Background briefings on emerging issues for
fire managers from AFAC and Bushfire CRC.

bushfire CRC   afac

FIRE NOTE

PLANNING AND EVALUATING COMMUNITY SAFETY PROGRAMS

The objective of this project was to develop and test a comprehensive framework and methodology for evaluating the broad range of community safety policy and programs, highlighting: (i) an approach that has the potential to lead to a comprehensive and sound evidence base for which policies and programs work best, for whom and in what settings; and (ii) a consultative and collaborative approach to working with end-users and community members.

RESEARCH BACKGROUND

Major bushfires continue to take a heavy toll on communities around Australia. Inquiries into these fires have addressed a common set of themes relating to improved community safety. Increasingly, reports of these inquiries have identified the importance of community safety activities and programs, while agencies across Australia have recognised that when a major bushfire occurs they do not have the resources to defend every home in danger. In the past decade or so there has been a shift in thinking in emergency management organisations towards an understanding that reducing the risk from natural hazards such as fire will be enhanced by the level of householder and community preparedness and ability to respond safely and effectively. Many emergency management organisations, including fire services, now advocate a risk

management approach with greater emphasis on prevention, mitigation and preparedness.

This shift in focus from 'response' to 'preparedness' has been named the 'community safety approach'. A central component is active engagement with, and empowerment of, the community to investigate its own risks and develop its own solutions, supported by policies and professional expertise from relevant organisations and agencies. The notion of community self-reliance is often used to sum up these ideas. Increasingly, organisations are seeking ways to engage more effectively with communities to promote greater understanding by providing information, but also to increase community involvement through consultation, shared decision-making and partnerships with other organisations.

Thus, fire agencies, other organisations and the community have initiated a range of activities that aim to increase householder planning and preparedness, and community capacity, to deal with the risk of bushfire. These include:

- Community education programs conducted by fire and other agencies
- Community development approaches that seek to capitalise on and enhance existing community strengths (particularly in 'hard-to-reach' and other vulnerable communities)
- A wide range of communication products and media-based campaigns intended to raise awareness and provide advice
- State-wide and more localised multi-agency planning initiatives that increasingly involve community consultation and collaboration.

Many of these activities and programs are designed to influence the sense of responsibility and the choices that are made at the household and community levels in response to the risk of bushfire. A particular challenge for the developers of these programs is to uncover strategies for planning and delivering community safety programs that work – and to gather the evidence through rigorous evaluation in order to ensure continuous program improvement.

SUMMARY

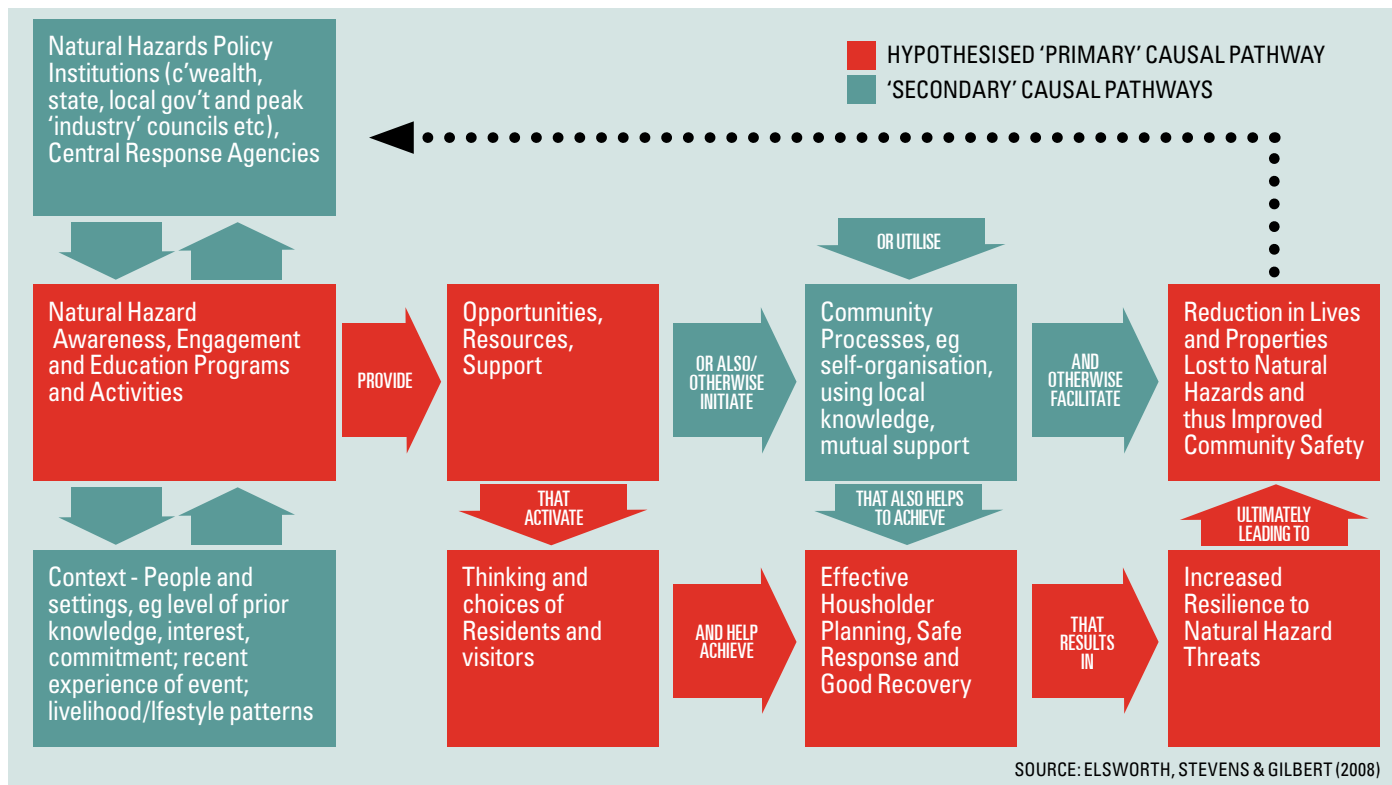The project sought answers to three major research questions:

