



Dissenting report

Mr Michael Organ MP

DISSENT

**ON THE REPORT OF THE HOUSE OF
REPRESENTATIVES
SELECT COMMITTEE INTO THE RECENT
AUSTRALIAN BUSHFIRES**

**Michael Organ MP
Member for Cunningham**

The rational response to fire risk is more investment in a sophisticated, multi-faceted approach to fire management and protection, which includes limited and carefully targeted pre-emptive burning, but does not rely upon it.¹

Introduction

The House of Representatives Select Committee on the Recent Australian Bushfires played an important role in bringing together evidence and submissions from around Australia on an issue of national importance, namely, how to deal with the ever present – and some would say worsening - threat of bushfires in the Australian environment.

The majority report strongly reflects the evidence and the more than 500 submissions received by the Committee. It is valuable for that and will be an important source of information for those planning the way forward.

Whilst I support many of the recommendations included in the final report, I also have concerns about a number which specifically deal with the management of fire and its impact on the environment, both short- and long-term. From the outset I have been concerned with two main aspects of the Inquiry and the Committee's work.

Firstly, the fact that a number of significant state government agencies did not contribute to the Inquiry. These included that the New South Wales and Victorian

¹ Western Australian Forest Alliance (WAFA) and the Conservation Council of Western Australia, "Fire, prescribed burning and the conquest of nature", Submission, p.2.

authorities responsible for fire fighting, emergency services such as SES and police, and the management of national parks and other public lands.

The absence of their submission was especially telling in light of the numerous criticisms received in submission and evidence from private land owners and land managers and those associated with farming, grazing and forestry industries.

Strenuous efforts were made by the Committee to obtain the input and support of all levels of government throughout Australia, but this was not successful. Reasons given to the Committee included perceptions that this was a politicised inquiry and that therefore the subsequent findings would be subject to question or in some way biased. All members of the Committee worked hard to dismiss these perceptions.

The announcement by the Prime Minister that he would also be setting up a COAG inquiry into bushfires was an additional factor in limiting the commitment of state governments around Australia to supporting and resourcing the present inquiry.

Secondly, I was concerned with the often expressed approach by some members of the government to bushfire prevention, the inherent attitudes regarding conservation and ecological issues, and a frequent off-hand dismissal of valid environmental considerations in the evaluation of bushfire risk and prevention. Public statements along these lines caused concern.

In terms of addressing specific aspects of the final report, I will address some of the terms of reference as well as some of the recommendations. I have reservations in regard to the potential usefulness of the report as a result of the limited scope of the evidence that was drawn upon to finalise recommendations, specifically from the important state agencies referred to above. I do not strongly oppose other aspects of the report aside from those I that specifically address in this Dissent.

Much of the evidence on which the final report relies is untested. This is not to say that it is not genuine or factual. There are many examples given in the final report which are based on decades of hands-on experience working with fires and with fire suppression and management. However, whilst the many submissions and evidence given at hearings are no doubt genuine, and therefore important in our understanding of what took place in connection with the recent Australian bushfires, it needs to be stated that in sum total the evidence as presented to the Committee cannot be said to give a complete picture.

The quote in the report from the Wilberforce Rural Fire Brigade is a good example:

The National Parks and Wildlife Service manages fire for conservation purposes, whilst the RFS manages fire to protect life and property. Therefore the RFS is the most appropriate agency to manage bushfire emergencies.²

It is of course wrong to blandly state that the NP&WS does not manage fire to protect life and property, as well as for conservation purposes. Just as it is obviously

² Wilberforce Rural Fire Brigade, Submission no. 204, p.1.

important that the RFS manage bushfire emergencies in close co-operation with the NP&WS. Yet this is not the impression gleaned from the quote.

The majority of evidence was received from volunteer bushfire fighters, many with extensive experience. Evidence was also received from scientists, environmental groups, local government instrumentalities and state government authorities in Western Australia and Tasmania.

Members of the committee were fully aware of the implications of not hearing directly from, for example, the NSW Rural Fire Service or National Parks and Wildlife Service, and their ACT and Victorian equivalents. This was especially significant in light of the impact of the 2003 bushfires on large areas of those two states.

As such, I believe that this omission, or absence of evidence, significantly limits many of the subsequent recommendations of the Inquiry.

I believe that the Inquiry has, in some instances, reached conclusions based upon a consideration and presentation of unbalanced or insufficient evidence. This is the thrust of this dissenting report.

For example, in regard to the manner in which Term of Reference (b) was considered:

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

As the Committee did not have the benefit of hearing evidence from the NSW or Victorian National Parks & Wildlife Services, criticisms of their management regime that came to the Inquiry in the form of submissions (both written and verbal) were largely untested.

Once again, the evidence in such instances was genuine and telling, however with no input from “the other side”, mitigating circumstances and explanations of particular behaviours open to criticism were not put before the committee.

These concerns also impact upon Terms of Reference (b) to (f):

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

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

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

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

As a result of the Committee's inability to obtain important evidence and submissions from relevant state government authorities, I have specific concerns in regards to some of the recommendations arising out of the first three chapters of the report and also with some of the editorial comments made within those chapters.

For example, I do not accept the broad observations made in the introductions that:

The fire suppression effort was hampered by a lack of prior fuel reduction burning, closure and lack of maintenance of tracks, historical loss of resources from land management agencies (particularly the forest industry), and a policy of suppression rather than prevention.

In many instances prior fuel reduction burning had been carried out, and the management of the fire risk was not subject to major criticism.

For example, information received from the Blue Mountains City Council suggested that, as a result of their many years experience in dealing with constant bushfire threats in an environmentally sensitive, fire prone urban environment, the authorities in that part of New South Wales were able to adequately deal with the bushfire threat in recent years.

As such, the broad nature of the statement in the aforementioned paragraph could not be sustained.

In this Dissenting Report I will respond to the general thrust of this statement by citing evidence and submissions that were presented to the Inquiry but were not including in the majority, as well as quoting experts in the field of bushfire management whose contributions are relevant to this debate.

