So we work through with people so they can **get in their head their plan – one way or the other**. 'If you're going to leave early, what are you going to do about your horses in the paddock? Are you going to get them out a couple of days early? If you're going to stay and defend, what are you going to do about Nana who's in the granny flat up the back? Is she going to stay with you? What are you going to do with **your two five year-old twins? Are they going to stay with you? Because we really advise against that as it's quite a traumatic thing for young kids.**

So, the property advice visit services allow us to go around and then **we can walk around the house and do a little check list with them, so it's one-on-one really concentrated support** and the opportunity to give them brochures from the CFA to back that up. (Ruth)



CFA Well Prepared Property

Ideas for future preparations

Blocked Pipes

The CFA often advise **block your pipes**. Well how do you block a down pipe? **[Ideally]** you have a valve here you can close off and then fill the gutters and **they'll maintain their level of water**, whereas if you simply **put a rag in your downpipe it's going to lick away**. (Alex)

Gas Bottles

Gas bottles ... **exploded with some ferocity** ... The people over the road had three gas bottles, from memory, on the veranda of the house and as the house

burnt, those gas bottles ... exploded upwards...They perhaps **contributed to the house burning much quicker** than it would have although it was going to be destroyed no matter what. I thought **gas bottles would be perhaps stored distant from infrastructure, maybe in a brick or concrete enclosure where they're not contributing to the fire.** (Alex)

Documentation

Photocopy all your documents and note all your assets – detailed. **Record everything and place those offsite**, with your solicitor, so you've got a duplicate of what you possess. [Insurance companies] still wanted documented detail of everything that was on the property. (Alex)

Engineering vehicles for escape

Fire vehicles had difficulty reaching us ... Fire vehicles have a bull-bar in the front – if they could invent (and I think they could) for **the bulbar to be hydraulically operated to drop to the ground and then the vehicle could push the trees aside ...** I don't know whether engineering wise it could be done, whether regulations prevent that or not. They may say the tires will burn. Well **lives are more important**, you can still drive a vehicle with a flat tyre. (Alex)

(3) Community-led recovery

This model is drawn from an interview with two informants, Elise and Chloe.

Prior to disasters:

1. Establish an independent department for recovery, employing professional people, and trained people with lived-experience.

In the immediate aftermath of a disaster:

2. Appoint a Commissioner for recovery, with decision-making capability and a budget, sitting within council (local government) to lead the recovery period, allowing existing councillors and council to continue day to day work.
3. Involve local groups through meetings every week, utilising the people who were seen as leaders in the community, and new people willing to contribute.
4. Allow local people direct access to decision-makers.
5. Train and employ local people to become paid community development workers and peer-support workers (see Box).
6. If case managers are employed, ensure they are trained for local conditions post-disaster.
7. Establish Community Dining (see Box).
8. Ensure an early return to properties.

Peer-support

Peer support 'is a network that can be established in every community *now*, not just after disasters. Community leaders and 'natural nurturers' can be trained in Mental Health First Aid, suicide intervention, trauma and referral pathways. These skills are already needed in communities and this will assist in early intervention, helping people to access support before a situation becomes a crisis'. (Chloe)

Community dining

We blocked out any outsiders from coming into Community Dining for the first six months. We needed a place for our community to come together and support each other. We provided nutritional meals knowing then that everyone was at least having one decent meal a day. This was run solely by community members, everyone that wanted to be able to help and support others. From day one of opening we would openly talk about our counselling sessions. And people looked at me and went, 'You wouldn't be having counselling'. I would say, 'Course I am. Do you think I can go through all this and come out the other end sane? You're got to be kidding. I know I'm a superwoman but I'm not that frigging good'. And make a joke out of it ...

There was a whole lot of us, and Doctor [name], we would deliberately talk about our counselling sessions very openly to try and make it like it's normal. [Two of the men] were really good talking with blokes and they would just go, 'How you going? I'm frigging struggling here.' 'Oh, I'm fine'. One would go, 'I'm not, Jesus, I can't sleep'. we knew that they weren't coping. So you'd get in to say, 'It is normal how you're feeling' and, 'This is natural, there's nothing wrong with how you're feeling'.

We had many men at community dining break down. Many. Women, kids, anyone, everyone had a time. As soon as someone was clinically diagnosed with PTSD, we would celebrate it. I know, to an outsider, this probably sounds mental, but instead of going, 'Oh my God, I've PTSD', we would embrace it and go, 'So have you, so have you, everyone's got PTSD so let's just all do it together. Let's go through our panic attacks and our paranoia, and our everything else together.'

Normalise it and make it fun, and then straightaway, they stop fearing themselves and thinking they were the only ones feeling like this and feeling alone. It made it open to talk about how you were feeling and knowing other's understood how you felt.

So we would make sure we created so many safe environments that it was fun, that it was normal. Allow your body to throw this crap out but don't fear it. Because once you can let go of that, you can actually work through it. (Chloe)

Elise and Chloe:

During the recovery process you also have to allow people to step up and step down and then come back later on. Because everyone is different, you're recovering, building your house, then someone might get sick ... You need to support them all but allow them to step down for a few months if they need to take a break.

There needs to be money access to be able to employ local people to do a hell of a lot of work, because then we wouldn't hit the burnout rate, because people have to earn and income. Like the recovery [because] sixty million dollars or something was that ... We could've done that in our own community.

[I remember] Rob Gordon [...said], 'No agency or any department is to come in and tell the people that have been assisting and supporting, that they're no

longer required. You use them in whatever way or capacity you can use them in because they are all part of the recovery’.

I believe that the biggest disconnection with their own land was that the temporary village was set up. While people were still connected to community by having a village it somehow was a disconnection as well. That would have given them a better start to normal, by placing a temporary dwelling onto their own property. Not somewhere else, disconnected from their own land.

(4) The Triangle Community Steelbands

The *Triangle Community Steelbands*, developed in the wake of the devastating 2009 Black Saturday Bushfires, is a musical group operating in Marysville and the Triangle District in Victoria. This band uses the steelpan, a percussive instrument originating in Trinidad and Tobago, traditionally created using recycled industrial chemical drums. It is an accessible instrument, enabling those of any age, level of dexterity and prior music experience to participate. The project began with small children’s and adult workshops, before forming the ‘Pans on Fire’ band and a music program at a local primary school. The founders of the group strived to create a safe, inclusive environment, foster community connectedness, and provide a creative emotional outlet to support the post-disaster recovery experience.

Engagement in art, cultural and music projects are believed to have a wide range of benefits on a personal and community level, and the response from the members of the band reflect this. While there is limited research on the impact of steelbands specifically, music and art therapy is used in a variety of contexts – such as for those with behavioural-emotional disorders – and has more recently been implemented in to assist in disaster recovery.

Members of the *Steelband* met weekly for rehearsals and reported that the practice made them ‘feel alive’ and ‘recharge their batteries’. They said it reduced feelings of stress, improved memory and built feelings of safety. In the five years since its founding, the group has performed over one hundred times, including at music festivals in Australia and overseas. The ability to perform for these audiences built confidence, and a sense of identity, belonging and fulfilment.

The practice of playing and performing with the *Steelbands* generated positive responses in its participants, as did the interpersonal engagement in the ensemble itself. The band provided an opportunity to connect with other community members, and grew into a supportive network and resource for those in need of assistance. The establishment of the *Triangle Community Steelbands* project proved to be a catalyst for increased community connectedness and pride, as well as personal growth and an improved recovery following the disaster.