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Legislative Council Environment and Planning Committee

Inquiry into fire season preparedness

Final Report

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Committee functions

The Environment and Planning Committee (Legislation and References) is established under the Legislative Council Standing Orders Chapter 23 — Council Committees and Sessional Orders.

The committee's functions are to inquire into and report on any proposal, matter or thing concerned with the arts, environment and planning the use, development and protection of land.

The Environment and Planning Committee (References) may inquire into, hold public hearings, consider and report on other matters that are relevant to its functions.

The Environment and Planning Committee (Legislation) may inquire into, hold public hearings, consider and report on any Bills or draft Bills referred by the Legislative Council, annual reports, estimates of expenditure or other documents laid before the Legislative Council in accordance with an Act, provided these are relevant to its functions.

Government Department allocated for oversight:

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Chair's foreword

This has been a long, difficult but important inquiry. The Committee received 86 submissions and heard from 111 witnesses, in Melbourne and in 27 hearings in country Victoria. On behalf of the Committee I want to record our thanks the many witnesses and submitters.

I want to particularly thank the Committee staff for what has been a long, complex and difficult inquiry, including Michael Baker, Keir Delaney, Joel Hallinan, Richard Willis, Prue Purdey, Michelle Kurrle, Annemarie Burt and Anthony Walsh.

The Committee grappled with the Government's determination not to provide detailed and independent submissions from the many different government agencies which have legitimate but different vantage points on the issue of bushfire preparedness.

A large part of the Committee's work related to the cabinet endorsed CFA EBA, the Country Fire Authority/United Firefighters Union of Australia Operational Staff Enterprise Agreement 2015.

Indeed, a number of submissions focussed entirely on the issue, despite it not being explicitly identified in the terms of reference and many witnesses gave evidence on concerns about the Agreement's potential impact.

Clearly, government members had a different viewpoint from opposition members, but the Committee as a whole recognised the importance of the CFA dispute, its impact on country Victoria and opened hearings specifically into this matter. The Committee concluded that it was:

...concerned about the impact of Country Fire Authority/United Firefighters Union of Australia Operational Staff Enterprise Agreement 2015 on country Victoria and community safety. (Page 17)

Unfortunately, a majority of the Committee concluded that it would report very little of the details of its hearings on the CFA EBA dispute. This is extraordinary considering the large amount of effort the Committee had devoted to this topic and the controversial aspects of this issue in country Victoria in particular.

There is no doubt on all the evidence I heard that the EBA proposals will have a massive impact on CFA volunteers, but most importantly on the effectiveness of the CFA in its response to large-scale bushfires, including its surge capacity.

I am particularly concerned that a union dominated CFA, where volunteers are squeezed out, will damage the reservoir of volunteers and diminish massively the surge capacity that is a cornerstone in protecting public safety and property

state wide. This is not just a country issue, city-based Victorians have family and properties in country Victoria. They also holiday extensively and are tourists in country Victoria.

I personally remain deeply concerned at the decision to move the Ballarat-based air crane to Moorabbin. I hope that in the future, people do not look back and say that the bureaucrats and officials who imposed this decision have blood on their hands.

Decisions by the Andrews Labor Government to retreat from planning amendments in the City of Nillumbik follow a revolt by land owners and residents who did not want their lives and property placed at risk by cumbersome and poorly targeted planning overlays and associated bureaucracy. There is a lesson in this for the Government as it implements its native vegetation framework state wide.

I also draw community attention to key issues concerning targets for bushfire planned burning and issues surrounding indigenous burning practices.

....

Hon David Davis MLC Chair

Findings and Recommendations

1 Overview

FINDING 1: The Gippsland Arson Prevention Program (GAPP) represents a positive and valuable example of community and agencies working together to address a significant cause of bushfire and should be commended and replicated in other regions of Victoria
FINDING 2: A significant percentage of fires are caused by human activity either through deliberate actions or through accident or negligence. In many cases these fires could be prevented
FINDING 3: The anti-arson program established by Gippsland Arson Prevention Program (GAPP) represents a significant and positive initiative and is an example of a community and agencies combining to address the serious problem of deliberately or negligently lit fires
FINDING 4: Currently the penalties for Total Fire Ban offences do not adequately reflect the seriousness of the offences and are difficult to enforce
RECOMMENDATION 1: The Government should:
(a) provide additional support to the Gippsland Arson Prevention Program; and
(b) support the establishment of arson prevention programs of this type in other bushfire-prone regions within Victoria, and involve both community and government agencies
RECOMMENDATION 2: The Government introduce an amendment to the Country Fire Authority Act 1958 or other instruments which imposes significant penalties and strengthens enforcement, including via infringement notices, for offences against Total Fire Ban requirements before the 2017-2018 fire season
Fuel management
FINDING 5: The logic of the mosaic, cooler burn model for planned burns may have merit and it could potentially provide a viable alternative to the current larger, landscape burns in some circumstances. Currently, there is very limited data available on the overall effectiveness of cooler burning models such as the Return to the Firestick project and therefore it is not possible to compare its effectiveness compared with current practices
RECOMMENDATION 3: That Government provide support in the form of funding for the Return to the Firestick project, and that a formal pilot scheme be established where data can be collected, collated and analysed and the effectiveness of this approach be compared against current burning practices32

RECOMMENDATION 4: That any such pilot program ought to be managed by the relevant indigenous organisations, with support provided by DELWP and its partner agencies and the development and the evaluation of any pilot program should be overseen by an independent and reputable academic or research institution
FINDING 6: The Committee supports a risk-based approach to planned burning to the extent that the focus is on protecting lives and property, but considers that such an approach may lead to a reduction in planned burns which could see an increase in fuel loads over time
FINDING 7: The Committee considers the risks associated with planned burns may see a reduction in total area subject to planned burns due to the pressure applied to fire managers in the media, within government and by communities where there is a breach and if there are no formal hectare-based targets to meet
RECOMMENDATION 5: That in conjunction with a risk-based approach, a minimum hectare target is also maintained that can be measured and compared. This minimum target should not be below the 5% target established by the Victorian Bushfire Royal Commission
RECOMMENDATION 6: That fire managers responsible for planned burns be indemnified against any and all actions in the event of damage caused by an escape of the planned burn, on the basis of a 'good faith' test
FINDING 8: The Committee considers that bushfire mitigation is the responsibility of all Victorians and that while governments have responsibility to ensure firefighting and mitigation is adequately resourced and arrangements in place are efficient and effective, the broader community must also take responsibility for its own safety by being aware of individual risk, being prepared with a plan and staying informed about weather and fire conditions
FINDING 9: The Committee considers that generally the community meets its responsibilities by staying informed but must remain vigilant and engaged as the risk remains high
FINDING 10: Private landholders have a responsibility to their communities to ensure that their land is well prepared for fire season and that they cooperate with authorities to ensure their land does not add to the fire risk for surrounding areas 50
FINDING 11: Local Councils have responsibility to manage large amounts of land and roadsides and while they can issue fire prevention notices to private landowners, these notices are difficult to enforce, particularly if adjoining public land is carrying high fuel loads and fuel reduction activities on that land have not been undertaken
RECOMMENDATION 7: That the Government conduct a review of fire prevention activities undertaken by local government, including the amounts and sources of funding for such activities and the support of departments and agencies to manage and mitigate risk. The review should include determining compliance with s43 of the Country Fire Authority Act 1958 and should consider the appropriate support required to enable Councils to meet their obligations under the Act 51

RECOMMENDATION 8: That a review of the cross-tenure approach be undertaken to determine its effectiveness and to address issues that arise in fire prevention on private and public land
FINDING 12: While the resilience of ecosystems and species and their long-term viability is considered in the planning processes for planned burning, there is room for more consideration of the welfare of animals themselves as failure to do so can exacerbate suffering of animals during burns and difficulties in managing the impacts after burns
RECOMMENDATION 9: That issues of animal welfare be given a higher practical priority in the planned burning process on the ground, including:
(a) Veterinarians and Wildlife volunteers (animal rescue teams) should be consulted before and during planned burns to reduce or remove the risk to native animals where possible, and to assist in tending injured wildlife (including euthanasia where necessary); and
(b) Wildlife volunteers (animal rescue teams) be given access to the fireground as soon as it is safe to assist injured animals
FINDING 13: While it is important to consider the impact of planned burns on the health of people, crops and businesses, it needs to be acknowledged that the impact of mega-fires that may result from not undertaking planned burns may be significant. 68
FINDING 14: The health impacts of planned burns are not satisfactorily documented and there needs to be more empirical evidence gathered to inform decisions about when it is safest to undertake planned burns
RECOMMENDATION 10: DELWP and its partner agencies, in conjunction with the Department of Health and Human Services, should undertake research into the specific effects on health of people affected by planned burns and the information should be made public. The study should include the direct impact of smoke on affected populations and impacts on water, food supplies and livestock 69
FINDING 15: While the 'Leave Early and Live' message places an appropriate emphasis on the protection of human life, it is recognised that it comes with a greater potential risk of property loss
FINDING 16: The optimum time to 'leave early' may not always be clear and it may be impractical for people to leave <i>before there is a fire</i> on days that have been designated to have a 'severe' or 'extreme' fire danger rating
FINDING 17: A review of the 'Leave Early and Live' policy should be undertaken to determine the extent to which it adds to the safety of the community and whether its implementation has created unintended consequences
FINDING 18: Evidence was presented that suggests that climate change will impact on fire seasons by making them longer and by increasing the number of days of severe or extreme fire risk and that this will have implications for the resources needed to manage and respond to bushfires

	FINDING 19: Evidence was presented that climate change, by increasing the length of fire seasons and by increasing the number of days that have severe or extreme fire danger ratings, is already reducing the time windows available to undertake planned burns
	FINDING 20: The result of fewer or less extensive planned burns as climate change reduces the time available to undertake them could be a build-up of fuels which could contribute to the catastrophic mega fires experienced in 2009
	RECOMMENDATION 11: In order to manage a reduced time window available to undertake the current types of planned burns, alternative methods, including the indigenous mosaic 'cool' burns, should be examined and trialled as they may extend the period in which planned burns can be undertaken while reducing overall risk and fuel loads
4	Coordination arrangements
	FINDING 21: Victorians expect well-resourced co-ordinated fire services and also need to take responsibility for their own preparedness and safety
	·

1 Overview

1.1 Introduction

Victoria is one of the most bushfire prone regions in the world. The bushfires of February 7, 2009, which have become known as Black Saturday, killed 173 people, destroyed more than 2000 homes and devastated more than 430,000 hectares of land. The Victorian Bushfires Royal Commission (VBRC), which investigated the Black Saturday fires, said that:

This was one of Australia's worst natural disasters. It will be many years before its effects dim. Governments, fire and emergency services agencies and all individuals can learn valuable lessons from those days, so that we might reduce the risk of such destruction occurring again.²

Indeed, while the Black Saturday fires were amongst the worst every experienced in Australia, they were far from the first major fire events in recent history. In the last two decades, Victoria has experienced a number of destructive bushfires. Some of the major bushfires in Victoria over the last 20 years, and the impact they had, is provided at Appendix 4.

Indications are that a changing climate, a growing population of people living in the outer fringes of Melbourne, the city-rural interface, and increasing numbers moving to country Victoria will lead to more people being directly affected by bushfires in the future.

As the VBRC said in its Final Report, although the Black Saturday fires were particularly calamitous, it would be a mistake to:

... treat Black Saturday as a 'one-off' event. With populations at the rural-urban interface growing and the impact of climate change, the risks associated with bushfire are likely to increase.

While the mega-fires experienced in 2009 grab the headlines, the fact is that bushfire is a constant part of the Australian, and particularly Victorian, landscape. Even without a Black Saturday event, bushfires are a consistent threat that require vigilance from people who live in rural and peri-urban areas and a fire management system that is committed, well-resourced and efficient and effective.

Most bushfires and grass fires are put out before they become a major threat to life or property. From 1 October 2015 to 20 March 2016, approximately 5000 grass and bushfires were responded to by agencies in Victoria. Most of these were made safe

^{1 &}lt;www.delwp.vic.gov.au/__data/assets/pdf_file/0004/318847/DELWP0016D_BMP15_AlpineNorthEast_web. pdf>, accessed 7 February 2017

² Victorian Bushfires Royal Commission, *Final Report*, July 2010, p1

very quickly and have not been too destructive. The main exception to this was towards the end of December 2015, when a major fire saw the loss of 139 structures and homes in the Scotsburn, Barnawartha and Wye River – Jamieson Track area. Despite the intensity of the fire, and due largely to the efforts of the firefighters, there was no loss of life.

Across the state in 2015-16, a total of 148 houses were destroyed by bushfires and 28,334 hectares burnt. Around 70 sheds and over 580 km fencing were destroyed, 4600 sheep were killed, along with other stock, cattle, chickens and horses and in excess of 442 tonnes of hay³. This is without the catastrophic conditions that caused the Black Saturday destruction.

The Victorian community has a combination of paid and volunteer fire fighters, and support staff, to thank for the fact that very few fires become the infernos of Black Saturday, or Ash Wednesday a quarter of a century earlier.

It is essential that the government ensures that the systems that are in place to protect the community are supported, improved and are resourced sufficiently to continue to keep Victorian safe from a threat that is likely to increase in the coming years.

1.2 Bushfires – the practical realities

1.2.1 The inevitability of bushfires

It has been made clear throughout the inquiry that bushfire is not a preventable natural phenomenon. It is part of the Australian landscape and Victoria is one of the most bushfire prone areas in Australia and, in fact, the world.

The relationship of fire to the Australian landscape was discussed in the submission to the enquiry by Australasian Fire and Emergency Service Authorities Council (AFAC), which stated that:

Fire is a natural part of the Australian landscape. Much of the Australian landscape has evolved with fire, and fire events are a certainty and necessity for the continued survival of fire dependent species and ecosystems.⁴

In a submission to a Senate Inquiry into Bushfires in Australia in 2009, following the Black Saturday fires, the CSIRO stated that:

Bushfires are an inevitable occurrence in Australia. ...the southeast, where the majority of the population resides, is particularly susceptible to large wildfires that threaten life and property. The periods of greatest fire risk vary across Australia because of differences in the rate of vegetation (and hence fuel) production, the rate at which fuels dry out, the occurrence of suitable fire weather for the spread of fire across the landscape, and ignitions.⁵

³ Emergency Management Victoria, Year in Review 2015 – 16, p 38

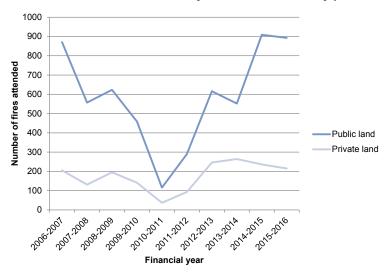
⁴ Australasian Fire and Emergency Service Authorities Council, Submission 24, p 3

⁵ CSIRO Submission to the 2009 Senate Inquiry into Bushfires in Australia, July 2009, p v

The CSIRO said in its submission to the Senate inquiry that about 50 million hectares of land are burned by bushfires across Australia each year. On average bushfires account for about 10 percent of the cost of all major natural disasters in Australia, and are associated with the greatest loss of life.⁶

In the following graph, the number of fires attended by DELWP and its predecessor agencies and partner agencies is shown in the last decade. The Department estimate that it has attended over 7,700 fires. The graph shows that the numbers of fires attended on private land has steadily increased since 2010-2011 which, according to the Government submission received by the Committee, is a reflection of the increased interoperability across the sector. The significant dip in fire attended in 2010-11 and 2011-12 is reflective of the influence of the La Niña weather system which brought significant rainfall. There may also have been an effect of the Black Saturday bushfires in 2009 reducing fuel loads in susceptible areas.

Figure 1.1 The number of fires attended by DELWP and delivery partners



Source: Government submission, Submission 60, p 74

One of the measures of effective management of bushfires is keeping them small. A small fire is less intense and easier to put out and is therefore going to be less of a risk to life and property.

During evidence before the committee, the Emergency Management Commissioner, Mr Craig Lapsley said that the strategies used to manage bushfires are based on 'keeping small fires small'.8

This is one of the key metrics for DELWP and its partner agencies to judge their effectiveness. In the Government submission presented to the Committee, it was stated that the Department has a performance objective of keeping 91 percent of fires contained to 5 hectares or below.⁹

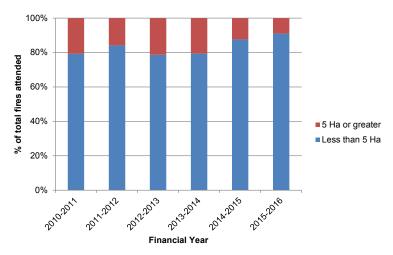
⁶ Ibio

⁷ Government submission, Submission 60, p 73

⁸ Mr Craig Lapsley, *Transcript of Evidence*, 28 February 2017, p 3

⁹ Government submission, Submission 60, p 74

Figure 1.2 The proportion of fires 5 hectares or under in size



Source: Government submission, Submission 60, p 75

The performance over the last five years shows that the majority of fires are kept reasonably small. This does not, however, suggest that the issues of bushfire management are under control or are not of concern. While the number of fires that become larger and more intense may be proportionately few, the effect of these fires can be devastating as seen on Black Saturday, or even at Wye River-Separation Creek in 2015.

1.2.2 Causes of bushfires

Evidence about causation of bushfires as presented to the Committee varied significantly. Some evidence went so far as to suggest that at least 70 per cent of bushfire is started by human activity, either deliberately or through negligence or accident.

The three key factors that lead to bushfires are the available fuel, ignition and weather conditions, particularly lightning strikes. The issues related to fuel management are addressed in more detail in the chapter three.

Weather conditions are also discussed in that chapter, particularly as they affected by climate change. Hot and dry conditions with strong winds make the potential for severe bushfires more likely and make fighting them more difficult. Evidence suggests that conditions conducive to mega-fires as seen on Black Saturday are increasingly likely as the climate warms and rainfall declines. These issues are discussed in more detail later in the report.

However, for a fire to start and take hold there needs to be ignition – something has to provide the spark.

Fires started by lightning are less avoidable than human-lit fires and much of the focus in this section is on the fires started either maliciously or through carelessness or negligence. Another cause of fires is sparking from electrical infrastructure, particularly as it ages. While usually a relatively small percentage of bushfires are started by electrical infrastructure, estimated by the VBRC to be about 1.5 per cent of all ignitions in normal circumstances, this percentage can rise dramatically on days of extreme fire danger. ¹⁰

The VBRC stated that at least three of the Black Saturday fires - the Kilmore East, Coleraine and Horsham fires were started by ageing electricity assets the assets were at least a contributing factor. The Commission estimated that about 200 bushfires a year are started by electrical infrastructure assets.

This is an Australia-wide issue and one where governments are being confronted with challenges of replacing infrastructure that is, in some cases, nearly a century old. In a report to the Western Australian parliament in 2012, an inquiry into the state of the power poles infrastructure in that State found that:

The potential for electricity network assets to ignite bushfires is one of the most significant public safety risks for the Western Power Network. Approximately 25% of our wood poles are located in 'extreme' or 'high' bushfire risk areas. Our challenge is to ensure these distribution assets continue to operate safely and are replaced before they reach the end of their useful life.¹¹

The VBRC said in its Final Report that 'now is the time to start replacing the ageing electricity infrastructure and to make major changes to its operation and management.' The report said:

The seriousness of the risk and the need to protect human life are imperatives Victorians cannot ignore.¹³

Specifically, in relation to electrical infrastructure the Commission recommended:

- the progressive replacement of all SWER (single-wire earth return) power lines in Victoria with aerial-bundled cable, underground cabling or other technology completed in the areas of highest bushfire risk within 10 years;
- the progressive replacement of all 22-kilovolt distribution feeders with aerial bundled cable, underground-cabling or other technology that delivers greatly reduced bushfire risk;
- The State require distribution businesses to change their asset inspection standards and procedures to require that all SWER lines and all 22-kilovolt feeders in areas of high bushfire risk are inspected at least every three years;
- The State require distribution businesses to review and modify their current practices, standards and procedures for the training and auditing of asset inspectors; and
- The State amend the regulatory framework for electricity safety to require that distribution businesses adopt, as part of their management plans, measures to reduce the risks posed by hazard trees.

¹⁰ Victorian Bushfires Royal Commission, Final Report, July 2010, p 12

¹¹ Standing Committee On Public Administration, *Unassisted Failure*, Report No 14, January 2012, p 5

¹² Victorian Bushfires Royal Commission, Final Report, p 12

¹³ Victorian Bushfires Royal Commission, *Final Report*, p 12

The Committee notes that power company AusNet reached settlement with the victims of the 2009 Black Saturday bushfires in 2015. Under the terms of the settlement, which arose out of a Class Action over the Kilmore East Bushfire, where a conductor broke after being struck by lightning and initiated the fire, it was reported that the final settlement was for about \$300 million. Of this amount, the company paid about \$260 million, with State parties and Utilities Services Corporation paying the balance.¹⁴

The *Electricity Safety Amendment (Bushfire Mitigation Civil Penalties Scheme) Bill 2017* assented to on 16 May 2017 provides for additional bushfire mitigation requirements for major electricity companies.

Arson and human-caused bushfire

Research presented to the inquiry suggests that a significant number of bushfires are deliberately lit, many by children. According to Monash University researcher, Dr Paul Read, the research over the past 15 years suggests that up to 85 per cent of fires have human ignition at the source.

That does not mean that all of those fires are the result of arson, or deliberately lit fires. Some may be caused by the use of machinery and are therefore accidental or negligent, but not malicious.¹⁵

Associate Professor Janet Stanley of the Melbourne Sustainable Society Institute indicated to the Committee in evidence that there is an over-reliance in bushfire mitigation on environmental modification in the form of fuel reduction activities, and insufficient effort put into dealing with the major cause of fires, in human actions. She said in evidence that given that about 85 or 90 per cent of fires are human lit in some form:

To not actually take this into account is not using all the resources that we can have and use and need to use for future prevention of bushfires in Victoria. ¹⁶

It is clear that getting very precise figures on how many fires are deliberately lit is difficult because, as the Committee was told by Ms Samantha Hunter of Crimestoppers, 'arsonists are very difficult to detect and convict'. They often have to be caught in the act or at least observed, because much of the evidence of their involvement literally 'goes up in smoke'.

Crimestoppers is a 29-year-old crime prevention organisation that gathers intelligence and runs crime prevention and crime detection activities.
Ms Hunter told the Committee in evidence that Crimestoppers has a vital role to play in preventing arson:

^{4 (}www.smh.com.au/breaking-news-national/ausnet-settles-with-bushfire-victims-20150206-3plwf.html

¹⁵ Dr Paul Read, *Transcript of Evidence*, 7 July 2016, p 15

¹⁶ Associate Professor Janet Stanley, *Transcript of Evidence*, 7 July 2016, p 14

¹⁷ Ms Samantha Hunter, *Transcript of Evidence*, 7 July 2016, p 15

¹⁸ Ibio

While we partner with the CFA, recklessly causing fires is a crime, the CFA is not a crime organisation. Crime Stoppers is a crime intelligence collection service, so we do have an important role to play in community education. We have 98 per cent brand trust with the community and a \$30 million pro bono media reach each year within Victoria...¹⁹

One of the problems identified during the inquiry is that often arsonists go unidentified.

The Committee is also aware that Victoria Police has developed the Operation Firesetter strategy, which involves police patrols undertaking crime prevention and monitoring activities in high-risk bushfire arson locations during high risk periods. There is Mandatory activation of the operation on 'extreme' or 'code red' fire danger days and discretionary activation of the operation can occur on lesser fire danger rating days.²⁰

The Committee received a submission from the Gippsland Arson Prevention Program (GAPP), which was formed as a result of the 2009 bushfires in Gippsland. It is made up of emergency management agencies and industries across Gippsland and aims to reduce the incidence of arson. Partners include Victoria Police, the CFA, businesses such as HVP Plantations, Engie, Loy Yang Power, True Energy, Gippsland Water, local government and state government agencies as well as the Monash University's Sustainability Institute.²¹

The program deals not just with deliberate or malicious arson, but also with accidental, negligent or carelessly caused fires such as breaches of Total Fire Ban (TFB) rules and leaving campfires unattended.

The GAPP undertakes co-ordinated fire prevention patrols across private and public land, runs and education program to deter arson. Through these activities, GAPP has identified some key issues that it considers impacts on 'the ability of regulatory agencies to implement legislation around fire prevention.'22

In particular, GAPP suggests that issues of concern include:

- There are no infringement notice options available for TFB offences;
- Penalties handed down by Magistrates for TFB offences are not in line with community expectations; and
- Complexities involved in proving that a campfire was left unattended.²³

Total Fire Ban offences can have devastating impacts on communities. In 2011 in Western Australia, the Roleystone bushfire led to the total destruction of 71 houses, with another 32 badly damaged. This fire was started by an angle

¹⁹ Ibio

²⁰ Inspector-General for Emergency Management, 2015-16 Annual Assurance Summary, August 2016, p 19

²¹ Gippsland Arson Prevention Program, Submission 81, p 3

²² Ibid

²³ Ibid

grinder being used on a Total Fire Ban day.²⁴ While charges that were laid over the incident were later dropped due to a technical breach in the declaration of a Total Fire Ban, the incident is an illustration of how significant such breaches can be.

The following Table shows the outcomes of cases of lighting a fire or allowing a fire to remain alight before the Magistrates' Court over a four year period. As can be seen, the most common outcome for such cases is a fine, with only 4 per cent of cases leading to imprisonment, and another 4 per cent leading to a suspended sentence.

These cases are offences against s 40(4)(a) of the *Country Fire Authority Act* 1958, which provides:

Notwithstanding the provisions contained in section 38 or 38A, a person in a part of Victoria where and at a time when a declaration of total fire ban applies—

- (a) shall not light a fire in the open air or allow a fire in the open air to remain alight; or
- (b) use or leave in operation any producer-gas equipment on or in connexion with any vehicle.

Penalty: 240 penalty units or imprisonment for 2 years or both.²⁵

Table 1.1 Cases of Lighting a fire or allowing a fire to remain alight in the open air, 2011-2014

Imprisonment	4%
Partially Suspended Sentence	0%
Wholly Suspended Sentence	4%
Youth Justice Centre Order	0%
Community Correction Order	8%
Intensive Correction Order	0%
Community-Based Order	0%
Fine	44%
Other	0%
Adjourned Undertaking (ADU)/Discharge/Dismissal	40%

Source: SACStat Magistrates' Court, <www.sentencingcouncil.vic.gov.au/sacstat/magistrates_court/6228_40_4_a.html> accessed on 12 April 2017. These are the most recent available figures.

In Victoria in the most recent declared fire season, several grass fires were attributed to the use of machinery such as ride on mowers or other equipment, some of which require significant resources to stop them becoming much more substantial fires. One of these fires burnt more than 10 hectares and required in excess of 50 firefighters, a fire bombing helicopter, grader and other machinery to put it out.²⁶

^{24 &}lt;a href="https://www.watoday.com.au/wa-news/policeman-charged-with-sparking-massive-bushfire-20110209-lamwp.html">www.watoday.com.au/wa-news/policeman-charged-with-sparking-massive-bushfire-20110209-lamwp.html accessed on 24 March 2017.

²⁵ Country Fire Authority Act 1958, s40(4)(a)

^{26 &}lt;news.cfa.vic.gov.au/news/zero-tolerance-for-fdp-breaches.html> accessed on 24 March 2017 at 9.30 am.

It has been claimed that unattended campfires are also becoming an increasingly serious problem as populations rise and increasing number of people use bushland for recreational use, often without great experience of doing so. GAPP's submission indicated that currently 'the burden of proof is on the regulatory agency to prove a campfire was left unattended.'²⁷ This provides a significant challenge in deterring irresponsible behaviour as authorities must prove that a campfire was left unattended, usually after the people concerned have left. GAPP has suggested that this onus of proof should be reversed, a legally difficult proposition.

GAPP expressed concern in its submission that currently there is no infringement notice option for TFB offences in the *CFA Act 1958* and the only options available to regulatory agencies is to send an official letter either warning of, or recommending, prosecution.

The GAPP submission suggested that as the warning letter is very rarely sent, due to the seriousness of the offence, most cases proceed to the Magistrates' Court, which in many cases is clogging up the courts where a high value infringement notice would be an immediate deterrent.²⁸

GAPP is also concerned about the low number and quantum of penalties being issued by Magistrates. While the maximum penalty available to Magistrates for a TFB offence is a fine of \$37,310 or 2 years' imprisonment or both, most fines are in the range of \$200-300.²⁹

In subsequent correspondence to the Committee, GAPP suggested that a comparison can be drawn with not complying with the direction of a Fire Prevention Notice under the *Emergency Services Legislation Amendment Act 2012*. It advised the Committee that the penalty for not complying with the direction of a Fire Prevention Notice was increased from 2 penalty units to 10 penalty units and that this saw a significantly higher level of compliance.³⁰

In its correspondence, GAPP indicated that Total Fire Ban offences are considered by the State Government to be far more serious an offence than Fire Prevention Notice offence, but this is not reflected in court outcomes.

GAPP stated that in the last year, 'the average fines awarded against people failing to comply with a Fire Prevention Notice in the Wellington Shire Council was consistently higher than the value of the original infringement fine, and far more than the average \$200-\$300 fines reported for Total Fire Ban (TFB) offences in Gippsland.'³¹

²⁷ Gippsland Arson Prevention Program, Submission 81, p 4

²⁸ Ibid

²⁹ Ibio

³⁰ Gippsland Arson Prevention Program correspondence to Committee, 5 May 2017

³¹ Ibio

It suggested in its correspondence that:

...the ability to issue an infringement for TFB offences, that matches or exceeds the Fire Prevention Notice infringements, not only makes sense and provides prosecution efficiencies, it would support the government's position on treating fire offences with the seriousness that they deserve.³²

It was the GAPP recommendation that there be a minimum penalty established for TFB offences to ensure the seriousness of the offences is recognised and a more significant deterrent is established.

The Committee considers that the GAPP initiative represents a positive and pro-active approach to bushfire mitigation at a community level and those involved should be commended. It is an example of the community taking responsibility for its own safety and well-being in an area that is difficult to police.

This view of GAPP was supported in evidence by Associate Professor Stanley and by Ms Hunter of Crimestoppers. Ms Hunter told the Committee that:

I think that is the kind of thing that would be really good to see taken as a model and replicated across other areas where there is the similar kind of mix of industry groups, so up in the Yarra Valley, including your water protection assets in the Macedon Ranges. I think there are a number of locations that that particular GAPP could be replicated, and the interagency approach I think is really vital but also that outreach into the community itself.³³

The Committee also agrees that TFB offences are potentially very serious ones that warrant a greater deterrent than the current range of penalties being imposed by the courts.

FINDING 1: The Gippsland Arson Prevention Program (GAPP) represents a positive and valuable example of community and agencies working together to address a significant cause of bushfire and should be commended and replicated in other regions of Victoria.

FINDING 2: A significant percentage of fires are caused by human activity either through deliberate actions or through accident or negligence. In many cases these fires could be prevented.

FINDING 3: The anti-arson program established by Gippsland Arson Prevention Program (GAPP) represents a significant and positive initiative and is an example of a community and agencies combining to address the serious problem of deliberately or negligently lit fires.

FINDING 4: Currently the penalties for Total Fire Ban offences do not adequately reflect the seriousness of the offences and are difficult to enforce.

³² Ibio

³³ Ms Samantha Hunter, Transcript of Evidence, 7 July 2016, p 15

RECOMMENDATION 1: The Government should:

- (a) provide additional support to the Gippsland Arson Prevention Program; and
- (b) support the establishment of arson prevention programs of this type in other bushfire-prone regions within Victoria, and involve both community and government agencies.

RECOMMENDATION 2: The Government introduce an amendment to the *Country Fire Authority Act 1958* or other instruments which imposes significant penalties and strengthens enforcement, including via infringement notices, for offences against Total Fire Ban requirements before the 2017-2018 fire season.

2 Terms of Reference and inquiry process

2.1 The Terms of Reference

On 3 May 2016 the Committee resolved to undertake an inquiry as a self-reference on the preparation and planning for fire seasons in Victoria. Specifically, the terms of reference adopted were:

That pursuant to sessional order 6 —

- the Environment and Planning Standing Committee inquire into and report on the preparation and planning for fire seasons by the Department of Environment, Land, Water and Planning and its agencies, including Parks Victoria and, in particular
 - a. the amount and nature of preventative burning undertaken to date;
 - b. the measures in place to ensure preventative burning is undertaken safely
 - c. the effectiveness of preventative burns in achieving community safety
 - d. the impact of preventative burns on threatened species
 - e. the impact of preventative burns on ecological vegetation classes
 - f. the impact of preventative burns on the climate
 - g. the targeting of preventative measures state-wide;
 - h. the resources available to ensure that adequate preparation is undertaken;
 - i. the coordination of such planning and preparation with other departments and agencies across government;
 - j. the nature and level of emergency response;
 - k. the relevant administrative and organisational structures in place within the department and with other relevant government departments and agencies; and
 - l. the impact of land tenure on the ability to provide fire prevention activities and the differences between types of land tenure such as national park, state forest, regional park and others.
- 2. the Committee is to consider annual reports tabled by the Department of Environment, Land, Water and Planning and its agencies, including Parks Victoria, and any other relevant matter as determined by the committee;
- 3. the Committee may present an interim report to the Legislative Council and may present further reports as necessary;

4. the Committee is to commence the inquiry in May 2016 and present its final report to the Legislative Council no later than 8 December 2016.

The Committee tabled an Interim Report on 8 December 2016, and in the Interim Report, the Committee said:

As a result of additional inquiries being referred to the Committee by the Legislative Council, on 25 October 2016 the Committee advised the House that it had resolved to extend its reporting date for the Fires Season Preparedness inquiry until 5 April 2017.³⁴

Therefore, the Committee delayed the report on this important inquiry.³⁵ It was able to do this because the timing of the original inquiry meant that any findings and recommendations would not be considered for the current fire season (2016-17) anyway and therefore the delay would have no practical effect on fire season preparedness and the Committee could give due consideration to the matters presented to it during the inquiry.³⁶

The recent changes to the administrative and co-ordination arrangements, including the shift from a hectare-based to a risk-based approach to fuel reduction activities were amongst the motivations for undertaking this inquiry.

2.2 The inquiry process

There have been a number of reports undertaken into bushfire risk and management in Victoria. In the last two decades there have been at least 11 government or independent reports, including:

2015	Independent Investigation of the Lancefield-Cobaw Fire(a)
	Undertaken by Director of Western Australia's Office of Bushfire Risk Management
2013	Harrietville fire report
	Office of the Emergency Services Commissioner
2009	Victorian Bushfires Royal Commission
	2009 Victorian Bushfires Royal Commission - final report
2008	Impacts of public land management practices on bushfires in Victoria
	Environment and Natural Resources Committee (ENRC)
2007	Operational reviews of major fires in Victoria 2006/07
	Ross Smith, Department of Sustainability and Environment and Country Fire Authority
2006	Ministerial taskforce on bushfire recovery – 2005/06 fires
	Victorian Government

³⁴ Environment and Planning Committee, Inquiry into fire season preparedness – Interim Report, 8 December 2016, p 2

³⁵ As Parliament did not sit in April, the tabling of the Report was further delayed until May.

The Committee further extended the tabling date to 22 June 2017 and advised the Legislative Council on 2 May 2017

2005	Examination of prescribed burning practices		
	Office of the Emergency Services Commissioner		
2003	National inquiry on bushfire mitigation and management		
	Council of Australian Governments (COAG), Mr Stuart Ellis, Professor Peter Kanowski, Professor Rob Whelan		
2003	Fire prevention and preparedness		
	Auditor-General Victoria		
2003	Inquiry into the 2002-2003 Victorian bushfires		
	Emergency Services Commissioner, Victoria		
1998	Investigation and inquests into a wildfire and the deaths of five firefighters at Linton on 2 December 1998		
	Coroners Court Victoria		

(a) <www.ffm.vic.gov.au/__data/assets/pdf_file/0002/20000/Independent-investigation-into-Lancefield-Cobaw-fire pdf>

While some of these reports have been focussed on specific fire events, all of them address issues covered by the Committee's terms of reference. In addition, there have been a significant number of reports produced in other jurisdictions that similarly address these issues.

The Committee does not intend in this report to re-examine many of the technical issues covered by these inquiries, nor has it undertaken a comparative analysis of practices in other jurisdictions. Since the Royal Commission there is a large amount of technical information published regularly related to fire season preparedness, including a range of accessible Monitoring, evaluating and reporting documents produced by Forest Fire Management Victoria, and which can be accessed at: www.ffm.vic.gov.au/monitoring-evaluating-and-reporting. The Committee has not sought to reproduce data that is freely available, unless for illustrative purposes in the report.

The Committee has focussed instead on community concerns raised through the course of the inquiry, both through submissions and through extensive hearings in Melbourne and bushfire prone areas of Victoria. The Committee has heard conflicting evidence on a number of issues and has understood that the community, in particular those living in regional Victoria, have strong views on issues which are, for them, literally life and death ones.

Therefore, while cognisant of views expressed and information and data provided in earlier inquiries, the Committee has relied on the submissions and evidence given during this inquiry to reach its conclusions. Its findings and recommendations will be aimed at addressing these community concerns.

2.2.1 Call for submissions

The Committee sought submissions from emergency management agencies, local government, specific stakeholders and the general community through advertising on the Committee's website, news alerts, social media and through correspondence to specific organisations. The advertising and calling

for submissions commenced on 23 May 2016 and the Committee received submissions formally until June 2017. Supplementary submissions were also accepted until June 2017.

As a result, the Committee received 86 submissions from organisations and individuals. Most of the individual submissions received were from people and community-based organisations in regional Victoria.

All submissions and evidence, including all correspondence received during the inquiry have been carefully considered by the Committee.

The Victorian Government submission was prepared by the Department of Environment, Land, Water and Planning (DELWP), with input from the key fire management agencies of Parks Victoria, Melbourne Water, VicForests, Country Fire Authority and Emergency Management Victoria. The Committee has used data provided within that submission in the same way as it would use data it specifically sought from departments.

The Committee notes that it received one submission from government agencies (the Government submission) which did not reflect that there may be differences in opinion between branches of the emergency management community. The Committee was advised that the Government submission was prepared as a whole-of-government submission pursuant to the 2002 Guidelines for submissions to inquiries.

The Committee was further informed after seeking individual submissions that formal submissions were not produced by the individual 'partner' agencies but that the development of the Government submission was a collaborative process of consultation. It is therefore not possible for the Committee to determine where there may be alternative views.

2.2.2 Public hearings

Based on the submissions received, the Committee held public hearings in Melbourne or regional centres on:

- 28 February 2017
- 25 January 2017
- 26 October 2016
- 18 October 2016
- 29 September 2016
- 27 September 2016
- 26 September 2016
- 14 September 2016
- 6 September 2016
- 31 August 2016

- 30 August 2016
- 17 August 2016
- 16 August 2016
- 3 August 2016
- 2 August 2016
- 21 July 2016
- · 20 July 2016
- · 19 July 2016
- 7 July 2016.

A full list of witnesses at these hearings is included in Appendix 2 and a full list of submissions is included in Appendix 1. All submissions and transcripts have been published on the inquiry website at: www.parliament.vic.gov.au/epc/inquiry/437.

2.2.3 The impact of the Country Fire Authority/United Firefighters Union of Australia Operational Staff Enterprise Agreement 2015

The issue of the Country Fire Authority/United Firefighters Union of Australia Operational Staff Enterprise Agreement 2015 and its perceived potential impact on the CFA, and in particular the 59,000 CFA volunteers, was not explicitly identified in the terms of reference. However, at the time of the commencement of the inquiry and throughout the inquiry, the issue was the subject of heated debate and the Committee considered it essential that it heard the concerns raised by the community and organisations. The Committee took extensive evidence in public hearings in Melbourne and in regional Victoria and received numerous submissions on this issue in the course of this inquiry.