Bushfire is a part of the Australian landscape and has been for thousands of years.

Aboriginal people used fire to manage the landscape but the use of fire by indigenous Australians prior to the European invasion of 1788 was not uniform across the landscape. The details of indigenous fire management are poorly understood in most areas, and there are few oral history accounts available which detail Aboriginal use and management of fire across the continent.

Whilst many people have seen images of Aboriginal people burning grasslands in Central Australia, their precise use of fire in wetter parts of Australia, such as amongst rainforests of south-eastern Australia and Tasmania, is little known.

Unfortunately the use of fire by indigenous people prior to the European invasion is frequently used to justify contemporary intensive burning regimes and native forest logging, despite the lack of available data and research.

The management of bushfires requires complex and detailed planning, taking into account and balancing often competing interests. However, a balance of interests is possible and must happen.

My concern is that sections of the majority report prefer one perspective and one set of interests over another, e.g. forestry managers over conservationists. And there is no doubt that the forest industry has a vested interest in how they deal with and manage bushfires, both upon their holdings and on adjacent land. In states such as Western Australian and Tasmania the Committee was shown evidence of how there are close linkages at the highest levels of government between the forestry authorities, fire fighters and the responsible environmental agencies. Testimony was presented that the environment was the junior partner in these relationships and as such as suffering.

As I do not believe in the wholesale and uncritical “burn more and burn often” mantra which was evident in many of the submissions presented to the Committee, I feel that an emphasis on such evidence weakens some of the recommendations in the final report and will not produce the best outcome.

The science of bushfire management is developing at a rapid rate. And it needs to, as more areas of the Australian bush are being subject to residential development and the threat to life and property therefore increases.

There is no doubt that the Commonwealth should assist in developing bushfire related information and management systems. This is recommended in the main report. The Commonwealth can assist in developing or financing the utilisation of such technologies for the benefit of the Australian community and our environment, but this approach should be based upon the best scientific data available and the approach should be balanced and not politically motivated.

Jurisdictional Issues

Via this Committee and the majority report the Commonwealth is asserting an interest in bushfire management, due to their mostly voluntary contributions to disaster relief and also via grant funding such as the National Heritage Trust.

I have major concerns with the fact that this Inquiry sought to tie Federal Government ‘performance conditions’ to future bushfire related disaster payments. It is inappropriate for a government to impose its priorities and perspectives onto matters which lie outside its jurisdiction. It is even more inappropriate when one considers that the recipients of Federal disaster relief are typically ordinary Australians who have no jurisdictional responsibility whatsoever for bushfire prevention.

I am strongly opposed to this aspect of the Report, and therefore reject Recommendation 58.

General concerns with the Inquiry

I am concerned by comments made by Committee members whilst the Inquiry was being undertaken. I was particularly concerned by comments attributed in the media

to the Chair of the Committee, on 17th July 2003, after only 1 week of hearing submissions, and 4 months out from the Report being issued, saying:

...fuel loads are of great concern. There's a view that overwhelmingly, the fires were so bad because of very heavy fuel loads which were present because prescribed burning hasn't gone on in the past 10 or 20 years the way it used to.³

I take issue with the broad generality of this assumption. There is no doubt that the Chair and other members of the Committee received evidence along those lines, and strongly supportive of that sentiment. However, once again, the evidence was untested.

There is no denying that "fuel loads are of great concern" in areas where life and property are under threat. But to then state that in general, across the country, there are heavy fuel loads because "prescribed burning hasn't gone on in the past 10 or 20 years the way it used to" is neither appropriate nor correct in all instances.

Throughout the main report there is an underlying emphasis on the 'burn more' model of bushfire management and prevention. I am unequivocally opposed to this position.

We need to "understand fire better" and manage it better, rather than simply "burn more." This may involve increased prescribed burning in certain areas, just as it could also involve less burning in some areas, and no burning in areas identified as of ecological significance.

The fact is, we need to know our local environment better, with more scientific analysis so that we can make informed decisions in regards to managing bushfires.

The perception that this Inquiry would focus on a "burn more" regime was obviously one of the reasons many people who would have made important contributions decided to shun the Inquiry.

The media report on the 17th July of this year quoted above seemed to best sum up the perception of the Inquiry in the minds of many:

State governments and their agencies have shunned a new federal inquiry into last summer's horrific bushfires which started public hearings in NSW fire 'hotspots' last week.

All the now-familiar allegations about inadequate hazard-reduction burning, the snubbing of local knowledge in both fire prevention and management and the failure of major public land managers such as the National Parks and Wildlife Service to properly prepare for bushfires were trotted out at the hearings.⁴

This criticism of the Committee was of concern to its members.

³ Melissa Lang, "Government Silence", The Land, 17 July 2003.

⁴ Ibid.

It highlights the fact that substantial evidence countering these perspectives was not presented to the Committee, and is therefore not referred to in any detail within the majority report. A reader could therefore easily conclude that such evidence does not therefore exist, and this is not necessarily the case.

A difference perspective can be obtained from evidence presented to the Committee. This is a perspective not necessarily reflected in the majority report.

Professor Rob Whelan, the Dean of the Faculty of Science from the University of Wollongong and a specialist in fire ecology, has been outspoken in his concern regarding the misinformation circulating and the ill-informed criticism of the NSW National Parks and Wildlife Service after the recent bushfires. He sought to counter this criticism by explaining the potential ecological impacts as a result of broad scale, frequent, hazard-reduction burning.

Professor Whelan's testimony was quoted in the majority report.

Professor Whelan is the spokesperson for a group of 16 professional ecologists from around Australia who expressed their concern at the inappropriate demands for simplistic solutions that accompanied the 2003 fire event. In his submission to this Inquiry, Professor Whelan commented on the terms of reference presented to the Committee and related his comments specifically to sections (c), (d) & (e).

