

Interim Report

of the

Inquiry into the 2002-2003 Victorian Bushfires

August 2003

The Hon. Steve Bracks, MLA
Premier of Victoria
1 Treasury Place
Melbourne, 3001

Dear Premier

Interim Report of the Inquiry into the 2002-2003 Victorian Bushfires

We have pleasure in presenting to you an Interim Report into the 2002-2003 Victorian Bushfires and we anticipate that we will deliver the final report by 30 September 2003.

This brief Interim Report brings to your attention matters that the Inquiry members believe require immediate action to assist in the preparation for the forthcoming fire season. Additionally, there are some matters that have come to the attention of the Inquiry that would benefit from early resolution to assist members of the Victorian community to move forward from the fire event of last summer.

We have also taken the opportunity presented by the Interim Report to explain the methodology adopted by the Inquiry to engage stakeholders and the wider Victorian community in the work of the Inquiry.

Finally, I would like to commend to you the support we have received from members of the public, firefighters, organisations, and Local Governments. They have all been generous with their time, insightful in their comments and have shown a strong commitment to learning from the fires of 2002-03 and improving Victoria's capacity to mitigate and respond to bushfires.

The Government agencies involved have provided much data and information at the request of the Inquiry team, and we recognise that this has been an impost on them. However, some requests remain outstanding and it is critical that these be urgently provided to ensure that the Inquiry can appropriately analyse the information requested and meet the deadline for its report to you.

Yours sincerely

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Emergency Services
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Interim Report

The Inquiry into the 2002-2003 Victorian Bushfires

1. Introduction and Terms of Reference

Over the summer of 2002-2003, bushfires burnt across the greatest expanse of land in Victoria since 1939. The 2002-2003 bushfire season occurred during an on-going drought that is one of the most severe in recorded history with the first bushfires occurring early in the season in September 2002. By the start of December 2002, the Department of Sustainability and Environment (DSE) and the Country Fire Authority (CFA) had already attended more than 375 fires in Victoria, almost three times the twenty-year average. The 2002 calendar year closed with Victoria experiencing its largest bushfire in 20 years, a fire in the Big Desert Wilderness Park in North West Victoria affecting 181,000 hectares of land, public and private.

On 7 and 8 January 2003 a dry storm swept across the predominantly forested and alpine areas of North East Victoria and Gippsland, and lightning strikes started some 87 fires. While the majority of these (78) were controlled within an acceptable time frame, the others were unable to be controlled and ultimately joined to form the fire complexes in the North East and Gippsland areas. In terms of area burnt, these fires were of a similar scale to the devastating Black Friday fires of 1939, and eventually burnt approximately 1.1 million hectares of land in Victoria.

Following repeated fire events in NSW and the devastation caused by bushfires in the ACT, many Victorians asked, 'Could Victoria have prevented these fires?' and/or 'Were there problems with the suppression of the fires?'

Large areas of land were burnt including over 108,000ha of private land. Public and private assets were destroyed and environmental amenity compromised. Victorians witnessed the personal toll on communities and firefighters. The length and severity of the fire season coming on top of the unbroken drought, and the extent and severity of these fires resulted in the capacity of the fire agencies and community resources being severely tested. The fires also succeeded in capturing unprecedented attention from the media and Victorians more generally.

When compared to extreme fire events from Victoria's past, and in the context of six consecutive years of drought, the management of the fires resulted in outcomes that were not as severe as they might have been. Given the eventual scale of the fires the loss of property and assets were significantly below what might have been expected, no lives were lost as a direct result of the fires and injuries were minimal.

However, some communities were severely affected by fire and felt let down by the fire services, while others lived with the threat of fire for days and even weeks. Many individuals and communities engaged in the firefighting effort for a protracted period requiring them to put aside their normal businesses or employment. Many businesses in the affected regions suffered losses.