In terms of the specific terms of reference, in the Committee's view the perceptions of the issue of the enterprise agreement negotiations have the potential to directly impact on co-ordination arrangements, the nature and level of emergency response and administrative and organisational structures. Therefore, the issue may fall within the scope of terms of reference (i) to (k).

The Committee is concerned about the impact of Country Fire Authority/United Firefighters Union of Australia Operational Staff Enterprise Agreement 2015 on country Victoria and community safety.

2.2.4 The report

The report comprises four chapters, including the Overview and Conduct of the Inquiry introductory chapters.

As several of the terms of reference address various elements of the issue of preventative burning and other mitigation activities, these have been addressed in Chapter Three, with sections on the changes to approach to preventative burning and the reason for the approach, the amount and nature of preventative

burning undertaken to date, the effectiveness of preventative burning and obstacles to its effective implementation, and the impact of preventative burns on threatened species and ecological vegetation classes and the impact of preventative burns on the climate.

Chapter Four addresses the issues of the relevant administrative and organisational structures in place, the legislative and regulatory framework, the co-ordination of planning and preparation processes and the resources available to ensure that adequate preparation is undertaken.

5 Fuel management

3.1 Fuel management

The major activity to mitigate the damage done by bushfires is through a systematic fuel management program. Fuel management reduces the amount of combustible material available to a fire, and in particular smaller material like leaf litter and twigs, bark and undergrowth. By removing this material the intensity and speed of spread of a bushfire can be significantly reduced and the fire can then be more easily controlled. When the build-up of fuel is allowed to grow over time, the risk of a catastrophic bushfire is increased.

In the Government submission to the inquiry, DELWP advised the committee that 'a number of treatment methods can be used to reduce bushfire fuels, including planned burning, mechanical treatments such as slashing or mowing, and applying chemical herbicides.'³⁷

Planned burning 'accounts for most of the area treated and is the most cost efficient method of reducing fuels over broad acre forested land'.³⁸

For fuel management purposes, public land in Victoria is classified into four fire management zones:

- Asset Protection Zone: an area around properties and infrastructure where intensive fuel management is undertaken to provide localised protection, to reduce radiant heat and ember attack on life and property in the event of a bushfire
- Bushfire Moderation Zone: an area where fuel hazard is managed to reduce the speed and intensity of bushfires, and to protect nearby assets, particularly from ember attack in the event of a bushfire
- Landscape Management Zone: an area where fuel is managed to reduce residual bushfire risk, to minimise the impact of major bushfires, improve ecosystem resilience, and for other purposes (such as to regenerate forests and protect water catchments)
- Planned Burning Exclusion Zone: an area where there is every attempt to avoid planned burning, mainly because ecological assets in this zone cannot tolerate fire.³⁹

³⁷ Government submission, Submission 60, p 23

³⁸ Ibio

³⁹ Forest Fire Management Victoria, Reducing Victoria's bushfire risk on public land: Fuel management report 2014–15, p

3.2 Defining planned burning

Planned burning, or preventative or prescribed burning as it is alternatively called, is a fuel management technique whereby controlled fire is used to burn the fuels that will feed a bushfire.

The Victorian Bushfire Royal Commission (VBRC) suggested that:

Prescribed burning is one of the main tools for fire management on public land. It cannot prevent bushfire, but it decreases fuel loads and so reduces the spread and intensity of bushfires. By reducing the spread and intensity of bushfires, it also helps protect flora and fauna.⁴⁰

Planned burns are classified as fuel-reduction burns, ecological burns and other burns. Other burns include regeneration burns after logging and the burning of heaps.

The Committee's terms of reference refer to 'preventative burning', rather than 'prescribed' or 'planned' burning.

During the inquiry a number of witnesses have pointed out that 'preventative burning' is a misnomer, because it does not prevent bushfires. In fact, a number of submissions and witnesses have made the point that bushfires cannot be prevented and, in fact, should not be prevented as they serve an important environmental purpose. Fuel management, of which burning is one technique, is intended to reduce the severity of bushfires rather than attempt to stop bushfires completely. The Committee was told by Mr Garry Squires during a hearing in Bairnsdale that:

I did want to take up the term of reference that talks about preventative burning, which to me is a new term. We have always called it 'protective burning' or 'fuel reduction burning'. Preventative burning seems to give the indication that we are going to stop fires, and that is not the case. We are reducing the fuel, but we can still have fires, so that is a very important point I think we need to bear in mind.⁴¹

The Institute of Foresters in its submission also made the point that the term 'preventative burning' is misleading. The submission said:

...the IFA cautions that in using the term 'preventative burning,' Victoria could unwittingly be providing the public with a false sense that these burns will prevent bushfires. Clearly, they will not even though they will reduce the impacts.⁴²

The Committee accepts that the use of the term 'preventative burning', which is used in the terms of reference and during the hearings, may lead to a misconception that bushfires can be prevented, rather than simply having their impact reduced.

⁴⁰ Victorian Bushfire Royal Commission, Final Report, p 15

⁴¹ Mr Garry Squires, *Transcript of Evidence*, 27 September 2016, p 29

⁴² Institute of Foresters of Australia, Submission 50, p 3

Therefore, the Committee will use the term 'planned burning' in this report rather than 'preventative burning' as it more accurately reflects the fuel management practices in Victoria. The actual burns will be referred to as Fuel Reduction Burns (FRBs).

In discussing planned burns, the Committee has not distinguished between fuel reduction, ecological or other burns, unless it is necessary for the issue under consideration. Planned burns are taken largely as a single activity, unless stated otherwise.

3.3 Planned burning - the on-going debate

Planned burning is the main bushfire mitigation activity undertaken in Victoria but it has been, and remains, an issue that divides communities. The differences of opinion around the usefulness and efficacy of using fire to prevent or reduce the impact of bushfires are strongly held and have been alluded to in a number of previous inquiries. In his 2015 *Review of Performance Targets for Bushfire Fuel Management on Public Land*, the Inspector General of Emergency Management stated that:

This review was conducted amidst a values debate around planned burning. The debate is long-standing and ...Members of communities with diverse backgrounds and social values have been active participants in this dialogue...(and for) individuals living with the consequences of planned burns, such as health impacts, changed landscapes or economic impacts, this has been a source of on-going frustration.⁴³

3.3.1 The Black Saturday Royal Commission recommendations

Prior to the Black Saturday bushfires in 2009 that had such a devastating impact on lives, property and, indeed, the psyche of Victorians, there tended to be an inadequate approach to planned burning. In its Final Report, the VBRC reported that at the time of its inquiry, the Department responsible (Department of Sustainability and Environment at that time) burned only 1.3 per^Scent of the 7.7 million hectares of the public land under its control (about 130,000 hectares).44

The Commission stated that this figure of 1.7 per^Scent was 'well below the amount experts and previous inquiries have suggested is needed to reduce bushfire and environmental risks in the long term.'⁴⁵

The Commission made a number of recommendations for land and fuel management, including implementation of a program of prescribed burning, based on an annual rolling target of 5 per^Scent of public land.

⁴³ Inspector General for Emergency Management, Review of Performance Targets for Bushfire Fuel Management on Public Land, 2015, p23

⁴⁴ Victorian Bushfires Royal Commission, Final Report, July 2010, p 15

⁴⁵ Ibio

It was the Commission's strong view that prescribed or planned burning is one of the main tools for fire management on public land. The Commission said in its Final Report that prescribed burning:

...cannot prevent bushfire, but it decreases fuel loads and so reduces the spread and intensity of bushfires. By reducing the spread and intensity of bushfires, it also helps protect flora and fauna. 46

Certainly, during the current inquiry, the Committee has noted that there are passionately held views on both sides of the debate. There are those that argue that there has not been nearly enough planned burning done and that this has left the community at risk.

Conversely, the Committee has heard from a number of witnesses who equally strongly argue that planned burning is not only an ineffective method of preventing bushfire, but it does substantial and lasting damage to ecosystems and therefore the environment.

Below is a brief discussion outlining some of the key arguments for and against the planned burning regime as it currently manifests. The Committee notes that the evidence ranged from the anecdotal and experiential to scientific on this issue.

3.3.2 The arguments for more planned burns

A fundamental need for a bushfire is fuel for the fire. Without fuel, it cannot burn. Therefore, the removal of fuel is a logical and widely accepted method of mitigating the impacts of fire.

The most common way for large-scale reduction of fuel for bushfires is by planned and controlled burns. As stated earlier, it is not the only form of fuel reduction activity, with mechanical and chemical removal of vegetation that can be used in specific and contained areas. Important new technological warning systems have been developed that may not reduce the size of a fire, but can enable people to prepare in time, including leaving the area under threat.

However, the use of fire remains the most widely used mitigation technique. The Bushfire and Natural Hazards CRC told the Committee in its submission that:

...it is well understood that fuel reduction will decrease fire intensity, flame height and the forward rate of spread. One of the most efficient methods of reducing fuel over large areas is through the use of controlled fire under prescribed conditions – that is, through prescribed burning or planned/preventative burning.⁴⁷

There is significant debate about whether the burning should be undertaken in large areas, given the limited opportunities to burn due to weather conditions, or in smaller areas more frequently, in what are referred to as 'mosaic burns'. This issue is addressed later in this chapter.

⁴⁶ Ibid

⁴⁷ Bushfire and Natural Hazards CRC, Submission 12, page 3

Throughout the inquiry, the Committee has heard evidence that indicates that if anything there is not enough planned burning taking place.

In a submission to the inquiry, Mr John Mulligan of the East Gippsland Wildfire Taskforce stated that in his view, and based on long experience of living in the bush:

The only proven way to prepare for fire seasons is to reduce fuel loads, less fuel, less heat, less damage. If the fuel load doubles the fire is four times more intense; therefore it is important to reduce fuel loads to protect our environment and people.⁴⁸

Mr Mulligan was critical of the terms of reference for the inquiry because he perceived it to be 'more concerned with the temporary light damage to the environment from fuel reduction burning than the terrible major permanent damage that has been done in the recent mega fires.'⁴⁹

In the view of Mr Mulligan and his organisation, the Royal Commission's recommended level of burning was too little but was 'at least a chance to demonstrate the value of fuel reduction burning.'50

In correspondence to the inquiry, Mr Mulligan said that:

Over the last 100 years or so, this argument 'to burn or not to burn' has raged. There have been Royal Commissions and Inquiries galore after nearly every fire. The message shines through that not enough FRB is carried out or natural burning allowed. Seasonal natural burning is immediately put out.⁵¹

Specifically, Mr Mulligan suggested that 'we should be making sure that 10-20% of the forested estate should be burnt by fuel reduction burns each year to render the forests reasonably safe from wildfire.'⁵²

ForestFire Victoria have argued that the science underpinning prescribed burning (or preventative burning as they referred to it) is sound, as had been found by both the Victorian parliament's committee inquiry by the Environment and Natural Resources Committee in June 2008 and the VBRC.⁵³

In its submission to this inquiry, ForestFire Victoria suggested that not only are fuel reduction burns (FRBs) important, but they must be undertaken regularly in order to maintain lower Forest Fire Danger Index levels. It is their view that evidence suggests that fuel reduction burns older than 10 years have no effect on fire severity.⁵⁴ Therefore, it is important to regularly undertake fuel reduction burns.

⁴⁸ East Gippsland Wildfire Taskforce, Submission 9, p 2

⁴⁹ Ibid

⁵⁰ Ibio

⁵¹ Mr John Mulligan, Correspondence, p 12

⁵² Ibio

⁵³ Forest Fire Victoria, Submission 11, p 2

⁵⁴ Ibid

On a personal level, a farmer from the Indigo valley area has expressed concerns about the lack of burning in the forests near his property. Mr Gregory Dale in his submission to the Committee said that he was concerned about the build-up of fuels in the forest which is a designated Reference Area:

I am concerned about the management of fuel load in the forest and this is something that private landholders presently have no control over. I ask the committee to review the process by which public land and Reference Area in particular is managed so that forest fuel loads do not escalate in the way it has.⁵⁵

Mr Dale continued that in his view, the exclusion of FRBs from Reference Areas 'did not serve me, or the environment of our beautiful neighbouring National Park.'⁵⁶

In supporting a greater level of planned burning in the face of opposition on environmental and ecological grounds, Mr D.J. Auchterlonie told the Committee in his submission that:

...we can manage the fuels through techniques such as prescribed burning. Our forests and the wildlife they contain are very resilient to relatively small, low to moderate intensity (green) fires. But our environment, and people, are harmed by immense high-intensity fires as we have witnessed so tragically in the past...⁵⁷

Another issue brought to the Committee's attention during the course of the inquiry was the issue of roadside fuel reduction burning.

Mr Nicolas Barton said in a submission that the issue of roadside vegetation was regularly overlooked but is 'a potential recipe for disaster'. Mr Barton's submission suggested that the 'leave early' campaign is likely to create large numbers of vehicles on roads under conditions of very high fire danger and with very heavy fuel loads on many roads this is likely to put large numbers of people in harm's way.

Mr Barton suggested that the resources to undertake the very necessary burning on roadsides are not being made available and that, in one example he cited:

Due to insufficient resources only a portion of the intended burn was completed. Due to waterlogging of the access track the opportunities to complete this burn have been very limited. The upshot is that 5 years after the strategic meeting, only around 10% of the required burning has been undertaken.⁵⁹

In evidence before the Committee in Bairnsdale, Mr Barton expanded on this issue, citing the VBRC referring to 'a lot of roads are acting as wicks.' He repeated his warning about the potential impact of the lack of burning of roadside vegetation, saying:

⁵⁵ Mr Gregory Dale, Submission 54, p 2

⁵⁶ Ibio

⁵⁷ D.J Auchterlonie quoting Dr Neil Burrows, Submission 8, p 4

⁵⁸ Mr Nicholas Barton, Submission 79, p 1

⁵⁹ Mr Nicholas Barton, Submission 79, p 2

⁶⁰ Mr Nicholas Barton, *Transcript of Evidence*, 27 September 2016, p 20

... once you get out into what is the country area of Victoria, there is very little. The CFA currently has this 'leave early and live'. In some areas, if you have a whole heap of people trying to get out at the first sign of fire, you are going to have a massive disaster.⁶¹

This view that there needs to be more planned burning is fiercely opposed by a number of submission authors and witnesses to the inquiry who believe that both the amount of, and approach to, planned burning is doing substantial and lasting damage to the environment. In addition, it has been argued that not only does it do substantial damage but it is not effective in reducing the impact of wildfires, particularly in extreme bushfire conditions.

3.3.3 The arguments for fewer, more restricted burns

The Committee heard that the widely-held commitment to planned burning is not based on scientific evidence that it works. It was argued by a number of witnesses that the use of planned burns is not, in fact, protecting the community because it not an effective mitigation technique in the face of extreme fire conditions, and that the impact it has on the environment, on eco-systems and on wildlife is not taken into account when decisions are made about planned burns.

A strong critic of the use of fuel reduction burns, particularly in forests and in parks, Dr Nancy McMurray told the Committee in a hearing that there is substantial scientific evidence to suggest that the use of burning in forests does not protect assets such as property but does do great damage to ecosystems and biodiversity. She said:

We have to stop pterpetuating the myth that fuel reduction burns protect communities because increasing amounts of evidence indicate that they do not. We need to be open and honest with the community. The scientific data on limitations of fuel reduction burns need to be put out there to the community ...we have to stop pretending that planned burns protect communities and do no harm to wildlife. ⁶²

The Strathbogie Forest Group suggested that a 'one size fits all' approach to planned burns did not take into account differences in vegetation classes which can have a negative impact on the effectiveness of the burns. In its submission, the group said:

Certainly, if a bushfire hits forest that was fuel reduced several years earlier, then fuel loads may well still be depressed, but for many vegetation types, including the forest types in the Strathbogies, post-fire understorey regeneration is rapid and fuel loads at ground and small-tree level may actually be higher than pre-fire levels for several decades post-fire.⁶³

The submission went on to say that the planning of burns was too broad and 'Fuel load in most plant communities is modelled at a rather gross level and often fails to take site characteristics (that are crucial) into account.'64

⁶¹ Mr Nicholas Barton, *Transcript of Evidence,* 27 September 2016, p 21

⁶² Dr Nancy McMurray, *Transcript of Evidence*, 27 September 2016, p 51

⁶³ Strathbogie Forest Group, Submission 33, p 2

⁶⁴ Ibid

A number of submissions suggested that planned burns were, in fact, counter-productive as they encouraged the growth of vegetation that is more of a fire hazard than that which the burns are trying to reduce. In a submission, the Wannon Conservation Group told the Committee that:

Burning encourages the growth of bracken - bracken is itself a fire hazard. Many control burn areas are now solid bracken - no understory plants no ground plants.⁶⁵

The submission also suggested that the frequent burning was changing the nature of the forest. This view was echoed by a number of other submissions, including one from Wombat Forestcare, which said:

Widespread fuel reduction burning may also be creating a drier and more flammable forest. A study in NSW carried out over a twenty-year period, 'Long-Term Effects of Repeated Prescribed Burning on Forest Invertebrates' by Alan York, points to an 18% reduction in topsoil moisture content in sites burnt every three years. Regular burning can also promote fire tolerant species therefore creating a greater fire risk.⁶⁶

Part of the impact on the forest that frequent burning can have, according to the Wombat Forestcare submission, is that it 'destroys the natural processes that break down litter, disruption of soil moisture that assists decomposition, encourages fire tolerant plants and allows for the introduction of flammable weeds that are usually left untreated'.⁶⁷ The submission suggests that:

Burning is occurring at a frequency that many plants cannot tolerate and will be lost if fire regimes do not allow time to set viable seed.⁶⁸

There were a number of submissions made to the inquiry that were not opposed to any burning, but that considered the methods of burning were unnecessarily damaging to ecosystems. The scale of burns, those that were undertaken at a landscape level rather than in smaller, localised areas was the source of much criticism. The suggestion was that this broad-approach to planned burns was more to do with economics than to effective control of bushfires.

The Strathbogie Forest Group's submission said:

Large burns may be cost effective, but have a much worse outcome for forest health and resilience. Large burns in a relatively small area of forest, such as in the Strathbogies, also risk erasing the existing mosaic pattern of planned burn history that has taken decades to establish.⁶⁹

It was also suggested that the more intense heat of large-scale burns, as fires get hotter as they grow and consume more fuel, makes them much more difficult to 'implement in an ecologically safe manner' and they are 'guaranteed to be much too hot and damaging in substantial parts of the burn'.⁷⁰

Wannon conservation Society, submission 68, p 2

⁶⁶ Wombat Forestcare, Submission 18

⁶⁷ Ibid

⁶⁸ Ibio

⁶⁹ Strathbogie Forest Group, Submission 33, p 2

⁷⁰ Ibio

Not all submissions or witnesses who gave evidence were against planned burning per se – some readily acknowledged that it remains one of the key mitigation strategies for the reduction of fuels for wildfires. However, it is the large-scale burns in short-time frames that limits their effectiveness and damages the environment. It has been argues by a number of submissions and witnesses that smaller, cooler burns that happen over a much longer period throughout the year would burn more areas in such a way as to be much less damaging.

Dr McMurray considered that the approach to burning was not based on the needs of the bush or even the needs of the community, but on vested interests – a 'burning industry'. She told the Committee that:

...there is an industry and there are egos involved. A lot of people have invested a lot in doing what we have been doing. Also there is a very strong dynamic in that the public wants to believe what they are told — that burning the bush keeps them safe. They need to believe that, especially those who live in the bush.⁷¹

She contended that 'We need to change the culture, because I think in the burning industry the culture is not to protect the environment — it is to burn. That is entrenched.'72

The Committee does not accept that the motivations for people who support the current approach to planned burning is based on ego or a desire simply to burn. Conversely, neither does the Committee accept that those who are concerned with the planned burning practices and their impact on eco-systems are simply urban-based environmentalists who don't understand the bush.

The evidence presented to the Committee from all of the witnesses whether or not they supported planned burning, including in the submissions, was based on a genuine desire to help and protect their communities and the environment in which they live. The Committee was impressed throughout the inquiry by the level of commitment to their community by all of the people who presented, regardless of their views of how best to protect that community.

One of the recurring themes throughout the inquiry related to the different impact of landscape-wide large planned burns versus smaller, less intense burns. This issue was raised by people from both sides of the 'planned burns debate' as something that needs to be considered.

Cooler, 'mosaic' burns were a method used by indigenous people prior to European settlement and which were intended to reduce the impact of fire while looking after the land on which the people were dependent.

⁷¹ Dr Nancy McMurray, *Transcript of Evidence*, 27 September 2016, p 49

⁷² Ibid

3.3.4 'Cool Burns' and The Victorian Fire Stick project

Throughout the inquiry, the Committee has heard that the indigenous way of managing fuel for bushfires is substantially different to that employed by western fire management. They operate with different timing, frequency and intensity.

The Committee has been advised that the National Indigenous Fire Network has been established which is based on Indigenous communities rebuilding their fire knowledge and undertaking programs back on country.

The Network aims to have indigenous knowledge being represented and controlled by Indigenous people for all Australians. There have been many communities sharing knowledge to rebuild their cultural connections to country by re-introducing fire back into the landscape. It is the intention of the Network to show other agencies and land holders the right process in engaging with Indigenous fire management by supporting Indigenous communities to lead the way in healing country.⁷³

According to Mr Brett Ellis of the Yarra Ranges Council and who has been working with the Network, Victoria is the last of the States to embrace returning traditional burning practices to the land despite being the State which has the most to benefit from this type of practice.⁷⁴

The Wurundjeri Tribe Land Council in collaboration with the Yarra Ranges Shire Council has initiated a project called the Return of the Firestick, which seeks to develop and disseminate knowledge about fire management that can be implemented across Victoria.

Mr Ellis told the Committee that the project aims to 'uncover further information about the reasons and methods for traditional burning, and through an exploratory and participative process, outline a program for Traditional Owners to practice and hold that knowledge'⁷⁵.

Mr Ellis advised that the project is in its early stages and is currently engaging with DELWP and the Federal Government to provide backing to ensure 'Traditional Owners are adequately supported in returning indigenous fire knowledge through extensive multiyear trials across a broad number of sites across Victoria'.⁷⁶

The Committee heard evidence from Mr Victor Steffenson, of the National Indigenous Fire Network about the indigenous approach to fuel reduction by burning. Mr Steffenson told the Committee in a hearing that there are fundamental problems with the western approach to burning in that they do not have a holistic approach, where the need to reduce fuels is considered alongside the health and well-being of the country. He suggested that the idea of having a

⁷³ Correspondence from Mr Brett Ellis, Manager Risk, Emergency & Community Safety, Yarra Ranges Council

⁷⁴ Ibio

⁷⁵ Ibid

⁷⁶ Ibid

priority of preserving life and property being in conflict with protection of the environment was wrong and that a different approach can meet both human and environmental needs.

He said in the hearing that:

When they just pick two weeks off a calendar, and choose also a window out of a calendar, and then look at country they have not burnt for 10, 15 years or more and just go in there and there is a lighting-up for the sake of just getting rid of fuel to look after life and property, they really are going backwards, because we could be looking after the environment and life and property, burning more regularly for the seasons and having larger windows, and, on top of that, educating the nation with the beautiful knowledge of how to maintain this country...⁷⁷

He further commented that:

You cannot go out there and just burn thousands of hectares of country without any idea of the landscape, because we are losing lots of trees and plants, and animals are declining rapidly. We cannot keep doing this because the landscape just cannot handle that...⁷⁸

The principle behind the indigenous approach to fire was further explained by Mr Brett Ellis of the Yarra Ranges Council, who has been working with Mr Steffenson. He told the Committee that the methodology adopted by indigenous people:

...would see more fire on the landscape, more fire of a lesser intensity, a smaller fire that goes through and cleans up country but is not impacting into the canopy.⁷⁹

The higher frequency, smaller areas burned in this way are based on a knowledge of the particular environment in which they take place. The burns are not based on just burning a large area at a time when the weather allows it, regardless of the flora or fauna, but is targeted according to what vegetation is in the area.

Mr Steffenson told the Committee that:

There is a larger window when you think in terms of burning country at the right time. Each different ecosystem has a different time of year when it cures, from the beginning of the year right to the end. The concept of Indigenous burning is based on burning all those different systems when they are ready at different times, rather than looking at country and looking at a window and just burning anything and everything that you can see...⁸⁰

The higher frequency and smaller areas does not mean that there is less burning. On the contrary, according to Mr Steffenson much higher percentage of the state would be burning because the burning happens not in a short window of a few weeks in autumn or spring, but throughout the year. He told the Committee that:

⁷⁷ Mr Victor Steffenson, *Transcript of Evidence*, 26 October 2016, p 2

⁷⁸ Mr Victor Steffenson, *Transcript of Evidence*, 26 October 2016, p 3

⁷⁹ Brett Ellis, Mr Brett Ellis, Yarra Ranges Council, p 3

⁸⁰ Victor Steffenson, *Transcript of Evidence* 26 October 2016, p 4

If we are looking at a size of half of Victoria ... we are looking at burning at least 60 per cent of that country and there will be constant fires all the time, all year round, so the burning is full time and the assessment of country is full time. There is not a season when it comes to fire.⁸¹

Mr Steffenson explained that the 'cool burning' is not dependent on the amount of material available to burn. Because the burning is of such low intensity, it is easier to control and removes the fuel available for wildfire slowly. He said in the hearing that:

... we can always have a cool burn. I am burning in country just today where there is masses of fuel load, and all the rangers came around with rigging, ready for helicopters and stuff—the national park staff—and I said, 'No.' But by the second day, they just turned their backs on us and walked away because they had seen how cool it was. It was just slowly eating this bit of country away, like eating an elephant really, in terms of getting the fuel loads down and doing it the right way. That is going to bring up the feed (sic) bank in the soil.⁸²

The condition of the land is a major priority for this approach to planned burning. Mr Steffenson told the Committee that everywhere he went in Australia, the land is unhealthy and that it is important to pass on knowledge to enable people to look for indicators of 'sick country'. He said that:

Indigenous burning is burning for biodiversity. We burn to look after that country and to make it rich so that everything benefits. We have not burned country to benefit solely ourselves. It is burnt in a way that everything benefits from that system...⁸³

Other witnesses before the inquiry were very supportive of the indigenous approach to planned burning. In evidence before the Committee, Mr David Packham, who gave evidence to the Committee in hearings in Morwell, described the practice as:

...fire, like water, should trickle gently over the land. That is how good prescribed burning goes. I have been involved in many a good prescribed burn, and immediately afterwards you can walk onto the area, the moist duff is still there and the little insects are putting their heads up as they come out of it and saying, 'What the hell was that?'.

He even suggested that it would have reduced the impact of the Black Saturday fires. Mr Packham told the Committee that:

I have done some research on the deaths in the Kilmore East fire, and if we had an Indigenous natural fire practice, we would probably have not suffered 183 or 186 deaths, but probably 3 or 4 or 5.84

While such a claim may be difficult to verify, the logic of the traditional approach to burning, and in particular to their less damaging impact on ecosystems, was a common theme in the hearings and in submissions to the Committee.

⁸¹ Ibio

⁸² Victor Steffenson, *Transcript of Evidence*, 26 October 2016, p 5

⁸³ Ibi

⁸⁴ David Packham, *Transcript of Evidence*, 26 September 2016, p 21

This approach to planned burning has been discussed by the emergency management community for many years. An article provided to the Committee from the Australian Journal of Emergency Management from 1995 said that:

The resulting effect of Aboriginal burning was to maintain a mosaic of areas at different states of regrowth so that a range of animal and plant species with different forage and shelter requirements could be fostered within their territorial area.⁸⁵

The Committee was represented at a demonstration of this project in November 2016.

DELWP have advised the Committee that its regional teams have responsibility for planned burning operations, and that 'this includes engaging with traditional owners to share knowledge and learn from each other to care for country.' The department provided the Committee with details of the activities that are being undertaken in each of the regions and this is included as Appendix 5.

Conclusion

The Committee is not able, in the course of this inquiry and report, to resolve the dispute over the relative value of planned burning. It has heard strong arguments put from both sides of the debate and these highlight the complexity of the issue.

The Committee acknowledges and supports the VBRC's view that human life needs to be the first priority in bushfire mitigation. The trauma, loss of life, livestock, wildlife and property suffered during and after Black Saturday is something that Victoria will continue to carry for many years.

It is also clear to the Committee that the removal of fuels is likely to reduce the size and intensity of bushfires and therefore is an important mitigation tool. The use of planned burns to reduce fuels is important because it is able to cover larger areas than manual methods and is more cost effective.

At the same time the Committee recognises that biodiversity is essential for the health of the environment in which we live, and that we are part of that environment. Without caring for the long-term health of the land, including the flora and fauna that live within it, we do a great disservice to future generations and to the State of Victoria.

It is essential that bushfire mitigation considers both human life and the environment. It should not be a choice between the two.

The Committee was particularly interested in the work being done using indigenous fire management practices, including the work done by Mr Victor Steffenson and others as part of the Return of the Firestick project. The logic of cooler 'mosaic' burns throughout the year rather than much larger, hotter burns in narrow time windows in Autumn or Spring is of particular significance and is worthy of further examination.

⁸⁵ CJ. Robinson, D.R. Packham, J.M. Powell, Cleaning Up The Country, in The Australian Journal of Emergency Management, Vol. 5 No.1 March 1995, p 45) included as an attachment to Submission 27

This issue of the timing of planned burns was also raised by the Gippsland Apiarists Association, which stated in its submission that it was against spring burning and suggested that Australia would not have evolved so many ground nesting birds if spring burning was part of their evolutionary background. The submission stated that:

Low intensity burns are necessary to protect the biodiversity, water catchments, property and human life as well as create conditions whereby fires are controllable.⁸⁶

While the Committee considers that the concept of 'cool burns' being undertaken more frequently with a ecology-specific focus has significant merit, empirical evidence of its effectiveness in reducing wildfires has not been presented during the inquiry. These mosaic burns are greater in number and frequency but smaller in area and heat intensity.

Such evidence is needed before making a fundamental change to the way planned burns are carried out. The Committee agrees with a number of witnesses that planned burns need to be undertaken with information about the specific ecology of the area being burnt and that this information should dictate the strategies employed and that smaller, cooler burns may well be a way to balance the need to protect life and property and damage to ecosystems.

In order to provide some empirical evidence, the Committee considers support for projects such as the Return of the Firestick by the Government in such a way as evidence can be gathered, collated and analysed should be a priority.

FINDING 5: The logic of the mosaic, cooler burn model for planned burns may have merit and it could potentially provide a viable alternative to the current larger, landscape burns in some circumstances. Currently, there is very limited data available on the overall effectiveness of cooler burning models such as the Return to the Firestick project and therefore it is not possible to compare its effectiveness compared with current practices.

RECOMMENDATION 3: That Government provide support in the form of funding for the Return to the Firestick project, and that a formal pilot scheme be established where data can be collected, collated and analysed and the effectiveness of this approach be compared against current burning practices.

RECOMMENDATION 4: That any such pilot program ought to be managed by the relevant indigenous organisations, with support provided by DELWP and its partner agencies and the development and the evaluation of any pilot program should be overseen by an independent and reputable academic or research institution.

⁸⁶ Gippsland Apiarists Association Submission 45, Attachment 2, p 8

3.3.5 The current fuel management levels

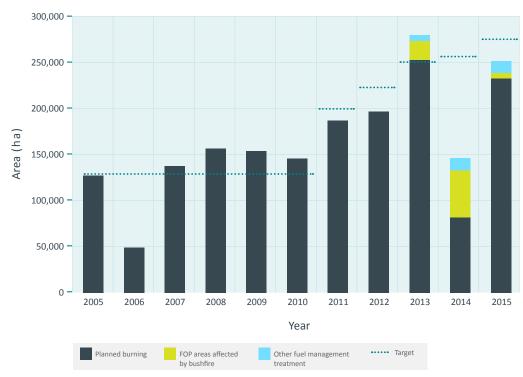
According to the Government's figures, in 2014-15 about 85 per^Scent of the total fuel management target (based on the hectare metric) was met through planned burning. In that year, DELWP conducted 670 planned burns, with the CFA assisting with 77 of these. The figures available for that year are provided in the following table.⁸⁷

Figure 3.1 Fuel management activity data

Measure	На	Ha toward target	% of target
Target area for fuel management	275,000		
Area treated by planned burning	234,614	234,614	85.3%
Ecological burns 40,769 ha (85 burns)			
Fuel-reduction burns 190,998 ha (346 burns)			
Other burns 2,847 ha (239 burns)			
Area treated by other fuel management methods	13,616	13,616	5.0%
Area suitable for planned burning burnt by bushfires	26,611		
(including area planned for burning on a current FOP)		6,377	2.3%
Total fuel-reduced area (actual)	274,841	254,607	92.6%

Source: Reducing Victoria's bushfire risk on public land | Fuel management report 2014-15

Figure 3.2 Fuel Management Program 2005 to 2015



Source: Fuel management report 2014-1588

⁸⁷ The 2014-15 are the most recent figures available at time of tabling. The 2015-16 are being compiled and will be published in mid-2017.

⁸⁸ Reducing Victoria's bushfire risk on public land | Fuel management report 2014-15, p27

The most recent published figures for planned burning in Victoria, by region, are published by the Inspector General for Emergency Management and are reproduced below.

Figure 3.3 Number of DELWP and delivery partner planned burns and area of land treated, by region

REGION	NO. OF PLANNED BURNS	AREA TREATED (HA)	% OF STATEWIDE AREA TREATED
Barwon South West	2	381	0.23%
Gippsland	167	83,375	49.97%
Grampians	9	1,098	0.66%
Hume	138	72,940	43.72%
Loddon Mallee	15	4,967	2.98%
Port Phillip	32	4,080	2.45%
STATEWIDE TOTAL	363	166,841	

Source: Inspector-General for Emergency Management, Summary of investigations into Department of Environment, Land,
Water and Planning breaches of planned burn control lines, November 2016

3.4 The approach to planned burning

There are a number of key considerations when determining what bushfire mitigation activity is needed approaching a fire season. These considerations included where planned burning would take place, when the burning would take place, which organisations would be involved and what resources were needed. In a state that has a large area that is subject to significant bushfire risk, these questions are challenging for those responsible for managing that risk.

The Committee has received evidence from a number of communities that they feel they have not been protected by sufficient planned burning; conversely, there are those who consider that burning is too frequent and is in the wrong place.

Since Black Saturday in 2009, there have been two different approaches to determining the amount of planned burns that take place. The first, following the Royal Commission's recommendation that reported in 2012 was to set a percentage of land area target that needed to be burned each year; the second was that a more targeted, risk-based approach is taken.

3.4.1 Hectare-based targets

The VBRC made a number of recommendations for fuel management, including a program of prescribed burning, based on an annual rolling target of 5 per cent of public land.⁸⁹ Recommendation 56 of the VBRC was that:

The State fund and commit to implementing a long-term program of prescribed burning based on an annual rolling target of 5 per cent minimum of public land.

⁸⁹ Victorian Bushfires Royal Commission, Final Report, p 15

The Commission's views were informed by two expert panels it engaged to contribute to its consideration of the subjects of planning and fuel management. The Commission asked the experts to respond to a series of questions and the experts then reviewed each other's responses before meeting to identify areas of agreement and disagreement. Each panel prepared a written statement describing the outcomes of this conference and then appeared as a panel of witnesses.⁹⁰

The Committee considers that the position that the Commission came to regarding planned burning and the hectare approach was based on highly-expert and considered evidence.

The VBRC said in its Final Report that approximately 7.7 million hectares of public land in Victoria is managed by the Department, including national parks, state forests and reserves, of which a large portion is forested and prone to bushfire and yet 'the DSE (the predecessor to DELWP) burns only 1.7 per cent (or 130,000 hectares) of this public land each year'. The Commission suggested that this level of planned burning was well below the amount experts have suggested is needed.⁹¹

The Commission stated that it considered the amount of prescribed burning occurring in Victoria to be inadequate and described the State's approach as 'minimalist'92 According to the Commission, Victoria had allowed:

...the forests to continue accumulating excessive fuel loads, adding to the likelihood of more intense bushfires and thereby placing firefighters and communities at greater risk. 93

As a result of these concerns, the Commission proposed that the State make a commitment to a long-term program of prescribed burning, with an annual rolling target of 'a minimum of 5 per cent of public land each year, and that the State be held accountable for meeting this target'.⁹⁴

These recommendations were accepted and the targets were set.⁹⁵ As a result of these recommendations, there was an increase in the amount of fuel management undertaken.

3.4.2 Risk reduction targets

In the Government submission to this inquiry, the partner agencies advised that the Inspector-General for Emergency Management (IGEM) undertook a review of the most appropriate policy settings for delivering a fuel management program in 2015. The review, which was requested by the government, was to consider

⁹⁰ VBRC, Volume III: Establishment and Operation of the Commission, p 2

⁹¹ Victorian Bushfires Royal Commission, Final Report, p 15

⁹² Ibid

⁹³ Ibid

⁹⁴ Ibid

⁹⁵ Government submission, Submission 60, p 24

how the fuel management program could reduce the risk of bushfire to people, property and the environment, with the priority on the protection of human life and what performance measures may be put in place to ensure the most effective policy was established.⁹⁶

The IGEM compared the hectare target approach with an alternative risk reduction target. In his report published in April 2015, the IGEM recommended the risk reduction target as the most effective form of performance target for bushfire fuel management on public land. He also made recommendations designed to support transition from a hectare-based target to a risk reduction target.

Key findings included:

- compared to a hectare-based target, a policy that adopts a risk reduction target:
 - is more effective at achieving the objectives of the Bushfire Fuel Management Program (including the primacy of life)
 - provides the right kinds of incentives
 - more easily allows adaptive management
 - is more transparent, more efficient and more equitable.⁹⁷

According to the IGEM, a risk reduction target allows the Department to 'optimise risk reduction effort across the suite of potential activities to manage fuel load on public land'.98

In evidence to the Committee, the Inspector-General, Mr Tony Pearce, told the Committee that:

Good, solid risk analysis should drive the decision-making, but then after that you might do large numbers of hectares, and you might even target large numbers of hectares and announce those numbers, but you would do that after you have actually understood what the risk is that you are going to mitigate...⁹⁹

Mr Pearce advised the Committee that the previous 5 per cent target as recommended by the VBRC was impossible to reach. He said in evidence that:

...the 5 per cent target, and even though others said 8, was a pluck, and it was a pluck based on the best available advice he could get at the time from practitioners and from academics and scientists. 100

He further told the Committee that

⁹⁶ Ibio

⁹⁷ Inspector-General for Emergency Management, Review of performance targets for bushfire fuel management on public land, April 2015, p 3

⁹⁸ Ibi

⁹⁹ Mr Tony Pearce, *Transcript of Evidence,* 6 September 2016, p 48

¹⁰⁰ Ibid

...it does not preclude there being a hectare target built into that, but the hectare target should not come before the analysis of risk and the outcomes that you want to actually see achieved.¹⁰¹

The recommendations of the IGEM review were all accepted by government, and the fuel management regime on public land is now undertaken in a risk-based framework.¹⁰²

This means that in planning fuel management activities and, in particular, planned burns, the key criteria are based around the perceived risk to human life and assets, including towns and significant infrastructure.

