



Submission to the
JOINT SELECT COMMITTEE ON BUSHFIRES
NSW Parliamentary Inquiry
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Executive Summary

The NSW Farmers' Association views it as essential that the declining levels and increasing impediments to achieving effective levels of hazard reduction activity across NSW be urgently addressed to reduce the intensity of future bush fires.

The recent Christmas 2001 bush fires have brought into serious question the level of hazard reduction activities being undertaken across the State, particularly by public land managers, such as the National Parks & Wildlife Service (NPWS).

Figures show that the level of prescribed burning operations conducted on lands managed by the NPWS has declined by 60% over the last 7 years, from 47,816 hectares (ha) in 1993/94 to just 19,220 ha in 2000/01. A comparison of the level of hazard reduction activities undertaken by the two largest public land managers, State Forests and NPWS, reveals a stark contrast in hazard reduction activity levels. In 2000/01, State Forests completed hazard reduction work on 15.5% of their land, compared to 0.37% undertaken by NPWS.

Reserve Fire Management Plans for publicly managed land need to be ratified and made operational in a much more timely fashion, to ensure there are not unnecessary delays to the implementation of hazard reduction activities. Amendments to the *Rural Fires Act 1997* are also required to remove current barriers to effectively managing fuel loads.

The implementation of hazard reduction activities and maintenance of fire trails need to be urgently investigated for their adequacy in all publicly managed land, with particular regard to effectiveness and frequency. The protection of life, livestock, property and assets need to take priority in decision making over broader environmental concerns in relation to bush fire management.

Currently, complex and bureaucratic environmental legislation is also preventing effective bush fire hazard reduction activities from taking place. A streamlined process for environmental assessment for hazard reduction activities is urgently required.

Additionally, fire breaks (or buffer zones) need to be established at and within the boundary of all Crown Lands to ensure that private property is protected, and no further national parks should be declared until existing parks are appropriately managed in regard to bush fire prevention and hazard reduction.

The Association remains concerned that recommendations from previous Inquiries have not resulted in increased hazard reduction activities taking place to help prevent the devastation as witnessed in the recent bush fires.

The Christmas 2001 bush fires also highlighted that there are some inadequacies with the provision of available fire fighting resources and equipment. Additionally, training of volunteers would be assisted if it was held more locally and featured suitable modules for varied terrain and conditions.

Summary of Recommendations

The NSW Farmers' Association recommends:

That Reserve Fire Management Plans for publicly managed land be ratified and made operational within three months following an adequate process of public consultation.

That hazard reduction and fuel management activities together with maintenance of fire trails be urgently investigated for their adequacy in all publicly managed land prior to the next fire season (2001/02), with particular regard to effectiveness and frequency.

That Section 73 of the Rural Fires Act 1997 be amended to require the Rural Fire Service Commissioner to either enforce or actually carry out hazard reduction activities on publicly managed land, where these activities have not been completed within the specified time.

That Section 76 of the Rural Fires Act 1997 be amended to require adjoining public land managers to repair or restore a dividing fence at their expense, if it is damaged by fire and if an owner has previously cleared their side of the fence and issued a notice which has not been acted upon. Simultaneously, that Section 80 of the Act, which prevents entry onto "excluded land" to establish fire breaks, be removed.

That the protection of human life, livestock, property and assets take priority in decision making over broader environmental concerns in relation to bush fire management.

That NSW Government implement within three months a streamlined process for environmental assessment for hazard reduction activities that is simple and cost-free for individual landholders.

That prior to the next fire season (2001/02) an appropriate fire break be established at and within the boundary of all Crown Lands to ensure private property is protected from bush fire emanating from National Parks, State Forests and other Crown Lands.

That no further National Parks be declared until existing parks are appropriately managed in regard to bush fire prevention and hazard reduction.

That the design of Rural Fire Service (RFS) vehicles be made more practical for the work required of them.

That RFS training for volunteers be provided locally to improve rates of attendance.

That RFS volunteers have access to training modules which feature suitable measures for varied terrain and conditions.

Introduction

NSW Farmers' Association represents the interests of farmers in NSW across all major agricultural industries and has a membership of around 13,000 farm business enterprises.

The Association has a particular interest in ensuring adequate bush fire management practises are implemented throughout NSW and that effective hazard reduction activities are undertaken by public land managers. The Parliamentary Inquiry into Bushfires is timely, as the Association holds significant concerns as to the impact on farm families and rural communities if the current lack of hazard reduction activities is not addressed.

The Association sought comment from its membership in relation to the Terms of Reference for the Inquiry and their feedback forms the basis of the Association's submission. Despite the short time frame available, the Association received approximately 50 responses from individuals or groups.