It is not surprising that fires of this scale will generate a wide range of views, and considerable criticism of the management of our forests. For many of those most affected, the fire season was seen as avoidable, and the result of perceived negative changes in Victoria's public land management regime over many years. For others, the fires were seen as a repeat of the 1939 fires that were also preceded by a severe drought and were a harsh reminder that the Victorian environment is subject to periodic, extreme unplanned fires.

A range of significant issues has been raised about these fires, in particular the management of public land to reduce fire risk, as well as the way in which the fire was fought.

It was in this context that, as the Emergency Services Commissioner, I was invited to chair an Inquiry into the 2002–2003 Victorian bushfires. Under the Emergency Management Act 1986 s21c, the Commissioner is required to monitor the performance of emergency service agencies and to advise, make recommendations and report to government on any issue in relation to emergency management (prevention, response and recovery).

The Inquiry is to report at the end of September 2003.

The Terms of Reference for the Inquiry are:

1. Examine the effectiveness of preparedness for the 2002/03 bushfire season, including hazard reduction and mobilisation of resources;
2. Assess the effectiveness of the response to the 2002/03 bushfires, including emergency management procedures, cross agency response and coordination and resource deployment; and
3. Provide recommendations for future bushfire management strategies, including any required improvements to existing emergency management arrangements including public communications, community advice systems, infrastructure, training and overall resourcing.

Two independent experts were also appointed to the Inquiry. They are:

- Dr Malcolm Gill, Honorary Research Fellow, CSIRO Centre for Plant Biodiversity Research, Canberra. He has published widely on wildfire and its role in forest ecosystems in Australia and was awarded an Order of Australia Medal in 1999 for his contribution to research on bushfires and the environment; and
- Professor Neal Enright, School of Anthropology, Geography and Environmental Studies, and Executive Director, Office for Environmental Programs at the University of Melbourne. He specialises in the fire ecology of plants, re-vegetation and rehabilitation, has been published widely and conducted extensive research and consultation.

Their appointment brings a breadth of knowledge in bushfire behaviour and environmental science to the Inquiry to complement the expert knowledge of the Emergency Services Commissioner in the planning for, and management of, emergency situations.

The Inquiry Panel members are supported by a Secretariat located in the Department of Premier and Cabinet.

2. Methodology employed by the Inquiry

The Panel Members approached the Inquiry with no predetermined views about the eventual findings. Considerable time has therefore been spent building an understanding of the fire events themselves, their impacts on communities and the environment, the quality and efficacy of planning and what was done to prevent and suppress the fires. A wide range of issues requiring consideration has been identified. A phased process was developed to explore and evaluate these issues.

The Inquiry called for public submissions by 30 May 2003 as a way of framing the key issues for consideration. Inquiry members then toured Victoria following the path of the fires in North West and North East Victoria, East Gippsland and Gippsland talking in situ to firefighters, Incident Controllers, Regional and local staff of DSE, the Department of Primary Industries (DPI), Parks Victoria (PV) and the CFA.

The Inquiry received 272 submissions from a range of individuals and organisations. These submissions, combined with a substantial volume of information gathered during and after the tour of fire affected areas from public land managers and staff and volunteers of the fire agencies, allowed the Inquiry members to understand the principal issues of concern to the community.

This was followed by a series of meetings with community members, Local and State Governments and agencies and other organisations to enable verbal submissions to be made to the Inquiry. These discussions were held at most of the fire affected areas, on farms and plantations, at the site of fires, CFA sheds, DSE/CFA/PV offices, shire offices and community halls as well as in Melbourne.

In all, the Inquiry members have met with over 400 people either as individuals or in small groups. This process was adopted to ensure as many people as possible had the opportunity to put their views to the Inquiry.

While submissions to the Inquiry were not protected by parliamentary privilege, Panel Members are unanimous in their view that information was provided, in an open and unfettered way by volunteers or staff of agencies involved in land management or fire suppression, and by community members.

While it is simply not possible to explore every anecdote or address every matter raised with the Inquiry, the process was made easier by the fact that comments and criticisms were surprisingly uniform around the State, and issues raised with the Inquiry fell into a series of themes repeated from the far north west to the far south east of the state.

