

**Factors Affecting Community-Agency Trust
in Bushfire Management:
Community Member Perspectives**

ILWS Report No. 51

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Disclaimer

The views expressed in this report are solely those of the authors, and do not necessarily reflect the views of Charles Sturt University or the people consulted during the research project.

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Executive Summary

Aims

This report presents findings from qualitative research conducted to better understand how trust shapes relationships in the development and implementation of bushfire management strategies. The specific objectives of the research were to identify factors which affect community-agency trust and how those factors differ across the fire management stages of 'before', 'during' and 'after' a bushfire event.

Approach

Semi-structured interviews were conducted with community members in the Rural City of Wangaratta, Victoria who were affected by the King Valley Complex and Tatong bushfires in December 2006 and January 2007. The interviews were used to explore community member experiences with trusting and/or distrusting community member-agency relationships before, during and after a major bushfire event. Community member participants were recruited through recommendations by the Rural City of Wangaratta Bushfire Recovery Officer and a Community Safety staff member from CFA Regional Headquarters at Wangaratta. Participants were also recruited from a list of persons who submitted personal photos and stories to a local photographic exhibition featuring images from the 06/07 fires.

In total, the semi-structured interviews included 38 community members (ie. 12 couples, nine males, five females) in 26 interviews across ten geographic locales. Interviews were conducted between late February and early July 2008. Ten fire management agency and two Rural City of Wangaratta Council staff were also interviewed, but the results of the staff interviews are not reported here.

Definitions of trust

Previous research defines trust in many different ways but elements common to most definitions include: uncertainty, vulnerability, risk, expectations and interdependence of trusting parties. One frequently cited definition states: 'trust is a psychological state comprising the intention to accept vulnerability based on the positive expectations or intentions of another.'

Community members defined trust in several ways. Some participants defined trust as something that is present within or results from a positive relationship. Many participants described trust as being able to rely on someone or something. Some participant definitions of trust combined relationships with reliability, defining trust as a positive relationship in which parties can rely on each other for specific things.

The importance of trust

Nearly all participants described community-agency trust as being important to effective bushfire management. However, one participant felt that trust was 'a given' and that cooperation and other institutional structures were more important than community-agency trust. Another participant suggested that trust was not an appropriate, or necessarily achievable, goal for community-agency relationships.

Factors affecting trust

Participants described many incidents which increased or decreased their trust in particular individuals, agencies and agency staff members before, during and after the 06/07 bushfires. Several common factors affecting trust encompassed the incidents described, as shown in the table below.

Factors Table: Factors affecting trust described by participants for different fire management stages (rectangles) and the overall trust theme (ovals) each stage generates. Italicised factors signify those present across more than one management stage.

BEFORE	DURING	AFTER
<i>Communication</i>	<i>Communication</i>	<i>Communication</i>
<i>Interagency Planning</i>	<i>Interagency Cooperation</i>	<i>Interagency Coordination</i>
<i>Local Concerns Addressed/Included</i>	<i>Local Knowledge/Assistance Integrated</i>	
<i>Trustworthiness</i>	<i>Trustworthiness</i>	<i>Trustworthiness</i>
	Institutional Assurances	Immediacy
	Reduction of Uncertainty	Perceived Needs Met/Unmet
	Personal Experience/Confidence/ Self-Reliance	Negative Outcomes Resolved

The factors affecting trust most commonly described by community member participants for each management stage included:

1) Communication

1a) Communication (Stage: Before) – Sharing and/or providing information within and between agencies and between agencies and citizens. Multi-directional information flows: 1) provide for sharing of information within and between agencies; 2) encourage community feedback through community identification of local hazards, assets and individuals with extensive local knowledge who can be integrated into response efforts; and, 3) provide community members with fire preparation advice and notification of agency activities from agencies.

1b) Communication (Stage: During) – Providing information within and between agencies and between agencies and citizens. Primarily one-way flow of agency information to community members about bushfire threat, progress, severity, etc. during the bushfire emergency. Also includes need for some/limited opportunity for enquiry about fire situation from community members. Enquiry need varies throughout duration of fire.

1c) Communication (Stage: After) – Sharing and/or providing information within and between agencies and between agencies and citizens. Two-way flow of information in which agencies provide targeted, specific information one-on-one to community members who are encouraged to ask questions specific to their circumstance.

2) Inter-agency Planning, Cooperation, Coordination

2a) Visible Inter-agency Planning (Stage: Before) – Planning that is visible to the public and conducted together by multiple agencies and Council to define agency roles, responsibilities, coordination and cooperation for all fire management stages, but particularly for response stage. Also includes advice, permits and property visits concerning property planning for residents.

2b) Visible Inter-agency Cooperation (Stage: During) – The extent to which agencies are visibly seen to be working together on the fire-ground and understood to be working together in incident command structures.

2c) Inter-agency Coordination (Stage: After) – Providing recovery services that are: 1) not duplicated by multiple agencies; and, 2) minimise number of property visits and individual agency staff attending properties.

3) Local Concerns, Knowledge, Assistance

3a) Local Concerns Addressed/Included in Planning (Stage: Before) – The extent and manner in which Council and agencies address local concerns (and include in plans where appropriate) regarding bushfire and land management issues.

3b) Local Knowledge/Assistance Integrated in Response (Stage: During)
The extent to which local knowledge of local conditions (eg. weather and wind patterns, asset and access track locations, topography) and local assistance (eg. food preparation volunteers) is integrated into the response stage.

4) Trustworthiness (Stage: Before, During, After) – The characteristics of agencies and agency personnel that promote placement of trust in that person or agency, such as honesty, ability, transparency, consistency and open-mindedness.

5) Institutional Assurances (Stage: During) – The knowledge that agency response structures, policies and procedures protect public safety and minimise private property losses and/or maximise positive ecological outcomes.

6) Reduction of Uncertainty (Stage: During) – Any actions by agencies, agency staff or other individuals that reassure residents that they are not alone in the response stage and/or lessen community member fear or apprehension. Also includes whether residents felt lack of agency assistance was justified or unjustified.

7) Personal Experience, Confidence, Self-Reliance (Stage: During) – The type and amount of past experience a community member has with bushfire and with fire management agencies, as well as community members' self-reliance and confidence in their own abilities and fire plans.

8) Immediacy (Stage: After) – The extent to which agencies/Council provide recovery assistance as soon as it is safe to do so after the fire front has passed.

9) Perceived Needs Met/Unmet (Stage: After) – The extent to which agencies/Council offer and provide assistance which either helps or satisfies perceived community needs and the individual needs of community members (eg. provision of fodder, fencing assistance, mental health services, recovery grants).

10) Negative Outcomes Resolved (Stage: After) – The extent to which agencies/Council address issues resulting from actions taken or not taken during the fire (eg. repair and/or rehabilitation of private property damaged during response) and provide satisfactory answers/closure to impacted community members regarding these issues.

Trust Across the Management Stages

Analysis of participant responses explored how the factors affecting trust were different or similar across the management stages of ‘before’, ‘during’ and ‘after’ a fire. The results suggested:

1) Some factors affecting trust were distinctive to a particular management stage while other factors spanned one or more stages.

- Factors spanning more than one management stage included: 1) ‘Communication’; 2) ‘Trustworthiness’; 3) ‘Interagency Planning/Cooperation/Coordination’; and, 4) ‘Local Concerns/Knowledge/Assistance’.
- No factors were described that were specific only to the ‘before’ stage.
- Factors specific to the ‘during’ stage included: 1) ‘Institutional Assurances’; 2) ‘Reduction of Uncertainty’; and, 3) ‘Personal Experience/Confidence/Self-Reliance’.
- Factors specific to the ‘after’ stage included: 1) ‘Immediacy’; 2) ‘Perceived Needs Met’; and, 3) ‘Negative Outcomes Resolved’.

2) Factors spanning more than one stage tended to have a different focus within each management stage.

The ‘Interagency Planning/Cooperation/Coordination’ factor spanned more than one stage and can be used to illustrate this finding. Knowing that agencies worked together was considered to be important to community-agency trust in all three fire management stages. However, participants felt a collective working relationship between agencies sometimes suffered for different reasons in each stage. For example, participants felt that ‘before’ a fire, it sometimes appeared that agencies did not share information and conducted planning in isolation from each other. Participants did not necessarily see conflict between agencies but did not see them working together either. It was suggested that visible interagency planning and joint training may demonstrate that agencies work together ‘before’ a fire.

In the ‘during’ stage, some participants described visible conflict between managing agencies. Many participants described the fire response as ‘joint’ rather than integrated. Agencies were seen to be working as parts rather than as a whole. Participants suggested that an integrated response and visible cooperation between the agencies were important to community-agency trust.

In the ‘after’ stage, participants suggested that agencies seemed not to be in conflict but did not always coordinate recovery services effectively. A lack of agency coordination sometimes resulted in duplication of services and property visits. In contrast to the ‘before’ and ‘during’ stages, participants indicated that visible cooperation was not necessary for

community-agency trust in the ‘after’ stage. Instead, the knowledge that agencies had coordinated recovery services, which was evident through the one-stop shop arrangements, was important to community-agency trust.

3) What is important for building trust in one stage may not necessarily build trust in another.

The primarily one-way communication from agencies to communities during the fire provided timely and accurate information about the bushfire emergency and strengthened community-agency trust. Participants suggested that ‘during’ a fire, community members simply wanted to hear about the fire’s threat and progress. There was a limited need to ask questions at community meetings, but this need varied according to the stage of the fire (ie. more need when fire begins). There was also a limited need to ask questions of agency personnel working on or near community member’s properties. Communication which provided ‘as much information as possible’ from agencies to community members was cited as strengthening community-agency trust in the response stage.

In contrast, most participants felt one-way communication from agencies to communities was detrimental to trust in the ‘before’ stage when a multi-directional flow of information was sought. Participants suggested community feedback (eg. identification of community assets and hazards, and identification of individuals with local knowledge who could be integrated into the fire response) was best suited to the ‘before’ stage when community members could ‘*have their say*’. Community members also wanted to see agencies communicating with each other and have agencies provide fire preparation education and information about agency preparation activities ‘before’ a fire.

4) Community-agency trust has the potential to increase or decrease in each stage based on actions taken and the outcomes obtained. Trusting relationships in one stage affect trusting relationships in other stages.

Positive trusting relationships developed ‘before’ a fire establish community-agency interactions which may set realistic expectations of what agencies and community members can or should do ‘during’ the fire. Familiarity with agency fire management strategies through participative planning ‘before’ the fire may reassure community members that there are institutional assurances in place to protect public safety and minimise losses ‘during’ the fire.

Building expectations before a bushfire emergency

Factors affecting trust in the prevention and preparation stages (ie. ‘before’) centred on ‘building expectations’. Many participants felt that they had not had a fire-management related relationship with the managing agencies before the bushfires began. The response stage was the catalyst for many participants’ relationships with the fire management agencies as there was a need for community members and agencies to interact. Trust based by default on the outcomes of the fire response is a risky prospect. Previous research shows that initial impressions of events and individuals have a much greater impact on beliefs than subsequent impressions. If fire outcomes are positive, community-agency trust may be significantly enhanced. However, if fire outcomes are adverse, community-agency trust may be irreparably damaged.

Our results show that one way to develop community-agency trusting relationships before a fire is through provision of inclusive and meaningful opportunities for community

participation in fire planning and preparation. Transparent implementation of policies and plans, which shows how community participation influenced planning outcomes, was also considered by participants to be important in building on-going relationships and community-agency trust. Community meetings may have limited effectiveness in gathering feedback and providing information to the community. Supplementary methods of communication (eg. newsletters, site visits, and letterbox drops) may be more inclusive and engaging for some community members, particularly those individuals who are not well connected to others in the community or who do not identify with their geographic locality.

Regular communication with the community, visible cooperation and demonstration of a common purpose between agencies were also seen as ways for the community to build positive expectations of how managing agencies would respond to a bushfire emergency. Establishing visible cooperation 'before' a fire promotes community confidence that agencies will work together in the best interests of the community 'during' a fire.

Delivering response outcomes during a bushfire emergency

Factors affecting trust in the response stage (ie. 'during') centred on actions taken by individuals, agencies and agency staff to minimise losses and maximise positive outcomes. Because there was no loss of life and a minimal loss of homes within the study area during the 06/07 fires, many participants thought community-agency trust had been strengthened.

Responses indicated there were several ways trust could be diminished 'during' the fire. First, our results indicate that it is important to differentiate between community and personal outcomes. Individuals who have experienced significant, negative outcomes may feel isolated, and their trust of agencies tested, when they cannot identify with the positive outcomes (eg. minimal property loss) emphasised by agencies for the community as a whole. Second, community members' perceived inequities in private property losses were potentially trust-diminishing. Participants who were unable to justify to themselves why particular agency decisions were made which resulted in personal losses were more likely to describe a loss of trust. Consistent decision-making and clearly defined priorities and responsibilities among managing agencies may not prevent losses but may allow community members to feel that agency actions were justified and losses unavoidable.

Trust was also influenced by actions taken by individuals, agencies and agency staff which provided reassurances and reduced the community members' uncertainty associated with the fire emergency. Knowing that the agencies would respond and had structures in place to ensure a coordinated and effective response gave some participants' reassurance and trust in the agencies. Roadblocks were repeatedly described as adding to uncertainty during the prolonged bushfire emergency because they did not allow 'life to go on' when fire was not an immediate threat. Participants also described how family members were not allowed into the area to help prepare and later defend family property. Disruption to daily routines over the two-month period was considered to exacerbate the emotions and frustrations experienced during the bushfires. Care in decision-making about the timing and extent of roadblocks can provide some sense of normality and ease the emotional burden associated with a prolonged bushfire emergency.

Culminating experiences after a bushfire emergency

Factors affecting trust in the recovery stage (ie. 'after') centred on resolving negative outcomes and celebrating positive ones. Trust 'after' a fire was generated by providing ways for community members to mentally process the event and physically and emotionally move

on. Agencies enhanced trust when they coordinated recovery activities, provided one-on-one help in understanding and accessing recovery services and programs, and quickly contacted properties to meet immediate needs. Respondents also suggested an empathetic, honest and sincere manner of approach by agency personnel could positively influence trust. Provision of long-term programs to meet on-going needs arising from the fire was also important in recognising the traumatic nature of the emergency and building community-agency relationships.

Effectively resolving negative outcomes directly or indirectly caused by agency actions or inactions during the fire was also important in influencing community-agency trust. Participant responses suggest that this was one of the greatest threats to community-agency trust. While the other factors identified in this research, when executed poorly, could decrease community-agency trust, only the lack of a satisfactory explanation for negative events severed participants' trust in managing agencies.

Challenges and opportunities

A challenge for communities and agencies lies in developing on-going versus needs-based relationships. On-going relationships may provide reassurances within and continuity between highly uncertain and hazardous bushfire events. Agencies may be able to establish the foundation for on-going relationships by considering the factors affecting trust identified in this report for each management stage. For example, establishing a multi-directional flow of information in the 'before' stage may be important in building initial community-agency trust. Multi-directional communication demonstrates cooperative planning between agencies and the agencies' valuing of community members' knowledge and concerns. Community-agency trust built in the 'before' stage may then buffer against feelings of distrust generated by adverse outcomes experienced by community members in the response stage. Similarly, providing immediate assistance 'after' a fire, which meets the needs of community members and resolves negative response outcomes, may save feelings of distrust swelling into complete breaches of community-agency trust.

The findings confirm that trust is not a static construct but a multi-dimensional process which evolves through the management stages. Viewing trust as a process allows agencies multiple opportunities to establish trusting relationships with community members by focussing on key factors that affect trust in each management stage. Trusting relationships may then foster continuing community-agency interactions which contribute to the reduction of the uncertainty involved with the hazards and complexity of bushfire management.

1. Introduction

1.1 Research context

This report presents findings from qualitative research conducted with community members in the Rural City of Wangaratta, Victoria who were affected by the King Valley Complex and Tatong bushfires in December 2006 and January 2007. Semi-structured interviews were used to explore community member experiences with trusting and/or distrusting community member-agency relationships before, during and after a major bushfire event. Forthcoming research will employ quantitative mail surveys within the study area to explore the relative importance of the factors affecting trust identified in the qualitative research reported here.

Funding for this project was provided by Charles Sturt University.

1.2 Research aim and objectives

The aim of this research was to better understand how trust shapes relationships in the development and implementation of bushfire management strategies. The objectives of the semi-structured interviews with fire-affected community members were to investigate:

- 1) What factors affect community member-agency trust in each stage of fire management (ie. before, during and after bushfire)?
- 2) How do factors affecting trust change through the stages of bushfire management?

2. Report structure

Section 3 provides some background to the significance of fires in Victoria and a brief summary of the policy documents and literature drawn upon to develop the research aims and objectives. Section 4 provides some background to the study area and the bushfires which impacted the district. The section also describes the research approach, the sampling and interview process and the data analysis procedures. Results are presented in Section 5 of the report and demonstrate how participants described trust, trustworthiness and the importance of trust. The factors affecting trust most commonly described by participants are then listed and illustrated with excerpts from interview transcripts. Discussion of the management implications of the factors affecting trust is considered in Section 6. The final section, Section 7, provides concluding remarks based on the results and discussion.

3. Background

3.1 The significance of bushfires in Victoria

Victoria is recognised as one of the most bushfire-prone areas on earth because of its climate, geography and topography. Over 35 significant fires have occurred since 1851 with two-thirds of these occurring in the past 55 years (ENRC, 2008). In both the 2002/03 and 2006/07 fire seasons, bushfires burnt over 1 million hectares of public and private land. The 2006/07 bushfires were the longest recorded fires in Victoria's history, running for 69 days (Smith, 2007). These severe bushfire events resulted in considerable social and economic consequences. For example, in the 2006/07 fire season, significant damage was caused to 658 private properties state-wide and Northeast and Gippsland region tourism managers estimated a \$200 million downturn for the 12 months from December 2006 (Ministerial Task

Force, 2007). Community members also suffered anxiety, stress, fatigue and a disruption to daily life for the duration of the prolonged fire event.