The Committee heard that 'the castle wall mentality' is not helpful, where it is believed that by building firebreaks and very localised mitigation around local communities, they can be adequately protected from a major fire. Ms Ruth Ryan of Hancock Victorian Plantations told the Committee in a hearing that the effects of a fire may be significant distances from the fire front due to ember attack, or spotting, where embers are carried on the wind forward of the fire itself. She said:

Spotting is a very significant effect in Victorian fire spread. The eucalypt bark is a major source of embers, and these can travel short and long distances. There have been examples from Black Saturday where spots have started new fires over 30 kilometres away from the fire front. Spotting was also significant in the burning of the Wye River township. If you read the report there, a lot of the houses were actually burnt through spot fires rather than from the main fire front. ¹⁰³

She said that fuel management needed to happen deeper into the forest to stop the fires starting or becoming major fires.¹⁰⁴

Therefore, any risk-based mitigation, while undertaken around assets and particularly towns and infrastructure, needs to be mindful of the likely carry of embers and therefore the likelihood of fire spread. Such considerations form part of the modelling used in planning for fuel reduction burns and will include not only the landscape to be burned, but also predicted weather and topography.

In evidence before the Committee Mr Lee Miezis, of DELWP explained that the changing of the base of fuel reduction burning from a 5 per cent land area target to a more risk based-approach does not mean that there is no measurable target. He told the Committee that the risk reduction target established by the government has been set to 'maintain risk at or below 70 per cent of its maximum level.'

He explained that at maximum fuel levels bushfire risk is 100 per cent, and by reducing fuel levels to 70 per cent (the residual risk) if a major bushfire were to occur, the impacts to life and property would be reduced by approximately a third due to fuel management on public land. 105

¹⁰¹ Ibid

¹⁰² Government submission, Submission 60, p 24

¹⁰³ Ms Ruth Ryan, *Transcript of Evidence*, 20 July 2016, p 18

¹⁰⁴ Ms Ruth Ryan, *Transcript of Evidence*, 20 July 2016, p 19

¹⁰⁵ Mr Lee Miezis, *Transcript of Evidence,* 16 August 2016, p 3

Mr Miezis told the Committee that:

Based on our current assessments, to achieve a residual risk of 70 per cent in 2016-17 would require us to treat somewhere between 225 000 and 275 000 hectares. ¹⁰⁶

This compares to a target established for 2009–10 of 130 000 hectares and a target that was set at 275,000 hectares in 2015-16. 107 Therefore, the risk-based strategy would appear to have a similar target to that established under the former model recommended by the VBRC.

In terms of the residual risk, Mr Miezis put the current target into some context for the Committee, explaining that in 2002 the bushfire risk, based on fuel loads was close to 90 per cent. Because of a number of very significant fire events over the next decade, including 2002-03 fires that burned 1.5 million hectares, the Great Divide Fires in 2006 which burned 1 million hectares and the Black Saturday fires in 2009 which burned about half a million hectares, the bushfire risk in Victoria had fallen to about 60 percent by 2010.¹⁰⁸

The Committee was told that as the forests and parks and other areas of public land recover, that risk has started to increase and is at the time evidence was given about 65 percent and would, without effective intervention, return to 2002 levels of about 90 percent by 2020.¹⁰⁹

In summary, the Committee has been told that the recent residual risk profile of the state has been characterised as follows:

- It fell steeply during the first half of the 1980s, largely as a result of the 1983 Ash Wednesday bushfires;
- It rose steadily from the 1980s through to the early 2000s as fuel re-accumulated across the landscape:
- was substantially reduced as fuel was reduced by major bushfires in the 2000s (particularly the 2009 Black Saturday bushfires);
- has begun to gradually rise in recent years as fuel re-accumulates following the major bushfires of the 2000s; and
- is projected to decline moderately from current levels over the next three years if the fuel reduction activities on the current FOP are carried out however, if these activities are not carried out, residual risk is projected to rise steeply over the same time period.¹¹⁰

¹⁰⁶ Ibid

¹⁰⁷ Ibid

¹⁰⁸ Ibid

¹⁰⁹ Ibid

¹¹⁰ DELWP, Fuel management report 2014-15, 2016, p 12

1,600,000 100 90 1,400,000 80 1,200,000 1,000,000 60 Area Burnt 800,000 50 40 600,000 30 400.000 20 200,000 10 100844 100884 100884 100884 10088 10 Projected Residual Risk Bushfires Planned Burning Proposed Planned Burning Residual Risk

Figure 3.4 Residual Risk profile in Victoria 1980-2018

Source: Government submission

Further supporting the shift from a hectare-based target to a risk-based target, the La Trobe University Department of Ecology, Environment and Evolution submission said that the area-based target of 5 per cent of public land annually meant that land managers carried out large planned burns to meet a top-down target, regardless of the effectiveness of the burns. The submission said that large planned burns in remote areas where few people live 'do little to increase the overall safety of the Victorian community, but do have the potential to do ecological harm'¹¹¹ The submission suggested that the bulk of burning was not occurring in areas where the greatest risk to life and property lies, and in particular:

- 68% of the state-wide risk to life and property lies in an arc surrounding the Greater Melbourne and Geelong region (East Central, West Central and Barwon Otway Bushfire Risk Landscapes)
- The majority of planned burning in 2012-13 & 2013-2014 occurred in remote areas, outside these regions.
- The Mallee region represents just 2-3% of the State's risk to life and property, but 17-20% of planned burning in Victoria in 2012-13 and 2013-14 occurred in the Mallee region.¹¹²

The shift from a hectare based approach to burning to a risk-based approach had support from a number of witnesses, but was not universal. Mr David Packham, who gave evidence to the Committee in a hearing in Morwell and provided a detailed submission, told the Committee:

¹¹¹ La Trobe University Department of Ecology, Environment and Evolution, Submission 65, p 3

¹¹² Ibid

But the loss of the 5 per cent was a tragedy. The royal commission's conclusion was 5 to 8 per cent, and 8 per cent is starting to look nicer on that curve, but the loss of that is going to bite Victoria. 113

Mr Packham, who has had 54 years in bushfire research and was a principal research scientist with the CSIRO, considered that the risk-based approach 'cannot really do any harm'. He told the Committee that:

It will work, and it will especially work on mild, annoying fires. It will be quite effective. However, with a fire of the Kilmore East-Kinglake type it would have made no difference.¹¹⁴

In Mr Packham's opinion, there needs to be a much higher percentage of land burned than has been done in recent years. He told the Committee that the minimum amount that has been burnt in Western Australia is 4 per cent, while Victoria on Ash Wednesday was 'probably about 1.3 per cent. In fact the Kilmore East fire was about 0.8 or 0.9 per cent.'

Mr Packham's view was that not only was it a mistake to remove the hectare based target because it would likely reduce the amount of burning, but that the way the burning was done is quite wrong. This issue was addressed earlier in the Chapter when discussing mosaic burning, cool burning, indigenous fire management practices and the Firestick project.

Mr Packham was also highly critical of the residual risk target of 70 per^Scent as discussed earlier in the chapter. He told the Committee that:

It seemed to be prodigious nonsense because I quizzed the people as to how they determine the 70 per cent, and the answers were along the lines of, 'Well, we would run the Phoenix model and we would run it in different scenarios, and if only 70 per cent of the damage was done, we would have met our target'. ¹¹⁶

He suggested that 'you really should be looking not at 70 per cent but at 5 per cent, right down that end...'117

3.4.3 Mitigating the risks associated with planned burns

There is a general recognition that planned burning has inherent risks associated with it. While every effort is made to ensure safety of the firefighters and the community in undertaking planned burns, fire is subject to a number of factors that cannot always be controlled or predicted, such as sudden changes in weather conditions.

If a planned burn gets out of control or 'escape' from the prescribed area that has been defined during the planning, they can become a bushfire that can cause significant damage.

Mr David Packham, *Transcript of Evidence*, 26 September 2016, p 17

¹¹⁴ Mr David Packham, *Transcript of Evidence*, 26 September 2016, p 18

¹¹⁵ Mr David Packham, *Transcript of Evidence*, 26 September 2016, p 17

¹¹⁶ Mr David Packham, *Transcript of Evidence,* 26 September 2016, p 21

¹¹⁷ Ibid

In the period 1 January to 30 June 2016, DELWP and its delivery partners conducted 363 planned burns, reducing bushfire fuels over 166,841 hectares of public land. The Inspector-General for Emergency Management has reported that of these 363 planned burns, eight breached control lines and impacted on 71.1 hectares of public and private land, although none of these breaches was significant enough to be declared a bushfire. This has not always been the case.

In 2015, the planned burn at Lancefield-Cobaw escaped and caused a substantial amount of damage, loss of property and great community anguish.

A detailed independent investigation of the burn conducted by the Department in the Macedon Ranges shire in spring 2015 was undertaken by Mr Murray Carter, who is Director of the Western Australian Office of Bushfire Risk Management. In his report, Mr Carter reported that the burn was ignited on Wednesday 30 September 2015, and breached containment lines on Saturday 3 October and Tuesday 6 October 2015.

He found that the weather conditions at the time of the Lancefield-Cobaw planned burns had a significant impact on the capacity to safely carry out a planned burn. Not only was the weather at the time not conducive to undertaking planned burns, it was following an extremely dry period. He blame for the fire allocated to inadequate Departmental processes and structures at the time, with Mr Carter stating that 'The Department's current systems and procedures in relation to planned burns are complex and detailed, but at times confusing and internally inconsistent.'120

The Inspector-General for Emergency Management, in reporting on his investigations of the 8 planned burns in 2016 that had breached containment lines, made four broad observations:

- In five of the planned burns that resulted in breaches of control lines, DELWP did not ensure completion of all necessary paperwork and approvals prior to ignition;
- In two of the planned burns, DELWP did not ensure sufficient preparation of the planned burn area, including control lines, hazardous trees, bark hazards and navigational markers;
- In six of the planned burns that resulted in breaches of control lines, DELWP had issues with use of the correct equipment for the conduct of the burn; and
- In three of the planned burns that resulted in breaches of control lines, IGEM considered DELWP's monitoring and patrolling to be ineffective because it did not detect breakaways or spot overs before they developed into breaches.¹²¹

¹¹⁸ Inspector-General for Emergency Management, Summary of investigations into Department of Environment, Land, Water and Planning breaches of planned burn control lines, November 2016, p 1

¹¹⁹ Independent Investigation into the Conduct of the Approvals and Oversight Process relating to the Lancefield-Cobaw Planned Burn, p 3

¹²⁰ Independent Investigation into the Conduct of the Approvals and Oversight Process relating to the Lancefield-Cobaw Planned Burn. p 2

¹²¹ Ibid

The Government submission to this inquiry stressed that safety is a high priority in its planning and procedures. The submission states that the safety of people is primary when implementing fuel management treatments, both of the workforce and of members of the public.¹²²

The submission states that while risk levels vary according to the activity, 'safety is consistently managed through the application of DELWP systems of work.'123

In particular, the DELWP Fuel Management Manual includes the procedure 'Safe Operation Procedure for Fuel Treatment which describes the measures to be taken to maintain the safety of personnel involved in on-ground fuel treatment activities by 'identifying hazards and assessing and controlling risks, including job safety planning and dynamic risk assessment'. 124

During a planned burn, the Committee was advised that the various fire agencies use similar management and supervision arrangements as would be used during a bushfire emergency.¹²⁵

Specifically, all planned burns undertaken on public land must be approved by the Chief Fire Officer of DELWP, who has overall responsibility for fire management on public land and a 'command and control' management structure is established and the State emergency management priorities guide the decisions of burn managers. Each burn is managed by a Burn Officer in Charge. 126

The Government submission recognised the risks and complexity of the processes, stating that it is 'currently developing a tiered process for accrediting people fulfilling this role which will be similar to the system used to accredit people in operational roles for bushfire response.'127

In terms of the actual burn process, the Committee was advised that prior to ignition, a number of assessments are carried out using the Planned Burn Risk Assessment Tool (PBRAT), which will identify:

- objectives of the burn
- weather conditions
- · the fuel environment
- proximity to assets
- technical challenges of the burn
- areas outside of the planned burn, such as adjacent private land and roadsides
- particular risks to fire-fighters carrying out fuel management activities in fire damaged forests.¹²⁸

¹²² Government submission, Submission 60, p 46

¹²³ Ibio

¹²⁴ Government submission, Submission 60, p 47

¹²⁵ Government submission, Submission 60, p 48

¹²⁶ Ibio

¹²⁷ Ibid

¹²⁸ Ibid

This risk assessment continues to be revisited throughout the conduct of the burn. Any 'escapes' or breaches of a planned burn have to be reported to the IGEM for investigation.

The Government submission advised the Committee that following the Lancefield-Cobaw Fire, the independent review of existing risk management procedures for planned burns has been used to develop a new risk assessment and approvals process for planned burns.¹²⁹

The submission states that the improvements in procedures include:

- new risk management and approvals system and processes consistent with international best practice in risk management
- development of new training on risk management and decision-making, based on best practice
- new standards for the classification, reporting and review of planned burn breaches and escapes (where the burn escapes its containment lines)
- enhanced community engagement processes.¹³⁰

The last of these is particularly important as the community has not always been kept up to date on planned burns and the attendant risks. The need for the community to take its share of responsibility for bushfire preparedness must be supported by appropriate information.

3.4.4 Conclusion

Planned burns and fuel reduction activities need to have as their first priority the protection of human life and of property. To this extent, an approach that identifies risk and plans burning regimes according to risk profiles is appropriate.

However, some evidence presented concerns that this approach could lead to planned burns being solely undertaken near built assets, thus leaving fuel loads on large tracts of public land to build up over time and increasing the risk of mega fires

The Committee acknowledges that previous inquiries and submissions noted that fuel reduction burning is inherently risky. The Committee notes that a risk-based approach may become a risk-averse approach, thus leading to a reduction in planned burns and leaving the community more exposed as a result.

The Committee considers that a combination of the VBRC and the IGEM's approach may be more effective in ensuring that the burns undertaken are adequate to protect the Victorian community. This may see a risk based assessment of where burns take place, with a set minimum number of hectares being set as well.

¹²⁹ Government submission, Submission 60, p 49

¹³⁰ Ibid

The Committee agrees that where and when planned burns take place is at least as important as how much burning takes place. As the La Trobe University submission said:

...key issue relating to preventative burning is that it is not necessarily the amount of burning that reduces risk, but where it is applied. We support an approach based on applying planned burning where it is demonstrated that it will have greatest benefit in reducing risk to life, property and ecological assets.¹³¹

However, such an approach still needs to ensure that the fuel reduction burning regime does not fall to the levels that were implemented prior to Black Saturday.

FINDING 6: The Committee supports a risk-based approach to planned burning to the extent that the focus is on protecting lives and property, but considers that such an approach may lead to a reduction in planned burns which could see an increase in fuel loads over time.

FINDING 7: The Committee considers the risks associated with planned burns may see a reduction in total area subject to planned burns due to the pressure applied to fire managers in the media, within government and by communities where there is a breach and if there are no formal hectare-based targets to meet.

RECOMMENDATION 5: That in conjunction with a risk-based approach, a minimum hectare target is also maintained that can be measured and compared. This minimum target should not be below the 5% target established by the Victorian Bushfire Royal Commission.

RECOMMENDATION 6: That fire managers responsible for planned burns be indemnified against any and all actions in the event of damage caused by an escape of the planned burn, on the basis of a 'good faith' test.

3.4.5 Safer Together program

In addition to a change in the fuel reduction regimes, and particular planned burning, there has been a shift in approach which sees responsibility for bushfire mitigation becoming a more collective one, both between emergency management agencies and with the community itself.

The new approach is predicated on the understanding that the community's safety from bushfires is not solely the responsibility of the government and its agencies, but is a shared responsibility of everyone in the Victorian community.

In 2015, the Victorian Government released Safer Together: A new approach to reducing the risk of bushfire in Victoria. 132

³¹ La Trobe University Department of Ecology, Environment and Evolution, Submission 65, p 2

¹³² Safer Together: A new approach to reducing the risk of bushfire in Victoria, Victorian Government, November 2015

This program 'outlines how land, fire and emergency management agencies will work in greater partnership with communities to reduce the risk of bushfire to people, property and the environment.' 133

It is intended to be a more integrated approach to bushfire mitigation 'across public and private land, with fuel management just one of the range of different management actions'.¹³⁴

The Safer Together policy came out of recommendations by the Inspector-General for Emergency Management's review of the existing hectare target approach to bushfire fuel management on public land with an alternative risk reduction target.

The IGEM also stated that the benefits of such a policy go beyond simply reducing the fuel available for a fire but also encourages shared responsibility for bushfire risks and promotes engagement with communities, regardless of land tenure.¹³⁵

According to the government, Safer Together is about:

- better assessing where and when to use fuel management and other risk reduction activities;
- avoiding unacceptable impacts on the environment and communities;
- better integration across public and private land;
- land and fire managers working together and with communities to plan and deliver integrated bushfire management;
- involving local communities in decision making, drawing on local values and insights to promote resilience; and
- using world-leading science to manage fire and ecosystems. 136

The Safer Together identifies three phases:

- 2016-17 Government will implement a risk reduction target to guide fuel management on public land. This target aims to maintain bushfire risk at or below 70%.
- 2017-18 Land and fire agencies will combine their efforts to implement a cross-tenure program of fuel management, across both public and private lands.
- 2020 The emergency management sector will work together to implement a single, end-to-end delivery model for bushfire risk management, across mitigation, response and recovery to achieve measurable risk reduction outcomes.¹³⁷

¹³³ Government submission, Submission 60, p 26

^{134 &}lt;www.delwp.vic.gov.au/safer-together/background> accessed on 1 March 2017.

¹³⁵ Inspector-General for Emergency Management, Review of performance targets for bushfire fuel management on public land, April 2015, p 3

^{136 &}lt;www.delwp.vic.gov.au/safer-together/background>, accessed on 1 March 2017

¹³⁷ Government submission, Submission 60, p 26

During the hearings, the Committee heard evidence supporting this approach. There is general consensus that the mitigation of bushfire risk should be a community-wide responsibility and that people do need to take responsibility for their own safety.

This does not suggest that the agencies with legal and administrative responsibility for providing fire-fighting and fire mitigation do not have significant responsibility to provide effective and effective services. It simply recognises that agencies simply cannot provide total protection. The community also must play its part by at least preparing their own properties, staying informed about the status of bushfires and having their own plan of how to protect themselves.

However, a key theme in Safer Together is the collaboration between the various agencies and communities. This is not only because of the need for community support, but is also a recognition that within communities there is a great deal of local knowledge and expertise which may not be available to the emergency services agencies, which have a state-wide remit. This point was reinforced by the Secretary of DELWP, Mr Adam Fennessy, who told the Committee in evidence that:

Particularly under Safer together, partnering with communities is a big opportunity to tap into local knowledge about local landscapes and to deliver our planned burning program far more closely with the community, including openly engaging with the community on where we should do planned burns...¹³⁸

Mr Fennessy told the Committee that:

Safer together is not just about how we work interagency; it is very much all communities. ... we have moved from all agencies, all emergencies to all communities, all emergencies.¹³⁹

The Committee heard evidence in regional Victoria that even at a relatively early stage. The new approach was having some effect on confidence in the community. In a public hearing in Bairnsdale, the Committee was told that:

...the Safer Together program and the working better with communities program which DELWP are fostering down here, those relationships are very, very strong. 140

While this is encouraging, it would be simplistic to suggest that the Safer Together approach is a panacea to all fragmented service delivery and planning for bushfire mitigation. The Committee found throughout its public hearings that even within individual communities there were substantially different understanding and approaches, some of them diametrically opposed to each other. This was particularly the case regarding the frequency, location and magnitude of planned burns.

¹³⁸ Mr Adam Fennessy, *Transcript of Evidence*, 16 August 2016, p 5

¹³⁹ Mr Adam Fennessy, *Transcript of Evidence*, 16 August 2016, p 10

¹⁴⁰ Mr Shane Turner, *Transcript of Evidence*, 27 September 2016, p 14

It is, however, an important step towards involving communities in their own protection, despite internal divisions within the communities themselves. In the Committee's view, any management regime must be undertaken with genuine consultation with the community it affects.

The Emergency Management Commissioner, Mr Craig Lapsley, said of Safer Together in a public hearing:

 $...Safer\ together\ I$ think is a solid piece of work about partnerships — about partnerships across agencies, about partnerships with community, about the community values and understandings... 141

The Committee strongly agrees that some of the responsibility for making Victorians safer from the threat of bushfires lies with the communities themselves. The government must ensure that the emergency management structure is efficient and effective and that it is resources sufficiently to enable it to meet one of the greatest threats to the people of this State.

It is also incumbent on all members of the Victorian community to take responsibility for their own safety by ensuring they understand their risk, by having a well understood plan for how they will protect themselves in the face of a major bushfire threat, and by ensuring that they are well informed about the fire activity in their area during fire season. It is also very important that landowners understand what constitutes a risk on their own properties and address that risk by removing vegetation from their land that can become fuel during a bushfire.

This issue of what is done on public land and what can be done on private land represents a challenge for the emergency management agencies and is addressed in the next section.

FINDING 8: The Committee considers that bushfire mitigation is the responsibility of all Victorians and that while governments have responsibility to ensure firefighting and mitigation is adequately resourced and arrangements in place are efficient and effective, the broader community must also take responsibility for its own safety by being aware of individual risk, being prepared with a plan and staying informed about weather and fire conditions.

FINDING 9: The Committee considers that generally the community meets its responsibilities by staying informed but must remain vigilant and engaged as the risk remains high.

3.4.6 Land tenure - bushfire on private and public land

Throughout the inquiry, the issue of the distinction between public and private land was raised as the primary responsibility of most of the emergency services agencies is based on activities on public land. Therefore, most of the mitigation takes place on public land. It is self-evident that fire makes no distinction based

¹⁴¹ Mr Craig Lapsley, *Transcript of Evidence*, 18 October 2016, p 6

on land ownership or tenure. There is therefore a risk that mitigation activity will not be effective in reducing the impact of a bushfire unless it is 'tenure blind' and does not stop at the boundary of private land.

The Government submission stated that:

... fuel loads on private land also pose a high bushfire risk. That is why the government's *Safer Together* policy focuses on fire and land management agencies working together, with Victorian communities, to extend the fuel management program across public and private land, based on where we can most effectively reduce risk and protect the things that Victorian communities value...¹⁴²

This view was supported by the Institute of Foresters of Australia (IFA) which stated in its submission to the inquiry that:

Too often bushfire risk analysis is restricted to a limited land status. Engagement of all parties, private and public, is essential if the State intends to conduct adequate mitigation (reducing the bushfire risk) and preparedness (readiness for the incidence of bushfires) activities so that Victorians are able to be better prepared to live with bushfires.¹⁴³

This 'tenure blind' approach to managing bushfire risk has a legislative basis, with the *Emergency Management Act 2013* (The Act) defining major bushfires – whether on private or public land – as a Class 1 emergency, which are subject to the control of a State Response Controller appointed by the Emergency Management Commissioner. Section 37 of the Act provides for control of responses to a Class 1 emergency:

- (a) planning for each anticipated Class 1 emergency in any area of the State; and
- (b) each Class 1 emergency in any area of the State that is occurring or has occurred.¹⁴⁴

The need to develop plans that do not distinguish between public and private land was reinforced by Forest Fire Victoria in its submission to the inquiry when it made the point that 'many fires which originated on public land have had substantial impacts on urban, regional and rural communities at the public/private land interface.'

The Australasian Fire and Emergency Services Authorities Council (AFAC) said in its submission that:

At a landscape scale, breaking large, high intensity, and high impact fire cycles requires incorporation of private lands to develop effective management strategies.¹⁴⁶

¹⁴² Government submission, Submission 60, p 42

¹⁴³ The Institute of Foresters of Australia (IFA), Submission 50, p 2

¹⁴⁴ Emergency Management Act 2013, s37 (1)

¹⁴⁵ ForestFire Victoria, Submission 11, p 39

¹⁴⁶ Australasian Fire and Emergency Services Authorities Council, Submission 24, p 11

Supporting the need to develop planning models that are as tenure blind as the fires that they are attempting to mitigate, Hancock Victorian Plantations P/L told the Committee in its submission about a tool developed by DELWP, the Risk Landscape model which is not restricted by administrative boundaries but:

...based on logical landscape units within which the risks are somewhat similar. The modelling needs to be applied to both public and private land and strategies developed to implement fuel management activities on a tenure blind basis.¹⁴⁷

In its submission, the government advised the Committee that its Phoenix Rapid Fire risk modelling and strategic planning shows that in many parts of the state, fuel loads on private land also pose a high bushfire risk. It said:

That is why the government's *Safer Together* policy focusses on fire and land management agencies working together, with Victorian communities, to extend the fuel management program across public and private land, based on where we can most effectively reduce risk...¹⁴⁸

It has been argued by a number of witnesses to the inquiry that the most effective mitigation against bushfires takes place close to houses and population centres and is therefore undertaken on private land. The Wombat Forestcare group said in its submission to the inquiry that:

The research also found that the most important factor in preventing house loss from bushfire was the actions undertaken by private landowners within 40metres of their house. 149

Such a view was supported by some of the witnesses in public hearings. The Committee heard in Bairnsdale from Dr Nancy McMurray that:

...there is some scientific evidence that burning the bush immediately surrounding a home just prior to the fire front coming through can provide some safety to that home, but burning Moormurng (forest) is not going to save a house 5 kilometres away. 150

The Committee certainly recognises that it is vitally important that land owners take responsibility for fuel reduction on their own land. This can be difficult as some may not have the equipment or the capacity to do much of the work themselves and there needs to be support for communities to co-ordinate such activities or to at least be aware of what activities are required and being planned.

An example of a co-operative 'tenure blind' approach to fuel reduction was provided to the Committee during its hearings in Wodonga. Mr Ian Ellett of the Indigo Shire Council told the Committee that the Council had planning in place for a joint burn around the north-west perimeter of Yackandandah as a pilot project, whereby DELWP would undertake the burn program across public and private land.

¹⁴⁷ Hancock Victorian Plantations Pty Limited, Submission 25, p 7

¹⁴⁸ Government submission, Submission 60, p 42

¹⁴⁹ Wombat Forestcare Inc, Submission 18, p 1

¹⁵⁰ Dr Nancy McMurray, *Transcript of Evidence*, 27 September 2016, p 49

There was a consultation process through a stakeholder meeting in which all of the impacted landowners agreed to DELWP undertaking that burn across their property. Under the arrangements, the CFA agreed to take a community information role closer to the event. The Committee was advised that DELWP has endorsed the program and listed it on the 2017 burn program and was at the time of evidence being given developing the burn plan with a commitment to meeting with the landholders.¹⁵¹

One of the problems for burning on private land that has been raised with the Committee is that if the surrounding public land has not been treated to reduce the fuel load, it is difficult to compel private land owners to undertake their own mitigation activities.

In a submission, Hepburn Shire Council told the Committee that the *Country Fire Authority Act* 1958 requires it to '... to take all practicable steps (including burning) to prevent the occurrence of fires on, and minimise the danger of the spread of fires on and from (a) any land vested in it or under its control or management; and (b) any road under its care and management. '152 Under the Act, the Council also has the power to issue a fire prevention notice on the owner or occupier of land to compel the landowner to undertake the fire prevention work necessary. ¹⁵³

The Council told the Committee in its submission that the enforcement of such notices is difficult if adequate mitigation activities have not been undertaken on adjoining public land. It said:

...owners of private property feel aggrieved that they are required to comply with the Act while nearby or abutting public land is often left to become overgrown. Obviously, this makes enforcement of this aspect of fire prevention in built-up areas extremely difficult.¹⁵⁴

The Council further told the Committee that it owns and/or controls approximately 148,000 hectares of public land and approximately 1400 kilometres of roads and stated that funding required to carry out any realistic program of fire prevention activities on this land and roadsides would 'impose a disproportionate and unacceptable burden upon Council's rate base'. 155

It therefore suggested that there needed to be a review of the funding model for fire prevention activities.

FINDING 10: Private landholders have a responsibility to their communities to ensure that their land is well prepared for fire season and that they cooperate with authorities to ensure their land does not add to the fire risk for surrounding areas.

¹⁵¹ Mr Ian Ellett, *Transcript of Evidence*, 20 July 2016, p 13

¹⁵² s43, Country Fire Authority Act 1958

¹⁵³ s41, Country Fire Authority Act 1958

¹⁵⁴ Hepburn Shire Council, Submission 36, p 1

¹⁵⁵ Hepburn Shire Council, Submission 36, p 2

FINDING 11: Local Councils have responsibility to manage large amounts of land and roadsides and while they can issue fire prevention notices to private landowners, these notices are difficult to enforce, particularly if adjoining public land is carrying high fuel loads and fuel reduction activities on that land have not been undertaken.

RECOMMENDATION 7: That the Government conduct a review of fire prevention activities undertaken by local government, including the amounts and sources of funding for such activities and the support of departments and agencies to manage and mitigate risk. The review should include determining compliance with s43 of the *Country Fire Authority Act 1958* and should consider the appropriate support required to enable Councils to meet their obligations under the Act.

RECOMMENDATION 8: That a review of the cross-tenure approach be undertaken to determine its effectiveness and to address issues that arise in fire prevention on private and public land.

3.5 Alternatives to planned burning

While the use of planned burning is the most visible mitigation activity, it is not the only way that the impact of bushfires can be reduced. Mechanical treatments such as slashing or mowing, and applying chemical herbicides are also used as ways of reducing the fuel load to reduce the size and intensity of bushfires.¹⁵⁶

Mechanical and chemical treatment methods are more costly because they are more labour intensive but have the advantage that they can be applied over a greater range of weather conditions and therefore for a longer period of time than planned burning.

Whilst fuel management can be undertaken at any time of year when conditions are suitable, it is mostly carried out in the autumn, with a smaller amount delivered in spring. As a general rule, the current methods for planned burning limit the window of time that they can be carried out as the risk of an escape, or a planned burn getting out of control, is increased when weather conditions are not conducive.

The categories of planned burns are:

- fuel reduction burns, which are primarily designed to reduce risk to people, property and the environment and accounts for the majority of the burns undertaken
- ecological burns, which seek to achieve landscape scale ecological objectives
- regeneration burns, which seek to regenerate areas after other land disturbance, primarily native forest timber harvesting.¹⁵⁷

¹⁵⁶ Government submission, Submission 60, p 23

¹⁵⁷ Government submission, Submission 60, p 39

There has been some criticism during the inquiry of the categorising of planned burns, with some people suggesting that some of the 'ecological burns' are, in fact, simply fuel reduction burns by another name. During a hearing in Bairnsdale, Dr Nancy McMurray told the Committee that:

Most of these burns are fuel reduction; some are listed as ecological, but there is insufficient evidence for the reasons for ecological burns. The pre-burn research is not done, and I would think it is largely because of culture and that the biodiversity is not valued as much, but lack of resources is very important as well. 158

According to the Government submission to the inquiry, strategic bushfire management plans identify the range of ecosystem values that need to be protected from major bushfires through fuel management. These include threatened species, ecological vegetation classes and other ecosystem services, such as healthy waterways.¹⁵⁹

It is clearly difficult to determine whether a planned burn is categorised as a fuel reduction or ecological burn. The fire is the same and its impact is likely to be the same. The difference is in the planning for the fire. According to the Government submission, appropriate fire management zones (FMZ) are identified to ensure that ecosystem values are not unduly impacted and fuel management treatments can then be modified. It is also possible to apply planned burn exclusion zones to ensure that fire is not introduced into the landscape unnecessarily. ¹⁶⁰

It is going to be inevitable that to protect life and property, there will be times when burns are undertaken in areas that have the potential to do ecological damage. The fire management agencies have advised the Committee that where this is necessary, attempts to mitigate the damage include 'burning outside of a breeding or flowering season, removing fuel from around habitat trees or burning at a low intensity to ensure canopy level habitat is not disturbed.'161

The Committee is aware that claims of such measures being undertaken do not satisfy community members who are opposed to the current burning regime, either because they consider the measures are inadequate to protect ecosystems or because they simply do not believe these issues are properly considered and that the planning process is 'window dressing'.

In correspondence, DELWP advised the Committee that information about planned burning is freely available to the public and that communities are encouraged to get involved in all aspects of planning for our fire management operations.

¹⁵⁸ Dr Nancy McMurray, *Transcript of Evidence*, 27 September 2016, p 49

¹⁵⁹ Government submission, Submission 60, p 54

¹⁶⁰ Ibid

¹⁶¹ Ibid

Specifically, a three-year fire operations plan (FOP) to set out the actions on our bushfire management strategies is prepared by DELWP and Parks Victoria. These plans set out where and when activities to reduce bushfire risk will take place, such as planned burning, slashing and mowing, which reduce the leaves, twigs, shrubs and other vegetation that fuel bushfires.¹⁶²

The plans provide an opportunity for those who live near public land or are interested in a particular area to talk to the Department about the timing and scheduling of planned burns.

The plan is updated each year and includes the latest 'local knowledge, fire ecology and fuel hazard information' and the Department have advised the Committee that it 'welcomes and encourages people to get involved in fire operations planning throughout the year'. ¹⁶³

This involvement could include providing suggestions for new planned burns or changes to proposed burns and community members can also provide input during the development of the plan, including questions about whether it is ecological, regenerative or fuel management and the mitigation measures undertaken. The Department advised the Committee that community involvement is encouraged all year round and not just on the release of a plan in August. 165

The Government submission acknowledged that the modelling for ecosystem resilience is not as advanced as for modelling the risk to life and property. It suggests that the process is developing and 'the use of key measures provides vital information and allows for the development of landscape scale ecosystem resilience objectives'. ¹⁶⁶

Despite the limitations of the current modelling, it is the Committee that ecological elements of the planned burning regime are given due consideration. It is clearly important that DELWP and the other fire management agencies take protection of ecological values seriously and that damage to ecosystems is a key consideration in developing planned burning programs.

The following table provides details of planned burning and other fire mitigation activities since the Black Saturday fire season.¹⁶⁷

¹⁶² Correspondence from DELWP to the Committee, 28 March 2017

¹⁶³ Ibid

¹⁶⁴ Ibid

¹⁶⁵ Ibio

¹⁶⁶ Government submission, Submission 60, p 55

¹⁶⁷ Data on non-burning mitigation activities were not recorded prior to 2012-13.

The fuel reduction program mix

Financial Year	Fuel reduction burns (ha)	Fuel reduction burns (no.)	Ecological burns (ha)	Ecological burns (no.)	Regeneration burns / other (ha)	Regeneration burns / other (no.)	Mechanical works*	Total (ha)	Total (no.**)
2009-2010	119,699	370	22455	70	3,951	263		146,105	703
2010-2011	159,731	421	27035	68	2,231	238		188,997	748
2011-2012	157,703	431	35963	123	3,483	280		197,149	834
2012-2013	200,733	330	51647	104	2,846	243	6,757	261,983	229
2013-2014	60,781	210	19269	29	1,972	168	12,686	94,708	445
2014-2015	190,998	346	40,769	82	2,847	239	13,616	248,230	029
2015-2016	138,734	223	40,736	43	2,230	174	12,000	193,700	440

ource: DELWF

3.7 The environmental impacts of planned burning

As with any fire, planned burning by definition has significant impact on the landscape. The point of planned burns is to reduce fuel loads, particularly fine fuels like bark and leaves and detritus that feeds fires and enables them to take hold and spread out of control. However, the consequences of this process may include unintended impacts on native flora and fauna. Fire is largely indiscriminate and a planned burn has the real potential of not only killing wildlife and vegetation, but also damaging or destroying the habitats of native animals.

The Committee has been provided with a number of examples throughout the inquiry of the damage to the native flora and fauna that planned burning can do.

3.7.1 Environmental planning for planned burning

In its Final Report, the VBRC suggested that the State needed to improve its understanding and monitoring of the impact of different fire regimes on flora and fauna. It proposed that the Department:

...expand its data collection on the effects of prescribed burning and bushfire on biodiversity. Maintenance and extension of data collection on Victoria's flora and fauna assets has not been a high priority. It needs to be improved so that more informed and scientifically-based decision making can accompany the development of prescribed-burning regimes that meet conservation objectives...¹⁶⁸

According to the Government submission, a primary objective of the Code of Practice for Bushfire Management on Public Land (2012) is to 'maintain or improve the resilience of natural ecosystems and their ability to deliver services such as biodiversity, water, carbon storage and forest products.'¹⁶⁹

The submission suggests that strategic bushfire management plans identify the range of ecosystem values that need to be protected from major bushfires through fuel management. These include threatened species, ecological vegetation classes and other ecosystem services, such as healthy waterways.¹⁷⁰

According to the Government submission, strategic bushfire management plans identify appropriate fire management zones (FMZ) to 'ensure that ecosystem values are not unduly impacted by fuel management activities'.¹⁷¹

It then claims that fuel management activities can be modified so that potential impacts can be better managed, including establishing planned burn exclusion zones to ensure that 'fire is not introduced into the landscape unnecessarily'.¹⁷²

¹⁶⁸ Victorian Bushfires Royal Commission, Final Report, July 2010, p 15

¹⁶⁹ Government submission, Submission 60, p 54

¹⁷⁰ Ibio

¹⁷¹ Ibid

¹⁷² Government submission, Submission 60, p 55

The submission acknowledges that in order to protect life and property, fuel management activities that have a potential impact on ecosystem values may need to occur. However, it suggests that when this is the case, the agencies concerned will consider issues such as the timing and approach to the activities by 'burning outside of a breeding or flowering season, removing fuel from around habitat trees or burning at a low intensity to ensure canopy level habitat is not disturbed.'¹⁷³

Whether the protocols and approaches to protection of the ecology of a particular area was subject of some significant dispute during the Committee's hearings and in submissions.

3.7.2 Animal welfare and planned burning

An issue that has been raised repeatedly during the course of the hearings, and in submissions to the inquiry, has been the issue of the damage done to native animals and their habitats by planned burns as they are currently undertaken. The frequency and severity of the burns, along with planning processes that do not, in the view of critics, take sufficient account of the safe escape of native fauna is a source of much of the opposition to the current planned burning regime.

According to the Government submission to the inquiry, the fuel management strategy aims to 'keep our animal and plant populations healthy, while mitigating risks to life and property.'174

It claims that ten years of research by DELWP and La Trobe and Deakin universities has resulted in one of Australia's most 'comprehensive, landscape-scale knowledge banks about how plants and animals and their key habitat characteristics (such as hummock or porcupine grass) recover after fire'. 175

The submission claims that the research provides data to assist with planning and specifically is used to:

- amend the Hummock-grass Mallee minimum tolerable fire interval
- indicate how much area of vegetation in each post-fire growth stage is needed for healthy animal populations
- develop fuel management strategy.¹⁷⁶

While the Government submission suggests that there is due consideration given to animal welfare in the planning of fuel reduction burns, some witnesses before the Committee were not convinced that there was any real priority given to it.

In a hearing in Bairnsdale, Ms Robyn Grant of the Gippsland Environment Group told the Committee that:

¹⁷³ Government submission, Submission 60, p 55

¹⁷⁴ Government submission, Submission 60, p 57

¹⁷⁵ Ibid

¹⁷⁶ Ibid

Our group has grave concerns for what is actually happening with prescribed burns on the biodiversity, due to the frequency, intensity and scale of burns. We have documented various burns in the Mitchell River National Park, Providence Ponds and Moormurng flora and fauna reserves and Blond Bay in the Gippsland Lakes Coastal Park. In Gippsland there are 59 threatened vertebrae species, including 42 species listed as threatened under the Flora and Fauna Guarantee Act 1988 — also many threatened plant species. 177

She further stated that in Gippsland, 18 small mammal species have been lost, are rare or are in severe decline and that one of the identified reasons for this decline has been 'inappropriate fire regimes and the intensity of burns.' 178

She also pointed out to the Committee that 'Inappropriate fire regimes and too frequent fire regimes are both listed as threatening processes under the Flora and Fauna Guarantee Act.' 179

Of particular concern is the impact on planned burns on the habitat of native animals and the effect it has on their on-going survival. Ms Grant told the Committee that prescribed burns are destroying huge numbers of hollow-bearing trees and that according to a CSIRO publication 303 Australian species use hollows, which represents 13 per cent of all terrestrial species. 180

By burning large sections of forest without adequate information on the ecological status of the area and without adequate resources to provide such information, it is argued that planned burning is a significant threat to a substantial number of native species and biodiversity. This is also partly due to a lack of expert staff available.

