

TITLE PAGE

Perceptions of Preparedness for Bushfire: A Case Study of Tamborine Mountain

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Disclaimer

The contents of this report include research results and analysis from a case study which was intended to inform relevant stakeholders of issues related to bushfire awareness.

Participants were informed of the purposes of the research according to ethics procedures established by James Cook University and the Queensland Fire and Rescue. Therefore, the persons and institutions involved waive responsibility for any misuse of information.

Glossary of Terms

Bushfire: A bushfire is any fire in native bushland. Fires which have been purposely lit for fuel reduction or to meet ecological imperatives are known as “controlled burns”.

Fire: Fire is the combustion of any material, including bushland.

Fire Risk: Risk is a given asset’s degree of exposure to damage by fire. Risk can vary over time and can be managed through human intervention. As such the risk to any particular asset at any particular time depends not only on those elements used to determine potential bushfire hazard but also factors such as: proximity of the asset to fire fighting services; access to and around the asset; appropriate landscaping; house site location and design; and fuel reduction measures.

Fire Breaks: Fire breaks refer to any natural or man-made elements in the landscape that can impede the progress of a fire and/or provide access so as to create an impediment to a fire. Fire breaks provide access to otherwise impenetrable bushland areas; a means of evacuation for fire fighters and residents; and suitable locations from which to backburn so as to stop an advancing bushfire. Fire breaks include elements such as the following: fire retardant species and vegetation communities; man-made or natural water features (creeks, dams, rivers, streams); walking/riding trails; roads and driveways of any construction and type; man-made landscaping features (lawns, rock/brick garden walls); and substantially reduced fuel zones (created by selected thinning).

Fuel Reduction: The reduction of fuel build up performed generally before the onset of the fire season. This includes but is not limited to: reduction or removal of accumulated fuel by lopping, chipping, crushing, slashing; prescribed or controlled burning; planting of ‘green firebreaks’ to replace existing highly combustible vegetation.

Potential Bushfire Hazard: Potential bushfire hazard is an indication of the potential of an area to carry bushfires, based upon its physical characteristics. For purposes of this report, these characteristics comprise vegetation, slope, aspect and fire history.

Glossary of terms were sourced from the Gold Coast Bushfire Management Strategy (Gold Coast City Council 1998, iv-v).

Abstract

The research explored perceptions of preparedness for bushfire-related matters at the rural-urban community of Tamborine Mountain. A literature review expressed the need for changes in bushfire mitigation/management as a result of the need for increased self-reliance. The social construction of risk methodology was applied to a multi-method case study to derive and deliver an analysis of agreements and differences in the perceptions/expectations of fire services and the community (see results below).

How the fire services' and the community's perceptions/expectations agreed

1. There are varied degrees of perception regarding bushfire risk.
2. Experience with fire appears to be related to awareness of associated risks.
3. Risk awareness does not appear to be related to recent Australian bushfire events.
4. The overall view was that fire breaks are a necessary fire management initiative.
5. The local bushfire season was perceived to be from early spring to summer.
6. There is a need for Bushfire Management Plans to be effectively implemented.

How the fire services' and the community's perceptions/expectations differed

Fire services' perspective	Community's perspective
1. Most people in the community would rely on fire services to respond in the event of a fire.	1. At least half of survey respondents reported they would not rely on help from fire services in the event of a fire.
2. Most people are unaware of the bushfire risk.	2. Most people reported being aware of the bushfire risk but have other priorities in their life that take precedence.
3. The public expects things to be done for them.	3. The survey results indicated that individual householders see themselves as the most responsible for personal and home safety.
4. Controlled burns are not wanted by the public.	4. Respondents supported controlled burns as long as they are carefully done.
5. Provision of advice is possible but can not tell residents they <u>need</u> to take action.	5. Respondents reported feeling frustrated that specific advice is not provided.

Bushfire-related matters that need further resolution

Also important for the basis of discussion are some bushfire-related matters that need further resolution. These matters are separate from how the perceptions/expectations agreed and differed because they were solely from either the fire services' or the community's perspective (as represented below).

Bushfire-related matters identified through interviews with the fire services
1. Fire services perceive there is confusion within the community about the roles of urban and rural fire brigades.
2. Fire services want to improve their capacity to convert data and information relevant to bushfire mitigation and management into knowledge to guide decisions.
3. Fire services were interested in how they can inform the public of the need for preparation against the risk of bushfire without sensationalising the topic.
4. Fire services see that it is necessary to find ways of improving the community's participation in bushfire mitigation and management.

Bushfire-related matters that arose from the community survey and community group interviews
1. Community groups seek operation of optimum controlled burn return intervals.
2. Research data indicated a high proportion of retired people in the community. Strategies need to be developed to effectively engage such resources of time and knowledge.
3. Survey respondents indicated that they are not confident in the costs of protecting property against fire and bushfire safety aspects to do or use if the need arose.
4. A wide range of media was identified as being the preferred way of receiving information, direct engagement with fire services was the least preferred.

Survey and interview results were interpreted into the key research findings (as presented on this and the previous page) and were used as the basis of discussion. The research findings were distilled into patterns of language and further summarised into a common language so that they could be compared and combined with similar research

such as the findings and recommendations of State and Federal Governments of Australia. A common language related to preparedness for bushfire has the potential for fire services, Governments and communities to move forward with bushfire community education efforts. The research findings indicated that the community's preparedness for bushfire was especially associated with the topics of risk perception, experience of fire, confidence in bushfire safety aspects and responsibility for life/property protection and less associated with controlled burning acceptance, impact of educational efforts and cost/effort required.

The research explored contemporary bushfire issues in an at-risk-from-bushfire Australian rural-urban locality adjacent to and mixed amongst protected areas. The term "marginalised" can be used to describe the landscape of some places partly as a result of the effects of bushfire. Some people are "marginalised" because of how their perceptions/situation regarding bushfire-related matters shape their behaviours and attitudes towards preparedness for bushfire. This finding is of particular concern to fire services throughout Australia as are expanding rural-urban interface areas, difficulties in impacting upon targeted areas for community education and the possible increase in the incidence of adverse weather conditions. The current situation is that citizens need to be aware of their exposure to hazardous conditions, and share responsibility for the mitigation of bushfires.

The research provides the relevant information to understand preparedness for bushfire issues from the local fire services' and an at-risk-from-bushfire rural-urban community's perspectives. Where there is agreement between fire services and the community, investment in communication is about reinforcing shared perceptions/expectations. The differences in perceptions/expectations highlight those areas that need particular attention by fire services and communities alike. It was an important priority for the research to effectively capture certain locals' perspectives, especially those with fire experience so that such invaluable knowledge is recorded. The case study illustrated a snapshot of a rural-urban community with bushfire-related matters as a medium to communicate that. This thesis provided an unbiased account of stakeholder perspectives with an emphasis upon recognition of the different constructions of bushfire risk within a community as a part of the transition towards increased self-sufficiency for bushfire preparations and shared responsibility for the protection of life and property.

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