It is likely severe bushfire events will continue to pose threats to Victorian communities. Hennessy et al. (2005) predicted that climate change will cause the number of Very High or Extreme Forest Fire Danger days to increase by up to 20 percent by 2020 and up to 60 percent by 2050. Such projected increases in severe fire conditions are likely to lead to a rise in the occurrence of severe bushfires (Victorian Government, 2008).

3.2 Community engagement and community-agency partnerships

Recognising the vulnerability of communities to bushfire impacts and the increase in bushfire risk under climate change projections, Victorian fire management agencies have reinforced their commitment to deliver bushfire-related community education and engagement programs. Historically, the Country Fire Authority (CFA), Department of Sustainability and Environment (DSE) and Metropolitan Fire Brigade (MFB) have provided public awareness and education campaigns and community consultation and development in regards to bushfire planning and management. More recently the agencies have also placed a greater emphasis on community engagement and community-agency partnerships to build community capacities for bushfire. Highlighted below are some of the documents that reflect the trend toward increased community engagement and the development of community-agency partnerships in bushfire planning and management.

CFA emphasised community-agency partnerships in its 2002 – 2005 *Strategic Direction for Community Development* which defined its vision, mission and objectives for community development. The second of eight objectives described in the document is to ‘create partnerships which develop trust, respect and social networks’ (CFA, 2003, p. 3).

After the 2002/03 fires the Victorian state parliament held the *Inquiry into the 2002-2003 Victorian Bushfires* (VBI) to investigate all aspects of preparation and response to the fires. Among other recommendations, the VBI recommended a greater inclusion of local knowledge and community involvement in fire planning and management. To address the recommendations, the DSE developed a community engagement strategy, *Community Engagement About Fire on Public Land – Plan to Improve*. The strategy states that partnerships between communities and fire and land management agencies provide the most effective way of managing fire on public land. In the strategy’s foreword the DSE Secretary states, ‘community engagement builds the trust and effective communication that leads to more robust partnerships between local communities, local government...fire and emergency services agencies’ (DSE, 2005, p. 3).

Similarly, the DSE *Code of Practice for the Management of Fire on Public Land* (2006), which provides the framework for all fire management activities undertaken on public land, also recognises the importance of community-agency partnerships. The Code of Practice states that fire management ‘must be planned and conducted in partnership with the general Victorian community’ (DSE, 2006, p. 7). The final principle ‘recognises that fire management outcomes are maximised when public and private landholders work cooperatively.’

More recently, the 2007 *Inquiry into the Impacts of Public Land Management Practices on Bushfires in Victoria* reiterated the importance of community engagement in fire planning and preparation (ENRC, 2008). In 2008 the Victorian government released its first comprehensive bushfire strategy, *Living with Fire – Victoria’s Bushfire Strategy*, to provide

direction for future bushfire management. The strategy includes six themes which are meant to 'position Victoria's bushfire management agencies to effectively manage risk in partnership with the community' (Victorian Government, 2008, Executive Summary).

Complementary to the Victorian government's bushfire strategy, the DSE, CFA, MFB and Department of Human Services (DHS) jointly developed *Living with Fire – A Community Engagement Framework 2008 – 2012*, replacing the previous *Fire Ready Victoria Strategy 2004-2007*. The *Living with Fire* strategy is a framework for cooperation between the agencies to deliver community awareness, education and engagement programs (CFA et al., 2008). The framework includes three themes, 'people', 'communities', and 'environment'. The theme for 'communities' states: 'communities work in partnership with agencies to manage and make informed decisions about the risks and consequences associated with fire' (CFA et al., 2008, p.7).

3.3 Community-agency partnerships and trust

Many of the bushfire policy documents described above link the development of community-agency partnerships with the concept of trust [Appendix A]. For example, *Living with Fire – A Community Engagement Framework* sets four goals, including the following: 'build the resilience of communities by enabling active participation in fire management and promoting community networks and partnerships' (CFA et al., 2008, p. 10). It goes on to state that community partnerships underpin the framework and that 'it is essential that all parties recognise the value of partnerships that foster mutual trust, respect and understanding'.

Previous research supports this relationship between partnerships and trust. Six (2005) suggests that when trust is present, members of partnerships are more likely to agree to work together, seek to maintain relationships and communicate openly. Trust is considered to be a significant resource in social relationships, such as partnerships, because it can reduce uncertainty and complexity and save time and emotional expenditure (Bachmann, 2006). Similarly, in a fire management context, Burns, Taylor and Hogan (2008, p. 82) argue that collaboration (defined as 'a process by which a diverse group of stakeholders come together to improve a complex management issue') in pre-fire planning and post-fire recovery builds understanding among stakeholders which can lead to increased trust and improved relationships.

3.4 Trust and social acceptance of fire management decisions

Trust has been identified as an important component not only in partnerships but also in the social acceptance of fire and fuels management strategies (McCaffrey, 2006; Shindler, Brunson, & Stankey, 2002; Vaske et al., 2007; Vogt, Winter, & Fried, 2005). For example, Brunson and Evans (2005) studied the effects of an escaped prescribed burn on the social acceptability of fuels treatments. They concluded that regaining the public's trust in agency abilities through successful future burns was the key to future social acceptability of fuels treatments. Similarly, one of the five key strategies advocated by Shindler et al. (2002, p. 48) to improve social acceptability of forest management practices was to 'approach trust-building as the central, long-term goal of effective public process.'

3.5 Defining trust in a fire management context

Mollering (2005) suggests that most people can easily relate to trust from everyday experience but struggle to grasp just what trust *is* in abstract terms. Numerous definitions of trust have been proposed by authors in such fields as sociology, psychology, organizational management, risk analysis and economics. Although trust definitions from these diverse disciplines have important differences, they also have common themes. Most definitions of trust include aspects of risk, expectation, vulnerability (Rousseau, Sitkin, Burt, & Camerer, 1998), uncertainty and interdependence (Hudson, 2004).

Uncertainty relates to the limits of an individual ever having full knowledge of others, their motives and their responses to internal and external changes in situations (Gambetta, 1988). Trusting under such conditions of uncertainty requires taking a ‘leap of faith’ (Lewis & Weigert, 1985). This ‘leap of faith’, or **risk**, is the potential that the trustor (ie. the person doing the trusting) will experience negative outcomes (eg. injury or loss) if the trustee (ie. the person being trusted) proves untrustworthy (Sitkin & Pablo, 1992). In other words, if another’s intentions could be ascertained with complete certainty or neither party had anything meaningful at stake, trust would not be necessary (Bigley & Pearce, 1998).

Vulnerability (ie. taking on risk) is related to expectation because it is supposed that a trustor is willing to assume vulnerability based on positive **expectations** that the trustee will fulfil his or her obligations within the relationship. Finally, trusting relationships are assumed to require **interdependence**, a situation in which the interests of at least one of the parties cannot be fulfilled without reliance on another party (McEvily, Weber, Bicchieri, & Ho, 2006). One frequently used definition of trust which directly and indirectly includes many of these aspects is offered by Rousseau et al. (1998, p. 395): ‘trust is a psychological state comprising the intention to accept vulnerability based on the positive expectations or intentions of another’.

Aside from defining trust, researchers have also sought to identify components of trust in a bushfire management context. For example, in a study involving United States homeowners in three different ecosystems, Winter et al. (2004) found that public trust in the government’s ability to manage fuels is tied to perceptions of risks and benefits and the agency characteristics of care, competence and credibility. Cvetkovich and Winter (2007) contend that trust is centred on the similarity of values between an individual and an agency, the agency’s consistency in their actions with those values and the legitimacy of any inconsistencies. Liljeblad (2005) found that the primary dimensions of trust lie not only in shared norms and values, but also in an individual’s willingness to endorse the agency to act on their behalf and in perceptions of efficacy (ie. beliefs about how others will act and their capacity to act).

3.6 Research need

As described above, previous research has identified the importance of trust as a component of partnerships and the social acceptance of fire management strategies. Research has also sought to define trust and its components. However, previous studies of trust in fire management are limited in two ways: 1) trust has been treated as a static construct without consideration of how it may be different at each stage of fire management; and, 2) research settings have largely been limited to the United States.

First, conceptual models from organisational behaviour theory describe trust as a context-dependent, multi-dimensional, evolving process (Lewicki, Tomlinson, & Gillespie, 2006).

Trust is thought to change over time as parties experience each other through a variety of encounters and experiences (Mayer, Davis, & Schoorman, 1995). Similarly, in a fire management context, McCool et al. (2006) suggest that community impacts from fire management decisions may be better understood using an event-based approach. This approach employs three temporal periods (ie. before, during and after) to describe how fire event decisions made in one period are linked to consequences in other periods. An event-based approach thus provides a broad overview of the relationships and dynamics involved in fire management decisions (McCool et al., 2006). The focus on dynamism in the event-based approach described by McCool et al. mirrors the process-based view of trust supported by empirical work in organisational behaviour. However, previous research investigating trust in fire management does not differentiate how trust may differ before, during and after a bushfire or which factors affecting trust may be most important to trusting relationships at a particular stage.

Second, community-agency trusting relationships in the United States and Victoria may differ because of divergent institutional and policy contexts. For example, the United States and Victoria differ in the number, type and government level of agencies taking a lead role in fire management activities. The settings also differ in their evacuation policies and public perceptions of who is responsible for fire suppression on public and private land. For example, studies of trust and fire management in the United States often measure trust only in the US Forest Service because it is often the agency that communities have the most interaction with in fire preparation, response and recovery. In contrast, Victoria's multiple fire management agencies share a lead role in fire preparation and response.

Our research seeks to explore trust as process, using an event-based approach to explore trusting relationships in an Australian context. The research reported here identifies factors which influence trust at each stage of a fire event (ie. before, during, after) and considers how factors differ at each stage. Using an event-based approach allows agencies to better target communication and community engagement strategies for each management stage. Stage-specific strategies can reflect those factors which are most likely to influence trusting relationships and the development of community-agency partnerships.

4. Methodology

4.1 Case study description

4.1.1 The study area

Our research focused on communities affected by bushfires in December 2006 and January 2007 in and near the King River valley in the Rural City of Wangaratta (RCOW), Victoria [Appendix B]. This area is approximately 245 kilometres northeast of Melbourne and bounded by extensive tracts of public land, including the Alpine National Park. The RCOW covers an area of approximately 3,764 square kilometres. The study area within the RCOW boundaries is approximately 1,350 square kilometres. Locales in the study area include: Moyhu, Carboor, King Valley, Whitfield, Cheshunt, Rose River, Edi, Edi Upper, Whitlands, Myrree and Tolmie. The King River communities are linked by local government, social networks and Country Fire Authority (CFA) brigade response structures. The total population of the study area is just under 2000 (Australian Bureau of Statistics, 2006).

Prior to the 1950s, dairy, beef cattle and mixed farming were the main sources of income in the study area. However, in the 1950s and 1960s tobacco grew in prominence and a large influx of Italian sharefarmers migrated to the area. In the 1980s tobacco became less profitable when a quota system and various taxes were introduced. In response, some growers began to diversify and invest in premium grape vines. In 2006, British American Tobacco withdrew from the region and the tobacco industry ceased. However, investment in premium, cool climate grapes continued throughout the 1990s and 2000s and premium wine production and its associated tourism is now a dominant industry in the area. Recreational tourism is also important to the study area as it is a major access point for the Alpine National Park and surrounding State Forest. Additionally, some individuals are employed in nearby regional centres (ie. Wangaratta, Myrtleford, Mansfield).

4.1.2 The King Valley Complex and Tatong bushfires

Lightning strikes ignited multiple fires on public and private land in and around the King Valley on 1 December 2006. Drought conditions, steep and inaccessible terrain and a lack of available resources meant not all ignitions could be contained. The fires burned throughout December and eventually joined with other fires to become the Great Divide Complex which burnt over one million hectares of land. A new round of fires began 11 January 2007 when lightning ignited the Tatong Fire in the Toombullup State Forest. The Tatong Fire burnt approximately 2300 hectares, including 750 hectares of plantation timber.

Overall, fire activity repeatedly threatened communities within the study area for most of December and January. There was no single, common experience among participants concerning the fires' impact because of differences in topography, property lay-out, property size, type and density of surrounding vegetation, daily weather conditions and individuals' fire behaviour knowledge. The multiple King Valley fires spread slowly at times and rapidly at others. Some participants experienced fire burning onto their properties in the first few days. Other participants waited several days or weeks for the fire to impact on their properties. For those who experienced impacts early but still had sections of their property or surrounding bush unburnt, there was a sense of apprehension that the fires could come again. Indeed, some participants had to defend their properties on several occasions.

Participants in the Myrree and Tolmie areas remained on alert, but were not directly impacted, during the December fires. However, participants from these communities were

the most directly impacted by the Tatong fires in January. The Tatong fires commenced in hotter and drier conditions than the December King Valley fires and initially spread more quickly. Many Myrreee-area participants described the Tatong fire impact as 'rapid and severe'. Fire eventually 'roared' through Tolmie five days after fire ignition. Residents in the Whitlands area were threatened or impacted by both the King Valley and Tatong fires.

Although no one was killed and there was a minimal loss of primary residences, the fires caused substantial economic and social disruption to the communities. For example, smoke taint affected grapes growing in the King Valley, resulting in the loss of the 2007 vintage and small quantities of premium grapes being sold at a loss for lower-quality blended wines. Private pine plantation losses were estimated at over \$20 million dollars (NE Forests, 2007). Though most described fire experiences were property specific, almost all participants shared one common emotion. Nearly all participants described feeling considerable apprehension and/or anxiety during the two months of anticipation and high levels of alertness.

4.2 Research approach

Semi-structured interview data for this case study was collected and gathered using a qualitative approach. This type of approach emphasises exploring experiences in depth and detail rather than measuring or counting the frequency of particular experiences within a population (Punch, 2005). A qualitative approach allowed us to capture detailed descriptions of trusting relationships which were important to participants with similar and different experiences before, during and after one common event.

4.2.1 Study participants

We spoke to 38 community members (ie. 12 couples, nine males, five females) in 26 interviews across 10 geographic locales. 10 regional and state level fire management agency staff and two Rural City of Wangaratta employees were also interviewed between March and October 2008. Agency and Council staff interviewed included personnel who were involved with the communities during the fires or with community engagement activities in general. However, the results from agency and Council interviews are not reported here.

4.2.2 Community member sampling

Community member participants were selected using purposive sampling. This sampling technique allows selection of participants with experiences and knowledge that will clarify and deepen understanding of the research objectives (Rubin & Rubin, 2005). Purposive sampling draws potential participants from relevant categories of interest rather than on the basis of statistical frequency or distribution in the population (Bradshaw & Stratford, 2005).

Participants were recruited through recommendations by Council's Bushfire Recovery Officer and a Community Safety staff member from CFA Regional Headquarters at Wangaratta. Recommendations were based on identification of people who were likely to have had experiences during the fires which were relevant to the research objectives. Several individuals who submitted personal photos and stories to a local photographic exhibition featuring images from the 06/07 fires were also recruited.

Individuals and couples recruited through CFA Regional Headquarters and Council were first contacted by representatives from those organisations seeking permission to release contact details to the research team. Contact details for individuals recruited from the

photographic exhibition were obtained from telephone directories. Potential participants were first sent a letter explaining the purpose of the project and then telephoned to set up an interview time and location of the participant's choice. Interviews with community members were conducted between late February and early July 2008.

To ensure the data reflected a variety of perspectives, our participant sample included diversity in the following characteristics: gender; age; farm enterprise; farm size; income source (eg. off-farm income); full-time/part-time resident; CFA/non-CFA member; length of residence in the region; amount of past experience with fire; and, amount of asset loss/damage in 06/07 fires. Appendix C provides an overview of participant characteristics.

4.2.2 The semi-structured interview guide

Interview guides were developed for use in semi-structured interviews with community members and agency staff [Appendix D]. An interview guide is a list of questions to be explored in an interview. The interview is organised around ordered but flexible questioning (Dunn, 2005). For example, the guide provides predetermined topics but allows the interviewer to build a conversation within a particular topic that is important to the participant (Patton 1990). Previous studies of trust in business management (Mayer et al., 1995) and natural resources and natural hazards management (Leahy & Anderson, 2008; Paton, 2007), as well as studies of risk perception (Siegrist & Cvetkovich, 2000; Slovic, 1993), risk communication (Trettin & Musham, 2000; Wray et al., 2006) and social acceptability of natural resource management strategies (Vogt, Winter, & Fried, 2005) were used to help develop the interview guide.

The semi-structured interview guide asked participants to describe their experiences in the 06/07 fires and any particular incidents in which their trust was increased or diminished in a specific person, agency or organisation before, during or after the fires. Participants were also asked to identify factors they regarded as critical to community-agency trust before, during and after a bushfire. When not volunteered through previous discussion, participants were asked to provide their own definition of trust at the end of the interview to help clarify how they understood the abstract concept. Interviews with agency staff also explored personal perspectives on how to build or maintain trust with the community and examples of where this had succeeded or failed. Interviews typically lasted 1 to 1.5 hours, although some lasted as long as 2.5 hours.

Initial interviews with 4 CFA fire brigade Captains and Secretaries in the study area helped refine the interview guides and develop a better understanding of the events and issues that occurred during the 06/07 fires. Based on these interviews, minor modifications relating to the elicitation of critical trust incidents in the 'before' and 'after' fire management stages were made before the guides were used in subsequent interviews.