The report of this Inquiry and its findings on these three terms of reference were of particular concern to me and so I found it appropriate to refer back to Professor Whelan's submission. As he points out:

Although it is undoubtedly true that fuel reduction can reduce fire intensity and rate of spread, achieving sufficient fuel reduction across a whole landscape to ensure effective wildfire control under severe weather conditions will require such frequent burning (perhaps every 5 years, or even less in some vegetation types), that the primary, conservation objective of the land will be compromised.

Broad-scale hazard reduction is threatening biodiversity conservation and must therefore be avoided by land managers and resisted at a political level.

This situation is not unique to temperate Australia. It occurs in all fire prone regions of the world where large population centres abut native vegetation. Land management agencies in California and South Africa are currently experiencing similar threats to biodiversity because of increasing pressure for wide scale hazard reduction surrounding expanding urban centres."⁵

Broad-scale hazard reduction must be replaced by targeted, strategic fire management practices at the local and regional level.

You do not need to burn "a million wild acres" to save a house on a small acreage.

⁵ Professor Rob Whelan, Submission, p.4.

You do not need to burn large areas of wilderness and bush to save specific properties and assets.

Towards the end of his submission Professor Whelan points out, and I support this observation:

The complex challenge for land managers is how to protect adjacent property and human lives without compromising biodiversity conservation in the areas gazetted to serve just that purpose. The responses to this challenge are not simple. I urge the Select Committee to be wary of simplistic proposals and apparent ‘quick fixes.’⁶

The Victorian National Parks Association submission made the following comment:

The unsophisticated, interested and blame-apportioning comments that followed the 2002-3 fires will not yield a successful and sustainable relationship with our natural environment.

Such a relationship will balance the needs of safety, biodiversity, tourism, agriculture and cost efficiency with the realities of where and how we live.

The Victorian National Parks Association believes that significant strides in this direction have been made in Victoria and that in general, both fire planning and suppression is intelligent, balanced and worthy of commendation. Improvements can be made, but we believe that the basic structures, processes and principles are current and need to be respected and preserved.⁷

Both these quotes point to the measured, scientific and strategic approach which must, at the end of the day, be adopted in order to protect biodiversity and assets.

Bushfires in Australia: In Context

We cannot consider recent fires out of context in the sense that fires have always been a part of Australian life. We must learn to live with them, rather than believe that they can somehow be ‘defeated’.

We have learnt a lot in recent decades. However we have also learnt that fire is often unpredictable, horrific, devastating and indiscriminate. We have also learnt that in instances where hazard reduction has occurred, and other management regimes have been put into place, disaster can still strike of weather conditions and human deficiencies come into play.

Associate Professor Chris Cunningham, in his paper “Urban Bushfires: A Time for Reflection”, points to the long-term problem of bushfires in Australia:

The most devastating Australian fires have occurred in the southern states. The Black Thursday fires of 1851 in Victoria are the first recorded examples of the cyclical episodes of disastrous fires which have ravaged the state on average every

⁶ Ibid., p.4.

⁷ Victorian National Parks Association, Submission, p.3.

13 years.... Still well remembered is the 1938-39 season culminating in the Black Friday fires of 13 January 1939, when a large part of the state was burnt out, over 1000 homes destroyed, and 71 people lost their lives. In 1943 fires in Victoria were almost as destructive and 51 lives were lost.

In Tasmania the fires of 7th February 1967 in the Hobart region resulted in the loss of 62 lives, more than 1000 homes, and many farms and pastoral properties. Loss of life was again heavy in the January 1969 Victoria fires which cost 23 lives and destroyed 230 dwellings, plus 34 other major buildings, and damaged many rural enterprises. The 'Ash Wednesday' fires of February 1983 in South Australia and Victoria caused loss of life and property destruction exceeding that of the 1939 season, with 73 lives lost and more than two thousand dwellings destroyed.

Compared with these disasters, bushfires in NSW have been far less destructive. In 1843 the Sydney Morning Herald reported that central NSW was ravaged by fires which persisted for weeks.... In October 1928 fires burned throughout the Sydney & Central Coast areas and 70 homes were destroyed...After the Second World War the extent of urban damage in New South Wales has accelerated...In 1968..Six lives were lost and more than 200 homes destroyed....In 1977 there was a season of similar magnitude...In 1994 three lives were lost and more than 200 properties were lost in the fires that burned from January 3 to January 11.⁸

It is important for us to remember that bushfires will always be a part of life in Australia – we cannot avoid them. At best we can only reduce risk. We first need to identify and analyse the risk and then priorities how best our scarce resources can be used to deal with the risk, whilst preserving the environment and protecting assets and lives.

The involvement and education of the community in managing bushfire risk is essential.

A sensible and balanced approach is required.

The need for Bushfire Management Plans

It is clear from the many submissions and evidence gathered by the Committee that we need to better manage bushfire, at all levels – individual, local, state and federal.

Bushfire management plans are essential. The federal government could assist in providing research and information to develop bushfires plans across the country.

Bushfire risk management plans should be based on the assessment of all risk factors such as ignition potential (including arson), asset vulnerability (including homes, property and environmental assets), hazard or fuel management, land use planning provisions and the provision of suitable equipment and resources to manage residual risk. Bushfire risk management plans should have regard to ecologically sustainable development in the consideration of their potential impact.

⁸ Assoc. Prof. Chris Cunningham, "Urban Bushfires: A Time for Reflection", public lecture, UNE, 18 March 2000.

As well as the need to protect human life, community assets such as homes and crops, environmental assets such as national parks estate, wilderness areas, remnant urban bush land, threatened species and communities which are not fire tolerant need to be protected.

Biodiversity should be considered as an asset

Professor Whelan argues that:

Biodiversity should be considered as an asset, just as public and private property, installations, pine plantations, native production forests, and other human activities are considered assets.⁹

I agree with this assertion and feel that this Inquiry did not pay appropriate attention to either the concept of the environment as an asset and to ecologically sustainable development, two extremely important and relevant concepts in regard to bushfire management.

All members of the Committee recognised the destruction caused to the environment by the recent bushfires in south-eastern Australia. What value can be placed upon that destruction? Likewise, inappropriate broad-scale burning is destructive and costly to the environment.

