



SUBMISSION TO THE NATIONAL BUSHFIRE INQUIRY

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EXECUTIVE SUMMARY

Through this submission, NSW Farmers' Association has put forward the concerns of its membership that a key element in reducing the severity and risk of bushfires is adequate hazard reduction burning (HRB).

The NSW Farmers' Association argues that hazard reduction burning (HRB) is an underutilised tool in landscape management across the eastern seaboard of Australia. This failure to make use of hazard reduction burning guided by research, traditional knowledge and pragmatism increases the risk of further personal tragedy and public anxiety, resulting from bushfires.

The Association argues that public confidence and local awareness about efforts to reduce bushfire risk through hazard reduction activities would be improved through a readily available public register that provided annual assessments of fuel loads, hazard reduction activities and bushfire risk assessments for public lands in NSW. To ensure independence, the register should be established through an independent commission reporting to an appropriate Minister. The Association urges the inquiry to further examine the development of such a public register.

The Association believes that management of fuel loads should be considered. It is as a cost effective tool for reducing bushfire risk across broad areas of regional Australia and as a tool for vegetation and conservation management within that framework that the Association calls for an expansion of broadscale hazard reduction burning.

The Association feels a failure to listen to local knowledge and give local people control over fire fighting efforts often prolongs suppression time and results in missed opportunities for control, opportunities that only local knowledge can provide.

The Association calls for a greater use of fire breaks (or buffer zones) at and within the boundary of all Crown Lands, combined with a system of well maintained fire trails, as a way of augmenting hazard reduction burning and provide access for suppression, respectively.

In NSW, since the election of the Carr Government in 1995, the area of public land now being managed for conservation has increase by 42%. It is noted that the total resources allocated to management of this land has also significantly increased. The Association acknowledges some effort to reduce fire risk has been made within the limits of resources. It argues that the change in land tenure has brought a change in management approach. NSW Farmers' Association believes that this change in land management has resulted in a larger area of bushland being

managed for the suppression of bushfires (at the site of strategic assets) rather than for an overall reduction in fuel loads through hazard reduction burning (HRB).

Summary of Recommendations

- The NSW Farmers' Association is calling for an expansion of broad scale, mosaic, burning regimes across the landscape, to achieve the reduction of fuel load across broad areas, over a regular cycle as a cost effective tool for reducing the severity and spread of bushfires.
- And to further reduce the risk to people, private property and stock a policy to implement fire breaks (or buffer zones) be established at and within the boundary of all Crown Lands and an accountable improvement in the levels of maintenance of strategic fire trials be made.
- The Association calls for the establishment of a readily available public register to provide annual assessments of fuel loads, hazard reduction activities and bushfire risk assessments over public lands in NSW. The Association believes that the register should be established through an independent commission reporting to an appropriate Minister.
- The Association believes that situation reports, arising from all bushfires incidents in Crown Lands be provided regularly and be broadened to include all agencies, and that standard terminology be adopted by all agencies involved in fighting fires.
- The Association seeks that a coordinated approach be developed for communications across agencies for fire events.
- The Association is supportive of a New South Wales Rural Fire Service review, currently underway, of Zone Radio Communications. The review is to examine the strategic relevance and cost of such an approach.
- The Association is supportive of accountable improvement in the levels of maintenance of strategic fire trials, recognising the necessary compromise between access and the need to exclude undesirable elements.
- The Association also strongly supports the development of a system of buffers around Crown Land that hold a significant risk of bushfire.
- The Association supports that hazard reduction approval not be required for routine agricultural purposes, such as stubble burning, burning diseased crops, orchard pruning and grazing.

- The Association supports the development of a formal structure to ensure local knowledge takes precedent in fire fighting operations.
- The Association supports the use of hazard reduction burning as a multi-functional tool in landscape management, meeting hazard reduction, conservation and land management needs.

INTRODUCTION

The NSW Farmers' Association is the premier lobbying organization for over 13,000 farmers in NSW. As the peak representative group for the custodians of approximately 70% of the land area of NSW - the NSW Farmers' Association represents the majority of professional broad acre farming enterprises in NSW. The Association wishes to make a submission because of the continued frustration that Association members have experienced during past fire seasons. In addition, the concerns of members as to the impact current levels of hazard reduction burning have had/may have on owners of agriculturally productive land and biodiversity in crown estates. Other concerns include the effectiveness of fire suppression activities, the coordination of fire management resources and the involvement of landholders in fire management.

In this submission comments from members across a range of issues relating to this Inquiry can be found in Appendices A-E. The comments are listed under subject headings. These include: Hazard Reduction, Communication, Equipment, Fire Control Officer / Operational and Fire Trails.

RESPONSES TO THE TERM OF REFERENCE

TOR a Risk factors contributing to bushfires, including deliberate fire lighting;

The Association makes no comment on the actual causes of any particular fire as it has neither the expertise nor the information to make definitive comments. The Association refers to the inquiry a submission provided to an ACT Coronial Inquiry into the 2003 bushfires.

Deliberate lighting of fires

The Association although recognising that many fires are deliberately lit does not have the resources to make definitive comments on the risk deliberate fire lighting poses to the community.

Climatic conditions

It is recognised by NSW Farmers' Association that extreme climatic conditions leading into the past summer's fire season greatly added to the risk of severe bushfire across a wide area and a variety of fuel types. A detailed analysis of the contribution the drought made to the eventual size and scope of the fires is beyond the Association's resources.

TOR b Bushfire mitigation strategies in national parks, state forests, other Crown land, other open space areas adjacent to urban development and private property;

The NSW Farmers' Association has advocated, over at least the past decade or so, that the approach to hazard reduction activities by State Government agencies is becoming increasingly inadequate. Of particular concern to the Association's members is the decline in the level of hazard reduction burning in National Parks and Crown Reserves.

Although seemingly self evident, the severity of the impact of any natural disaster is greatest where the event is infrequent and the population impacted is under prepared¹. Both familiarity with fire and preparedness for it are improved by the regular use of fire as a land and risk management tool. This is most easily done through regular hazard reduction burning.

The Association argues that an expansion of regular hazard reductions burning would increase general community awareness and ultimately the collective experience of the population with respect to fire, both as a feature shaping the landscape and as a tool for reducing general fire hazards.

Hazard reduction using prescribed burning, referred to hereafter as hazard reduction burning (HRB), involves setting fire to areas of land in a predetermined manner at a planned intensity and time, typically during cooler months of the year². Hazard reduction burns aim to remove fine dry fuels, thereby reducing the total amount of fuel available to bushfires originating during summer months.

A major finding of the NSW Coronial Inquiry into the fires from August 1994 to February 1996, was that hazard reduction burning activities had not been adequate in many fire prone areas and consequently this failure 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 CALM Western Australia (1994) Report to the Hon Kevin J Minson MLA Minister for the Environment WA from the Fire Review Panel at 1.

² McCarthy, J. G and Tolhurst, K.G. (2001) Effectiveness of broadscale fuel reduction burning in assisting with wildfire control in parks and forests in Victoria. Research report No. 51, Natural Resources and Environment.

“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.”³

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.⁴

Hazard Reduction Burning

During the bush fires of 2001-2002, available figures indicated 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. Furthermore, the average area of prescribed or hazard reduction burning by NPWS over the last 4 years is just 11,700 ha per annum.⁵

A comparison of hazard reduction activities, undertaken by the two largest public land managers, NSWNPWS and State Forests, reveals a marked 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.⁶

It is argued by some that all that can be done is being done to ensure hazard reduction burnings. The Director-General of NSWNPWS stated Select Committee Inquiry *“we would always like to do more than the weather lets us get done in any one year”⁷*.