4.3 Data analysis

All interviews, except two, were tape-recorded with consent of the participant. Detailed notes were taken and written up immediately after the two interviews which were not taped. Tapes were transcribed verbatim and analysed using both a deductive and inductive coding process (Rubin & Rubin, 2005). First, categories were created based on the research questions regarding trust in each stage of fire management and literature relating to human dimensions of bushfire management. Next, codes were inductively developed from the trusting relationships and incidents described by interviewees. Through iteration this relatively large number of codes was refined so that the data and categories were grouped

and regrouped into more conceptual categories according to their relationships with each other. Figure 1 illustrates this process showing some of the codes and categories used to develop one factor. The qualitative data analysis program NVIVO 7 was used during the analysis process to help develop categories and code the data. The final categories reflect participant perceptions of the key factors affecting trust in each stage of fire management.

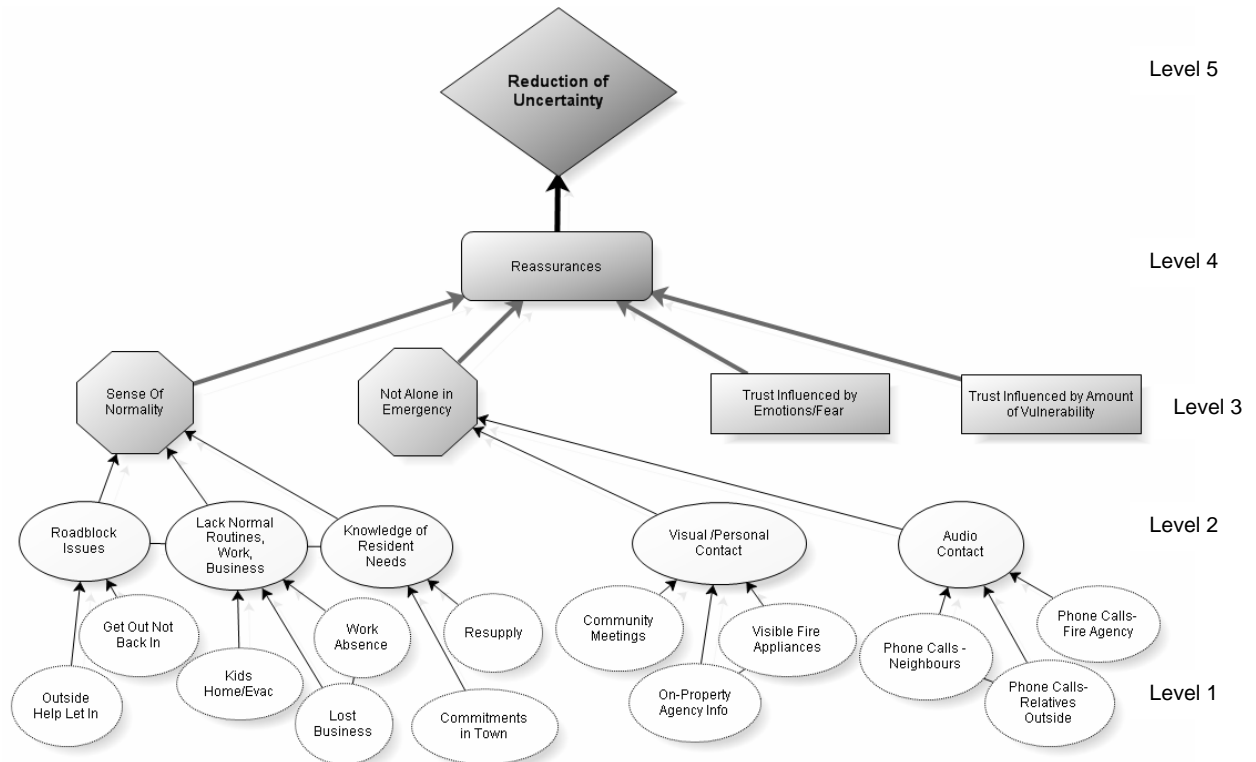


Figure 1: Illustration of the combined deductive and inductive data analysis process used to identify factors affecting trust. Conceptual abstraction of categories increases at each level. Level 1 shows inductive codes developed directly from the transcript data. Level 2 shows categories created from Level 1 codes. The Level 3 octagons are a refinement of the Level 2 categories. The Level 3 rectangles represent categories developed deductively from related literature. Level 4 depicts another category refinement. The Level 5 diamond shows the final, refined conceptualisation of a factor affecting trust developed from inductive and deductive categories.

4.4 Limitations

Our sample was not intended to represent the statistical distributions of population demographics. Instead, we selected participants from a range of demographic categories who were likely to have a diverse range of relevant experiences. However, the sample only includes individuals who had some contact with fire management agencies or Rural City of Wangaratta before, during or after the 06/07 fires and who were willing to participate in an interview. Our results reflect individuals' experiences in a prolonged fire event where community members generally had threat warnings and time to prepare. Experiences may differ for individuals involved with short-duration fires where little or no warning of approaching fire can be given. Furthermore, the study area is in a rural location and findings may not be applicable to other contexts. For example, individuals in urban interface settings may have different experiences with bushfires or the fire management agencies.

5. Results

5.1 Introduction

This section summarises and illustrates the data gathered from semi-structured interviews with community members in the study area. This section is divided into four subsections. Subsections 5.2 and 5.3 explain how participants defined trust and trustworthiness and the relative importance of trust to community-agency relationships in fire management. Subsection 5.4 then describes the factors affecting trust most commonly discussed by participants for each management stage (ie. before, during and after).

Because the aim of qualitative research is to understand issues from a participant's point of view, we include numerous excerpts within each subsection to provide examples for the definitions, factors and issues. The excerpts are linked and clarified by explanatory text. Excerpts are presented in italics. Community member excerpts are designated by a 'CM' followed by a transcript reference number. The grey boxes titled 'Community Members' Trust Wish List' in Subsection 5.4 summarise the participants' key issues within each overall factor affecting community-agency trust.

5.2 What is trust and trustworthiness?

Community members in our case study defined trust in both broad and specific ways [Table 1]. Trust was most often defined as '*having a good relationship*' with agency staff and/or '*being able to rely*' on the agency and agency staff. Participants described *both* their willingness to rely on agencies and agency staff and the characteristics that agencies and individuals needed to exhibit to be considered 'trustworthy'.

5.2.1 Trust – Broad view

Some participants held a broad view of trust, describing trust as something that is present within or results from a good relationship. For these participants, trust and relationship-building between agencies and communities mirrored each other.

Trust is just part of a good relationship. You have trust when you have a good relationship with someone you know.—CM34

Participants holding a broad view of trust often described actions and events which contributed to positive relationships among managing agencies, Council and the community. For example, one participant felt that building trust between community members and between community members and fire management agencies was enhanced through getting to know one another during community activities offered after the fire.

I suppose it was building community and building community relations and getting to know who people are in the community. You go to a community event and ... everyone comes out of the woodwork. So building up trust. And to build up trust you actually need that face-to-face, or that knowledge to get to know that person.—CM30

5.2.2 Trust – Specific view

Many participants, however, held a more specific view of trust. Trust was described not as '*having a good relationship*' but as a particular aspect of the relationship itself. In this case,

trust was most frequently described as *'being able to rely'* on another person or agency. Here are some examples of participant definitions of trust from a specific view.

The feeling that you can rely on someone else, or rely on something to happen to feel secure.

When people do what they say they'd do and stick to it.

Knowing that the agencies will be there, and knowing what they will do.

The ability to believe in what another person is telling you without questioning it. And being sure that the outcome will be a positive one because of what you are being told.

Some 'specific view' participants described trust as a one-way relationship of relying on agencies or agency staff because of the agencies' expertise.

I think that trusting is just having the confidence that they know what they are doing and just to believe that that's the case. That they know more than me, how to deal with these things. They have the experience and training, so to trust their expertise.—CM34

Some participants described this type of one-way relationship during the 06/07 fires. For example, one couple described their willingness to rely on agency staff when they stated that they *'suddenly felt safe and secure'* when fire appliances arrived on their property. The couple were unsure whether they could successfully defend the property but felt that they could rely on the firefighters to do so. Participants also described how they relied on information provided by the agencies during the fire to decide on what management actions to take at their properties.

5.2.3 Trust - A combined view

Some participants described trust in a way that combined both specific and broad views of trust. Trust was described as positive relationship in which parties could rely on one another for certain actions or things. In contrast to some participants' specific view of trust which often described a one-way reliance on agencies, those participants expressing a combined view of trust often described reciprocity as an important part of trusting relationships. In the quotes below, trust is described as a two-way relationship in which both parties respect each other's knowledge, ability and opinions.

Trust in my eyes would be that I've gotta trust their decision, they've also gotta trust your decision so that both parties are happy. So they've gotta trust us and we've gotta trust them. But both parties have gotta be prepared to talk it over. You're not always right.—CM25

[Trust is] having faith or appreciation in an individual's or organisation's ability or knowledge so that when they are interacting with you you can value their involvement.—CM19

Some participants also noted how reciprocal relationships were necessary between fire agencies and local residents.

So trust from a CFA perspective, you trust that landowners will, or you expect, that landowners will look after their own background. As a landowner, you expect, trust - I guess you can interchange them a little bit - if there's a fire in your area that you'll be notified or that you'll know that you'll get some sort of protection. Or that they may come.—CM9

5.2.4 Comparing participant vs. research definitions of trust

Previous literature related to trust considers risk, vulnerability, uncertainty, expectation and interdependence as essential features of the trust construct. In our research, participants' 'broad view' definitions generally did not describe *risk*, *vulnerability*, *uncertainty* and *expectation* but did describe *interdependence* in their description of trust as a relationship. However, this view of trust did not differentiate trusting relationships from other types of relationships.

Many participants expressing 'specific' views of trust directly described *expectations* of others, and to a lesser degree, the *vulnerability* related to relying on others. Most 'combined view' participant definitions directly addressed not only *expectations* and *vulnerability*, but also the *interdependence* of a relationship. A few 'specific' and 'combined' view participant definitions also described the *risk*, or 'leap of faith' involved in relying on others but did not mention the underlying *uncertainty* of others' actions underlying that risk.

Community Member Trust Definitions	
Broad View	Something that is present within or results from a positive relationship. Example: <i>'having a good relationship'</i>
Specific View	A particular relationship aspect related to reliability. Example: <i>'being able to rely on someone'</i>
Combined View	A positive relationship in which parties can rely on one another for certain actions. Example: <i>'a type of relationship where people are true to their word'</i>

Table 1: Three different views of trust illustrated by community member definitions.

5.2.5 Trustworthiness

When describing incidents in which their trust in management agencies was increased or diminished before, during or after a fire, participants often described positive actions or attributes of individuals that made the participant feel like he/she could trust that person. Attributes that made an individual or agency worthy of a participant's trust were common across agencies. Attributes were also similar whether participants were describing individual neighbours or agency staff or agencies and organisations as a whole. The composite characteristics of a trustworthy person or agency included:

- Honest
- Open
- Transparent
- Respectful of others' needs/knowledge/opinions
- Caring
- Credible
- Empathetic
- Competent
- Consistent in actions
- Knowledgeable about local conditions

- Reassuring in a crisis
- Has a good reputation
- Keeps residents' best interests at heart in fire management decisions
- Follows through on promises and/or responses to resident enquiries
- Shows strong leadership
- Has good and flexible decision-making skills
- Ability to liaise within agency structures and between agencies and the community.

5.3 Is trust important?

Most participants felt that trust between communities and agencies was important in bushfire management. Participants often said trust was necessary because of the uncertainty and risk surrounding the bushfire hazard and the inability of community members to respond to fires on their own. However, two participants felt that trust was either not important or less important compared to other aspects of community-agency relationships. One of these participants was a community member who felt that trust was a given and that other institutional structures were more important.

Trust is an assumption of the community. It is assumed that it is there. You don't doubt this. The things that are further up the structure are more important. When people are emotional they might question this, question trust. But the trust is there and understated. The emphasis now is on safety and cooperation.—CM20

The other participant who did not feel trust was important suggested that trust was not an appropriate, or necessarily achievable, goal for community-agency relationships. This participant, an agency staff member, thought that community-agency relationships should instead be based on 'a contract of expectations' between community members and fire management agencies. Positive community-agency relationships depended on community members 'doing their part to plan for fires' and agencies 'delivering good outcomes and changing perceptions of what we can and can't do.'

Several participants also suggested that trust's importance in community-agency relationships was based on need. For example, trust was considered very important during a fire because community members 'needed' agencies to respond to the fires and provide communication about what was happening. During a fire, agencies 'needed' community members to prepare their properties for the approaching fire. In contrast, trust was not always considered important in the 'after' stage of fire for individuals whom had suffered no losses and did not perceive a need for a relationship with recovery agencies.

While the fire is active, there is a much greater need for trust because there are no other alternatives, whereas people in a post-fire situation have the opportunity of making other choices. And dealing with it in other ways. Look, after a fire, you don't really need to [trust], because it's all been done. So - but for the people who were impacted by the fire that's a whole different story.—CM26

The relationships I had after the fires ...was the photographic exhibition.... That was really nice, but I don't feel there was a need, not really. That was just a nice, positive relationship, but I didn't feel there was a need to trust anyone there.—CM8

5.4 Factors affecting trust

The factors affecting trust identified and described in the following pages represent those most commonly discussed by participants [Appendix E]. When analysing participant interviews, it was necessary to try to distinguish between factors which were critical to trust from factors which were simply issues that arose from the fires but were not necessarily important to trust. It was decided that the factors should reflect participant definitions of trust. Therefore, the factors affecting trust identified below are ones that either: 1) promote positive community-agency relationships; 2) promote a willingness to rely on another person or organisation; or, 3) promote both 1 and 2.

5.4.1 Communication (Stage: Before, During, After)

Community Members' Trust Wish List Communication

Before a bushfire, fire management agencies:

- Ensure there is a multidirectional flow of fire mgmt information within the community
- Provide opportunities for community-agency interaction
- Provide opportunities for participation in cross-boundary fire and land mgmt planning
- Use multiple methods to gather community concerns/feedback

During a bushfire, agencies:

- Ensure the manner of approach in community meetings is inclusive, reduces fear and promotes transfer of knowledge
- Allow community members the opportunity to ask questions of personnel working on/near their property
- Provide accurate, timely, reliable information

After a bushfire, agencies/Council:

- Provide community members with one-on-one contact with agency personnel
- Target information provided during one-on-one contact to an individual's needs
- Provide an explanation for how to access grants and available recovery services

Stage: Before

Participants described a multi-directional flow of information between agencies (eg. visible planning), from agencies to residents (eg. providing property preparation education) and from residents to agencies (eg. identifying local assets, fire hazards and other concerns) as important to trust in the 'before' management stage. Participants had mixed experiences with communication in the 'before' stage. Some participants said they receive little information about agency activities or opportunities for interaction in this stage.

*...nobody tells us, no one actually informs us, and I think they changed the status of the land around us without telling us. So that's the other thing, it's like, you don't even bother to keep us informed about how you see...the land that's literally all around us. We tried to find out if they had burn-offs scheduled for our block and there's no sign...that our particular area, our block was being targeted at all.—
CM16*

*The day that they lit the fire (prescribed burn at Edi in April 2008), the only reason we knew was because we knew through *****. We should have received a bloody flyer, because like that smoke, when the hills were alight...it just brings back memories.... Really, after what we've been through we should have been notified about this weeks in advance. And tell people where it's happening, why it's happening, when it's happening, how it's happening. —CM3*

Other participants thought the agencies did a good job of providing information about making the 'stay or go' decision and agency activities taking place in the 'before' stage. Additionally, all participants stated that they had understood they should not expect agency help in protecting their properties.

[Information about the planned burning] was in the paper in the Border and in the Chronicle maybe a month or two ago saying that this was what was proposed. It was actually a big 2 or 3 pages, 'this is the burns we're going to do and this is the dates they're gonna do', so it was probably well and truly advance notification.—CM5

I think, particularly in Victoria, there's been a strong education for leave, plan or make a decision well before. Don't make that hot-headed last minute decision - but I think, and, if you listen to the radio in summer, you hear it all the time. So people are probably more aware of it. How you get to those people who don't get that message, I don't know.—CM9

Several participants described how information only seemed to flow from agencies to residents and there was little opportunity to work together with agencies on fire management planning that spanned the public-private boundary.

I would like...for them to do the door knock, or at least offer it. And I know they talk about offering it, but it's usually about... 'let us come and check your property'.... But I'd like to talk, have someone offer to say, in partnership, not this is the rule and that's the rule. And I don't want to clear the land - I want to say, 'what could we mutually agree to that would mean I would feel adequately protected in my circumstances?'.—CM16

Several participants noted that agencies have used community meetings as a way for residents to provide feedback and information. However, these same participants noted community meetings were often an ineffective means of interaction because of low attendance and group dynamics.

Unfortunately, there wasn't a lot of people who turned up to that [community debriefing] meeting.... It was essentially just the fire brigade and a few vocals. And if people know that those vocal people are going to be there, they're not going to go. If ... that's the only avenue for getting information back, then you really need to have another way to get info, like phone interviews or something like that....—CM17

Both agency staff and CFA volunteers expressed frustration with low attendance at meetings designed to provide opportunities to comment on fire operations plans or provide communities with information about how to prepare for and what to expect during a fire.

*There was a community awareness meeting held here.... We had...5 people turn up to it, myself included and a fellow from neighbouring **** brigade.... It was really very disappointing to go to the trouble of organising something like that and only have people from two households turn up.—CM10*

However, there were several common reasons community members did not participate in agency-led community meetings [Figure 2]. Some participants also suggested they had acquired education materials but were unsure about how to obtain further advice or were concerned they would receive conflicting advice from different agencies.