As Professor Whelan noted:

One key element of the nation's biodiversity conservation strategies is the national parks and other reserves. For example, the Corporate Plan of the NSW National Parks and Wildlife Service identifies their principal objective as "...to protect and conserve natural and cultural heritage." This includes conservation of biodiversity, and species and communities that are listed as vulnerable and endangered.

A major challenge for any individual or land management agency charged with conserving biodiversity, under threatened species legislation and state or national biodiversity strategies, is the lack of detailed knowledge about the responses of many vulnerable animal and plant species to different types of fires.¹⁰

The need for a modern approach to land & resource management

Assumptions about traditional European bushfire prevention, mitigation, control and management need continual review in the light of improvements in technology, understanding of fire behaviour and the need for ecological sustainable management.

The assertion that the practices of bushfire management from 10 or 20 years ago are somehow preferable to current practices does not seem to reflect the acknowledgement of how far we have come in terms of our understanding of fire and

⁹ Professor Rob Whelan, Submission, p.2.

¹⁰ Ibid.

how to best manage it, taking into account the complex factors and considerations involved.

As the Western Australian Forest Alliance and the Conservation Council of Western Australia point out in their submission:

Traditionally, land and resource ‘management’ has meant high-impact intervention and heavy-handed manipulation of natural systems. This outdated approach is gradually being replaced by a new understanding of the values and sensitivities of natural systems. In the area of fire management there are moves to modify and modernise approaches to fire and pre-emptive burning by reducing and varying the size, intensity and frequency of burns and varying the season....¹¹

There is a need to correct the misconception that responsible fire management necessarily involves burning to reduce moderate and high fuel loads generally throughout the landscape, irrespective of where they occur. Rather, such activities should be strategically planned, in proximity to vulnerable assets.

Prescribed burning is only one method of fuel management and should be considered in the context of other available options and the management objectives of the land in question.

The need for more appropriate planning, better education, and concerns regarding the effectiveness of hazard reduction burning

Professor Rob Whelan supports the perspective of more appropriate planning, and outlines his concerns regarding where hazard reduction methods should be implemented:

One strategy that shows promise is directing fire management activities at the boundaries between urban areas and adjacent bushland. This is essentially the objective behind the zoning strategy used in bushfire management planning under the NSW Rural Fires Act. District Bushfire Management Committees develop management plans, across all land tenures, to address both detection and prevention of bushfires – recognising the different management objectives of different parts of the landscape.

If the most effective protection is reducing the fuel loads close to houses (combined with ‘fire-wise’ house and garden maintenance and well trained and prepared fire fighting services), then even greater pressure will be brought to bear on land managers to create and maintain fuel reduction within the bushland where it abuts urban areas.

This is problematic, especially where the small size of reserves is already compromising conservation objectives. A ‘sacrificial zone’ within a reserve effectively reduces the size of the reserve and alienates part of it from its primary

¹¹ WA Forest Alliance & the Conservation Council of WA, Submission, p.2.

conservation purpose. Future subdivisions must surely contain adequate fuel load reduction zones within the subdivision, not in the adjacent bushland.¹²

There are of course some concerns about the effectiveness of hazard reduction burning. Some of these concerns are outlined by the Blue Mountains Conservation Society in their submission;

A paper was prepared by Stuart James for the Rural Fire Service, Blue Mountains District, giving an overview of results of field studies of Prescribed Burns in the Blue Mountains from 1993 to 1997. This showed that hazard reduction burns are of limited effectiveness.... Hazard reduction, other than by fire, e.g. slashing, mowing and thinning of vegetation, near the assets being protected, will provide better protection for those assets than burning in remote areas.¹³

Education and community awareness material needs to focus especially on the threat to the environment and property of inappropriate use of fire, particularly burning which is too frequent, extensive in area, of excessive intensity, badly timed or carelessly implemented.

High bushfire hazard areas are usually those associated with natural areas and vegetation. The location of residential or rural residential areas in high bushfire hazard areas increases the level of native vegetation loss as well as increasing the level of threat to people and their homes from the risk of a bushfire. This is neither economically, socially, nor ecologically sustainable.

Development should not be permitted in bushfire prone areas, where such development is likely to put lives or property in danger or involve substantial protection and suppression costs including loss of environmental values.

Fire fighting services need support, supplementation and additional resources. In particular, local government needs to be provided with additional resources and finances to enable the proper implementation of its responsibilities with regard to the assessment and implementation of hazard reduction strategies.

Education of councils, land managers, land-holders, the general public, fire management planners and fire fighters is needed and should be publicly funded. Such education should target specific audiences and address a broad range of 'bushfire' and environmental issues.

As was argued in the submission from the Blue Mountains Conservation Society:

Lack of education and preparedness of the community in general contributes to the severity of the impact – for example, in the Canberra fires. Most residents are not adequately prepared to protect their homes, gardens are not maintained to reduce fire spread, homes are not fitted with well-known and accepted measures to assist in risk management.¹⁴

¹² Professor Rob Whelan, Submission, pp.4-5.

¹³ Blue Mountains Conservation Society, Submission., p.3.

¹⁴ Ibid., p.2.

