
The Impact of Traditional Land Uses

Introduction

The Inquiry's eighth term of reference requires the Committee to consider the impact of traditional land uses on the scale and intensity of bushfires and on the ability of relevant agencies to respond. The reference provides a number of examples of traditional land uses including timber harvesting, grazing, four-wheel-driving, hunting, camping, and mining and prospecting. The impact of each of these commercial and recreational activities is considered in this chapter.

The Committee recognises that there are a range of activities conducted on public land in Victoria that are not specifically referred to in the terms of reference, such as bushwalking, picnicking, horseriding and birdwatching. While the Committee received little evidence in relation to these activities, it does not consider that they have had an adverse impact on the severity of recent bushfires or on the ability of relevant agencies to respond. The Committee is also mindful that, as with the traditional land uses discussed below, many of these activities have been adversely affected by the recent bushfires.

The Committee is also mindful that Aboriginal people practised a range of traditional land uses prior to the arrival of Europeans, some of which continue to the current day. The issue of Aboriginal land use, and its significance for land and fire management, is discussed in Chapter One.

Overview of stakeholder evidence

Introduction

A significant number of stakeholders expressed the view that access to public land had been increasingly restricted over recent decades, resulting in a range of negative impacts on land and fire management. Impacts identified by stakeholders included: increased fuel loads in forested areas; the loss of valuable sources of local knowledge; the loss of firefighting experience and equipment; and a decline in the condition of, and access to, vehicle tracks. On the latter point, stakeholders' concerns focused on the condition and right of access to management vehicle only tracks and those tracks currently subject to seasonal closure.

The creation of national parks and the reduction of timber harvesting in public native forests were the two developments most commonly cited by stakeholders as having contributed to the above impacts. Many stakeholders also expressed the view that such impacts were the cumulative effect of these and other public land access restrictions, including the restriction of grazing, four wheel driving, hunting, mining and prospecting.

The view that public land access restrictions have adversely affected land and fire management in Victoria was not universally shared by stakeholders. Some stakeholders suggested that particular traditional land uses have exacerbated, and in some cases continue to exacerbate, the challenges of fire management on public land. These views are also outlined below.

Stakeholder evidence

The view that land and fire management has been compromised by the cumulative impact of various public land access restrictions was expressed by Mr Simon Ramsay, President of the Victorian Farmers Federation. Mr Ramsay described traditional land users as a valuable fire management resource whose capacity had been under-utilised in recent years as a result of both their removal from fire management decision making, and the advent of public land access restrictions:

The involvement of local communities is vital to Victoria's fire response. However, this resource is often not fully utilised. The VFF believes there are considerable opportunities to utilise those engaged in traditional uses of Crown land to improve the standard of fire management. Groups engaged in traditional uses such as timber harvesting, grazing, four wheel driving, hunting, mining and prospecting by definition all have a strong interest in preventing bushfires on Crown land and carry a significant amount of practical knowledge about fire management. It is disappointing and unfortunate that to varying degrees traditional users of Crown land have been removed from the fire management decision making processes. Over time many of these groups have had their access to Crown land restricted by government authorities. As a result, these users have been disenfranchised.⁵⁸⁹

This view was echoed by Mr Trevor Roche, Volunteer Fire Brigades Victoria:

From a fire suppression point of view it [access restrictions] disadvantages in a number of ways. In particular it limits access so that people who live in the community are no longer able to move freely within the land, and that has always been an important consideration in terms of them being familiar with the land. A lot of locals used to walk through the land or drive through the land, and when they cannot do that there is a disadvantage that occurs. Lack of maintenance of tracks is another issue. A lot of tracks are now limited in terms of the access, and past access by the public has always ensured that those tracks remain passable.⁵⁹⁰

⁵⁸⁹ S. Ramsay, President, Victorian Farmers Federation, *Transcript of evidence*, Melbourne, 16 July 2007.

⁵⁹⁰ T. Roche, Project worker, Volunteer Fire Brigades Victoria, *Transcript of evidence*, Melbourne, 19 November 2007.

Mr Mark Coleman identified the restrictions placed on traditional land uses in national parks in recent years, and the associated loss of land and fire knowledge, as an explanation for the scale and intensity of the recent bushfires:

What has happened now is they have locked the whole thing up, and it is just been a holocaust waiting to happen. We knew it was going to happen, but we just did not know when. ...The knowledge just seems to be gone, and what I still cannot understand is with the national parks, yes, we have got park rangers, but why is it that none of the park rangers actually reside in their national parks? ...They are basically looking after a vast array of country, the same as the timber industry and the cattlemen did. They lived in those areas for generations, and they knew what was happening, whereas ... the park rangers ... are probably lucky to be there 20 hours a week.⁵⁹¹