1. Hazard Reduction and Other Fire Prevention Methods

1.1 Declining Levels of Hazard Reduction

The NSW Farmers' Association continues to be concerned with the declining levels and increasing impediments to achieving effective levels of hazard reduction activities across NSW. Hazard reduction activities include prescribed burns that are low intensity fires during cooler months of the year designed to remove fine dry fuels, thereby, reducing the intensity, rate of spread and crowning of fires which usually occur during summer months.

The definition of bush fire hazard reduction work within the *Rural Fires Act (1997)* is:

- a) *the establishment or maintenance of fire breaks on land; and*
- b) *the controlled application of appropriate fire regimes or other means for the reduction or modification of available fuels within a predetermined area to mitigate against the spread of a bush fire.*

The recent Christmas 2001 bush fires which occurred during December 2001 and January 2002 burnt huge areas of NSW and devastated many households, small businesses and primary producers. The fires brought into serious question the level of hazard reduction activities being undertaken across the State, particularly by public land managers, such as the National Parks & Wildlife Service (NPWS).

Primary producers particularly those who adjoin or closely neighbour national parks, state forests or vacant Crown land, have a genuine interest to ensure that adequate hazard reduction activity is undertaken in these publicly managed land areas. The escape of the Narromine/Cabonne fire from the Goobang National Park, on approximately 19 December 2001, devastated 18 adjoining private landholders, who rely on their land and livestock for their livelihood.

The inadequate levels of hazard reduction activities have been clearly documented since the 1993/94 fires. Following these fires, the NSW Legislative Assembly Select Committee on Bushfires was established and subsequently recommended that all public authorities accept the responsibility to conduct adequate hazard reduction and provide and maintain fire trails on their land.¹

Further, a major finding from the Coronial Inquiry into the same fires, conducted from August 1994 to February 1996, found that hazard reduction activities had not been adequate in many fire prone areas and consequently was principally responsible for the intensity of the fires. The Deputy State Coroner found that:

“Unwittingly, many of the backburns conducted during these (January 1994) bush fires were not truly backburns to stop the fires, but hazard reductions to protect property that should have been carried out as part of fuel management policy prior to the bush fires.”

¹ NSW Legislative Assembly, *Report of the Select Committee on Bushfires*, November 1994.

“The evidence satisfied the Court conclusively, that throughout NSW during the period 1989-1993, the fuel load was not managed as intended by Parliament and high fuel loads were principally responsible for the intensity of the uncontrollable fires.”²

The 1998 Auditor-General’s Report, entitled “The Rural Fire Service: The Coordination of Bushfire Fighting Activities”, also recommended that hazard reduction strategies need improvement and greater guidance and assistance needs to be provided to local communities in this regard.³

During the recent bush fires, figures showed that the level of prescribed burning operations conducted on lands managed by the NPWS has declined by 60% over the last 7 years, from 47,816 hectares (ha) in 1993/94 to just 19,220 ha in 2000/01. Also, the average burning by NPWS over the last 4 years is just 11,700 ha per annum.⁴

A comparison of the level of hazard reduction activities undertaken by the two largest public land managers, NPWS and State Forests, reveals a stark contrast. An Agency Fuel Reduction Report for 2000/01 indicates that State Forests completed 440,817 ha of hazard reduction activities, or a total of 15.5% of their land. NPWS undertook 19,936 ha of hazard reduction in the same period, which corresponds to 0.37% of the land under their management.⁵

1.2 Reserve Fire Management Plans

Reserve Fire Management Plans are prepared to provide direction on the activities required to meet the fire management responsibilities of the NSW NPWS. The plans contain policies and actions to prevent the occurrence and minimise the damage potential from bush fire events.⁶

Considering the recent fires in Goobang National Park and the resultant devastation for adjoining primary producers, Goobang provides a particularly relevant case study in terms of the Park’s Fire Management Plan and the prior implementation of hazard reduction activities.

1.2.1 Goobang National Park Fire Management Plan

Goobang National Park is located in central western NSW, approximately 30 kilometres north east of Parkes. Cropping and sheep grazing are the major land uses in the surrounding areas.

In late 1999, the NPWS released a draft Goobang National Park Fire Management Plan (dated October 1999), for a two month exhibition period. Although the public exhibition

² NSW Coroner, *NSW Bushfire Inquiry*, Findings, Volume 4, at 362.

³ NSW Auditor-General, Performance Audit Report, *Rural Fire Service: The Coordination of Bushfire Fighting Activities*, December 1998 at 66.

⁴ Media Release, The Hon George Souris MP, Leader of the NSW National Party, 11 January 2002.

⁵ Bush Fire Co-ordinating Committee, Agency Fuel Reduction Report – Year 2000/2001.

⁶ National Parks & Wildlife Service, *Draft Goobang National Park Fire Management Plan* (October 1999).

period closed on 31 January 2000, over two years later the Goobang Fire Management Plan is still to be ratified by NPWS.