This is a familiar response, regularly put forward to explain away declining levels of hazard reduction by NSWNPWS. This is evident from the Director-Generals comment during the Joint Select Committee on Bushfires, June 2002 where in answer to the question; do you cavil (meaning trivial or annoying objection) with the amount of hazard reduction activities over this period? (Referring to the last few years);

³ NSW Coroner, *NSW Bushfire Inquiry*, Findings, Volume 4, at 362.

⁴ NSW Auditor-General, Performance Audit Report, *Rural Fire Service: The Coordination of Bushfire Fighting Activities*, December 1998 at 66.

⁵ Media Release, The Hon George Souris MP, Leader of the NSW National Party, 11 January 2002.

⁶ Bush Fire Co-ordinating Committee, Agency Fuel Reduction Report – Year 2000/2001.

⁷ Report of Proceedings Before Joint Select Committee on Bushfire, of the NSW Parliament, Sydney, Monday 3rd June 2002.

“In every year since I have been the Director –General of NPWS we have only managed to do roughly half or less of what we have had scheduled and would have like to have achieved”⁸

It needs to be answered; if climatic condition, logistics and resources prevent many of the planned hazard reductions from taking place, for a succession of seasons, as indicated, alternative measures need to be implemented to reduce the risk to life, property, live stock, crops and pastures from possible summer bushfires.

Importantly, 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.

Further trends in hazard reduction burning

The NSW Farmers’ Association argues that key influences over the area of land under regular hazard reduction burning is land tenure and regulation governing hazard reductions activities on private lands. The transfer of management jurisdiction from a production based systems, under State Forest of NSW, to one with a conservation aim, under the National Parks and Wildlife Service, has brought with it differences in policies and practices – the role of fire as a management tool has changed respectively.

In NSW, since the election of the Carr Government in 1995, the area of land being managed for conservation has increase by 42%. It is noted that the total resources allocated to the management of Crown Land has also significantly increased. The Association is not arguing that efforts to manage fire risk have not been made, rather it is stating that with the change in land tenure comes a change in management approaches. NSW Farmers’ Association argues that this change in land use aims has seen a larger area of bushland managed for the suppression of bushfires, at the site of strategic assets, rather than for an overall reduction in fuel loads through hazard reduction burning (HRB).

Under a production oriented system, low intensity firing or hazard reduction is used as an asset and landscape management tool - it is seen as a cost effective tool to reduce bushfire risk and for silviculture. In contrast, management practices aiming for a conservation outcome appear to see fire as an external, although natural, phenomena that can be, through a strategic approach, suppressed, if required. This is demonstrated in NSWNPWS policy position .

” best used in a highly strategic manner to reduce fuels immediately adjacent to buildings and structures at the interface with bushland and at carefully targeted points in the

⁸ Report of Proceedings Before Joint Select Committee on Bushfire, of the NSW Parliament, Sydney, Monday 3rd June 2002.

*landscape where fuel reduction limitation may facilitate effective suppression of bushfires*⁹

The shift away from broad scale HRB towards a strategic approach may have application at the urban-bushland interface; however it is less effective in non-urban areas. It is the Association's belief that this has led to an increased risk of more severe bushfire events in regional NSW, particularly under highly adverse climatic conditions.

Additional influences on hazard reduction burning result from the meeting of expanding urban development and existing Crown Land. This gives rise to:

- an increased risk of more significant damages bill if an uncontrolled bushfire develops as a result of hazard reduction actions;
- an increase in the damages bill when suppression of bushfire fails;
- greater perimeter requiring suppression actions and hazard reduction management; and
- air pollution regulations restricting burning activities.

The greater number of high value assets in a close proximity to Crown Land increases the chance of an adverse fire event resulting in significant assets damage (Five damaged houses on the urban fringe is more costly both financial and politically than a destroyed length of fence line, pasture, crop and stock). It can be argued that the policy response to this threat has been the implementation of a strategic approach to hazard reduction backed up by a significant increase in suppression capability around the urban fringe. This manifests as the strategic or zoning approach¹⁰.

NSW Farmers' Association acknowledges improvements and the saving of life this approach seems to have delivered, in particular in the Sydney basin, but would argue that achieving these gains at the expense of broad scale hazard reductions in non-urban Australia represents a policy failure. Again this could be remedied though the expansion of broadscale hazard reduction in regional areas as a compliment to the strategic approach closer to the urban areas.

Inadequate hazard reduction burning and public confidence in fire management actions

Inadequate levels of hazard reduction burning of areas of Crown Land in NSW have been documented. Following the 1993/1994 fires, the NSW Legislative Assembly Select Committee on Bushfires was established and subsequently

⁹ Submission by NSW National Parks and Wildlife to a Joint Select Committee of the NSW Parliament looking into the 2001-2002 Bushfires. April 2002.

¹⁰ Submission by NSW National Parks and Wildlife to a Joint Select Committee of the NSW Parliament looking into the 2001-2002 Bushfires. April 2002.

recommended that all public authorities accept the responsibility of conducting adequate hazard reduction burning and provide and maintain fire trails on their land.¹¹

The definition of bush fire hazard reduction activities within the NSW *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.*

Anecdotal evidence gathered from the Association's members confirms the high level of concern landholders have about the level of hazard reduction burning activities across Crown Land, in particular hazard reduction burning in the areas affected by this summer's fires. Responses to a questionnaire about where and when the last hazard reduction burning activity occurred included;

- " At least 20 years ago in Clive State Forest and no fire breaks graded since 1960s. If hazard reduction had been carried out, fire would have been a lot easier to extinguish ".*
- " Never in area adjoining Milmill and property even though it was requested on a regular basis over 20 years ".*
- " 3 years ago, 100ha of hazard reduction. Cannot remember any hazard reduction in our end of the Kosciusko National Park ".*
- " Over 50 years ago - NPWS Scone. Complaints from city-based hobby farmers stopped hazard reduction being undertaken ".*

*Names and addresses are withheld for privacy reasons, although contact can be made through NSW Farmers' Association.

The Association argues that public confidence and local awareness about efforts to reduce bushfire risk through hazard reduction activities would be improved through a readily available public register that provided annual assessments of fuel loads, hazard reduction activities and bushfire risk assessments for public lands in NSW. To ensure independence, the register should be established through an independent commission reporting to an appropriate Minister. The Association urges the inquiry to further examine the development of such a public register.

Considerable evidence exists detailing the effectiveness of hazard reduction burning in reducing bushfire intensity and spread over a number of years following the hazard reduction burn. An extensive study of the effectiveness of hazard reduction burning across Victorian Forests reported that while fire ground

¹¹ NSW Legislative Assembly, *Report of the Select Committee on Bushfires*, November 1994.

level fuels may reach pre hazard reduction levels 3- 5 years after a burn, when elevated shrub and bark fuels were also burnt, the fuel loads were reduced for significantly longer periods, up to 25 years¹². Evidence from Association members indicates that levels of bark and shrub fuels are considerable factors in generating fierce bushfires from lower intensity fires which could be managed through hazard reduction.

