

Submission No.59

**SUBMISSION TO SELECT COMMITTEE ON –
RECENT AUSTRALIAN BUSHFIRES**

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BUSHFIRE PROTECTION IN NEW SOUTH WALES AND
RECENT AUSTRALIAN BUSHFIRES

SECTION - 1 INTRODUCTION

- 1 - 1. My name is Roy Alan Free and for the past 8 years I have been on the periphery of the bushfire management scene in New South Wales as a Bushfire Management Consultant particularly concerned with protection measures in bush fire prone areas. A large part of my experience was developed with bushfire management from 1952 to 1983 in the Tumut Forestry District, Kosciuszko region, the A.C.T. and N/E Victoria. I was closely associated with the Hume/Snowy Bushfire Prevention Scheme and was the Fire Control Officer from 1962 to 1970. Overlapping that period I had almost 43 years of experience with bushfire suppression, prevention and protection policy development with the Forestry Commission of New South Wales from 1946 to 1988. As Assistant Commissioner I was for 8 years a member of the Bushfire Council of N.S.W. and a member of the Co-ordinating Committee of the Bushfire Council of New South Wales. During my service in Tumut Forestry and Hume/Snowy areas I can recall many occasions when bushfire was controlled due to previous hazard reduction. One most spectacular was the way in which the northwesterly progress of the 1965 Tumut River Fire petered out in the Tantangara area. Twelve months previously in the autumn of 1964 the Hume/Snowy Fire Crew had shepherded illegal burning in that area with use of existing trails resulting in a substantial area, some thousands of acres, of low intensity hazard reduction. The progress of the 1965 fire was recorded for it's duration by the C.S.I.R.O. Fire Research Team under the leadership of A.G.Macarthur [NOTE: A younger Philip Cheney was a member of that team]. Additionally the influence hazard reduction of 1964 was verified by Mr. Dick Condon who was a member of the Kosciuszko Park Trust at the time the 1965 fire.
- 1 - 2. In March 1989 I wrote a paper for the National Conference of the Institute of Foresters of Australia for a conference at Leura entitled - "Development of Bush Fire Management in New South Wales". (Copy attached as APPENDIX-1) In that document I concluded that bushfire management planning had evolved in N.S.W. largely by the "stimulus of disaster". New South Wales has been confronted again with another disaster and again inevitably there will be enquiry and opportunity to ascend to a higher plateau of protection efficiency. It is my opinion that the current legislation which includes the Rural Fires Act of 1997 and the relevant section of the E.P.A. Act regulations are excellent documents which require little amendment to provide protection against bushfire threat. The only serious deficiency with the legislation is the failure of
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the appropriate authority to adequately discharge their responsibility under the legislation. The shortfall is significant and to a huge degree and will be dealt with in more detail in Section 2.

It is recognised that the only practical way to reduce bushfire threat is to modify the hazard. That is by modifying the amount and type of combustible fuel. Research has clearly identified that fuel is the only variable in the bushfire equation that man can exercise some control over.

SECTION - 2 HAZARD MANAGEMENT

- 2 - 1. In recent times there have been public statements tending to reduce the enormous importance of meaningful hazard reduction by burning in bushland. I think that such statements are unfortunate and tend to undermine the only real chance that we have in this country to lessen the impact of severe bushfires. In January this year (2002) the Institute of Foresters of Australia issued a statement about the issue of hazard reduction burning. As a Fellow of that body I concur completely with the statement and quote in part -

"Hazard reduction burning for fuel reduction is an appropriate management practice for many forest types that needs to be applied in a planned and scientific way. It is the only method of fuel management that is ecologically and economically sound and can reduce the impact of bush fire weather and make firefighting safe and easier.

It is difficult to see how the social impacts of failing to do so can be justified either socially, environmentally, or economically.

Years of experience by on ground firefighters had repeatedly demonstrated that fire suppression was easier when fuel had been reduced within the last six years.

Research within State government agencies and the C.S.I.R.O. show that fire intensity is directly related to fuel loads. Fire behaviour, notably crown fire and consequent spotfire ignitions is strongly influenced by fuels load and the fuel's spatial arrangement. Heavy fuels produce hot fires; vertically arranged fuels lead to crowning and spot fires. Both lead to conflagration. Hazard reduction burning significantly minimises both factors.