Ms Grant told the Committee that:

...the burn plans relying on inadequate biodiversity data due to no pre-burn on-ground surveys, inadequate VBA data and insufficient biodiversity staff.¹⁸¹

Dr Nancy McMurray strongly expressed the view that the damage to wildlife is not only unconscionable but is not even achieving its desired outcome. She told the Committee in a hearing that:

...there is substantial scientific evidence that burning the bush puts many fauna species at risk, initially through lack of food and shelter, and also increased predation because they have nowhere to go. So why do this when burning the bush does not protect built assets?¹⁸²

One of the key negative impacts of large-scale planned burns is that if they are burning a large area of land from the outside in, in order to limit the possibility of an escape of the planned burn, animals are likely to be caught in the burn area with no way of escaping.

¹⁷⁷ Ms Robyn Grant, *Transcript of Evidence*, 27 September 2016, p 36

¹⁷⁸ Ibid

¹⁷⁹ Ibid

¹⁸⁰ Ibio

¹⁸¹ Ms Robyn Grant, *Transcript of Evidence*, 27 September 2016, p 39

¹⁸² Dr Nancy McMurray, *Transcript of Evidence*, 27 September 2016, p 49

In her submission to the inquiry, Dr McMurray said that a recent planned burn in the Moormurng Flora and Fauna Reserve 'incinerated a large part of its total area and it must be noted that there are no wildlife corridors leading from Moormurng along which animals could disperse or escape a fire.'¹⁸³

This issue of the method of carrying out planned burns and the negative impact that this can have was also raised by Mr Neil Barraclough of the Gippsland Apiarists Association, who told the Committee in a submission that practice of burning selected blocks by lighting up the entire perimeter and then lighting the interior with aerial incendiaries at the same time creates an unnecessarily strong updraft which 'causes the fire to burn far too hot which is damaging to the soil, the vegetation and also traps both animals and birds'.¹⁸⁴

The submission suggested that such techniques create conditions which can cause 'intense fires and spotting outside of the block intended to burn leads to a need for large ground support crew and that escapes are occurring more frequently than should be the case'. ¹⁸⁵

The submission further stated that:

Anyone with fire fighting experience could look at the smoke plumes on the horizon over recent years from fuel reduction burns and realize that the fires are often much hotter than they should be for prescribed burning purposes.¹⁸⁶

Concerns about the method of burning were also expressed by Bushwalking Victoria, which suggested in its submission that any controlled burn activity 'must include in its management plan protected areas where native animals can retreat to.'¹⁸⁷ While acknowledging the need to give priority to the protection of human life, BWV suggested that extreme care needed to be taken to protect flora and fauna, particularly those species that are endangered or vulnerable.¹⁸⁸

In an article in the Midland Express in March 2017, Pastoria Wildlife Shelter operator, Mr Marcus Ward, said that despite improvements in some of the burning practices since the Lancefield-Cobaw planned burn escape, there were still concerns. He is quoted in the article as saying that 'despite promises to the contrary, DELWP's focus in reducing fuel risk was still 99.9 percent fuel reduction burning and still on a landscape scale.'¹⁸⁹

Mr Ward is quoted as saying:

There is still no recognition that this program is having a massive negative effect on flora and fauna. They are still burning wet forests and stream sides and turning them into dry hazardous areas. 190

¹⁸³ Dr Nancy McMurray, Submission 22, p 1

¹⁸⁴ Gippsland Apiarists Association Submission 45, Attachment 2, p 1

¹⁸⁵ Ibid

¹⁸⁶ Ibio

¹⁸⁷ Bushwalking Victoria, Submission 14, p 2

¹⁸⁸ Ibid

¹⁸⁹ The Midland Express, 7 March 2017, p 7

¹⁹⁰ Ibid

He said:

There is no significant shift to other methods to reduce wildfire risk and, importantly, the risk/benefit analysis is still not demonstrated.¹⁹¹

In a submission from Mr Ward and Ms Chris Lichfield, it is suggested that the fuel reduction program actually represents a bigger threat to native wildlife than do bushfires themselves.¹⁹²

The submission says that having lived in the Cobaw forest for 36 years, they have seen substantial damage to the forest and that, in fact, the nature of the forest itself has been changed for the worse by logging and burning up until the 1990s, and by burning since. Mr Ward and Ms Lichfield say in the submission that:

When we first knew the Cobaws it was a forest with wet gullies, including tree fern gullies...what used to be a wet sclerophyll forest has morphed into a dry one with the tree ferns gone and plants relying on high moisture struggling.¹⁹³

They suggest that combined with the short-term impact on animals and habitat of planned burns that have escaped containment lines, the DELWP burning program has done substantial long-term damage to the ecology of the forest.¹⁹⁴

On the more specific issue of the welfare of animals in the planned burning program, Mr Ward and Ms Lichfield stated that:

It is clear to us that the impact of fire on native animals is of little concern to DELWP officers planning burns. They continually refer to the forest as "fuel" never, habitat. There appears to be a massive blind spot on this which is out of step with Australian standards on animal welfare and conservation. The cruelty of purposely burning animals alive is, in our view, astonishing and unacceptable.¹⁹⁵

They have suggested that the claims by DELWP that animals can escape planned burns is 'either a convenient deception or a deliberate falsehood.' ¹⁹⁶

The submission states that the animals that can flee will do so but some will run through burned areas and die from their injuries days/weeks later. 197

Another submission from Dr Louise Simpson suggested that a further important issue of animal welfare revolves around wildlife volunteers being able to get access to animals on firegrounds, on both public and private lands. She said in her submission that 'Long delays on these and other firegrounds have been experienced through being denied access by fire teams or being unable to locate and gain access from private land-holders.'¹⁹⁸

¹⁹¹ Ibio

¹⁹² Mr Marcus Ward and Ms Chris Lichfield, Submission 84, p 1

¹⁹³ Mr Marcus Ward and Ms Chris Lichfield, Submission 84, p 2

¹⁹⁴ Ibi

¹⁹⁵ Ibid

¹⁹⁶ Ibid

¹⁹⁷ Ibid

¹⁹⁸ Dr Louise Simpson, Submission 82, p 1

Dr Simpson argued that more needs to be done to assist injured animals and the wildlife volunteers and veterinarians should be considered an essential part of fire management teams and should be given access to areas deemed safe for entry.¹⁹⁹

She also considered that local government should be made responsible for organising access by wildlife teams to private holdings affected by fire and that local governments should undertake an assessment of the potential impact on wildlife prior to a planned burn.²⁰⁰

The Government submission states that strategic bushfire management plans identify the range of ecosystem values that need to be protected from major bushfires through fuel management. The submission says that:

The strategic bushfire management plans identify appropriate fire management zones (FMZ) as part of a long term fire regime to ensure that ecosystem values are not unduly impacted by fuel management activities.²⁰¹

The submission acknowledges that in some instances fuel management activities that have a potential impact on ecosystem values may need to occur to protect life and property. It claims that in these situations, 'DELWP and delivery partners mitigate the potential negative impact of fuel management on ecosystem values at the local operational level, through the timing and approach to fuel management activities.'²⁰²

The ecosystem values that the Government submission identify include 'threatened species, ecological vegetation classes and other ecosystem services, such as healthy waterways.'²⁰³

Animal welfare is an important part of the state's risk reduction strategy, and evidence provided to the inquiry indicated that this includes avoiding breeding seasons, mitigating the impact of planned burns wherever possible, using mosaic burns strategically, and the deployment of departmental wildlife experts during planned burns when operationally appropriate.²⁰⁴

Evidence provided to the inquiry by the Department also indicated that moving towards a tailored risk-based approach to fire risk reduction and away from a blunt hectare-based target is also intended take into account the characteristics of local landscapes and biodiversity.

The Government submission indicates that by using world class research it 'aims to keep our animal and plant populations healthy'. 205

¹⁹⁹ Dr Louise Simpson, Submission 82, p 2

²⁰⁰ Ibid

²⁰¹ Government submission, Submission 60, p 54

²⁰² Government submission, Submission 60, p 55

²⁰³ Government submission, Submission 60, p 54

²⁰⁴ Government submission, Submission 60, p 55

²⁰⁵ Government submission, Submission 60, p 57

It is necessary to strike a safe balance between the management of people on the ground during a live burn and animal welfare activities, and although departments are constantly working to improve systems and approaches, it is important to avoid any risk to human safety in the mitigation of impacts upon wildlife in planning for or responding to burns.

In evidence to the Committee, Ms Mhairi Roberts of the RSPCA said:

The RSPCA considers the welfare of all animals should be taken into account when planning a preventative burn and that the welfare impacts should be reduced as much as possible. 206

Ms Roberts also suggested that the information on DELWP's website relating to animals during planned burns is not comprehensive and that it 'assumes that all planned burns move slowly, are not as hot as bushfires and have low flames'. She told the Committee that there needed to be protocols in place to protect animals from the impact of the burns.

While the RSPCA acknowledged that there was an overarching emergency animal welfare plan for Victoria in emergency fire situations, they were not aware of protocols for planned burns.²⁰⁸

Ms Roberts told the Committee that:

As far as we can tell there is nothing that is publicly available and nothing has been shared with us for how animals would be considered prior to a planned burn.²⁰⁹

It is not only the direct effects of the fire of a planned burned on animals when they cannot escape the flames, there is also the issue of the food sources for the native animals.

The Committee was told by Mr Victor Steffenson of the Firestick Project that:

The biggest problem, from Queensland right down on the east coast to where you guys are, is that the current fire regimes and conservation are actually starving the animals because there is no food left for them...²¹⁰

Both the direct impact of fire and the indirect effects of loss of habitat and food sources clearly have a significant impact on native animals. In the case of wildfire, with the fire approaching from one direction (depending on wind conditions) there may be some chance of animals escaping the fire. In planned burning, the practice of burning a perimeter and then burning from the centre out is likely to trap many animals in the fire, giving them little chance to escape.

²⁰⁶ Ms Mhairi Roberts, *Transcript of Evidence*, 19 July 2016, p 23

²⁰⁷ Ibid

²⁰⁸ Ms Lara Griffin, Transcript of Evidence, 19 July 2016, p 25

²⁰⁹ Ms Mhairi Roberts, *Transcript of Evidence*, 19 July 2016, p 25

²¹⁰ Mr Victor Steffenson, *Transcript of Evidence*, 26 October 2016, p 5

The Committee understands that the perimeter burning is necessary to reduce the opportunity for the fire to escape and become a wildfire. It also understands that burning in a particular location may be essential to protect human life and infrastructure.

However, there is a perception that the welfare of animals is not given sufficient consideration in the planned burning process. While endangered species and species resilience is considered, the Committee has been told that native animals are vulnerable to great suffering and death from planned burning and that not enough is done to provide safety corridors or other ways of escaping the fire.

While it is important that animal welfare is a high priority, this should not be seen as a reason not to undertake necessary planned burns. The Committee notes that a lack of planned burns puts landscapes at a greater risk of catastrophic wildfire with its negative impacts on fauna.

FINDING 12: While the resilience of ecosystems and species and their long-term viability is considered in the planning processes for planned burning, there is room for more consideration of the welfare of animals themselves as failure to do so can exacerbate suffering of animals during burns and difficulties in managing the impacts after burns.

RECOMMENDATION 9: That issues of animal welfare be given a higher practical priority in the planned burning process on the ground, including:

- (a) Veterinarians and Wildlife volunteers (animal rescue teams) should be consulted before and during planned burns to reduce or remove the risk to native animals where possible, and to assist in tending injured wildlife (including euthanasia where necessary); and
- (b) Wildlife volunteers (animal rescue teams) be given access to the fireground as soon as it is safe to assist injured animals.

3.7.3 Endangered and rare species and planned burning

Similarly to the issues faced by native animals, the Committee heard evidence that insufficient weight is placed on the health of vegetation, and particularly rare and endangered vegetation, the planning and implementation of planned burns.

In his submission to the inquiry, Dr David Cheal, Associate Adjunct Professor with the Centre for Environmental Management at Federation University stated that:

DELWP has no procedures in its planned burning management process that ensure that the requirements of threatened species are accommodated. As a result many rare species are further threatened by planned burning.²¹¹

Further, Dr Cheal claimed that:

²¹¹ Dr David Cheal, Submission 15, p 1

DELWP has no procedures in its planned burning management process that ensure that the requirements of the full array of habitats and vegetation types are accommodated. As a result some vegetation types (EVCs) are threatened by planned burning, notably including rainforests.²¹²

Dr Cheal was not an opponent of the concept of planned burns, stating in his submission that it 'can achieve useful risk reduction, particularly close to built assets ...and close to susceptible biological assets.'²¹³

He supported the risk-based approach rather than the hectare-based targets because:

The most effective and efficient location to focus on for fire protection, is the immediate vicinity of the infrastructure to be protected and the places where people live and work. A risk-based approach to fire planning (including the application of planned burns) is far preferable, as it enables utilization of the considerable fire management expertise now resident in both the CFA and DELWP.²¹⁴

However, while not being against planned burning *per se* and supporting a risk based approach, Dr Cheal considers that the current processes and the current lack of planning for the protection of wildlife and native flora represent a substantial risk.

He told the Committee in his submission that:

...some threatened species are adversely impacted, or even locally sent extinct, by fires, including planned burns. 215

As an example of this threat, Dr Cheal told the Committee that the Astelia Australiana (Tall Astelia) is a dramatic, tall lily endemic to Victoria (found nowhere else) in rainforest sites of the Beenak area, and a single population in the Otways and is listed under the Victorian Flora & Fauna Guarantee Act and is rated as vulnerable in Victoria and vulnerable in Australia.

Dr Cheal told the Committee that the populations of this lily are subject to continuing decline, mainly as a direct result of fires (both wild fires and planned burns). He said in his submission that recent DELWP proposals to burn adjacent to and into the last remaining stand of Tall Astelia in the Yarra River catchment (at Tomahawk Creek, where the plant was formerly locally common) gave scant regard to this highly threatened species.²¹⁶

Dr Cheal's submission stated that threatened species occurrence rarely impact on planned burns and that 'no DELWP planning process that compels giving threatened species a high and determinative profile when planning burns.'²¹⁷

²¹² Ibid

²¹³ Dr David Cheal, Submission 15, p 3

²¹⁴ Ibid

²¹⁵ Dr David Cheal, Submission 15, p 4

²¹⁶ Ibid

²¹⁷ Ibid

This view of ecological considerations being of little or no significance in planned burning was a common theme among submissions and in evidence.

3.7.4 Data collection and maintenance

One of the issues that has been raised with the Committee in a number of submissions and hearings is the issue of the knowledge of the people undertaking fuel management about the ecology in which they are working.

Research and data is currently insufficient to know what flora and fauna are living in a particular area and the impact that fire, both planned burns and wildfire, is likely to have on it. This is not a new problem and it was recognised by the VBRC in 2010.

In its Final Report, the VBRC said that the State needed to improve its 'understanding of the effects of different fire regimes on flora and fauna'. ²¹⁸

The Commission suggested that the Department (at that time DSE but now DELWP) should expand its data collection on the effects of prescribed burning and bushfire on biodiversity and that maintenance and extension of data collection on Victoria's flora and fauna assets needed to be a higher priority than it had been to date.²¹⁹ In the Commission's view, the data and subsequent knowledge needed to be improved:

...so that more informed and scientifically-based decision making can accompany the development of prescribed-burning regimes that meet conservation objectives as well as accommodating bushfire safety considerations. 220

This issue was raised by a number of participants in the inquiry. Environment East Gippsland said in its submission that there is almost no research being carried out on how 'listed threatened species are travelling, let alone the once more common species.'²²¹ The submission said that:

Without this information it is pointless assessing how burns are affecting species. Reliable baseline data is essential.²²²

This view was supported in evidence that the knowledge and data available to staff undertaking burns is inadequate, and the number of appropriately skilled staff is insufficient to protect the ecology of an area. In a hearing in Bairnsdale, Ms Robyn Grant of the Gippsland Environment Group told the Committee:

...the burn plans relying on inadequate biodiversity data due to no pre-burn on-ground surveys, inadequate VBA data and insufficient biodiversity staff. In 2011 there were seven staff in Bairnsdale; now only three. 223

²¹⁸ Victorian Bushfires Royal Commission, Final Report, p 15

²¹⁹ Ibi

²²⁰ Ibid

²²¹ Environment East Gippsland Inc., Submission 63, p 1

²²² Ibid

²²³ Ms Robyn Grant, *Transcript of Evidence*, 27 September 2016, p 5

Ms Grant said that empirical data does not exist on which animal species are disappearing and the only thing that people have to go on is anecdotal evidence and evidence based on their own observations.²²⁴

The government submission indicated that significant investment was being made in research and data gathering, both in bushfire behaviour and in ecosystem resilience. The submission stated that since 2012, DELWP has invested nearly \$20 million in research to 'better plan for and manage bushfire risk and ecosystem resilience'.²²⁵. The submission stated that the investment includes:

- research projects targeted at enhancing the accuracy of long term bushfire risk models:
- better understanding the relationship between fire and ecosystem resilience;
 and
- increasing the ability to capture and incorporate community values into bushfire management planning.²²⁶

According to the submission, this research is aimed at improving the 'our ability to monitor and predict the response of flora and fauna species to manage bushfire risk'.²²⁷

The submission said that the research also informs the setting of 'landscape ecosystem resilience objectives, to assist in determining appropriate fire regimes and appropriate fuel management strategies for the landscape'.²²⁸

The Fire Management agencies use three measures of ecosystem resilience in its strategic planning for fuel management:

- Tolerable Fire Interval (TFI) the minimum and maximum recommended time intervals between fire events for a particular ecological fire group;
- Geometric Mean Abundance (GMA) an index of the relative abundance of species and provides a measure correlated with community viability; and
- Growth Stage Structure (GSS) the different stages of vegetation succession (e.g. mature, adolescent or juvenile) and modelling can be used to derive a mix of growth stages across a landscape to optimise GMA.²²⁹

The approach to this modelling tends to be long-term in the sense that it is less concerned with the welfare of the animals within a burn area but the long-term viability of the species within that ecosystem. While it will be used to assess this long-term viability, it is not likely to be used to stop a burn based on the abundance of animals if the long-term viability of the species is not seen to be threatened. For those that have to deal with the effects of the fire on the animals at the time of the burn, this long-term analysis may be cold comfort.

²²⁴ Ms Robyn Grant, *Transcript of Evidence,* 27 September 2016, p 10

²²⁵ Government Submission, Submission 60, p 56

²²⁶ Ibid

²²⁷ Ibid

²²⁸ Ibid

²²⁹ Ibid

3.7.5 Health impacts of planned burning

An issue that needs to be taken into account by those planning fuel reduction burns is the effect on the health of people in the surrounding areas, particularly from the effects of smoke inhalation.

A paper related to a new study entitled: *Health effects of smoke from planned burns: a study protocol* has suggested that while the health effects associated with planned burns are probably less serious than those of a major bushfire, they nonetheless exist. There is insufficient research to make any definitive statements in this regard. The paper suggested that:

There is strong evidence that extreme pollution from severe, infrequent forest fires contributes to mortality, hospital admissions, and emergency attendances especially for respiratory conditions and some cardiovascular illnesses. However, it is not known if similar risks can be expected at the lower concentrations of smoke derived particulate matter (PM) generally associated with planned burns.²³⁰

The study is intending to evaluate the relationship between exposure to smoke from planned burns and effects on individual respiratory and cardiovascular health outcomes.²³¹ The study will take place in three Victorian sites, being Warburton, Traralgon and Maffra/Heyfield.

At this stage, epidemiological evidence of the health impacts of planned burns is inadequate. There is substantial literature on the effect of bushfires on health, in particular inhalation of smoke and particulate matter that is carried in bushfires. Given that planned burns are intended to be smaller and less intense than wildfire, it may be logical to conclude that the impacts are less severe than a wildfire. However, planned burns have the capacity to become larger, more intense and, on occasions, escape their containment lines and can become effectively wildfires.

In the Government submission, the emergency management agencies advised that DELWP, the Bureau of Meteorology, the Environment Protection Authority, and the Department of Health and Human Services are working to improve their smoke modelling capability. They said in the submission that:

This includes developing smoke impact modelling and a more integrated approach across all agencies to predict, communicate and reduce smoke impacts on communities.²³²

A further concern is the impact on water catchments where fire can lead to 'immediate loss of service due to contamination of water supply and a longer term drop in water yield.'²³³

The Government submission said that:

^{230 &}lt;br/>
cbmcpublichealth.biomedcentral.com/articles/10.1186/s12889-016-2862-y>, accessed 20 March 2017

²³² Government Submission, Submission 60, p 62

²³³ Ibid

Most water for Melbourne's 4 million residents is sourced from the Upper Yarra and Thomson reservoirs. The characteristics of the forests and soils in these catchments make them particularly susceptible to the impacts of fire, and water supply protection is therefore a critical component of fire management.²³⁴

The Committee was told that the University of Melbourne has developed a model called HydroFire, which quantifies fire impacts on water supply, measuring both water quality and water yield.

According to the Government submission, land and catchment managers can use this tool to mitigate the impact of bushfires on water supply, including to determine the most appropriate planned burning strategies as well as the impact of those strategies themselves.²³⁵

Ms Charmaine Quick of Melbourne Water told the Committee that Melbourne is one of only about five cities in the world that has protected catchments that are uninhabited. She said that 80 per cent of Melbourne's drinking water comes from those closed catchments.²³⁶

Ms Quick made the point that while not a fire agency, Melbourne Water has responsibility to mitigate fire risk on its own land, including fuel reduction strategies, and maintaining fire breaks. Generally, though, it undertakes a role in managing fires in partnership with the CFA and DELWP.

It is undertaking research which is designed to assist DELWP in its risk modelling about the impacts of planned burns of bushfires on water quality and quantity so they can 'put that in their models and help prioritise where the best bang for the buck is in that area.'237

In addition to the health impacts on people, smoke can have devastating impacts on some industries, particularly the wine industry. In a hearing in Wodonga, the Committee was told that the effect of smoke either from bushfire or planned burns can destroy grape crops.

Veraison is when the grape changes colour and softens. The Committee was told by Mr Chris Pfeiffer of Winemakers of Rutherglen that in the time from Veraison to picking the grapes are most susceptible to smoke taint, where the grape absorbs the smoke and it taints it. In most cases, grapes that are tainted in this way are unsaleable.²³⁸

The Committee heard that in the fires of 2003, 2007 and 2009 there were serious issues of smoke taint across Victorian wine regions. Mr Pfeiffer told the Committee that:

²³⁴ Government Submission, Submission 60, p 63

²³⁵ Ibio

²³⁶ Ms Charmaine Quick, Transcript of Evidence, 18 October 2016, p 24

²³⁷ Ms Charmaine Quick, *Transcript of Evidence,* 18 October 2016, p 26

²³⁸ Mr Chris Pfeiffer, Transcript of Evidence, 20 July 2016, p 35

...smoke taint is not highly visible, and it tends to take a back seat. It does not have the impact of property being destroyed. However, it does destroy a person's income for 12 months, and generally it has been destroyed after all the inputs have gone in.²³⁹

While it is difficult to avoid such damage in the face of a bushfire disaster, the issue of smoke taint is also one that can arise during planned burns. As Mr Pfeiffer said in evidence planned burns tend to take place at the same time as veraison, which increases the risk of contamination of grape crops by planned burns. He told the Committee:

...even though spring burns are not as effective as autumn burns, perhaps we should give more thought to spring burns in areas where there is a lot of grape growing occurring. 240

The issue of the type and timing of planned burns is a problem for winemakers throughout Australia. Recent media reports of concerns in Western Australia's premium wine region of Margaret River suggest a clash between the needs of the authorities in planned burning and the health of the grape crop. Due to recent heavy rain, the soil in the region was wet enough to allow for safe burning but the planned burn was likely to take place prior to harvest. A report said that the authorities considered that the burning needed to begin as soon as possible to protect the Margaret River town site from bushfires, and that the unseasonal heavy rain had meant the soil was damp enough to carry out prescribed burning earlier than usual, creating a clash with the grape harvest.²⁴¹

A viticulturist quoted in the article said the mild summer had delayed the grape season, with harvesting beginning later than usual across much of the region and that carrying out prescribed burning in the area could damage crops.²⁴²

In areas where fruit is close to ripening, like it is here, it's just too risky to be starting to light fire. 243

With experts saying that it takes as little as half an hour of smoke exposure to taint grapes, it is essential that consultation with affected people and industry be undertaken prior to planned burns, particularly as the impact of smoke can be sustained significant distances from fires. This is not just an issue for planned burns as major bushfires will cause the same problem and, of course, are not planned and so cannot be controlled. Bushfires in Northcliffe in WA in 2015 damaged grape crops 150 kilometres away from the fire.

FINDING 13: While it is important to consider the impact of planned burns on the health of people, crops and businesses, it needs to be acknowledged that the impact of mega-fires that may result from not undertaking planned burns may be significant.

²³⁹ Ibid

²⁴⁰ Mr Chris Pfeiffer ,*Transcript of Evidence*, 20 July 2016, p 35

^{241 &}lt;www.abc.net.au/news/2017-03-22/margaret-river-wine-growers-concerned-over-prescribed-burn/8378216> accessed on 23 March 2017, 9.00 am

²⁴² Ibid

²⁴³ Ibid

FINDING 14: The health impacts of planned burns are not satisfactorily documented and there needs to be more empirical evidence gathered to inform decisions about when it is safest to undertake planned burns.

RECOMMENDATION 10: DELWP and its partner agencies, in conjunction with the Department of Health and Human Services, should undertake research into the specific effects on health of people affected by planned burns and the information should be made public. The study should include the direct impact of smoke on affected populations and impacts on water, food supplies and livestock.

3.8 Other bushfire mitigation measures

Planned burning and fuel reduction are not the only measures in place to reduce the risks associated with bushfires.

3.8.1 Evacuation policies - stay versus leave early

Another way that the impact of bushfires is reduced, at least the impact on human life, is through the policy of 'leave early' rather than stay in the fire zone until its too late to leave. This policy, which like planned burning has some passionate critics, is predicated on the priority of the protection of human life.

The VBRC discussed at length the merits of the previous prevailing message of 'stay or go', which had as its full title 'Prepare, Stay and Defend or Leave Early'.²⁴⁴

The VBRC came to the conclusion that this policy was severely tested by the Black Saturday fires and 'exposed weaknesses in the way it was applied.'245

The VBRC's final report stated that the stay or go policy 'failed to allow for the variations in fire severity that can result from differing topography, fuel loads and weather conditions' and did not take into account the ferocity of the Black Saturday fires.²⁴⁶

The Committee needs to make clear that while it considers this an important issue, it has not undertaken detailed research in relation to evacuation policies. Therefore, any comments the Committee makes are general in nature.

In the view of the VBRC, any policy must be capable of differentiating potential firestorms from other bushfires. It suggested that the kind of fires experienced in February 2009 may need a different approach and may call for different 'advice, support and responses from fire agencies'.²⁴⁷

It was also the view of the VBRC that the *stay or go policy* tended to assume that community members were prepared, had an adequate fire plan and knew what to do in the face of a bushfire.

²⁴⁴ Victorian Bushfires Royal Commission, Final Report, p 5

²⁴⁵ Ibid

²⁴⁶ Ibid

²⁴⁷ Ibid

It found that many people 'did not have a well-thought-out plan and were left to make their own decisions without the benefit of assistance from the authorities.'248

While acknowledging the reality that people will usually 'wait and see' before evacuating, the VBRC concluded that:

...any policy must encourage people to adopt the lowest risk option available to them, which is to leave well before a bushfire arrives in the area.²⁴⁹

Despite the comments made by the VBRC, the Committee heard criticism of the 'leave early' policy that has been developed since the Black Saturday fires.

Evidence presented to the Committee has suggested that he leave early policy has the effect of reducing the number of houses that may be saved. In a public hearing, Dr Thornton of the Bushfire and National Hazards Cooperative Research Centre told the Committee that:

One of the things and the corollaries of encouraging people to leave their houses is that we know from research that the single biggest predictor of house survival is the presence of somebody with it, because most houses will burn down from ember attack, so the fires will start small and they can be dealt with when they are small.²⁵⁰

He went on to say that this does not make the policy that places saving lives as the primary concern wrong, but that 'balance between the two is something to which I do not know that there is a right answer'. He said that:

So I think that is still a balancing act that we need to look at. That is certainly what we see in the US, where they evacuate whole suburbs and lose thousands of houses. So I think it is a balance that we need to understand, where we sit on that.²⁵¹

Certainly, some witnesses considered that an appropriate balance had not been achieved. There was a view expressed in a number of public hearings that by encouraging people to leave early, there was a greater loss of property without necessarily a greater degree of safety.

One of the reasons for this is that the roads are not safe places during a bushfire with the possibility of heavy smoke making visibility very low, trees falling across roads and the fire itself burning roadside vegetation and turning roads into wicks, joining up fires and creating a greater threat. Mr Nick Barton, a CFA volunteer, told the Committee in a hearing Bairnsdale that:

The CFA currently has this 'leave early and live'. In some areas, if you have a whole heap of people trying to get out at the first sign of fire, you are going to have a massive disaster.²⁵²

²⁴⁸ Ibid

²⁴⁹ Victorian Bushfires Royal Commission, Final Report, p 5

²⁵⁰ Dr Richard Thornton, *Transcript of Evidence*, 7 July 2016, p 5

²⁵¹ Ibi

²⁵² Mr Nick Barton, *Transcript of Evidence*, 27 September 2016, p 21

The other concern that Mr Barton expressed was that the policy is impractical, and that people simply can't or won't leave before a fire starts, as the policy suggests because they would be leaving regularly which is very disruptive.²⁵³

Another witness was even more forthright in his criticism of the leave and live policy, saying that he felt it was simply for the benefit of outsiders who were unprepared for bushfire and that it had the potential to cost well-prepared people their properties.

Mr L. Ralph Barraclough told the Committee that in a relatively small fire he experienced:

We lost one house — that was somebody's house — and that burnt down two and half weeks after the fire. It was well insured. Nobody's life was ever in any danger — of the local people. We had a handful of outsiders. This leaveandlose (sic) policy is the most stupid thing I have ever seen.²⁵⁴

The Committee understands that the balance between leaving early to protect lives and staying to protect one's property is a difficult one to strike. Ultimately, without formal forced evacuation powers, this comes down to an individual's decision. If people are capable and properties well-prepared, and if the fire conditions are not so severe that fighting the fire would be impossible (such as during Black Saturday), the Committee concurs with Dr Thornton that staying and fighting the fire may be an appropriate option for some.

However, the key issue has to be that public advice and updates on the progress of the fire, the prevailing conditions and the immediate threat need to be clear, unambiguous and readily available.

The development of the VicEmergency phone app, which replaced the FireReady app, has proved to be a significant advance in early warning of bushfire threats. The app, which is developed by the government with funding from the Australian government has a very high take-up rate by people in bushfire prone areas, provides early warning of all reported fires, even very small ones and false alarms.

FINDING 15: While the 'Leave Early and Live' message places an appropriate emphasis on the protection of human life, it is recognised that it comes with a greater potential risk of property loss.

FINDING 16: The optimum time to 'leave early' may not always be clear and it may be impractical for people to leave *before there is a fire* on days that have been designated to have a 'severe' or 'extreme' fire danger rating.

FINDING 17: A review of the 'Leave Early and Live' policy should be undertaken to determine the extent to which it adds to the safety of the community and whether its implementation has created unintended consequences.

²⁵³ Ibid

²⁵⁴ L. Ralph Barraclough, *Transcript of Evidence*, 27 September 2016, p 21

3.9 Climate change and the effect on fire seasons

Despite being included in the terms of reference, climate change and its effects on either bushfires or bushfire mitigation has not been a primary focus of evidence given to this inquiry, and as such the issue is one that would require greater resources and time than the Committee has had. Therefore, comments here are of a general nature.

Many accept that the risk of bushfires is likely to increase in the future as the climate changes, leading to longer fire seasons with hotter, drier summers. According to the Climate Council's report, *Climate Change and the Victoria Bushfire Threat: Update 2017*, since the mid-1990s, southeast Australia has experienced an 11 per cent decline in rainfall during April-October growing seasons. This is projected to lead to an increase in drought and consecutive hot and dry days, leading to longer fire seasons.²⁵⁵

The report suggests that:

The concept of a 'normal' bushfire season is rapidly changing as bushfires continue to increase in number, burn for longer and affect larger areas of land...²⁵⁶

In the view of the Climate Council, climate change can affect ignition, fuel and fire weather. The impact on ignition is not huge, although changes in weather patterns can lead to increased lightning, which accounts for around 25 per cent of bushfire ignitions in Victoria.²⁵⁷

The Climate Council report asserts that climate change is likely to have a significant impact on fuel loads over time, as the reduced rainfall can dry out soil and vegetation, thus making the fuel for a bushfire burn more easily.²⁵⁸

However, the Climate Council's view is that it is in weather patterns themselves that climate change is going to have the most impact on increasing bushfire risk. It states in its report that:

The most direct link between bushfires and climate change therefore comes from the relationship between the long-term trend towards a warmer climate due to increasing greenhouse gas emissions, which are increasing the amount of heat in the atmosphere, in turn leading to increased incidence of very hot days.²⁵⁹

In other words, climate change is likely to increase the number and intensity of very hot and extreme fire danger weather.

A number of witnesses before the inquiry supported this view that there is likely to be a worsening of fire seasons as a result of climate change.

²⁵⁵ Based on CSIRO and Bureau of Meteorology data and quoted in Climate Council, Climate Change and the Victoria Bushfire Threat: Update 2017, p 11

²⁵⁶ Climate Council, Climate Change and the Victoria Bushfire Threat: Update 2017, p 11

²⁵⁷ Climate Council, Climate Change and the Victoria Bushfire Threat: Update 2017, p 6

²⁵⁸ Climate Council, Climate Change and the Victoria Bushfire Threat: Update 2017, p 7

²⁵⁹ Ibid

Dr Richard Thornton of the Bushfire and Natural Hazards Cooperative Research Centre told the Committee in a public hearing that:

...it is becoming clear that fire seasons around the world are getting longer. Our partners, both researchers and practitioners, are telling us they are starting earlier and finishing later. This will in the long run have some serious implications for resourcing of fire services.²⁶⁰

Dr Thornton continued to suggest that this will lead to similar weather conditions that precipitated the catastrophic fire conditions seen on Ash Wednesday and Black Saturday becoming more frequent.

FINDING 18: Evidence was presented that suggests that climate change will impact on fire seasons by making them longer and by increasing the number of days of severe or extreme fire risk and that this will have implications for the resources needed to manage and respond to bushfires.

Climate change and planned burning

The impact of climate change on extreme fire conditions and the resultant increase in risk of mega-fires as experienced in 2009 is not the only impact that climate change is likely to have on fighting bushfires. It is also likely to reduce the window available for planned burning, thus impacting on the fuel reduction regime.

Dr Thornton told the Committee that the extreme fire conditions will mean that:

...we need to reduce the fuel levels more at a time when the weather windows for doing this are shrinking. We will need to rely on our firefighting resources more when fire seasons in the northern and southern hemispheres start to overlap, potentially reducing the availability of resource sharing.²⁶¹

It has been suggested to the Committee that climate change will not only have an impact to the incidence of fire but also on the health of the vegetation itself. It was argued by Australian Landscape Trust in its submission to the inquiry that too frequent burning as the climate warms may have a detrimental impact on certain species of plants. The submission states:

Climate change is expected to impose considerable stresses to plants, particularly with predicted rainfall variations and temperature increase. Plant demographic rates may slow, meaning plants take longer to reach reproductive maturity. The impact of frequent planned burning on species with delayed reproductive maturity is difficult to quantify, and as such needs further study.²⁶²

The Australasian Fire and Emergency Services Authorities Council (AFAC) has stated in its submission to the inquiry that there is potential for planned (or prescribed) burning to mitigate climate change impacts. The submission suggested that:

²⁶⁰ Dr Richard Thornton, *Transcript of Evidence,* 7 July 2016, p 3

²⁶¹ Ibid

²⁶² Australian Landscape Trust, Submission 13, p 1

... the smoke from high intensity bushfires such as the 2009 Black Saturday Fires can release huge emissions of GHGs to the atmosphere, including CO2, and that if occurrences of severe bushfires can be reduced in frequency, severity and extent, a substantial reduction of GHG emissions may be achieved. The report notes that, as prescribed burning is a recognised means of mitigating the extent and severity of such bushfires, it offers potential to reduce carbon emissions and help mitigate predicted climate change, certainly in the short to mid-term.²⁶³

There has been a view expressed to the Committee that the way to manage the increased risk of bushfire through climate change is not only through mitigation by planned burns, but to increase the firefighting capability. In acknowledging the increased risk of the bushfire threat as a result of climate change, the Gippsland Environment Group stated in its submission that:

The science of climate change very clearly indicates that the number of extreme fire days is increasing and will increase further in the following decades. It is of crucial importance therefore that rapid response capability of the emergency fire fighting authorities is further enhanced in particular an increased investment in water deploying aircraft in regional areas is required.²⁶⁴

It was the view of this group that the key to avoiding disaster is to put the fires out very quickly. It stated that:

...DELWP must ensure that bushfires are put out as rapidly as possible without leaving them to burn unattended for weeks as occurred with the Mt Ray fire in East Gippsland (January 2014). 265

This is consistent with the view of the Gippsland Environment Group as expressed earlier in this report that too much emphasis is placed on planned burning and that, on its own it is an ineffective way of mitigating significant fires.

FINDING 19: Evidence was presented that climate change, by increasing the length of fire seasons and by increasing the number of days that have severe or extreme fire danger ratings, is already reducing the time windows available to undertake planned burns.

FINDING 20: The result of fewer or less extensive planned burns as climate change reduces the time available to undertake them could be a build-up of fuels which could contribute to the catastrophic mega fires experienced in 2009.

RECOMMENDATION 11: In order to manage a reduced time window available to undertake the current types of planned burns, alternative methods, including the indigenous mosaic 'cool' burns, should be examined and trialled as they may extend the period in which planned burns can be undertaken while reducing overall risk and fuel loads.

²⁶³ Australasian Fire and Emergency Services Authorities Council, Submission 24, p 9

²⁶⁴ Gippsland Environment Group, Submission 29, p 5

²⁶⁵ Gippsland Environment Group, Submission 29, p 5

4 Coordination arrangements

4.1 A shared responsibility

Underpinning the current approach to emergency management in Victoria is the concept of shared responsibility. It is recognised that the government on its own cannot protect the community from the impact of natural disasters and emergencies, but that everyone shares the responsibility. In the Government submission to the inquiry, the emergency management agencies have said that:

All agencies, departments, industry, business, all levels of government and community need to work together to achieve a sustainable and efficient emergency management system that reduces the likelihood, effect and consequences of emergencies: 'we work as one'. 266

This concept has led to the development of *Safer Together* in 2015, the government's program aimed at reducing bushfire risk in Victoria. There is more discussion about this program and attitudes to it later in this chapter.

The VBRC made the point that 'Shared responsibility' does not necessarily mean 'equal responsibility' and that in some areas the State should assume greater responsibility than community members. It stated that:

... the State and its fire authorities are likely to be more able than individuals to identify the known risks about bushfire. It is also necessary for the State, municipal councils and families to recognise the specific needs of vulnerable people, who might need early warning, assistance or separate consideration particularly on code red days.²⁶⁷

It is clear that the Victorian community places great faith in, and relies on, the various emergency services. These services, such as the CFA and its substantial numbers of volunteer and paid firefighters, have kept Victorians safe for decades and continue to be in the frontline of protecting the community from bushfires. However, this does not mean that people should feel that they do not have to take responsibility for their own safety by being as prepared as they can be, by heeding warnings and by remaining vigilant during the fire season.