Many individuals, farmers and small businesses who were hurt and are still hurting, were critical of the management of public land over a long period of time and critical of both the level of, and the process for obtaining, the financial support made available during and since the fires. In saying this, however, at times the needs of drought affected farmers interplayed with the assistance required for those small businesses, farmers and households affected by the fire or its aftermath. When

challenged, many accepted that their concerns related to issues other than fire recovery, including working with Government agencies and the CFA in their communities and the changing face of rural communities.

The Inquiry's public consultations provided an opportunity for expression of rural anger. Most of these communities were in drought prior to the fires and following the fires, these communities remained in drought, but with less feed and water available for their remaining stock, a need to rebuild fencing and make good other fire suppression works combined with, in some cases, significant loss of tourism in their community.

The public meetings allowed Inquiry members to hear and discuss community and individual concerns, ensure everyone had a say, and draw out community views on the terms of reference - specifically, how fire prevention and suppression and community recovery could be improved or strengthened.

The Inquiry made it clear that its recommendations would be developed independent of Government and of the public land management agencies and fire services. However, the success or failure of the final recommendations would rely to a large extent on all parties participating in implementation and owning the outcomes. Communities need to move forward in partnership with Local Government, Departments, agencies and the CFA.

Communities were asked what they wanted to see in the Inquiry recommendations to prepare and respond better for future bushfires. Solutions covered the full spectrum of views but were consistent in seeking greater effort by all parties to fire prevention planning, more involvement and better use of 'local knowledge' in fire suppression.

A number of return visits were made and the Inquiry members informed communities and government agencies that, to the extent possible, recommendations made would be tested or 'ground truthed' with selected communities. This process commenced as the consultations continued over the 6 weeks of rural visits and emerging themes were discussed with individuals and groups.

In addition to their involvement in considering submissions and participation in public meetings, the two expert panel members, Dr Malcolm Gill and Professor Neal Enright are undertaking scientific research into the issues associated with fuel reduction generally, and prescribed burning in particular, and its value in suppression and reducing bushfire intensity. They are also examining the climatic conditions that existed over the fire season and how these compare to previous years, especially those years when significant bushfires occurred.

Additionally, an external review of the effectiveness of the management of aerial firefighting resources over the fire season has commenced and the outcomes of this review will form part of the final report.

The Inquiry is also examining the Emergency Management Act and arrangements in place; the findings and implementation of previous bushfire inquiries and reviews; and the adequacy of coordination between DSE and the CFA in fire planning/prevention and response for rural Victoria.

3. The September Report

The purpose of the Inquiry is to learn from the recent bushfire experiences in order to further improve Victoria's preparedness and response to future fire and other emergencies.

Reviews following any large scale emergency identify both the successes and mistakes made in managing the consequences of an emergency on the community, clear lessons to be learnt and improvements to be made. However in saying that, the Inquiry's purpose is not to attribute blame nor will it engage in the public humiliation of individuals working on behalf of their community, paid or unpaid.

Rather the Inquiry will address the terms of reference and identify areas for improvement in fire prevention planning, preparedness and response and will develop realistic strategies to ensure a longer-term continuous improvement strategy is implemented for Victorians. Systemic problems and issues requiring policy change by Government, or changes to the State's emergency management arrangements, are obviously of critical interest.

The Inquiry will provide a report that is first and foremost a constructive document that provides recommendations for enhanced bushfire safety in Victoria. The report will acknowledge positives such as progress made in Victoria's Emergency Management arrangements since 1983 and the significant improvement in cooperation and coordination across the many agencies involved during and after the fires. It will also be educative to some extent, providing the context for a discussion of fire in the Victorian environment, a framework for rational debate and a way forward based on objective data and evidence.

The final report will deal with many of the criticisms made in submissions and in consultations. It cannot however engage in point by point forensic analysis of every incident raised with the Inquiry but will look for themes and commonality of purpose and provide recommendations based on evidence and research.

