

# FIRE UPDATE

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## RESILIENCE AT THE URBAN INTERFACE

### A STUDY OF NEW SOUTH WALES FIRE BRIGADES COMMUNITY FIRE UNITS

**By targeting 'at risk' urban communities with information and education about bushfires, fire agencies have aimed to increase overall levels of community resilience and ensure that people are adequately prepared in the event of a serious bushfire.**

However, it has become clear that simple 'top-down' or 'deficit model' styles of education and empowerment are no guarantee that communities will act in the ways that emergency managers want them to. The idea of 'resilience' extends far beyond people simply knowing what to expect and how to react when threatened.

Instead, research suggests that partnerships should be formed with communities in an effort to accommodate all levels of risk perception and understanding. This, however, is a problematic task that requires trust, shared responsibility, cooperation and communication across numerous organisations, professionals and community groups.

A major challenge in fire prone areas is to tap into existing sources of 'social capital' or create new bonds within high risk communities. This is of particular importance when dealing with issues surrounding the 'Prepare, stay and defend or leave early' policy and has

significant implications for the ways in which we communicate and control risks.

The continued growth and popularity of the NSW Fire Brigades Community Fire Unit scheme is a sign that rural-urban interface communities are becoming aware of the risks and that they are taking advantage of the training and resources that are on offer.

However, it is also important that any future development is carried out with a good idea of the benefits and the difficulties that the program may be confronted with.

There is a need to understand the ways in which this brand of community empowerment acts to promote bushfire awareness, preparedness, positive behaviour and ultimately community self-sufficiency at the rural-urban interface.

There is also a need to accurately describe where this kind of scheme fits into the wider spectrum of community involvement and volunteerism in Australia and how the experience can be incorporated into bushfire management in the future.

#### DATA FROM SURVEYS, INTERVIEWS AND FOCUS GROUPS

This project is part of Bushfire CRC Program C6: Evaluating the Policy of Prepare, Stay and Defend or Leave Early.

It has utilised a range of qualitative and quantitative research techniques, the breadth of which is intended to provide a robust and objective set of results from which key issues can be identified and discussed.

Data have been compiled from 10 interviews with fire agency personnel, 670 CFU member questionnaires, 4 focus groups and 50 public questionnaires.

Agency interviews: Semi-structured interviews were carried out with individuals involved specifically with Community Fire Units and bushfire community education and outreach in general. The aim was to gather a balanced picture of the ideas behind the program and any issues that may exist in its management or administration.

Community Fire Unit member surveys: An on-line questionnaire was used to gather information on demographics and to gather a basic idea of member's background, bushfire experience, motivations and risk perceptions.

#### ABOUT THE PROJECT

In order to manage the bushfire hazard and improve public safety in this environment, NSW Fire Brigades have recruited an army of urban interface 'Community Fire Unit' volunteers.

In addition to empowering and educating 'high risk' urban communities, NSW Fire Brigades equips these small groups with the training and resources required to protect their homes from bushfires in collaboration with professional fire-fighters.

Research by the Bushfire CRC is attempting to understand the nature, effectiveness and future capacity of this approach to community preparedness and risk reduction.





◀ LEFT: THE URBAN INTERFACE IS A COMPLEX ENVIRONMENT FOR FIRE AGENCIES. THE NSW COMMUNITY FIRE UNITS ARE ONE WAY OF ASSISTING THE PUBLIC TO BE RESPONSIBLE FOR THEIR OWN SAFETY.

CFU member focus groups: These were used to further develop understanding of the preliminary survey and agency interview findings. In addition, they provided an opportunity for CFU members to introduce a diversity of issues and to discuss these in more depth.

Public surveys: These were used as a control to contrast data gathered from CFU members. Non-CFU member households in high risk urban interface areas were targeted.

## OUTCOMES OF THE STUDY

Overall, the CFU movement has created many positive effects at the urban interface, among them a sense of empowerment and community resilience, greater preparedness and awareness and an increased knowledge of bushfires and bushfire operations.

The training and equipment are particularly valued as they boost confidence and create more of an active and cooperative role for groups intending to stay and defend their homes from bushfire.

The evidence from groups that have already had to defend their homes from fire is positive. The teams work well together and benefit from an understanding of the fire brigade's operations and procedures. A more detailed knowledge of pre-fire preparations, fire behaviour, likely ignition points and each other's strengths and assets in a highly localised area all appear to have contributed to the successful defence of homes and property.

Early analysis has also helped to identify potential problems and areas for improvement.

The findings suggest that there is a tendency for CFU members to focus too sharply on their operational role of manning pumps

and deploying hoses. This may leave gaps in their wider preparation and planning. Relying too heavily on equipment alone could stop members from considering a full range of safety options, from designating adequate shelters and defending them appropriately, to creating contingencies for a loss of water pressure, equipment failure or the absence of key group members.

The strong community spirit engendered in the CFU movement was identified as having a potentially negative influence on wider community relations, preparedness and communications. For example, the highly localised nature of CFU's focus can, in some cases, lead to the exclusion of individuals viewed as being 'outside' the group and existing community tensions can be exacerbated (conversely, there is also the chance that conflicts can be resolved through greater community cooperation).

Some CFU members considered that by having a highly visible street presence, it is possible that neighbours that are not directly involved with the units may become complacent in their bushfire preparations and mistakenly take their protection for granted.

Ultimately, the bushfire experience cannot be replicated through training alone and, for many groups, the real test will come when they are presented with the reality of an intense bushfire. However, most individuals interviewed expressed an intention to stay and defend their homes whether or not they were in a CFU.

## USING THE FINDINGS FOR BETTER COMMUNITY FIRE UNITS

This research has been carried out in close cooperation with the NSW Fire Brigades who are keenly aware of the need for accurate

information in order to design the future trajectory of the CFU scheme.

Findings are being fed straight back to those involved in management, administration and training in the form of reports, short briefing notes such as this and targeted presentations.

In addition, it is intended that the CFU volunteers receive feedback on the information and data that they have provided in order to maintain a feeling of inclusion in the development process.

As previously mentioned, the CFU approach is unprecedented in Australia, due to the evolving nature of the urban environment and a relatively recent shift in policy towards greater public responsibility during bushfire events. As a result, this research will provide lessons for the wider national and international public preparedness, communication and education community, both in research and practical application.

## FUTURE DIRECTIONS

Both the management and training elements of the Community Fire Unit program are currently undergoing significant restructuring in order to keep pace with growing numbers and changes in demand. It is hoped that this research can have a direct input into the future development of the program.

This research therefore feeds into a wider framework for disaster risk reduction and can be used to inform the next level of natural hazards research.

This project is being conducted by Tom Lowe, Katharine Haynes and Professor John Handmer at the Centre for Risk and Community Safety, RMIT University. For more information contact [thomas.lowe@rmit.edu.au](mailto:thomas.lowe@rmit.edu.au)