Mr Scott Gentle of Timber Communities Australia, stated that there is a need for more “active management” of national parks. Mr Gentle identified existing restrictions on access to national parks, and the way in which parks are currently managed, as particular problems for neighbouring landholders:

Timber Communities Australia really would like to see some more active land management. ...locking up forests is just not working. It is great to have national parks, but ... they are just becoming ... the neighbours from hell. I speak to people out there whose properties border on national parks, from orchardists to viticulturalists, and all of them say the same thing — that is, they are keeping and managing their land responsibly, yet they are seeing Parks Victoria not doing anything about things like trees just bordering their property falling over fences. ... They are really frustrated with it.⁵⁹²

Councillor Malcolm Hole of Timber Towns Victoria, a local government association comprising councillors and officers from 22 rural councils, stated that Crown land should be available to traditional land users by virtue of its status as publicly-owned land:

The matter that we would like to raise is in relation to Crown land use — that is one of the things — and particularly with state parks and national parks. We believe, and I am speaking on behalf of councils right across Victoria, that Crown land actually belongs to all the citizens of Victoria, and the use of those parks should be made available to them, regardless of whether it is selective logging or whether it is cattle in the high country or four wheel drives or motorbikes being allowed into that area.⁵⁹³

In common with a number of other stakeholders, Councillor Hole also suggested that a greater degree of access to national parks for traditional land uses would help to control the bushfire risk and recommended grazing, selective timber harvesting, and firewood collection as a means of reducing forest undergrowth.⁵⁹⁴

⁵⁹¹ M. Coleman, *Transcript of evidence*, Traralgon, 2 August 2007.

⁵⁹² S. Gentle, Victorian State Manager, Timber Communities Australia, *Transcript of evidence*, Melbourne, 16 July 2007.

⁵⁹³ Councillor M. Hole, President, Timber Towns Victoria, *Transcript of evidence*, Traralgon, 2 August 2007.

⁵⁹⁴ Councillor M. Hole, President, Timber Towns Victoria, *Transcript of evidence*, Traralgon, 2 August 2007.

A number of stakeholders expressed the view that the land practices established by the first European Victorians – such as grazing, timber harvesting and prescribed burning – served to regulate the fuel loads in forested areas and minimise the risk of large bushfires, in a similar way to the traditional burning practiced by pre-European Aboriginal Australians.⁵⁹⁵ These stakeholders suggested that increases in the frequency, scale and intensity of bushfires in Victoria are the result of a decline in such European land practices across large areas of public land. This view was articulated by Mr Gilbert Rothe of the East Gippsland Wildfire Taskforce (EGWFT) in the following terms:

Fire was natural prior to early settlement. The early settlers also carried on a tradition of mosaic burns to protect themselves, and we have had the benefit of that era with the harvesting of timber for the last 100 years from a very resourceful supply. Many thousands of people have also enjoyed the legacy within our national parks, but the former glory that could be appreciated is being eroded by an overgrown, inaccessible floor cover of debris. We acknowledge some fires will still be a problem. But if we reduce the fuel load available, not as much damage will occur to the flora and fauna of our environment. While we respect the views of the DSE, Parks Victoria et cetera, there is little evidence to suggest the way forward is by continuing as we have been for the last 35 years.⁵⁹⁶

As the Committee has concluded in Chapter One, there is insufficient evidence to determine the exact extent and regional intensity to which Victorian Aboriginals used fire for land management purposes prior to the arrival of Europeans. It is therefore difficult to assess the argument that early European land practices in the forested regions of Victoria, served to maintain pre-existing fuel loads and fire regimes.

A significant number of stakeholders identified land use changes and restrictions as the reason for the decline in a range of forest workers - including timber industry employees and contractors, graziers, miners, prospectors and Government employees – who were previously available as a “first strike response team” in the event of bushfires.⁵⁹⁷

This loss of a skilled and knowledgeable workforce, with valuable experience in bushfire prevention and suppression was noted by many stakeholders. For example, Mr Bernard Young of Plantations North East stated that:

There simply are not enough people who fully understand and are comfortable working in firefighting situations, as there would have been 20 or 30 years ago.

...

It has been a long term passage of time that has got us to this situation in relation to the levels of experience and skill that go out and work in the bush, as we call it, on a day to day basis, and it would take a very large effort to turn that around. I think there

⁵⁹⁵ See for example: G. Rothe, *Transcript of evidence*, Bairnsdale, 31 July 2007; H. Livingstone, President, Buchan/Gelantipy Branch of the Victorian Farmers Federation, *Transcript of evidence*, Bairnsdale, 31 July 2007.

⁵⁹⁶ G. Rothe, *Transcript of evidence*, Bairnsdale, 31 July 2007.