Further on, this point is developed:

With regard to damage mitigation of individual properties, retro-fitting of protective items to buildings should be encouraged, eg. shutters, metal screens, water tanks, sprinkler systems, etc....There is an urgent need for...legislation regarding restrictions on building approvals in bushfire areas to be implemented and enforced. Continuing development in the Blue Mountains is further endangering the property built on the developments, and the environment surrounding them when fires occur. New subdivisions are currently being developed further into the bush... Although house design, materials, construction and siting can lead to some approvals, local government needs to carefully assess these matters and in some cases refuse consent for either subdivision or individual home development approval. Some properties cannot be protected from bushfire, no matter how carefully they follow design codes...Clearing of asset protection zones as required by current legislation can have an adverse effect on the environment and biodiversity, but this needs to be balanced against the need for property protection and requires further research.¹⁵

Many submissions called for the need for more sensible planning, rather than the need for more hazard reduction burning, as a way of countering the severity of impact upon urban areas during a fire event. Calls for the need for more burning were countered by a number of submissions, including that from the National Parks Association of Queensland, which stated:

In some sectors, there has been a tendency to blame the fires on national parks and other natural areas. Statistics show that more wildfires start outside national parks and burn into them than vice versa. Natural places should not become the victims of –fire counter-measures, but rather a more enlightened approach to development surrounding them is needed. The importance of such places and the need for their proper preservation must be recognised.¹⁶

The Blue Mountains Conservation Society also supported this perspective, stating in their submission:

A major factor contributing to the impact on people and property is that of granting development consent in high and extreme bushfire risk areas. This could be addressed immediately, preventing further building in such areas.¹⁷

Many people have of course already built in bushfire prone areas and so we must implement strategies to protect these properties from destruction from fire.

The problems with broad scale burning

There was some discussion in the Inquiry's report outlining the case for broad scale burning as a means to protect potentially vulnerable properties. I am opposed to broad scale burning because I believe it destroys too much bush unnecessarily and there is

¹⁵ Ibid., p.3.

¹⁶ National Parks Association of Queensland Inc, Submission, p.1.

¹⁷ Blue Mountains Conservation Society, Submission.

not sufficient evidence that it achieves a beneficial outcome on balance. Many also argue that broad scale burning is not feasible given the limitations of equipment and time resources.

Responding to calls for more extensive prescribed burning after wildfires in NSW, Rural Fire Service Chief Commissioner Phil Koperberg warned:

The previous practice of broad acre burns runs the risk of permanently changing the balance among the plants and animals which make our landscape unique and attract millions of tourists each year... The prospect of regular, comprehensive prescribed burning to convert the entire 5.4 million hectares of national parks into a garden landscape is, however, out of the question.... Strategic fuel reduction, not widespread burning, is central to protect lives and property.¹⁸

The Western Australian Forest Alliance and the Conservation Council of Western Australia made the following point in their submission to the inquiry:

Pre-emptive burning at the scale and frequency proposed by the proponents of more burning will impoverish our natural environment and leave our community just as, or even more, vulnerable to fire.¹⁹

In his paper entitled “Managing Urban Bushfire Risk: To Burn or Not to Burn?”, Chris Cunningham, an Associate Professor and Honorary Fellow from the School of Human and Environmental Studies at the University of New England, writes:

There are quite a few possible ways of removing fuel. We can rake up and dispose of ground fuels, and we can keep land ‘groomed’ to ensure that further fuel does not accumulate. These procedures are mostly considered too labour intensive to be practical, so many scientists, fire fighters, lay people and, not least, politicians enthusiastically see the use of fire itself – hazard reduction burning – as the long term solution to the bushfire problem. So great is this enthusiasm that we hear arguments that failure to carry out such burning by authorities charged with management of public lands is almost criminal.

But is hazard reduction burning really a general solution to bushfire management? There is no doubt that it is a useful management tool, but the efficacy of that tool should never be overrated. For protection of urban property it is a very limited tool indeed.

Hazard reduction burning in autumn, winter and, perhaps, early spring depends heavily upon the weather. Bushland which burns explosively in high summer when wind speed and atmospheric temperature are high and relative humidity is very low, burns fitfully if at all in cool weather with high humidity. In any given year there are likely to be fewer than forty days that are suitable for such burning.

It is a labour-intensive procedure. While authorities with responsibility for national parks and forests have a small permanent fire management staff, the overall task to

¹⁸ NSW Rural Fire Service Chief Commissioner Phil Koperberg, Sydney Morning Herald, 7 January 2002.

¹⁹ WA Forest Alliance & the Conservation Council of WA, Submission, p.2.

control burn every hectare of bushland, even if that were desirable, is well beyond their capacity, despite the availability of broad brush methods such as incendiary dropping from aircraft. Much of the work on urban fringes relies on the voluntary labour of bushfire brigades, and this largely reduces the available working days to weekends. In short, only a tiny fraction, even of the vulnerable urban fringes can be treated in any given year.

Hazard reduction burning is far from a precise science. It is rare for a fire to exactly match a desired prescription. Too little intensity and virtually no fuel will be removed, too much intensity and the scorched canopy will soon rain down litter to replace the fuel removed. If the vegetation is moist and green all that may be achieved is a partial dessication and an increase in available fuel in subsequent wildfires.

Fuel accumulates more rapidly than hazard reduction burning can reasonably remove it. Within three years of a successful prescribed burn, the bushland of the Sydney region has the ability to produce enough ground fuel to support an uncontrollable wildfire in extreme bushfire conditions. This means that adequate protection of urban areas would require hazard reduction burning on a two-year rotation.

It is also a fallacy that hazard reduction burning conducted deep in the heart of natural bushland and many kilometres away from urban property will have any significant ameliorating effect on urban bushfires. The land that really matters is that located within one kilometre of urban areas, and especially within 300 metres of, and indeed within, the urban areas themselves. Fire does not gain any special ferocity for having travelled many kilometres in its run: its intensity depends upon the availability of fuel in the area where it happens to be burning as well as on atmospheric temperature and humidity, wind speed and the slope of the land. Most houses destroyed in bushfires are destroyed by the penetration of ember showers from short distance spotting by very intense local fire. Of course the fire may have started a long way from the point of its eventual impact, but it is the condition of bushland close to the urban areas that ultimately determines the extent of urban damage...

Even with these precautions we will still lose property in extreme bushfire conditions: Canberra's suburbs were much less vulnerable through design than most parts of the Blue Mountains, Sutherland Shire, the Adelaide Hills, western Hobart or the Dandenong Ranges near Melbourne. The real lesson when we choose to live close to the bush, is to be prepared for fire, be prepared for the possibility that we can lose everything and to be fully insured.²⁰

Professor Whelan, in his submission, comments upon the impact of a single wildfire compared to regular burning;

Previous research, pioneered by Dr. Malcolm Gill of CSIRO Division of Plant Industry, has demonstrated clearly that the long term responses of plant and animal populations, and of ecological communities, to fire are determined by the **fire**

²⁰ Chris Cunningham, op cit.

regime. This represents the various characteristics of fire, including intensity, interval between fires (also called ‘frequency’), season of burning, and type of fire (e.g. crown fires, vs. surface fire).

