

Lessons from the January 2003 fires - advancing bushfire risk management in the High Country

Rick McRae, ACT ESB, Australia

Rodney O Weber, UNSW at ADFA, Australia

Introduction: The alpine fires of January 2003 burnt vast tracts of forested country in Victoria, New South Wales and the ACT. Much of the prior basis for bushfire risk management was found insufficient for understanding this event. Lessons must be learnt from the event to ensure future safety of threatened communities. The BushfireCRC's HighFire Risk Project will use Federal Government funds to address this.

Methods: Initially using the bushfire risk framework used across the ACT, we will address all aspects and methodically analyse shortfalls in understanding. Some of these are already evident from material collected during the fires, some will need to be researched. A multi-disciplinary approach will be applied, spanning field data collection, modelling, analysis of fire data and risk methodologies. While much of the initial effort will of necessity be meteorological, many aspects of fire management will be integrated.

Results: To date the approach has revealed significant risk drivers that have been poorly recognised to date. Nocturnal low-level jets frequently produce peak FFDIs between midnight and sunrise. These produce unexpectedly intense fire behaviour and require rethinking of objectives and strategies, and put crew safety at risk. Dynamic channelling was the key factor that produced the catastrophic fire behaviour seen around the ACT on 18/1/2003. Future mitigation effort will need to reflect these findings.

Significant improvements in bushfire risk management in the ACT have already emerged from initial efforts. Benefits are expected for the entire alpine region, and elsewhere in Australia.