The Black Saturday fires, which were unprecedented in their scale and destructiveness, provided clear evidence that there are times when people need to be able to look after themselves and their own safety.

In a disaster the size of the Black Saturday bushfires, the authorities are stretched to the limit fighting the fires that they can fight. They cannot, however, be everywhere and people will need to be prepared and to take steps to keep themselves safe. The VBRC stated in its final report that:

²⁶⁶ Government Submission, Submission 60, p 12

²⁶⁷ Victorian Bushfires Royal Commission, Final Report, p 6

But many people did not have a well-thought-out plan and were left to make their own decisions without the benefit of assistance from the authorities.

FINDING 21: Victorians expect well-resourced co-ordinated fire services and also need to take responsibility for their own preparedness and safety.

4.1.1 Sector reform

The emergency management sector in Victoria has been undergoing a period of change, following the *Victorian Emergency Management Reform-White Paper*, released by the previous government in 2012.

The principles underpinning the ongoing reforms include:

- emergency management founded on community participation, resilience and shared responsibility;
- efficient governance arrangements that clarify roles and responsibilities, embed cooperation across agencies, and ensure emergency management reform is coordinated across the sector; and
- an all-hazards, all-agencies approach built on networked arrangements, greater interoperability and a stronger emphasis on risk mitigation.²⁶⁸

The current fire management arrangements are largely based on these principles and are detailed below.

4.2 The current fire management arrangements

4.2.1 The agencies

As stated, the Government submission was a joint submission from the agencies which have responsibilities within the emergency management framework, in particular in relation to bushfires. Below is a brief summary of the role played by each of the agencies, as described in the Government submission. These roles were further explored during the public hearings and comments made in the hearings are included as appropriate.

Department of Environment, Land, Water and Planning

The Department of Environment, Land, Water and Planning (DELWP) is the government department with overall responsibility for the emergency management sector. It brings together the portfolios of energy, environment, climate change, water, planning, local government and suburban development and is responsible for managing 8.05 million hectares of land for multiple values. The DELWP portfolio includes over 100 major agencies (e.g. large public entities) and 1,200 small committees of management of crown land reserves.²⁶⁹

²⁶⁸ Ibid, 14

²⁶⁹ Government Submission, Submission 60, p 15

DELWP is the Control Agency for:

- fire (in accordance with the *Forests Act 1958*, in State forests, national parks and protected public land)
- · water and sewerage essential service disruption
- electricity, natural gas, petroleum and liquid fuels essential service disruption
- cetacean (whale) stranding, entanglement and vessel strikes
- dam safety incidents
- exotic marine pest incursions
- · wildlife affected by marine pollution

DELWP undertakes its bushfire management role in conjunction with the other key agencies, in particular Parks Victoria, Melbourne Water, VicForests and the Country Fire Authority.

Emergency Management Victoria

Established by the *Emergency Management Act 2013*, Emergency Management Victoria (EMV) is the key co-ordinating agency and has a central role in implementing the emergency management reform agenda.

The key functions of EMV are:

- to act as the agency responsible for the coordination of the development of the whole of government policy for emergency management in Victoria;
- to provide policy advice to the Minister in relation to emergency management;
- to implement emergency management reform initiatives given to Emergency Management Victoria by the Minister;
- to liaise with the Commonwealth Government on emergency management;
- to provide support to the Emergency Management Commissioner to enable the Emergency Management Commissioner to perform the functions conferred on the Emergency Management Commissioner under this Act.²⁷⁰

According to the Government submission, the main ways EMV ensures the reforms are implemented include:

- ensuring the emergency management sector works together and is community focused;
- leading and facilitating key initiatives focused on system-wide reform with integrated policy, strategy, planning, investment and procurement;
- ensuring a stronger emphasis on shared responsibility, community resilience, consequence management and post emergency recovery activities;

²⁷⁰ Emergency Management Act 2013, s17

- embedding emergency management across government, agencies and business; and
- leading and coordinating emergency preparedness, response and recovery with the emergency management sector and community.

The Emergency Management Commissioner, who is supported by the EMV, has overall responsibility for coordination before, during and after major emergencies including management of the consequences of an emergency.

In addition to overall responsibility and a number of specific functions under that general responsibility, the Emergency Management Commissioner is responsible for ensuring the community is warned about fires. The Act requires the Commissioner to:

...ensure that warnings are issued and information is provided to the community in relation to fires in Victoria for the purposes of protecting life and property.²⁷¹

Country Fire Authority

The Country Fire Authority, which was established by the *Country Fire Authority Act 1958* has responsibility for:

superintending and enforcing all necessary steps for the prevention and suppression of fires and for the protection of life and property in case of fire and the general control of all stations and of all brigades and of all groups of brigades shall, subject to the provisions of this Act, so far as relates to the country area of Victoria be vested in the Authority.²⁷²

It is the main fire-fighting organisation in regional Victoria and is therefore key to dealing with bushfires.

The CFA has approximately 58,000 members including 937 career fire fighters on station (May 2016) who work alongside volunteers. In addition to operational leadership, CFA also has approximately 1200 support staff who work in areas such as community engagement, media, communications, training, health and safety, finance, human resources and emergency management.²⁷³

The CFA is the Control Agency for:

- fire on private land;
- fire and/or explosion with aircraft, boilers and pressure vessels;
- · gas leakage;
- hazardous materials Incidents:
- incidents involving lifts, cranes, scaffolding or amusement structures; and
- rescue involving buildings, structures, lifts, cranes, scaffolding, amusement structures, road, rail, aircraft, industrial, trench or tunnel.

²⁷¹ Emergency Management Act 2013, s42(1)

²⁷² Country Fire Authority Act (1958), s20

²⁷³ Government Submission, Submission 60, p 20

VicForests

The purpose of VicForests is to operate a responsible business that generates the best community value from the commercial management of Victoria's State forests. VicForests role in bushfire management is to contribute' skilled staff and contractor resources to assist with bushfire response in accordance with the Bushfire Management Agreement it has with the Secretary of DELWP.'274 VicForest's main focus during an emergency is on the provision of fire fighters, heavy machinery and operators familiar with working in forested terrain.

One of VicForests main priorities is to undertake a regeneration burning program with the assistance of DELWP, and as part of the Bushfire Management Agreement, it will in turn assist DELWP in its fuel reduction burning program in forested areas.²⁷⁵

Parks Victoria

Parks Victoria (PV) is a statutory authority established under the *Parks Victoria Act 1998*. Its primary objective is to ensure parks and reserves are healthy and resilient and it manages over 4 million hectares of parks and reserves, which equates to about 17 per cent of Victoria.²⁷⁶

PV provides fire management services in support of DELWP and the other fire management partners.

About 720 of PV's 1000 employees have bushfire preparedness and response skills, with about 150 staff having dedicated fire management roles across over 80 locations across Victoria. Specifically, PV has:

- Strategic fire and emergency co-ordinators located in each of Parks Victoria's regions;
- 15 districts have a fire and emergency ranger-in-charge to oversee operational delivery;
- park areas have fire and emergency team leaders; and
- field service officers provide a focus for on ground program delivery. 277

Parks Victoria also employs about 200 seasonal firefighters annually that undertake bushfire works across all public land in the state.

Melbourne Water

Melbourne Water is responsible for the protection of a number of Special Water Supply Catchment Area under the *Catchment and Land Protection Act* 1994.

²⁷⁴ Government Submission, Submission 60, p 19

²⁷⁵ Ibid

²⁷⁶ Government Submission, Submission 60, p 18

²⁷⁷ Ibid

It protects water quality and yield in the catchment areas through a series of agreements and arrangements with DELWP, Parks Victoria and the Country Fire Authority. This protection includes providing a first response capability to bushfire in the water catchment areas.²⁷⁸

It also reduces bushfire risk to the water supply catchments through a range of approaches including:

- closed catchments,
- · early warning and detection,
- · mowing along roadsides and on access trails, and
- maintenance of over 600 km of strategic fire breaks for fuel management.²⁷⁹

In addition to its responsibilities in water catchment areas, Melbourne Water is also required to manage bushfire risk on its privately owned to protect water supply infrastructure and the adjoining communities.²⁸⁰

4.2.2 The legislative framework for fire season management

The *Emergency Management Acts* 1986 and 2013 provide the foundation for emergency management arrangements in Victoria. Currently, there are significant planned changes to renew the emergency management arrangements in Victoria, with a review of The *Emergency Management Act* 2013 being the first stage. Currently, though, the two Acts need to be read together.

The Emergency Management Act 2013 establishes:

- the State Crisis and Resilience Council as the peak policy and strategy advisory body on emergency management in Victoria
- the Emergency Management Commissioner, responsible for coordinating the response to major emergencies (including major fire) and for co-ordinating consequence management and recovery for all major emergencies
- the Chief Executive of Emergency Management Victoria, responsible for the day to day management of Emergency Management Victoria (EMV)
- the Inspector-General for Emergency Management, responsible for developing and maintaining a monitoring and assurance framework, and evaluating the performance of the sector.²⁸¹

The Government has released a draft Emergency Management Legislation Amendment (Planning) Bill for public comment. It is intended that the Bill will 'for planning for all emergencies and all agencies at the state, regional and municipal levels.'282

²⁷⁸ Government Submission, Submission 60, p 19

²⁷⁹ Ibid

²⁸⁰ Country Fire Authority Act 1958, s43

²⁸¹ Government Submission, Submission 60, p 13

²⁸² Ibid

Other Victorian legislation that impacts specifically on bushfire management includes:

- Forests Act 1958
- Parks Victoria Act 1998
- Water Act 1989
- Catchment and Land Protection Act 1994
- Country Fire Authority Act 1958
- State Owned Enterprises Act 1992
- Sustainable Forests (Timber) Act 2004

The regulatory and planning framework

There are a number of legislative and regulatory instruments that govern the management of emergencies in Victoria, including Bushfire. The main ones relevant to fire season preparedness are briefly summarised here. The main Acts relevant to emergency management and bushfire management are:

Principal Acts

- Country Fire Authority Act 1958
- Electricity Safety Act 1998
- Emergency Management Act 1986
- Emergency Management Act 2013
- Forests Act 1958
- Metropolitan Fire Brigades Act 1958

Regulations

- Building Regulations 2006
- Country Fire Authority Regulations 2014
- Country Fire Authority (Community Fire Refuges) Regulations 2014
- Electricity Safety (Bushfire Mitigation) Regulations 2013
- Electricity Safety (Electric Line Clearance) Regulations 2015
- Electricity Safety (Installations) Regulations 2009
- Forests (Fire Protection) Regulations 2014
- Forest Fire Management Victoria

A key document for the planning and management of bushfire mitigation is the Code of Practice for Bushfire Management on Public Land (2012) (the Code), which has been made under section 31(1) of the *Conservation, Forests and Land*

Act 1987. Under section 62A(2) of the *Forests Act 1958*, the Secretary of the department must have regard to the Code in applying and using fire in a State forest or national park, or on protected public land.²⁸³

Following the Black Saturday bushfires, the Code was revised. This revision implemented Recommendation 59 of the VBRC Report, which recommended that the Code of Practice be amended to achieve the following:

- provide a clear statement of objectives, expressed as measurable outcomes;
- include an explicit risk-analysis model for more objective and transparent resolution of competing objectives, where human life is the highest priority;
- specify the characteristics of fire management zones—including burn size, percentage area burnt within the prescribed burn, and residual fuel loading; and
- adopt the use of the term 'bushfire' rather than 'wildfire'.²⁸⁴

The Code provides a risk-based bushfire management and planning framework and under the Code, the primary objectives for bushfire management on public land are:

- To minimise the impact of major bushfires on human life, communities, essential and community infrastructure, industries, the economy and the environment. Human life will be afforded priority over all other considerations.
- To maintain or improve the resilience of natural ecosystems and their ability to deliver services such as biodiversity, water, carbon storage and forest products.²⁸⁵

A key element of the Code is that 'Human life will be afforded priority over all other considerations' which is in keeping with the VBRC statement that:

The Commission views protection of human life and the safety of communities as the highest priority for bushfire policy and directed its efforts accordingly.²⁸⁶

Within the legislative and regulatory base, a key document or group of documents is the Emergency Management Manual Victoria (EMMV).

The EMMV organises the key policy and planning documents for emergency management in Victoria.

Some of the key documents are:

- the State Emergency Response Plan (SERP)
- the State Emergency Relief and Recovery Plan (SERRP)

²⁸³ Government Submission, Submission 60, p 18

²⁸⁴ Victorian Bushfires Royal Commission, Final Report, p 35

²⁸⁵ Government Submission, Submission 60, p 18

²⁸⁶ Victorian Bushfires Royal Commission, Final Report, p 2

- guidelines for municipal emergency management planning and fire management planning
- details of agency roles and responsibilities.²⁸⁷

The documents include the arrangements for the prevention, response to and recovery from emergencies.

The emergency management arrangements, are designed to:

- · deal with all hazards
- be integrated, involving all people and relevant agencies, municipal councils, along with relevant voluntary organisations and private sector organisations
- be comprehensive that is, consider, identify and implement measures to reduce emergency risks and consequences before, during, and after emergency events.

The SERP outlines Victorian arrangements for the coordinated response to emergencies by all emergency management agencies.

This includes a set of State-endorsed emergency management priorities to underpin and guide all decisions. The priorities focus on the primacy of life and the issuing of community warnings and information to assist people to make informed decisions about their own safety.²⁸⁸

The Committee supports the multi-agency approach to bushfire and emergency management that is being developed and considers that breaking down silos within emergency management and ensuring that all agencies play a role within a larger integrated system is essential for the effective management of disasters, and particularly bushfires. It also supports an inclusive approach with the community, where the responsibility for bushfire safety is shared. It is important that bushfire management arrangements are done *with* the community and not just *for* the community.

In the context of the multi-agency arrangements, some members of the Committee have significant concerns about the potential damage to the arrangements that may be caused by any reduction in the capacity of the Country Fire Authority as a result of the Country Fire Authority/United Firefighters Union of Australia Operational Staff Enterprise Agreement 2015.

In relation to the legislative and regulatory framework, the Committee understands that there are significant reviews being undertaken and so it is difficult to come to any conclusion about the effectiveness of the framework. However, one submission in particular has raised an issue that the Committee considers requires more detailed consideration.

²⁸⁷ Government Submission, Submission 60, p 14

²⁸⁸ Government Submission, Submission 60, p 14

4.2.3 Nillumbik landowners and the regulatory regime

The Committee has been made aware of an apparent inconsistency with the principle of primacy of life in at least one of the key regulations areas governing fuel reduction.

A submission from a group called the Nillumbik Pro-active Landowners (PALS) has raised with the Committee some serious concerns about the *Victorian Native Vegetation Permitted Clearing Regulations ("NVPCR")*.

In Victoria, The Bushfire Management Overlay is a planning control that is incorporated into planning schemes in Victoria. It is applied where the bushfire hazard requires bushfire protection measures to be implemented. If a property is in a Bushfire Management Overlay, the landowner may need a planning permit if they want to build or develop their land, and they will need to meet bushfire protection requirements.²⁸⁹

A permit is also required to remove, destroy or lop native vegetation. These regulations are known as the NVPCR.²⁹⁰

The Committee understands that the Government is currently reviewing the State's native vegetation clearing regulations. Concerns have been raised about the onerous requirements of the regulations and suggestions have been made to the Committee that exemptions to the requirements for permits to remove vegetation for properties within a Bushfire Management Overlay should be automatic.

In a public hearing, the Committee was advised by DELWP that exemptions, including fire protection, are currently being reviewed for clarity and operability, so the department was conscious of the issues related clearing vegetation that may impose a risk. Mr Miezis told the Committee:

That review has been undertaken as part of a broader native vegetation permitted clearing regulations review, so we expect that there will be some improvements in that system, which will hopefully flow on to clarity for private property owners.²⁹¹

Mr Miezis also told the Committee that:

Certainly maintaining and improving resilience of natural ecosystems is a priority for DELWP. It is one of two objectives in our code of practice for bushfire management on public land — the first, of course, being to minimise the impact of major bushfires on human life, communities, essential and community infrastructure, industries, the economy and the environment, with human life being afforded, of course, the highest priority over all other considerations; the second objective being to maintain or improve the resilience of natural ecosystems and their ability to deliver services,

^{289 &}lt;www.planning.vic.gov.au/bushfire-protection/bushfire-protection-and-my-property>, accessed on 17 March 2017

^{290 &}lt;www.depi.vic.gov.au/ environment-and-wildlife/biodiversity/native-vegetation/native-vegetation-permitted-clearing-regulations> accessed on 6 March 2017.

²⁹¹ Mr Lee Miezis, Transcript of Evidence, 16 August 2016, p 19

be they biodiversity, water, carbon storage, forest products or other. Those two objectives drive all of our work, including our fuel management programs, so they are a key consideration in what we do. 292

The Nillumbik PALS told the Committee in a public hearing that:

Victoria planning provisions negatively impact on bushfire preparedness in rural Nillumbik and really across peri-urban Victoria. It is administratively complex, it is expensive and it is burdensome, and the requirements on landowners for routine management and maintenance activities on land are increasingly being the subject of regulation, which cost lots of money.²⁹³

Restrictions placed on the clearing of vegetation are of particular concerns in Nillumbik because of its high bushfire risk. In evidence, Mr Damian Crock of the Nillumbik PALS told the Committee that:

It is recognised and understood as being one of our most — if not the world's most — fire-prone and heavily wooded highly populated areas.²⁹⁴

Mr Crock told the Committee that 125 of the 173 deaths that took place on Black Saturday in 2009 were in the Shire of Nillumbik. He further suggested that 'in modelling bushfire activity and behaviour in our area the projections for a catastrophic fire coming either from our north, particularly, or north-west perhaps and travelling through the Shire of Nillumbik and into areas to our south, the projections for the fatalities are well over 4000'.²⁹⁵

The concern for the Nillumbik PALS is that the regulations made it difficult and expensive, as well as unnecessarily time-consuming, for landowners to remove native vegetation from their land and this increased the risk of bushfire as fuels are likely to remain at dangerous levels.

The Nillumbik PALS made clear to the Committee that it considered exemptions from native vegetation permitted clearing regulations for any land in a bushfire management overlay were essential to ensure the safety of people in those areas and that such exemptions would be consistent with the VBRC's stated view that the protection of human life is the first priority in bushfire management.²⁹⁶

Nillumbik PALS gave evidence that there is an inconsistency between the requirements to get a permit to remove vegetation from properties that are within a Bushfire Management Overlay and the VBRC's overriding principle that the protection of human life should be the first priority.

The Nillumbik PALS also raised some significant concerns in their original submission and appearance before the Committee about two proposed planning scheme amendments which they considered were going to negatively impact on landowners capacity to manage bushfire risk.

²⁹² Mr Lee Miezis, *Transcript of Evidence*, 16 August 2016, p 15

²⁹³ Ms Narelle Campbell, *Transcript of Evidence*, 28 February 2017, p 70

²⁹⁴ Mr Damian Crock, *Transcript of Evidence*, 25 January 2017, p 18

²⁹⁵ Mr Damian Crock, *Transcript of Evidence*, 25 January 2017, p 19

²⁹⁶ Mr Damian Crock, Transcript of Evidence, 28 February 2017, p 75

In its original submission to the inquiry, the Nillumbik PALs stated that:

Our bush fire preparation for this season, and future seasons, has been thrown into chaos by Nillumbik Shire Council ("NSC") and their insistence of promoting the protection of the environment as their overwhelming priority over and above the lives, properties and livelihoods of rural Nillumbik residents and landowners.²⁹⁷

The submission stated that the Nillumbik Shire Council, by proposing two amendments to the Planning Scheme, would have negative impacts on rural landholding fire preparedness because they would have:

- significantly increased the number of property management and maintenance activities subject to the requirement to obtain a Planning Permit
- placed prohibitive Planning Permit requirements and costs on the permit application process
- created significant delays in property management and maintenance whilst awaiting the preparation of Planning Permit application requirements
- created more significant delays in property management where permit applications are refused and appeals are lodged
- re-introduced the requirement to obtain a permit to remove Burgan (petrol bush), a highly invasive and flammable plant
- provided no acknowledgement of the bush fire risk that exists in the rural Nillumbik area, or provide any consideration of the need for fire preparation of private landholdings
- required water ways on rural properties to be fenced off over time so they are not easily accessible, and requiring fenced areas to be returned to virgin bushland
- aimed to eventually remove static water sources on private landholdings altogether
- implied that there may be restrictions on granting of future permits to re-build properties in the event that they are lost to bush fire.

Specifically, the Planning Scheme Amendments in question were proposed Amendment C81 and C101.

Proposed Planning Scheme Amendment C81 sought to place restrictive Significant Landscape Overlays over all 6000 properties in rural Nillumbik intended, according the Nillumbik PALs to 'protect the views and vistas for people passing through rural Nillumbik.'²⁹⁸

Proposed Amendment C101 sought to place environmental significance protection overlays over approximately 65 per cent of Nillumbik properties including:

²⁹⁷ Nillumbik PALs, Submission 59, p 2

²⁹⁸ Nillumbik PALs, Submission 59, p 3

- Core Habitat
- Buffer Habitat
- · Overlay for residential and township zones and
- Waterways²⁹⁹

Neither of these proposed Amendments have proceeded. Following VCAT declaration that Nillumbik Shire Council "failed to comply with section 28 of The Planning and Environment Act 1987", Planning Scheme Amendment C101 was abandoned. Further, in February 2017 the other proposed Planning Scheme Amendment, C81, was refused by the Minister on the grounds that the Minister was 'not satisfied that the amendment would result in a good planning outcome because the amendment includes duplications, contradictions and inconsistencies with a number of existing provisions…'.³⁰⁰

As the proposed Amendments were abandoned or rejected by the Minister, the issue of what was contained within them is no longer an issue. What Nillumbik continue to be concerned with is the processes involved in the development of the proposed amendments, and in particular the lack of consultation with private landholders.

According to the Nillumbik PALs, the public consultation was flawed. The submission and supplementary submission claimed that the public consultation claimed by the Nillumbik Shire Council was 'conducted largely "in-house" and in consultation with a small number of stakeholders i.e. Council's Environment Advisory and Agricultural Advisory Committees, a number of Government departments and various Presidents & Secretaries of Nillumbik land care groups and convenors of Nillumbik Friends of Groups.'³⁰¹

In the view of Nillumbik PALs, the consultation process represented an attitude of the council that placed environmental concerns ahead of the protection of human life. The submission stated that:

We are concerned that this flawed consultation is typical when environmental laws are being formulated, developed or reviewed, to the exclusion of those people on whom those laws mostly impact - and in flagrant disregard for the consideration of the primacy of human life. ³⁰²

Between the Nillumbik PALs initial submission and the Committee's hearings, there were local government elections which saw changes to the Nillumbik Shire Council. The Committee invited the new Mayor of Nillumbik to appear and give evidence, acknowledging that he was not the Mayor at the time of the development of the proposed failed Amendments. Cr Peter Clarke, the new Mayor of Nillumbik Shire Council, told the Committee in evidence that while the two amendments were no longer proposed, the Council was wrestling with the issue of the clearing of vegetation. He said:

²⁹⁹ Ibi

³⁰⁰ Correspondence from Minister for Planning to Mayor of Nillumbik Shire Council, 12 February 2017

³⁰¹ Nillumbik PALs, Submission 59 Supplement, p 11

³⁰² Ibid

The failure to coordinate that in an ordered manner leaves total confusion in the community about how they manage their own land and leaves a massive vacuum in the sense of what they should do, which goes to the point of fire preparedness confusion.³⁰³

The NSC made it clear that the concerns over the clearing of native vegetation and the onerous permit requirements represents a significant bushfire risk to the rural Nillumbik. Cr Karen Egan, the Deputy Mayor, told the Committee in evidence that the difficulty in getting sufficient planned burns and the red tape involved in seeking permits to remove vegetation is making it difficult for the Shire to prepare for the fire season. She told the Committee in a hearing that:

The biggest issue that came out of our meetings with the CFA captains, and that was 14-odd ones, was the lack of controlled burns and the fact that they have virtually given up on applying for them; permitting is so onerous and so regimented and involves so much tape. 304

One of the key issues identified by the Nillumbik Shire Council was the fact that the vegetation overlays and the bushfire management overlays are not compatible and that this can mean that there are a number of properties within these overlays that are unable to take action to mitigate bushfire risk. The Chief Executive Officer of the Shire told the Committee in evidence that:

For our community as well, there is really no reference to human life in those regulations...the overarching issue is this fact that there is not the integrated, holistic approach to looking at the entire suite of regulations.³⁰⁵

RECOMMENDATION 12: In keeping with the Victorian Bushfires Royal Commission's findings and recommendations, human life has primacy in bushfire-related regulations and it is important that this is maintained in the implementation of bushfire management overlays and relevant vegetation removal exemptions should reflect the primacy of human life.

4.2.4 Resourcing of fire season preparedness

DELWP and its partners have approximately 3,000 individuals with fire and emergency management roles, including:

- permanent staff with dedicated fire roles;
- permanent staff who take on fire and emergency roles, separate from their normal duties, as and when required; and
- seasonally recruited project firefighters.

Fuel management – and in particular planned burning – is undertaken using the same crews of firefighters that respond to bushfires in the summer season, using many of the same work methods. 306

³⁰³ Cr Peter Clarke, *Transcript of Evidence,* 28 February 2017, p 50

³⁰⁴ Cr Karen Egan, *Transcript of Evidence*, 28 February 2017, p 51

³⁰⁵ Mr Mark Stoermer, *Transcript of Evidence*, 28 February 2017, p 52

³⁰⁶ Government Submission, Submission 60, p 76

Long-standing arrangements are in place for additional support to be provided by interstate and international agencies, and this support is reciprocated.

The department's firefighting assets also include:

- 312 small capacity water carrying four wheel drive vehicles (slip-on units);
- 79 heavy tankers;
- 48 dozers, graders; and
- 66 fire lookout towers across Victoria.

DELWP also maintains a panel of plant contractors (dozer and grader contractors) that are available at short notice to deploy to fires.³⁰⁷

Up to 47 aircraft are contracted as the base aircraft fleet to support state fire and emergency management activities. Contracted service periods for aircraft are between 10 and 14 weeks. 308

DELWP has a Resource Management Agreement with NAFC, which is a membership organisation made up of Australian states and provide a centralised procurement of aviation resources. It also provides access to Australian Government funding.

In addition to the aircraft contracted for the peak summer fire period, DELWP also maintains a fleet of more than 100 'call when needed' appliances which can be activated at any time of year.

Mutual aid agreements exist in all DELWP regions between DELWP and CFA, which cover resource sharing with respect to emergency response accountabilities.

The Sky Crane relocation

An issue was raised during the inquiry related to the relocation of the Sky Crane, a helicopter with a 7500-litre water carrying capacity that is the major firefighting aircraft in the Victorian fleet. In 2016, the decision was made to relocate the Sky Crane from Ballarat airport to Moorabbin airport in Melbourne.

The Committee became aware that there were significant concerns about this decision, as it was seen to be leaving Ballarat and Western Victoria exposed.

The Mayor of Ballarat, Cr Samantha McIntosh appeared before the Committee in a public hearing and detailed the concerns that the Ballarat City Council had with the decision.

³⁰⁷ Government Submission, Submission 60, p 77

³⁰⁸ Ibid

Cr McIntosh told the Committee that from the perspective of the Ballarat Council a major asset was removed from Ballarat which was been replaced by a helicopter of a lesser capacity. She advised that the Council met with EMV soon after the decision was made and tried to get the decision reversed. Cr McIntosh told the Committee that:

The community were very concerned to hear of the loss of this firefighting asset, particularly in light of the Scotsburn and Mount Bolton bushfires.³⁰⁹

Cr McIntosh said in evidence that Ballarat was a better option for the Sky Crane as it is centrally located and would enable the Sky Crane to get to fire hotspots in Central and Western Victoria such as the Wombat forest, Scotsburn, the Grampians and the Otways. She said that if the helicopter were located at Moorabbin, it would be a longer trek through difficult terrain and wind. ³¹⁰ She said:

Ballarat airport is positioned centrally and that it provides what is required in those areas at times of high fire response needs. It is very well located to ensure maximum response times, and that is what we are talking about. It is why there has been this concern coming from the broader community.³¹¹

The significant extra water carrying capacity of the Sky Crane (7500-litre) compared with the 2000-litre capacity of the smaller attack helicopter is the key concern for the Ballarat Council and community. Cr McIntosh told the Committee that the relocation was a 'major concern to the Ballarat and regional community' and that:

Every year we have had a major fire in the area, and we want to ensure that Ballarat is maintained as a central piece in the firefighting network. 312

Cr McIntosh said the Ballarat Council was not seeing the Sky Crane as a piece of equipment in isolation but was a part of a larger vision of establishing Ballarat as an emergency services hub. She told the Committee that the emergency services hub, which is a joint project between the Council and Emergency Services Victoria, is intended to be a hub for emergency coordination, training, logistics, storage, maintenance, research and development.³¹³

She advised the Committee that the City of Ballarat had looked at the issue of the hub over a long period of time and had many experts look at the positioning and they have had consistent responses suggesting that Ballarat is ideally situated as a multifaceted emergency hub.³¹⁴

In addition to concerns about the diminution of the emergency hub if the Sky Crane were relocated to Moorabbin, Cr McIntosh also expressed concerns that the logistics of putting the helicopter in the city would make it harder to access the fires that it needed to get to, particularly west of the city.

³⁰⁹ Cr Samantha McIntosh, *Transcript of Evidence*, 25 January 2017, p 32

³¹⁰ Ibid

³¹¹ Cr Samantha McIntosh, *Transcript of Evidence*, 25 January 2017, p 33

³¹² Ibi

³¹³ Ibid

³¹⁴ Ibid

She told the Committee that:

By having the air crane in Ballarat there is no question about the time saved and the ability to have a much greater response.³¹⁵

Cr McIntosh told the Committee that the explanation about the decision to relocate the Sky Crane that the City of Ballarat had received was that they would get the type 2 helicopter that has a 2000-litre belly water-carrying capacity and that it had a shorter time-frame to get up off the ground. She said that the smaller helicopter takes about 8 minutes, compared to 15 with the Sky Crane. ³¹⁶

The Emergency Management Commissioner gave the Committee an overview of the state's emergency profile via a series of maps and showing how the use of aircraft fit into the state's emergency planning.

He told the Committee that the strategy is used in Victoria, developed since the VBRC final report was to have:

- fixed wing aircraft in the western side of the state to deal with the agricultural risk;
- fixed wings in the eastern side of the state, which deals with the forested and agricultural risk; and
- helicopters in the centre of the state, matching the where the majority of the population interfaces with the bush.³¹⁷

The Commissioner told the Committee that a key recommendation of the VBRC was that aircraft did not need to wait for a request before taking off and getting to where it was needed. Specifically, Recommendation 20 of the VBRC was that:

The Country Fire Authority and the Department of Sustainability and Environment amend their policies on aerial preparedness and standby arrangements, their dispatch protocols and the management of aircraft in order to do the following:

- require that at locations that attract the risk assessment or preparedness level A
 on code red days all personnel needed for air operations must be on standby by
 10.00 am
- establish a system that enables the dispatch of aircraft to fires in high-risk areas without requiring a request from an Incident Controller or the State Duty Officer.³¹⁸

The Commissioner told the Committee that the VBRC had made it clear that it did not want to see situations where 'aircraft sat on the ground and it was wait, wait and wait until someone said, "Send it".'³¹⁹

³¹⁵ Cr Samantha McIntosh, *Transcript of Evidence*, 25 January 2017, p 34

³¹⁶ Ibid

³¹⁷ Mr Craig Lapsley, *Transcript of Evidence*, 28 February 2017, p 2

³¹⁸ Victorian Bushfires Royal Commission, *Final Report*, p 28

³¹⁹ Mr Craig Lapsley, *Transcript of Evidence*, 28 February 2017, p 3

As a response to this recommendation, EMV established a process that it refers to as 'predetermined dispatch', or PDD. The PDD system is based on research from 8 different fire agencies in Australia and three in the US and Canada about processes, procedures and systems and a system of aerial suppression on fires according to the fire danger index has been developed. The intention is to get aircraft to fires much quicker because that increases the chance of keeping the fire small and able to be put out by ground crews.

The Commissioner told the Committee that the Sky Cranes are not part of the PDD system because they take too long to become airborne and therefore cannot provide the rapid response for PDD to be effective.

He told the Committee that Ballarat had not been part of the PDD system because the Sky Crane was located there and as they were not able to be part of the system, it left Ballarat out of PDD.³²¹

The Commissioner told the Committee that they had been looking for ways of getting Ballarat into the PDD system, about 'how do we put a helicopter in Ballarat that can run on PDD'. 322

In evidence, the Commissioner told the Committee that:

So last year when the crane was taken out of Ballarat on 24 December to go to the Wye River fire and spent the next week in the Wye River fire, there was no coverage in Ballarat unless we backed another call when needed machine in...So that is why I say there may be those concerns. As I said to the Chair, if we need to go and talk in detail to the mayor of Ballarat, we will do that, because I am very solid about the logic. It is not only about a single point; it is about multiple points of how we get the best out of the fleet that we operate. 323

In the hearing, the Commissioner gave an example of the different response of the smaller helicopter.

So if we sent the Essendon one, it would have turned up at the 45 minute mark. The Ballarat crane would have turned up at the 41minute mark and dropped 7500 litres. You can actually look at the 45 minute mark, where the smaller helicopter has done eight loads of water at 9000 litres, and at the 41 minute mark, where it has done seven loads of water at 7600 litres. So we are ahead of the game. The principle of keeping small fires small is solid as a rock.³²⁴

The Commissioner acknowledged that he knew the move of the Sky Crane from Ballarat was not going to be popular there as he said he felt there was 'an emotional attachment' to it, but that he also knew it was the 'right thing to do'.³²⁵

³²⁰ Operating Protocols – Pre-determined Dispatch, Government of Victoria, November 2016, p 7

³²¹ Mr Craig Lapsley, *Transcript of Evidence*, 28 February 2017, p 3

³²² Mr Craig Lapsley, *Transcript of Evidence*, 28 February 2017, p 4

³²³ Mr Craig Lapsley, *Transcript of Evidence*, 28 February 2017, p 15

³²⁴ Mr Craig Lapsley, *Transcript of Evidence*, 28 February 2017, p 6

³²⁵ Mr Craig Lapsley, *Transcript of Evidence*, 28 February 2017, p 4

The Commissioner also told the Committee that the smaller, more nimble aircraft, while carrying less water than the Sky Crane, can do more runs in the same time and, according to the Commissioner's modelling, can in fact drop more water on the fireground in the same period of time. He said in evidence that:

...the smaller helicopter carrying 1400 litres per load. Automatic dispatch, so it gets dispatched straightaway. The start up time to get it in the sky is estimated in this model at 5 minutes, and then it is on scene in 12 minutes. So by the time it gets off, flight to fire — this was a model of a fire — it is on scene in 12 minutes. Then it drops water every 3 minutes at 1400 litres and comes up on the 27 minute mark with six drops of water at 8400 litres.³²⁶

For the Sky Crane, though, he described a different scenario:

we put in this model 15 minutes for on scene firefighters to say, 'We want a helicopter; we want an aircraft'. That goes back through incident control, and it gets dispatched. The start up time would be, in there, 5 minutes, 10 minutes to get into the air. So there is 10 minutes of winding the machine up, 2 minute travel... and it lands on the 27 minute mark on the fire. That would be its first drop of water.³²⁷

In summary, the Commissioner told the Committee that:

That is 7500 litres at the 27 minute mark, whereas the other model was 8400 litres on a smaller aircraft doing six drops.³²⁸

The Commissioner said:

My strategy, and I will stand very strongly by this and I will prove this in the next piece of evidence, is that you can wait 27 minutes and get one big drop of water, but the fire has had a 27 minute run on you and will have a head that is quite big on it, and it is a matter of then, 'What are you trying to protect?'.³²⁹

When asked by the Committee why the Sky Crane could not be put on the PDD system and whether it was effectively a resourcing issue, the Commissioner agreed that it was a resourcing issue and was about the most effective use of resources. He said:

They are big machines and they need to wind up in a way to be effective in their operation. The best thing for the cranes is to go to the most strategic fires and let the smaller machines pick them up, and when a fire on the wrong day is running, that is when the strategic resources should be coming to do what they do and do best.³³⁰

FINDING 22: The Committee supports the evidence provided by the Emergency Management Commissioner regarding the decision to relocate the Sky Crane and to deploy more agile resources to the Ballarat region.