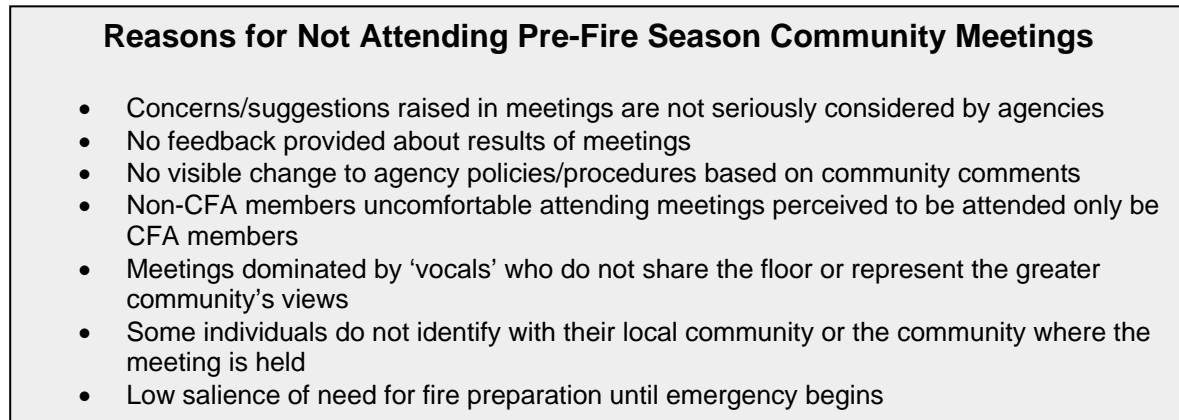


Figure 2: Participant reasons for non-attendance at community meetings

Stage: During

During the fire, many interviewees felt the community information meetings and their primarily one-way flow of reliable information was a strong contributor to trust.

The very first community meeting...there were lots of questions...and perhaps some of them not terribly appropriate.... But...after that first one or two - then everyone would just arrive and they'd just sit and listen. People were there to just get information. They'd made their decisions basically, and they didn't want the meeting to be long. They just wanted to hear.—CM36

A few participants suggested that being able to engage in two-way communication with agency staff and volunteers working on or near an individual's property during the fire was also important for fostering trust and community-agency relationships.

During the fire, it's...we sit back, they'll deal with it. And I'd like to see that changed.... Feeling like we can approach people. And even if that's like, 'okay, I haven't got time to talk about it, talk to this and this person', so they've got clear lines of communication to deal with the queries that we've got, or for us to know what's going on. And you can't say, 'go to the community hall for the briefing', because by that time, there's a delay and it doesn't work. It's gotta be the one-on-one sort of stuff.—CM17

Participants stated that the agencies' manner of approach during the community meetings was important to trust. Many participants stated that the meetings emphasised the importance of being well-prepared and self-reliant but did this in a way that dampened fear and made residents feel included and knowledgeable about the fire situation.

But if it hadn't been for us going to those couple of meetings it really wouldn't have sunk in. It more or less woke you up to the fact that you're on your own.—CM21

What they did do well was the community meetings.... It took the sting out of the community. It took the panic out - people were getting information, even though it wasn't completely - necessarily completely accurate. —CM32

The community meetings really helped. You felt you had all the knowledge.... You felt they'd really well-informed you.... You just felt like you were included.—CM36

Trust was further enhanced if the information came from local personnel because he/she was viewed as having greater knowledge of local conditions and the needs of residents.

The CFA, I found them absolutely excellent with all their information.... Especially when it was the local CFA that live in the area, that know the area - where prior to that it was just THE CFA man or woman from wherever. It just didn't have that same connection, I suppose. The last few were actually people who lived in the valley. I don't know, that just came across as a lot more caring....—CM14

Most participants stated that during a fire there 'was no such thing as too much information' related to the fire situation. While community information meetings were regarded positively by those who were able to attend, most participants stated that they supplemented this advice with information from other sources, such as the UHF radio, scanners, CFA pagers, ABC radio, etc.

The CFA meetings were the first point and they were really good, but we had the fire trucks filling up the other side of the river. So there was a constant stream of people coming in there and we talked to them. But I guess our main source of information was from the websites, as well.—CM7

One of the motivations for being part of the CFA, and one of the fantastic things about the pagers for instance, is that you do know what's going on a bit more. Certainly more than before the pagers. And if you weren't part of the CFA I think you'd be missing out on so much background information.—CM18

The two-ways worked really well with everyone. I had that on all the time.—CM28

Most, but not all, participants were satisfied with the accuracy and timeliness provided by official information sources. However, some participants thought it was necessary to ground-truth this information to aid their decision-making.

You trust the information we're getting is right. You rely on that. So people in those organisations all have their job to do.... And I suppose you have to believe, because it's all you've got. You've got what you can see going on, and if the two don't match up then you're going, 'well, hold on a minute'.... —CM9

Each morning we were getting up and going and driving along the road ourselves just to find out where the fire had been and what it had done because, by that stage, there wasn't enough precise enough information coming across the ABC. It was more general information. It wasn't incorrect, it just wasn't accurate enough for what we needed at the time.—CM38

Stage: After

After a fire, trust was enhanced if information was provided through one-on-one contact and targeted to individuals' specific needs.

*I really appreciated ***** coming out and being a face-to-face contact rather than - it's nice having a phone call, even that's great, but having that face-to-face, and knowing a person is so much better than just the phone interview.—CM30*

Because residents were mentally, physically and emotionally exhausted, too much information in the recovery phase was viewed as overwhelming by several participants. One couple noted that the 'show-bag' of information they received was 'good value' but could be seen as overwhelming if there was no one-on-one contact to further explain what resources and programs were available. The participant in the quote below described how there was little information available immediately after the fire but then too much information to sort through once information began to flow.

You just felt like you were left.... And then all of a sudden, it was overkill.—CM11

5.4.2 Interagency Planning, Cooperation, Coordination

Community Members' Trust Wish List Interagency Planning, Cooperation, Coordination

Planning (Before a fire, agencies):

- Ensure fire planning activities are visible/transparent to community members
- Promote visible interagency training and cooperation in fire preparation activities
- Provide property preparation advice that is consistent with other agencies
- Ensure sufficient firefighting resources and support will be available before the fire season commences

Cooperation (During a fire, agencies):

- Promote visible cooperation among agencies at the fire ground
- Ensure agency response is integrated - not joint
- Endeavour to promote a decision-making process that is unhindered by hierarchical structures within the Incident Management System

Coordination (After a fire, agencies):

- Provide a one-stop shop for recovery information
- Ensure there is little or no duplication of property visits and recovery services among agencies

5.4.2a Visible Interagency Planning (Stage: Before)

Several participants suggested that interagency fire planning lacked a community focus. For example, several participants stated that community members generally don't receive information about how agencies plan for fire or see the fire management agencies working together to prepare for the fire season.

Planning is crucial for trust. We [CFA] need to educate them about the plans and then they need to trust us that this is what will happen and this is what we'll do. When people don't trust us, trust the plans and they don't know why we're doing certain things, then this is how rumours get started and then get out to media, spreading info that isn't true.—CM13

I think it's incredibly important that the agencies are there. That the CFA is strong, that DSE is strong, that they talk to one another. And most people wouldn't know that - that they talk to one another.—CM18

A lack of visibility in interagency planning may contribute to community perceptions that the agencies do not have defined roles and responsibilities when a bushfire does occur. One participant suggested a newsletter could help explain to community members how agencies worked together.

Wouldn't it be good to have like a quarterly newsletter or something that combined all the organisations? (laughs) You know, page one - well wait, who goes on page one? That's a problem, do it in alphabetical order. But just do a combined - so you know, so people know how this fits in with that and that sort of thing.—CM3

Another participant noted that she would like to complete more fire preparation works on her property. However, she is afraid she will receive conflicting advice/permission from Council, CFA and DSE and feels it is unlikely they would conduct a joint property visit.

I did actually think about...talking to DSE but, as I said, I'm still on the cusp of thinking, 'is it worth taking the step over and going, I want you to come out'. But I think, 'oh, if I have someone come out, then I'd have to have someone from Council, someone from here, someone from there'. How am I going to get all these people to agree?.... So, if it means CFA talking to the Council - because I don't want to then have Council come out and them give me the reverse advice. —CM16

Several CFA members discussed how DSE and CFA personnel in the Moyhu Group have been working together in recent years to conduct planned burns in the district and provide opportunities for more frequent interaction between organisation members.

We've worked extremely hard in this area over the last say 5 or 6 years with the head guy over at NRE at Myrtleford, to I guess build up some sort of relationship, or trust, mainly for fire management, as in reduction burns. So far that side of it has worked pretty good. They liaise with us and we try and get brigades and them guys working together, CFA, NRE, working together on a particular reduction burn.—CM25

Other CFA members stated that the limited opportunities for interaction meant trust between CFA and DSE could take a long time to build. One CFA member suggested that training together could foster cooperation and minimise inefficiencies in the system.

The CFA have their minimal skills training...and the DSE have their training.... And if one wants to move from one organisation to the other, I think they have to be retrained in the other organisation, and to me that's duplicating a lot of things that don't need to be done, duplicated ... that could be minimised by the two organisations maybe working together a bit more closely. At the moment, none of that happens.—CM4

Finally, both CFA and non-CFA participants felt that many individuals and organisations were 'caught out' by the early onset of the fire season in 2006/07. Some participants felt this was 'a failure on the government's part' and many participants were disappointed with the lack of support available given the weather forecasts and record dry conditions.

...the Edi-Black Range...took everybody by surprise. It was a month early. So I don't think people were really mentally - not just the farming community - but I'm not sure the DPI and DSE were really set up for a fire in December either. So, I mean, I think everyone realised that we had a pretty horrendous fire season ahead of us, but I don't think anyone quite had taken on-board that it was going to come that early.—CM26

The most difficult aspect of the 06/07 fires was there wasn't enough air support.... Three or four days before the fires, the Bureau reports were predicting lightning storms, so we should have had air resources here to be prepared.—CM1

5.4.2b Visible Interagency Cooperation (Stage: During)

Rivalry and a lack of cooperation and trust between DSE and CFA during a fire were seen by participants to potentially diminish trust in the agencies and the incident management system.

I think it's important to have trust between the government agencies right across the board. I feel that without that you wouldn't achieve the end result that's required to protect the public basically. That trust has to work reciprocally with all the agencies that are involved.... I don't think you can have one agency sort of going off on a tangent and doing their own thing without informing other people or other organisations...it could jeopardize the whole process that the thing goes through.—CM4

Some participants described visible conflict among fire management agencies during the fire.

There was so much conflict. What I noticed was that...you had all these groups, and they were all at loggerheads with each other.... there was a lot of bickering and a lot of animosity.... And I know a lot of people have lost their trust in the system, and I know a lot of people are angry.... There was so much bitching. And I got so confused as to why, and who was bitching at who. But it clearly didn't work.... It exhausted me. And I kinda get the feeling a lot of people have lost respect for each other in the organisations.... And I just didn't expect that.... I honestly didn't think there was so much politics.—CM3

Other participants described how they only saw CFA personnel engaged at the fire front but assumed DSE personnel were working on public land in less visible roles.

And the CFA, I can't speak highly of them enough.... But, you didn't see the Department of Sustainability and Environment much. It was the CFA ones, they were the back-up. I guess they [DSE] were there, but there didn't seem to be much coordination between the groups.—CM11

However, other participants did not witness a lack of cooperation among agencies.

[To build trust] *there's gotta be common sense and there's gotta be cooperation. Between all the different organisations.... I don't know how you do it because we had Parks, we had DSE, we had Shire, so many regulatory bodies, and then we have CFA.... But I didn't see it as an issue. Not to say that it wasn't an issue. I have no doubt there were disagreements between different bodies. There may well have been. But I didn't see that. It wasn't obvious to me.—CM6*

CFA members generally agreed that they had no difficulties in working with DSE staff at the fire front but noted that there can be complications higher up the hierarchy.

I had good rapport with all DSE personnel. I found communication with them was excellent during the fires, the ones that I had to work with, we worked well. We trusted one another's judgement and we respected each individual's organisations and respected each other's abilities to handle things. If one was better than the other, well, they took over. There was no question of 'well this is my territory, or this is your territory' that sort of parochial stuff. There was none of that.—CM4

A lot of times it's actually people you know sorta through everyday life that are the ones on the ground, and you know where you stand with them, whereas the ones higher up the chain of command sort of aren't, um... - it gets very political.... And sometimes the request that is originally made isn't quite the same as what gets to the top of the chain of command.... If somebody doesn't necessarily go along with the same views that you've got, if they just slightly change the request, uh, they can pretty much guarantee that it'll be knocked back.—CM10

Most CFA members said cooperation between the agencies had greatly improved in recent years.

My own opinion is that there's a hugely different trust relationship between DSE and CFA in these fires compared to the 2003 fires. I don't know why it is, but the attitude by CFA to DSE during the 2003 fires was shameful. It was really embarrassing, but I did not detect any of that this time. The relationship between the two organisations was really good.—CM18

However, rumours of conflict and disagreement persist which may result in reduced community-agency trust.

The other thing you hear a lot...is that there's this incredible tension between them. And that's what we did worry about.... You hear the stories where THEY are in conflict, and that doesn't give me any confidence.... However... I've also heard stories of great cooperation as well. But you know that sort of rumour stuff doesn't give you any sense of comfort that it's all going to work out for me if something goes wrong.—CM16

Well, I think the organisations, whether...CFA, DSE, Police...the strong attribute is that they need to be able to work together. And I know that's worked on, but at times people feel that they don't. Well, a lot of people don't see the levels at which they work higher up.... People quite often don't understand that.—CM9

5.4.2c Interagency Coordination (Stage: After)

Providing residents with a ‘one-stop shop’ of information and advice about recovery programs and assistance was described as enhancing community-agency relationships ‘after’ a fire.

It's having one place to go to. So you're not going from this agency to that agency to that agency, trying to find the fact that you've got to go back to the first one for what you want. So being able to go to one central place, and go, 'this is my problem', and have someone who can then direct you to the appropriate places. Or organise it for you. Just having someone to go to.—CM23

While having one place to go to get information was important, several participants also described how it was reassuring to see multiple agencies providing support for the many types of loss individuals might experience.

After a bushfire you need support to cope with possible loss of stock, fodder, sheds, fences, all manner of things. I believe there seems to be a good support basis from shires and DSE and DPI.—CM21

Some concern was raised that agencies and organisations duplicated services and property visits after the fires, causing residents unnecessary stress in a difficult time. Some participants suggested that ‘knowing that agencies and organisations have worked together’ to plan a coordinated response could reduce community member frustration and foster trust in the organisations involved.

One of the greatest impediments seemed to be very early on in the piece with privacy and confidentiality.... But perhaps more communication even prior to a fire - again so that there's a protocol established between DPI ...and Rural City...and also CMA and other agencies - but particularly DPI and Rural City agency staff, so they could actually share the database. Because there does seem to have been a lot of duplication that has happened. And I think that's not just frustrating for the agencies, but it's also frustrating for community people.—CM26

5.4.3 Local Concerns, Knowledge, Assistance

5.4.3a Local Concerns Addressed/Included in Planning (Stage: Before)

Community Members’ Trust Wish List Local Concerns Addressed/Included

Before a fire, fire management agencies:

- Recognise community concerns regarding land mgmt issues which have a perceived link to fire management
- Weigh equally community member concerns and agency goals in planning decisions
- Ensure community members have a voice in the bushfire planning and preparation process
- Ensure changes to mgmt strategies, objectives, plans, etc which have resulted from community feedback are visible to community members
- Promote a helpful, empathetic manner of approach in agency communications and public meetings/consultation
- Provide responses to community member concerns which directly address issues raised

Many participants felt that their concerns related to land management practices, permit processes, the condition of roads and fire access tracks, and identification of personal and community assets were not effectively addressed by Council and fire management agencies. Most participants considered land management and fire management issues as inseparable concerns.

We've had a blackberry infestation for years that's creeping through the bush. It was beautiful when we first arrived, it's not so much now and the message has always been, not our problem.... They're not doing anything to look after it.... BUT, if I want to take a tree down (laughs), heaven help me!.... So my view is, 'then you have to protect me if there's another fire because you won't actually let me make myself safer'.... So, yeah, it's all that tension the whole time. And it's just, we just want to be here and we're not intruding on the land, but everything we ever want to do, becomes sort of an issue.—CM16

The other thing we see from the government side of it is ... the roads hadn't been cleaned up properly to access into the forests. So different roads around here hadn't been cleaned for I suppose for so many years, or not updated, not kept so you can get in [during the fire].—CM5

One participant noted that '[after the fire] all the authorities were willing to listen, to learn about what worked and what didn't work, like with the community meetings they had'. This participant felt that agencies often ignored resident concerns over land management issues but did listen to concerns about the 06/07 fire response.

However, many participants stated that they did not feel they had a voice in matters which had the potential to directly impact them. The participant in the following quote wanted to undertake some thinning across an unfenced private-public boundary but did not feel the DSE would weigh her concerns about public safety equally with conservation goals.

We're not going anywhere at the moment getting anything done about it, because it's doubtful we'll be able to do anything at all.... We've always been sort of fighting for retaining the natural environment, and here's the one instance where it almost feels like we're competing with the wildlife to have sanctuary.... That's the thing I don't trust about them. I don't trust them to see us as equally important to the bush that's at the back of the land.—CM16

One participant stated that ignoring issues raised in industry-agency discussions about the timing and impact of planned burns would breach all of the trust that had been built through positive interactions during the 06/07 fires.

As a King Valley landowner and grape grower, I'm actually disappointed...that the DSE are going to do controlled burns in our area...at the beginning of our harvest. Now, I can't understand after all the meetings we've had with the DSE people that they turn around and make decisions or contemplate making decisions like this. Without consulting the industry that it will affect.... I just think it's irresponsible of that organisation to try and steam roll something like this through.... By doing that... up here, they will burn us again. And they'll burn us good. [All of the trust,] that can all be undone with this one action that they are doing now. Personally, as far as I'm concerned, if they go ahead and do this... I will lose that trust that we have just spoken about.... —CM4

(note: the DSE did postpone this burn until after the grape harvest)

Public meetings and consultation were often seen as ‘*polite listening exercises*’ which did not result in visible change.