⁵⁹⁷ MacAlister Four Wheel Drive Club Inc., *Submission*, no. 52, 9 May 2007, p. 1.

is a need for a new approach which balances both the need for more experienced people working in the bush as well as, obviously, taking advantage of any of the technologies that were not available 30 years ago that are clearly available now. ... Are there enough people working in forested areas now across all public land jurisdictions? In my view there are not.⁵⁹⁸

Mr David Evans also referred to “the lack of experienced people whose life’s work is in the bush”, and who had previously helped to control the bushfire risk, while providing a pool of local knowledge and fire-fighting experience. Mr Evans stated that the availability of such a resource was critical to the early suppression of bushfires and could also alleviate the burden on volunteers during bushfire suppression.

...the lack of experienced people whose life’s work is in the bush — be it timber getters, be it cattlemen, be it people operating tourism et cetera — who used to be there, who know the bush extremely well, perhaps do things that decrease the fire risk but are available as a pool of experienced people when you do have fires. Again I come back to the fact the sooner you can get onto a fire, the more likely you are to be able to suppress it without having it run for too long. That also reduces the risk of damage to the environment, and it reduces the load, particularly on the volunteer people who have to leave their homes for days and weeks on end, come from one end of the state to the other. But I think that lack of a pool of experienced people is very critical in early suppression of bushfires.⁵⁹⁹

Dr Kevin Tolhurst also emphasised the importance of maintaining a workforce within forest environments to ensure a sufficient level of experience for subsequent firefighting work:

Part of the effective work on fires is achieved because of familiarity with working in those forest environments, and you do not get that just at fires. That needs to be an ongoing experience, if you like, working in there, whether it be for track maintenance, for clearing drains, for maintaining picnic grounds, for timber harvesting or for whatever. All those incidental experiences are incredibly valuable when it comes to firefighting. Typically volunteers will not have those skills or experiences, so I do not think we should be asking them to suddenly get that experience under severe conditions. ... What I am suggesting is that we ought to have a workforce working in land management available to a great extent to work on forest fires...⁶⁰⁰

The land and fire agencies acknowledged the need for a degree of access to public land for traditional land uses but also noted the bushfire risks associated with some uses and the need for regulation. While the agencies provided little evidence of the extent of the decline in traditional land uses, in general they did not endorse the view that the decline had contributed to the scale and intensity of recent bushfires or that it had detracted from the ability of agencies to respond.

⁵⁹⁸ B. Young, Executive Officer, Plantations North East, *Transcript of evidence*, Mansfield, 26 November 2007.

⁵⁹⁹ D. Evans, *Transcript of evidence*, Mansfield, 26 November 2007.

⁶⁰⁰ Dr. K. Tolhurst, Senior Lecturer Fire Ecology and Management, School of Forest and Ecosystem Science, University of Melbourne, *Transcript of evidence*, Melbourne, 16 July 2007.

The general position was summarised by Mr David Nugent, Parks Victoria, as follows:

At the end of the day there is no doubt that in terms of fires there are a number of risks and people are a part of that. As I said, we have to manage all those in the best way we can, to try to minimise unnecessary fires.⁶⁰¹

Mr Neil Bibby, Chief Executive Officer, Country Fire Authority also highlighted the potential for increased bushfire risks with greater public access:

I have no figures to hand, but what we do know is where there is human intervention within a forest environment, that automatically increases the possibility of fires occurring.⁶⁰²

Mr Ken King, previously Executive Director, Land and Fire Management, DSE, also identified the bushfire risks associated with some traditional land uses:

In terms of traditional uses, the main risks to fire starting have been the accidental escape of campfires; some ignition from the operation of machinery; and some ... reckless behaviour associated with recreational activities. ... if a track is open, it is open to everyone. We do not have a way of stopping people at the gate through some other means.⁶⁰³

However, the land and fire agencies all acknowledged the important contribution of local knowledge to land and fire management. This point was articulated by Mr King, who also emphasized the role of the recreational industry in the recovery effort following the Grampians fire of 2005/06:

The traditional users of our forests and parks and the industries that rely on them are certainly an important part of our local area knowledge. One of the examples I would use in terms of recovery is the Grampians fire where the recreational industry there helped us to provide some recovery effort. They provided a hell of a lot of input into what was the best way to reopen the park after it was burnt.⁶⁰⁴

Mr King also highlighted the importance of education and engagement in meeting this challenge:

The agencies have relationships with these users continually to educate them about the risk of fire, and there was some discussion during the CFA questioning. It is about how you get that fire awareness out to everyone...⁶⁰⁵

Mr Nugent informed the Committee of the value that Parks Victoria places on maintaining partnerships with a range of groups involved in traditional land uses.⁶⁰⁶ The importance of informal local relationships between Parks

⁶⁰¹ D. Nugent, Parks Victoria, *Transcript of evidence*, Omeo, 29 November 2007.