³²⁶ Mr Craig Lapsley, *Transcript of Evidence*, 28 February 2017, p 5

³²⁷ Ibid

³²⁸ Ibid

³²⁹ Ibid

³³⁰ Mr Craig Lapsley, *Transcript of Evidence*, 28 February 2017, p 7

Appendix 1 **Submissions**

Submission no. Name Ion Worrell 2 Name withheld 3 Goulburn Broken Catchment Management Authority 4 Name withheld 5 John Drewett 6 **Garry Squires** 7 Blairgowrie Community Fire Prevention Action Group 8 D.J. Auchterlonie 9 East Gippsland Wildfire Taskforce 10 Jeremy Orchard 11 Forest Fire Victoria Inc 12 Bushfire and Natural Hazards Cooperative Research Centre (CRC) 13 Australian Landscape Trust Bushwalking Victoria 14 15 **David Cheal** 16 Lynda Code 17 Victorian Auditor-General's Office 18 Wombat Forestcare Inc 19 **RSPCA** 20 **GWMWater** 21 Friends of the Box Ironbark Forests (Mount Alexander Region) 22 Nancy McMurray 23 Mornington Peninsula Shire Australasian Fire and Emergency Service Authorities Council 24 25 Hancock Victorian Plantations Pty Limited 26 Goulburn-Murray Water 27 David Roy Packham 28 Janet Stanley, Alan March, Paul Read and James Ogloff 29 Gippsland Environment Group Inc 30 Friends of the Gippsland Lakes Parks and Reserves 31 Victorian Water Industry Association 32 Victorian National Parks Association 33 Strathbogie Forest Group, Firefighters for Forests, Euroa Environment Group 34 L.Ralph Barraclough 35 Laurence Gaffney 36 Hepburn Shire Council 37 Murrindindi Shire Council 38 Mount Alexander Shire Council

Submission no.	Name		
39	Volunteer Fire Brigades Victoria		
40	Environment Protection Authority Victoria		
41	Southern Dandenongs Landcare Group		
42	Brian Smart		
43	Federal Department of the Environment		
44	Hawkesdale Goup of Fire Brigades District 5 Barwon SW Region		
45	The Gippsland Apiarists Association		
46	lan Jack		
47	Stretton Group		
48	The Australian Workers' Union		
49	John Kotsiaris		
50	Institute of Foresters of Australia		
51	Norm Stimson		
52	Omeo Dance Inc		
53	Crime Stoppers Victoria		
54	Gregory Dale		
55	Gil Hopkins		
56	Wine Victoria		
57	Blackwood Action Group		
58	Friends of the Koalas Inc		
59	Nillumbik Pro Active Landowners		
60	Government submission		
61	John Nicholson		
62	Name withheld		
63	Environment East Gippsland Inc		
64	Wildlife Victoria Inc		
65	La Trobe University, Department of Ecology, Environment and Evolution		
66	Friends of Crusoe Reservoir & Number 7 Park		
67	Name withheld		
68	Wannon Conservation Society Inc		
69	Maurie Killeen		
70	Michael Tudball		
71	Red Eagle Bushfire Protection Services		
72	L. Byrne		
73	Graeme Connley		
74	Lyn Gunter		
75	Garry Hurle		
76	Deb Foskey		
77	Grat Parry		
78	Denise Veness		
79	Nicholas Barton		
80	Mount Taylor Rural Fire Brigade		
81	Gippsland Arson Prevention Program		
82	Louise Simpson		

Submission no.	Name
83	Chris Litchfield and Marcus Ward
84	Peter Allard
85	Gippsland Arson Prevention Program
86	East Gippsland Shire

Appendix 2 **Public hearings**

Thursday 7 July 2016, Melbourne

Name	Position	Organisation
Dr Richard Thornton	Chief Executive Officer	Bushfire and Natural Hazards
Mr David Bruce	Communications Manager	Cooperative Research Centre
Associate Professor Janet Stanley	Principal Research Fellow, Melbourne Sustainable Society Institute, University of Melbourne	
Dr Paul Read	Senior Research Fellow , Monash Sustainability Institute, Monash University	Researchers in the ARC Linkage project, <i>Building an Integrated System</i> for Australian Bushfire Prevention
Ms Samantha Hunter	Chief Executive Officer, Crime Stoppers	-

Tuesday 19 July 2016, Melbourne

Name	Position	Organisation	
Mr Nial Finegan	Chief Executive Officer		
Dr Anthony Boxshall	Group Manager, Applied Sciences	Environment Protection Authority	
Mr Jamie Twidale	Manager, Emergency Management	(Victoria)	
Mr Damien Wells	Executive Director, Regional Services	-	
Mr Gregory Esnouf	Manager Predictive Services	Australasian Fire and Emergency Service Authorities Council	
Ms Mhairi Roberts	Animal Welfare Policy Manager	DCDCA (W. L. d.)	
Ms Lara Griffin	Continuous Improvement Manager	– RSPCA (Victoria)	
Mr Philip Ingamells	Park Protection	Victorian National Parks Association	
Ms Gayle Osborne	Secretary	Wombat Forest Care	
Mr Chris Ekinsmyth		Blairgowrie Community Fire Prevention Action Group	

Wednesday 20 July 2016, Wodonga

Name	Position	Organisation	
Ms Juliana Phelps	Chief Executive Officer	Taurana China Caurail	
Cr David Wortmann	Mayor	Towong Shire Council	
Mr Trevor Ierino	Director, Business Services		
Ms Narelle Klein	Manager, Finance	——— City of Wodonga	
Mr Dave Barry	Chief Executive Officer	Alaire Chin Conneil	
Cr Ron Janas	Mayor	——— Alpine Shire Council	
Mr Gerry Smith	Chief Executive Officer	Indigo Shire Council	
Ms Ruth Kneebone	Director, Corporate Services	Rural City of Wangaratta	
Ms Ruth Ryan	Corporate Fire Manager	Haranda Vistaniaa Blantatiaa	
Mr Richard Mailer	Northern Risk Manager	—— Hancock Victorian Plantations	
Ms Ant Packer	Head Ranger	Parklands Albury Wodonga	
Ms Anne Stelling	Facilitator	Wodonga Urban Landcare Network	
Mr Chris Pfeiffer		Pfeiffer Wines and Winemakers of Rutherglen	

Thursday 21 July 2016, Euroa

Name	Position	Organisation	
Mr Alex Green	Chief Executive Officer	Mansfield Shire Council	
Ms Margaret Abbey	Chief Executive Officer	M . II II GI . G . II	
Mr Mark Leitinger	Manager of Infrastructure Operations	– Murrindindi Shire Council	
Mr Peter Harriott	Chief Executive Officer	Greater Shepparton City Council	
Mr Bertram Lobert		Churchland Toward Current	
Mr Sim Ayres		— Strathbogie Forest Group	
Mr Andrew Townsend		Firefighters4Forests	
Ms Shirley Saywell		Euroa Environment Group	
Mr David Hamilton	Captain	Strathbogie Rural Fire Brigade	
Mr Steve Wilson	Land and Biodiversity Program Manager	Goulburn Broken Catchment Management Authority	
Dr David Cheal	Associate Adjunct Professor	Federation University	

Tuesday 2 August 2016, Melbourne

Name	Position	Organisation
Mr Andrew Ford	Chief Executive Officer	Valuntaan Fina Dring dan Vintaria
Mr Adam Barnett	Executive Officer	– Volunteer Fire Brigades Victoria

Wednesday 3 August 2016, Melbourne

Name	Position	Organisation
Mr Greg Smith	Chair	
Ms Frances Diver	Chief Executive Officer	County Fine Authority
Mr Steve Warrington	Chief Officer	Country Fire Authority
Mr John Peberdy	Former Chairman	

Tuesday 16 August 2016, Melbourne

Name	Position	Organisation
Mr Adam Fennessy	Secretary	
Mr Lee Miezis	Deputy Secretary, Forest Fire and Regions	Department of Environment, Land, Water and Planning
Mr Darrin McKenzie	Acting Chief Fire Officer	_

Wednesday 17 August 2016, Melbourne

Name	Position	Organisation
Mr Michael Tudball		

Tuesday 30 August 2016, Melbourne

Name	Position	Organisation
Mr David Hamilton	President	
Mr Peter Marshall	National and Victorian Secretary	United Firefighters Union
Mr Geoffrey Barker	Lead Firefighter	

Wednesday 31 August 2016, Melbourne

Name	Position	Organisation
Mr Chris Hardman	Acting Chief Executive Officer	
Mr David Nugent	Director, Fire and Emergency Services	Parks Victoria
Ms Jennifer Rebeiro	Executive Director, Business and Infrastructure Services	_

Tuesday 6 September 2016, Melbourne

Name	Position	Organisation	
Ms Lucinda Nolan	Former Chief Executive Officer	Country Fire Authority	
Ms Julie Oxley	Chief Executive Officer		
Mr Ben Piper Chief Operations Officer		Emergency Services Telecommunications Authority	
Mr Howard Ronaldson	Chair		
Hon. Bernard Teague	Former Chair	2009 Victorian Bushfires Royal Commission	
Mr Tony Pearce	Inspector-General	Inspector General for Emergency Management	
Mr James Higgins	Chief Executive Officer	Makana dikan Fina Balanda	
Mr Paul Stacchino	Acting Chief Officer	—— Metropolitan Fire Brigade	
Mr Joe Buffone	Former Chief Officer	Country Fire Authority	

Wednesday 14 September 2016, Melbourne

Name	Position	Organisation
Mr Robert Green	Chief Executive Officer	
Mr Lachlan Spencer	General Manager, Corporate Services	VicForests
Mr Michael Ryan	Forest Scientist	-

Monday 26 September 2016, Morwell

Position	Organisation	
Statutory Compliance Officer	Latrobe City Council	
Grants and Emergency Management Coordinator	South Gippsland Shire Council	
President	Voices of the Valley	
Treasurer	- Voices of the Valley	
Member		
Member	Country Fire Authority District 9 and South Gippsland Group	
Member		
	Statutory Compliance Officer Grants and Emergency Management Coordinator President Treasurer Member Member	

Tuesday 27 September 2016, Bairnsdale

Name	Position	Organisation	
Mr Gary Gaffney	Chief Executive Officer	Foot Cinnoland China Council	
Mr Shane Turner	Emergency Coordinator	East Gippsland Shire Council	
Mr Ian Ashcroft	Volunteer		
Mr Nick Barton	Volunteer	Country Fire Authority District 11	
Mr Garry Squires			
Ms Louise Crisp		Gippsland Environment Group	
Ms Robyn Grant			
Dr Nancy McMurray		Firedorf Circular III da Bulana	
Mr Lindsay Ralph Barraclough		——— Friends of Gippsland Lakes Parks and Reserves	
Mr John Mulligan	President	East Gippsland Wildfire Taskforce	

Thursday 29 September 2016, Melbourne

Name	Position	Organisation
Mr Peter Marshall	National and Victorian Secretary	United Firefights Union

Tuesday 18 October 2016, Melbourne

Name	Position	Organisation	
Mr Craig Lapsley	Emergency Management Commissioner	Emergency Management Victoria	
Mr Neil Robertson	Chief Executive Officer		
Ms Charmaine Quick	Executive General Manager, Service Delivery	Melbourne Water	

Wednesday 26 October 2016, Melbourne

Name Position		Organisation	
Mr Brett Ellis	Manager Risk, Emergency and Community Safety	Yarra Ranges Council	
Mr Victor Steffenson		National Indigenous Fire Network	
(via telephone)		National indigenous Fife Network	

Wednesday 25 January 2017, Melbourne

Name	Position	Organisation	
	Chief Executive Officer		
Mr Michael Wootten	(Formerly Executive Director of Business Services, Country Fire Authority)	City of Whittlesea	
Mr Damian Crock		Nilly makilly Dury Asking Landaumann	
Mr Max Parsons		— Nillumbik Pro Active Landowners	
Ms Narelle Campbell			
Dr Sali Bache			
Mr Neil Marshall			
Cr Samantha McIntosh	Mayor	City of Ballarat	

Tuesday 28 February 2017, Melbourne

Name Position		Organisation	
Mr Craig Lapsley	Emergency Management Commissioner	Emergency Management Victoria	
Ms Claire Higgins	Former Chair		
Mr Mick Bourke	Former CEO	Country Fire Authority	
Cr Peter Clarke	Mayor		
Cr Karen Egan	Deputy Mayor		
Mr Mark Stoermer	Acting Chief Executive Officer	Nillumbik Shire Council	
Mr Justin Murray	Executive Officer, Emergency Management		
Mr Danny Michell	Former Chief of Staff	Minister for Emergency Services	
Mr Damian Crock			
Mr Max Parsons			
Ms Narelle Campbell		Nillumbik Pro Active Landowners	
Dr Sali Bache			
Mr Neil Marshall			

Appendix 3

Fuel reduction burns against targets - 1993-2016

Financial year	Fuel reduction burning	Target	% of Target
1993-1994	180,000	120,000	150%
1994-1995	141,000	120,000	118%
1995-1996	72,182	120,000	60%
1996-1997	131,000	120,000	109%
1997-1998	40,000	120,000	33%
1998-1999	104,584	120,000	87%
1999-2000	105,688	120,000	88%
2000-2001	65,800	120,000	55%
2001-2002	81,140	100,000	81%
2002-2003	49,200	100,000	49%
2003-2004	90,000	100,000	90%
2004-2005	127,000	130,000	98%
2005-2006	49,000	130,000	38%
2006-2007	138,490	130,000	107%
2007-2008	156,473	130,000	120%
2008-2009	154,260	130,000	119%
2009-2010	146,106	130,000	112%
2010-2011	188,997	200,000	94%
2011-2012	197,149	225,000	88%
2012-2013	255,227	250,000	102%
2013-2014	82,022	260,000	32%
2014-2015 ^(a)	248,230	275,000	90%
2015-2016 ^(a)	197,940	275,000	72%

(a) The BP3 measure was changed to bushfire fuel management (includes mechanical works).

Source: DELWP April 2017.

Appendix 4

Selected major bushfire events since 2000

Year	Location of fires	Impact of fires
2015	Wye River – Separation Creek	In Wye River and Separation Creek, 116 structures and homes were lost
2015	Lancefield-Cobaw	
2013	Aberfeldy-Donnellys Creek Harrietville Chepstowe	More than 190,000 hectares of public and private land were burned A community member and four firefighters lost their lives
	Grampians	46 houses were destroyed
2009:	Almost 80 communities were directly affected	Killed 173 people.
7 February, Black Saturday	and entire towns were left unrecognisable	Burned more than 2,000 properties and 61 businesses
		Almost 430,000 hectares of land were burned (70 national parks and reserves and more than 3,550 agricultural facilities).
2006-2007	Great Divide North fire Gippsland (the Great Divide South fire)	The total area burned exceeded 1,200,000 hectares
	Tawonga Gap	There was 1 death
	Tatong-Watchbox Creek Track	51 houses destroyed
		1,741 stock lost
2005-2006	More than 500 fires broke out across the state:	4 fatalities
	Stawell (Deep Lead),	Fifty-seven houses were destroyed
	• Yea,	359 farm buildings lost
	Moondarra,	Stock losses totalled more than 64,000
	Grampians,	
	Kinglake	
	Anakie	
2003: Eastern Victorian (Alpine) Fires	Eighty-seven fires broke out and at that time it was the largest fire in Victoria since the 1939 Black Friday bushfires:	Burned more than 1.3 million hectares 41 homes were destroyed More than 9,000 livestock were killed
	Mt Buffalo	
	Bright Diagram Plain	
	Dinner Plain	
	BenambraOmeo	
2002: December,	Big Desert Wilderness Park and the adjoining Wyperfield National Park	181,400 hectares of public land were burned
Big Desert Fire		An abandoned house was destroyed
		400 hectares of private property

Appendix 5

Summary of traditional burning practices being implemented in the Department of Environment, Land, Water and Planning

The Department of Environment, Land, Water and Planning (DELWP) including Forest Fire Management Victoria (FFM Vic), operates out of six regions across Victoria. Each regional team, led by an Assistant Chief Fire Officer has responsibility for planned burning operations, this includes engaging with traditional owners to share knowledge and learn from each other to care for country.

The story of each DELWP region's involvement in traditional burning practices is unique and specific to the environmental conditions of each region, its fuel management requirements and the local traditional owner groups. Recognising this, it is important to view traditional burning practices in a local context with the understanding that the stages of the journey will be different across regional Victoria.

The following information provides insight into the work underway across the six DELWP regions and involvement with traditional burning practices.

1. Gippsland

In December 2016 traditional owners, agency and community representatives spent several days visiting different locations across Gippsland talking with fire specialist, Victor Steffenson about traditional burning practices and the health of country. From these discussions, it was very clear that there were a variety of perspectives on burning, be it large scale burns, a risk-based approach or traditional burning.

What the department's forest and fire management staff in Gippsland have focussed on is building relationships with Gunaikurnai Land and Waters Corporation (GLaWAC) and building capacity and knowledge sharing. This is reflective of GLaWAC being a new organisation.

The department has had some really terrific achievements and taken some significant steps forward including:

- Increased numbers of GLaWAC staff passing medicals and participating in the general fire fighter camp training
- Incorporating GLaWAC staff into the response roster at Lindenow Road Depot (Tambo District) ensuring collaboration and a focus on safety and skill building
- Successfully including GLaWAC staff into the planned burn program with an emphasis on the ten joint managed lands and general burning practices.

GLaWAC has thrived working with DELWP in the fire and planned burning space, with their staff attending their first wildfire, first coupe burns and first fuel reduction burns. They have met a lot of people from across Gippsland and across the state and report back to DELWP:

- that they have not felt like an afterthought (which is positive feedback);
- they have learned "heaps" and want to keep working with our Forest and Fire Operations officers as well as be involved or get exposure to burn planning;
- they are building connections with country (it shouldn't be assumed because they are Gunaikurnai that the connection is there or immediately strong);
- they have really loved this part of their job and meeting people;
- they would like to work with us more and explore secondments; and
- there are lots of things they know they will do differently and improve on next year.

The Joint Management Rangers and the natural resource management crew are very much the face of GLaWAC and the elders have been proud to see GLaWAC working with DELWP. Similarly, the Gunaikurnai (GK) Traditional Owner Land Management Board (TOLMB) receives monthly reports on how GLAWAC and DELWP work together and has also expressed how pleased they are to see the practical nature of how the department is going about things.

The GK TOLMB is setting the strategic direction for joint managed lands and the broader culture of partnership and is promoting "small steps" that are achievable for GLaWAC. Gippsland environment agencies have taken this on forming one partnership agreement to streamline administration for GLaWAC and help agencies work with GLaWAC recognising they are one small agency working with many agencies. This agreement is probably the first of its kind in the state.

The draft joint management plan being prepared by the GK TOLMB does not create undue pressure to rush into traditional burning operations. It contains goals like:

- JMP "Gunai-Kurnai land management practices (eg. burning) have been piloted with partners" (1-5 years) and
- "Partners have incorporated Gunaikurnai cultural practices into land management eg. fire" (5 to 10 years).

GLaWAC is participating in a range of broader discussions relating to burning and for example has staff attending the traditional burning discussions on Monday 15 May at Toolangi State Forest and also has staff attending Victor Steffenson's tradition burning workshop in Queensland later this year.

DELWP has a young Gunaikurnai man, Kobi Laudani working in the rappel team in Macalister District who attended the first day of Victor Steffenson's discussions in December 2016.

2. Loddon Mallee

The story of Loddon Mallee region's journey with the Dja Dja Wurrung community to incorporate traditional burning into the planned burning program starts from a commitment to genuine relationships and two-way learning.

DELWP Loddon Mallee has adopted these mindsets in partnering with the Dja Dja Wurrung:

- The Dja Dja Wurrung speak for their own Country (as other Traditional Owners do for theirs)
- Traditional fire is one aspect part of a greater whole of their connection to Country
- Elders teach us that healthy Country is profoundly linked to healthy community
- We actively apply our 'community at the centre' ethic in delivering this initiative
- This wholehearted approach is a powerful contributor to bushfire risk reduction.

DELWP Loddon Mallee's approach

- If we're to succeed, and ensure the community we serve is safer together, traditional burning must be incorporated into our program in a rigorous and systematic fashion.
- The flow-on effects of this philosophy equate to employment of Aboriginal people in fire roles, both planning and on-the-ground, and in other land management roles (seven positions have been filled over two years to date, a mix of ongoing and seasonal roles).
- The model DELWP has developed is:
 - Full partnership with the Traditional Owners, the Dja Dja Wurrung people
 - Embedded into the planned burning program and state-wide systems
 - Can be repeated with confidence, and rolled out to other regions as the Traditional Owners of those places individually express their desire for that to happen

 To not approach this work just through the avenue of fire, but seek broader understanding of what is important to traditional owners in managing 'Country'

DELWP's Loddon Mallee philosophy

- This is not a 'side project' we do not pay lip service to the aspirations of Traditional Owners
- Traditional burning is not an add on, it must be embedded into our everyday roles and systems (elders have regularly commented on this to our team)
- Traditional burning is not a separate, but an intrinsic part, of fire management
- We strive to learn about the importance of 'Country' to Traditional Owners
- · Two-way information exchange and learning is critical
- This is not a 'single party' issue: our Aboriginal FFMVic colleagues, Aboriginal Corporations and representative groups have repeatedly let us know that traditional fire is but one important aspect of culture, of their connection to Country
- We strive for genuine collaboration mere consultation does not meet the mark.

DELWP's Loddon Mallee operating environment

- When it comes to bushfire, we live in a profoundly altered environment, an environment with many more people and many more assets
- The traditional burning program DELWP Loddon Mallee has co-developed with the Dja Dja Wurrung is not about changing Traditional Owner practices, but rather about supporting, safely, their full incorporation in the existing environment and planned burning program
- DELWP/FFMVic, in its overarching land management role, is strategically placed to genuinely deliver on the wishes of Traditional Owners with regards to traditional burning
- Working closely with the Dja Dja Wurrung Board and elders, with their structure, is key
- The breadth of DELWP/FFMVic, our systems and most importantly our people, with their depth of knowledge across a range of topic areas, ensures the program can be embedded.

DELWP's Loddon Mallee learnings (so far...)

• While there are other ways to approach things, the recognition and settlement agreement (RSA) signed by the Dja Dja Wurrung Clans Aboriginal Corporation provided a clear base to get to work from – a starting point for genuine collaboration and shared management.

- The traditional burning model must be developed in a place-based manner able to be replicated, and replicated state-wide (in some instances, in other parts of Victoria where there may be no Aboriginal team members on staff, where there are no signed management agreements nor a Registered Aboriginal Party (RAP).
- An ongoing commitment to partnerships and building trust is critical
- Genuine relationships mean any concerns can be openly addressed and resolved
- We have embraced a 'learning by doing' model
- · Mutual training opportunities are important
- Incorporating traditional burning into standard procedures is a driver of real change, this includes the Safer Together approach, fire operations planning, planned burning approvals process, after action reviews (AARs) and monitoring, evaluation and reporting (MER)
- Stumbles, together, are part of the story and not to be feared
- DELWP/FFMVic's broader teams make this work: experts in risk management, biodiversity and ecology, cultural heritage management, risk analysis – these are people who can make land management decisions and, in a collaborative and ongoing way, effectively share their insights.

The story of a day at FFMVic, DELWP Loddon Mallee

The incorporation of Aboriginal traditional burning into DELWP's program starts each morning in the simple, everyday, moments: Mick Bourke, our district planner and a Dja Dja Wurrung man, logs in at his workstation at FFMVic Loddon Mallee's Bendigo base.

Mick (who is also a Dja Dja Wurrung Clans Aboriginal Corporation Board member) is almost 18 months into a three-year contract here and has been leading the introduction of traditional burning into the planned burning program. Mick grabs a coffee with his office mates and chats as he logs into the fire web system.

At the other side of the Epsom office, out in our depot, Amos Atkinson, a Dja Dja Wurrung man employed as a Project Firefighter (one of four Aboriginal PFFs) puts on his FFMVic gear and starts up the fire tanker he'll be driving today. Ready for another day in the field, a day of reducing bushfire risk to the community, a day of working on his Country. A first year PFF, Amos is learning, but, he is also teaching his colleagues – the learning goes both ways – as he spends a day alongside his Aboriginal and non-Aboriginal team mates.

At a recent meeting with Dja Dja Wurrung elders on Country, FFMVic District Manager Paul Bates was invited to share his thoughts on the traditional burning program by one of the senior elders, Aunty Fay. His response was as follows:

"We started out thinking this was about fire, we've realised it's about people."

3. Port Phillip

- DELWP staff have met with representatives of the Wurundjeri people and discussed possibilities. Yarra Ranges Shire are very supportive of developing this program.
- Victor Steffenson visited the Region last year to meet with elders and agencies. He also returned on Monday 15/5/17 for another session (see **Attachment 1**).
- DELWP staff have also made the offer to work with the Wurundjeri people to develop a program, which they have declined in the short term. They wish to develop their own traditional skills without DELWP involvement at this stage. When they are ready, they will approach DELWP to start to develop.
- In the meantime, DELWP continues to engage with them and develop the relationship.

4. Grampians

• In the Grampians, Damien Skurrie of Parks Victoria in partnership with the Barengi Gadjin Land Council (BGLC) has invited all Aboriginal Staff and Aboriginal elders and community members to participate in a low key Traditional Burn called Dyurrite (Mt Arapiles) Wanjap (Fire) in Wegai language, one of the local dialects of the Wimmera.

Key points

- Collaboration and Partnership with Traditional Owners and Forest Fire Management Victoria was integral for this burn to be a success
- Agreements with working with Traditional Owners were being adhered to
- Learnings and Development skills were being put into practice with the GFF Training that the BGLC staff had completed
- Traditional Fire Practice and Customs was being reintroduced to the land and the Aboriginal people of the Wimmera
- A Traditional Burn at Teesdale Bakers Lane Reserve was conducted in conjunction with Wadawurrung RAP, Wathaurong Aboriginal Co-operative, Corangamite CMA, Golden Plains Shire, PV and DELWP under the project brief "Wiyn Murrup Yangarramela" Fire Spirit Comes Back in Wadawurrung Language. This project was developed by the representatives mentioned above upon return from the 2015 Cape York National Fire Workshop. This burn was a success, under the guidance and expertise of Uncle Rod Mason a Nagarigo Elder from the Snowy Mountains, we were able to reintroduce this practice to Wadawurrung People and Country.
- A traditional burning workshop was held in Ararat, Grampians staff were invited to share information, discuss what Traditional Burning is going to look like in the Grampians Regions, it was a great forum for our PV, DELWP Grampians and Loddon Mallee to be able to be in the same room to have this

- discussion. Engaging with some key staff and partners in learnings from Cape York National Fire Workshop and other Traditional Burn programs that are happening throughout South Western Victoria and the aspirations of the Traditional Owners in the Regions.
- In addition, Grampians and Loddon Mallee regions will be sending three staff to Cape York in 2017 to attend the National Fire Workshop one from Grampians region and 2 from Loddon Mallee region. Staff will be encouraged upon return to share the learnings of the workshop and assist with the ongoing development of the Traditional Burn Program in our Regions.
- It is important that we acknowledge the time and effort it has taken to begin these processes locally and across the state, the Traditional Owners aspirations to bring this practise back to the land is the key focus here and we as a department have obligations to them in doing so.

5. Barwon South West: Gunditj Mirring Traditional Owners

- Aim of engagement is two-fold;
 - 1. To upskill Local Gunditj Mirring staff and Windamarra Rangers so that they can manage fire on Indigenous Protected Areas (IPAs);
 - 2. To develop DELWP knowledge of traditional burning practices and incorporate this knowledge into DELWPs larger planned burning program.
- DELWP Barwon South West has trained about 15 Traditional Owner (TO) staff in general fire fighting over the past 4 years. DELWP continues to provide preseason briefings to TO staff.
- DELWP Barwon South West has committed to moving TOs through fire pathways to build skills within the group so that they are self-sufficient.
- TOs attend DELWP planned burns when on co-managed land (eg. Mt Eccles) or where burns are near IPA Land. This allows TOs to build skills to assist them with objectives for burning on land the TO own themselves.
- Some burning on IPA (TO managed land) this year (see photo below). This
 was unbounded burning with no machinery present to manage the fire.
 DELWP is invited to participate and attends to develop DELWP skills in
 traditional land management. The main objectives are to uncover cultural
 sites.
- The Ngootyoong Gunditj Ngootyoong Mara South West National Park management plan includes reference to cultural burning. The ultimate objective is to ensure TO do their own planning and conduct burns. DELWP has made some offers in the past to train TO planners.

6. Hume: Yorta Yorta

Traditional methodologies incorporated in planned burns in Hume Region / North East Victoria:

Mudgegonga

- Mudgegonga 2010, utilising traditional methodology, implementing spot mosaic burn to protect a Cultural Heritage Place.
- Undertook multiple 'ecological' burns around the art sites and other culturally significant areas.
- Key approach has been to look at what are the values in the landscape, and how should they be managed to ensure totems are protected.
- Pre-burn monitoring- focus on values, quadrangles around species. Pre and post burn mapping.
- Main aims are to reduce weeds/manage changes in environment and encourage endemic species to return.
- Traditional Owners have ignited the initial spotfire as a symbolic part
 of burn. Traditional Owner participants have Basic Wildfire Awareness
 accreditation and are paired up with an FFMVic staff member to build
 knowledge and capacity.
- Conducted brief prior to the day to talk about what to expect.

Koetong

• Using traditional methodology and implementing a spot mosaic burn to protect a Cultural Heritage Place.

Bonegilla

- 2014 grasslands burn, utilising traditional methodology, implemented burn in cooler months. DELWP managed in conjunction with the Aboriginal Landcare Group.
- Communications products from this were a DVD with Glen Johnson (DELWP Biodiversity Officer, Wodonga), and a YouTube clip titled: "Traditional Use of Fire in NE Victoria".

Barmah and Winton Wetlands

• DELWP and PV are burning with the Yorta Yorta Nations Aboriginal Corporation (YYNAC), utilising traditional methodology, implementing a spot mosaic burn to protect Cultural Heritage Places. Cool mosaic pattern in cooler months.

Attachment 1

Indigenous Fire Presentation with fire specialist Victor Steffensen at Toolangi on 15/05/2017

Agenda

9.30am Arrive (light morning tea available on arrival and throughout session)
9.45am Introductions, Welcome to Country and Smoking Ceremony
10.00am Indigenous Fire and Land Management Presentation
12.00pm Close

Overview of presentation

On behalf of Uncle David Wandin of the Wurundjeri Tribe, Land, Compensation and Cultural Heritage Council, you have been invited to Wurundjeri Country to gain a valuable insight into the Return of the Firestick Project. The Project responds to a range of issues relating to current fire practices in Victoria.

Uncle David would be honoured to have you join him, aboriginal Elders, indigenous fire specialists Victor Steffensen, members of parliament and key project partners at Pauls Range Toolangi/Dixons Creek in Yarra Ranges.

The Return of the Firestick Project is underpinned by the Indigenous concept of Country which has evolved with nature over tens of thousands of years. This ancient wisdom is regaining a foothold as a practical and highly effective alternative to current fuel reduction measures.

There is increasing evidence to suggest that current management regimes are negatively impacting on our environment, bio-diversity and contributing to major bushfires. The Project aims to shift the way fire is applied in Victoria and has generated strong interest and support from a range of government and private land managers. Partners include DELWP, the CFA, local government, regional CMAs, the Mountain Cattlemen's Association and a number of Land Care Groups. A number of these partners will be attending.

Uncle David is keen to introduce you to indigenous fire practitioner Victor Steffensen who will share his depth of wisdom and connection with the environment and culture. Together they wish to discuss with you the importance of Indigenous fire and land management practices in healing Country, improving biodiversity and supporting Indigenous and non-Indigenous Victorians in connecting with culture and heritage.

The meeting will discuss alternative fuel reduction methods which will also greatly improve risk and safety outcomes for communities, fire management employees and fire brigade volunteers.

Shu Brown, the Aboriginal Inclusion Coordinator for the Grampians Region will be in attendance at the event on Monday. Shu was invited directly by Brett Ellis.³³¹

³³¹ Correspondence from Department of Environment, Land, Water and Planning (DELWP).

Extract of proceedings

Legislative Council Standing Order 23.27(5) requires the Committee to include in its report all divisions on a question relating to the adoption of the draft report.

All Members have a deliberative vote. In the event of an equality of votes, the Chair also has a casting vote.

The Committee divided on the following questions during consideration of this report. Questions agreed to without division are not recorded in these extracts.

Committee Meeting - 15 June 2017

Mr Dalla-Riva moved, That the resolution of the Committee on 14 June 2017 that "Chapter 5 be removed in its current form in its entirety from the report on the basis that no agreement would be possible but the content of this chapter may be used in any minority report if required" be rescinded.

The Committee divided.

Ayes 3	Noes 5	
Mr Davis	Ms Shing	
Mr Dalla-Riva	Mr Melhem	
Ms Bath	Mr Eideh	
	Ms Dunn	
	Mr Young	

Question negatived.

Mr Davis moved, That at the end of the last sentence in the Call for Submissions section the words "and it has had to, reluctantly, accept the single jointly expressed position" stand part of the report.

The Committee divided.

Ayes 3	Noes 5
Mr Davis	Ms Shing
Mr Dalla-Riva	Mr Melhem
Ms Bath	Mr Eideh
	Ms Dunn
	Mr Young

Question negatived.

Mr Davis moved, That at the end of the section headed The Impact on the CFA of the Country Fire Authority/United Firefighters Union of Australia Operational Staff Enterprise Agreement 2015, the words commencing with "The Committee is concerned about" and concluding with "on country Victoria and community safety" stand part of the report.

The Committee divided.

Ayes 4	Noes 4
Mr Davis	Ms Shing
Mr Dalla-Riva	Mr Melhem
Ms Bath	Mr Eideh
Mr Young	Ms Dunn

There being an equality of votes, the Chair gave his casting vote for the Ayes.

Question agreed to.

Mr Melhem moved, That the preceding resolution of the Committee be rescinded.

The Committee divided.

Ayes 4	Noes 4	
Ms Shing	Mr Davis	
Mr Melhem	Mr Dalla-Riva	
Mr Eideh	Ms Bath	
Ms Dunn	Mr Young	

There being an equality of votes, the Chair gave his casting vote for the Noes.

Question negatived.

Mr Davis moved, That Finding 7, as amended, stand part of the report.

The Committee divided.

Ayes 4	Noes 4	
Mr Davis	Ms Shing	
Mr Dalla-Riva	Mr Melhem	
Ms Bath	Mr Eideh	
Mr Young	Ms Dunn	

There being an equality of votes, the Chair gave his casting vote for the Ayes.

Question agreed to.

Mr Davis moved, That Recommendation 5, with the deletion of the second paragraph which related to a deleted chapter, stand part of the report.

The Committee divided.

Ayes 4	Noes 4
Mr Davis	Ms Shing
Mr Dalla-Riva	Mr Melhem
Ms Bath	Mr Eideh
Mr Young	Ms Dunn

There being an equality of votes, the Chair gave his casting vote for the Ayes.

Question agreed to.

Mr Davis moved, That in the paragraph commencing "Neither of these proposed Amendments have proceeded", all words in the draft, commencing with "Following VCAT" and ending with "suite of regulations" stand part of the report.

The Committee divided.

Ayes 4	Noes 4
Mr Davis	Ms Shing
Mr Dalla-Riva	Mr Melhem
Ms Bath	Mr Eideh
Mr Young	Ms Dunn

There being an equality of votes, the Chair gave his casting vote for the Ayes.

Question agreed to.

Mr Davis moved, That the Finding which reads "The Committee notes the evidence provided by both the Commissioner for Emergency Management and the Mayor of Ballarat and remains concerned that there may be a reduction of the capacity to fight certain types of fires in western Victoria" stand part of the report.

The Committee divided.

Ayes 3	Noes 5	
Mr Davis	Ms Shing	
Mr Dalla-Riva	Mr Melhem	
Ms Bath	Mr Eideh	
	Ms Dunn	
	Mr Young	

Question negatived.

Mr Melhem moved, That the words "the Committee supports the evidence provided by the EMC regarding the decision to relocate the Sky Crane and to deploy more agile resources to the Ballarat region" be inserted into Chapter Four as a new Finding.

The Committee divided.

Ayes 5	Noes 3
Ms Shing	Mr Davis
Mr Melhem	Mr Dalla-Riva
Mr Eideh	Ms Bath
Ms Dunn	
Mr Young	

Question agreed to.

Minority Reports

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PAYBACK:

Daniel Andrews Pays Back the UFU for its Electoral and Booth Support in 2014

Minority Report
Liberal and National Members of the
Environment and Planning Committee
Bushfire Preparedness - June 2017







Minority Report Liberal and National Members of the Environment and Planning Committee Bushfire Preparedness - June 2017

The Committee's terms of reference were broad and considered a broad range of issues pertaining to bushfire preparedness in Victoria.

The Minority member's commentary conclusions are set out below.

1. Preparatory or planned burning

Wide evidence was heard from experts, firefighters and many others in Melbourne and country Victoria. Much of this evidence was reported in the main Committee report.

The Minority members would make the following critical points:

Risk Reduction Targeted burning is accepted as a critical part of planned burning and thereby the fire prevention regime in Victoria.

However a risk reduction targeted burning approach is insufficient on its own. The members were impressed by the evidence of Mr David Packham that a hectare target at least at the level set by the Royal Commission should be retained in parallel with targeted burning.

"The whole question is: does fuel reduction work? The answer, beyond reasonable doubt and beyond scientific probability, is yes in our forest types, and that is how it works." 1

"By the time you get to about 10 to 15 per cent, you are where the Indigenous people were operating. I think the move is back to the 1.5 per cent. I think it is terrible that the 5 per cent has gone. At 5 per cent you are improving things — you are losing less lives et cetera — but if you go back to the 1.3 per cent, we cannot expect to have any of our forests in Victoria unburnt during about the next 20 years. The mega-fires in Victoria, the big ones that cause the trouble — 1851, 1890-something, 1914 or 1913 onwards — seem to turn up about once every 30 years."²

The view that a risk reduction targeted burning approach alone is sufficient carries real risk over the longer term.

Recommendation 1 – Both risk reduction targeted burning objectives and a hectare based target similar to that implemented post Royal Commission form the basis of the State's planned burning approach. Both targets should be reported annually.

Sadly the essence of this recommendation was rejected by Labor and the Greens.

2. The CFA/UFU EBA Dispute

The Committee received many submissions and sworn evidence from many individuals and organisations concerning the proposed CFA/UFU EBA.

The Committee received evidence from the United Firefighters Union, particularly Peter Marshall.

The Union initially sought to avoid giving evidence dodging, ducking and weaving to avoid appearing before the Committee. New dates had to be found. Mr Marshall was found by a newspaper photographer at union headquarters on the day he avoided appearing.

¹ Mr David Packham Transcript of Evidence, 26 September 2016 p.17

² Mr David Packham Transcript of Evidence, 26 September 2016 p.17

At his first appearance Mr Marshall sought to use all the allotted time to put his position avoiding the opportunity for full questions.

The Committee needed to indicate to Mr Marshall he would need to return and a new date was found to allow questioning.

The Minority members found Mr Marshall to be a wholly unconvincing witness whose testimony could not be trusted.

The sacking of the Emergency Services Minister, the Hon. Jane Garrett, the entire CFA Board, the Chief Fire Officer and the Chief Executive Officer of the CFA points to a pattern of behaviour where the Government is arrogantly pushing for a particular outcome and determined to silence independent and expert voices.

The loss of the Metropolitan Fire Brigade Chief Fire Officer, Mr Rau is also concerning. Evidence confirmed our fears that union control would weaken the CFA as had occurred at the MFB.

The Coalition members found that the evidence provided by independent officers and staff of the CFA who had been forced out or were about to be forced from service was credible and conclusive.

We found that Ms Lucinda Nolan former CEO of the CFA and Deputy Commissioner of Police was a reliable and highly credible witness and the evidence she gave led us to the conclusion that the dismantling of the CFA through the UFU/CFA EBA was not in the interests of Victorians or the safety of Victorians.

Ms NOLAN said "When I took on the role of the CEO my entire hope and want was to make the CFA a better place when I left. I certainly was not going to make any decisions or sign any agreements that would make the organisation a worse place." ³

In responding to a question relating to her resignation from the CFA Ms Nolan stated.....

"No. 1 was because there was not an opportunity to stay if the EB was not going to be signed or supported by me, in its current form, in June. There was not an opportunity to say, 'These are still up for negotiation' or 'This is going to change'. The EB was accepted as it was. It was not going to make the organisation a better place. It is destructive and divisive. I could not stay and oversee the destruction of the CFA."

Other credible witnesses included **Mr Joe** Buffone, Former Chief Fire Officer and **Mr John Peberdy**, Former CFA Chairperson. Former Chief Fire Officer **Joe Buffone** has demonstrated exemplary service to the Victorian community in his senior roles at both CFA and Emergency Management Victoria (EMV) commented to the Committee.

"I raised a number of the issues, it is around the ability to make timely decisions, it is around the inflexibility of the EBA, because a lot of it would lock in for the period of the EBA staffing levels, appliance levels, policies et cetera — a whole range of aspects — and therefore under the new arrangements I would not be able to make those changes as the chief officer or make decisions without having agreement from the UFU." 5

"I am absolutely aware of consultation. I am aware that it is actually a mandatory requirement under the Fair Work Act. I am aware of what it says. However, if you have a look at many of those agreements, and you would be well aware of many of those agreements, it is the point that you have 52 clauses that you must agree — must agree. Now, 'must agree' is different to 'consultation'."

³ Ms Lucinda Noland *Transcript of Evidence*, 6 September, 2016, p. 6

⁴ Ms Lucinda Noland *Transcript of Evidence*, 6 September, 2016, p. 6

⁵ Mr Joe Buffone *Transcript of Evidence*, 6 September, 2016, p. 78

⁶ Mr Joe Buffone *Transcript of Evidence*, 6 September, 2016, p. 86

"I go back to 6I, which CFA is fundamentally a volunteer-based organisation. So I do not understand how you can have a management of an organisation that does not have a volunteer ethos embedded in it regardless of an industrial agreement."

Former CFA Chair **Mr PEBERDY** stated; "That was the view that we took on that issue, that we did have a responsibility to act in the best interests of CFA and if there were clauses in the EBA which were not in the best of CFA, then we should try and get those clauses removed....."⁸

Country communities will be at greater risk because the Labor and Green members were determined to silence powerful independent and expert voices.

