

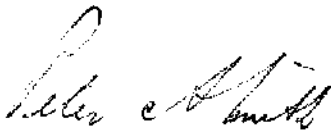


SUBMISSION TO THE HOUSE OF REPRESENTATIVES SELECT COMMITTEE ON THE RECENT AUSTRALIAN BUSHFIRES.

BY

Peter A Smith

Peter Smith has been an active volunteer in the Brindabella valley for some 30 years. He has been Captain of the Brindabella Brigade for ten years and is qualified to Group Officer level and was recently a Deputy Group Officer in the Yarralumla Shire for five years.



Peter A Smith

PREFACE

On the 8th January 2003 some 9 bushfires started by lightning surrounded the Brindabella Valley. These fires all posed a potential threat to the valley and for the next month a major firefighting campaign was waged in the region.

At the outset I wish to record my admiration and gratitude to the large number of volunteers and staff of various agencies which made such a dedicated and skilled response to the fires.

In particular I wish to record my thanks to the RFES and Fire Management for recognising the threat to property in the Brindabella Valley and for providing a significant Task Force for property protection during this campaign. Without this help, several more properties would have been lost. To those firefighters from many brigades who helped us I express my heartfelt thanks.

The following submission is made in this overriding context; it is made with the intention of identifying factors which may help to improve responses in future emergencies. In reflecting on decisions or the various roles of decision making I do not reflect on the individuals involved, but rather the processes. Every person involved gave of their best and we should use any benefits of hindsight so as to better prepare for the future. If policies of the past can be improved, let us do it without dwelling on the past.

Terms of reference (a) the extent and impact of the bushfires on the environment, private and public assets and local communities.

The effect of the bushfires in the Brindabella region has been catastrophic for the environment. The deeply incised valley of the Goodradigbee River has been severely burned on both sides from its headwaters for some 50 Km. The loss of wildlife and vegetation has been severe and will take many years to recover, albeit with permanent scars. One of the worst aspects of the denudation of the steep valley walls is the severe erosion which is already stripping away soils and detritus into the river. The detrimental effects of siltation and pollution to the river are already evident. Unfortunately much of the remanent seed-bank has been carried away and regeneration of the herbaceous understory will be severely compromised

Three dwellings, many kilometres of fencing and most of the fodder reserves were destroyed by the fire with harsh economic consequences for the community. This, together with the devastation of the living surroundings, has an ongoing effect on those living in the area. The sense of loss is heavy.

Terms of reference (b) the causes of and risk factors contributing to the impact and severity of the bushfires, including land management practices and policies in national parks, state forests, other crown lands and private property.

Section 1 of Attachment A considers the factors leading to catastrophic fire behaviour. The conclusion is that unacceptably high fuel loads were the principal reason for the firestorm behaviour under the adverse weather conditions of 17–18 January 2003.

Section 3 of Attachment B outlines the basic commonsense taught to all bushfirefighters at the most basic level that the reduction of fuel is the only option available to reducing the hazard from bushfire.

For those that doubt the effect of fuel loads on wildfire, even under extreme conditions, there is now incontrovertible evidence on the ground that fuel loads have a significant effect on fire behaviour under any conditions. An improved scientific understanding of firestorm generation and behaviour is essential to an understanding of when fuel loads become critical. This is important because whilst even severe bushfires are susceptible to control, firestorms are not.

One legacy of this disaster is the evidence left behind of the modification of fire behaviour by previous fire history. Scientific observations on the firegrounds is required before much of this evidence is lost and increased funding for fire research may be required into these aspects of fire behaviour.

The policies for hazard reduction differ greatly in different agencies. The cessation of broad area low intensity mosaic burning in our area in the mid 70s, has seen an unprecedented fuel build-up in surrounding national parks in the ensuing 30 years. Forestry appear to have maintained an annual program of hazard reduction in the adjoining State Forests. Until the mid-90s, significant areas of crown lands were available for hazard reduction activities and until then saw a number of major prescribed burns.

Prescribed burns provide the best training for brigades and for training in Incident Management methods. The recent reclassification of crown lands into national parks or forestry has had a major impact on the ability of the RFES to be involved in protecting the environment and communities through prescribed burning and an acute loss in training opportunities. Indeed the policy of withdrawal of the RFES from involvement in land management is, in my opinion, one of the most retrograde steps taken in my time as a fire-fighter.

