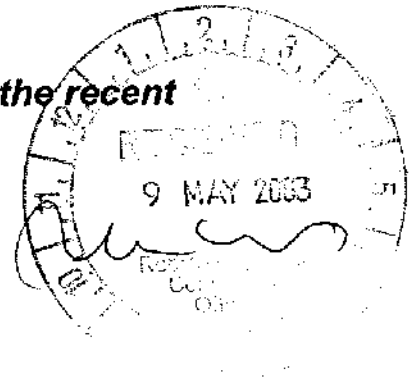


**Submission to House Select Committee on the recent  
Australian bushfires**

**Submission by:**  
Dr Kevin Tolhurst



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Submission No.210

**Background**

I was closely involved in the bushfires this year and have had about 30 years of experience in firefighting, fire management, fire research and education (CV attached). I therefore make this submission with my significant background of experience and with my professional drive to see environmentally, socially and economically sustainable forest management.

This is a brief submission outlining a few important points, however, I would welcome the opportunity to personally address the committee for fuller discussion and debate.

I see this Inquiry as having the ability to influence government policy without parochial interests. I believe that fire management on public and private land is a national issue. I therefore submit these thoughts in the hope that they will assist the Committee in its discussions and recommendations.

**History**

Fire has been actively managed in Australia for 10's of thousands of years. When Europeans arrived in Australia, they encountered and took over a fire managed landscape. The Australian Aborigines had managed fire in such a way as to maximize the benefits coming from the "bush". The displacement of the Aborigines progressively at different times in different parts of Australia has seen the fire regimes change as well. The ecosystems which had come into balance with Aboriginal induced fire regimes were suddenly changed. This has been most pronounced in SW Western Australia and SE Australia.

Houses, sheds, fences and livestock are all threatened by bushfires. In association with these built assets, human life also becomes threatened due to the defense of these assets and associations with them. Fire suppression has become the norm in many developed areas of Australia. This has lead to increasing fuel hazard levels, more intense fires and increasing threats to human life and property as well as environmental changes.

## Today

Today we are faced increasing areas of long-unburnt bushland which is threatening the viability of fauna and flora populations and increasing threats to human life and property and economic and social disruption. With limited resources, fire and land management agencies are prioritizing their expenditure to achieve the greatest benefit, which is the protection of human life and property. A consequence of this is that a relatively small proportion of the bushland is being burnt frequently, sometimes too frequently with local loss of biodiversity values while the majority of the landscape is being threatened by long periods of fire exclusion. We need to get back to a balanced fire management regime which will achieve environmentally, socially and economically sustainable management.

## Some Issues

- The 2003 bushfires were undesirable because of their extent and severity. Research shows that the time for a population to recover from fire depends on the patchiness of the fire (Humphries and Tolhurst 1992). In many areas this year, the fires were almost uniformly intense as a result of the drought conditions and the scale and intensity of the fires.
- The impact of the bushfires on the human populations in Victoria were relatively minor when compared with the potential impact. This was largely due to effective public warning, public education, strategic fire protection and fire suppression around these population areas. Conversely, the impact of the fires in Canberra was much more severe due to poorer education and preparedness. Whilst there are many areas for improvement, it is clear that we are improving our ability to deal with the protection of human life and property.
- Land management philosophy which leads to almost total fire exclusion is misguided and potentially dangerous. This fire exclusion philosophy is appropriate for rural and urban areas, but not for our native bush. A mosaic of fire ages across the landscape leads to greater protection of environmental values (Tolhurst & Friend 2001) and indirectly to reduced threat to human life and property. There is a procedure in place which can satisfy environmental and protection fire management objectives, but it needs better resourcing both in terms of numbers of people, skill levels and finances (Tolhurst 2002). A managed fire landscape will present less of a hazard to the rural-urban interface.
- The Code of Practice for Fire Management on Public Lands in Victoria (1995) provides a good basis for managing fire and mitigating the risk to rural and urban interface communities. However, there are a number hurdles to achieving the full implementation of this Code (Tolhurst 2003). Some of these hurdles include better government support and some require better management.
- It seems that both in the case of the Canberra fires and in the Victorian fires, fire suppression resources were not engaged in sufficient numbers quickly

enough to control the fires in their early stages. In both Victoria and in the ACT, there were a number of days when little suppression work was undertaken on fires which ultimately burnt significant areas. This is due partly to the priority process and partly to inefficient use of resources. When resources are scarce, fires must be dealt with in priority order. If the resources never match the task at hand (as this year), some fires will remain uncontrolled for too long and become a significant problem. A more realistic assessment of the task at hand would have suggested more resources should have been sought earlier. In Victoria, for example, all except 8 of about 90 lightning fires were contained before a run of severe fire weather and it was these 8 fires which joined to burn about 1.1 million hectares.

- The requirement to work safely when firefighting was emphasized by the Linton Coronial Inquiry. The safety of firefighters must always take the highest priority. However, better systems need to be put in place to reduce the amount of valuable skills and expertise tied up in maintaining the paper trail. Often the most experienced firefighters were involved in an incident management team rather than on the fireline. Once the requirements of the Incident Management Teams were satisfied, the rest were left for fireline duty. With the reducing number of experienced firefighters nationally and internationally, this meant that most of the experience was in the office not in the field and this resulted in much lower achievement rates on the fireline and lost opportunities. Whilst I acknowledge the need for experience people in the Incident Management Teams, there needs to be a better balance between field and office. A certain amount of streamlining and centralizing is needed.
- Fatigue is a major problem at fires and has to be managed well to avoid accidents and poor decision making. However, there has been an increasing tendency to accommodate firefighters (field and office) at locations remote from the fireline. As a result, some firefighters were traveling up to 3 hours to and 3 hours from the fireline to get to their resting place. When there is a maximum working day of 16 hours, this means that on 10 hours are available for working and then there is only 20 out of 24 hours available for fire suppression work with little or no overlap between shifts. Fire agencies must get better at locating firefighters in camps within one hour of the fireline.
- The prospect of litigation and the need for information and accountability has blown the size of Incident Management Teams out of proportion. The need for large office space and high-tech facilities such as online computers, faxes, photocopiers, GIS printers, telephones, radio communications, etc. has led to Incident Management Teams being located a long way from the firefighting crews and the fire. This leads to good communication with Melbourne and the media, but poorer performance and information to the firefighters. This leads to inefficient firefighting efforts. A review of the functions carried out in the IMT and those that can be carried out regionally or centrally is needed.
- Short-tour of duty times for volunteers and for Incident Controllers led to slippage in the understanding of the fire and local conditions. Greater continuity of firefighters and Incident Controllers is needed to maintain a continuity of philosophy and understanding of local conditions. This can be

achieved by employing fast turnover crews in simple environments, and by arranging for a deputy Incident Controller to stand in for the IC while they rest. Once IC should be give the responsibility for a fire for its duration. This could be achieved provided arrangements are put in place for rest periods and for subordinate ICs when the IC is not on duty.

There are many more issues which could be addressed, but I will not do so here. I would be happy to address the committee in person if invited.

## References

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