Recommendations

The NSW Farmers' Association is calling for an expansion of broad scale, mosaic, burning regimes, across the landscape, to achieve the reduction of fuel load across broad areas, over a regular cycle as a cost effective tool for reducing the severity and spread of bushfire.

And to further reduce the risk to people, private property and stock, a policy to implement fire breaks (or buffer zones) be established at and within the boundary of all Crown Lands and an accountable improvement in the levels of maintenance of strategic fire trials be made.

The Association calls for the establishment of a readily available public register to provided annual assessments of fuel loads, hazard reduction activities and bushfire risk assessments over public lands in NSW. The Association believes that the register should be established through an independent commission reporting to an appropriate Minister.

¹² Tolhurst, K.G. *et.al.* (1992) Low Intensity fire behaviour and fuel dynamic in dry sclerophyll Forest. Research Report No 349. Forest Research, Dept.. Conservation and Natural Resources, Victoria 40pp

TOR c The impacts of bushfires on the environment, human life, property and the economy;

The impact of bushfires on human life and property

It is clear to the Association from the feedback provided by members that bushfires have a significant impact on the economy, rural properties and human life. While the Association is not in a position to definitely provide estimates of the total cost, in particular the value of human life, it argues that all efforts must be made to safe guard human life and property from the ravages of bushfires. The Association is firmly of the belief that the most effective way to manage the impact of bushfires is to reduce the risk of fires occurring, by deploying high levels of hazard reduction across public land and by empowering local people in the event of a bushfire.

Environmental impact of bushfires

The Association does not have sufficient resources to fully assess the environmental impact of bushfires, although observation from members in the Brindabella area suggest that the environmental damage resulting from bushfires can be considerable.

For example, members report the lack of epicormic sprouting (shoots emerging from under the bark layer at times of stress or defoliation) in the majority of sprouting species, from the mid-slope, upper-slope and the ridge tops, across large areas of the Brindabella ranges. This suggests that the fires were of such an intensity that tree species normally adapted to fire were killed or damaged to such a degree as to delay their normal regeneration response. Clearly, what needs to be investigated is whether this is indeed the case and if the exclusion of fire (in the form of hazard reduction burning) from areas may have contributed to the intensity of the fire across large areas of the landscape.

Members report that in a number of areas significant soil erosion is occurring across burnt areas. As farmers, many members are very concerned that the amount of erosion, at levels that would be unacceptable to farmers, is regarded as natural and unavoidable by some public land management agencies.

TOR d The impacts of fire mitigation strategies, such as hazard reduction, on the environment, human life, property and the economy;

Environmental impact of hazard reduction

Fire has been a notable part of the Australian landscape from the first recorded observations of the continent. The explorer Charles Sturt introduced his book on vegetation stating “there is no part of the world in which fires create such havoc as in New South Wales, and indeed Australia generally”¹³. From the earliest European settlement, the management of fire and the use of fire across the landscape has been a factor shaping the character of the landscape and indigenous and new inhabitants. The removal of regular firing from the landscape removes a key driving force, up until the last 150 years, shaping the nature of the native vegetation of Australia. Anecdotal evidence put forward by the members testifies to changes in the vegetation structure and floristic composition through the exclusion of regular low to medium intensities fires, see Appendix F.

The current debate over the environmental impacts of hazard reduction appears, when not based around ideology, to have degenerated into an argument over degrees. Few would disagree that much of Australia’s native vegetation is tolerant of, if not dependent upon, a range of fire regimes. Few would disagree that past fire regimes were a substantial element in the composition of the many ecosystems and their attendant biodiversity¹⁴. Furthermore, few would disagree that fire at a broader scale acted as a major force in shaping the vegetation structure across much of the landscape¹⁵. Rather the argument seems stuck over how best to apply fire across the landscape and whether we can apply fire at the broadscale level when not enough is known about particular species and the way they interact with fire. Laudable as this may be, unfortunately considering this question in isolation leads to perverse conclusions. The question should be “which burning regimes can vegetation communities withstand and remain viable in the long-term”. Basing vegetation management strategies on “minimising the impact hazard reduction burning has on a community or population” ignores basic evolutionary mechanisms. Over time, such strategies will lead to the proportion of that population which has adapted to bushfires, diminishing. The likely outcome is a population or vegetation community less tolerant of the impact of bushfires.

¹³ The Australian Landscape – Observation of Explorers and Early Settlers , Ryan, D.G, Ryan, J.R and Starr, B.J.: no date, Murrumbidgee Catchment Management Committee, NSW

¹⁴ Keith *et al.*. (2002:) Fire management and biodiversity conservation: key approaches and principals; in Flammable Australia ed: Bradstock.R.A, Williams, J.E. and Gill, M.A.: Cambridge University Press.

¹⁵ Gill *et.al.*, (2002) Fire regimes and biodiversity: legacy and vision: in Flammable Australia ed: Bradstock.R.A, Williams, J.E. and Gill, M.A.: Cambridge University Press.

An important note to any consideration of fire regime is the spatial and temporal heterogeneity in the character of fire within the landscape, across different topographic, climatic, vegetation and land use gradients. The NSW Farmers' Association recognises the complex nature of fire management and the debate within the scientific and general community as to appropriate levels of hazard reduction burns. It also accepts that areas exist in which hazard reduction burns, through the use of fire is not possible or appropriate for a number of reasons including; conservation, pollution levels, occupational health and safety needs, and fire risk.

Hazard reduction burning is used as a cost effective tool for reducing bushfire risk across broad areas of non-urban Australia as well as a tool for vegetation and conservation management within the landscape. For these reasons the Association believes an expansion of broadscale hazard reduction burning should be implemented as a fundamental component of the normal management of crown land in Australia. The Association puts forward that hazard reduction burning should be used as a multi-functional tool in landscape management.

Recommendation

The Association supports the use of hazard reduction burning as a multi-functional tool in landscape management, meeting hazard reduction, conservation and land management needs.

TOR e The adequacy of infrastructure and human resources for fire mitigation purposes;

Poor fire trail maintenance and construction

The Association's membership reported a number of cases where fire trail access was limited or poor due to inadequate maintenance and/or poor trail construction.

"NPWS have few decent breaks around its boundary and in this situation fight fires from an adjacent private property" (member's comment, Scone NSW, 2003), rather than from a fire trail or fire break inside the park. The result is a much greater impact on the adjoining private property assets such as fences, pastures and or crops.

Primary producers, particularly those who adjoin or closely neighbour National Parks, State Forests or vacant Crown Land, have a legitimate interest to ensure that fire trail maintenance, clearing and where necessary, buffer zones are established over publicly managed land.

A solution that must be investigated is the greater use of fire breaks (or buffer zones) at and within the boundary of all Crown Lands combined with a system of well maintained fire trails to augment hazard reduction burning and provide access for suppression. This approach would provide infrastructure and management alternatives that could reduce the risk of bushfire impacting on private property adjoining Crown lands. Secondly, it would prevent fire originating on private land from entering the Crown Estate.

Recommendation

The Association is supportive of accountable improvement in the levels of maintenance of strategic fire trails, recognising the necessary compromise between access and the need to exclude undesirable elements.

The Association also strongly supports the development of a system of buffers around Crown land that hold a significant risk of bushfire.

A number of policy options exist to mitigate the risk of future damaging conflagrations. NSW Farmers' Association wishes to bring these options to the attention of the Inquiry. A key policy initiative is to allow individual landholder the ability to easily and flexibly undertake hazard reduction activities. This is explored below.

