UNDERSTANDING COMMUNITIES PROJECT
COMMUNITIES LIVING WITH BUSHFIRE: DESKTOP REVIEW

→ This bulletin is a summary of the review *'Living with Bushfire: What do People Expect?'* by Sally Bushnell and Alison Cottrell, which will be published as a book chapter in *'Communities Living with Hazards'* by the Centre for Disaster Studies, James Cook University. This bulletin also provides the background information for the following four bulletins (# 7, 8, 9 & 10), which present results of the Thuringowa Bushfire Survey 2005. Please refer to the Bushfire CRC Understanding Communities Project website for further information https://www.jcu.edu.au/centre-for-disaster-studies

→ **UNDERSTANDING PERI-URBAN COMMUNITIES**

Reducing the risk and impact of bushfire is a problematic and complex challenge, but it is recognised that the key to successful policies and management strategies lies with the communities in which they are to apply. Specifically, input from the community is required so that policies and strategies actually reflect what the community requires. Cottrell (2005) discusses the complexities in understanding peri-urban communities and thus the challenge of delivering appropriate services. This review highlights the differences within and between communities in terms of bushfire awareness, perceptions of bushfire and expectations of the roles of various organisations. It is concluded that locality remains important in terms of service delivery.

→ **BUSHFIRE RISK PERCEPTION**

Studies have revealed that there are numerous factors influencing a person's perception of risk. There is general agreement that a cohesive community leads to realistic risk perceptions because of the ability to widely share knowledge and experience. However, peri-urban communities are typically not cohesive due to a growing influx of newcomers. Newcomers, particularly if from an urban area, cannot perceive the bushfire risk

until they are aware of the bushfire risk. Awareness may be achieved through exposure to educational material or contact with long-term residents. Although it is agreed that experience directly influences risk perception, experience has also been found to both increase and decrease perception of risk, depending on the type of experience. Building codes, insurance and other preventative measures may similarly increase or decrease perceptions of risk. Demographic factors have also been considered but once again there are many inconsistencies. A general trend that has emerged is that people generally consider themselves or their property to be less at risk than their locality. Furthermore, the non-hazard benefits of living in the bush can moderate the perceived risk.

→ **EXPECTATIONS OF THEMSELVES**

Most studies have found that people do perceive themselves to be responsible for some level of bushfire protection. However, which activities and to what extent varies greatly from person to person, and actually taking action to fulfil the perceived responsibility can be moderated by several factors. Firstly, people need to perceive the risk in order to take action, and secondly, believe that the effort expended is a good investment. People who rent their homes may believe that preparation activities are not a good investment; Beringer (2000) found that renters were less likely than owners to undertake preparation activities. Household income can also constrain preparation. Furthermore, the activity needs to fit in with a person's lifestyle and neighbourhood. For example, a person who values naturalness may not undertake any preparation activity that alters the landscape. Busy lives also compromise action, and research has shown that fire protection activities actually undertaken are usually those that people undertake for other reasons such as keeping a tidy yard.

EXPECTATIONS OF NEIGHBOURS AND COMMUNITY

There is evidence of a link between community cohesiveness and bushfire preparation, a cohesive community is usually better prepared because of a good knowledge base and support network. However, when there is not a shared perception of risk, community norms such as maintaining the 'natural' look of the area may compromise bushfire preparation (e.g., preparation of a firebreak). Particularly in a cohesive community, people often do what they perceive to be expected by the community, and the community expects its individuals to act collectively. Newcomers who are often not part of the 'community', can be oblivious to community norms, and are thus often identified as people who do not undertake bushfire preparation.

EXPECTATIONS OF ORGANISATIONS

▶ Fire services

The public perceive the primary responsibility of fire services to be fire suppression and protecting people and property. Most evidence indicates that the public highly values and are confident in local brigades. Furthermore, people generally appreciate all communication efforts, and information received from brigades is perceived as credible. However, there does not appear to be an expectation that brigades should be highly visible and have regular contact with the community, rather some people believe that brigades should assign a higher priority to hazard reduction activities. There is some recognition that brigade activity can be constrained by a lack of resources and authority.

▶ Government

People are clearly in favour of managing the bushfire risk, but opinion concerning how it should be done varies greatly. Judgement of acceptability of management actions is influenced by numerous factors. For example, people with a good knowledge of bushfire and its ecological importance may support controlled burning. Those who highly value the aesthetics of forested areas may be against controlled burning. An expectation that bushfire management is the government's responsibility may lead to acceptance of any institutional arrangements. On the other hand, if the property owner accepts personal responsibility, any arrangements that impinge on perceived rights to freedom, such as ordinances, may be strongly opposed.

▶ Media

Numerous studies have linked public knowledge, perceptions and opinions of bushfire and its management with information disseminated by the media. Some studies also suggested a strong public preference for bushfire information to be disseminated via the media (e.g., television).
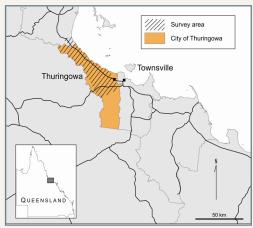

FIGURE 1. SURVEY AREA, LOCATED IN THE CITY OF THURINGOWA, NORTH QUEENSLAND, AUSTRALIA.

▶ Insurance

There is a strong reliance on insurance to protect people's assets, however some people may expect too much. For example, Nelson et al.'s (2004) study suggested that people view insurance as highly effective in protecting investment from bushfire, however there are numerous examples of bushfire victims not receiving their expected payouts.

THE THURINGOWA BUSHFIRE SURVEY 2005

In addressing the challenge of increasing community resilience to bushfires in diverse and often complex peri-urban communities, the Understanding Communities Project undertook the Thuringowa Bushfire Survey in 2005. This survey examined the knowledge, perceptions and expectations of Thuringowa peri-urban residents relating to bushfire risk, service delivery and participation in bushfire preparation activities.

The survey was delivered in October 2005 to a random sample of households in non-metropolitan (peri-urban) areas within the jurisdiction of the Thuringowa Rural Fire Brigade Group. This Group covers the non-metropolitan area of the City of Thuringowa, which is located next to Townsville in north Queensland, Australia (see Figure 1). The survey response rate of 28% (263 surveys) was relatively low and a likely consequence of residents' greater concern for cyclones, which are a seasonal event in north Queensland.

REFERENCES

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