Finally the report will discuss the efforts of the two principal fire suppression agencies, DSE and the CFA, during the North East-Gippsland fires and their relationship with the other agencies engaged in fire and emergency management and will comment on the effectiveness of arrangements now in place and changes recommended for the future.

All submissions to the Inquiry will be made public at the release of the final report.

4. The Interim Report

The possibility of an interim report being submitted to Government if the Inquiry members believed that there were pressing issues that needed immediate attention was discussed when the Inquiry was established. It is our view that a number of matters fall into this area and we therefore provide this report.

5. Principal issues arising from submissions and consultations

The following is a list of issues raised with the Inquiry members either through submissions or in public consultations. These, and significant others, will be dealt with more fully in the final report. However, a number of interim recommendations can be made that will assist in the preparation for the forthcoming fire season.

5.1 Prescribed Burning/Fuel Reduction Burning

There is significant criticism in rural Victoria that public land management practices have deteriorated under successive Victorian Governments since the Ash Wednesday Fires of 1983. There is a widely held view that this results from a reducing resource base allocated to public land management at a time of increasing areas of the State being declared as Parks. The problem is exacerbated by the complexity of legislative and environmental overlays now in place. To many, the result is declining amenity and access, combined with a very significant increase in fire hazard.

The contrary view is that Victoria now places appropriate emphasis on protection of our natural environment and wilderness habitats for the enjoyment of all Victorians and future generations. That Victorians are increasingly celebrating our environment is evidenced by increased recreational use of our public land and the population shift to the urban-rural interface.

Other than extreme views on either side of the debate, both sides are agreed on the need to better protect both public and private land from inappropriate fire. The criticism that DSE does not appear to have met its prescribed burning targets has been a common complaint from the rural community and a finding of the 2003 Auditor General's report.

There is, however, little agreement on what is the appropriate prescribed burning regime.

The key questions to be answered are: is prescribed burning effective in reducing the risk of unplanned fire and/or increasing the likelihood of successful fire suppression; how much burning is required; how frequently is burning required; and, when can fuel reduction burning be safely and effectively undertaken.

The work of Dr Gill and Professor Enright will assist in providing an objective basis for this debate but **it is important to note that prescribed burning will not prevent bushfires** and in extreme fire weather conditions, even fuel reduced areas could support an intense fire. Fuel reduction burning may assist in slowing the early development of the fire, may reduce the fire's intensity and could make fire suppression safer and more effective. This is supported by evidence from the recent Victorian fires and is discussed in the recent report of the McLeod Inquiry into the ACT fires.

Early results from Dr Gill and Professor Enright indicate that under existing prescriptions and practices, total days suitable for approved fuel reduction burning could be fewer than 10 in some years. This analysis is supported by submissions to the Inquiry from past and present DSE staff.

Given the limited opportunities available to undertake prescribed burns each year, it is essential that practices are developed to maximise the achievement of targets. The current approval process is cumbersome and too many decisions are now centralised in Melbourne rather than made locally.

The Inquiry believes that the process for approval of prescribed burns should be reviewed immediately with a view to developing flexible, broad policy guidelines that can be managed/administered at the local level.

Other recommendations in relation to prescribed burns will be made in the final report.

Recommendation 1

That the Department of Sustainability and Environment immediately review the prescriptions and approval processes for prescribed burns to ensure that more of the annual number of suitable weather days for prescribed burns can be exploited.

5.2 Use of Local Knowledge in Fire Management

A significant number of submissions criticised the management of the fires for ignoring local knowledge at both the tactical and strategic level.

The AIIMS-ICS¹ system should provide for strategic, communications and logistics support for tactical firefighting at the fire line. The inquiry believes that AIIMS-ICS is a sound command and control system, but that in some locations, it was applied in an inflexible way that resulted in opportunities to safely attack the fire being missed.

¹ Australian Interagency Incident Management System – Incident Control System. A nationally adopted structure to formalise a co-ordinated approach by all agencies involved in the management of an emergency. The Incident Control System is a major subsystem.