Figures available on the NSW NPWS website, last amended on 9 April 2002, indicate that of the fire management plans for parks and reserves managed by the NPWS, there are only five final plans in place, with thirteen draft plans being progressed and no draft plans currently on public exhibition.

The inability to finalise fire management plans in a timely fashion, has the real potential to delay essential fuel reduction activities from being implemented. Consequently, the “damage potential” from bush fires is greatly increased, and this is a major concern to primary producers, particularly those immediately bordering publicly managed land.

Recommendation:

That Reserve Fire Management Plans for publicly managed land be ratified and made operational within three months following an adequate process of public consultation.

1.2.2 Hazard Reduction Activities within Goobang National Park

Farming families most at risk from damage by fire within Goobang National Park are those occurring on the eastern and southern park boundaries. Accordingly, NPWS have designated these boundaries of the Park as Asset Protection Zones, and have established Strategic Wildfire Control Zones to assist with suppression activities and prevent the movement of fires from these zones into other areas.

A principle strategy for protecting life and property is fuel reduction through prescribed burning in these strategic areas. Although Goobang National Park comprises 42,080 ha, Strategic Wildfire Control Zones comprise less than 6000 ha, or 14% of the total land area of the Park.

The Fire Management Plan indicates that hazard reduction burning should generally be implemented every 10-12 years for each Strategic Wildfire Control Zone area. However, ironically it also indicates that there are only two known records of prescribed burns for Goobang National Park, those being in 1978 and 1982. Therefore, it has been 20 years or longer since most of the land area of Goobang National Park has been involved in prescribed burning activities.

This apparent lack of hazard reduction activity raises serious doubts about whether effective fuel management programs are being periodically implemented within Goobang. But what does this mean for fuel accumulation over such a long period of time and the consequential risk to life and property?

Smith (2002) highlights that leaf litter in a typical Australian dry forest accumulates at a rate of three to five tonnes per hectare per year. “If left undisturbed for 20 years, an accumulated fuel load of up to 30 tonnes per hectare would not be unusual. Given severe fire weather conditions, a load of 15 tonnes per hectare will produce a fire of such intensity that it will be extremely difficult to control or would be uncontrollable.” The time

taken to accumulate 15 tonnes of fuel per hectare in an open dry forest is only 7.2 years, whilst it is just 3.5 years for a dense dry forest.⁷

Additionally, the declining maintenance of adequate fire trails on some publicly managed land, which thereby inhibits effective access and rapid response to fire outbreaks, is also a significant concern to the Association. This issue is discussed in section 4.1.3.

Recommendation:

That hazard reduction and fuel management activities together with maintenance of fire trails be urgently investigated for their adequacy in all publicly managed land prior to the next fire season (2001/02), with particular regard to effectiveness and frequency.

1.3 Bush Fire Management Committees & Bush Fire Risk Management Plans

Following the 1993/94 fires, key amendments to the *Bush Fires Act 1949* included the compulsory formation of Bush Fire Management Committees in districts and compulsory preparation of fuel management plans. The fact that these fuel management plans are now termed bush fire risk management plans under the *Rural Fires Act 1997*, highlights how the emphasis in bush fire prevention has moved from one of fuel management to risk management.⁸

Bush Fire Management Committees, of which there are 97 across NSW, are required to prepare and submit to the Bush Fire Co-ordinating Committee a draft bush fire risk management plan and a plan of operations. The bush fire risk management plan is required to set out a plan for the reduction of bush fire hazards, identifying the level of bush fire risk across the management area, and the strategies which need to be implemented by the responsible land managers to manage those risks.

The bush fire risk management plan should be prepared within 12 months after the constitution of the Management Committee, and then within each successive five year period. The plan of operations must be prepared each two years following the constitution of the Committee.⁹

However, figures show that prior to the Christmas 2001 fires, 30% of the State's bush fire risk management plans had not been approved.¹⁰ A significant component of some bush fire risk management plans would be identifying hazard reduction activities required to be implemented on vast expanses of publicly managed land. An example would be the Cabonne, Parkes and Narromine Bush Fire Management Committees whose districts include areas of Goobang National Park.

Firstly, it is essential that all bush fire risk management plans are finalised and approved as a matter of urgency. Secondly, even though hazard reduction works may be listed within risk management plans, this does not guarantee that these works are being implemented in a timely fashion, if at all.

⁷ Smith, S. Briefing Paper No.5/2002, NSW Parliamentary Library.

⁸ Smith, S. Briefing Paper No.5/2002, NSW Parliamentary Library.

⁹ Smith, S. Briefing Paper No.5/2002, NSW Parliamentary Library.

¹⁰ Media Release, The Hon. Andrew Stoner, MP, NSW National Party, 11 April 2002.

The *Rural Fires Act* places a duty on public authorities and owners and occupiers of land to prevent bush fires. As such, a local authority under Section 66 has the power to issue a notice requiring an owner or occupier of land to carry out bush fire hazard reduction work. This is most likely to occur when a bush fire risk management plan identifies the need to remove a hazard, for instance to maintain an asset protection zone.