The overall feeling I got was we were being listened to out of politeness rather than anything else, yeah. Basically, I think it was a PR exercise that they listen to our concerns. From what I’ve heard since the debriefs and that, not a lot has been taken on board.—CM10

They had what they called a conciliation meeting there. And you walked in and the Mayor and three others from the Council were sitting there and not one of them had a pencil or paper between them. So you knew what the result was going to be. – CM35

Nothing that we can do or want is going to change...what these outside people and events are going to do.... It's no point in jumping up and down and saying they should have done this or whatever because it's not gonna change. They're not gonna change what they think is right.... Like all the things you hear about them taking these different things on board, when push comes to shove I'm sure similar things - well, I should say, it will be interesting to see how many things do change. Or just get gobbled up in bureaucracy.—CM19

Several participants described ‘*being passed around among the agencies*’ with no resolution to their concerns. One participant noted that the manner in which Council and agencies responded to issues seemed unhelpful, unconcerned and did not directly address the issues raised. Several participants stated that they had ‘*resorted*’ to appealing to local parliamentarians to attempt to resolve issues.

I've written to Council, and also the Sustainability Department on a number of occasions and they don't want to know you.... They don't refer to the issues that you raise in the letters always. It's just a negative response. So that saves them the time of disputing what I say and what they say. It's just a curt response of 'we feel this issue is not a high priority, so therefore no action will be taken'. I've been continually trying to establish that dialogue. And I've even gone and resorted to local members of Parliament. You've got to resort to some other means then to try to get some form of dialogue with them on that. —CM2

...we did try to appeal to different people and say, 'get them up here'. Appeal to your local parliamentarian, 'GET THEM UP HERE'.... But you don't get any response. They have got their set ideas and that is it.—CM15

5.4.3b Local Knowledge/Assistance Integrated in Response (Stage: During)

Community Members’ Trust Wish List **Local Knowledge/Assistance Integrated**

During a fire, agencies:

- Integrate local knowledge and local non-CFA volunteers into response efforts
- Ensure individuals with local knowledge have been identified before the fire
- Use local knowledge in Incident Command and fire ground decisions
- Utilise locals where appropriate to identify assets, track locations, etc.

Trust in fire management agencies was influenced by whether participants felt like fire management decisions were effectively utilising local knowledge about local conditions and fire behaviour.

*I finished up...working with one of the units from *****. And that's when it struck me how important it is for units from outside the area...to meet up with someone who has a bit of local knowledge.... They wanted to do a backburn, and because I knew the area and the wind currents and how they change in these areas, we were able to do that safely. And what they were going to do was light it where they shouldn't have. But because I knew the area, I was able to just advise them about where to start and where to finish....—CM6*

The biggest trouble is you gotta have lots of local knowledge at all these fires. Like if someone's local and they know the area, they're the ones to grab and get them fully involved. They know the bush, they know everything that's around there....—CM5

Many participants stated that persons with extensive local knowledge of the area could be identified before a fire and more effectively integrated into response strategies.

Well, I think in local CFA brigades, they usually know reliable people. That's where they have to work together to find out who the local knowledge is.... I mean most of the local CFA know the terrain, know those areas, and I think the communication there is essential.—CM6

CFA members repeatedly mentioned the importance of making decisions informed by local knowledge at the fire front.

It was probably too much organisation away from the fire front. The people there who knew what was going on and when things should be done, by the time their requests went up and then back down through the chain of command, the time to do it was gone....—CM10

Several participants gave examples of local residents and/or CFA members being used to work with agency personnel, identify property infrastructure locations, describe access track conditions and guide fire trucks to properties and through the forest. However, most participants suggested that local knowledge should play a greater role in response and that this would increase trust in fire management agencies.

They wanted local knowledge to guide the trucks, so that night I guided the trucks through.... In an area like this where local knowledge is really important - and probably wasn't used as much - I think up higher needs to make a greater recognition of local knowledge - and I think they are probably a bit more aware of it now. But just without local knowledge in a spot, that's where people get into trouble.—CM9

Several participants expressed concern that local, non-CFA, volunteer assistance was not integrated into the fire response. Sidelining locals in preference to outside assistance was seen to decrease trust in the managing agencies responsible for coordinating logistics. For example, several participants felt that denying locals the opportunity to assist in food preparation was detrimental to the community's cohesion and collective mental health.

One of the things that took away from the trust in the bureaucracy was the removal of the women's input and the sandwich making. Using commercial kitchens for preparation of the sandwiches destroys this part of the community effort. The community showed a lot of sincerity in wanting to do what they could and feel like they had made some contribution.... People feel so helpless and this is one way they can help and that has been taken away by ridiculous rules. —CM13

Participants stated that residents in small communities were used to mounting a community response to a crisis and were frustrated by the bureaucracy which prevented their participation.

But that was really hard to cope with, that none of us could do anything.... They just refused our help up here, you know. Because we were all prepared to go down and make sandwiches or do something, but we were just flatly refused. We weren't allowed to do anything.... I felt just really embarrassed as a local that this went on up here.... I was absolutely appalled by it.—CM11

...as small communities, everyone went around, and everyone helped out so much. That's sorta like what little communities do, when something major happens, they get in and help.—CM5

5.4.4 Trustworthiness (Stage: Before, During, After)

When describing why certain events or actions increased or diminished their trust in a person, agency or organisation, many participants described individuals they viewed as being particularly trustworthy. The following are some of the descriptions of fire agency personnel who were repeatedly described as being trustworthy.

*He's just an absolute natural leader...inspiring on a whole host of levels. He was able to do every job that was asked of him.... Where things are a really fluid situation, he was able to step up into those roles naturally – like he hadn't been trained for them.... And he was someone you could trust.... I came back almost every time I was on the truck and said, 'ah, *****'s done this glorious thing again.' He had great attention to detail too.—CM18*

****** knows the locals.... He's part of the community. He's not frightened to bring someone into line at a job, but he's got his own way of doing that, that he doesn't get offside with people.... You'd be hard pressed to find someone with a bad word for him in the local area.... He can give you so much information and help at an incident because he knows what boxes gotta be ticked and all the rest of it. He can do all that, but he is also extremely flexible.—CM25*

See Section 5.2.5 for other characteristics described as 'trustworthy' .

5.4.5 Institutional Assurances (Stage: During)

Community Members' Trust Wish List Institutional Assurances

During a fire, agencies:

- Ensure community members feel that agencies have appropriate policies/procedures that minimise losses and protect public and volunteer safety
- Ensure community members feel/know that personnel have appropriate training for tasks
- Ensure community members feel that the Incident Command System does not hinder response efforts at the fire ground
- Ensure community members that agencies and their personnel are accountable to bushfire response protocols

Participants described how living in a bushfire-prone area meant it was necessary to trust that agencies had policies and procedures that would protect residents and their properties when bushfires occurred. The excerpts below illustrate the importance of institutional assurances to trust from two contrasting perspectives.

The response of the government at all levels was there to support people when they needed.... There was no sense of a headless chook – the initial response seems to be, this is chaos. But it's chaos with direction and it clarifies as the incident progresses or as time goes on.... And you just have to trust that there is order behind all this and it will become apparent.—CM18

You trust there's a set of protocols or a chain of command that should be followed to allow things to happen. There's a few breakdowns in that link...because of the bureaucratic nature of the system, at times - and because, being volunteers, you've got people in roles who are experiencing things for the first time...in a pretty heavy situation.—CM9

Many participants stated that community members needed to be able to trust that staff and volunteers had appropriate training to protect public safety and property.

******'s a really sensible guy, so I trusted that the CFA had trained him appropriately. But I wonder if some people who do work for them are capable of doing the job they need to do, in a situation as...demanding and changeable as it is.—CM8*

I just think I wonder if they do enough training. Like, I remember years ago when we were kids they used to have training weekends.... But they don't seem to do anything like that anymore, not that I'm aware of anyway.—CM3

Similarly, participants who were CFA members also said it was necessary to trust that those on the fire front had proper training for the tasks assigned and that arrangements were in place to ensure volunteers had sufficient food and resources.

None of us know each other from a bar of soap. So you're putting that trust in that training. So you are not so much putting it in an individual but the organisation behind it has seen fit to train that person because they trust them, basically.... You're putting your trust in because you know you're going to have to have certain criteria to get to that stage.—CM4

...those infrastructure things, I suppose they're bases, or what you have to trust in them to deliver you the right stuff. So, we trust when we're out on the truck that 'gee, someone's going to bring us food', and if it doesn't come, people are hungry, people are frustrated. No one will complain, you just keep on, but you trust in other people when you're doing that.—CM9

Many CFA members also described how it was necessary to trust that the incident management system had structures and policies that ensured positive outcomes and volunteer safety.

The structures to support the fire effort are as important [as trust itself]. The structures allow you to get good outcomes, and in these fires they were well-managed, and managed for loss minimisation....—CM20

Since they burnt six people - they had changed the culture of the CFA and it's a much better system now. In the old days you just ...roar in and put it out. Now it's like... wait for it to come out so you can backburn onto it. And it's much better, a much more sensible system.—CM32

However, many CFA volunteers felt that 'the hierarchy' could not always be trusted because the system hindered the ability to make timely decisions at the fire front.

In the initial stages, in the first three days we don't have a problem. After about the third day, the upper level management get caught up with things and then throw a complete spanner in the works. They get to the stage where everything has got to be done by the book, every tick has got to be in every bloody box.—CM25

The chain of command is the biggest problem to building trust and getting the job done. In a backburn, the people at the bottom need to do a series of burns, but getting permission to do that is very hard.... But at the local level there is trust in each other to do what has to be done.—CM13

A few participants felt that even though training was important, the amount of training now required by CFA volunteers has become burdensome. One participant thought this was causing members to leave the organisation which in turn was causing damage to the CFA's reputation and community-CFA trust.

...because of the increased workloads expected from volunteers now, a lot of people are walking away from it that have previously been members.... And that's not really giving the CFA a good name. Because when they've had enough and say, 'oh, I'm not putting up with all the crap they go on with', and people who don't know what's happening and hear that...it doesn't do anything to build trust between the community and CFA.—CM10

Some participants, both CFA and non-CFA members, stated that trust could be diminished if CFA members were not accountable to response protocols because of their volunteer status.

But the response [to the negative impacts we suffered]... whoever wrote back said, 'oh you know, there was a lot of volunteers involved'. The implication being that some concessions have to be made because they're volunteers. And that's actually what those department guys said, too.... It's just the indication is, when something awry happens...they can sorta pass the buck in a way.... An emergency is like a code for a lot of protocols go out the window.—CM28

Other participants were more forgiving of volunteer actions.

At the end of the day, that bloke that was running it was just a farmer - like they are just volunteers themselves.... It's not their fault...you only spend X amount of time doing it, you've gone and done a course over a weekend that says, 'right, now you can be a strike team leader or something'. And then it's 6 years before they have an event which requires that sort of hierarchical system. It's a fair bit to ask, but I guess that's why people chip department things a bit more because that's those people's full-time job.—CM19

Some participants also felt trust was diminished by specific management policies. For example, several participants felt abandoned or angry when crew changeovers left fires and backburns unattended and/or threatening private property.

*The Department of Sustainability (laughs), one night ... they lit up a backburn next door here and ... an hour later [our neighbour] rang up and said, 'they've gone and no one's come...get over here'. ***** and them went over there to help because no one turned up, there was no back-up. They started a backburn and then took off.—CM11*

They have their hours - now there was a chap up there wanted to put a break in back in behind here. And it was a changeover time. Now he had to bring the dozer back out here to the changeover point until his relief came. And it was a waste of time going back in there because the fire was gone. You know, that frustrates old farmers like me! Because you don't knock off - just because you're hungry doesn't mean that you can go and have your lunch and then come back and the fire's gone. You stay there, and work until another one turns up and then keep going....—CM6

5.4.6 Reduction of Uncertainty (Stage: During)

Community Members' Trust Wish List Reduction of Uncertainty

During a fire, agencies:

- Make provisions at roadblocks, when threat is not imminent, so that community members can resupply and friends/family can access property to help defend it
- Provide a sense of normalcy in a prolonged fire by allowing 'life to go on' when fire is not an imminent threat (eg. ease roadblocks)
- Ensure there is a visible presence of fire agency personnel on or near properties in threatened communities
- Ensure agency decisions and priorities are clear and consistent
- Ensure that agency actions/decisions will be justifiable to community members

Participant descriptions of incidents that increased trust often included actions and decisions by others that reduced a participant's uncertainty about the fire situation. As the following

participant notes, emotions and feelings of trust and distrust were heightened for many residents during the fires.

The fear factor that was associated with it, and how personal it was. ...but when I trust the CFA to put that fire out...or I trust what they are telling me about the area or situation, yeah, the fear factor was so big. That sense of trust is much more heightened, and so would have the mistrust been the same way, you know. My level of trust was related to how much fear I was feeling at the time, too.—CM8

Reassuring residents that they were not alone during their fire experiences was important in easing uncertainty for many participants during the prolonged fires. This reassurance often came in the form of phone calls and offers of assistance from family and friends.

I had friends ringing me, not even hesitating, they would ring at 11 o'clock at night...knowing that we'd be up.... Just talking...not even about the fires but just chatting for that reassurance.....—CM8

*When it started...we had wonderful friends that came and supported us, too. We had five of our friends We were so lucky in that we had all that support and that gave us security as well.... It was lovely for me to have that knowledge that someone was with ***** and he was safe and that I had someone not too far away. —CM30*

And he came 'round and he'd been training to get into the CFA and...he was like really rarin' to go.... So he was brilliant. Apart from making me feel good, he'd go out getting all the spot fires in the paddock, so it means I could concentrate on guarding the two houses. And I just didn't feel so much alone.—CM17

Similarly, participants often mentioned that actions taken by agencies and agency staff to reduce their fear and apprehension increased their trust in that person or agency. For some this reassurance came from having direct on-property assistance from the CFA or DSE during the fire.

So that was a really exciting time, very scary time. But also, in a way, it was also the time that I felt the calmest because we had all of the trucks here on the property... I really did feel a massive sense of trust with the CFA. ...knowing that they were here, I just thought, 'I just don't have any concern now at all. I know they're here, I know they know what they're doing'. So my trust was very much increased when I had the presence of the trucks or people.... Normally if they had the CFA uniform on I thought, 'they're God at the moment.' —CM8

I had one DSE fellow here. He was marvellous. He came in and asked me where all the hoses were. Because I couldn't go out. I had a breathing problem. And he just come in here and wet everything down. He was terrific. Really tremendous. —CM37

For others in remote areas this reassurance sometimes came from individual phone calls from CFA.

The other thing I really appreciated during the fires, and it was another trust thing, was... during the heat of the fires...we had nightly phone calls from CFA.... So the CFA were terrific...the way they communicated it, it was direct, it was to the point, they were on and off the phone very quickly.... So they were really good, they were great people and that's a really great service to have.—CM30

Many participants also described the reassurance provided by the visible presence of large numbers of firefighting personnel and equipment, even if not on the participant's property.

There was the comfort people felt that there was a response in the valley and that we were there, you know the trucks going past and the trucks on people's properties and just that they could see red and blue lights at night and just stuff going round, it was a huge comfort for people.—CM18

...dozers everywhere, and the helicopters. And that was a bit of a comfort, but I didn't think about it at the time. It's more in hindsight. To spot a helicopter. It was around, every now and then, I don't know how often. And eventually we were refilling our firefighting unit, gave him a thumbs up, and never saw him again....—CM22

Inconsistency in firefighting decisions and actions, however, had the potential to diminish community-agency trust. Some participants thought it was unclear how the managing agencies made decisions and/or determined priorities and which private and community assets would be defended.

Having a dam - that afternoon the CFA came around and asked if you wanted to be a CFA designated property.... And...you could say yes or no, and I thought if I say yes, to me that meant, if the fire was really close or on my property, the CFA would be here because they could get water.... But there were a few other people in the valley who said 'no, you can't have my water'. Well, they didn't get serviced, basically. There was no way to tell, but, the people who owned the properties were there and manning them, it was not like there was no one there, so one assumes that's the CFA's thinking.—CM14

You get mixed messages. They say you're on your own...but...I remember thinking nobody's lost a house. So clearly that tells you that there's heightened levels of support out there. But, you know, I had this creeping sense of the people, the bureaucracy, covering themselves, telling you that we can't guarantee you support, but they seemed to arrive. And when they arrived that night, in huge numbers, for a grass fire, I went, 'wow'! And I must say, that imbued a confidence, like if they come when it's over there and it's not threatening anyone's house or sheds or infrastructure, that's pretty good.—CM16

Though all participants stated that they knew not to expect agency help to defend their property, some participants who did not receive assistance from the CFA or water-bombing helicopters questioned why others had received assistance but they had not.

*We were piddled off, or peeved off, on the day. The helicopters were flying around, and they were dropping water in and around ****. Now everyone knew we were here, 'cause they knew we weren't going to go anywhere. The helicopters were over here, and we needed water - to just get a fire front smashed with water, and we would have been laughing. Only half a tank, wouldn't have mattered. It really makes me wonder if any houses should have burnt.—CM21*

We weren't the only ones that never got assistance. There's other people that lived, live a long way in, you know, and they're worse off than what we had, because they've got a lot more trees around them than what we've got. And they were left to their own defences as well.—CM27

However, other participants who did not receive assistance felt CFA/DSE actions were justified because they could see that their neighbours were in greater need or there were more strategic places to be positioned in the overall fire response.