1. What are the best ways of evaluating and improving community safety activities and programs for bushfire?
2. What are the best ways to support agencies in the development and improvement of community safety programs?
3. What activities and programs may work best, for whom (householders and communities) and in what organisational and local settings?

This *Fire Note* addresses the first question. Future *Fire Notes* will provide detailed answers to the others.

▲ **Working with the community:** Many programs are designed to influence the sense of responsibility and the choices that are made at the household and community levels.

Figure 1: A program-theory model of the community safety approach to bushfire

SOURCE: ELSWORTH, STEVENS & GILBERT (2008)

BUSHFIRE CRC RESEARCH

Building the proposed evaluation framework was a dynamic process, using case studies of leading practice in community safety programs, framework development, 'testing' and modification.

In the first three years of the project (2004-2007), a broad range of research activities was conducted. It included: literature reviews; agency and community consultations (including 11 concept mapping workshops); surveys of householders after fires in the Lower Eyre Peninsula, the Adelaide Hills (both South Australia) and North-West Tasmania; and four 'post-event' householder interview studies (Lower Eyre Peninsula, Port Lincoln area and Mount Bold in SA, the Grampians region in Victoria). The aim was to provide a clear understanding of:

- The essential characteristics of the community safety approach as applied to bushfire

- The way householders and the community respond to critical bushfire events

- The range and purposes of current agency community preparedness programs, and

- An evaluation approach that would best answer the questions of 'what works, for whom, and in what settings' in community safety for bushfire.

END-USER STATEMEMT

"This project's exploration of the best ways to evaluate community fire safety policies and programs contributes valuable, evidence-based research that benefits all organisations involved in these areas.

"It identifies key issues that are essential to the success of community fire safety awareness activities. These include the need to develop programs that recognise community diversity while delivering clear, consistent fire safety messages.

"Such rigorous evaluation is essential for the continuous improvement of our community fire safety programs. Importantly, it confirms the need to take a consultative and collaborative approach to these processes."

– Damien Killalea
Director, Community Fire Safety,
Tasmania Fire Service

A comprehensive analysis of relevant policy documents, over 90 community education and engagement programs, and the outcomes of six public enquiries into bushfire and natural hazards, more generally, were completed. All this work pointed towards a 'theory-based' evaluation approach based upon what is called 'program logic' and 'program theory' (See Figure 1).