If the hazard reduction is not undertaken within a specified time, both the local authority and the Rural Fire Service Commissioner have powers to undertake the work on private land and to bill the owner. To date, however, public land managers have unwisely been excluded from this provision, and have also been afforded a dispute resolution process under Section 73 which has the potential to further delay hazard reduction activities from occurring.

The Association understands that the Government will shortly propose to amend Section 73 of the *Rural Fires Act*, to reflect the need for equivalent accountability and expediency in implementing hazard reduction on publicly managed land as there currently is on private land.

Recommendation:

That Section 73 of the Rural Fires Act 1997 be amended to require the Rural Fire Service Commissioner to either enforce or actually carry out hazard reduction activities on publicly managed land, where these activities have not been completed within the specified time.

The *Rural Fires Act* also includes provisions for damage by fire to dividing fences (Section 76). For example, an owner who has cleared land on their side of a dividing fence of all combustible matter for a distance of six metres may require, by written notice, the adjoining owner on the other side of the fence to repair or restore the fence if it is damaged by bush fire caused by the failure of the adjoining owner to clear the land to six metres.

The adjoining owner to whom the notice has been given must repair or restore the dividing fence at their expense, however, this provision does not apply to an adjoining owner that is a public authority other than a local authority.¹¹ Once again, implementation of activities that promote bush fire prevention should not exclude public land managers.

Amending Section 76 to include public land managers should then prompt the removal of Section 80 of the Act, which restricts private landowners or occupiers establishing fire breaks immediately over the fence in “excluded land” (such as National Parks).

¹¹ *Rural Fires Act 1997*, Section 76.

Recommendation:

That Section 76 of the Rural Fires Act 1997 be amended to require adjoining public land managers to repair or restore a dividing fence at their expense, if it is damaged by fire and if an owner has previously cleared their side of the fence and issued a notice which has not been acted upon. Simultaneously, that Section 80 of the Act, which prevents entry onto “excluded land” to establish fire breaks, be removed.

Environmental issues have gained significant importance in the debate about the place of fire in the Australian landscape, and in particular, hazard reduction activities. This is partly reflected in the *Rural Fires Act 1997*, which highlights that the Rural Fire Service is to have regard to the principles of ecologically sustainable development in carrying out any function that affects the environment. These issues are discussed in the following section.

2. The environmental impact of bushfire management and control on biodiversity and biophysical processes and the application of research, technology and management techniques to minimise the impacts.

The environmental impact of bushfire management is an intensely debated issue in the Australian scientific community.

Central to the debate is the well-developed concept of fire regime, which describes the temporal and spatial patterns of fire. As proposed by Gill (1975), a regime is comprised of four components:

- i) Interval: the period of time between fire
- ii) Intensity: the amount of heat generated and duration of individual fire event
- iii) Seasonality: timing of the burn (summer / winter)
- iv) Type / Extent: (spatial extent of the individual fire – area covered, canopy/understorey fire)

2.1 Impact on biodiversity – Flora and Fauna

Australian native plant species have two basic mechanisms for coping with fire. Some species such as grevilleas, acacias and banksias are fire sensitive, and a fire consumes individual plants. Seeds stored in the ground however, germinate as a result of the heat and smoke generated from the fire. Research indicates that such species need longer intervals between fires to ensure that seed stores can be maintained and to ensure the fire is of such intensity to initiate germination.

Other species, such as most eucalypts are “resprouters” whereby the fire is not fatal to individuals, although they suffer damage to the crown of the tree. Such species sprout new leaves and branches from the cambium tissues beneath the bark. Research indicates that frequent, intense fires are detrimental to these species, as the “sprouting” tissues can be damaged.

Weed species take advantage of the disturbed ecosystems that result from fire. Weed infestation in the early periods after a fire impact on the ability of early recolonisers, such as native grasses or ferns.

Similarly, the nature of the fire regime will determine the impact of the fire on fauna species, as it directly impacts on the habitat requirements of a particular population. For example, the endangered Leadbeaters Possum thrives where there are long intervals between fires, as it nests in the hollows of old trees (which are more likely to be consumed by fire). Similarly, Antechinus (a native rodent) prefer longer intervals between fire. However, other endangered native rodents recolonise areas soon after fire, where their particular habitat requirements are met.

2.2 Impact on Biophysical processes

It is acknowledged science has given us a better understanding of how individual species respond to fire events. However, more than 25 years of intense research into the impact of fire on the Australian biota, has yielded little more than continued debate as to the most appropriate fire regime for our natural areas.

