

Social Resilience to Bushfire Hazard

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Introduction

- Bachelor of Social Science (Environment) (Hons), RMIT University, 2003.
- PhD student with Program C of the Bushfire CRC.
- Supervised by Professor John Handmer and Associate Professor Dave Mercer, RMIT University.



Overview of Research

- Aims to identify factors that contribute to (or detract from) social resilience to bushfires (the capacity to anticipate, cope with, resist, and recover from the impacts of bushfires).
- The broad objectives are as follows:
 - Develop indicators and a framework for assessing social resilience to bushfires in Australia.
 - Assess the resilience of an Australian community (or communities)* to bushfires.
 - Build on theoretical understandings of vulnerability and resilience.
 - *Cases for study are yet to be selected. Debates about the nature of community are acknowledged, but not dealt with here.




General research questions:

1. Why are some people and places more or less resilient to bushfires than others?
2. How do we identify the least resilient groups and individuals and target policies and programs to increase their capacity to cope with bushfires?
3. What indicators are best suited to assessing or measuring social resilience to bushfires?




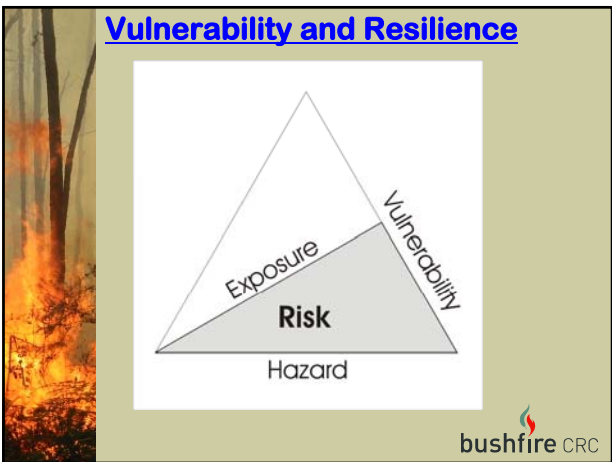
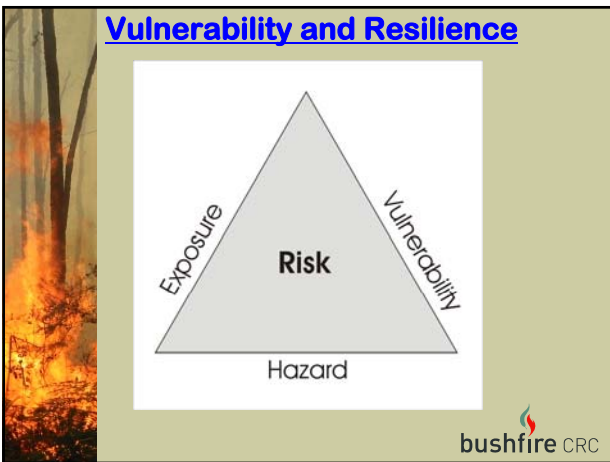
Hazards and Risk


- **Hazards:**
 - The threat to people and their property (i.e., a bushfire).
 - Result from complex interactions between natural and social systems, technology, and the built environment.
- **Risk:**
 - 'The chance of something happening which will have an impact on objectives' (AS/NZS 4360).
 - Is a product of the hazard(s), the people and assets exposed to the hazard, and the vulnerability of what is exposed (see diagram).
 - Distinction between 'event risk' and 'outcome risk'.



Vulnerability and Resilience

- Meaning of terms is contested.
- 'The characteristics of a person or group and their capacity to anticipate, cope with, resist, and recover from the impact of a natural hazard' (Wisner *et al.* 2004).
- 'The *differential* capacity of groups and individuals to deal with hazards, based on their positions within physical and social worlds' (Dow 1992).
- A measure of human welfare and capacity, which varies over time and space.
- Language of 'resilience' and 'capacity' is gaining favour.







Resilience Assessments

- Aim to identify those groups and individuals who are least resilient and *the reasons why* they lack resilience.
- Methods of resilience (or vulnerability) assessments are still under development. No standard approach.
- Potential to increase community self-sufficiency for fire safety by developing and reformulating policies and programs that are targeted to the needs of groups and individuals who lack resilience.


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Resilience Assessments

- Requires development of a framework that incorporates different levels of analysis (e.g., macro, local etc.), as well as qualitative and quantitative data.
- Possible research methods include: interviews, surveys, questionnaires, focus groups and public meetings, as well as collation and analysis of relevant statistics.
- Wisner *et al.*'s (2004) disaster 'Pressure and Release' model:
 - Root Causes → Dynamic Pressures → Unsafe Conditions

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Resilience Assessments

- Some examples:
 - Lack of access to resources (includes information, knowledge and technology).
 - Limited access to political power and representation.
 - Lack of strong local institutions.
 - Age, gender, physical limitations.
 - Beliefs and culture.
 - Social networks.

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The Way Forward

- A formal research proposal is under development.
- Potential to tie in with evaluation of the 'Stay or Go' policy.
- Cases for study will be selected in close consultation with the relevant state agencies.
- Fieldwork to begin early 2004.

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Questions or Suggestions?

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Key References

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