⁶⁰² N. Bibby, Chief Executive Officer, Country Fire Authority, *Transcript of evidence*, Melbourne, 4 June 2007.

⁶⁰³ K. King, Executive Director, Land and Fire Management, Department of Sustainability and Environment, *Transcript of evidence*, Melbourne, 4 June 2007.

⁶⁰⁴ K. King, Executive Director, Land and Fire Management, Department of Sustainability and Environment, *Transcript of evidence*, Melbourne, 4 June 2007.

⁶⁰⁵ K. King, Executive Director, Land and Fire Management, Department of Sustainability and Environment, *Transcript of evidence*, Melbourne, 4 June 2007.

⁶⁰⁶ D. Nugent, Parks Victoria, *Transcript of evidence*, Omeo, 29 November 2007.

Victoria and traditional land users was emphasised by Mr Ben Rankin, Senior Fire Management Officer, DSE, who stated that it was not unusual to receive feedback from graziers regarding areas requiring fuel reduction burning.⁶⁰⁷

As noted above, a number of stakeholders questioned the view that the restriction of particular traditional uses on public land had adversely impacted land and fire management in Victoria. These stakeholders were notably critical of the use of timber harvesting and grazing as bushfire mitigation strategies.

The Victorian National Parks Association Inc. expressed the argument against Alpine grazing as a bushfire mitigation strategy, as follows:

...[it] does not reduce blazing by “controlling” the shrubs. Nor do they [cattle] remove the bark and litter in the surrounding woodlands and forests that spot fires into the alpine and sub-alpine areas. Instead grazing steadily increases blazing over the long-term by encouraging the establishment of shrubs within the grasslands.⁶⁰⁸

The Association also argued that rather than mitigating bushfires, timber harvesting can in fact exacerbate their severity and rate of spread while creating forest types which are more fire-prone:

The 2003 and 2006-07 fires have encompassed an extremely wide range of forest including unlogged and heavily logged areas. There is no evidence that logging retarded fires in any way whatsoever. Indeed some of the more severe and / or rapidly spreading fire occurred in 2003 to the east of Mt Beauty, south of Coryon and to the north-east and east of Benambra all of which had recent logging coupes. Logging has been found to create a drier forest type for at least some forest types in the short to medium term with changes from damp ferny understoreys to more flammable shrubs.⁶⁰⁹

...

The dense regrowth that occurs after clearfelling will also add to fuel loads. Where these regrowth forest are thinned, extreme difficulty has been experienced in conducting fuel reduction burning within them because of the high levels of debris that results from the thinning operations. Thus it is unlikely that logging, especially intensive logging practices, will reduce fire risk – the reverse is more likely.⁶¹⁰

Similar views regarding the effectiveness of timber harvesting in mitigating bushfires were expressed by Mr Charlie Schroeder, Ms Elizabeth Knight, Ms Freda Harvey, Ms Robyn Grant, Mr Alistair Traill, the Wilderness Society Victoria Inc., the Gippsland Environment Group, Mr Richard Goonan, and

⁶⁰⁷ B. Rankin, Senior Fire Management Officer, Department of Sustainability and Environment, *Transcript of evidence*, Omeo, 29 November 2007.

⁶⁰⁸ Victorian National Parks Association Inc., *Submission*, no. 190, 4 June 2007, p. 13. Emphasis in the original omitted.

⁶⁰⁹ Victorian National Parks Association Inc., *Submission*, no. 190, 4 June 2007, p. 13. Reference in quotation omitted.

⁶¹⁰ Victorian National Parks Association Inc., *Submission*, no. 190, 4 June 2007, p. 14. Reference in quotation omitted.

Ms Caroline Copley.⁶¹¹ The majority of the above stakeholders were also critical of grazing as a bushfire mitigation strategy.

Mr Ralph Barraclough stated that the clearfelling of Alpine ash forest can create fire hazards because prescribed burning cannot be conducted in regenerating stands:

Clear felling is really very bad ecologically, but the other thing is it does not lend itself to protective management with fire. I think the science in relation to alpine ash being a single aged stand stems from the fact that it supports clear felling, and that is where the science was directed. You cannot protectively burn the young stands, and that is creating a fire hazard.⁶¹²

Discussion and conclusion

The Committee considers that there has been a significant decline in traditional land uses on public land in recent decades. While it is difficult to determine whether this decline has had an impact on the severity of bushfires, the Committee considers that an insufficient level of fire in the landscape, primarily due to a lack of prescribed burning, is likely to have had a significantly greater impact on the scale and intensity of recent bushfires. However, the Committee is strongly of the view that the decline in traditional land uses has had an obvious impact on the ability of relevant agencies to respond, primarily due to the loss of a permanent workforce in forest areas. The Committee is mindful that the regulation of traditional land uses is likely to continue, given the need to manage Victoria's public land for a variety of purposes, including the protection of water, flora and fauna. Nevertheless, the Committee believes that traditional land users make a valuable contribution to land and fire management and that this contribution can be enhanced through appropriate regulation. Whether existing levels of regulation are appropriate must be considered on a case by case basis. Accordingly, the particular impacts of specific land uses are considered in the following section.

