

THE VALUE OF OUR BUSHFIRE CRC

A RURAL FIRE SERVICES PERSPECTIVE

The rural fire services encompass a broad portfolio of responsibilities that impact on people, property and the environment. In relation to bushfire, rural agencies play a leading role in prevention, preparedness and response, and recovery.

Rural fire services also work closely with park and forest management agencies and with their urban-based counterparts. To properly inform their role and deliver their legal responsibilities rural fire agencies must effectively utilise research to inform all aspects of their business.

The recent history of major fires in south-eastern Australia and the subsequent independent scrutiny of all aspects of agency performance by lengthy and costly Inquiries is a timely reminder that agency policies and practices must continue to be based on sound evidence and robust processes. Further, not only the increased pace of both environmental and demographic change, but also the expectation that agencies are strategic, anticipatory, flexible and dynamic (whilst at the same time preserving and valuing their cultures) requires effective research, analysis and knowledge transfer.

The Bushfire CRC offers benefits to rural fire agencies across all of its research programs. In fact it is difficult to mount an argument that any of the current research is not relevant. Further, the bulk of the research would not be carried out were it not for the access to the skills and resources of the Bushfire CRC.

The following areas are currently, or will be of particular benefit to rural fire agencies:

Bushfire Risk Management Model - this project (A.4) and its 'Phoenix' fire spread simulation model provides a computational platform that allows fire behaviour models, fed by fuel information (supported by better grassland curing assessment -Project A1.4 and fuel classification - A1.3), and enhanced fire weather information (A2.1 and B6.3) to be utilised to assess various fuel management options and suppression approaches (A1.1 and A3.1). The approach of fire agencies to fire prevention planning should be enhanced considerably by this research, specifically in relation to the strategic placement of fuel breaks, the nature and extent of fuel management programs and in assisting with

the prioritisation of the road and track maintenance program. Further benefits will be derived once the model includes an ability to assess both the impact of human behaviour in bushfires (Program C) and the risk to the industrial buildings or subdivisions of properties (D1). Work currently underway in Programs C and D will continue to inform rational building and planning policy, and is critical to the evolution of fire agency positions on national standards committees and other regulatory and advisory bodies. Further, once coupled with Program A (A2.1) research on fire climatology, agencies will be able to better develop and promote their risk-based approach to the application of building and planning regulations.

Stay and Defend or Leave Early - the continual testing and improvement of this national AFAC position is critical, and the published evaluation conducted through Bushfire CRC Program C (C6) gives independent validity to the policy. The research has also identified areas that need further testing; thus it sets a clear agenda for all Australian fire agencies and their peak body to pursue.

Evaluation of Community Education Approaches - Program C (C7) has developed a framework for community safety which permits the evaluation of education programs currently in use. This research now allows agencies to better understand, and thus measure and demonstrate the effectiveness (or otherwise) of their programs. This knowledge allows agencies to provide evidence for and to explain the allocation of their resources, and to develop more effective and efficient programs.

Understanding Communities and Volunteerism - research on understanding communities (C1) is allowing agencies to better focus their efforts in dealing with their communities. This work is complemented by Project D.3 on volunteerism. Substantial research has already been conducted for most rural agencies to help them better understand the management of their volunteer programs. Agencies are using this research to improve volunteer recruitment, retention and management. A recent trial in Western Australia has combined demographic profiles with the CRC knowledge of fire agency volunteerism to assist the fire agency to

increase volunteer recruitment in a specific geographic area.

Firefighter Health and Safety and Wellbeing (Program D) - all fire agencies have a duty to care for their firefighters. The Bushfire CRC has undertaken considerable research to inform agency approaches to managing fitness and fatigue of fire fighters. Project D2.1, while focussing on tanker based fire fighting, has developed a methodology that is likely to have a much broader application. Improving agencies' understanding of smoke exposure by fire fighters and by the wider community and the management of this risk is well underway (D2.2, B2.1 and B2.2). The work has strong agency participation. Finally, the nature of safe and effective decision making of individuals and of Incident Management Teams is being explored (D2.3 and D5). This work has already provided guidance about managing information that can aid decision making.

These are but some of the ways Bushfire CRC research is benefiting rural agencies. The benefits will not be fully realised however unless agencies continue to engage with the researchers and participate in the uptake of the research results.

Finally, the work of the Bushfire CRC, and the support of its stakeholders, has seen the development of a cohort of researchers that provides fire and land management agencies with a rich recruiting base for the future.

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September 2007*