A range of studies in several parts of Australia reveals that high intensity wildfires kill many individual animals and plants. However, it is rare for **populations** of species to become locally extinct as a result of a single wildfire. Reproduction and, in some cases, recolonisation, rebuilds populations.

Although incomplete, research has revealed many plant and animal species that persist through a single high-intensity fire event can nevertheless be threatened by too-frequent fires....

A large-scale high-intensity fire will open up the habitat and make it unfavourable for many elements of the fauna for a few years in every several decades. Hazard-reduction burning can create these unfavourable conditions for several years out of every five to seven years, and even maintain them permanently.

Research findings...have led to the declaration of the ecological consequences of high frequency fires as a key threatening process under the NSW Threatened Species legislation and to a position statement on the use of fire in ecosystem management published by the Ecological Society of Australia (an organisation representing more than 1500 professional ecologists based in a wide range of universities, research institutes and land management agencies in Australia and overseas).²¹

The impact of extreme weather conditions

The recent bushfires on the eastern coast of Australia coincided with extreme weather conditions. Drought, strong winds and extreme temperatures combined to provide the conditions for large and intense bushfires.

As was pointed out in the submission from the Victorian National Parks Association:

Unquestionably, the major cause for the 2002/03 fires was drought. This may have been exacerbated or even caused by global warming.....the current drought was exceptionally severe.²²

The National Parks Association of Queensland, in their submission to this Inquiry stated:

The bushfires which ravaged many parts of Australia, particularly the south-east areas, were extraordinary and resulted from extraordinary climatic conditions. The severity of the fires must be recognised as extreme and not taken to be the normal situation faced by the majority of the country in ordinary bushfire seasons.

²¹ Professor Rob Whelan, Submission, p.3.

²² Victorian National Parks Association, Submission, p.4.

*There should not be an overreaction when considering measures to counter fires which are normally encountered as part of the natural Australian ecosystem.*²³

Part of the reason for our recent severe drought could be attributed to the effect of global warming.

As was noted in the Bureau of Meteorology submission to the McLeod Inquiry:

The high temperatures in the lead up to the 2002/2003 bushfire season appear to be unprecedented.²⁴

The Blue Mountains Conservation Society also believed that extreme climatic conditions have been a major contributing factor and called on governments to address the issue of climate change in a more meaningful way;

Another contributing factor is the hotter, drier weather we have experienced. Although this may be cyclical, climate change due to global warming is leading to more frequent 'el nino' effects, and the Federal and State governments have not moved to improve or control the changes. This must be addressed urgently, and by all Australian governments as any change will be over the long term.²⁵

Around the world unprecedented bushfire events are being experienced after periods of extreme temperatures. For example, Portugal and British Columbia are facing firestorms in this northern summer. Global warming outcomes like severe drought and prolonged higher temperatures, necessarily resulting in worse bushfires has been largely ignored in this report.

In their joint submission to the Inquiry, Climate Change Network Australia (CANA) and Greenpeace had the following to say about climate change:

It is now accepted that since the industrial revolution, the burning of fossil fuels had led to an increase in atmospheric concentrations of carbon dioxide. This in turn has led to an increase in global temperatures which are predicted to result in changes to the global climatic system....

Since global climate change is predicted to affect temperature and precipitation patterns it is also likely to affect bushfire regimes. Research published earlier this year revealed that the 2002/03 drought had been exacerbated by record high temperatures resulting in record evaporation rates and drying of vegetation in parts of Australia. The exceptionally dry conditions are thought to have, in part, influenced the severity of the fires, particularly in Canberra.

Even the Prime Minister has publicly made the link between the Canberra bushfires and drought. On ABC Radio on the morning of January 20, Mr Howard said:

²³ National Parks Association of Queensland Inc, Submission,, p.1.

²⁴ Bureau of Meteorology, Submission to the McLeod Inquiry 2003.

²⁵ Blue Mountains Conservation Society, Submission, p.2.

I do know...that we are in eastern Australia experiencing probably the worst drought in a hundred years and the severity of that drought has contributed enormously to the precarious tinderbox nature of the environment and you can imagine what happened at the weekend was a freakish conjunction of a very hot day, bad winds, dry undergrowth, all those things coming together in a quite uncontrollable fashion.²⁶

In their submission, CANA and Greenpeace suggested that the Committee needed to:

...recognise that further scientific research is required into the link between climate change and bushfire risk in Australia, and that such research is an important step in the development of successful bushfire prevention and mitigation strategies.²⁷

I strongly support this recommendation and call on the federal government to recognise that climate change will be a major problem globally into the future and that Australia is not, and will not be immune from these problems.

Despite this, Australia has always experienced intense fires due to extreme weather in the past, and obviously this will continue. How severe this weather becomes is yet to be seen, and recent extreme conditions cannot be ignored in the context of the impact of global warming.

As the submission from Gecko (Gold Coast & Hinterland Environment Council) pointed out:

Recent fires show the need for a multi-pronged approach to bushfire management. The challenges created by climate change are unprecedented and will require fire managers to rethink all strategies. Global warming with increased drought, evaporation and dryness will not only increase the frequency and intensity of bushfires, but will also make hazard reduction burns more risky, and will even make rainforests more susceptible. We need to rethink all our fire management techniques.²⁸

Countering the case for more fire trails

There is much discussion in the main report about the need for more fire trails and access roads to assist in fighting fires, and also for greater access to water to assist in fighting fires.

In regard to these aspects of the report I was again concerned by the lack of evidence countering certain perspectives which were prevalent in the report.