Finding 5.1:

That the decline in local knowledge, skill, resources and infrastructure associated with the restriction of traditional land uses has had a negative impact on the ability of relevant agencies to manage fire on public land.

⁶¹¹ C. Schroeder, *Submission*, no. 76, 23 May 2007; E. Knight, *Submission*, no. 83, 23 May 2007; F. Harvey, *Submission*, no. 85, 23 May 2007; R. Grant, *Submission*, no. 96, 23 May 2007; A. Traill, *Submission*, no. 103, 24 May 2007; The Wilderness Society Victoria Inc., *Submission*, no. 140, 28 May 2007; Gippsland Environment Group, *Submission*, no. 145, 28 May 2007; R. Goonan, *Submission*, no. 159, 29 May 2007; C. Copley, *Submission*, no. 244, 18 September 2007.

⁶¹² N. Barraclough, Gippsland Apiarists Association, *Transcript of evidence*, Bairnsdale, 31 July 2007.

Timber harvesting

Introduction

The reduction of timber harvesting on public land in recent decades was the traditional land use most commonly identified by stakeholders as having negative implications for bushfire severity and the ability of agencies to respond. Many of these stakeholders expressed the view that the consequent decline of the workforce previously engaged in timber harvesting and forest management in these areas, and the associated vehicle access tracks and heavy machinery that it had maintained, had significantly compromised bushfire prevention and suppression. Some stakeholders also advocated particular forms of timber harvesting, thinning for example, as a means of regulating fuel loads in Victoria's forests and of thereby preventing bushfires of the scale and intensity experienced in recent years.

A detailed analysis of the extent and causes of the decline in the area of public native forest available for timber harvesting is beyond the scope of the current report. The main reason for this decline is the process of land tenure change – that is, an increase in national parks and other conservation reserves – which has occurred in recent decades and which has effectively brought timber harvesting to an end in various areas of public native forest.

Changes to land tenure

A significant number of stakeholders cited changes to land tenure, primarily for flora and fauna conservation, as a major explanation for the reduction in the area of Victoria's public native forest in which timber harvesting is conducted. The Committee notes that over recent decades, a significant proportion of state forest (in which timber harvesting is generally permitted) has been transferred to national parks and conservation reserves (in which timber harvesting is generally prohibited).⁶¹³ Since the 1970s, Victoria's national parks have expanded from approximately four to 16 per cent of the state.⁶¹⁴ It is likely that public native forest previously held as State forest would have accounted for a significant proportion of this increase.

Changes to the management of State forests

Changes to the management of Victoria's State forests have also contributed to the reduction in the area of public native forest available for

⁶¹³ Department of Sustainability and Environment, *Code of Practice for Timber Production 2007*, Department of Sustainability and Environment, Melbourne, 2007, p. 3; Melbourne Water, 'Timber Harvesting', viewed 26 May 2008, <http://www.melbournewater.com.au/content/water/water_supply_catchments/timber_harvesting.asp?bhcp=1>.

◇ Public native forest previously held as state forest would have accounted for a significant proportion of the increase in Victoria's national park estate over this period.

⁶¹⁴ Parks Victoria, 'History of Parks Victoria', viewed 26 May 2008, <http://www.parkweb.vic.gov.au/1process_content.cfm?section=16&page=18>.

timber harvesting. According to the Commonwealth Department of Agriculture, Fisheries and Forestry's *Australia's State of the Forests Report 2008*, Victoria has approximately 3.16 million hectares of "multiple-use public forest" legally available for timber harvesting.⁶¹⁵ However, like all other states and territories, Victoria has continued to experience "major reductions" in the actual availability of this forest for timber harvesting.⁶¹⁶ According to the report, this trend is the result of an increased focus on managing for other values, particularly conservation values, within such forests.⁶¹⁷

Some of the more significant developments which have reduced the area of State forest available for timber harvesting in recent decades include:

- the Victorian *Timber Industry Strategy* of 1986, which first implemented Forest Management Plans for state forests;⁶¹⁸
- the *Regional Forests Agreements* between the Victorian and Commonwealth governments, signed between 1997 and 2001, which increased reserves in Victoria by more than one third;⁶¹⁹
- the Victorian *Government's Our Forests, Our Future* strategy, which introduced a reduction in sawlog volumes of approximately one third across the state in 2002;⁶²⁰
- the phasing out of logging in the Otways in 2008;⁶²¹ and
- the review into timber harvesting in old growth forests in East Gippsland.