Environmental policies/legislation and private hazard reduction burning

The NSW Farmers' Association has long advocated that complex and bureaucratic environmental legislation is preventing effective hazard reduction burning from occurring. The Association's concerns on the issue have, in part, been addressed through policy changes being implemented in NSW. It is hoped a description of the process will highlight the issue and some potential solutions for other jurisdictions.

As a result of growing concerns amongst Association members about the complexity of regulations implemented in NSW to regulate HRB, the Association campaigned very strongly on the need to simplify HRB regulations during the 1999 NSW elections. In response, the NSW Government established an Inter-Departmental Committee (IDC) to review the regulatory arrangement, and to determine the extent to which they were hindering appropriate HRB.

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."¹⁶

Given that these comments were written by the governments own bureaucrats, it is clear they provide a strong and unambiguous critique of policies in place at that time. Additionally, in 1998 the NSW 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 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..."*¹⁷

The Rural Fire Service Association has also raised significant concerns in regard to the lack of hazard reduction burning 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."*¹⁸

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.

The Current System

NSW Farmers' Association recognises that some progress has been made with regard to the streamlining of environmental approvals for hazard reduction burns with the introduction of the *NSW Rural Fires and Environmental Assessment Legislation Amendment Bill 2002*.

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).

¹⁷ NSW Auditor-General, Performance Audit Report, *Rural Fire Service: The Coordination of Bushfire Fighting Activities*, December 1998.

¹⁸ Luscombe, D. (President of Rural Fire Service Association) in *Bushfire Bulletin*, Vol.23 No.3, 2001.

The primary objectives of the Bill were to amend the *Rural Fires Act 1997* and the *Environmental Planning and Assessment Act 1979* to:

- allow for a streamlined environmental approach to hazard reduction; and
- provide the NSW Rural Fire Service (RFS) with more authority in the residential planning process, for new developments in high-risk bushfire areas.

The complex and bureaucratic environmental approval process (ie. using Part 5 of the EP&A Act, or the Threatened Species Act, etc) has been streamlined to provide a one-stop shop (via NSW RFS) for landholders to get hazard reduction burns approvals. NSW RFS may issue a bushfire hazard reduction certificate in place of all the other onerous approvals, consents or authorities that may still be required – an excellent outcome and one that the Association has long advocated. The certificate issued is free of charge and issued for a 12 month period. It is disappointing that the new approach is only to be applied to Asset Protection Zones and Strategic Fire Advantage Zones and not to the broader Land Management Zones.

It is very important to emphasise that hazard reduction approval under this new system will not be required for routine agricultural purposes, such as stubble burning, burning diseased crops, orchard pruning and grazing. Only one hazard reduction application will need to be approved under the new system, regardless of multiple land tenures – so a public land manager can undertake the environmental assessment for land under their management and for adjoining private land, if the private landholder agrees.

The Association continues to be involved in the development of this code, and will ensure that one complex process is not simply replaced with another. This policy direction, that the NSW Farmers' Association has played a major role in achieving, must be practicable.

TOR f The use of existing fire fighting resources, including an examination of the efficiency of resource use and co-operation between agencies and between jurisdictions;

A key complaint put to the Association for inclusion in this submission and submissions in the past is the lack of common effective resource sharing between agencies and jurisdictions. The key issues of concern are;

- ambiguities between agencies as to which are responsible for a fire or for hazard reduction burnings (see member comments below in paragraph following the bullet points).
- within agency confusion as to the zone or regions responsible. Comments by a Hunter valley member testify to this issue;
 “Ownership of fire problems, my property is located on boundary of 2 fire zones (Singleton & Crawley) creating problems”, May 2003.
- inability to gain clear permission for private actions to prevent fire spread from any agency involved in the fireground management and;
- poor recognition and use of local knowledge to set suppression priorities, back burns and the establishment of emergency access tracks.

The NSW Farmers’ Association would also like to put to the inquiry its support and thanks to the many RFS volunteers who gave their all in efforts to fight the many fires across NSW this last summer. The comments under this term of reference seek to highlight systematic failures of interagency interaction rather than make a criticism of the effort and support given by volunteers.

The following comments by a member typify the concerns over systematic failures during this summer’s fire.

“Fire started in the National Park adjoining my property Milmilland. Conflict between RFS and NPWS as to who was in charge. Day 2, fire was brought under control on private land but was still burning strongly in NPWS country. A private request to grade a fire break established around the boundary some years earlier was ignored and consequently a wind change brought the fire back onto private property and is when the bulk of the damage was done. Quote to NPWS for assistance to repair fencing was sent on 15 Dec 2002 with no answer or assessor to this time. No explanation (from NPWS or RFS) as to why the fire breaks were not utilised. A very rushed debriefing session was held, with affected landholders not informed of the meeting.”

Recommendation

The Association supports actions to remove ambiguities between agencies and within regions over responsibilities for fireground management.

Increased fire severity and risk of personal injury through poor communications

Reports from members indicate that communications on a fireground are fragmented. In most cases, there is no shared system of communication between New South Wales Rural Fire Service (RFS) and New South Wales National Parks and Wildlife Service (NSWNPWS) on the fireground; nor does an interagency communication system exist for a rural fire event. Members believed that most problems occurring in fire suppression can be considered to be as a direct result of an inability to contact individuals when the need arises.

An array of bushfire communication issues have been raised by members, such as:

- Different terminology/language exists across the various agencies, this hampers recognition of information especially during crisis.
- No system of communication between air support and ground crews. On-ground crews were not notified early enough of water bombing and were too close to water bombing. In addition, a report was provided of aerial incendiary from helicopters dropped over crews (Clarence Valley).
- Poor communications between operations and fire fighting personnel. A lot of outside personnel working in control centre did not have knowledge about where to contact local brigades/crews.
- Reports of messages/requests not being passed onto the next shift of fire-fighters, with advice not received when requested equipment has arrived.
- Lack of communication down the chain.
- Debriefing consultations after a fire event have been replaced by form-filling. It is necessary that all operations must have a critical analysis of resource effectiveness and efficiency.

Recommendations

The Association believes that situation reports, arising from all bushfires incidents in Crown Lands be provided regularly and be broadened to include all agencies, and that standard terminology be adopted by all agencies involved in fighting fires.

The Association seeks that a coordinated approach be developed for communication across agencies for fire events.

The Association is supportive of a NSW Rural Fire Service review, currently underway, of Zone Radio Communications. The review is to examine the strategic relevance and cost of such an approach.

Consultation with Landholders

The NSW Farmers' Association is dismayed at the continued reports from its members of a lack of consultation with local officers, landholders and/or the ignoring of advice on local conditions. The Association strongly believes that consultation should occur to decide the management of a fireground and should be allocated to personnel with relevant experience and knowledge of local fire barrier features.

- It was reported that a farmer was not notified of fires on his boundary and therefore did not have the opportunity to move stock which therefore perished. (Nundle)
- It was reported that against strong local opposition, a NPWS backburn was undertaken in extremely risky conditions which resulted in a farmer's internal and boundary fencing being badly damaged or obliterated. Locals were seeking to wait and conduct the backburn under more favourable weather conditions. (Jindabyne)
- It was reported that constant fighting between RFS and NPWS occurred, with both flatly refusing to listen to local knowledge and over-rode property owners. (Hunter Springs).
- Local landholders asked and were refused NPWS permission to backburn a perimeter of the National Park to create a fire break to stop the progress of fire. NPWS were relying on the road to stop the fire. The fires came out of the National Park and leapt over roads and devastated large areas of Wellingrove-Kingsland. (Glen Innes)

It is the Association's understanding that some National Parks under the NSWNPWS did not accept *Rural Fires Act 1997* changes, so some have clauses within their Operational Plans which may give NSWNPWS responsibility for fire events above the local Fire Control Officer.