The ability of private landholders to undertake prescribed burning has also been made much more difficult by increasingly complex and restrictive permit procedures.

Term of reference (c) the adequacy and economic and environmental impact of hazard reduction and other strategies for bushfire prevention, suppression, and control.

Determining a hazard reduction policy is complex because different agencies place different values on various assets. Broadly, this has been seen as achieving a balance between the needs for protecting life and property on one hand and the environment on the other.

Given the disastrous destruction of the environment by the recent bushfires, this needs to be re-examined.

I suggest proper hazard reduction is critical to the protection of the environment and maintaining biodiversity. The policies of land management which have blanket prohibition of prescribed burning have now been proved to be inadequate and must now be scientifically re-examined to prevent similar disasters.

We must remember that there are other areas of the State which could be exposed to similar situations in the coming years, and there should be no complacency or delay in addressing the lessons learned from the disastrous summer of 2003.

This leads me to think that there is a need for **an expert independent statutory authority which can balance all these needs and recommend appropriate hazard reduction plans for all lands in NSW and monitor compliance.**

The involvement of local Fire Districts and brigades in the formulation and implementation of these plans should be seen as mandatory so as to maximise

- Coordination between all agencies involved in fire control
- The effectiveness and efficiency of implementing hazard reduction plans
- Training opportunities for all agencies
- Input of local knowledge to development and implementation of the plans
- A development of the understanding in all agencies of the balance between protection of life, property and the environment.

Section 8 of Attachment A addresses inter agency and inter IMT coordination

Term of reference (d) appropriate land management policies and practices to mitigate the damage caused by bushfires to the environment, property, community facilities and infrastructure and the potential environmental impact of such policies and practices.

Since the Australian landmass was isolated some 40 million years ago the environment has adapted to yet-to-be-understood climatic change and totally unchecked fires begun by lightning. Human intervention, perhaps some 60,000 years ago brought additional fire use without suppression. The indigenous peoples brought with them their knowledge of the regeneration after fire, used it for hunting and clearing, and, I think likely, used it to keep their 'bush highways' open and safe. The result in this area was open forest with a low herbaceous ground cover.

Early white settlers were quick to adapt to using fire as a tool, but with the development of modern society the need to suppress unwanted fires grew and the 20th century saw an ever-growing ability to suppress fires. The cessation of grazing in national parks followed by the abandonment of the broad area low-intensity mosaic fuel reductions in this area in the mid 70s had dramatically changed the bush in this area to dry sclerophyl forest with high ground fuel loads and a scrubby middle story which is highly prone to wildfire under adverse conditions.

By the end of the 20th century our increased capacity to suppress fires has spawned a trend to suppress **all** fires, irrespective of seasonal conditions.. Coupled with a policy of not using hazard reduction a gross imbalance has developed. Such rapid environmental change is a recipe for the extinction of many species and ecosystems which have, over aeons, adapted to and need fire for their survival.

There is an urgent need to redress this balance both for the environment and for the protection of life and property.

Term of reference (e) any alternative or developmental bushfire mitigation and prevention approaches, and the appropriate direction of research into bushfire mitigation.

Bushfire behaviour has been the subject of a deal of applied research, especially in CSIRO, and recent findings indicate there is much to be done in the area of **fire behaviour prediction**, including the use of computer-based technologies. This is vital to the development of fire-fighting strategies and the safety of crews. I do not see a lot of evidence of the transfer of scientific advice to fire-fighting authorities.

A better understanding of **firestorm behaviour** is essential and research in this area should be accelerated as firestorm behaviour is not amenable to control. An understanding of how to prevent this behaviour is thus essential to combative strategies in large fires.

Term of reference (f) the appropriateness of existing planning and building codes, particularly with respect to urban design and land-use planning, in protecting life and property from bushfires.

It must be emphasised that the primary emphasis on preventing bushfires must be in the bush itself.

Land-use planning must give due recognition to the fact that bushfires **will** occur and ensure that suitable low-fuel load buffers exist between the urban and bush interface.

I do not subscribe to the idea that we should prevent people from living in the bush. Rather, I think planning and building codes should recognise that all development approvals will require an assessment of fire risk and that owners are advised that in fire situations, brigades will not assist if there is any risk to crews. Further, this risk assessment should be available to insurance companies. The entrances to all properties at risk should be signposted accordingly. Prospective owners should be counselled about fire risk before final approval is given.