Plantation Forestry

According to *Australia's State of the Forests Report 2008*, plantation forestry now dominates Australia's forestry and timber industries, having expanded rapidly since the National Plantation Inventory began collecting data in

⁶¹⁵ Montreal Process Implementation Group for Australia, *Australia's State of the Forests Report 2008*, Bureau of Rural Sciences, Canberra, 2008, pp. 54-55.

⁶¹⁶ Montreal Process Implementation Group for Australia, *Australia's State of the Forests Report 2008*, Bureau of Rural Sciences, Canberra, 2008, pp. 54-55.

⁶¹⁷ Montreal Process Implementation Group for Australia, *Australia's State of the Forests Report 2008*, Bureau of Rural Sciences, Canberra, 2008, p. 55.

⁶¹⁸ Department of Sustainability and Environment, 'Forest Management Planning Process', viewed 26 May 2008, <<http://www.dse.vic.gov.au>>.

⁶¹⁹ Commonwealth Department of Agriculture Fisheries and Forestry, 'Regional Forest Agreement', viewed 26 May 2008, <<http://www.daff.gov.au/rfa/regions/vic-eastgippsland/rfa>>.

⁶²⁰ Department of Natural Resources and Environment, 'Our Forests, Our Future: Victorian Government Statement on Forests', viewed 12 June 2008, <[http://www.dse.vic.gov.au/dse/nrenfor.nsf/93a98744f6ec41bd4a256c8e00013aa9/31a72d7192e8aa73ca256e6b001f69e7/\\$FILE/Polycystmnt.pdf](http://www.dse.vic.gov.au/dse/nrenfor.nsf/93a98744f6ec41bd4a256c8e00013aa9/31a72d7192e8aa73ca256e6b001f69e7/$FILE/Polycystmnt.pdf)> ; Department of Sustainability and Environment, 'Our Forests Our Future - Forest Management Area Fact Sheets', viewed 18 June 2008, <<http://www.dse.vic.gov.au>>.

⁶²¹ Department of Sustainability and Environment, 'A New Future for the Otways Tourism Initiative', viewed 18 June 2008, <<http://www.dse.vic.gov.au>>.

1993.⁶²² The cultivation, harvesting and processing of logs into sawn timber, paper, panels and various other products is now a major source of employment, particularly in rural areas.⁶²³ Further, although the total area of land used for plantations has continued to increase in all states and territories in recent years, plantations occupy a relatively small proportion of the rural estate with much of the increase in recent years achieved by planting on cleared agricultural land.⁶²⁴ Notably, Victoria has the largest total area of timber plantations, accounting for 22 per cent of the national total of both hardwood and softwood plantations.⁶²⁵

Stakeholder evidence

As noted in the overview of stakeholder evidence above, a significant number of stakeholders stated that the restrictions placed on forestry operations in public native forests had increased the risks associated with bushfires, due to the loss of a workforce with a significant degree of local knowledge, skill and experience in bushfire prevention and suppression. Many stakeholders also referred to the associated decline in access roads and tracks which were now becoming overgrown and inaccessible.

The situation was summarised by Mr Kevin Erwin, a representative of Volunteer Fire Brigades Victoria, as follows:

In summary, the reduction and sometimes exclusion of forest industries, with their bushcrafts, and laying and maintenance of tracks, has led to an increase of fire hazards.⁶²⁶

The land and fire management expertise of forestry officers in previous years was also noted by Ms Heather Livingstone, President, Buchan/Gelantipy Branch, Victorian Farmers Federation:

After European settlers did their bit, forestry officers took over the responsibility of maintaining a balanced public land service. These men had a good understanding of the bush and mostly did a good management job. They were able to burn when conditions were right, and these slow fires kept the bush clean. These forestry officers lived in places like Orbost; there was a group in Buchan — each place had its group of workmen. They were hands on people; they went out and did what had to be done. Now it is much worse. Fires at the right time do not destroy but rather manage the bush. But they must be regular...⁶²⁷

⁶²² Montreal Process Implementation Group for Australia, *Australia's State of the Forests Report 2008*, Bureau of Rural Sciences, Canberra, 2008, p. 56.

⁶²³ Montreal Process Implementation Group for Australia, *Australia's State of the Forests Report 2008*, Bureau of Rural Sciences, Canberra, 2008, p. 56.

⁶²⁴ Montreal Process Implementation Group for Australia, *Australia's State of the Forests Report 2008*, Bureau of Rural Sciences, Canberra, 2008, p. 56.

⁶²⁵ Montreal Process Implementation Group for Australia, *Australia's State of the Forests Report 2008*, Bureau of Rural Sciences, Canberra, 2008, p. 57.

⁶²⁶ K. Erwin, Volunteer Fire Brigades Victoria, *Transcript of evidence*, Halls Gap, 3 July 2007.