Recommendation

The Association supports that hazard reduction approval not be required for routine agricultural purposes, such as stubble burning, burning diseased crops, orchard pruning and grazing.

The Association supports the development of a formal structure to ensure local

knowledge takes precedent in fire fighting operations.

CONCLUSION

Through this submission, NSW Farmers' Association has put forward a number of concerns, held by its membership, over the way bushfires are managed in NSW. It is the Association's opinion that a key element in reducing the severity and risk of bushfires is adequate hazard reduction burning (HRB). The Association argues that hazard reduction burning (HRB) is an underutilised tool in landscape management across the Eastern seaboard of Australia. In addition, the failure to make use of hazard reduction burning guided by research, traditional knowledge and pragmatism increases the risk of further personal tragedy and public anxiety, resulting from bushfires. Furthermore, inadequate burning of the landscape, particularly in a mosaic pattern, is putting at risk the States' biological heritage.

In line with this the Association argues that hazard reduction burning is a cost effective tool for reducing the bushfire risk across regional NSW, as it is an essential part of vegetation and conservation management .

The Association argues that the public confidence and awareness of efforts to reduce bushfire risk through hazard reduction activities would be improved through a readily available public register, which provided annual assessments of fuel loads, hazard reduction activities and the bushfire risk across public lands in NSW. To ensure independence the register should be established through an independent commission reporting to an appropriate Minister. The Association urges the inquiry to further examine the development of such a public register.

Secondly the Association argues a failure to heed local knowledge and give local people control over fire fighting efforts often prolongs suppression time and results in missed opportunities for fire control, opportunities that only local knowledge can provide. The Association strongly argues for the implementation of systems that facilitate the inclusion of local knowledge at all levels of fire decision making.

The Association calls for a greater use of fire breaks (or buffer zones) at and within the boundary of all Crown Lands, combined with a system of well maintained fire trails, as a way of augmenting hazard reduction burning and providing access for suppression.

The NSW Farmers' Association would also like to put to the inquiry its support and thanks to the many Rural Fire Service volunteers who give their all in efforts to fight the many fires across NSW.

APPENDIX A – Hazard Reduction

Town	Fire name	Fire location	Fire date	Where and when was the last time hazard reduction burning occurred?	Was this sufficient?
NORTH					
INVERELL	Stannifer Fire	Stannifer area	16-Dec-02	At least 20 yrs ago in Clive State Forest and no fire breaks graded since 1960s. If hazard reduction had been carried out, fire would have been a lot easier to extinguish.	OK 20 yrs ago but none since.
NEWTON BOYD	Guy Fawkes National Park		Feb-03	24 months ago. Guy Fawkes Nt Pk has burnt 10 times in past 15 years. Vigorous HR program has not stopped awful fires occurring.	Yes
MACKSVILLE			Oct-02	On-farm one a year in parts. None in State Forest land. None in surrounding area in over 20 years.	No, it is a failure in the thickest bush.
DAVIS CREEK	Scrumbe		4-Dec-02	Both private and public owned lands do very little hazard reduction	
NUNDLE	Ben Hall Gap - Gogs Top		4-Nov-02	Over 50 years ago - NPWS Scone. Complaints from city-based hobby farmers stopped hazard reduction being undertaken.	No - NPWS and city-based neighbours do not do hazard reduction.
MATHESON via GLEN INNES	Kings Plains National Park	Wellingrove-Kingsland		Supposed habitat of fauna and flora must not stop backburning or hazard reduction operations. Regular, light, hazard reduction would safeguard more fauna and flora than allowing a huge build up of fuel.	

CENTRAL

APPENDIX A – Hazard Reduction

Town	Fire name	Fire location	Fire date	Where and when was the last time hazard reduction burning occurred?	Was this sufficient?
TAMWORTH	Gulf Mountain		4-Nov-02	Do not know, but not in the last 3 years.	No. However hazard reduction on my property was responsible for stopping the spread of the fire.
via SCONE	Tubrabuca	Originated in Barrington Tops National Park	Nov-02	In some place, no one can recall hazard reduction ever being done.	No
HANGING ROCK	Gulf Mountain		4-Nov-02	1982 (in area where fire started). Some hazard reduction carried out on private property, some with high fuel load.	No
MURRURUNDI	Mt Helan		post Xmas 02		Never. No
HUNTER SPRINGS	Tubrabuca Fire	Scone	3-Nov-02	Never in area adjoining Milmilland property even though it was requested on a regular basis over 20 years.	No
DEEPWATER	Timbarra River	Washpool Tenterfield	10 Oct 02 - 30 Oct 02	60% 7 years 30% 10 years	
MATHESON	Nymbouda NPWS			Hazard reduction has been discouraged for the last 20 or so years	No
WELLINGROVE	Rockwood	Wellingrove	23-Oct-02	on TSR about 10 years about 50 acres	
TABULAM	Ewingar		23 Oct 02 - 26 Oct 02	15 years	Definitely not
Via BRUSHROVE	Morora State Forest		12-Jan-02	8 years - not allowed to burn	No - needs to be burnt every winter and early spring
GLEN INNES	Rockwood	Inverell/Glen Innes	Oct	25 years ago	Yes

APPENDIX A – Hazard Reduction

Town	Fire name	Fire location	Fire date	Where and when was the last time hazard reduction burning occurred?	Was this sufficient?
GRAFTON	Water View Heights Fire	Old Glen Innes Rd	17-Oct-02	nil done - I applied to Pristine Waters council no response - this would have saved 3.25 km fencing	
BOWRAVILLE	Strathmore fire			15 years	No, not completed
DEEPWATER	Stannum/Torrington	Red Hill/Pyes Ck Rd	Oct-02	6 years ago when last bush fire Torrington national park - too ong ago to recall	No Obviously not when you see the intensity of the fires
DEEPWATER EBOR	Torrington Cathedral Rock National Park	Cathedral Rock NP	30-Nov-02 19-Jan-03	about 6 years	No
TENTERFIELD	Grogans & grasstree fires		23-Oct-02	approximately 5 years	No
SOUTH GRAFTON	Grange Forest		Spring 2002	approximately 5 years	
GLEN ELGIN GRAFTON	Speriby Reedy Creek	Cungelubung area	Oct-Nov oct/nov 2002	up to 20 years between March 02 and appoximately June 02	No No
CANGAI				in my area both my neighbours and myself do hazard reduction burning	
midcoast	Tuckers Nob fire			Agreed to with local volunteer brigade but no action taken	
SNOWY / ACT					
COOK	Canberra	ACT	18-Jan-03	Grazing was allowed in Cork oak plantation for the adjoining rural lessee but fire did not reach there.	
JINDABYNE	Tin Mine; Ingebyra; Panpong; Numbla Vale			None taken.	Inadequate. HR areas are too small and not in areas that provide protection for private property.