The first time the fires came there were several fire tankers, there were several department utes with fire tanks on the back. I felt well-supported, but in the second fires we were less well-supported. But the neighbour's house was more critical and they had protected that through the day. So I don't think they'd done anything inappropriate.—CM20

Not understanding and considering the everyday needs of residents during a prolonged fire also had the potential to diminish community-agency trust. For example, many participants were frustrated by the implementation and management of roadblocks. These participants suggested that there could have been more consideration of resident needs when deciding where and when to implement roadblocks.

It was also a bit awkward with the road blocks. They closed the road at the bottom here...and the policeman said, 'right, when you go out this way you won't be allowed back up'. And I said, 'you've got to be kidding, I live up the road.' And he said, 'Nup, sorry, no traffic's going back up the road'. And I said, 'but this is fine, the threat's not right here, the threat's away.' I knew where the threat for the fire was. But yet he was telling me that I could not drive back up my road. And I said, 'I've got children at home'. So I lost a lot of trust in the police there because I thought, 'you know, you guys think you're doing the right job here, but you actually don't know what's going on.... I don't feel like...relying on you' —CM8

Participants agreed that conditions could change quickly and that thick smoke presented a road hazard but also stressed that 'life goes on' in a prolonged fire event. Some participants were also frustrated when their families were unable to get through a roadblock to assist in defending their property.

I can understand they've gotta have the roadblocks because of the amount of traffic, but surely they should have a list of the locals and their families and if someone wants to come up to help you, surely they should allow people to come in....—CM11

However, several participants acknowledged that while others had experienced difficulties passing through roadblocks they personally did not have trouble.

We didn't ever have any trouble, did we? Like we never got stopped.... Whereas I gather there's other people ...could get within a kilometre of their home but no further.—CM35

A few participants also felt trust in the Police was diminished because of the authoritative and insensitive manner displayed by some personnel.

The Police weren't...compassionate enough.... Like every day I had to go...through that roadblock.... And they would say, 'you realise when you come back, we don't HAVE to let you back in'. Like, really negative.... I found that really (pause) horrible.... Because you know, like, was it going to be a nice one this day or was it going to be an asshole, or someone with AUTHOR-I-TIE. Most of them were fine, but some of them were like, they would jump out with their bloody gun and nearly point it at you, and going, 'where are YOU going'? And...you just didn't need it.—CM14

5.4.7 Personal Experience, Confidence, Self-Reliance (Stage: During)

Community Members' Trust Wish List Level of Personal Experience, Confidence, Self-Reliance

During a fire, agencies:

- Ensure community members have knowledge about what to expect of bushfire behaviour
- Ensure community members will be able to anticipate the emotional/mental strains associated with a bushfire
- Promote well-being strategies that deal with feelings of anticipation and 'the waiting'
- Provide effective communication with more knowledgeable and/or self-reliant individuals who are less likely to 'need' to trust agencies but also more likely to want to work independently or alongside them

Participants with little or no experience with bushfires tended to have less knowledge about how fires behaved and what to expect during a fire. Other participants had considerable experience and therefore more knowledge about what to expect. The excerpts below show this range of experience and knowledge.

[The fire was] a really big unknown. I've never ever been exposed to anything like that before.... So this was really my first experience, and for the previous six years that we've been living here, every summer we were talking about preparing for bushfire season. ...in the back of my mind I thought, 'yeah, we do need to prepare, we need to rake up those leaves and make sure things are -'. But when the fires came across us I then realised the enormity of it. And thought, 'holy hell, we've got to be aware here'.—CM8

...the actual event wasn't all that stressful because...I'd been dealing with fire. I got into the fire mode by being on the tanker all Tuesday...so I'd been around the fire. I'd done the CFA training, so you know what's going to happen, know what it's going to do. It's just a matter of being in the right spot, or not getting in the wrong spot.... With the neighbours we'd done Community Fireguard...before the 2003 fires. And pre-fire, we'd had information and discussions...so we know more what to do and what to expect....—CM20

Being a city-slicker, I knew absolutely nothing about bushfires, other than what you see on telly, and you go "hhoohh, isn't that horrible!"—CM14

I've had just on 25 years experience in fire brigade. I've seen some pretty big fires and been involved...with Ash Wednesday. And I've been involved with all the major fires...so I knew what to expect. And I basically knew what was going to happen. How the fire was going to react, so we knew what we could save and couldn't save. And that also helped with dealing with the whole thing, knowing what's going on.—CM23

One participant who had little direct experience with bushfire prior to the 06/07 emergency joined the local CFA brigade afterwards so that he would know what to expect in regards to fire behaviour and agency response for next time.

I thought it was a good idea I join [CFA after the fires]. Because at least then you'd have some sort of idea of what was going on. Not being involved with the CFA... you sort of thought, 'ah, hell, you know, what's happening?'. And so I did get involved, so that we would have a bit more understanding of what was going on. Or at least know what to expect anyway.—CM35

Some participants who had put together fire plans were not confident in implementing them when the fire arrived in an unexpected manner or timeframe.

We second-guessed and thought, we think we've got it right, we've got enough hoses and whatever, but we still weren't sure that whatever structure we put together wouldn't lead us into trouble.—CM16

Many participants said they did not expect the emotions and mental strains that were associated with the fire and the sensory stimulation of the passing fire front.

You could just hear the crackle and - oh it was shocking.... We've been here about 17 years...and we've had a lot of droughts and hot summers and I'd never ever seen a fire. And I mean to live here for so long and not ever encounter anything like a fire before and then THAT comes through, you just can't believe it, you know.—CM27

Similarly, many participants described the emotions associated with the anticipation and uncertainty of the prolonged fires as being the most exhausting aspect of the event. The 'waiting' was repeatedly mentioned as the most difficult aspect of the fires for most participants, regardless of their level of experience with fire.

*But it wasn't just the fire, it was the waiting. And everyone went through the waiting. I guess it was brought home to me the night of the fire when ... the fire came across here, and there's a hill between us and the rest of *****. And we've seen video of it since and it looked pretty horrendous.... And it was after dark, and [my cousin drove] around here and she just burst into tears as soon as she saw me, because she didn't know whether we were right, and nobody could tell it. And of course we all lost our phones, so it was just the waiting and the not knowing, the 'is it coming, isn't it coming?'. You don't know.... You just have your imagination of what happened or what may not have happened. And you're tired. And you knew you couldn't afford to go down to ***** because if the fire came through you wouldn't get back and then you didn't have a chance of saving anything. I just think that was the worst bit. I'm not saying it was nice after with all the cleaning up and everything, but then you know where you stand.—CM36*

Those with no or few expectations of fire behaviour were more likely to say that community-agency trust was very important during the fire. Participants with more fire experience and/or greater personal confidence and/or who perceived themselves as being highly self-reliant were less likely 'to need to rely on the agencies for protection.' These participants often viewed trust in their partners/family and/or neighbours as more important than community-agency trust.

I think you've got to trust your own judgement. You've certainly got to trust one another, who you're defending the house with.—CM18

So we're always going to be by ourself. Now, we were confident in each other, not a problem. Reasonably confident about the neighbours.... We believe we were bomb-proof. The place is set up and I do a lot of work having it that way.... I've got a firefighting unit, I'm crew leader level in the CFA. We understand fire behaviour. So, basically, we expect to be on our own, we were on our own, and we didn't have a problem.... CM32

I think most people up here are quite independent.... We're very self-sufficient.... So during the fires everyone felt, 'right, well, we are on our own'.... And then we felt, when help did come, 'oh, this is a fantastic bonus'. But we still had that sense of independence where we felt we had to handle certain things ourselves.... So I think that is your first priority, your trust in your neighbours in your community, because...if you can't see something, you are trusting them to tell you where things are, how it's progressing, what it's doing.—CM30

However, participants who felt trust in partners/neighbours/friends was more important than community-agency trust acknowledged that community-agency trust and the agencies' role in communication and property protection were still important.

...it is a big thing having trust in the services...because ultimately you're guarded by them. If they overrule or they're saying a fire line has to be set through there, you are trusting them that they are making the right decision to protect you and your assets and your home and your family...and have other people's best interests at heart.—CM30

These participants were also more likely to critically analyse agencies' response actions and/or want to work alongside or independently of agency personnel.

We don't expect [help], so much. Sometimes the agencies are in the road anyway. Because you know your property and they don't. So we probably don't trust so much.—CM22

He was smart enough to think if it was getting a bit big, then how about we just let these [local] boys do their own thing. He's in charge of it and you report to him but – he knew the people 'round here, he knew their abilities.... Him letting us do it as opposed to, well, 'you're not qualified so you guys just go and sit over there' - like he let us do some pretty significant sorts of things -which, one, got things done, and two, made the working relationship all that much better.—CM19

5.4.8 Immediacy (Stage: After)

Community Members' Trust Wish List Immediacy

After a fire, agencies/Council:

- Check on the welfare of community members as soon as it is safe to do so after a bushfire
- Provide assistance for injured stock and wildlife as soon as it is safe to do so
- Provide recovery information and services as soon as it is safe to do so

Not providing immediate assistance after the fire front had passed was seen as damaging to community-agency relationships because some community members felt abandoned.

Several participants described a delay in information about recovery assistance and services or help for injured wildlife, particularly after the King Valley fires.

Well there was NOTHING, no one knew where to go for that first week. Like there was nothing, no one came near you.... It took them awhile to get a list of things of where to go to. And everyone was just in shock, you didn't know where to go for resources. And that was a bit of a let-down....—CM11

... it was the animals, they started to come out of the bush burnt. And I think it was about 6 weeks before the RSPCA or anyone came up here looking for injured animals and that. It was so, that was a bit too late, and that was really distressing for me to see the animals burnt. —CM3

Concern was also raised by a few participants that there was not always a coordinated effort after the fire fronts had passed to investigate the welfare of individuals who had stayed to defend their properties.

*I don't know if it was the second or the third day that anyone even bothered coming up after the fires. We could have been dead and they wouldn't have known. I was really, I must admit, I was disappointed with the local fire brigade - and it wasn't just the local fire brigade, they had about 20 fire brigade trucks in **** for that day and not one of them came up here after the event to see if we were alright....—CM27*

However, other participants experienced assistance that came quickly. The Department of Primary Industries was repeatedly mentioned as attending properties immediately, providing useful information about recovery services and problems to be aware of in stock, and encouraging residents to start clean-up at once.

Circumstances are different for different people but one good thing, for most people I think, was that the DPI got out immediately.... They brought information from many different departments and told ways I could get food for the cattle....—CM20

The Department of Primary Industries were good. They put an impression on us to get things cleaned up and that quick. They've gotta do that, otherwise you'll just go, 'oh, it'll happen tomorrow, it'll happen the next day'.—CM21

5.4.9 Perceived Needs Met/Unmet (Stage: After)

Community Members' Trust Wish List Perceived Needs Met/Unmet

After a fire, agencies/Council:

- Ensure community members' immediate, basic needs arising from bushfire are met
- Recognise and meet the long-term and on-going needs of community members
- Recognise differences in recovery times (commencement and conclusion) among individuals in the community
- Follow through on funding promises, community member enquiries and requests for assistance
- Provide recovery programs that enable community members to take the first step in moving into recovery and/or give community members the feeling they are reciprocating help to others (eg. Landmates fencing program)
- Provide community events that prevent community member isolation and build community relationships by celebrating successes/commiserating losses

Most participants were generally satisfied with the recovery assistance provided by the various agencies and organisations. Most participants felt the recovery programs met their immediate and basic needs.

...I think...if people needed help they got it. If they didn't want help or they didn't need it, that was fine. It wasn't the case, 'we're here to help and we are going to help'. Because that can be a problem too.—CM23

After the event [DSE personnel] came up and did a fair bit of repair work and just looking around and seeing what happened, seeing what we had to do to modify our place... perhaps what fences the CFA broke down or, you know. So that was a help, and that was good after the event to know that they were still involved.—CM8

Several participants expressed concern that the recovery period for affected individuals commenced and concluded at different times. It was suggested that the funding and programs provided may not meet the long-term recovery needs of some community members.

The other tricky thing about recovery, and part of it I know just through work and dealing with crisis recovery ... the recovery points in these are different for people and spread out over periods of time. So the people coming and doing the recovery really need to be quite knowledgeable about where people are. And be able to find that out pretty quick.—CM18

But the response was, let's have these big barbeques, and that was a great initial point, but then it sort of dwindled into nothing beyond that. And it's probably a resource issue, you get lots of money from government, fix it, like the drought, and then you withdraw everything. And really, it's the preparation for next time that's probably more important than the actual crisis.—CM16

Perhaps there is a need for a really prolonged period for people, to allow them to come to terms with what it is they need to do, or the changes they need to make or what they need to know, the damage that needs to be rectified. Because, I'm aware of people in September, October...saying, 'oh yeah, we went up to the back block last week and it was the first time we've been up there to look at the damage from the fire', and they obviously couldn't pull themselves to do that earlier. So I don't know whether...it's recognised that it really does take people such a long time.—CM26

Some participants described difficulties in accessing the assistance. However, most participants were understanding of the complexity of organising program logistics and did not feel this detracted from their trust in the organisations and agencies.

We had a posse that came out from DSE... but at the end of all that, it was more or less like a run-down of what you can't get, really.... And there were all these hurdles and this, and in the end, I didn't avail myself of that...it was a waste of time....—CM28

Since the fire, the persons representing the Sustainability Department and the fire authority people have done what they can. And I think the Council, to a fairly good degree, too.... It was something that people just don't know what people's needs are and we have to communicate that.—CM2

Trust was enhanced when government, agencies and agency personnel followed through on funding promises, assistance requests and resident enquiries.

While the fires were on...there was promises of millions of dollars worth of funding for new equipment and that. And we really haven't seen anything in the way of new equipment or that yet at all.... It's just interesting to note that there are a lot of promises made in the heat of the moment and we haven't really seen a lot out of it so far.—CM10

Following up on what they say they're going to do. So keeping their word. And that's particularly with an organisation. Like one arm of the organisation says, 'yes, we'll reimburse you', and the other arm says 'no, we won't'. The other person doesn't know what they are talking about. For us, we're dealing with an organisation. And to me, that's important.—CM17

Wangaratta Council's Bushfire Recovery Officer was repeatedly mentioned as being trustworthy, particularly because she followed through all actions and requests.

*You trusted ***** because she followed it through...whatever she said.... The trust is because she followed it through. She was the only one who did that.—CM11*

She came out and attended meetings and said, 'now, we can't help you if we don't know what you want. What do you want? What are your concerns? What wasn't done right? And what do you want done in the future?' And I think that was really good, too. It cleared the air for one.—CM15

Additionally, all participants who were involved with the Landmates fencing program described the assistance and experience as overwhelmingly positive. The program brought minimum security prisoners from Beechworth Correctional Centre and Dhurringile Prison near Shepparton to work with property owners to remove and replace burnt fencing.

The department brought out the prisoner teams. That was important, because it helps you get on and make changes, because you had to do things to get the property ready so they could come and help - so that lifts you out of depression. Because you can see the change.—CM20

The thing that was very helpful...was the prison teams.... It made a really big difference, getting back on track here.... Because we'd lost about seven kilometres of fence and...I didn't have much insurance, because you don't expect it all to go, and that just made a big difference. Just the way it 'g'ed us up....—CM28

Many participants stated that the community events organised after the fire were important in assisting the communities to get 'back on track'. These events, such as the community BBQ's, film night and photographic exhibition, were seen as bringing the community together in the recovery stage and promoting positive community-agency relationships.

I think people would think it's not a necessary thing to be given organised barbeques and things, but it really helps build the trust and the communication and the community. And it's just a nice catch-up for people, but it's also that feeling that someone is looking after you a little bit. It's that someone is aware of what's been going on and showing support and things like that.... I suppose it was building community and building community relations....—CM30

The community events were good because it got people talking, and it got people out and to talk out what they'd been through. There was opportunity for distraction.—CM20

A few participants suggested that community recovery events were a waste of funds. However, the majority of participants thought they were important in meeting community needs, even if they personally did not attend the events or need such support.

There's been a lot of money spent - and I consider wasted - on community projects. Afterwards, most people just want to get back to doing their own thing, get on with their lives. I know after the fires here there was community meetings, community BBQs and god knows what, and look, to be honest, I didn't go to any of them. I had a month's extra work to catch up on here and I think a lot of people felt the same.—CM10

We didn't feel in need of any of the services that were offered at the end of it. But I do think it's good that they are offered. And a lot of people obviously took them up and a lot of people had hugely more stressful times than us.—CM38

5.4.10 Negative Outcomes Resolved (Stage: After)

Community Members' Trust Wish List Negative Outcomes Resolved

After a bushfire, agencies:

- Provide closure to community members experiencing negative outcomes arising from agency fire control efforts:
 - By rehabilitating/repairing damage to private property (eg. repair of fences, rehabilitation of control lines on private property)
 - By providing explanations satisfactory to the individual about 'why' actions/events occurred
- Ensure agency personnel have good 'people-skills' and a sensitive, empathetic manner of approach

Several participants experienced negative events due to the fires and expressed a desire for closure. They wanted to know why certain actions were or were not taken by particular managing agencies before, during or after the fire.

*...and then we tried to find out who do we talk to. And we're given the run around at *****, and I thought, 'well, we'll go straight to the ***** people and present what happened' and say 'we lost a lot, and we just want...some help with the costs of putting it all back'. So that was one thing we didn't like, because they didn't seem to know who was responsible that night, or they weren't willing to tell us, and that's when we started to get a bit snaky about it, trust-wise.—CM17*

Providing closure did not necessarily mean compensation or extensive rehabilitation or repair works. Sometimes closure could be provided with a satisfactory explanation for why certain events/actions occurred.