⁶²⁷ H. Livingstone, President, Buchan/Gelantipy Branch of the Victorian Farmers Federation, *Transcript of evidence*, Bairnsdale, 31 July 2007.

The Victorian Association of Forest Industries (VAFI) explained the impact of the decline in the timber industry on the network of vehicle access tracks on public land as follows:

The timber industry either directly or through the revenue it generated has traditionally provided a network of roads that provide good access to fire fighters. Roads suitable for log trucks are suitable for fire tankers. Roads and tracks are used for control lines for wildfires, back burns and controlled burns. The removal of the industry from large parts of the forest estate over the past two decades has reduced this contribution to the construction and maintenance of this road network. The standard of the network needs to be significantly improved.⁶²⁸

Mr Scott Gentle of Timber Communities Australia stated that many local tracks which were established in the Powelltown area following the Ash Wednesday fires, had become overgrown with the decline of forestry in the area.⁶²⁹

A number of stakeholders also emphasized the former effectiveness of the timber industry in maintaining an optimum level of prescribed burning. Mr Killeen, a former forest worker with 45 years experience working with public land management personnel in fire prevention and suppression, outlined the way in which the timber industry and the former Forests Commission had worked together to ensure a sufficient level of prescribed burning:

... going back a few years, all the timber industry worked on a selective logging regime where you would go through a forest, be given an area, go through it, selectively log the trees and then you could go back over that. In our operation from 1939 to 1987 when we were finished up as logging, we would have logged an area three times. ... there was much more collaboration with the Forests Commission, which is the DSE today, and those places were burnt off. There were restrictions, but they were cooperative restrictions.⁶³⁰

Mr Killeen also contrasted the continuous presence of the timber industry in forested areas in previous years – and its capacity to maintain a flexible approach to prescribed burning – with DSE’s current reliance on seasonal employees and more restrictive approach to prescribed burning:

We used to have the little depots around and they had their crew of two, three or four crew. They had access to a grader which they shared around with three, four or five areas. They shared a dozer around and they had a plan. They used to go and do the dozing here and the grading there and they were just going all the time. They were in the bush all the time. They might say that that would burn now. They would go back to their superiors and say, ‘We should be looking at burning that area’. Yes, all right, they would set up a little plan to do that. They would shoot up there and burn that, and do a bit out there. If they got up there and found out, ‘If we get down the bottom and let it go up the top, it will be too fierce, so we will just stay at the top and will start burning down. If it doesn’t want to burn much, we will go down further and burn back up again’. They had all those tools at their discretion, but the burns are too

⁶²⁸ Victorian Association of Forest Industries, *Submission*, no. 174, 4 June 2007.

⁶²⁹ S. Gentle, Victorian State Manager, Timber Communities Australia, *Transcript of evidence*, Melbourne, 16 July 2007.

⁶³⁰ M. Killeen, *Transcript of evidence*, Heyfield, 1 August 2007.

prescriptive now. They call them prescription burns. That is exactly what they are, and that is the problem.⁶³¹

The significant reduction in the permanent workforce available for land and fire management throughout the year as a result of changes to the timber industry was noted by several stakeholders. Mr Trevor Roche, described this as the key factor which needed to be addressed for future land management:

In relation to logging, our concern is more about the loss of human resources from the department which has occurred — and as I said East Gippsland is a good example where significant logging in the past meant a significant distributed resource workforce within the forested areas which were automatically available for fire suppression during the summer period.

... logging contractors were available as a part of the conditions for timber being made available to them. That resource is no longer there and it ought to be compensated for in a similar way based again on the department's assessment of what is actually required.⁶³²

The loss of a workforce with specialised skills in the operation of heavy machinery, particularly in steep country, was also identified by many stakeholders as having had a negative impact on bushfire suppression capacity. This impact was illustrated by Mr Gary Moran, a logging contractor based in Warburton, as follows:

Once upon a time we had a Board of Works here in Warburton which employed 80 to 100 blokes. They had their own forestry department, and the pride of the water catchments was their fire lines and their roads. It was a situation where they managed the water catchment areas and Forestry managed the state forests, and that was how we coexisted. If you needed a hand, you needed a hand. Board of Works dozers were always sitting down here. They were working. The Forestry dozers were always working, doing 1,000 to 1,500 hours a year with all this preventative maintenance work. Anyway, things have changed a little bit.⁶³³

This issue has been identified as of particular importance in remote areas, such as East Gippsland, where:

historically, there was a strong link between commercial forestry and fire management / protection. ... Most bushfires in East Gippsland will continue to be controlled using bulldozers as the primary agent. The bulldozer operator skill is paramount here, taking the lead in achieving fire control, doing this safely and minimising the environmental impact. Operators from the timber industry understand these factors and have proven to be the best at this demanding work relative to, for example, operators from the earth moving sector. While highly skilled, they have less knowledge of the forests, their environments and fire fighting. Other people fighting fires also rely on the bulldozer operators to protect them if the fire situation changes.