The NSW Scientific Committee concluded in its determination to list high frequency fire as a key threatening process that “*No one time limit can be used as an acceptable time between fires for the maintenance of biodiversity across the State of New South Wales*”¹²

The extreme priority given to the environmental impact of bushfire management is a priority based on debated scientific evidence, and occurs at the expense of other overwhelming considerations. The Government must be realistic about conservation, and prioritising the environment over the protection of human life, livestock, property and assets.

Recommendation:

That the protection of human life, livestock, property and assets take priority in decision making over broader environmental concerns in relation to bushfire management.

¹² NSW Scientific Committee (2000) Final Determination to list “High frequency fire resulting in the disruption of life cycle processes in plants and animals and loss of vegetation structure and composition” as a key threatening process under the Threatened Species Conservation Act.

3. The causal factors of the bushfires including an investigation of land use decisions, development planning and the responsibilities of property owners that will reduce bushfire risk and the environmental impact of bushfire management.

3.1 Environmental Assessment and Hazard Reduction

The NSW Farmers' Association has long advocated that complex and bureaucratic environmental legislation is preventing effective bush fire hazard reduction from occurring. In 1999, the Association's concerns on the issue prompted the establishment of an Interdepartmental Committee (IDC) on Environmental Assessment for Bush Fire Hazard Reduction.

In late 2001, and two years later, the IDC finalised their report for the Minister for the Environment. The report attempts to emphasise that the complexities of environmental legislative requirements in respect to effective bush fire hazard reduction is a "perceived impediment" rather than an "actual impediment" for some sectors of the community. Such interpretation is quite extraordinary considering that the report highlights the following:

"The environmental assessment system is complex and the subsequent regulations under the Rural Fires Act have not included a resolution of the issue of hazard reduction and environmental assessment." "Currently, the environmental assessment of hazard reduction activities is derived from a diverse array of legislation administered by a number of different Government agencies. This statutory complexity is responsible for confusion in landowners (and occupiers) and the prevailing perception of an apparent (but not an actual) conflict between the various requirements. It is this perception that impedes effective implementation of environmental assessment and hazard reduction activities."

"The current arrangements are clearly unacceptable with a substantial potential, if not real, cost burden being borne by the community and government agencies." "In some instances, bush fire hazard reduction is not being undertaken at all. This appears to be for a number of reasons including: the lack of clarity surrounding the environmental assessment process, the lack of clarity surrounding the applicable legislation, the difficulty for landholders in identifying which agency is responsible for ensuring the environmental assessment is undertaken, the perceived greater legal liability for undertaking an inadequate or inappropriate environmental assessment compared with the "do nothing" approach, and the level of detail to which environmental assessment should be undertaken."¹³

Additionally, in 1998 the Auditor-General noted that:

In one rural fire district the bush fire management committee has been unable to undertake any hazard reduction activities for three years because of the requirements of the Protected Lands Act. The difficulty arises because of inadequate information about

¹³ Interdepartmental Committee Policy Review Report for the Minister for Environment, *Environmental Assessments for Bush Fire Hazard Reduction Proposals*, Vol. 1 Main Report (October 2001).

species or the effects of fire prevention activities on the local environment. As a result, Fire Control Officers, brigades and bush fire management committees are uncertain whether they have adequately assessed the likely impact of actions on the environment.” “The issue which must be resolved is what level of protection a community is willing to accept and the level of sacrifice of competing wants which must occur...”¹⁴

The Rural Fire Service Association has also raised significant concerns in regard to the lack of hazard reduction being undertaken due to environmental legislative constraints:

“Why is it too hard? Simply the level of bureaucracy involved is such that there is too large a burden on volunteers and the amount of environmental legislation that needs to be coped with too extensive. People have literally ‘given up’! Whilst the Association understands the need to protect our environment and its lifestyle enriching biodiversity we believe that it is time for the pendulum to swing back towards a recognition of the need for the protection of life and property to be paramount in any decision making process.”¹⁵

In most cases, public land management agencies are required to undertake an Environmental Impact Assessment under Part 5 of the *Environmental Planning and Assessment Act 1979*, prior to implementing hazard reduction activities. Additionally, private landowners (and leaseholders) are generally required to obtain development consent from council or the Department of Land and Water Conservation if a Bush Fire Risk Management Plan is not in place. However, even though hazard reduction activities may be consistent with a Bush Fire Risk Management Plan, they may still be subject to Part 5 of the *Environmental Planning and Assessment Act*, or licensing provisions.¹⁶

To complicate matters, any hazard reduction burn may cross a number of land tenures and land owners, as currently the environmental assessment regime is tied to the ownership of each of the individual properties being affected and not the individual burn. Consequently, a large number of environmental assessments may be required for what is essentially one prescribed burn.

Private landholders acknowledge responsibility for managing their land in such a way that reduces the risk of bushfire, including undertaking routine hazard reduction activities. However, landholders continue to highlight the disincentives with the current regime.