I said, 'look, all I want out of this is for you to tell me why'. You know, in a couple of words, why.... That's all I want.... So twelve months down the line, that's probably my biggest issue that I still can't get over. It just absolutely amazes me.... Just their lack of communication, basically. Not even a letter of - not necessarily apology, but you know, an explanation: 'this is why...'. And that doesn't seem to be really hard. To me. They would know that. They would have known that when they did it. So why is it such a big deal in telling me?—CM14

Disappointed. And I'm just saying what I can't understand is why. You just can't understand why...because we could have been dead.... But after, I couldn't understand that, and I still don't to this day. Where's the answers? The questions are there, but where's the answers?—CM21

Several participants also noted that it was important for agency staff to have good 'people-skills' when visiting residents' properties after a fire. Participants explained that agency staff need to understand the overwhelming mental, emotional and physical stress residents have undergone and respond to residents' concerns in a sensitive and empathetic manner.

I suppose the other characteristic is for them to be open, and just to be honest. Just state when they can't do something. And state it in a - particularly after an emergency - in a way that doesn't upset you. Because you're not functioning for six months afterwards, really.... And I think they have to be trained in understanding that post-trauma stuff that people go through, even though you might seem to be alright.—CM17

*And I don't want to sound too over the top, but the ***** guy was mean as cat-shit, and the guy on this side was quite generous, just in the way they approached it. And the guy on this side said, 'look we've got to put right all this control burn stuff, do you want this and this?'.... And, this guy on the other side says 'we can't do this, we can't do that, because it won't make any difference'.... And I kept asking them for more remedial work there, and I wouldn't have bothered if they hadn't been so bloody mean....—CM28*

And after the fire, the people who got out to do the clean up, they were wonderful. They really worked and they really did a good job. And they were very obliging, if they thought they could help you in any way, they did. And no nonsense. CM15

6. Discussion

6.1 Factor similarities and differences across stages

The findings presented here show some factors affecting trust were distinctive to a particular management stage while other factors spanned several stages but had a different focus in each stage [Appendix E]. For example, ‘Communication’ and ‘Local Concerns/Knowledge’ factors spanned more than one stage. In contrast, ‘Institutional Assurances’ and ‘Immediacy’ factors were specific to a particular stage.

The findings also show that what is important to community members for building trust in one stage may not necessarily build trust in another. For example, most participants described communication as an important factor affecting trust across all three stages of fire management. However, many participants also described how the amount and direction of information flow affecting trust differed in each stage [Table 2].

A multi-directional flow of information between agencies and between agencies and the community was important to trust in the ‘before’ management stages. Participants felt information should flow between agencies (eg. joint planning), from agencies to community members (eg. fire preparation education, notification of planned burns) and from community members to agencies (eg. identification of hazards, assets and individuals with local knowledge to consult during fires). In contrast, the primarily one-way flow of accurate, timely and reliable information provided ‘during’ the fire was considered to positively affect trust. Participants described a need for ‘*as much information about the situation as possible*’ during the fire. However, ‘after’ the fire, trust was positively influenced by information provided through one-on-one contact which was limited to targeted information specific to an individual’s needs.

Communication Trust Factor – Direction and Amount of Information			
	<i>Before</i>	<i>During</i>	<i>After</i>
Direction of Information Flow	Multi-directional	One-way with limited need for question and answer	Two-way with need for question and answer
Example of Flow Direction	<p>Agency ↔ Agency ↙ ↘ Community Member</p>	<p>Agencies ↓ Community Member</p>	<p>Agencies ↓ ↗ Community Member</p>
Amount of Information	Not Described	‘No such thing as too much’	Too much = overwhelming

Table 2: Amount and direction of information flow required for building community-agency trust before, during and after a bushfire

Improving communication, per se, may not enhance community-agency trust if it does not address the differing amounts and direction of information flow desired by community members at each stage. A one-way flow of information from agencies to communities may contribute to trust in the response stage but is unlikely to contribute to trust in the ‘before’ stages when community members desire a multi-directional flow of information.

The findings show that trust building and maintenance are unlikely to succeed with a one-size-fits-all approach. For example, characteristics of trustworthiness, as described by participants in Section 5.2.5, were similar across all management stages. However, other factors affecting community-agency trust before, during and after a fire may differ according

to management stage. Factors affecting trust may also span some or all management stages but vary subtly within the stages.

6.2 Building community-agency expectations – ‘Before’

Factors affecting trust in the prevention and preparation stages (ie. ‘before’) centred on ‘building expectations’. Many participants felt that they had not had a fire management-related relationship with government agencies before the fire. As a result, several participants stated they had neither a distrusting nor trusting relationship with the agencies and had no expectations about how the fire response would be handled. Many participants who were not CFA members also stated that they had not known what to expect of the fire, or of themselves, when the embers and/or fire front arrived.

Our findings show that providing inclusive and meaningful opportunities for community participation in fire planning and preparation is important for developing community-agency trust. Many participants described past experiences with consultation and engagement processes as largely negative. Participant responses suggest that for trust to be developed, community participation must go beyond ‘polite listening exercises’ to opportunities that are inclusive and that explicitly value and welcome community knowledge and concerns. Responses also suggest that transparent implementation of policies and plans, which show how community consultation influenced planning outcomes, has the potential to begin building on-going relationships and community-agency trust.

Participants recognised that not all community members have the knowledge or desire to participate in community engagement activities. However, many participants suggested that it was still important for all community members to be well-informed of fire management agencies’ planning and preparation activities and to see the agencies working together ‘before’ a fire. Regular communication with the community, demonstration of a common purpose and visible cooperation between agencies were seen as ways for the community to build positive expectations of how managing agencies would respond to a bushfire emergency. Establishing visible cooperation ‘before’ a fire promotes community confidence that agencies will work together in the best interests of the community ‘during’ a fire.

Responses also suggest that community meetings may have limited effectiveness in gathering feedback and providing information to the community. Supplementary methods of communication (eg. newsletters, site visits, and letterbox drops) may be more inclusive and engaging for some community members, particularly those individuals who are not well connected to others in the community or who do not identify with their geographic locality. Providing multiple methods of communication demonstrates agency trustworthiness by showing community members that agencies have the communities’ best interests at heart in the fire planning and preparation stage.

6.3 Response outcomes – ‘During’

Factors affecting trust in the response stage (ie. ‘during’) centred on actions taken by individuals, agencies and agency staff to minimise losses and maximise positive outcomes. Several CFA members emphasised positive outcomes as a contributor to community members’ trust in their organisation. Because there was no loss of life and a minimal loss of homes within the study area during the 06/07 fires, CFA member participants thought community-agency trust had been strengthened. Indeed, most participants gave examples of agency actions during the fire which had fostered their trust in the agencies or agency personnel.

However, the response stage was the catalyst for many participants' relationship with fire management agencies. The uncertain nature of bushfire hazard and the external factors beyond the control of managing agencies preclude a guarantee of positive outcomes in a bushfire emergency. Community-agency trust based by default on fire outcomes poses a tenuous route to trust. For example, previous research has shown that timing is important to trust. Breaches of trust early in a relationship can have significant, negative consequences that are difficult to overcome (Kim et al., 2004). Initial experiences and information (ie. trust breaches) create strong impressions that resist subsequent ones (Lewicki & Bunker, 1996). Breaches of trust later in a relationship may limit that relationship for a shorter period of time, though distrust may still lurk beneath the surface if negative events are not resolved (Lount et al., 2008). Therefore, negative outcomes in a bushfire emergency could have devastating consequences for community-agency trust if relationships begin 'during' a fire. However, community members who have developed a prior, positive relationship with agencies 'before' the fire may be more likely to give 'the benefit of the doubt' to agencies if response outcomes are adverse.

Our results also indicate that it is important to differentiate between community and personal outcomes. Negative outcomes may be felt differentially among community members. Individuals who have experienced significant, negative outcomes may feel isolated, and their trust of agencies tested, when they cannot identify with the positive outcomes (eg. minimal property loss) emphasised by agencies for the community as a whole.

Results also showed that perceived inequities in private property losses were potentially trust-diminishing. For some participants who experienced negative outcomes, it was not the ability of agencies to minimise negative outcomes that was questioned but the agencies' benevolence – that is, whether the agencies had individuals' best interests at heart in the decisions that were made. Participants who were unable to justify to themselves why particular decisions were made were more likely to describe a loss of trust. Consistent decision-making and clearly defined priorities and responsibilities among managing agencies may not prevent losses but may allow community members to feel that agency actions were justified and losses unavoidable.

Most participants also described the emotional nature of experiencing a bushfire. Many participants' descriptions of increased trust in a person or agency during the fire were related to the provision of reassurances by friends, family and the fire management agencies when outcomes were uncertain. Knowing that the agencies would respond and had structures in place to ensure a coordinated and effective response gave some participants' reassurance and trust in the agencies.

In contrast, some participants described roadblocks as a frustrating addition of uncertainty when it was least needed. Care in decision-making about the timing and extent of roadblocks in a prolonged fire can provide community members some needed reassurances. For example, allowing community members to bring family in to help defend their properties was frequently mentioned as boosting spirits and providing reassurance that successful property defence was achievable. All participants stated they knew not to rely on help from an agency fire truck; however, because property defence was seen by many as a complex and daunting task, participants shifted their perceived need for help in property defence to friends, family and neighbours. Additionally, participants suggested that easing roadblocks for community members when fire is not an immediate threat allows community members some ability to conduct daily routines. This can provide some sense of normality and ease the emotional burden associated with a prolonged bushfire emergency.

6.4 Culminating experiences – ‘After’

Factors affecting trust in the recovery stage (ie. ‘after’) centred on resolving negative outcomes and celebrating positive ones. Trust ‘after’ a fire was generated by providing ways for community members to mentally process the event and physically and emotionally move on. Trust was enhanced when agencies anticipated the immediate needs of those impacted and were on-the-ground quickly to ascertain human and animal welfare, as well as the depth of individual need. Positive descriptions of one-on-one contact from an individual representing a one-stop shop for multiple agency information highlights the importance of interpersonal relationships to community-agency trust in this stage. Furthermore, several participants stressed how individuals in this recovery role need good people-skills, patience, an empathetic nature and the flexibility to respond to initially unanticipated community member needs.

The Landmates fencing program was an example of a recovery activity that helped community members move on from the fire event. Our findings also show that the Landmates fencing program contributed to trust between community members and government agencies in several ways. First, participants who used this program unanimously agreed that it helped jump-start individuals into recovery and allowed people to move on more quickly from negative bushfire events. Second, participants described a feeling of reciprocity among community members and the agencies and prisoners. By participating in the prisoner rehabilitation program, participants felt they were not just receiving aid, but also giving back to others. Finally, the Landmates program represents responsiveness to community member concerns. The program evolved from a Landcare coordinator’s concerns for his members’ immediate fodder and fencing needs after the fire. The program then evolved from this grass roots request through agency contacts and the re-jig of an existing program.

Effectively resolving negative outcomes directly or indirectly caused by agency actions or inactions during the fire was also important in influencing community-agency trust. Participant responses suggest that this was one of the greatest threats to community-agency trust. Descriptions of complete breaches of trust were often related to an unsatisfactory explanation for ‘why’ events occurred during the fires. While the other factors identified in this research, when executed poorly, could decrease community-agency trust, only the lack of a satisfactory explanation for negative events severed participants’ trust in managing agencies. Offers of repair or rehabilitation of damaged property and infrastructure positively influenced community-agency trust but could not always overcome the negative influence of an unsatisfactory explanation.

6.5 Opportunities for trust building and maintenance

Viewing trust as a process allows agencies multiple, linked opportunities across the management stages to build trusting relationships with community members. The findings show that many of the factors within and across stages are related. For example, within the response stage, incorporating local knowledge into response strategies is likely to be related to institutional assurances. Community members may feel that integration of local knowledge into response protocols helps to ensure that there are policies and procedures in place (ie. institutional assurances) that will protect the public and minimise fire losses.

One of the challenges across the management stages is to convince community members that effective bushfire management and positive fire outcomes require an on-going versus needs-

basis relationship. The linked factors affecting trust provide relevant opportunities to build such relationships. For example, providing community members with meaningful participative opportunities which result in visible changes to policy or procedure demonstrates that agencies need and value community input. Using community feedback to shape policy also shows community members that the desire to build lasting, positive relationships exists. Community involvement may establish the basis for reciprocity in community-agency relationships. Reciprocity expands the ‘specific’ view of trust from ‘relying on the agencies’ [see Section 5.2.2] to a more ‘combined’ view in which both parties of a relationship can ‘rely on each other for specific actions’.

Not all community members have the knowledge or interest to engage in a reciprocal relationship with fire management agencies. Community-agency trust may still be promoted by demonstrating visible agency cooperation across the management stages, providing consistent and timely advice, clearly defining agency priorities, roles and responsibilities and valuing local concerns. These actions address the factors affecting trust described in this report and are likely to build community confidence, and ultimately trust, in the agencies’ ability and integrity in preparing for, responding to and recovering from fire. Non-engaged community members who feel that agencies ‘have their best interests at heart’ in actions and decisions are less likely to lose trust when outcomes are adverse and more likely to feel strengthened trust when outcomes are positive.

7. Conclusion

This report has detailed the findings of semi-structured interviews conducted with community members about their experiences with trusting community-agency relationships in a recently fire-affected Council area in rural Victoria. Community members’ descriptions of trust, trustworthiness and the importance of trust to bushfire management were given. Factors affecting community-agency trust were identified for three fire management stages (ie. ‘before’, ‘during’, ‘after’). Participant descriptions of the key issues within each factor affecting trust were provided through examples from a prolonged fire event in the 2006-07 season.

The report has shown that trust was considered to be an important part of effective bushfire management by nearly all participants. However, trust cannot be built or maintained through a one-size-fits-all approach for several reasons. First, community members define trust and its requisites in different ways. Some community members have greater expectations of the actions required for a relationship to be considered ‘trusting’ than others. Second, some factors which affect trust are specific to a particular management stage or require a different application in each stage. Targeting actions specific to the factors affecting trust for each stage is more likely to develop or maintain trust than utilising a broad and general approach that is not stage-specific.

The report has illustrated the factors affecting trust that are influential in each fire management stage, according to participants. Responses suggest that the following factors are important to trusting community-agency relationships ‘before’ a fire: 1) a multi-directional flow of communication; 2) visible interagency fire planning; 3) provision of inclusive and meaningful opportunities for community participation in bushfire planning which values local knowledge and concerns; and, 4) demonstration of how community feedback has influenced policy.

The following factors are important to community-agency trusting relationships ‘during’ a fire: 1) communication which is timely, reliable, accurate and given in an inclusive manner

which reduces fear and promotes knowledge transfer; 2) visible agency cooperation and integrated management; 3) integration of local knowledge and volunteer help into the fire response effort; 4) clearly defined agency roles, responsibilities and priorities, as well as strategies that guarantee public safety and loss minimisation; 5) actions by individuals and agencies which reduce uncertainty; 6) personal justification of agency actions/inactions which result in private property losses; and 7) the level of individuals' experience, confidence and self-reliance related to bushfire.

Participant responses suggested that the factors affecting community-agency trusting relationships 'after' a fire include: 1) communication that is targeted to individuals' specific needs; 2) coordination between agencies in providing recovery assistance; 3) provision of recovery assistance as soon as it is safe to do so; 4) satisfaction of perceived community and individual needs resulting from the fire; and 5) resolution of negative outcomes experienced in the response stage.

Community-agency trust is dynamic. The results show that community-agency trust has the potential to increase or decrease in each stage based on actions taken and the outcomes obtained. Therefore, the challenge for communities and agencies lies in developing on-going versus needs-based relationships. On-going relationships may provide reassurances within and continuity between highly uncertain and hazardous bushfire events. Establishing trusting relationships 'before' a fire may be helpful in creating reciprocal expectations of how the fire response will be handled and the actions both community members and agencies will undertake 'during' the fire. Establishing trusting relationships 'before' the fire allows community-agency trust to be based on realistic expectations rather than solely on fire outcomes. On-going relationships may also support recovery assistance 'after' the fire to not only resolve negative outcomes incurred 'during' the fire but also plan and prepare for future bushfires.

Finally, because trust is a dynamic, multi-dimensional process, agencies have multiple opportunities to establish trusting relationships with community members by focussing on key factors which affect trust in each management stage. Established community-agency trusting relationships have the potential to foster interactions which contribute to the reduction of the uncertainty involved with the hazards and complexity of bushfire management. Established community-agency trusting relationships also have the potential to increase community member understanding of and support for agency management strategies.