Term of reference (g) the adequacy of current response arrangements for firefighting.

Attachment A Section 8, identifies potential delays in response where several agencies are involved. It is argued that whilst other agencies may use fire as a management tool, the RFES is **the** agency which has fire suppression as a primary focus.

I submit that in NSW, one agency, the RFES, should decide on initial response and incident control arrangements for all wildfires so as to avoid delays in the initial response, and ensure an appropriate initial response.

The increasing centralisation of Incident Management and the diminishing involvement of local brigades in decision-making have led to a demonstrable decrease in the aggression initial responses. Section 2 of Attachment A deals with this issue in the Brindabella area and concludes that the initial response was inadequate.

Initial response should not await the formation of Incident Management Teams and the development of long-term strategies and plans. This is where local brigades are best suited to respond to fires in their areas whilst back-up is being organised. They have the local knowledge of terrain, access, fire behaviour and are well trained in the need for safety in carrying out their operations. In many cases the local area has better early intelligence of fire than Fire Control. As an incident develops, Fire Managers have a much better overview and the role of brigades changes accordingly after the initial response.

I further suggest that the philosophy of initial response be reviewed. There has been a general approach to escalate the fire fighting response behind the escalation of fires. It seems the bigger the response capacity, the bigger the fires we are getting. Funding considerations, no doubt, have been a reason for not 'throwing everything at fires' in the early phase; yet so many times I have seen fires escalate to major proportions for want of an adequate early response. Lightning strikes in the ranges here are the most frequent cause of fire and generally strike on or near hilltops. In high summer I consider early air attack could slow the progress of fires until a ground attack is in place. This approach could save both costs and much time of volunteers.

Term of reference (h) the adequacy of deployment of firefighting resources, including an examination of the efficiency and effectiveness of resource sharing between agencies and jurisdictions.

Section 2 of Attachment A deals with a number of response factors militating against the suppression of the fires impinging on Canberra and Brindabella

Whilst delays are inevitable as resources are amassed and changing fire behaviour causes changes to plans, I conclude that there were a number of unacceptable delays in the prosecution of the fire-fighting response to these fires.

There is a need for a review of the protocols which allow agencies to unduly delay or obstruct fire suppression activities. The fires surrounding Brindabella were under the control of four Incident Management Centres making coordination a significant cause of delay where different strategies overlapped.

I believe this should be the subject of major regional Disaster Planning reviews to develop plans so as to minimise confusion and delay where the scale of bushfires involves multiple control agencies and centres.

Recent changes in NSW land designation have resulted in three major rural agencies concerned with fire use and suppression, viz national parks, forestry and the RFES.

Section 8 of Attachment A considers this subdivision and concludes that: Rather than resource three main fire-fighting authorities to suppress fires in NSW, The RFES Standards of Fire Cover should, in consultation with all stake-holders, take into account the resource needs of all lands in NSW and the appropriate distribution of fire-fighting resources.

Further, the whole of NSW should be covered by designated brigade areas, and the involvement of local brigades in fire mitigation and suppression should be a mandatory consideration by all three agencies.

This would have significant advantages for

- common knowledge of District and Agency bushfire plans
- resourcing for fire mitigation and suppression
- training opportunities
- development of standard operating procedures for joint fire-fighting operations, and
- familiarisation of fire personnel from different agencies.

Term of reference (j) the roles and contributions of volunteers, including current management practices and future trends, taking into account changing social and economic factors.

The greatest fire-fighting resource in NSW is the volunteer membership of the RFES.

Their safety and welfare is a primary consideration of the RFES and is implemented through standard operating procedures and structured training.

However, input from the Brigade level to many issues concerning their involvement has declined to the point where consultation with the service is negligible. A huge amount of local knowledge and experience is thus not tapped by the service which appears to be increasingly centralised and bureaucratic in its decision making.

The emergence of 'professional' Incident Management which reduces local initiative and input to fireground operations is widening the gulf of trust between salaried and volunteer members of the service. This leads to a perception by some volunteers that they are being 'used' by the service and there is a consequent lowering of morale.

Local communities, once the grass roots of the fire service, are feeling increasingly estranged and remote from the modern RFES.