These disincentives are fourfold. Firstly, and as highlighted above, many landholders believe that environmental regulations prevent them from undertaking hazard reduction activities. For example, many farmers view the listing of frequent burning as a key threatening process under the *Threatened Species Conservation Act* as the end of periodic and effective hazard reduction. Surveys of the Association’s membership

¹⁴ NSW Auditor-General, Performance Audit Report, *Rural Fire Service: The Coordination of Bushfire Fighting Activities*, December 1998.

¹⁵ Luscombe, D. (President of Rural Fire Service Association) in *Bushfire Bulletin*, Vol.23 No.3, 2001.

¹⁶ Interdepartmental Committee Policy Review Report for the Minister for Environment, *Environmental Assessments for Bush Fire Hazard Reduction Proposals*, Vol. 1 Main Report (October 2001).

indicate that many landholders are simply confused as to what activities are permitted and what is required under the regulations.

Secondly, the Native Vegetation Conservation Act prevents farmers from undertaking many routine agricultural practices, such as the thinning of regrowth, and clearing shrubby understorey in timbered country. This presents greater risk in the event of a fire.

Thirdly, the requirement to undertake detailed environmental assessment is a major hurdle for private land managers in undertaking hazard reduction activities. For example, if a planned development or activity will have an impact on a threatened species, this must be taken into account in the development approval process. If the impact is likely to be significant, a species impact statement must be prepared and the Director-General of the NPWS must agree to the development approval. In some cases, the Minister for the Environment will also need to be consulted. The requirements imposed on other land managers, such as State Forests to undertake hazard reduction can be overly onerous. For example, in the Pilliga Forest, NPWS imposes the following conditions on State Forests in carrying out hazard reduction:

- a) Hazard reduction work must take account of wildlife history, intensity, frequency and seasonality, and reflect the ecological requirements of any threatened species, or their habitat, known or likely to occur in the area.
- b) Hazard reduction work must be conducted in a manner that promotes and maintains an understorey mosaic that includes significant areas of dense understorey vegetation.
- c) Hazard reduction work must be conducted in a manner that minimises the impact on large fallen logs (greater than 40 centimetres diameter and greater than 5 metres in length) and dead and dry standing trees.

Such conditions hamper land managers in adequately reducing fuel loads to minimise the risk of fire outside the boundaries of Crown Land.

Fourthly, the cost and time of environmental assessments for hazard reduction proposals is also a disincentive to private landholders undertaking hazard reduction. This fact has been clearly acknowledged in the IDC Report, "Environmental assessment processes tend to be time consuming and relatively expensive."¹⁷

As highlighted above, current government resource management restrictions are major disincentives to private landholders and public land managers undertaking effective and timely hazard reduction activities. Over twenty pieces of legislation have the potential to influence environmental assessment for hazard reduction. However, the most critical pieces of environmental legislation are the *Environmental Planning and Assessment Act 1979*, the *Native Vegetation Conservation Act 1997*, the *Threatened Species Conservation Act 1995*, and the *National Parks and Wildlife Act 1974*.

¹⁷ Interdepartmental Committee Policy Review Report for the Minister for Environment, *Environmental Assessments for Bush Fire Hazard Reduction Proposals*, Vol. 1 Main Report (October 2001).

There needs to be a clear and simple relationship between hazard reduction proposals and the environmental legislative regime that applies. Considering the importance that hazard reduction plays in protecting life and assets, environmental assessment should be cost neutral to private landholders.

In response to the IDC Report, the Association understands that the Government intends to introduce a streamlined environmental assessment process for hazard reduction. It will be important that this process does not replace one complex and costly process with another.

Recommendation:

That NSW Government implement within three months a streamlined process for environmental assessment for hazard reduction activities that is simple and cost-free for individual landholders.

3.2 Land Use Planning

Land use planning decisions, such as the creation of new National Parks, have significant consequences for bush fire prevention and suppression activities. Essential hazard reduction activities in land managed by NPWS continue to decline despite increases in areas classified as National Parks. As already highlighted, recent hazard reduction activity levels vary greatly between NPWS and State Forests.

No further National Parks should be declared until existing parks are appropriately managed in regard to bush fire prevention and hazard reduction. The need to protect life and property, in conjunction with preserving the environment, requires much greater recognition.

Recommendation:

That no further National Parks be declared until existing parks are appropriately managed in regard to bush fire prevention and hazard reduction.

The establishment of fire breaks or buffer zones around all parkland and private farm land is required to protect farm families and rural communities. NPWS would be responsible to ensure the ongoing maintenance of the fire break.

The width of these fire breaks should be appropriate to maximise the ability to contain a fire within National Park boundaries. For example, in heavily timbered country, fire breaks should be at least as wide as the height of trees on the boundary.

Recommendation:

That prior to the next fire season (2001/02) an appropriate fire break be established at and within the boundary of all Crown Lands to ensure private property is protected from wildfire emanating from National Parks, State Forests and other Crown Lands.