As Gecko pointed out in their submission:

²⁶ Climate Action Network Australia, Submission, p.2.

²⁷ Ibid., p.4.

²⁸ Gecko, Submission, p.1.

We are concerned by the position taken by some that the more frequent hazard reduction burning and the greater number of fire trails, the better. We do not want to see our forests managed to such an extent that they lose their natural values.... Tracks can ... become too extensive, creating edge effects and bringing in threatening processes such as weeds, feral animals and even fire vandals... We are insistent that if fire breaks are necessary, they must be planned, not only strategically for the prevention of the spread of fire and protection of fire fighters, but also for the protection of our rare and threatened plant and animal habitats, as well as the stability of the landscape and protection of our waterway.²⁹

The Wilderness Society, on the subject of fire trails, in their submission said:

Only tracks regarded as essential for fire-fighting purposes should be maintained. The potential for fire hazards provided by tracks and the negative impacts on biodiversity should be taken into account when determining which tracks are essential. Non-essential tracks should be closed and vegetation rehabilitated, both for the safety of fire crews and the enhancement of biodiversity. Wilderness should be regarded as no-track zones.³⁰

The Victorian National Parks Association also made mention of this issue in their submission:

It has been oft claimed during and after the recent fires that the existing road and track network is inadequate and that it needs to be extended and upgraded to improve and aid fire detection and suppression. As roads and road maintenance has severe detrimental impacts on conservation values, in particular through facilitating the spread of weeds and vermin, expansion of the track network is not be taken lightly.³¹

Countering the claims regarding the benefits of grazing in bushfire prevention and management

In their submission, the Victorian National Parks Association pointed out their concerns with regards to the suggested benefits of grazing to minimise the impact of bushfire:

The recent fires have led to the predictable repeat of the claim of the Victorian Mountain Cattlemen's Association that 'grazing reduces blazing'. Much is made of the fact that sections of the Bogong High Plains were unburnt. But from visiting the area ourselves we observed that there were also many parts of the Bogong High Plain and of other areas in the Alps that were grazed and yet burnt....In fact there are severely burnt, partly burnt and unburnt areas to be found in both grazed and ungrazed areas.... There have been claims that the cover of shrubs is reduced by cattle grazing, which in turn reduces the fire risk in the alps. However, such claims

²⁹ Ibid., p.2.

³⁰ The Wilderness Society, Submission, p.9.

³¹ Victorian National Parks Association, Submission, p.11.

are not supported by any of the long term monitoring studies, nor by a consideration of the behaviour and diet of cattle.³²

Friends of the Earth, Melbourne, also commented on the effects of grazing on fire hazard reduction, pointing out that:

Stock grazing has been advocated as a fire prevention method based on the idea that cattle reduce the fine fuel load in the forest. After the 2002-2003 fires, Brian Gilligan, Director General of the NSW National Park and Wildlife Service, described this as 'a proposition that was debunked by government decision based on good science 50 years ago. Every time that people have tried to revisit it, to put livestock back into the parks, every scientist that has looked at it has debunked it..' (ABC 7.30 Report, 21 January 2003).³³

Community participation in bushfire management

Many submissions provided helpful and enlightening suggestions as to how we should manage bushfire risk in a more enlightened and inclusive way. One of those suggestions came from the NSW Nature Conservation Council submission which made the following point on the subject of community participation:

Community participation in fire management is vital to achieving better fire preparedness. While governing agencies are usually well represented on bushfire management planning bodies, generally the public only has marginal participation.

Community/public involvement in the planning process is essential to community appreciation of bushfire risk management strategies, and to cultivating an appreciation amongst the public of their role in bushfire risk management. Management of hazards on private property should be an integral component of any bushfire risk management.

States and territories should move away from token public consultation on risk management plans and towards genuine community participation in the planning and mitigation processes. This could be achieved through co-operative development and implementation of property, reserve, village and town level management plans, each of which is a subset of a larger district or zone plan.

Fire services and land managers need to develop mechanisms for collecting and utilising knowledge and information from locally acting stakeholders including farmers, volunteer fire fighters, conservationists and the Aboriginal community. The incorporation of these knowledge resources would have the dual effect of developing a comprehensive understanding of fire and its interaction with the environment in particular localities, as well as broadening the scope of risk management and creating a sense of involvement on the part of stakeholders. This

³² Ibid., p.9.

³³ Friends of the Earth, Submission, p.5.

would have beneficial outcomes for risk management on both private and public land.³⁴

Gecko outlined in their submission that they have embarked upon planning a local education program entitled 'Families, Forests & Fire'. According to Gecko, the purpose of the program will be to:

....bring together all stakeholders to discuss the latest knowledge and issues involved. We are gathering research and inviting speakers to enlighten all of us on the need to guard our communities with proper building standards and distances from forests. Gecko is seeking a multi-pronged approach to fire management, including avoiding building near forests.³⁵

In their submission, the Colong Foundation requested that the Committee take into account the following IUCN resolution on fire management:

Resolution on Fire Management by the Australian Council of the IUCN

Impacts of Human-Induced Fire Events on Biodiversity Conservation

Recognising that both protected areas and non-protected natural and modified habitats on public and private lands make a vital contribution to the conservation of biodiversity and ecological integrity;

Recognising that many ecosystems are highly sensitive to fire, for example wetlands, rainforests and alpine areas, and that their ecological integrity may be destroyed, degraded or significantly altered as a result of inappropriate fire regimes; and that other ecosystems such as prairies are dependent on fire to maintain natural processes;

Recognising that fire is required to renew or to maintain the natural ecological characteristics and functions of ecosystems such as natural grasslands, brushlands, pine forests and the boreal forest, and can be an appropriate management tool;

Noting that in many parts of the world the natural vegetation is highly flammable under certain conditions and that where land use patterns are inappropriate this creates risks to life and property;

Noting that urbanisation (residential, recreational, tourism, etc.) increasingly extends into natural or semi-natural areas of value for biodiversity and that protected areas may receive large numbers of visitors;

Noting that in both protected and nonprotected areas the optimum strategy is one that utilises a better balance of techniques including planned fire events and non-fire based risk reduction strategies;

Noting that in some protected and non-protected areas the current management focus on the use of planned fire events for fuel reduction is giving rise to an increasing reliance on fire-based techniques at the expense of more ecologically and economically sustainable non-fire-based risk reduction strategies; and in some ecosystems the absence of fire based management techniques may lead to the irreversible loss of biodiversity;

Believing that all human-induced fire management strategies should place emphasis on ecological sustainability when implementing strategies to reduce risks for life and property;

³⁴ NSW Nature Conservation Council, Submission.