On a similar theme, the use by the CFA of strike teams provides a powerful and safe 'weight of attack' at the fire-front, but again, inflexible operational procedures have limited the use and effectiveness of strike teams.

The use of spatial information, line scanning aircraft, satellite imagery, and forward looking infrared technology was one of the successes of the fires. However, there is strong evidence to suggest that there were occasions when human intelligence from the fire area, which contradicted technical intelligence, was ignored.

These criticisms are equally levelled at CFA and DSE and both organisations have agreed that the criticisms are valid, acknowledging that Incident Controllers at the Incident Control Centres did not always give due weight to local knowledge, experience and data from the fire ground to maximise strategic management and appropriately support tactical firefighting at the fire front.

The CFA has come under particular criticism from some volunteers who have not accepted or supported the introduction of the Incident Control System.² Linking the Group Structure and the Incident Control System is an on-going internal change-management project, and a public relations challenge for the CFA, and more work is required with certain regions to gain their confidence in, and commitment to, AIIMS-ICS. Some strategic management issues during the fire, particularly the local knowledge issue, have negatively affected relationships and this need to be rebuilt as a matter of urgency.

Recommendation 2

That in preparation for the coming fire season, the CFA:

Modifies its operational procedures to ensure that local knowledge is flexibly and appropriately incorporated into tactical and strategic fire management.

Modifies its operational procedures to allow for more flexible management of strike teams.

Continues to work with its Brigades to complete the integration of AIIMS-ICS with the group structure.

Recommendation 3

That DSE reviews procedures to ensure that all Incident Controllers and Incident Management Teams have full access to those Departmental, Parks Victoria or appropriately experienced and qualified community members who can provide local knowledge and expertise in the development of fire suppression strategies and that advice from the fire ground is incorporated into decision making.

² Incident Control System is a command structure set up under AIIMS to systematically and logically manage emergency incidents, including bushfires from small simple incidents to large difficult or multiple situations. It is designed to expand to ensure effective span of control at all levels.

5.3 The Fencing Policy

The most frequent criticism of the Government's relief and recovery policies relates to the fencing issue - specifically responsibility for the replacement of boundary and internal fencing burnt during a fire event. There is still significant anger in rural Victoria despite initiatives developed after the fires to support fencing replacement. The fencing issue contributes significantly to the generally poor relationship between public land managers and their private land neighbours.

Under the *Fences Act 1968* the Government is exempt from all obligations to contribute to the maintenance and/or replacement of boundary fences between crown and private land including those damaged or destroyed by fire. A review of past fencing policy implementation following large fire events suggests that in the 1980s, Governments provided relief on an ad hoc, incident by incident basis, but that this policy was changed at some point to a policy based on the letter of the legislation with fencing being a risk that should be insured by the private land owner.

Over recent years a number of exception decisions have eroded the existing Government policy of the private landowner being wholly responsible for the replacement of boundary fences in all circumstances. This has left farmers uncertain about entitlements and has led to tensions when differing responses are developed and implemented for different fire events.

The current fencing policy provides no imperative for public land managers to manage their side of the fence.

The community demand for more prescribed burns as a fire prevention strategy has been discussed elsewhere. However, any increase in the number and area of burns will invariably result in more fires escaping from public to private land. This adds impetus to the need for a clear and consistent policy to apply in all circumstances.

Similarly, any policy set in relation to external and internal fences burnt as a result of back burning during suppression operations by fire agencies on private land remains unclear and inequitably applied.

The Inquiry considers that the Government should review the fencing policy to develop policy that holds for all circumstances in accordance with the following principles:

- It is not a replacement for prudent risk management (insurance) by private land holders;
- It provides an imperative for appropriate land management on public land at the public/private interface;
- It should be equitable;
- It should be predictable;
- It should be consistently applied to different areas, different emergencies and over different years; and
- There should be general policy guidelines that can be flexibly managed by local public land managers, applied in accordance with the principles articulated above and fit with local circumstances and needs.