In 2008 and 2009, case studies of a number of programs were conducted in order to build and test the evaluation framework. The case studies included: (a) the Street FireWise program in the New South Wales Blue Mountains; (b) the Tasmanian Fire Service 'Prepare to Survive' DVD; (c) the Victorian Country Fire Authority (CFA) during-event community briefings; (d) the South Australian Country Fire Service (CFS) community development approach to community fire safety; and (e) the needs of disabled people in bushfire (CFA, Victoria, and Victorian Department of Human Services).
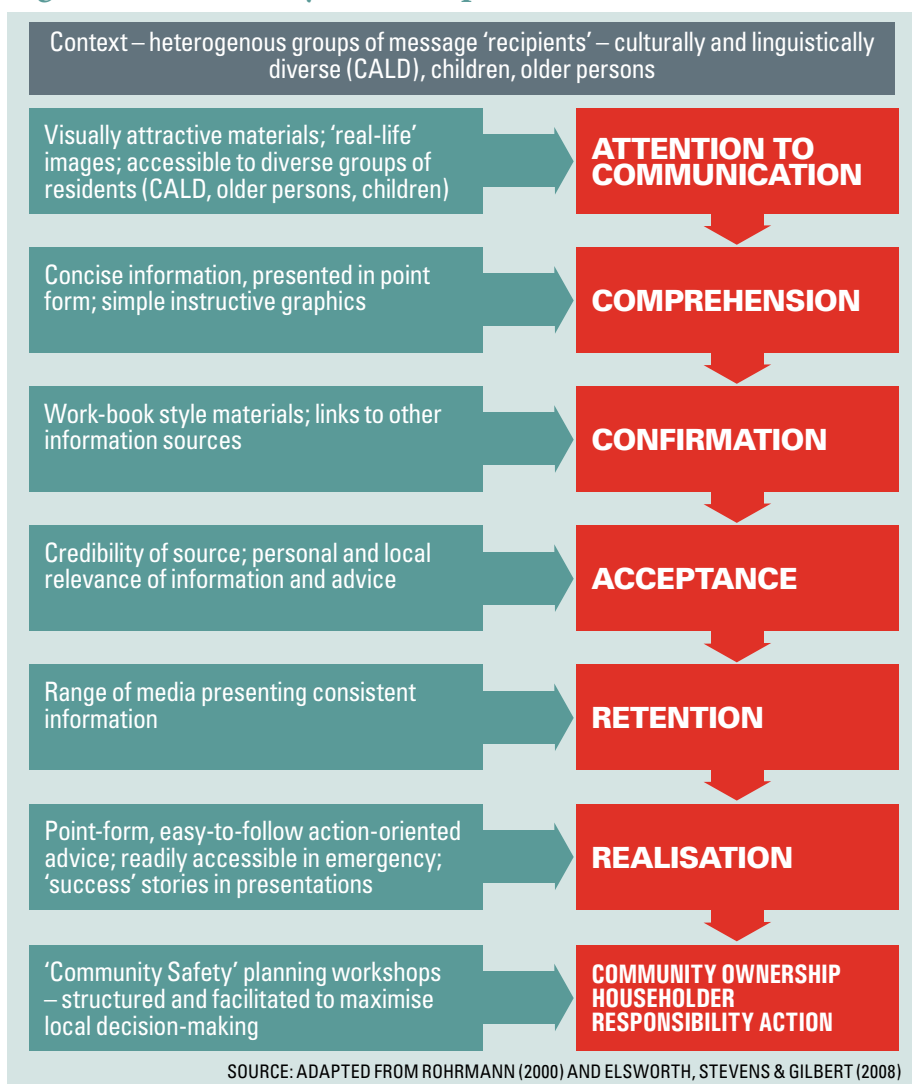
The case studies provided a positive testing and feedback for modification of the evaluation framework across a wide range of program types, including the appropriateness and acceptability of the approach to agencies. A workshop strategy for developing and/or reconstructing the 'logic' and 'theory' of the framework was developed and successfully trialled on a number of occasions in three different settings.

RESEARCH OUTPUTS

A significant number of reports have been produced on all the phases of the research. These have been reviewed by relevant end-user agencies and distributed widely. Many have been revised into journal articles, conference presentations and book chapters. These have helped to inform agency based practitioners in the importance of thinking about evaluation before a project is implemented and the principles behind the program logic approach.