Fires burning under extreme weather conditions such as those on Christmas Day in New South Wales will not be stopped on fuel reduced areas more than a year old, but they will be slowed and are less likely to crown and

produce spot fires.

This means they are more manageable, allowing flank attack, either directly or from existing firebreaks allowing faster backburning and giving firefighters more time to organise containment as soon as weather condition ease".

The Institute of Foresters is the national body for professional foresters. It advocates better forest management in Australia, high professional standards in forestry and the active management of forests for all their values.

The IFA was originally set up in 1935 out of concern for the widespread destruction of native vegetation".

- 2 - 2. Bushfire threat to any property can only exist if fuel hazard either on a property and or adjacent land exists. Any threat over time will increase if the amount of fuel in the fine fuel zone increases. Statutory provisions exist which are designed to limit such hazards.
The Rural Fires Act of 1997 provides opportunity for excessive levels of hazard to be removed or modified.
- 2 - 3. Section 52 Division 4 Part 3 of the Act requires that each Management Committee established under the Act must prepare and submit to the Co-ordinating Committee of the Bush Fire Council a draft bushfire risk management plan.
- 2 - 4. Section 54 Division 4 Part 3 requires that a draft risk management plan for a rural district or any other part of the State is to set out schemes for the reduction of bushfire hazards in the rural fire district or any other part of the State.
Taking into account that the concept of fuel management planning was introduced into the Bush Fires Act in 1994 [after the January 1994 bushfire disaster] and changed to Bush Fire Risk Management Planning in 1997 in the Rural Fires Act the progress towards achieving meaningful hazard reduction over 7 years has been very disappointing.
At the present time the Draft Bush Fire Risk Management Plans have been prepared and approved for most Council areas but from my observation all this planning has not translated into hazard reduction to any significant degree.
- 2 - 5. It is noted that Section 73 Division 2 Part 4 of the Rural Fires Act refers to bushfire hazard reduction by the Commissioner and in Clause (1) states -

"The Commissioner may carry out bushfire hazard reduction work on any land in the manner required by a bushfire risk management plan if any such work has not been carried out on that land when required by the plan or has not been carried out in the manner required by the plan".

This Section 73 also provides for costs recovery and dispute resolution.

Even though hazard reduction as a result of bush fire risk management plan initiatives has been very limited I am unaware of any action ever taken under Section 73.

- 2 - 6. Hazard reduction by burning has been opposed by vested interest groups for so many years and so many barriers real or imagined developed that the practice has declined significantly. As the activity declined the numbers of people with the skills declined. As the numbers of people with the skills diminished so did the areas treated. As the areas treated diminished the opportunity for new people to develop the skills reduced even further. In order to reverse the trend it is obvious that trained resources will be needed in this demanding and often dangerous activity. It is my opinion that each area covered by a bushfire risk management plan should have a team dedicated and equipped for the task of constructing the required firebreaks. Members of the dedicated team to receive the required training to carry out the task. For the major part of the last century the Forestry Commission of New South Wales was the most significant player in bushfire management in the state. Fire fighting practices, policies and techniques were developed either independently or with the help and co-operation of other states and federal bodies. The two most significant initiatives were -

1. Development and performance of more efficient fuel or hazard reduction programmes primarily directed at indepth or strategic areas.
Without question the most significant was the introduction of aerial hazard reduction. For example this technique provided the best chance for effective and acceptable fuel management in Kosciuszko National Park. As co-orthor with A.G. McArthur I wrote the initial Aerial Hazard Reduction Plan for the Hume/Snowy Area in 1968. Very effective fuel management burning was carried out in the next decade.
However in 1982 the National Parks and Wildlife Service invoked legal argument and withdrew from the 30year old co-operative scheme and the Hume/Snowy Scheme was disbanded. It is ironical that the principles from which the Hume/Snowy Scheme derived it's success is now enshrined in NSW Rural Fires Act legislation.
Unfortunately however, not all the responsible authorities in this state respond to those statutes as already stated in Clause 1-2.
After the disbanding of the Hume/Snowy Scheme little if any managed hazard reduction took place in Kosciuszko National Park and laid the foundation for the severity of recent bushfires.