3.3 Disaster Planning by Local Government

There is a need to draw up a disaster plan for any sort of emergency so that local people know where it is they can go when a disaster occurs. For example, in the recent fires, residents in Camden arrived to find that the local high school was closed to them.

Timely information is essential for people in the potential path of the fire and for those with resources to assist with the control of the fire. Accurate information to local radio stations to broadcast during a fire or other emergency must be implemented as a matter of the highest priority during any danger time. A dedicated “disaster information radio band” on AM radio could be established.

During an emergency, the Association believes there should be the use of a mobile control centre in the direct area local to the emergency, rather than be located at some distance away. Reference was drawn by Association members to the purchase in 1994 of two communications buses at a cost of \$400,000 each, purchased from money raised in the Bush Fire Fund, and whether they were operational during the Christmas fires? The Association on behalf of its members will seek clarification from the Rural Fire Service on this issue.

4. The adequacy of equipment available to, and training of, Rural Fire Brigades

The Association considers that the recent bushfires have highlighted there are inadequacies with the provision of available fire fighting resources and equipment. This particularly relates to an uneven distribution of available resources and equipment to rural brigade/volunteer units, which unfortunately impacts at critical times.

4.1 Equipment

The NSW Farmers' Association received many comments from its membership in regard to equipment, training, and associated issues. The key points from members are summarised below:

- Some areas reported being well equipped while others were left to cope “making do”, with ineffectual equipment and aged vehicles. During the recent bushfires, rural volunteers/brigades operated without back up crews due to other local brigades being called away to attend the metropolitan fire scene, which depleted resources available to fight local fires.
- Comments indicated there are some rural brigades with their equipment adequate to meet the conditions, expressing confidence in the supply of heavy machinery and water supply trucks and the tremendous assistance from local councils, who worked non-stop during the main danger period. Yet others indicated there was little provision for bulldozers and that long delays were experienced with overdue resources arriving after being required, and therefore, causing containment lines to be initiated too late.
- Member's comments indicated that neither the local brigade, nor the Sydney Catchment Authority or NPWS were adequately equipped, given the size of bushland in their area. Some areas have totally inadequate fire fighting resources and rely on nearby, and even interstate resources, to come to their aid.

4.1.1 Communications Equipment & Issues

- Members urged that communications between NSW Police, RFS and NSW Fire Brigades be upgraded to enhance the level of responsiveness and cooperation in emergency situations.
- Outside management should not be unduly imposed in an adhoc manner on local fire management structures, with locals to be assisted not displaced. By recognising that local leadership is a crucial element to a successful volunteer organisation, it would be consistent to retain local accountability and respect for local leadership.
- Maps – To achieve uniformity and standardisation, it is suggested that all brigade maps be provided on A4 size paper, as occurs in Victoria and SA.
- Mobile phones – Most remote and forested areas have limited or no available mobile phone access and must not be relied upon.

- UHF radio - To tackle the difficulty and poor radio communications experienced by fire fighters the supply of UHF CBs is recommended by volunteers.
- With the increased participation of aircraft, UHF ground-to-air radios are considered essential together with vehicle recognition "on the roof" for improved identification from the air.
- That Global Positioning System (GPS) units be made available as a safety measure, to provide assistance in identifying the location of firefighters through smoke.

4.1.2 Vehicles

- Some rural units labour under the service of tired fleets in need of replacement and this reinforces the major difference between equipment available in the Blue Mountains/Sydney area and equipment available west of the Sydney Basin. For example, ex-army trucks are being used with an average age of 35 years old. These trucks have been purchased privately over the years and pose continual problems in up-keep. However, being able to fund appropriate replacement vehicles is coupled with the very real fear that the more modern trucks are not any more efficient and do not suit the rural and remote terrain conditions. Also, volunteer fire fighters are very concerned with the belief that the provision of modern trucks to brigades reduces the need for as many vehicles.
- An equipment issue for the Western Division is that the trucks do not perform well in loose sand, e.g. Boree. The suitability of fitting "super single" tyres on these trucks should be investigated. It would make them considerably more useful in sandy conditions.
- The storage of equipment in a depot up to 200km away renders it useless when an emergency strikes. The majority of rural crews west of the Tableland require quick action, lightweight equipment that can be loaded onto a 4WD utility, with trailers that can be left full of water ready for use. The trailers are now being withdrawn from use. The design of slip on units are considered to be over-engineered as they only carry 400 litres of water and require a forklift or similar to load.
- The process of replacing and purchasing firefighting vehicles needs flexibility, to ensure that replacement vehicles are fit for purpose, ie. Large tankers may be inappropriate for fires in rugged terrain.

Recommendation:

That the design of RFS vehicles be made practical for the work required of them.