³⁵ Gecko, Submission, p.3.

The World Conservation Congress at its 1st Session in Montreal Canada, 14-23 October 1996, passed the following motions:

Requests the Commission on Ecosystem Management to identify the types and extent of ecosystems subject to frequent occurrences of human-induced fire events, and to identify and consider the implications of human-induced changes to natural fire regimes for the biodiversity and ecological integrity of such ecosystems;

Calls upon all governments to have regard for the ecological sustainability of affected ecosystems when implementing bushfire risk management strategies in relation to both public and private land.

The way forward

Colin Sagar, in his submission put on behalf of the Environment Network in Bega stated, after attending a Fire Forum at the Australian National University that the forum had:

...encouraged the move from a vocabulary and approach to fire of “fighting an enemy in an emergency of dire threat”, to one of “understanding fire, using fire and adapting our lifestyles in order to successfully live with the recurring nature of fire in the Australian landscape.”³⁶

Professor Whelan suggests, and I support this proposal, that:

... this inquiry display leadership in Australia and internationally by recommending funding for a unified research effort in fire and biodiversity to parallel proposals for research into fire prevention and control.³⁷

This perspective is supported by the Blue Mountains Conservation Society in their submission which states:

Although knowledge and understanding of fires is increasing, further research is needed in a number of areas.

1. A better understanding of the behaviour of arsonists and investigation of appropriate rehabilitation of those convicted.
2. The behaviour and patterns of wildfire.
3. The effectiveness of hazard reduction burning and other fire mitigation options.
4. The damage to biodiversity from fires and fire mitigation, and the possible methods of effective rehabilitation.
5. Improved building design measures.³⁸

One of the recommendations of the Committee to come out of this Inquiry is the establishment of a national database to monitor fuel load across the country.

³⁶ Carl Sagar, Carl, on behalf of the Environment Network, Submission,, p.5.

³⁷ Professor Rob Whelan, Submission, p.4.

³⁸ Blue Mountains Conservation Society, Submission.

I support the concept of a database being established that is federally funded and that has a federal perspective, but I am concerned by the fundamental thrust of this report and the fact that the push for this database may be politically motivated.

A sensible approach is needed, and if a database is to be established and research undertaken, these efforts must have a balanced perspective in order to be of genuine benefit.

I have concerns that the federal government, in conducting this Inquiry and in putting the recommendations that it is has, is committed to the 'burn more' perspective and that the recommendations that are implemented will be pushed toward promoting this perspective.

As I have previously outlined, I have fundamental concerns with the outcome of this Inquiry for these reasons.

The World Wildlife Fund, in their submission, included an impressive list of recommendations that I strongly support and which I regret the Committee did not take on board:

Recommendation 1

That the Committee examine the extent to which human-induced global warming exacerbated the severity of the drought, and contributed to the severity of the 2002-2003 bushfires, and recommend policies and strategies to reduce the level of Australian greenhouse emissions.

Recommendation 2

That the Committee examine and report on the historical correlation between major bushfires and national parks, forestry lands, private lands etc., and examine 'hard' evidence that studies the correlation between prescribed burning and major fires.

Recommendation 3

That the Committee examine and report on the impact of inappropriate and inadequate hazard reduction regimes on biodiversity.

Recommendation 4

That the Committee examine and report on the economic costs and benefits of prescribed burning and other fire protection works.

Recommendation 5

That the Committee examine the opportunity for the Commonwealth, through the NRM Ministerial Council, strongly encourage all States and territories to implement actions under objective 3.5 of the National Strategy for the Conservation of Australia's Biological Diversity, which aims to reduce the adverse impacts of altered fire regimes on biological diversity.

Recommendation 6

That the Committee examine and report on the lack of ecological knowledge of volunteer fire fighters and municipal staff, and ways to reverse this situation.

Recommendation 7

That the Committee highlight the opportunity for the Commonwealth, in association with its partners, to ensure that the Bushfire CRC develop a major research program to investigate the role of fire in the maintenance of biodiversity, and the development of ecologically sustainable prescribed fire regimes that minimise the adverse impact of fire on biodiversity.

Recommendation 8

That the Committee highlight the opportunity for the Commonwealth, in association with its partners, ensure that the Bushfire CRC and CRC for Tropical Savannas Management support and co-ordinate further research into the role of fire in Australian ecosystems, to further contribute to the implementation of action 3.5.1 of the National Strategy for the Conservation of Australia's Biological Diversity.³⁹

Conclusion

I believe it is of crucial importance that all stakeholders who are potentially bushfire affected or who are involved in fighting fires or managing land that is bushfire prone work together to ensure the best outcomes for the Australian environment and the community.

I am concerned by the fact that this Inquiry was perceived as being politicised, as this issue is too important to be manipulated for political ends.

We must respond to the reality of the Australian environment with a co-ordinated, scientific and sensible approach. We must reach consensus on the way forward wherever possible. This will involve concessions and understanding from all quarters.

I believe this is possible, and the evidence I have read in association with the Committee indicates that, at the end of the day, the community will work for a positive outcome for the natural and the built environment. In the interim vested interests and poor management is impacting upon that aim.

At the end of the day we all want to protect people and property from the ravages of wildfire without unduly compromising our precious environmental assets.

On this I think all members of the Committee concur.

Michael Organ
Committee Member
24 October 2003

³⁹ World Wildlife Fund Australia, Submission, p.3-4.