APPENDIX A – Hazard Reduction

Town	Fire name	Fire location	Fire date	Where and when was the last time hazard reduction burning occurred?	Was this sufficient?
INGEBYRA	Snowy River - Bombala and Kosciuszko		Dec-Feb 02-03	None for some years.	Given drought conditions - can't say.
DALGETY	NPWS fire exit at Gullies Rd			Never enough hazard reduction in the NPWS.	No
EAST JINDABYNE	Fairleys			20 years ago	Yes
BERRIDALE	Kosciuszko National Park (section 44)		8-Feb-03	NPWS - Eucumbene Cove < 100 ha in Spring 2002.	Grossly inadequate.
DALGETY	Mt Pleasant	Avon side		Can't remember	No
BERRIDALE				Little or none undertaken in the National Park.	No
JINDABYNE	Kosciuszko National Park	Thredbo River & Lake Jindabyne	26-Jan-03	No hazard reduction has occurred in the immediate vicinity in at least the last 56 years.	No
JINDABYNE	Kosciuszko National Park		30-Jan-03	None	No
INGEBYRA	Kosciuszko National Park, Snowy Mtns, Ingebyra		29-Jan-03	No hazard reduction has occurred in the living memory of locals.	No
INGEBYRA	Kosciuszko National Park		Jan-03	Small area at Jacobs River in Autumn 2002.	No - useless.
JINDABYNE	Kosciuszko National Park	Barry Way	26-Jan-03	3 years ago, 100ha of hazard reduction. Cannot remember any hazard reduction in our end of the KNP.	No. There are still huge amounts of fuel even after these latest fires.
NAAS via THARWA	ACT fires		8-Jan-03	Nil reduction in Namadgi National Park	No.
NAAS via THARWA	Canberra Snowy		18-Jan-03	Nil - it's a disgrace.	No.

APPENDIX A – Hazard Reduction

Town	Fire name	Fire location	Fire date	Where and when was the last time hazard reduction burning occurred?	Was this sufficient?
THARWA	Canberra		18-Jan-03	30 years ago - when I did it myself.	It was 30 years ago.
Via COOMA	Snowy Mountains	Avonside Road area	26 Jan 03 - 2 Feb 03	Never to our knowledge in the area of KNP near us. Past fires (eg near entrance station on Kosciuszko Road a few years ago) definitely reduced the intensity of the fire in that area.	I do not think so. Few undertaken on our place, too risky to the Park and neighbours due too their fuel load.
COOMA	Snowy Mountains	Snowy Plains	8 Jan 03 - 28 Feb 03		30 years ago No
BERRIDALE	Snowy Mountains	Eucucumbele Snowy Plains	8-Jan-03		Nil No
COOMA	Snowy Mountains		21& 22 Jan 03		Never
BERRIDALE	Snowy Mountains	Snowy Plains	8 Jan 03 - 14 Feb 03	There has been very little or no hazard reduction done only arsen reduction, and where this was carried out this fire failed to burn over these areas	Absolutely not
Via JINDABYNE	Kosciosko	Reedy Ck/Pallpong Nature Reserve		Not in 10+ years I am advised in my immediate area	Obviously not. No apparent fire management strategy for the recently declared Pallpong Nature Reserve until the local volunteer brigade weighed in.
THARWA	Canberra		18-Jan-03	No hazard reduction has been carried out by burning, grass fuel loads kept to a minimum by grazing	On farm hazard reduction sufficient, but neighbouring national park has had nil hazard reduction

APPENDIX A – Hazard Reduction

Town	Fire name	Fire location	Fire date	Where and when was the last time hazard reduction burning occurred?	Was this sufficient?
THARWA	ACT fires		18-20 Jan 03	Grazing only on rural leases E ACT - never	No
NAAS via THARWA	Canberra fire		17&18 Jan 03	no hazard reduction for 30+ years	No
JINDABYNE	Kosciosko		20 Jan 03 - 17 Feb 03	Nil adjacent to our farm	Yes
BOMBALA	Snowy Mountains		Dec 02 - March 03	I do not remember any	No
KENTUCKY Via THARWA	Canberra		18-Jan-03 18-Jan-03	Nil Never	No ACT forests on my boundaries. Badly managed attempt at logging 5 years ago left to fuel the fire.
THARWA	Canberra		Jan-03	Cannot recall a long time ago	Absolutely not

APPENDIX B – Communication

Fire name	How could State Government agencies better manage bushfires in your area?	How well was the fire fighting effort managed?	Outline your concerns with the fire event in your area	Suggest any improvements which could be made
Scrumbe (4 Dec 02) DAVIS CREEK	All work sharing same radio frequencies.	All things considered NPWS + RFS were very good. I liaise personally with above authority, which helps.	Ownership of fire is a problem, my property is located on boundary of 2 fire zones (Singleton & Crawley) creating problems.	
Gibraltar Range (17 Oct 02) GRAFTON	Emergency 000 failed.	Poorly.	NPWS totally rely on RFS for assistance within National Parks, exhausting RFS staff and equipment.	One needs to study NPWS policy and why the State continues to ignore budgeting costs necessary for servicing the six million hectares in their stewardship.
Ben Hall Gap (4 Nov 02) NUNDLE	Supply a good Fire Truck and equipment. Over 100,000 acres of unattended country and 1/2 day before back up arrives.	Terrible and unprofessional - not notified of Fires on our boundary, stock was not moved therefore perished. No backup for a long time, due to a lack of equipment.	No equipment, no prevention, too much political intervention. It could happen again next summer.	Good fire breaks put in; large dams for helicopter bucket and tanker fill; better road access; better liaison with local knowledge of the area; with up-to-date maps of properties, roads and water storages - ALL ARE REQUIRED.
Gulf Mountain (4 Nov 02) TAMWORTH		Communication very poor, co-ordination inadequate. Whilst local manpower management & resources were good, next level(s) of management-control left a lot to be desired.		Reorganisation of responsibility for fire management (RFS responsibility - NPWS has a conflict of interest in these situations and should not be part of the management team.

APPENDIX B – Communication

Fire name	How could State Government agencies better manage bushfires in your area?	How well was the fire fighting effort managed?	Outline your concerns with the fire event in your area	Suggest any improvements which could be made
Gulf Mountain (4 Nov 02) HANGING ROCK	<p>Improve fuel management to reduce intensity of fires to make them more manageable;</p> <p>Improve fire trail management; Fire fighting was affected by lack of resources, with this recent fire no.5 on the priority list.</p>	Reasonably well considering the scale and number of other major fires in the area at the time.	<p>(a) Control centre: Lack of knowledge of where to contact local brigades or who to contact to get crews; large contingent of outside personnel working in control centre. (b) Communication was difficult: No communication between RFS and NPWS on fire ground; no communication between air support and ground crews; poor communication between operation and fire ground particularly on shift changes, messages of information equipment or crews were not passed on from one shift to another; Control Centre neglected to advise Divisional Command of available resources with additional equipment arriving some hours after being required; and the remoteness of fire and terrain made UHF communications difficult yet Control Centre depended on fire ground position.</p>	Improve radio communication on fire ground and between agencies.
Tubrabuca Fire - Scone (3 Nov 02) HUNTER SPRINGS		Very badly, there was constant fighting between RFS and NPWS, they both flatly refused to listen to local knowledge and over-rode property owners.		Communication between parties during major fires needs improving; Independent adjudicators to make sure all people affected can have input in decision making.