It was apparent during the hearings that the bulling, harassment and intimadatory behaviour of the Government in seeking to impose its will on the CFA organisation was relentless. Many witnesses attested to this pattern of behaviour. It was clear this came from the highest levels of the Andrews Labor Government. A fish rots from its Head.

3. The Censoring of "Chapter Five – The Potential Impact of the United Firefighters' Union Enterprise Agreement" by Labor and Greens Political Party Members

The removal of Chapter Five has led to the Coalition here as an appendix to this report) reprinting the draft Chapter Five in its entirety. Only minor typographical and other corrections have been made. Findings and recommendations have also been highlighted. To reject discussion on these matters at all is a sad reflection on the Labor and Green members of the Committee given the extensive amount of time, effort and evidence to establish the capacity of Victoria's volunteer base to be fully equipped to deal with Victoria's next catastrophic fire season.

The Committee divided on Chapter five entitled, *The Potential Impact of the United Firefighters' Union Enterprise Agreement*. The Labor members did not want this chapter included in the report and together with the Greens pushed for its exclusion in total.

This was an obstructive step because some parts of it may have been areas where common ground could have been found. However voting to exclude days and days of public hearing and witness evidence from those important hearings and many submissions is an arrogant approach that underlines the closeness of Labor to the UFU and the impact that the UFU has on the Greens Political Party.

The United Firefighters Union is formally aligned with the Australian Labor Party. The United Firefighters Union of Australia VIC is an associated entity of the Australian Labor Party (Victorian Branch) under S. 287 of the Commonwealth Electoral Act 1918 and is not required to disclose financial donations in kind. This weakness in the electoral Act means the UFU has a financial and political stronghold over Labor.

The behaviour of the Government throughout the dispute has been extraordinary and reprehensible. The Labor member's determination to avoid the CFA/UFU EBA issue in the report reflects this institutional control and influence. In short this report is a case study in hard-line union control of Labor.

The 'improper' payment by the CFA to the UFU for spurious legal costs is detailed in the Chapter Five and the Coalition members support the attendant findings and recommendations.

The likely damage to CFA surge capacity is detailed in Chapter Five and associated evidence. Findings and recommendations on this and the impact of the EBA on morale are supported.

⁷ Mr Joe Buffone *Transcript of Evidence*, 6 September, 2016, p. 78

⁸ Mr John Peberdy *Transcript of Evidence*, 3 August 2016, p. 40

The Coalition members believe the loss of surge capacity from the proposed UFU/CFA EBA arrangements will leave Victorians at greater risk.

All Findings, conclusions and recommendations within Chapter Five are supported by the Coalition members of the Committee but apparently not by other Committee members.

4. Ballarat-based Ericsson Sky crane

The authors of this report are not convinced by evidence received from the Emergency Services Commission regarding the removal to the Ballart based Sky crane. We remain concerned that lives in Western and Northern Victoria may be at risk by Daniel Andrews decision to move the Sky crane to Moorabbin in Melbourne's Southern Suburbs.

5. Nillumbik planning Amendments

Nillumbik landowners were successful in their campaign to remove planned local overlays that would have put the community at greater risk of bushfire.

The Coalition remains concerned about planning amendment that weaken the capacity of landowners to undertake necessary and lifesaving bushfire mitigation practices, including the state-wide vegetation framework.

Div

Hon. David Davis MP Member for Southern Metropolitan Region

Hon. Richard Dalla-Riva

Melina Bath

Member for Eastern Metropolitan Region

Melina Bath MLC

Member for Eastern Victoria

June 19th 2017

Chapter Five

The Potential Impact of the United Firefighters' Union Enterprise Agreement

Background

The proposed Country Fire Authority/United Firefighters Union of Australia Operational Staff Enterprise Agreement 2015 (The Agreement) is to replace the current agreement that has been in place since 2010. The Agreement is a very substantial document of 425 pages some of which is controversial and some of which is not.

However, there are a number of clauses that have caused deep concern within the community and this was reflected in evidence to the inquiry. The disputes over these clauses have apparently led to the resignations of senior officers of the CFA, including the CEO and the Chief Officer, the sacking of the Board of the CFA and ultimately the resignation of the Minister for Emergency Services.

It needs to be made clear that the Committee is aware that this very substantial agreement is still to be finalised. Like all complex legal and industrial agreements it is subject to different interpretations and legal argument about those interpretations.

The Committee has not sought to undertake a full industrial and legal analysis of the cabinet-endorsed proposed Agreement itself, however it has received evidence in relation to key clauses. The Committee is not a party to the cabinet-endorsed proposed Agreement and understands therefore that it would be inappropriate for it to attempt to engage as a third party in the negotiations. However, given the community concerns about the impact of specific clauses and the impact of the cabinet-endorsed proposed Agreement overall on fire season preparedness and consequently community safety, Committee members do have an obligation to engage with and understand the impact of this Agreement.

The Committee supports the view in this regard of the Commissioner for Emergency Management, Mr Craig Lapsley, who said in evidence:

...an EBA is signed between two parties. I am not one of them. The VFBV is not one of them. Parks Victoria is not one of them. It is a CFA-UFU signature, but it has got other players. ⁹

The most important 'player' is the Victorian community and its safety in the face of the risk of bushfire.

In the Committee's view, while negotiating the actual agreement is not appropriate, the reality is the outcome of the negotiations are likely to affect a large number of volunteers, regardless of whether they are signatories. Certainly, the negotiation period has had a significant impact on volunteers.

The Committee has sought to explore some of the concerns that have been raised about the cabinet-endorsed proposed Agreement through the course of its inquiry, canvassing the views of both sides of the dispute and, importantly, the volunteers that have been affected by the dispute, which has now been running for 18 months.

Therefore, this chapter seeks to provide an overview of the concerns that have been raised with the Committee during the course of the inquiry, both in submissions and during public hearings, particularly in regional Victoria. Findings are not made about individual issues and the Committee has limited its findings and recommendations to the concerns raised throughout the inquiry.

⁹ Mr Craig Lapsley, *Transcript of Evidence*, 18 October 2016, p 10

Concerns about the impact of the EBA

It is not usual for an enterprise agreement to cause the level of concern in the broader community that has this proposed agreement. It has received more media attention than most industrial agreements and the concerns raised, whether justified or not, have caused substantial anxiety, particularly in communities that rely heavily on volunteers for protection against bushfires.

The Committee has received evidence from the Chair and members of the sacked CFA Board and senior staff, including the former CFA Chief Officer. These witnesses included:

- Mr John Peberdy, Former Chairman, CFA.
- Mr Michael Tudball, former Board Member, CFA
- Mr Joe Buffone, former Chief Officer, CFA
- Ms Lucinda Nolan, former Chief Executive Officer, CFA
- Mr Michael Wootten, former interim Chief Executive Officer, CFA
- Ms Claire Higgins, former Chair, CFA
- Mr Mick Bourke, former Chief Executive Officer, CFA

The current CFA Board Chair, CEO and Chief Officer also gave evidence to the inquiry.

The Committee received a very detailed submission from the Volunteer Fire Brigades Victoria (VFBV), which is the 'body established under Victorian law, the Country Fire Authority Act, to represent CFA volunteers on all matters that affect their welfare and efficiency. VFBV is an independent Association operating autonomously from CFA but at the same time working closely with CFA'. Specifically, the VFVB's role is established under s100 of the Country Fire Authority Act 1958, and is intended to 'enable members of brigades (other than industry brigades) to consider and bring to the notice of the Authority all matters affecting their welfare and efficiency...'¹⁰

The VFBV told the Committee in its submission, and reiterated in public hearings, of its concerns about the impact that the cabinet-endorsed proposed Agreement is likely to have on volunteers and therefore the state's fire season preparedness.

These concerns were also expressed by local brigades in regional Victoria concerning their local circumstances and reflecting the concerns of their communities.

It is the VFBV's view that 'CFA's volunteer based resource model is the only approach capable of economically and practically dealing with the quantum, scale, spread and simultaneous occurrence of fire and other emergencies...'¹¹. This view has been expressed by a number of witnesses to the inquiry and it is generally accepted that without the culture of, and commitment to, volunteering in this State Victorians would be in much more danger than they have been. The fact that the main bushfire fighting organisation, the CFA, is made up of approximately 58,000 members, of whom all but 937 are volunteers, illustrates the point that volunteers are vital to the safety of Victorians in the fire season and throughout the year.

It is fundamental to the CFA's success in protecting the community that it operates in an integrated way with both paid fire fighters and volunteers working together.

While the concerns about the loss of volunteers due to a perceived diminution of their role is widespread in the community, it is not shared by everyone involved with the CFA. Mr Steve Warrington, the CFA's Chief Officer suggested that the concerns that the Agreement would damage the CFA and its integrated staffing model were overstated. He told the Committee in a hearing that:

CFA for decades has served this state with our volunteers and with our career staff working side by side in an integrated model. We have done that for decades. We will do that this season, and we will do that for years to come. So to suggest that there is a divide is not true, because when the flag goes down, if you like, we work... ¹²

Mr Warrington went on to say that:

The reality is we have had agreements in the past. The sky was going to fall in in 2010, and I can tell you we continue again to provide service in a collaborative manner across this state, and we will continue to do so. ¹³

¹⁰ Section 100(1) of the Country Fire Authority Act 1958

¹¹ Volunteer Fire Brigades Victoria, Submission 39, p 5

¹² Mr Steve Warrington, *Transcript of Evidence*, 3 August 2016, p 12

¹³ Mr Steve Warrington, *Transcript of Evidence*, 3 August 2016, p 12

Despite Mr Warrington's contention that the cabinet-endorsed proposed Agreement was not going to undermine the CFA's integrated approach, the Committee was made aware throughout the inquiry that at least the perception of a threat to volunteers is real.

There have been a number of concerns expressed to the Committee about the potential impact of the cabinetendorsed proposed Agreement on the CFA and its ability to attract and retain volunteers. One of the key opponents of the Agreement, the VFBV, went as far as to say in its submission to the inquiry that:

Victoria currently faces the risk that the proposed EBA... could dismantle the very nature of CFA as a volunteer based and fully integrated organisation; break down the integrated operations and chain of command arrangements currently operating within CFA; impede CFA operational decision making and trigger the deterioration of CFA's essential volunteer capacity and capability. ¹⁴

The submission stated that if the cabinet-endorsed proposed Agreement was implemented the effect would 'negatively impact Victoria's bushfire season preparedness for the forthcoming season and the seasons that follow.' 15

The submission summarised the concerns of the VFBV about the cabinet-endorsed proposed Agreement, saying it:

- diminishes the role and utilisation of CFA volunteers, particularly those of urban brigades who are so essential to state-wide surge capacity;
- restricts and undermines support and training to volunteers and is thereby a barrier to building volunteer capacity to meet future challenges;
- overrides CFA's capacity for effective, efficient and timely operational arrangements and decision making powers and CFA's integrated model of operation; and,
- therefore constitutes a major risk to the continuance of CFA volunteer response capacity into the future and its associated benefits for the people and communities of Victoria. 16

More specifically, the VFBV have argued that the cabinet-endorsed proposed Agreement could undermine the CFA's existing volunteer capacity and capability, particularly:

- CFA's volunteer based model whereby volunteers and paid staff work in a fully integrated manner;
- the ability of volunteers to deliver CFA services and/or diminish or restrict the role and utilisation of volunteers;
- support to volunteers and damage CFA volunteer capacity building effort (including training, equipping and supporting);
- interfere with the CFA's operational, resource and decision making powers;
- undermines CFA's and Government's legal obligation to consult with Volunteers as comprehended by the Volunteer Charter & the CFA Act; and
- the existing functionality of volunteer firefighting services. 17

In evidence before the Committee in a public hearing, the Chief Executive Officer of the VFBV, Mr Andrew Ford, told the Committee that the proposed Agreement:

...erodes the role of volunteers, it restricts support to volunteers, it dismantles the CFA integrated model and it restricts and overrides decision-making, particularly operational decision-making of the chief officer, things we say are fundamentally important to Victoria's fire season planning and preparedness... ¹⁸

This concern about the potential impact of the cabinet-endorsed proposed Agreement was echoed by a number of witnesses, including Ms Lucinda Nolan, the former Chief Executive Officer of the CFA who resigned from the position rather than sign off on the Agreement. Ms Nolan had particular concerns about

¹⁴ Volunteer Fire Brigades Victoria, Submission 39, p 2

¹⁵ Volunteer Fire Brigades Victoria, Submission 39, p 2

¹⁶ Volunteer Fire Brigades Victoria, Submission 39, p 3

¹⁷ Volunteer Fire Brigades Victoria, Submission 39, p 9

¹⁸ Mr Andrew Ford, *Transcript of Evidence*, 2 August 2016, p 3

clauses in the cabinet-endorsed proposed Agreement that she saw as restricting the capacity of the management to make decisions, particularly during an emergency. These specific concerns are addressed later in this chapter. Overall, though, Ms Nolan told her Committee that she had resigned rather than sign the cabinet-endorsed proposed Agreement because she considered that it would make the organisation worse, not better.

In evidence before the Committee, Ms Nolan said:

I think this has the potential to negatively impact the organisation, community safety, our volunteers and our volunteer contribution and other groups within the organisation that are not covered by the UFU or not covered by this particular EBA. ¹⁹

Mr Joe Buffone, the former Chief Officer who also resigned during the Enterprise Bargaining negotiations, also expressed concerns about the potential impact of the proposed Agreement.

In evidence, Mr Buffone told the Committee that the reason he resigned was that the cabinet-endorsed proposed Agreement put him in a position where his ability to perform his 'statutory obligations as the chief officer under the CFA act had been fundamentally inhibited.'²⁰

Mr Buffone's concerns about the capacity of the Chief Officer to make decisions during an emergency will be further discussed later in the chapter. More broadly, he expressed the view in a hearing that his concern was whether the dispute over the cabinet-endorsed proposed Agreement may have 'put pressure and challenged some of those core values of that frontline service.' He further told the Committee that:

I have some concerns, being that there are some fractures that have occurred within the system, and I hope that it does not impact on the response to the fire season. 22

The concern over the potential fracturing of the culture of 'One CFA', where paid staff and volunteers work seamlessly as a single entity was a one that the Committee heard throughout the inquiry. CFA volunteers themselves expressed concerns that they will become marginalised if the cabinet-endorsed proposed Agreement is implemented.

While the VFBV and others expressed concern about the potential impact of the cabinet-endorsed proposed Agreement on the CFA and its largely-volunteer workforce, the Committee was told by the Secretary of the United Firefighters Union that the Agreement will not affect volunteers.

Mr Marshall of the UFU denied that the cabinet-endorsed proposed Agreement was going to negatively impact on volunteers as had been claimed. In a hearing, he suggested that the volunteers would be able to continue to provide the services that they currently provide. He told the Committee that Clause 7A was put into the cabinet-endorsed proposed Agreement to make clear that the role of volunteers would not change as a result of the Agreement. The Clause read:

The role of volunteers in fighting bushfires and maintaining community safety and delivering high quality services to the public in remote and regional areas and in integrated stations is not altered by this agreement. ²³

There was a view expressed during the course of the inquiry, both in submissions and in public hearings, that such a clause is of a general nature and would not over-ride specific clauses in the cabinet-endorsed proposed Agreement. In evidence in a public hearing, Mr Andrew Ford of the VFBV told the Committee that:

The other problem with clause 7A in the proposed EBA is it is suggesting a general provision will be able to override specific provisions in the EBA that contradict it. That will not be the case. The general will not override the specific in law. ²⁴

Mr Ford said that statements to the effect that volunteers would not be impacted by the Agreement were incorrect, saying in evidence that:

¹⁹ Ms Lucinda Nolan, *Transcript of Evidence*, 6 September 2016, p 6

²⁰ Mr Joe Buffone, *Transcript of Evidence*, 6 September 2016, p 76

²¹ Mr Joe Buffone, *Transcript of Evidence*, 6 September 2016, p 82

²² Mr Joe Buffone, *Transcript of Evidence*, 6 September 2016, p 82

²³ Mr Peter Marshall, *Transcript of Evidence*, 29 September 2016, p 6

²⁴ Mr Andrew Ford, *Transcript of Evidence*, 3 August 2016, p 4

The critical support roles that are provided to volunteer brigades for brigade and community capacity building — the community support facilitator's role, the brigade administration support officer's role, the volunteer support officer's role and training issues, just as four examples — are all impacted by the proposed EBA...²⁵

FINDING 1: It is a fundamental and non-negotiable requirement that the Country Fire Authority remains a united and integrated organisation with a single workforce, made up of paid and volunteer firefighters and that they are considered equally important. The principle of "One CFA" must be the basis of all of the organisation's operations.

FINDING 2: Any arrangements that place the needs of one part of the CFA's workforce ahead of another's runs contrary to the principle of 'One CFA'.

FINDING 3: Regardless of the legal interpretations of the cabinet-endorsed proposed Agreement between the CFA and the United Firefighters Union, the negotiations have led to substantial stress to volunteers, particularly in regional Victoria. This stress has the potential to lead to a loss of volunteers, which could over time reduce the capacity of the CFA to protect the community from major fire events.

Consultation and the 'power of veto'

One of the key elements in the cabinet-endorsed proposed Agreement has been an increase in the number of matters where the Union must be consulted by the management of the CFA prior to implementation. This has been interpreted as being an effective veto power because agreement is required before implementation and the assumption is that if agreement is not reached then management cannot proceed with the action proposed.

The Committee has been told that there have been 50 new Clauses added to the previous Agreement that require consultation and agreement from the union.

In his letter to the Minister upon resigning, the former Chief Officer wrote to the Minister for Emergency Services and provided examples of some of the areas where union agreement was required prior to implementation by the CFA and which effectively gave a power of veto to the union over management decisions. The examples he gave were that the UFU agreement was required before the CFA could:

- implement changes to minimum staffing and the seniority of roles at any station/appliance and this can only be for a period of seven days before further UFU agreement needs to be sought (clause 45.3)
- direct firefighters to cross crew on an appliance (clause 45.15)
- make changes to all aspects of clothing, equipment, (including personal protective equipment), technology, station ware and appliances (e.g. fire trucks) (clauses 90.4 and 90.7)
- appoint instructors that are not from the CFA or Metropolitan Fire and emergency services board (MFB) to undertake training (clause 162.1 .4 (B) B)
- engage employees covered by the agreement on a part-time basis (clauses 51.3, 51.6.4, 51.6.5, 140.5, 165.3.1, 165.3.2, 183.3, 183.4.2, 194.3, 194.4.2, 207.3, 207.4.2 and 219) ²⁶

The effective 'power of veto' was the subject of legal advice by the CFA and in a letter to the Minister in June 2016, the then-Chair of the CFA advised:

The Board has received advice from Frank Parry QC that the Proposed EA continues to afford the UFU a veto over critical decisions of the CFA, for example the procurement process – a matter which is in direct contradiction of the Recommendation of the Judge Lewis Report. The advice is that the process proposed by President Ross does not permit a single dispute over procurement (which may involve critical equipment) to be effectively resolved by the Commission. A range of curious and unnecessary barriers are placed before the CFA preventing the speedy resolution of a dispute after veto. No explanation or consideration of industrial merit has ever been given as to why such vetoes should be agreed. ²⁷

²⁵ Mr Andrew Ford, *Transcript of Evidence*, 3 August 2016, p 4

²⁶ Correspondence from Mr Joe Buffone to the Minister for Emergency Services, 19 June 2016

²⁷ Correspondence from CFA to Minister, 10 June 2016

Ms Lucinda Nolan, the former CEO of the CFA, also had concerns about what she considered veto clauses. In evidence, Ms Nolan told the Committee about the concerns she had had with the cabinet-endorsed proposed Agreement, and which had ultimately led to her resignation. She said:

The fourth component was really around a requirement of the introduction of 50 clauses stating that we would need to consult and agree with the UFU on particular issues, which we called the veto clauses, and we would say that they were vetoes in disguise, I would say. 28

Mr Marshall of the United Firefighters Union strongly rejected the characterisation of the consultation process as a veto power. He repeated several times during a hearing with the Committee that there was no veto clause in the cabinet-endorsed proposed Agreement but that it was simply a consultation process. ²⁹

In a written response to the issue of veto, the UFU provided the Committee with an extract from the VFBV submission to the Senate Inquiry on the Fair Work Amendment (Respect for emergency services volunteers) Bill 2016 and asserted that in this submission the VFBV conceded that consultation is a process and does not constitute a veto.

In this response, the UFU stated that:

... there has to be a process to resolve issues between the parties – requirement under the act for federal agreements – yes of course disagreements about change in implementation of the agreement provides process for the resolution of those agreements. Therefore because there are consultation/dispute processes – because there is a process it cannot be a veto. ³⁰

The view that the consultation and agreement clauses do not amount to a veto clause was supported by the new Chair of the CFA, Mr Greg Smith. In response to a question about the 'veto' power in the proposed Agreement, Mr Smith said in a hearing:

To the extent that you say there is a power of veto, I am giving that a lot of thought. I am not so sure that is right. ³¹

He went on to suggest that the cabinet-endorsed proposed Agreement talks about consultation and agreement, and that 'you cannot withhold agreement on capricious or unreasonable grounds.'

While the Committee acknowledges that the word 'veto' is not used in the cabinet-endorsed proposed Agreement however any requirement that there be not only consultation but also agreement before the implementation of a decision can reasonably be seen to be an effective veto power. While there are mechanisms for dispute resolution, these are likely to be time-consuming and expensive and will not assist an organisation that needs to be agile and flexible in responding to emergencies and changing circumstances.

FINDING 4: The Committee considers that the proposed cabinet endorsed Agreement contains a veto which the Union may choose to exercise in its own interests.

FINDING 5: The Committee is firmly of the view that such a veto is not in the public interest. Where lines of authority are blurred and the Chief Officer's authority is undermined by what is in effect a union veto, the community may be put at risk given the need in bushfires for swift and decisive decision making by the Incident Controller and the Chief Officer.

The Committee is aware that there is a significant amount of angst in the wider community and particularly amongst volunteers about this effective veto power. This element of the cabinet-endorsed proposed Agreement has reinforced the perception that the UFU are attempting to 'take over the CFA'. By removing decision-making power from the CFA management and the Chief Officer by making decisions dependent on the agreement of the union, the concern is that the union becomes an equal decision making partner in operational decisions.

The Committee understands that the UFU sees the requirement to consult and agree as a way of protecting its members, the fact remains that this was one of the key reasons why the previous CFA Board was unwilling to sign the proposed Agreement, why the former CEO resigned and why a significant number of people

²⁸ Ms Lucinda Nolan, *Transcript of Evidence*, 6 September 2016, p 3

²⁹ Mr Peter Marshall, *Transcript of Evidence*, 29 September 2016, pps 22-24

³⁰ Response tabled at the public hearing on 29 September 2016.

³¹ Mr Greg Smith, Transcript of Evidence, 3 August 2016, p 17

appearing before the Committee, particularly in regional Victoria, see the cabinet-endorsed proposed Agreement as a union takeover.

The former Minister for Emergency Services, Jane Garrett, resigned over a series of issues related to the UFU/CFA proposed Agreement. After accepting her resignation, the Premier in a reported statement said that:

Despite all concerns previously raised by Ms Garrett being addressed, she had indicated she refuses to support Cabinet proposals to end the long-running dispute over the CFA enterprise agreement, ³²

FINDING 6: Claims that a requirement to 'consult and agree' do not represent an effective veto are disingenuous and any clause that requires the agreement of both parties prior to implementation of a policy has the potential to limit the capacity of the Chief Officer and the CFA to make operational decisions.

Chain of command issues

One of the recurring themes during the inquiry has been that the cabinet-endorsed proposed Agreement may have a negative impact on understanding of the chain of command, an essential element of any operation dealing with an emergency situation.

In evidence before the Committee, Mr Ford of the VFBV told the Committee that:

The other issue is volunteer and paid firefighters working as one integrated team, a single chain of command, an issue well recognised and discussed in the bushfires royal commission of 2009, is vital for effective response. ³³

Mr Ford advised that Clause 35.4 of the cabinet-endorsed proposed Agreement 'is quite specific about paid staff reporting to paid staff.' He said in evidence that such a provision has the potential to dismantle 'the integrated nature of CFA and destroys the integrated chain of command that is required'. ³⁴

The concern was also expressed by Mr Adam Barnett of the VFBV that the EBA is creating an uncertainty in the chain of command structures. He said:

The royal commission spent weeks and months and years looking at single line of control and chain of command. Who was in charge? You have now got a proposed document on the table that is going to put that very question into doubt. Who actually is in charge? ³⁵

There have been a number of witnesses during the inquiry who have expressed the concern that the usual chain of command processes during an emergency will be diminished by a perception that the cabinet-endorsed proposed Agreement meant that the paid fire-fighters would not take instructions from a volunteer.

The Committee was told by Mr Walter Aich in a hearing in Morwell that:

...if I am acting in one of those roles — i.e., sector commander or divisional commander — as an unpaid firefighter, there is every chance that I could be told by a paid firefighter that they are not going to take my instruction. And while it has not happened to me, it has happened to two of my colleagues, and the excuse given was 'EBA'. ³⁶

Mr Aich said in evidence:

I have read three versions of the EBA, including 17.6, and I do not read into that a clear instruction as to how chain of command should work on the fireground. That is of personal concern. ³⁷

Mr Aich concluded that this potential chain of command ambiguity was of concern because:

³² http://www.news.com.au/national/victoria/news/victorian-emergency-services-minister-jane-garrett-resigns-from-cabinet/news-story/c4844f970859d669f3febc016a519b53 accessed on 12 April 2017 at 8.28 am

³³ Mr Andrew Ford, *Transcript of Evidence*, 2 August 2016, p 2

³⁴ Mr Andrew Ford, *Transcript of Evidence*, 2 August 2016, p 2

³⁵ Mr Adam Barnett, *Transcript of Evidence*, 2 August 2016, p 10

³⁶ Mr Walter Aich, *Transcript of Evidence*, 26 September 2016, p 40

³⁷ Mr Walter Aich, *Transcript of Evidence*, 26 September 2016, p 40

...if I am in a situation — and fortunately I have never been in a really tough situation, but if I am in a tough situation — and somebody is questioning my ability to make decisions or to communicate with them, that is going to be a real issue. ³⁸

He told the Committee that he had recently been told about an incident where 'a lieutenant from a volunteer brigade was incident controller, a crew from an integrated station, paid staff, turned up and they refused to take instruction from that incident controller unless each instruction was preceded by a directive from the rostered duty officer of that district to the paid staff.' ³⁹

Such a situation is of concern to the Committee and that in an emergency any ambiguity or failure of chain of command could have disastrous consequences.

It should be noted, however, that such an incident has not been verified by the Committee and that if it happened as described, it happened not under the cabinet-endorsed proposed Agreement but under the existing 2010 EBA. It therefore may be more of a reflection of tensions between paid and volunteer staff than any impact of the proposed Agreement. However, in an environment where such tensions may exist, it is essential that chain of command procedures are clearly stated and are not requiring interpretation on the fire ground.

Mr Aich told the Committee that the involvement of the union in chain of command procedures was of significant concern. He told the Committee in evidence that the acting chief officer, in one of the online Q and A sessions which the CFA have run makes the comments that in trying to clarify this issue 'he will be seeking clarification from the UFU before making a decision.' 40

Mr Aich said in evidence that:

I have to say personally that really worries me, because chain of command to me is clearly a chief officer thing, not something that needs to come out of the EBA or needs to be confirmed with the union. 41

FINDING 7: The Committee believes that the weight of evidence was such that there are legitimate concerns that the cabinet-endorsed proposed Agreement may cause confusion on the fireground which could result in sub-optimal, and potentially catastrophic outcomes, both for firefighters and communities.

FINDING 8: The Committee does not support any Agreement which adds to confusion and believes a clear Chain of Command must be a priority of any Agreement and in that context does not support any clause that creates ambiguity, such as Clause 35.4 in the publicly available version (of the Agreement) available at (http://www.ufuvic.asn.au/wp-content/uploads/2015/11/2013-UFU-CFA-Draft-EA-Version-17.1.pdf)

Minimum Career Firefighters on the Fire Ground

There were concerns raised in the public arena that the cabinet-endorsed proposed Agreement required a minimum of seven career (paid) firefighters on the fire ground before operations could commence.

The Committee understands that during negotiations in the Fair Work Commission a change was ordered in the clause that altered the clause to say that 7 paid fire fighters had to have been 'dispatched' and that meant that the crews that had already got to the fire ground did not need to wait until the paid firefighters had arrived before commencing operations.

The VFBV, while acknowledging the changes made to this provision in the proposed Agreement, expressed concern in its submission that as the clause specifies that there has to be seven paid firefighters despatched to an incident, 'under these requirements at any iteration, trained and qualified volunteers are simply not counted.'⁴²

³⁸ Mr Walter Aich, *Transcript of Evidence*, 26 September 2016, p 41

³⁹ Mr Walter Aich, *Transcript of Evidence*, 26 September 2016, p 41

⁴⁰ Mr Walter Aich, *Transcript of Evidence*, 26 September 2016, p 40

⁴¹ Mr Walter Aich, *Transcript of Evidence*, 26 September 2016, p 40

⁴² Volunteer Fire Brigades Victoria, Submission 39, p 13

The submission went on to say:

At the very least, this undermines and disrespects the role of the volunteer firefighter as a qualified and capable first responder to fires and other incidents and does not count volunteers towards fireground safe staffing. This requirement will also directly impact on CFA's operational response to incidents depending on location and mix of staffing attending or dispatched to the incident. ⁴³

This clause was explained by the UFU, with Secretary Mr Peter Marshall telling the Committee in a public hearing that due to past failures at some CFA brigades where volunteer brigades had not arrived in time and thus putting undermanned crews at risk, the cabinet-endorsed proposed Agreement sought to ensure that sufficient firefighters were dispatched, but he stated that it did not preclude operations commencing prior to their arrival. It was seen by Mr Marshall not as an issue of control of the volunteers or operations by the paid firefighters but was an issue of safety.

He said in evidence that:

There are 1200 brigades in the CFA, approximately. Thirty-four of them are integrated. Out of the 34, 31 will be going to a requirement to dispatch seven career firefighters. The purpose of that is to ensure that the necessary backup, safety backup, arrives because there have been problems with the volunteer truck not arriving, and you will see that later on. It does not preclude a volunteer truck commencing operations, getting there first, and if it is there first, the volunteer captain or the lieutenant is the incident controller. ⁴⁴

FINDING 9: The Committee does not support clauses that direct specific numbers of categories of firefighters, whether paid or volunteer, be present on the fireground prior to commencement of firefighting operations, noting the risk that such clauses pose to firefighters and the community.

Limiting access to appliances and equipment by volunteers

The Committee was told during the inquiry that there is a perception among volunteers that they were going to have the equipment and clothing that they were issued with limited by the proposed Agreement. This was seen by some witnesses as a way of distinguishing between paid and volunteer firefighters.

In its submission, the VFBV said that particularly CFA Brigades in communities experiencing urban growth face different challenges to other brigades and there is need for support to upgrade facilities and fire trucks, firefighting equipment and 'additional structural firefighting personal protective clothing (PPC) appropriate for their changing risk environment'. ⁴⁵

The submission stressed the importance of CFA's fully integrated paid staff and volunteer service delivery model, designed to achieve paid and volunteer firefighters working together as one integrated team, using the same equipment, the same training framework, and responding to fires as one integrated firefighting force, working in a respectful and cooperative manner.

It is a concern to some CFA volunteers in regional Victoria that under the proposed Agreement, the UFU will purportedly be able to control what protective clothing will be worn by volunteers. In a hearing in Morwell, one volunteer expressed this concern saying in evidence that his understanding was:

...the UFU claims the right to approve equipment and personal protective equipment and things like that before it is issued. 46

This claim was strongly denied by Mr Peter Marshall of the UFU, who told the Committee in evidence that the UFU had no role in determining the equipment issued to volunteers and that such decisions are made by the CFA through its own consultative committees. He said that the CFA and volunteers:

... have their own standing committees that we have no business to interfere with, nor do we have any input, between the CFA board and the VFBV, and those committees go to equipment and infrastructure, uniform and fire station design.

⁴³ Volunteer Fire Brigades Victoria, Submission 39, p 13

⁴⁴ Mr Peter Marshall, *Transcript of Evidence*, 30 August 2016, p 11

⁴⁵ VFBV, Submission 39, p 10

 $^{^{46}}$ Mr Robert Auchterlonie, *Transcript of Evidence*, 26 September 2016, p 44

FINDING 10: The Committee is strongly of the view that decisions regarding equipment must be made on empirical evidence by management and ultimately the Chief Officer to maximise the safety and efficacy of fire fighting efforts, regardless of the employment status of any specific firefighter. Specifically, it is the Committee's view that:

- The Committee acknowledges that management and the Chief Officer should consult extensively with relevant experts, other agencies and the workforce but that these decisions are ultimately to be made by management and the Chief Officer within the structures that exist in Victoria.
- Firefighters and their access to equipment should be a matter of appropriate training and function and not a matter of firefighter category and not subject to industrial veto.

Access to training for volunteers

Another concern raised during the inquiry has been the fact that opportunities for training for volunteers is being limited.

One of the problems the Committee has been told about is that there are only a limited number of instructors to train volunteers. Mr Robert Auchterlonie said in evidence during a hearing in Morwell that:

The significant problem is that then we have trouble getting training for our brigades, because they do not have enough instructors. Because we have got a relatively small number of instructors for a very big area...⁴⁷

This issue is not one related to the proposed 2015 Agreement but came into effect in the previous 2010 EBA which 'limits recruiting CFA training instructors to only paid staff, those that have done the recruit training course which is for paid firefighters.' 48

The result of that, according to Mr Auchterlonie, has been that 'we have not been able to recruit volunteers into the paid role of CFA training instructor since 2010.' 49

Mr Auchterlonie told the Committee that 'if the training instructors are not allowed to be drawn out of the CFA volunteer ranks, then it will continue to create gaps in our trainer instructor...'.⁵⁰

The timing for available training is also an on-going problem, with the Committee being told that it is only being provided during normal business hours, when many volunteers are at work and unable to attend. In a hearing, the Committee was told by Mr Adam Barnett of the VFBV that:

the heart of some of the frustrations around the inflexibility that has been proposed. So you have got 97 per cent of CFA's workforce being volunteer. When are they most likely going to need training and access to paid trainers? It is going to be evenings and weekends. Under the proposed agreement...the training instructors' normal hours of business are prescribed as being Monday to Friday during business hours. That is of no assistance to volunteer brigades that want, need and are asking for access from their highly skilled, highly respected paid training pool.51

Mr Ford of the VFBV told the Committee that this inflexibility is a long-standing issue and does not simply relate to the current cabinet-endorsed proposed Agreement with the UFU. In fact, he said in evidence:

... concerns raised by VFBV on the 2006 EBA and 2010 EBA, significant concerns about barriers to CFA engaging sessional training instructors to provide the flexibility for volunteers to be able to access training at a time and a place that makes it as easy as possible for them to get there and for CFA to be able to provide as much training as possible...

One reason suggested for a lack of training opportunities for volunteers has been the budgetary considerations. According to Mr Ford, a number of the elements of the cabinet-endorsed proposed Agreement will place greater pressures on the CFA budget and will have a significant impact on the

⁴⁷ Mr Robert Auchterlonie, *Transcript of Evidence*, 26 September 2016, p 34

⁴⁸ Mr Robert Auchterlonie, *Transcript of Evidence*, 26 September 2016, p 34

⁴⁹ Mr Robert Auchterlonie, *Transcript of Evidence*, 26 September 2016, p 34

⁵⁰ Mr Robert Auchterlonie, *Transcript of Evidence*, 26 September 2016, p 49

⁵¹ Mr Adam Barnett, *Transcript of Evidence*, 2 August 2016, p 12

ability for CFA to mix and match its funding expenditure and 'a growth in training will be limited by an inability to fund it.' 52

Mr Ford said that the limitations of training for volunteers has been an on-going concern of the VFBV.

The Committee shares this concern and considers that training for volunteers is, or should be, a core business activity of the CFA and that budgetary considerations should not limit such training. This is a matter not only of protecting the community by ensuring that firefighters are well trained and work cohesively under highly stressful conditions, but is a matter of protecting the volunteer firefighters themselves. Any reduction in the level or quality of training places them at greater risk of harm as they undertake what is clearly dangerous work.

It is also incumbent upon the CFA to recognise that volunteers are not necessarily available during normal business hours and therefore training arrangements need to be flexible and need to be provided at a time and place accessible to volunteers.

While acknowledging that this issue pre-dates the current proposed industrial agreement and has been an issue for some time, the Committee is concerned that the current industrial process will place further pressure on the budget of the CFA and will therefore make it more difficult to ensure appropriate training is provided to volunteers.

FINDING 11: Training should be made available on the basis of capacity and experience to firefighters and this training should not be related to the category or employment status of the trainee.

FINDING 12: Training should be available at times convenient to volunteers to ensure that training is not restricted, via an indirect discrimination, to paid firefighters. Volunteers must have equal access and opportunity to undertake relevant training and opportunities for professional progression.

Surge Capacity - the importance of volunteers

One of the most important roles that volunteers play in fighting bushfires lies in their impact on surge capacity, which is when a major emergency such as a large bushfire needs the maximum resources available. As suggested in the submission by the VFBV:

The ability to mobilise large numbers of emergency personnel to major disasters anywhere in Victoria (and frequently interstate), often over long durations and frequently to concurrent large scale emergencies PLUS maintain service coverage to local service risks (eg suburban areas) is one of the most critical factors in the nature and level of emergency response considerations. ⁵⁴

Much of the surge capacity available to emergency responders comes from the outer metropolitan brigades, which are made up of a combination of paid and volunteer firefighters. According to the VFBV, this surge capacity is not only necessary during major disasters like the Black Saturday bushfires, but is also necessary to be deployed to other emergencies, such as the Hazelwood Mine fire, flood events or the Longford Gas explosion. ⁵⁵

This view was supported by CFA volunteers who gave evidence to the Committee in Gippsland. At a hearing in Bairnsdale, Mr Ian Ashcroft told the Committee that:

Fortunately the CFA has significant surge capacity. We have large numbers of volunteers across the state who can respond and are willing to respond for long periods when needed. In East Gippsland most of this surge capacity is provided by the volunteer brigades in and around outer Melbourne. ⁵⁶

⁵² Mr Andrew Ford, *Transcript of Evidence*, 2 August 2016, p 13

⁵³ Mr Andrew Ford, *Transcript of Evidence*, 2 August 2016, p 13

⁵⁴ VFBV, Submission 39, p 6

⁵⁵ VFBV, Submission 39, p 7

⁵⁶ Mr Ian Ashcroft, *Transcript of Evidence*, 27 September 2016, p 20

FINDING 13: The Committee finds that the CFA surge capacity is critical to firefighting capacity in Victoria and must be protected. The CFA structure which involves both outer metropolitan, regional city and rural components and including both paid and volunteer firefighters is a critical support to this surge capacity and therefore the protection of the Victorian community.

Impact on morale

It has been one of the key concerns of the Committee throughout the inquiry that the morale of volunteers has clearly been affected by the controversy over the proposed Agreement. The Committee has heard in a number of hearings how the perception of the devaluing of volunteers has caused anxiety and anger amongst volunteer brigades.

There is a belief amongst some volunteers, particularly those who operate in integrated brigades, that the cabinet-endorsed proposed Agreement places them in a subordinate position to that of the paid firefighters they work alongside. The perception is that their skills and experience are not appreciated while the reality is that many have many years of experience, knowledge and training and know as much or more than some of their paid colleagues. Despite this expertise, they perceive that they may be seen as lesser contributors.

The risk with a perception among volunteers that they are less important to bushfire management is that some may decide to walk away and this could lead to a reduction in the surge capacity of the bushfire management system.