2. The next most significant initiative was the development of rapid and direct initial attack response. It is unacceptable to allow fires to be undetected or simply left unattended sometimes for days in bushfire dangerous periods. This task is obviously made easier if any fire occurs in or near fuel reduced areas.

The task is also facilitated by more sophisticated detection systems and with provision of access to remote forest areas.

In recent times I have been intrigued at the lack of publicity given to the fact that many lightning strikes in the Tumut Forestry District were rapidly extinguished with minimal damage while the many lightning strikes in the KNP seemed to burn forever and cause catastrophic damage. This is a prime example of the benefits that can eschew when a team is trained and capable of quick and efficient attack.

- 2 - 7. SECTION 63 - DIVISION 1 - PART 4 of the Rural Fires Act sets out duties of public authorities and owners and occupiers of land to prevent bushfires.
This section states -

- "(1) It is the duty of a public authority to take the notified steps (if any) and any other practicable steps to prevent the occurrence of bushfires on and to minimise the danger of the spread of bushfire on or from:-
(a) any land vested in or under its control or
(b) any highway, road, street, land or thoroughfare, the maintenance of which is charged on the authority.
- (2) It is the duty of the owner or occupier of land to take the notified steps (if any) and any other practicable steps to prevent the occurrence of bushfires on and to minimise the danger of the spread of bushfires on or from that land.
- (3) A public authority or owner or occupier is liable for the costs incurred by it in performing the duty imposed by this section.
- (4) The Bush Fire Co-ordinating Committee may advise a person on whom a duty is imposed by this section of any steps (whether or not included in a bushfire risk management plan) that are necessary for the proper performance of the duty"

It is clear that the Bush Fire Co-ordinating Committee has the power to take steps that are necessary for the proper performance of the duty imposed.

It is my observation that the majority of the owners or occupiers of land both private and public fail to take adequate practicable steps to minimise the danger of the spread of bushfires on or from that land.

2 - 8. Section 66 Division 2 Part 4 of the Rural Fires Act provides for bushfire hazard reduction work required by local authorities. Section 66 in part states -

- (1) *The local authority of an area may, by notice in writing, require the occupier or owner [not being a public authority] of any land within the area to carry out bushfire hazard reduction work specified in the notice on the land.*
- (2) *The local authority must serve a notice under this section if required to do so by a bushfire risk management plan applicable to the land that is in force.*

It is in my experience that Councils [usually the appropriate authority] are using this clause less and less as time goes by to achieve hazard reduction.

I believe the matter can be rectified through the bushfire risk management plan if necessary.

However as Councils fail to use Section 66 notices the buildup of hazard occurs with consequential increase in danger to the community.

I know this to be true because of personal observation in many places including the Blue Mountains, Central Coast, South Coast, South West Slopes and many Council areas in the Sydney area.

SECTION - 3 PLANNING FOR BUSHFIRE PROTECTION

3 - 1. The 15th October, 1984 was a very significant day for community bushfire protection in New South Wales. The then Minister for Planning and Environment, Terry Sheahan, made a direction under Section 117 (2) of the Environmental Planning and Assessment Act of 1979 which required all Councils in New South Wales to observe the principles specified in Direction G.20.

This Direction culminated in the issue of Circular C.10 by the Department of Planning in 1989 and the Planning for Bushfire Protection discussion document released by the Department of Bushfire Services in May 1991.

These two documents provided for the creation of -

- perimeter road access concept
- fire radiation zones

- incorporation of appropriate building standards.

There may be some but I do not know of any structures that complied with the above requirements being destroyed in the recent bushfires.

It is noted that as at 10/1/2002 both the above mentioned documents have been replaced by the 2001 revision of "*Planning for Bushfire Protection*".

This revision generally reflects the provisions of the two previous guidelines with the addition of minimum specifications for asset protection zones (APZ's) for Special Protection Developments such as housing for older people or people with disabilities which do not seem to be supported by any scientific base.