APPENDIX B – Communication

Fire name	How could State Government agencies better manage bushfires in your area?	How well was the fire fighting effort managed?	Outline your concerns with the fire event in your area	Suggest any improvements which could be made
Morora State Forest (12 Jan 03) via BRUSHROVE	<p>The fire control (brigade) no idea of local area, wasted money on a big show which could have been contained in a couple of days if left to local fire brigade and farmers. A waste of good money mismanaged terribly. Farmers not allowed to come on our own property told to go home and keep out of it and let the fire come to us. You must have management at home level where local people know the area and have managed the control burns for years.</p>	<p>Hopeless - no experience of the area and not allowed to burn back when local brigade and farmers felt it safe to do so</p>	<p>extreme cost - 3 bulldozers, 2 skidders and 12 rural fire service tankers (city circus) over 3 weeks to contain a fire that would have taken 2 days managed properly</p>	<p>An arrangement is required between land owners and RFS to control burn where safe to do so, not to be controlled by NPWS or any bodies out of the area.</p>
<p>Water View Heights Fire (Old Glen Innes Rd) (17 Oct 02) GRAFTON</p>		<p>Very badly - I was in charge of Grafton RFS tanker and radioed to firecome the situation and requested assistance - nil arrived until too late</p>		<p>A comprehensive list is available if required</p>

APPENDIX B – Communication

Fire name	How could State Government agencies better manage bushfires in your area?	How well was the fire fighting effort managed?	Outline your concerns with the fire event in your area	Suggest any improvements which could be made
Strathmore fire			NPWS would not allow the local fire brigade to operate nor would they take any notice of my advice they didn't know that area	
Grogans & grasstree fires (23 Oct 02) TENTERFIELD	more communication between landowners and NPWS, more gear (firefighting) disributed amongst landowners	The fire event that occurred on my place was managed quite well by the RFS when it was contained. Once the NPWS took control, the fire got out of hand and money was no obstacle (time, helicopters, men etc).		
Speriby (Oct-Nov 02) GLENELGIN			The locals who have lived in the area all their lives were treated as if they had no knowledge or expertise whatsoever. Local knowledge ignored - too many government personnel after glory.	Communication with locals needs to be improved.
Snowy River - Bombala and Kosciuszko (Dec-Feb 02-03) INGEBYRA			Scarcity of information a major concern; Communcations were poor and available information was not reaching the Brigades; local RFS failed to use local knowledge and information on the status of the fire; resources were stetched.	
Kosciuszko National Park, Snowy Mtns, Ingebyra (29 Jan 03) INGEBYRA		As good as the various communications equipment would allow. Most problems were as a direct result of non-contactability.		Improve all radio system - get everyone using the best available instead of what is being used at present.

APPENDIX B – Communication

Fire name	How could State Government agencies better manage bushfires in your area?	How well was the fire fighting effort managed?	Outline your concerns with the fire event in your area	Suggest any improvements which could be made
Snowy Mountains - Avonside Rd area (30 Jan - 03 Feb 03) via COOMA	Needed better liaison between local landowners and NPWS crews sent to us. NPWS was in charge but it should have been the very experienced neighbours (private landowners).		Enormous resources were required to protect houses built in totally inappropriate places surrounded by thick bush on hillsides. Houses were the only things deemed to matter by those supplying the resources.	

APPENDIX C – Equipment

Town	Fire name / Location	Fire date	Equipment / Resources concerns
GRAFTON	Gibraltar Range	17-Oct-02	NPWS totally rely on RFS for assistance within National Parks, exhausting RFS staff and equipment.
NUNDLE	Ben Hall Gap - Gogs Top	4-Nov-02	No equipment, No prevention, too much intervention.
TAMWORTH	Gulf Mountain	4-Nov-02	Lack of adequate fire fighting resources.
HANGING ROCK	Gulf Mountain	4-Nov-02	(a) Delay in earthmoving equipment arriving (24hrs) while waiting to approve dozing breaks in Ben Halls Gap National Park. (b) Lack of manpower - 14 fires in the Crawney Zone stretched resources. (c) Lack of water, no provision made for water points for National Parks fires. All water for fires in this region whether on private property, National Park or State Forest has come from private property. (f) Communication was difficult. No communication between RFS and NPWS on fire ground; no communication between air support and ground crews; poor communication between operation and fire ground particularly on shift changes; Control Centre neglected to advise Divisional Command of available resources with additional equipment arriving some hours after being required; remoteness of fire and terrain made UHF communications difficult yet Control Centre depended on fire ground position.
Via BRUSHROVE	Morora State Forest	12-Jan-02	Extreme cost - 3 bulldozers, 2 skidders and 12 rural fire service tankers (city circus) over 3 weeks to contain a fire that would have taken 2 days managed properly
	Tuckers Nob fire		Lack of planning of water supply for fire fighting, priority of forestry business over farm business, lack of consultation with landowners/stockowners problems stock health and well being
BERRIDALE			Money being spent on Control centres (at Cooma and Jindabyne) should be spent on equipment for volunteer fire fighters or rewarding them in some manner.
	Kosciuszko National Park	30-Jan-03	Shortage of men and equipment.
INGEBYRA	Kosciuszko National Park, Snowy Mtns, Ingebyra	29-Jan-03	Confusion on use of earth moving equipment. Most problems were as a direct result of non-contactability.
BERRIDALE	Kosciuszko National Park		Water tankers deployed to protect hobby farm buildings and not sent to new spot fires close by.
SUTTON	Big One	1-Jan-03	More resources were required earlier (in the first week or two).
IAS via THARWA	ACT fires	8-Jan-03	No concentrated effort was made for 3 or 4 days to put out initial lightning strikes (x3).

APPENDIX C – Equipment

Town	Fire name / Location	Fire date	Equipment / Resources concerns
Via COOMA	Snowy Mountains, Avonside Rd area	30 Jan 03 - 3 Feb 03	Enormous resources were required to protect houses built in totally inappropriate places surrounded by thick bush on hillsides. Houses were the only things deemed to matter by those supplying the resources.
Via JINDABYNE	Kosciuszko, Reedy Ck/Pallpong Nature Reserve		After the fires spotted over to Reedy Creek from Moonbah the only RFS/NPWS response was to post units to the area for "property protection" of houses - anything else was ignored. So units drove up and down the public roads while the spot fires festered till, inevitably wind/humidity conditions worsened - so they could indulge in a bit of "property protection". Interviewed 3 separate NPWS units on one high danger day who didn't even have a map of the area. I had to tell these units where they were and where the fire was bearing down on my place - but they weren't authorised to respond. Old fashioned (hard work) suppression techniques appear out of vogue. So they rely on water bombing or massive backburns.

APPENDIX D – FCO / Operational

Town	Fire name / Location	Fire date	Backburn Ops	% farm burnt	% fences lost	Chain of command
INVERELL	Stannifer Fire	16-Dec-02	Part of backburn operation was not lit on property where shown and made the fire so much bigger.	60%	40%	Elsmore Fire was well organised. Fires were on our boundaries and were controlled before reaching our properties.
INVERELL	Kings Plain National Park					
DAVIS CREEK	Scrumbe	4-Dec-02		33%	41%	All things considered NPWS + RFS were very good. I liaise personally with above authority, which helps.
NUNDLE	Ben Hall Gap - Gogs Top	4-Nov-02	Terrible and unprofessional - not notified of Fires on our boundary, stock was not moved therefore perished. No backup for a long time, due to a lack of equipment.	70%	50%	
MATHESON via GLEN INNES	Kings Plains National Park, Wellingrove-Kingsland		Local landholder asked and were refused NPWS permission to backburn the perimeter (a fire break) to stop progress of fire. NPWS relying on the road to stop the fire. The fires came out of NPark and leapt over roads and devastated large areas of Wellingrove.			Decisions on fire fighting must come back to Group Captains and Captains of local Brigades - local knowledge is vital as every area is different and each fire should be fought in an individual way; FCO's to modify their arrogant behaviour and respect local people's advice and opinions.
TAMWORTH	Gulf Mountain	4-Nov-02		75%	60%	Communication very poor, co-ordination inadequate. Local manpower management & resources were good, next level(s) of management control left a lot to be desired.