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Appendix A – Policy documents linking community engagement, partnerships and trust

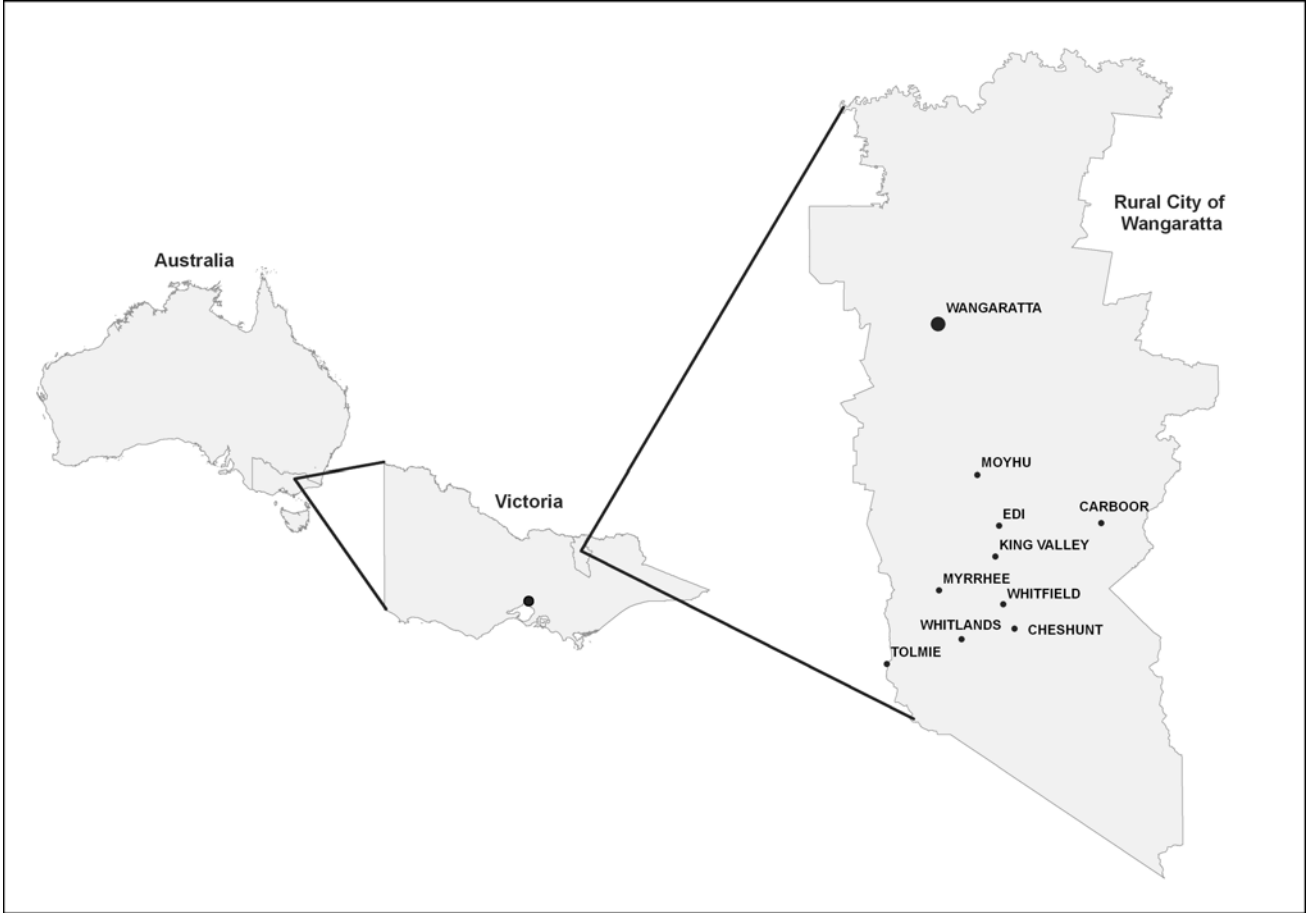
Document	Agency and Year Published	Partnership Reference	Trust References
<p><i>Strategic Direction for Community Development 2002-2005</i></p>	<p>CFA 2003</p>	<p>Text under Community Development Mission:</p> <p><i>Community development is a CFA core responsibility, supporting two of CFA's five major corporate objectives:</i></p> <ul style="list-style-type: none"> • <i>Preventative measures in place and communities of people who are aware of the risks and behave appropriately</i> • <i>Support and increase partnerships between CFA and the community.</i> 	<p>Eight Objectives of Community Development:</p> <p><i>CFA Community Development strives to:</i></p> <ul style="list-style-type: none"> • <i>Empower communities to work towards self-reliance</i> • <i>Create partnerships, which develop trust, respect and social networks</i> • <i>Build community preparedness to prevent loss of life and property</i> • <i>Build the capacity of the community by enhancing the knowledge and skills of individuals</i> • <i>Engage with a broad range of communities and develop strategies that reflect community diversity</i> • <i>Develop flexible and interactive programs based on participation, engagement and empowerment</i> • <i>Deliver quality programs based on accurate and substantiated information and the principles of risk management</i> • <i>Maintain a commitment to strategic management supported by a rigorous research and evaluation program.</i>
<p><i>Community Engagement About Fire on Public Land – Plan to Improve 2005-2009</i></p>	<p>DSE 2005</p>	<p>Text from DSE Secretary's Foreword:</p> <p><i>The most effective way of managing fire on public land is through partnerships that bring together Victoria's fire and public land services and the communities they serve. In turn, the most effective way of creating, developing and strengthening these partnerships is through community engagement.</i></p>	<p>Text from DSE Secretary's Foreword:</p> <p><i>Community engagement builds the trust and effective communication that leads to more robust partnerships between local communities, local government, fire and emergency services agencies and other government departments.</i></p>

Document	Agency and Year Published	Partnership Reference	Trust Reference
<p><i>Code of Practice for the Management of Fire on Public Land</i></p>	<p>DSE 2006</p>	<p>6 Principles guide Code of Practice.</p> <p>Community Partnership Principle: <i>Fire management must be planned and conducted in partnership with the general Victorian community according to the following principles:</i></p> <ul style="list-style-type: none"> • <i>community members to be appropriately involved at the local, regional and State level;</i> • <i>processes to be open and accessible to people of different backgrounds and cultures (especially Indigenous communities);</i> • <i>to be transparent and accountable with appropriate reporting back to the community;</i> • <i>local community knowledge and information to be actively sought, respectfully managed, and used to inform decision-making, where appropriate; and</i> • <i>recognises that fire management outcomes are maximised when public and private landholders work cooperatively.</i> 	
<p><i>Living with Fire – Victoria’s Bushfire Strategy</i></p>	<p>Victorian Government 2008</p>	<p>Executive Summary Text:</p> <p><i>This strategy will position Victoria’s bushfire management agencies to effectively manage risk in partnership with the community with clear direction under six themes.</i></p>	<p>Theme: <i>‘Building community capacity to live with fire’</i></p> <p>Text under Theme: <i>...a growing commitment and ability of fire agencies to inform and involve local communities across the prevention, preparedness, response and recovery (PPRR) continuum. This approach to engagement is better for supporting the incorporation of local knowledge into decision making, as well as generating greater confidence and trust in fire agencies to manage the fire threat....</i></p> <p><i>Dialogue and transparency are seen as key to building trust and acceptance of the use of fire as a management tool.</i></p>

Document	Agency and Year Published	Partnership Reference	Trust Reference
<p><i>Living with Fire – A Community Engagement Framework 2008 – 2012</i></p>	<p>CFA, DSE, MFB, DHS 2008</p>	<p>3 Themes: <i>‘People’; ‘Communities’; ‘Environment’</i></p> <p>1st of Two <i>‘Communities’</i> Goals: <i>Build the resilience of communities by enabling active participation in fire management and promoting community networks and partnerships</i></p>	<p>Introductory text under <i>‘Communities’</i> Theme: <i>Safety from fire and the protection of our environment are both highly complex and emotive issues and it is essential that all parties recognise the value of partnerships that foster mutual trust, respect and understanding.</i></p>

Appendix B – Case study map

Study location: Rural City of Wangaratta, Victoria, Australia. Fire-affected communities shown in relation to the major regional centre of Wangaratta.



Appendix C – Overview of community member participant characteristics

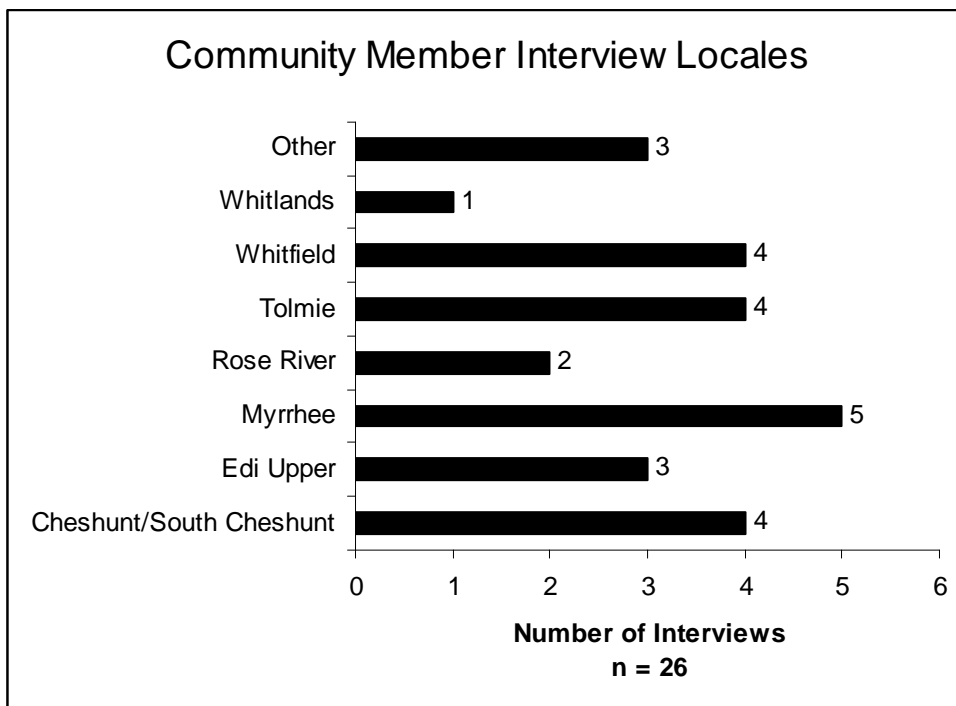
Total Number of Interviews: 26

Total Number of Interview Participants: 38

Female: 5

Male: 9

Mixed-Sex Couples: 12



Full-time Residents: 35

Part-time Residents: 3

Number of interviews with participants who were CFA volunteers or had family members who were CFA volunteers at the time of the 06/07 fires:

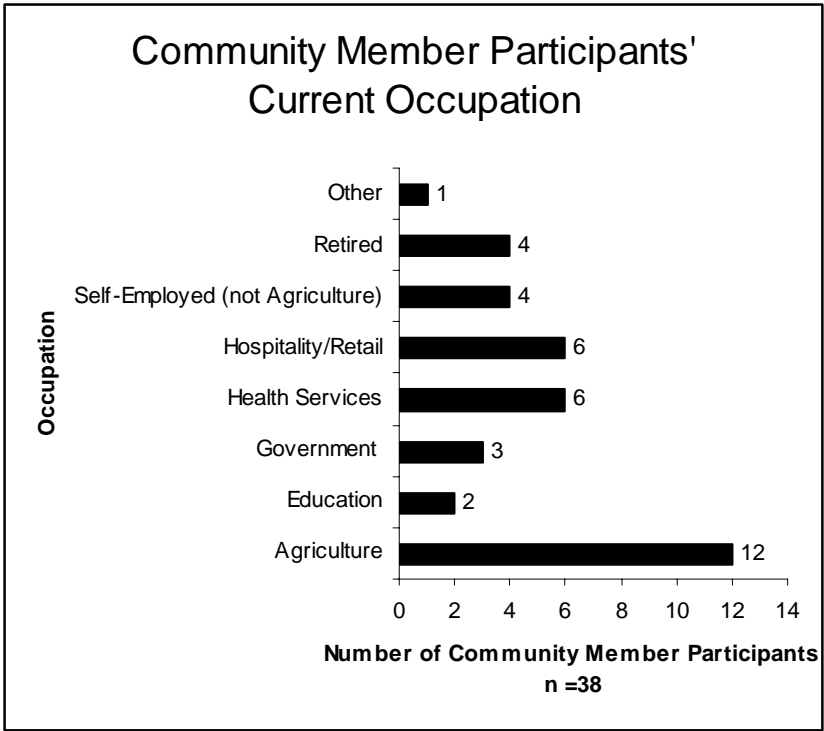
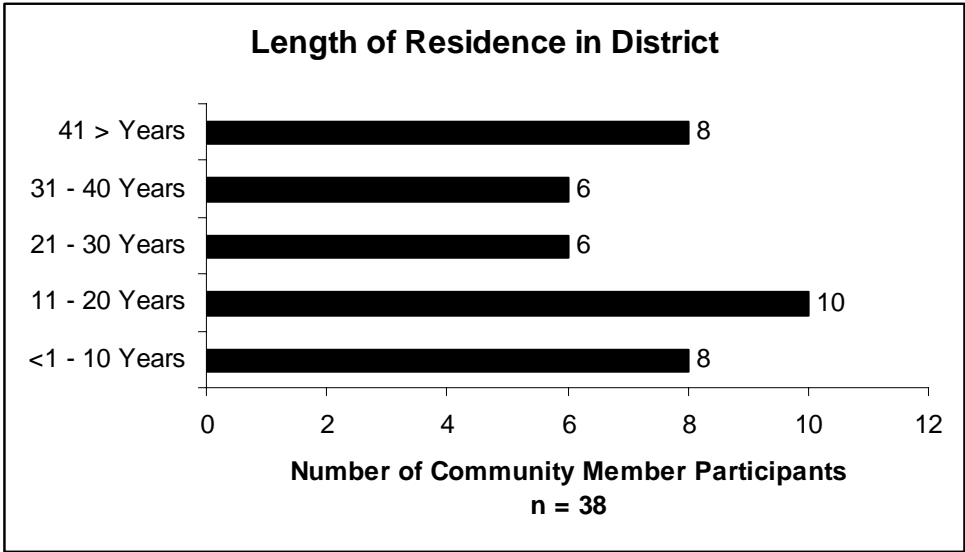
17 Yes 9 No

Number of interviews with participants who had children under age 18 living at home:

9 Yes 17 No

Number of interviews with participants who had fires burn onto their property during 06/07 fires:

16 Yes 10 No



Appendix D – Semi-structured interview guide for community members

I'd like to start off with hearing about your experiences with the fires in 2006/07 and how they impacted you.

1) Can you please tell me about your experiences with the 06/07 fires?

Follow-ups if necessary:

Had you experienced a bushfire before the 06/07 fires?

How were your experiences in the 06/07 fires similar or different to previous fires?

Now I'd like to talk to you about experiences with other people in relation to the fires. As we discussed on the phone, in my research I'm interested in finding out how trust influences fire management strategies in the preparation for, response to and recovery from bushfires.

2) Please describe an event before, during or after the recent fires which either strengthened or diminished your trust in a particular person, organisation or agency.

Follow-ups:

What were the main factors that made you feel like you could/could not trust him/her/them?

What other things contribute to/diminish your trust in him/her/them?

I'd also like to talk about how the relationship you've described may have changed over time. Thinking about the event you described before,

3) How have your feelings about trusting _____ changed since the event you described?

Follow-ups:

What actions or events have made you change your feelings?

How are your feelings now different to the trust/lack of trust you had in _____ before the event occurred?

Thinking about your experiences with the 06/07 fires and about fires that may start in the future:

4) What do you think is most important in being able to trust others:

a) before the fire

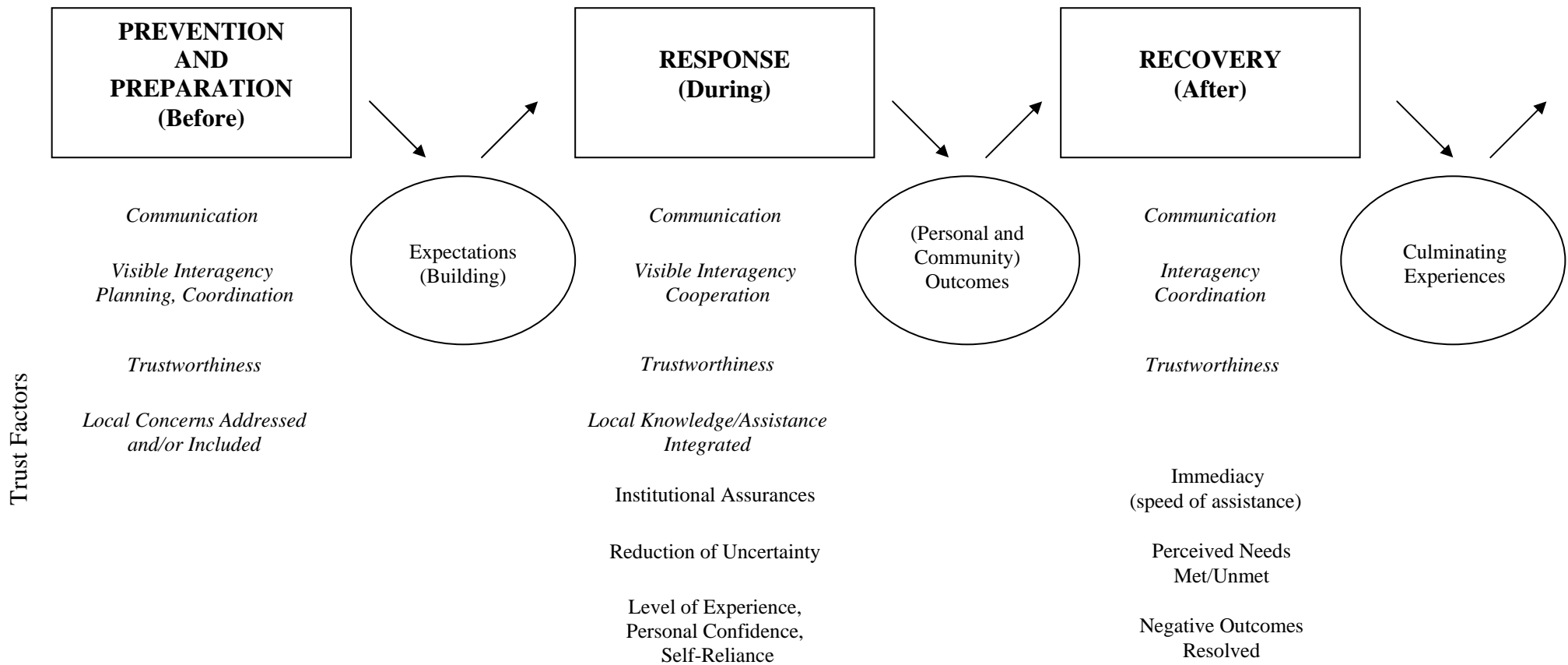
b) during the fire

c) after the fire?

Finally, trust is a very commonly used term, but we may not all be talking about the same thing when we use the word.

5) If you had to write a definition for a dictionary for how you define trust, what would that definition be?

Appendix E – Diagram of factors affecting trust



Factors affecting trust described by participants for different fire management stages (rectangles) and the overall trust theme (ovals) each stage generates. Italicised factors represent those present across more than one management stage.