One of the concerns about the cabinet-endorsed proposed Agreement is that there could be a level of disengagement from volunteers if they feel they are being marginalised or their status is being reduced. This could, over time, reduce the surge capacity of the emergency response. Mr Ashcroft told the Committee that:

Our concern is that if the EBA as it currently stands is agreed to, it will result in volunteer disengagement and a lack of future recruitment and, if this happens, a valuable community protection resource will be lost and it will probably never be recovered.⁵⁷

Mr Buffone told the Committee in a hearing that the effect of the dispute has been felt by both volunteer and paid firefighters. He said the risk is that the surge capacity, where firefighters from all over the state are prepared to be sent where they are needed in the case of a major emergency, will be affected by the dispute. He said:

...it has impacted on the relationship, on the morale of both career staff and volunteers, and in particular for volunteers. If they do not feel valued, if they are demoralised and do not feel like they are considered as part of the organisation, then there is the potential that where we had surge capacity, where they would normally go, you know, far and wide, they may choose to just stay. ⁵⁸

Mr Brian Brewer from the CFA District 9 and South Gippsland group told the Committee in a hearing that the cabinet-endorsed proposed Agreement was doing a significant amount of damage to the morale of volunteers. He said in evidence:

The EBA is clearly divisive, as the three of us here have discussed, and numerous clauses differentiate between career and volunteer firefighters and in some cases discriminate against volunteers. This has a serious negative impact on volunteers and, in particular, their morale. It has to be remembered that volunteers make up over 97 per cent of the state's firefighters. The current widely acknowledged morale issue in the CFA at the moment is largely caused by the current EBA. ⁵⁹

Mr Brewer told the Committee that the only way to improve the morale 'is if volunteers and staff are treated as one. We are one CFA.'60

It has been suggested to the Committee that the impact on morale, which is acknowledged to be real even by the CFA itself, has not been caused by the proposed Agreement, but by the media coverage and the way the negotiations have been presented.

⁵⁷ Mr Ian Ashcroft, *Transcript of Evidence*, 27 September 2016, p 20

⁵⁸ Mr Joe Buffone, *Transcript of Evidence*, 6 September 2016, p 89

⁵⁹ Mr Brian Brewer, *Transcript of Evidence*, 26 September 2016, p 47

⁶⁰ Mr Brian Brewer, *Transcript of Evidence*, 26 September 2016, p 47

Ms Frances Diver, the new CEO of the CFA told the Committee that the organisation was under significant stress and that 'clearly, and certainly morale has been affected' 61 She said in evidence that:

There are probably a couple of things that I would say. The intense media scrutiny as well as the leadership change have caused significant issues for the organisation. ⁶²

The Commissioner for Emergency Management, Mr Craig Lapsley, also acknowledged that the tensions that have arisen during the negotiations over the cabinet-endorsed proposed Agreement have affected people within the CFA. He said in evidence:

I have watched with absolute interest about the behaviour, about the tone, about the emotion, about the direction, and there is huge emotion of people who have given lifetimes to our organisations that are now being tested about their loyalty or whether they want to be as loyal in the future. ⁶³

The Commissioner told the Committee that he did not think there would be a loss of volunteers, although he acknowledged that he had heard anecdotally of examples of individuals who had indicated that they no longer wanted to be involved. He indicated to the Committee that, while that was a worry, it was incumbent on the leadership of the CFA to lead and, in his view, with strong leadership the issues raised could be overcome. He told the Committee that following a recent visit to Nihill his view is:

 \dots the EBA will have limited, if any, impact on a volunteer at SES or CFA Nhill. 64

Despite the risk to the morale of the organisation, the Committee has heard that there is still a sense of camaraderie that transcends the conflict over the proposed Agreement. The Committee considers it essential that this sense of camaraderie between paid and volunteer firefighters is maintained and strengthened because the success of the CFA in protecting Victorians demands a cohesive, united team.

FINDING 14: The Committee is concerned that a reduction in morale in response to the cabinetendorsed proposed Agreement negotiations between the CFA and the UFU will threaten the fire response capacity of the CFA.

Payment of Legal Costs for UFU by CFA

It was of significant concern that the Committee heard that the CFA had paid the legal costs of the United Firefighters Union in early 2015 in relation to earlier industrial and legal activities between the UFU and the CFA in 2014. The Committee considers that this represents a risk to the independent operation and governance of the CFA and, perhaps more importantly the resources available to the CFA to undertake its fundamental role of protecting Victorians from bushfire.

As the CFA has a new CEO and a new Board, the Committee sought information from former executives and Board members to shed light on the allegations that the government instructed the CFA to pay the legal costs of the UFU. The Committee invited Mr Michael Wootten, former CFA Interim CEO, Ms Claire Higgins, former Chair of the CFA, Mr Mick Bourke, former CFA CEO and Mr Danny Michel, former chief of staff to the then-Minister for Emergency Services to appear at a hearing to give evidence.

Mr Wootten agreed to appear and gave evidence on 25 January 2017. The Committee was grateful for Mr Wootten's co-operation and assistance.

The other three invited witnesses all refused the invitation to appear. The Committee therefore issued formal summonses and all three of the witnesses appeared in a hearing on 28 February 2017.

The Committee heard conflicting evidence about the decision by the CFA to pay the legal costs of the UFU.

The issue related to an amount of \$484,045 paid by the CFA as part of a settlement of the matter arbitrated in the Federal Court. Concerns have been raised that this payment was made by the CFA under instruction from the government.

⁶¹ Ms Frances Diver, *Transcript of Evidence*, 3 August 2016, p 13

⁶² Ms Frances Diver, *Transcript of Evidence*, 3 August 2016, p 13

⁶³ Mr Craig, Lapsley, Transcript of Evidence, 18 October 2016, p 8

⁶⁴ Mr Craig, Lapsley, Transcript of Evidence, 18 October 2016, p 8

Mr Wootten told the Committee that he had only sketchy memory of the payment. As he was no longer an employee of the CFA, he was unable to provide any documentation about the payment but was clear in his response that he was not approached about the matter by anyone from the Premer's Office or department. ⁶⁵

Mr Wootten told the Committee that the original figure being sought by the UFU was in the millions and negotiations were undertaken to bring the figure down to the final figure. He said that while he briefed the then-Chair of the CFA, Ms Claire Higgins, about the matter, he did not brief the Board.⁶⁶

He indicated in evidence that at the time the matter was being treated as part of the legal costs of the CFA. He said:

...I think at the time treated it as part of its overall budget for legal costs. We have a budget annually for a whole range of things. This was part of that budget. ⁶⁷

Mr Wootten told the Committee that the 'annual budget for legal fees is in the millions.' 68

Mr Wootten told the Committee that he entered into the arbitration process because it was preferable to going to court. He said in evidence:

...there is a history of litigation between the fire services and the UFU which precedes my time at the CFA, and ultimately probably in court is the last place you want to end up with those matters. Sometimes it does end up there. ⁶⁹

On the issue of whether the government asked the CFA to pay the legal costs of the UFU, the Committee heard contradictory evidence.

Mr Mick Bourke, the former CEO of the CFA who was replaced briefly by Mr Wootten, appeared before the Committee at a hearing in February. Mr Bourke told the Committee that he did recall being asked by a representative of the Minister to pay the legal costs of the UFU, to his recollection the Minister's Chief of Staff. Mr Bourke said in evidence:

I know of, or I heard of, a request for some money for the UFU. That was in my last day, last two days, and I then took that issue to the department, and they started to formulate whatever they were going to do as a response to that. 70

In answer to the question of whether such a payment was proper or not, Mr Bourke said:

I would not call it proper, no.⁷¹

When asked who the person was who made the request, Mr Bourke told the Committee that he could not remember the person's name but that it was 'one of the staffers out of the then Minister's office' and that he believed 'it to be their then chief of staff.' ⁷²

Mr Bourke told the Committee that the nature of the request was along the lines of:

 \dots CFA has to come up with a couple of million dollars' in respect of satisfying some of the legal processes that we had been involved in. 73

Mr Bourke told the Committee that this request was informal and that he never saw any accompanying written documentation. ⁷⁴

The Committee heard quite different evidence from the Minister's then Chief of Staff, Mr Danny Michel, who also gave evidence on 28 February 2017. Mr Michel told the Committee that he had a

⁶⁵ Mr Michael Wootten, *Transcript of Evidence*, 25 January 2017, p 3

⁶⁶ Mr Michael Wootten, *Transcript of Evidence*, 25 January 2017, p 5

⁶⁷ Mr Michael Wootten, *Transcript of Evidence*, 25 January 2017, p 6

⁶⁸ Mr Michael Wootten, *Transcript of Evidence*, 25 January 2017, p 6

⁶⁹ Mr Michael Wootten, *Transcript of Evidence*, 25 January 2017, p 6

⁻⁻ wir wiichaer wootten, *Franscript of Evidence,* 25 January 2017, p

Mr Mick Bourke, *Transcript of Evidence*, 28 February 2017, p 32
 Mr Mick Bourke, *Transcript of Evidence*, 28 February 2017, p 34

⁷² Mr Mick Bourke, *Transcript of Evidence*, 28 February 2017, p 32

⁷³ Mr Mick Bourke, *Transcript of Evidence*, 28 February 2017, p 33

⁷⁴ Mr Mick Bourke, *Transcript of Evidence*, 28 February 2017, p 34

scanty recollection of the details of the meeting Mr Bourke referred to in his evidence but he said unequivocally that he 'did not make that request that the \$2 million be paid'. 75

Mr Michel told the Committee that he believed the conversation was an informal one and that he 'would not have made such a request.' ⁷⁶

Mr Michel told the Committee that:

Quite clearly somebody going and asking an agency's CEO to hand over a cheque for \$2 million is ridiculous, so I would not have done it. If he took away that there were maybe some discussions in that meeting around that costs needed to be considered and he knew of an upper limit, well maybe that is where he took that away from.⁷⁷

In response to a question about whether there was ministerial office involvement or involvement from a political office or office-holder around the way in which this particular matter should be settled, Mr Michel said there was not.

Conclusion

As stated earlier, this inquiry has not sought to undertake an analysis of the cabinet-endorsed proposed Agreement between the CFA and the United Firefighters Union. The inquiry has been focussing on the concerns raised by the volunteers and to make clear that these concerns must be addressed by the CFA to ensure that the volunteers continue to be committed to the CFA and continue to make the major contribution they have been making into the future.

In the Committee's view, there needs to be dedicated and independent review of the impact of the cabinet-endorsed proposed Agreement on the operational capacity of the CFA and, in particular, the impact on the morale of its 58,000 volunteers.

FINDING 15: The Committee is concerned at what it has heard regarding the legal steps and lack of process concerning the \$484,000 by the CFA to the UFU. The lack of formal process, lack of documentation, the involvement of the Minister's Office and the Office of the Premier raises a series of major concerns. The Committee finds that there was no adequate formal process to authorise the CFA payment to the UFU.

FINDING 16: The Committee also finds the involvement of the Minister's Office and the Premiers Office to be improper, potentially corrupt, and worthy of investigation by IBAC. Other independent oversight agencies may also wish to examine the payment and the lack of process involved.

RECOMMENDATION 1: The Committee recommends that the CFA immediately publish all details and documentation regarding the payment made to the UFU discussed in this chapter, including all correspondence related to the payment.

RECOMMENDATION 2: The Committee recommends that IBAC investigate the payment of \$484,000 by the CFA to the UFU and the lack of proper process involved.

Aside from the payment to the UFU by the CFA, many other issues are raised. Central to these is the operational capacity of the CFA, the impact of the EBA negotiation on volunteers, volunteer numbers and the surge capacity of the CFA. These matters are central to the operational effectiveness of the CFA and its ability to protect Victorians. These matters require further investigation and detailed work that is beyond the capacity of this inquiry as it is currently resourced.

RECOMMENDATION 3: That the Government appoint a Board of Inquiry pursuant to section 53 of the *Inquiries Act 2014* to determine the impact of the cabinet-endorsed proposed Agreement on the operational capacity of the CFA, and in particular:

⁷⁵ Mr Danny Michel, *Transcript of Evidence*, 28 February 2017, p 57

⁷⁶ Mr Danny Michel, *Transcript of Evidence*, 28 February 2017, p 60

⁷⁷ Mr Danny Michel, *Transcript of Evidence*, 28 February 2017, p 61

- Any impact it is likely to have on volunteer numbers and the surge capacity of the fire management agencies;
- Any impact it has on the efficient and effective operations of the CFA in fighting fires; and
- Its impact on the working conditions and morale of volunteers.

The Board of Inquiry should consist of people independent of the Victorian government and the Victorian fire management agencies. They should have substantial experience in bushfire management.

The Board of Inquiry should report its findings by 1 December 2017 and the findings should be made public.

Minority Report – Standing Committee on Environment and Planning

Inquiry into Fire Season Preparedness

Harriet Shing MP (Deputy Chair) Cesar Melham MP Khalil Eideh MP

June 2017

Introduction

This Minority Report has been prepared by reference to materials, evidence and submissions provided to the Victorian Parliament's Standing Committee on Environment and Planning (EPC) and to the Inquiry into Fire Season Preparedness and is intended to be read in conjunction with the Report of the Committee of the whole.

The areas in which this Minority Report departs from the Report of the Committee of the whole relate to the following parts of the Report of the Committee of the whole:

- 1. Paragraph 3 of the section entitled "The Impact of the Country Fire Authority/United Firefighters Union of Australia Operational Staff Enterprise Agreement 2015". This paragraph is at odds with the two preceding paragraphs which relate to perception, and does not represent the views of the authors of this Minority Report. Specifically, as the vote was tied, the Chair of the EPC used a casting vote to succeed on a division to include a statement that "The Committee is concerned about the impact of Country Fire Authority/United Firefighters Union of Australia Operational Staff Enterprise Agreement 2015 on country Victoria and community safety". In this regard, the authors of this Minority Report prefer the views and evidence of the many witnesses to this Inquiry who gave evidence (in some cases, after indicating concerns about the aggregate effect of the extensive history and nature of enterprise negotiations, resourcing, and adverse public comment), all firefighters continued to consistently work together to respond and act collaboratively on the fire ground, as required, to secure the safety of people and property, and that they would continue to do so.
- 2. Recommendation 5 of the Report of the Committee of the whole relates to the maintenance of a minimum hectare target, and states "That in conjunction with a risk-based approach, a minimum hectare target is also maintained that can be measured and compared. This minimum target should not be below the 5% target established by the Victorian Bushfire Royal Commission."

It is important to state that the level of preparedness, dedication and professionalism in our fire services across Victoria was clearly evident to the authors, in the submissions and evidence of the leaders and staff from Victoria's fire services throughout the Inquiry. The thousands of men and women who contribute their time, expertise and energy to reducing and managing the many risks associated with living, farming, holidaying and travelling in a highly bushfire-prone environment are to be commended for all that they do, and it the authors commend the work being done to provide them with additional resourcing, training, equipment and facilities, including through the implementation of the recommendations of the Bushfire Royal Commission .

This includes initiatives undertaken by the current Government to recruit 450 additional career firefighters, to implement the findings of Safer Together, and to expand the number of firefighting air craft available during fire season.

It is clear that ongoing reform to maximise the potential of Victoria's fire services and to encourage people to participate (both in their communities as volunteers and through their work in career firefighting, support or operational roles) must continue. This work should focus on ensuring

communities are engaged and prepared, that services work well together, and that the best possible response is provided in high-risk situations.

It is clear from evidence presented to the inquiry that industrial issues, particularly in the Country Fire Authority and MFB have too often been used as an excuse for inaction on wider cultural issues within these organisations. As such, it is imperative that greater efforts must be made over time to positively engage with all firefighting and emergency management stakeholders to improve culture within all organisations tasked with fire response in Victoria.

Industrial Relations

The workplace relations practices, industrial history, cultural and operational challenges that were identified in the course of this Inquiry (as well as, *inter alia*, the Bushfires Royal Commission, the Jones Review and the Fire Services Review) between management and staff, staff and volunteers and regional and metropolitan operations as they relate to the Terms of Reference also warrant comment.

In this regard, it is disappointing that this Inquiry strayed so often from its primary and appropriate focus (namely the provisions of the Terms of Reference) to devote disproportionately large amounts of time on industrial arrangements and anecdotal and industrial history as it related to the Country Fire Authority's thirty-five integrated stations throughout Victoria.

In doing so, a number of exchanges occurred in the course of the proceedings of this Inquiry which amounted to politically-motivated conflicts that had their genesis under the former Government in Victoria, and which the current Victorian Government has sought, since being elected in 2014, to resolve given the increasingly damaging impact on career and volunteer firefighters whose work, contributions and value are the subject of intense and regular public speculation and interrogation – often by members of Parliament or the media do not have any experience in firefighting or emergency response themselves.

Through a total of 86 submissions and 19 days of hearings, the Committee heard from a large number of individuals and organisations with a shared interest in the safety of our community and the preservation of our environment.

Bushfires are an inescapable part of life for many Victorians. A result of our State's environment, topography and climate, Victoria is one of the most bushfire-prone regions in the world, and our rapidly growing population in interface suburbs and regional centres has created new challenges for contemporary firefighting.

The purpose of this Parliamentary Inquiry was to inquire into the State's fire season preparedness and explores the Department of Environment, Land, Water and Planning (DELWP), and its agencies' processes.

The tragic events of the Black Saturday Bushfires are still fresh in mind of many Victorians. Eight years after this event, it is evident that significant change has occurred and progress has been made in preventing, preparing and responding to bushfires in Victoria.

At the outset the authors note that time and time again the Committee heard evidence during the course of the Inquiry of a clear understanding that our community is protected and led by professionals within CFA's volunteer and paid firefighters teams, and within DELWP and its related agencies, who all work to create a balanced understanding of competing policy interests, and work with local communities to use the best available evidence in helping fight fires and reduce the State's risk to bushfires.

Fuel Management and Risk Reduction

Risk-based Approach to Planned Burns

Managing fuel loads and planned burns are one of the most important aspects of the Department's fire prevention and mitigation measures. As part of the State's evidence-based approach to mitigating the bushfire risk to communities, the government asked the Inspector-General for Emergency Management (IGEM) in 2015 to undertake a review to examine the hectare based targets of planned burns with that of other risk-reduction approaches. The result of that inquiry was to recommend a move away from the 5% hectare based targets which was recommended in the 2009 Victorian Bushfires Royal Commission report and to suggest a move towards a 'risk-based approach' to fuel reduction and management. The IGEM report relied on the latest evidence and suggested that the hectare-based targets would in many instances lead to planned burns of large parcels of land which had no strategic significant or endangered communities in order for the Department to hit its annual target of hectares burned.¹

The move towards a risk-based approach is a more efficient use of resources and is targeted in a way to maximise the utility of planned burns in mitigating risk to the community and on critical infrastructure. The findings also state that risk-based approach to planned burnings may lead to an increase in fuel loads and that there may be a reduction in burns because of pressure by the government, communities and the media if there is no target for burns is based in supposition and off very little evidence to that effect.

For these reasons, and in relation to the question of a hectare-based target being re-established as borne out in evidence set out in the Report of the Committee as a whole, this Minority Report prefers the evidence of the IGEM and that of the Hon. Bernard Teague AO to that of Mr David Packham and does not support a re-establishment of a target "not below five per cent" in the terms of Recommendation 5.

¹ Inspector-General for Emergency Management; *Review of Performance Targets for Bushfire Fuel Management on Public Land*, pg 38.

The Potential Impact of the CFA Enterprise Agreement

Background

The CFA and its workforce have been engaged in negotiations for a new enterprise agreement since March 2013. Any assertion that the dispute has been running for only 18 months is incorrect and an absurd mischaracterisation. During the term of the previous Coalition government, little progress was made on these negotiations. Instead, with the backing of the previous government the CFA engaged in a number of protracted legal disputes with career firefighters and their representatives.

The impact of this on morale across Fire Services has been well documented. A submission (name withheld – no 67) from a firefighter with both volunteer and career experience made this clear: "Media coverage of the CFA EBA dispute has been inflammatory and deeply divisive. Career firefighters and those volunteers who work regularly with us have been shocked by the false divide that has been erected between volunteers and career firefighters." 2 This is also evident in the findings of the Fire Services Review, which found that morale in 2015 was at its lowest in decades. 3

The present Victorian Government was elected in 2014 with an agenda to strengthen Victoria's fire services. This included by recruiting an additional 450 career staff for the CFA and MFB, additional trucks and station upgrades for volunteers, and inquiry to deliver justice for firefighters who worked and trained at the CFA Fiskville Training College.

More broadly, the Government shifted from the divisive industrial relations approach taken during the term of the previous Coalition government to one focused on resolving enterprise negotiations, working with the public sector, and providing better resourcing to frontline services around the state. This meant that protracted disputes, such as the paramedics' agreement, were able to be resolved and industrial action for other major workforces like police and teachers has been avoided for the first time in many years.

From late 2015, the Government and CFA participated in the Fair Work Commission processes to try to resolve a dispute which had already run for two years.

This process ran until June 2016 when the Fair Work Commission handed down recommendations in an effort to resolve the dispute. It offered a fair and balanced way forward, including a resolution to a number of key clauses in dispute and the insertion of a protective clause safeguarding the role of volunteers.

After extensive work to consult and put in place these additional safeguards, the CFA and union reached an agreement to end this dispute in August 2016.

Throughout this time, the process of resolving this industrial dispute has been subject to unprecedented political interference from the Victorian state opposition and the Federal

² Name withheld, Submission 67, pg 1

³ Name withheld, Submission 67, pg 2

Government, resulting in changes to the *Fair Work Act 2009* and intense public scrutiny and intervention by media.

This deliberate misrepresentation of clauses, such as the notion that seven career fire fighters were required to be on the fire ground before work could be done to put the fire out (an issue addressed in some detail in other evidence, including that of the UFU)⁴. Mr John Peberdy, Former Chairman of the CFA noted that this was being "mischievously used."⁵

It also included attempts by the Victorian Liberal Party to fundraise using the "Hands Off the CFA" website. The CEO of Volunteer Fire Brigades Victoria noted this about the website:

"We have nothing to do with that site and are very concerned that it was raised and bringing us into any sort of disrepute."

A number of volunteers who gave evidence to this Committee also cited the impact on morale, largely arising from the perception that volunteers contributions are not valued. We do not find that there is any evidence that this is the case.

The majority report's characterisation of the industrial issue reinforces those myths that have been circulated as part of this debate, and its emphasis on the resulting concerns of volunteers, serves only to demonstrate that this campaign had the desired effect of causing fear within firefighting ranks, and raising avoidable concern about public safety.

⁴ United Firefighters Union, *Transcript of Evidence*, 30 August 2016

⁵ John Peberdy, *Transcript of Evidence*, 3 August 2016, pg 44

⁶ Volunteer Fire Brigades Victoria, *Transcript of Evidence*, 2 August 2016, pg 10

The lack of consensus on impact of key terms in the proposed enterprise agreement was evident in the hearings. A number of witnesses made comments about the uncertainty as well as misunderstandings of the terms in the proposed agreement. CFA CEO, Ms Frances Diver stated:

"There are a number of interpretations. It really will only be worked through when we work through the detail of implementation once we get there, depending on how the board goes and their consideration of the agreement."

What cannot be disputed is the experience in recent history of implementing enterprise agreements in the fire services. It is worth noting that there is evidence that concerns raised in the past have been highly similar in nature to the current commentary and there is no evidence that the impact previously warned of has eventuated. In 2006, the VFBV said:

"Volunteers in Victoria are very concerned with the implications of this EBA on CFA's ability to support them in providing the highest level of emergency services to Victorian communities."

In 2010 they said: "the CFA's newly signed enterprise bargaining agreement with the firefighters' union is a major setback for Victoria's volunteer fire fighting resource." 9

In our view it is valuable to ensure that the words in the agreement itself, and the view of those who will be managing the our fire response, are presented clearly to the public. As CFA Chief Officer Steve Warrington noted,

"The reality is we have had agreements in the past. The sky was going to fall in in 2010, and I can tell you we continue again to provide service in a collaborative manner across this state, and we will continue to do so." 10

In this regard, the evidence of both the leadership from within fire services and firefighters themselves on the impact of the proposed enterprise agreement on volunteers is directly relevant.

The enterprise agreement itself provides that:

"Nothing in this agreement shall prevent volunteers from doing their work as volunteers without remuneration. 11

"The role of volunteers in fighting bushfires and maintaining community safety and delivering high quality services to the public in remote and regional areas and in integrated stations is not altered by this Agreement." 12

Further, CFA Chief Officer Steve Warrington stated in evidence to the inquiry that:

⁷ CFA, Transcript of Evidence, 3 August 2016, pg 13-14

⁸ Volunteer Fire Brigades Victoria, *Transcript of Evidence*, 2 August 2016, pg 8

⁹ VFBV, 'CFA union deal a setback for volunteers', 9 September 2010

¹⁰ CFA, Transcript of Evidence, 3 August 2016, pg 12

¹¹ United Firefighters Union, Transcript of Evidence, 30 August 2016, pg 23

¹² United Firefighters Union, *Transcript of Evidence*, 30 August 2016, pg 6

"I am absolutely convinced that we will continue to go to fires, we will continue to work collaboratively. Yes, there will be changes, but the sky is not going to fall in." ¹³

The implication from critics of the EBA that volunteers would not turn out has been of particular concern. It is important to note that the committee also heard evidence from volunteers – including some who had concerns about the EBA – who rejected this implication including CFA volunteers lan Ashcroft who stated that:

"If the EBA was signed tomorrow, then on Monday we would not see any difference at East Gippsland." 14

And Nick Barton:

"Okay. If I could support what Ian says, there is no concern that local volunteers will not turn out." 15

Even former CFA Chair Mr John Peberdy who outlined a number of concerns with the proposed agreement noted that:

"My experience is when there is a fire, the firefighters are there, and I was not personally convinced that we would lose a lot of people." ¹⁶

For these reasons, the authors of this Minority Report find as follows:

Finding 1: Political interference as documented in the Fire Services Review continued in negotiations of the CFA EBA particularly through the Victorian Liberal Party's "Hands Off the CFA" fundraising website which has had a substantial and negative impact on all firefighters.

Finding 2: It is unclear what impact the proposed enterprise agreement would have on CFA volunteers, but it is clear from past experience that industrial arrangements have not prevented CFA career and volunteer firefighters from providing a world class fire service.

Evidence given by the current leadership of the CFA on the powers of the Chief Officer to manage emergency situations also addressed concerns around preservation of chain of command. CEO of CFA, Ms Frances Diver stated:

"We are not at all concerned with our capacity to deliver for the summer season and the chief officer's powers remain exactly the same as they have been. There is no change to his powers at the moment, and we will not be looking to limit the chief's powers at all."¹⁷

Chief Officer of the CFA, Steve Warrington provided a more detailed explanation around the powers of the Chief Officer and chain of command issues:

¹³ Country Fire Authority, *Transcript of Evidence*, 3 August 2016, pg 23

¹⁴ CFA Volunteers, *Transcript of Evidence*, 27 September 2016, pg 22

¹⁵ CFA Volunteers, *Transcript of Evidence*, 27 September 2016, pg 24

¹⁶ John Peberdy, *Transcript of Evidence*, 3 August 2016, pg 24

¹⁷ Country Fire Authority, *Transcript of Evidence*, 3 August 2016, pg 14

"We do not run a single control command in Victoria. We run control arrangements when we get to a level 3 fire — sorry, it is not complicated but it might sound complicated — and we run what we call command control when it is within agencies, which is at level 1 and 2 jobs. So essentially what I am saying is if it is a small spot fire, it is the CFA through to the chief officer who has the powers. If it is a large fire, then it becomes a control arrangement. The authorising environment goes to the emergency management commissioner, who appoints a state response controller, if you are still with it." 18

Mr Peter Marshall, Victorian Secretary of the United Firefighters' Union also presented evidence on this clause and stated:

"The most important part about this clause is the myth that career firefighters will no longer report to volunteer captains and lieutenants. If you read the whole sentence, the following bit, 'or to a CFA/MFB incident controller at an incident'. Now an incident controller is a captain, a lieutenant, a career officer, a leading firefighter. There is no prohibition, no prohibition, on reporting to volunteers. So whoever propagated that myth, it is an untruth." 19

Finding 3: The Powers of the Chief Officer remain paramount. Consistent with evidence presented, the proposed Agreement would not affect the Chief Officer's primacy.

Building Better Fire Services

We note that there were a number of other issues canvassed in the context of the investigation into industrial matters that do provide some useful guidance for the improvement of the fire services, and fire season preparedness, for the Victorian community.

As a number of reviews, including the Fire Services Review and the Royal Commission, and as generally evidenced by the nature of public discourse over the EBA, the internal culture of Victoria's fire services needs to be strengthened improvement.

In a fire services organisation, matters of interoperability, equipment, training, diversity and relationships between career and volunteer staff are issues of public safety.

Specifically, a number of witnesses to the Inquiry gave evidence on these matters:

Acting CFA CEO Frances Diver explained the wider context of cultural issues that needed to be addressed within the CFA:

"So the culture of the organisation is obviously very important — and the organisation has suffered a setback — but there are probably some underlying issues that need to be addressed. One of the issues, particularly in relation to diversity in the workforce."²⁰

Emergency Management Commissioner Craig Lapsley noted the work required to strengthen culture and diversity in the fire services:

¹⁸ Country Fire Authority, *Transcript of Evidence*, 3 August 2016, pg 27

¹⁹ United Firefighters Union, *Transcript of Evidence*, 30 August 2016, pg 7

²⁰ Country Fire Authority, *Transcript of Evidence*, 3 August 2016, pg 15

"(FSR) has provided a framework and a series of recommendations, but it has also got the dialogue in the back of it when you read it about what are operations and interoperability, what are the culture of the services and some of the strengths of the culture but also the weaknesses of our cultures, and that is about societal change. Our fire services are very male dominated, and we need to do some serious work in that area, for example. It talks about the health and wellbeing of the workforce, and it talks about the integration and work between career and volunteers.

CEO of the MFB Mr James Higgins also recognised this:

"The fire services review, conducted in 2015, identified — and it is well-traversed ground over the recent past — that there is significant change required to create more harmonious fire services that work collaboratively with their key stakeholders to ensure that firefighters are as equipped and operationally ready as possible to meet the needs of the community." ²¹

Resourcing issues are clearly vital for fire season preparedness, ensuring that volunteer and career staff are supported as well as possible to do their work. Former Chair of the CFA, Claire Higgins recognised the need to support volunteers in the CFA:

"I think there are only a couple of points that I could make, and that is the importance of supporting the volunteers in an environment in which it is becoming more difficult to volunteer, and I think that is a very important component in rural and regional Victoria, where there are both demographic growth and shrinking of volunteerism in some of the more remote areas of the state." ²²

On this matter, the UFU provided an extensive presentation which included data sets indicating difficulty achieving the required response times at a number of brigades. The committee did not further investigate the matter of response times but the evidence given by the UFU pointed towards some resource allocation concerns following the Coalition Government's funding reduction of \$41 million from the CFA budget and \$25 million from the MFB budget²³. Issues around access to training, equipment and appliances need to be considered in this wider context.

The Minority members note the current Government's significant resource improvement for emergency services, notable the recruitment of an additional 450 fire fighters, investment in upgraded and replacement training facilities, and more than 100 new fire trucks since it came to office.

The evidence of the CFA leadership argued strongly that training needed to be a central focus of the organisation. Chief Officer of the CFA Steve Warrington notes that it is "biggest issue" for people at the grassroots of the CFA. Acting CEO Frances Diver outlined work underway and the need for more to be done when it comes to training:

"There are seven regional training centres across Victoria. In the last budget there was additional funding provided to CFA to enable us to upgrade those facilities and expand those facilities to ensure there is additional capacity for training both for the recruit courses, so new firefighters

http://www.parliament.vic.gov.au/images/stories/committees/SCEP/Fire Season Prepardeness/UFU Fire Prepardeness Presentation-final.pdf

²¹ MFB, *Transcript of Evidence*, 6 September 2016, pg 58

²² Claire Higgins, *Transcript of Evidence*, 28 February 2017, pg 29

²³ UFU Presentation, 30 August 2016,

coming in, promotional courses, so for firefighters to gain additional qualifications, but also for volunteers.

There is also a significant amount of training that is undertaken at a local level, and that will continue as well at fire stations. There is also the VEMTC. That is the training centre that we go to with MFB. We are also doing quite a lot of training with MFB at Craigieburn to ensure that we have kind of got interoperability and improving the relationships between MFB and CFA. So we recognise there is a lot of work to be done in training, and fortunately we have had some additional funding that will allow us to expand our facilities, and also with our expanded career workforce that will also provide some additional capacity for us as well."²⁴

Finding 3: The principle of "One CFA" should form the basis of the CFA's operations and career and volunteer staff should be equally supported. The structure and the basis of all CFA operations should first and foremost be the safety of the Victorian community.

Finding 4: Decisions regarding equipment should be made on empirical evidence to maximise the safety and efficacy of firefighting efforts, regardless of the employment status of any specific firefighter.

Finding 5: training is a vital part of the support CFA provides to fire fighters. Effort should be made to utilise investments made over recent years into training facilities to ensure all fire fighters, career and volunteer, are trained to the level appropriate to their role to ensure community safety is not compromised.

Payment of Legal Costs

In relation to matters concerning a payment made by in the CFA to the UFU, the relevant particulars heard by the committee are as follows:

- (a) a payment was made to the UFU pursuant to private binding arbitration agreed to between the parties relating to resolution of a long standing series of disputes;²⁵
- (b) the independent arbitrator assessed the competing claims and ordered that an amount was appropriate to be paid by the CFA to the UFU in relation to their claim;²⁶
- (c) the uncontroverted evidence heard by the Committee on this point was provided by Mr Michael Wootten;²⁷
- (d) Mr Wootten's evidence was that he was the Acting CEO of the CFA at the time the payment was ordered, and that he held the appropriate corporate delegation under which the payment was validly made;²⁸

²⁴ Country Fire Authority, *Transcript of Evidence*, 3 August 2016, pg 15

²⁵ Michael Wooten, *Testimony of Evidence*, 25 January 2017, pg 3

²⁶ Michael Wooten, *Testimony of Evidence*, 25 January 2017, pg 3

²⁷ Michael Wooten, Testimony of Evidence, 25 January 2017

²⁸ Michael Wooten, *Testimony of Evidence*, 25 January 2017, pg 7

- (e) Mr Wootten's uncontroverted evidence went to the entire authorisation process necessary to make the relevant payment, and confirmed that it was followed. It is pertinent to note that Mr Wootten's substantive role within the organisation was as Executive Director of Business Services, so he was uniquely well placed to provide evidence on this question;²⁹
- (f) Mr Wootten specifically denied any involvement by government in the process under which the payment was made;³⁰
- (g) Mr Michel specifically denied anything capable of characterisation of improper involvement by either himself or the Ministerial Office to which he was attached in the process of making the payment;³¹
- (h) Mr Michel's evidence on this aspect of the matter was not contradicted by any other evidence put before the Committee; and
- (i) The Committee neither heard nor received any evidence of involvement of the Office of the Premier, improper or otherwise, in the process of making the payment.

²⁹ Michael Wooten, *Testimony of Evidence*, 25 January 2017

³⁰ Michael Wooten, *Testimony of Evidence*, 25 January 2017, pg 6

³¹ Danny Michel, *Testimony of Evidence*, 28 February 2017, pg 61

Cesar Melhem MP Legislative Council Victorian Parliament Western Metropolitan Region

Signature:

Harriet Shing MP

Legislative Council Victorian Parliament

Eastern Victoria

Parliamentary Secretary for Emergency Services

Signature:

Khalil Eideh MP Legislative Council Victorian Parliament Western Metropolitan Region Deputy President of the Legislative Council

Signature:

King

Environment and Planning Committee

Inquiry into Fire Season Preparedness

Minority Report

I write this minority report to outline areas of disagreement I have within the body of the report as well as disagreement with some of the findings and recommendations made.

This Inquiry was held over a number of months, much of it taken up examining the Country Fire Authority/United Firefighters Union of Australia Operational Staff Enterprise Agreement 2015 on matters that didn't completely align with the Inquiry's Terms of Reference, however I accept it was worth taking the time to explore these matters to determine if Victorians were or are at risk in terms of fire season preparedness.

Chapter 2 of the report, in the section headed the Impact of the Country Fire Authority/United Firefighters Union of Australia Operational Staff Enterprise Agreement 2015 says:

"The Committee is concerned about the impact of Country Fire Authority/United Firefighters Union of Australia Operational Staff Enterprise Agreement 2015 on country Victoria and community safety".

I disagree with this statement. It is unfortunate that the report could not indicate this was a view held by some, not all committee members. From the evidence provided I do not believe that at any time Victoria was not prepared for fire and continue to believe that Victorians should be confident that our emergency services first responders are prepared for future fire seasons regardless of negotiations being undertaken in relation to this industrial agreement.

The Committee considered the issue of **fuel management** and **approaches to planned burning** and came up with a range of findings and recommendations contained in Chapter Three of the report including a return to **hectare-based targets** for planned burns.

Evidence to the Committee indicated the state has shifted from a hectare-based approach to a risk-based approach for planned burning activities. Finding 7 and Recommendation 5 of the report refer to maintaining hectare based targets for planned burning activities and say:

"FINDING 7

The Committee considers the risks associated with planned burns may see a reduction in total area subject to planned burns due to the pressure applied to fire managers in the media, within government and by communities where there is a breach and if there are no formal hectare-based targets to meet.

RECOMMENDATION 5

That in conjunction with a risk-based approach, a minimum hectare target is also maintained that can be measured and compared. This minimum target should not be below the 5% target established by the Victorian Bushfire Royal Commission."

Maintaining or reintroducing a hectare-based target approach for planned burning activities should not be supported.

It is my view that the evidence provided to the Inquiry does not support a hectare-based planned burn target and that this approach drives burning for burning's sake to meet a target rather than provide a more strategic risk-based community safety approach. Although it is my view that any risk-based planned burning activities must be informed by evidence-based science.

I therefore do not support Finding 7 or Recommendation 5 contained in the report.

The Committee heard evidence on two occasions from **Nillumbik Pro-active Landowners** (PALS) regarding concerns they had about the Victorian Native Vegetation Permitted Clearing Regulations as well as proposed planning scheme amendments to the Nillumbik Planning Scheme, C81 and C101. These planning scheme amendments have since been abandoned.

The **Nillumbik Shire Council** (which since the introduction of C81 and C101 has changed direction and focus due to council elections in October 2016) presented evidence that vegetation overlays and bushfire management overlays are not compatible and that this means that there are a number of properties within these overlays that are unable to take action to mitigate bushfire risk.

It is worth noting that the Nillumbik Shire Council is covered by changes made to the Victorian Planning Provisions in November, 2011 which allow for an amount of vegetation that can be removed from around a property. In relation to those properties contained within a Bushfire Management Overlay in the Nillumbik Shire Council area the 10/50 exemption applies, which means permits are not needed to remove trees for up to 10 metres around an existing building (that is used for accommodation) nor are permits required to clear any vegetation, except trees, for up to 50 metres from that building on the property owners own land. The exemption applies to all buildings used for accommodation regardless of whether there are any other overlays in place.

It is my view that evidence received by the committee from the Nillumbik Pro-active Landowners (PALS) were related to matters that didn't completely align with the Terms of Reference and issues raised could already be covered by the existing 10/50 vegetation removal exemptions incorporated into the planning scheme.

In closing it is my view that a well resourced emergency services sector is an essential asset for a safer, more secure community. However landscape and fuel management, including planned burning, must be informed by evidence-based science and the Precautionary Principle. It is also critical that ongoing, well funded education and training programs for the community are essential to assist in fire preparedness efforts for Victoria.

Samantha Dunn MLC

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19 June 2017