APPENDIX D – FCO / Operational

Town	Fire name / Location	Fire date	Backburn Ops	% farm burnt	% fences lost	Chain of command
HANGING ROCK	Gulf Mountain	4-Nov-02		15%	>1%	Improve radio communication on fire ground and between agencies. Better system for providing manpower (address local volunteer rejections).
HUNTER SPRINGS	Tubrabuca Fire, Scone	3-Nov-02	Fire started in the National Park adjoining my property Milmilland. Conflict between RFS and NPWS as to who was in charge. Day 2, fire was brought under control on private land but was still burning strongly in NPWS country. A private request to grade a fire break established around the boundary some years earlier was ignored and consequently a wind change brought the fire back onto private property and is when the bulk of the damage was done. No explanation (from NPWS or RFS) as to why the fire breaks were not utilised. A very rushed debriefing session was held, with affected landholders not informed of the meeting.	20%		Very badly, there was constant fighting between RFS and NPWS, they both flatly refused to listen to local knowledge and over-rode property owners.
TABULAM	Ewingar	23 Oct 02 - 26 Oct 02		90%	33%	I am a Victorian and fought in Ash Wednesday fire in 1993 and have been a captain (no longer involved) and couldn't believe the total confusion involved. Need of experience and common sense, and an ability to listen to consult with locals.

APPENDIX D – FCO / Operational

Town	Fire name / Location	Fire date	Backburn Ops	% farm burnt	% fences lost	Chain of command
Via BRUSHROVE	Morora State Forest	12-Jan-02	Hopeless - no experience of the area and not allowed to burn back when local brigade and farmers felt it safe to do so	50%		The fire control (brigade) no idea of local area, wasted money on a big show which could have been contained in a couple of days if left to local fire brigade and farmers. A waste of good money mismanaged terribly. Farmers not allowed to come on our own property, told to go home and keep out of it and let the fire come to us (NO SENSE AT ALL). You must have management at home-level where local people know the area and have managed the control burns for years. We were not allowed to burn for 8 years in our own property. The fires in January 2002 were mismanaged. Biggest mess ever had taken place in the area (city circus) controlled by Evan's Head. Our local fire brigade does a great job but they were not allowed to participate in the fire.
GLEN INNES	Rockwood, Glen Innes	Oct	More back burning at night	3%	3%	Use local fire captain more.
GRAFTON	Water View Heights Fire, Old Glen Innes Rd	17-Oct-02			98%	Very badly, I was in charge of Grafton RFS tanker and radioed the situation and requested assistance - nil came until too late.

APPENDIX D – FCO / Operational

Town	Fire name / Location	Fire date	Backburn Ops	% farm burnt	% fences lost	Chain of command
DEEPWATER	Torrington	30-Nov-02	Use local knowledge in back burning operations, spend more on hazard control.		13%	
KEMPSEY	McKenzies Creek, Upper Macleay River Bellbrook, Wullli Wullli, Garrai	Dec01 - Jan 2002				We felt the brigades needed guidance from landowners with local knowledge.
GLEN ELGIN	Speriby	Oct-Nov				Fire authorities to communicate with locals.
GRAFTON	Reedy Creek Cungelubung area	oct/nov 2002		97%	46%	Return to common sense and local knowledge plus experience instead of ? Management. Recognition that local experience can be useful.
INGEBYRA	Snowy River - Bombala and Kosciuszko	Dec-Feb 02-03	RFS backburn was poorly handled with devastating impact. Unsatisfactory discussions with RFS so far. No resources for low intensity fires. In general, crews were considerate and helpful, particularly NPWS crews.	85%		Too much power under Section 44 declaration with a lack of accountability for actions and money spent or mis-spent. Post-fire feedback to be accepted constructively.
JINDABYNE	Kosciuszko National Park , Barry Way	26-Jan-03	Decisions were made in a panic. Backburns were undertaken in extremely risky situations, against strong local opposition and resulted in internal and boundary fencing badly damaged or obliterated. We would not have been burnt out if NPWS did not backburn on 25th January 2003 and waited for more favourable weather conditions.	25%		

APPENDIX D – FCO / Operational

Town	Fire name / Location	Fire date	Backburn Ops	% farm burnt	% fences lost	Chain of command
BERRIDALE	Kosciuszko National Park (section 44)	8-Feb-03		1%		Management was good considering the scale of the fire. Problems stem from a lack of a strategic planning level.
INGEBYRA	Kosciuszko National Park	Jan-03		64%		Very well by local RFS. The number of fires happening at the one time showed how vital local knowledge was on all levels. NPWS crews varied, some were useless, either not aware of fire behaviour and/or not interested in putting fires out.
THARWA	Canberra	18-Jan-03		80%	75%	More say and more control for experienced people.
COOMA	Snowy Mountains	8 Jan 03 - 28 Feb 03		20%		RFS managed exceptionally well. No NPWS were present in the area throughout the time I was present during the fires.
THARWA	Canberra	18-Jan-03		50%		Placing qualified and capable person to run BSB (ACT)
THARWA	ACT fires	18-20 Jan 03		5%		Disband the entire ESB in ACT and make ACT a sub of NSW - fires have no boundaries
NAAS via THARWA	Canberra fire	17&18 Jan 03		100%		Control of fire fighting effort should be removed from national park rangers

Town	Fire name / Location	Fire date	Experience	Comment
CENTRAL				
TAMWORTH	Gulf Mountain	4-Nov-02	Lack of adequate adequate access to probable fire sites.	
HANGING ROCK	Gulf Mountain	4-Nov-02		Fire trail maintenance should be regular.
KEMPSEY	McKenzies Creek - Upper Macleay River Bellbrook, Wulli Wulli, Garra Tuckers Nob fire	Dec01 - Jan 2002	Lack of fire trail maintenance, clean up after logging, pine creek forest Tucker Nob State Forest. Use of local knowledge and trail maintenance would have allowed quicker access to this fire and possible control at fire trail edges rather than spreading as it did.	NPWS have allowed fire trails access roads to become inaccessible. Little fires prevent big fires.
SNOWY / ACT				
COOK JINDABYNE	Canberra Tin Mine; Ingebyra; Panpong; Numbla Vale	18-Jan-03	Fire trails are inadequate, trees overhanging which presents crowning fires access to the property being protected.	Public monies to be spent in maintenance of fire trails.
BERRIDALE	Kosciuszko National Park			More access roads in National Parks.
BERRIDALE	Snowy Mountains - Eucumbele	8-Jan-03		No fire trail maintenance in KNP
BERRIDALE	Snowy Plains	8 Jan 03 - 14 Feb 03		Keeping all fire trails open and in top condition. Propose putting a fire trail around all private country and inside NPs boundaries before another fuel build up. I feel a big push should be made for this to be carried out.