Significantly, the project has focused upon developing training and capacity building

Figure 2: Community ownership – a communication flowchart

Context – heterogenous groups of message 'recipients' – culturally and linguistically diverse (CALD), children, older persons	
Visually attractive materials; 'real-life' images; accessible to diverse groups of residents (CALD, older persons, children)	**ATTENTION TO COMMUNICATION**
Concise information, presented in point form; simple instructive graphics	**COMPREHENSION**
Work-book style materials; links to other information sources	**CONFIRMATION**
Credibility of source; personal and local relevance of information and advice	**ACCEPTANCE**
Range of media presenting consistent information	**RETENTION**
Point-form, easy-to-follow action-oriented advice; readily accessible in emergency; 'success' stories in presentations	**REALISATION**
'Community Safety' planning workshops – structured and facilitated to maximise local decision-making	**COMMUNITY OWNERSHIP HOUSEHOLDER RESPONSIBILITY ACTION**

SOURCE: ADAPTED FROM ROHRMANN (2000) AND ELSWORTH, STEVENS & GILBERT (2008)

materials and activities in its final phase. This includes the development of:

- An evaluation handbook, providing an overview of the principles of the program logic approach
- A 4-6 hour short-course to introduce the program logic approach to planning and evaluating community safety programs
- A semester-long postgraduate/ executive training module on planning, implementing and evaluating community safety programs, containing:
  - o A course outline that universities could adapt for local accreditation purposes
  - o A course reader (PDFs of key course readings), cross-linked to other course materials as appropriate
  - o Pedagogical materials to support self-study of course materials
  - o The plan of a 5-day intensive version of the course.

An unintended, but not unusual, side benefit of the work is that as practitioners consider the evaluation process using the program logic approach, they more clearly consider the objectives of the program or intervention before it is rolled out.

ESSENTIAL CHARACTERISTICS OF THE COMMUNITY SAFETY APPROACH AS APPLIED TO BUSHFIRE

This project clearly demonstrated that community safety programs have the potential to achieve positive outcomes at both the individual (resident, household, family) and community levels, provided they are planned, implemented and resourced appropriately.

In applying the program logic to the case studies three particular challenges in implementing the community safety approach, have become, apparent. Firstly, context is of critical importance in successful program implementation. A specific aspect of context that has only recently been consciously addressed is community diversity, which means that community safety programs cannot use a 'one size fits all' approach.

Secondly, from an agency perspective, it is important that a consistent and coherent message of planning and preparation for bushfire is disseminated to householders and communities.

FURTHER READING

Community safety programs

Betts, R. (2003). The missing links in community warning systems: Findings from two Victorian community warning system projects, *The Australian Journal of Emergency Management,*18 (3) 37-45.

Elsworth, G., Anthony-Harvey-Beavis, K. & Rhodes, A. (2008). What should community safety initiatives for bushfire achieve? In J. Handmer & K. Haynes (Eds.), *Community Bushfire Safety.* Collingwood, Vic: CSIRO Publishing.

Elsworth, G., Stevens, K. & Gilbert, J. (2008) *Evaluating the Community Safety Approach to Bushfire in Australia: Towards an Assessment of What Works and How.* Paper presented at the Biennial Conference of the European Evaluation Society, Lisbon, October.

Gilbert, J. (2007). Community education, awareness and engagement programs for bushfire: *An initial assessment of practices across Australia.* Bushfire Cooperative Research Centre and School of Global Studies, Social Science & Planning, RMIT University.

Lowe, T., Haynes, K., & Byrne, G. (2008). Resilience at the urban interface. In J. Handmer & K. Haynes (Eds.), *Community Bushfire Safety.* Collingwood, Vic: CSIRO Publishing.

Rohrmann, B. (2000). Critical assessment of information on bushfire preparedness for residents. *The Australian Journal of Emergency Management,* 15, 14-20.

Steelman, T. A., & Burke, C. A. (2007). Is wildfire policy in the United States sustainable? *Journal of Forestry,* 105(2), 67-72.

Program logic/theory approach to evaluation

Pawson, R. (2006). *Evidence-Based Policy: A realist perspective.* London: Sage.

Rhodes, A., & Gilbert, J. (2008). Using program theory in evaluating bushfire community safety programs. In J. W. Handmer & K. Haynes (Eds.), *Community Bushfire Safety* (pp. 129-138). Collingwood, Vic: CSIRO Publishing.

This includes a shared understanding of necessary 'command and control' structures, especially where community members and other volunteers join agency personnel in responding to a bushfire emergency.

Thirdly, single stand-alone activities are unlikely to achieve all the desired results. A careful selection and integration of a small suite of activities that seek to generate engagement, trust and self-confidence, confirmation and re-assessment, and community involvement and collaboration may be more successful. An overarching program theory that links different activities to different desired outcomes in a manner similar to the model of the stages in risk communication (see Figure 2) would greatly facilitate this.

FIRE NOTE

FIRE NOTES: INDEX
Download at www.bushfirecrc.com/publications/fire_note.html