4.1.3 Infrastructure

- Fire Trails - Existing fire trail infrastructure is currently deteriorating and is in need of urgent maintenance. Fire trails, reported to be blocked with rocks and trees to prevent trespassing and access by 4WD vehicles, were reported to have hindered fire fighters. Members in particular highlighted the deterioration of some fire trails now managed by NPWS, which were previously adequately maintained by State Forests. As a consequence, NPWS had trouble, for instance, quickly moving heavy equipment to the recent south coast fires, thereby hindering containment. Although there is a need to restrict access to trespassers, surely this is secondary to adequate access and rapid response to fire outbreaks.

A committed effort to ensure that fire trails are maintained throughout Crown land will promote the rapid intervention and access for the containment and extinguishment of future fires. Priority could be given to those isolated communities and areas boarded by Crown lands.

- Accommodation Alternative for Firefighters - To save time for firefighters shuffling backwards and forwards to accommodation, the use of a campsite by a mobile trailer (10km to fire ground) is suggested, with a sign in/sign out register.

4.2 The adequacy of the level of training for volunteer firefighters to adequately participate in fire fighting events.

4.2.1 Participation

- It is well recognised that formal training is available for rural volunteers and that it is coupled successfully with the farmer's skills in fighting grass and forest fires often handed down from the older generation. Yet it is difficult for farmers who are rural volunteers to attend training due the demands of farm management and farm-based training (e.g. chemical training, grazing management, computer/IT). Due to the level of training required by the Rural Fire Service the participation rate has dropped and there are fewer experienced people attending with any significant knowledge of the fire trails in the area.
- Distances to training create a major obstacle for farmers and would be more effective and participation improved, if training modules were to be provided locally. Many farmers also find it difficult to spare the time necessary to travel to weekend (2 day) courses.
- A predominant complaint exists for rural volunteers that there is not enough time for fire training in hilly country, as compared to training on flat plains. Some major problems exist for rural volunteers called to assist in the handling of building and/or chemical fires, with training in this area inadequate.
- The Association recommends that the dissemination of information should be improved from the RFS to rural volunteers so that they may be kept abreast of issues and policy, and provided access to training modules which feature suitable measures for varied terrain and conditions.

Recommendation:

That RFS training for volunteers be provided locally to improve rates of attendance.

That RFS volunteers have access to training modules which feature suitable measures for varied terrain and conditions.

5. The use of aircraft in firefighting

The key issues received from members on the use of aircraft in firefighting are summarised below:

- The use of aircraft in the recent fires has demonstrated their potential to significantly assist the firefighting effort. However, the very high cost of such equipment must be kept in mind particularly in context of the level of funds being spent on ground based equipment. It must also be considered that aerial suppression cannot be applied effectively in all areas of the State where totally different geographic and logistical conditions apply.
- The targeted placement of aircraft firefighting is seen as critical to its effectiveness, with water bombing needing to be applied strategically to ensure a reliable co-ordination of water drops with firefighters on the ground to avoid fatalities, damage to vegetation and infrastructure.
- Problems arise in regard to aircraft having to use major airfields verses local airstrips. There are many good strips for smaller planes and they could be utilised more, saving vital response time. The turn around time of fixed wing planes can make them very ineffective.
- A register of landing strips for small planes could be established so that as soon as an approved operator is assigned, an approved air strip can be located.
- Utilising local pilots with local knowledge is a must where ever possible.
- Large Australian military aircraft capable of carrying 12 tonne are not being utilised in firefighting, with several aircraft stationed at Nowra. It was suggested that some military aircraft be equipped to be used as water bombing craft when required.

6. The adequacy of changes made to bush fire planning and fighting, development planning and other relevant matters since the 1994 bushfires.

There have been positive changes made to bush fire planning and fighting since the 1994 fires that undoubtedly would have assisted in the recent fires. However, the lack of hazard reduction activities since this time on land managed by public authorities has been very inadequate.

This is particularly concerning considering that lack of hazard reduction activity was found to be principally responsible for the intensity of the uncontrollable fires in 1994. Also, independent reports since that time continue to highlight the need for more effective and periodic hazard reduction activities. The lack of hazard reduction activities on publicly managed land has potentially devastating ramifications for many farm families, particularly those who closely border these areas.

The Association has explored the concerns in relation to hazard reduction in sections one and three of this paper.

Conclusion

Effective implementation of bush fire prevention and suppression activities are essential to protecting human life, livestock, property and assets, in conjunction with ensuring sound environmental outcomes.

The recent Christmas 2001 bush fires had a devastating effect on many farm families, households and small businesses. The fires highlighted an urgent need to assess whether the implementation of current bush fire management activities, in particular hazard reduction work, are adequate to provide as higher level of protection as possible to our communities and landholders.

The Association remains concerned that recommendations from previous Inquiries have not resulted in increased hazard reduction activities taking place to help prevent the devastation as witnessed in the recent bush fires.

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