The Inquiry recommends that Government either make a formal decision on a revised policy, or alternatively, commence a public consultation process. The policy will need to address the following issues:

- Fires started on private land by a private individual that burn onto public land;
- Fires originating on public land resulting from a prescribed burn that escapes onto private land;
- Fires deliberately lit as a fire suppression tactic – i.e. back burns; and
- Naturally caused fires that originate on public or private land and burn across the boundary.

Recommendation 4

That Government initiates a review of the fencing policy for boundary and internal fences damaged as a result of a fire.

5.4 Rehabilitation of Damage

Public and private land suffers significant damage from the fire event itself but also from fire suppression activity. Historically Government has not had a formal policy in respect to ‘making good’ or rehabilitating damage to private land and assets caused by the fire suppression activity, and any work carried out, appears to have been ad hoc and locally determined.

This year following significant complaints from affected landholders, Government agreed to rehabilitate mineral earth breaks (a clearance that requires the removal of all flammable material from the land by a bulldozer) on private land and this decision was well received in communities. DSE and Parks Victoria have always restored mineral earth breaks and other works carried out on public land.

The Inquiry considers that Government should form a view on whether, as a matter of policy, Government will restore private assets damaged or consumed as a result of any fire suppression activity agreed to and authorised by the Incident Controller (with the exception of fences above). Such restoration could include:

- The making good of mineral earth breaks on private land;
- Repair to fences damaged by the passage of heavy equipment engaged in the fire suppression activity either in the creation of a mineral earth break or by traversing private land to access public land; and
- Assistance in the replacement of water used by the fire services, where possible.

The policy will not cover private structures, stored fodder and stock. These are insurable assets and stock should be moved prior to the commencement of authorised fire suppression activities.

Recommendation 5

That Government develops a consistent policy for the rehabilitation/restoration of private assets damaged or consumed in authorised fire suppression activity.

5.5 Protection of Melbourne's Catchments

While the fires of 2002-03 burnt a large area of Victoria, significant areas of public and private land remain at risk, and the coming fire season could again be extreme unless Victoria receives substantial and prolonged rain.

A negative outcome of the North East and Gippsland fires has been the degradation of the water quality of many rural communities - caused by silt and ash pollution and damage to catchments.

Because of the importance of Victoria's water catchment areas, the Inquiry believes that Government should be assured that adequate fire mitigation and fire suppression planning is in place for the State's catchments, and in particular the Melbourne catchments.

Approximately 50% of Melbourne's catchment area is Mountain Ash forest and is not prescribed burnt for practical and ecological reasons. Melbourne Water estimates that 80% of the city's water is derived from the Mountain Ash vegetation areas. If there was a significant fire, it is estimated that it would take 20-25 years after the fire for the water yield in these fire affected areas to return to 50% of the pre-disturbance water yields³. Actively growing Mountain Ash will intercept and use more water than mature forest. It will then take many more years for full recovery to occur.

An extreme fire in the catchments would have severe impacts on water yield well into the future, and could require development of alternative water storage.

Melbourne Water and DSE/PV protect Melbourne's catchments in accordance with a memorandum of understanding. The principal mitigation strategies are aimed at preventing fire from entering catchment areas from surrounding land, and putting in place rapid response strategies to ensure fires originating in the catchments can be attacked and controlled while still small. This is done by a combination of well maintained and extensive road networks, seasonal or project firefighting staff required to reside close to the catchment they are protecting, mutual aid agreements with DSE and Parks Victoria and other land management strategies.

Recommendation 6

That the Premier requests that the Minister for Water critically review the fire prevention planning and fire response strategies for Victoria's water catchments.

³ Kuczera, G.A. (1987) Prediction of water yield reductions following a bushfire in ash-mixed species eucalypt forest. *Journal of Hydrology*, 94:215-236.

6. Conclusion

The recommendations above are issues the Inquiry believes require early consideration by Government, either to assist with community recovery following the 2002-03 fires, or as preparation for the coming fire season by both private landholders and fire agencies.

The final Report will include recommendations for further change and policy development that cannot be implemented before the coming fire season, or is required in the medium to longer term.