SECTION - 4 PROTECTION OF PRE - 1990 STRUCTURES

- 4 - 1. While owners or occupiers of structures built since 1990 which are at the urban/bushland interface have reason for optimism in time of bushfire the same cannot be said with regard to many structures built prior to 1990. I have observed many places in New South Wales where structures cannot comply with current planning requirements. In particular I have seen many examples in Sutherland, Blue Mountains, Hornsby/Ku-ring-gai and Gosford Council areas. I have observed many situations where landholders have cleared firebreaks in Council Reserves and National Parks and others who are afraid to do so without permission and have a hazard within a few metres of their homes. It is emphasised that planning approvals prior to 1990 often did not require or even allow for fire protection zones to be located within residential blocks and as a result large numbers of people are exposed to serious threat in time of bushfire.
- 4 - 2. Originally the Bushfires Act of 1949 made provision in Clause 15 (5) for owners or occupiers of land which adjoined Vacant Crown Land (V.C.L.) to enter upon such land for the purpose of clearing, making and maintaining firebreaks not more than 20m. wide along the common boundary. This provision was included in the legislation as it was clearly recognised that the Crown did not have the resources to provide firebreaks. The reality is that in bygone years people living adjacent to Vacant Crown bushland in many places would simply burn off adjacent bushland to create a larger fire buffer. As the law changed this practice diminished and increased fire hazard resulted. The legislation was amended after the formation of the National Parks and Wildlife Service to exclude much of the land that was originally V.C.L. but was now the responsibility of the National Parks and Wildlife Service. The only problem was that the N.P.W.S. did not have the capacity or the desire to

provide and maintain firebreaks.

This amended provision was retained in the 1997 Rural Fires Act [Section 80 Part 4 Division 3] except that the 20m. was reduced to 6m. without any fanfare.

Usually legislation is amended for positive reasons but to reduce a firebreak from 20m. to 6m. was a retrograde step.

In fact I find it extraordinary when it is considered that the current Environmental Planning and Assessment Act and Regulations require firebreaks adjacent to bushland that range from 20m. to 70m.

I believe there is strong argument to at least re-introduce the 20m. firebreak applicable to bushland where owners and/or occupiers fail to discharge their obligations under the provisions of the Rural Fires Act of 1997.

- 4 - 3. Sections 52, 54 and 63 of the Rural Fires Act were intended to eliminate or at least reduce threat from bushfire but failure by land owners and/or occupiers and appropriate authorities to properly comply with these provisions of the legislation leaves many sections of the community at serious risk from bushfire. I think it would be an acceptable interpretation of Section 63 of the Rural Fires Act for fire radiation zones at the urban bushland interface to be mandatory. By any measure such a step would be a reasonable measure to *"minimise the danger of the spread of bushfires on or from that land"*. Buffer zones can be installed and maintained manually and/or mechanically when weather conditions are unsuitable for burning. Such measures do not rely on the very narrow window of opportunity which exists with hazard reduction burning.

SECTION - 5 SUMMARY AND CONCLUSION

I have been saddened in recent years that the real progress made towards the prevention and suppression of bushfires since the disastrous bushfires of 1951/52 with the birth of the Fire Management Research at the Federal level is allowed to be frittered away.

There is no doubt that in New South Wales in recent times there has been vast improvements with the provision of equipment for fire suppression.

There is equally no doubt that the legislation for the prevention and suppression of bushfires in New South Wales is excellent.

There is equally no doubt that failure of appropriate authority to adequately enforce those laws is a huge scandal.

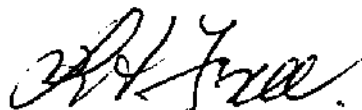
There is no doubt that in the past 20 years there has been a steadfast decline in the application of the two most significant bushfire protection strategies namely -

- meaningful hazard management in all it's forms;
- rapid and direct early response to bushfires.

Although long since retired from the mainstream I am distressed at the insidious dismantling of schemes and practices which were demonstrably effective in former years in providing a real chance for diminution of the enormous damage from bushfires. I make the above submission in the hope that it might make some small contribution in getting the fire protection vehicle back on track.

In conclusion I believe that the best chance of success is to -

- 1) Create a National Council with State representation equipped with the authority to override inept practice and procedure.
 - 2) Substantially strengthen the Commonwealth Bushfire Research Facility with increase of funding and personnel.
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