⁶³¹ M. Killeen, *Transcript of evidence*, Heyfield, 1 August 2007.

⁶³² T. Roche, Project worker, Volunteer Fire Brigades Victoria, *Transcript of evidence*, Melbourne, 19 November 2007.

⁶³³ G. Moran, *Transcript of evidence*, Warburton, 8 October 2007.

In remote locations, there are few alternatives for machines or operators outside the forest industry.⁶³⁴

Discussion and conclusion

The Committee is strongly of the view that the decline in the timber industry workforce has had a number of impacts including: a loss of expertise in land and fire management; reduced knowledge of local conditions; a reduction in the machinery available for bushfire suppression, particularly in remote areas; and a decline in the number and accessibility of vehicle access tracks. Collectively, these impacts have detracted from the capacity of relevant agencies to respond to bushfires.

This impact should be addressed as a matter of priority through a significant increase in the number of regionally-based, permanent, or long-tenured, fire management personnel – with a wide variety of practical and specialist skills – as per recommendation 2.7.

Finding 5.2:

That the reduction in the extent of timber harvesting on public land and associated loss of local knowledge and expertise, machinery available for fire prevention and suppression, and a decline in the number and accessibility of vehicle access tracks has had a negative impact on land and fire management, particularly the bushfire suppression capacity of relevant agencies.

Management of timber on public land

The Victorian Association of Forest Industries (VAFI) and the National Association of Forest Industries (NAFI) referred to the potential of timber harvesting as a bushfire mitigation and ecological enhancement strategy in Victoria's forests. Other stakeholders who advocated the more active management of Victoria's forests included the Institute of Foresters in Australia, Mr Peter Attiwill and Push for the Bush.⁶³⁵

The Victorian Association of Forest Industries (VAFI) is the peak industry body for the native hardwood timber processing industry in Victoria. In its submission to the Inquiry VAFI identified two trends in forest management during the past decade as having directly increased the risk of large and intense bushfires: the "passive" management of the forests held in parks and reserves compared to the "active" management of State forests; and the creation of additional parks and reserves in response to election commitments.⁶³⁶ According to VAFI, these trends have "increased the average fuel loads across the state up to the point when they are consumed

⁶³⁴ MBAC Consulting, 'A Socioeconomic Impact of the Timber Industry on Communities within East Gippsland FMA, Victoria', viewed 10 June 2008, <[http://www.dse.vic.gov.au/CA256F310024B628/0/333392975706B15FCA2572A00016B4EF/\\$File/E_GFIP+11.3+SocioEconomic+Impact.pdf](http://www.dse.vic.gov.au/CA256F310024B628/0/333392975706B15FCA2572A00016B4EF/$File/E_GFIP+11.3+SocioEconomic+Impact.pdf)>.

⁶³⁵ Institute of Foresters Australia, *Submission*, no. 138, 28 May 2007.; P. Attiwill, *Submission*, no. 177, 31 May 2007.; Push for the Bush, *Submission*, no. 187, 4 June 2007.

⁶³⁶ Victorian Association of Forest Industries, *Submission*, no. 174, 4 June 2007, p. 4.

by mega fires”.⁶³⁷ VAFI defined the concept of “active” forest management as a combination of timber harvesting and prescribed burning across the forested landscape and “passive” management as its opposite.⁶³⁸ VAFI argued that it is possible to “provide an active management regime that will protect Victoria from catastrophic fires and minimise the impacts when they do occur” and suggested the following timber harvesting methods as part of such a regime:

- clearfelling and seed tree silviculture, which can also create young forest in strategic and controlled locations;
- selective harvesting of dry forests to provide greater access and water yields and scattered regeneration to replace the older trees; and
- thinning of dense undergrowth stands, which also produces larger trees in a shorter time period, reduces water usage by trees and increases access to tree stands.⁶³⁹◇

VAFI concluded its submission with nine land and fire management recommendations, two of which are of particular note in the current context:

Integrated active land management [should] be applied to all of the public land in Victoria with continued access to timber yielding stands for the industry in areas where there are important timber values and lesser biodiversity values. Active management should use silviculture and fire to provide a diversity of forest ages and fuel loadings across the forest landscape to reduce the severity and impacts of uncontrolled wildfire and to protect neighbouring communities.

... [and]

Timber harvesting [should] be allowed in Melbourne’s water catchments so that young forests can be provided in a controlled manner and for ecological purposes.⁶⁴⁰

VAFI suggested that a “widespread thinning program in the catchments especially in the 1939 regrowth forests and in the future regrowth forests” would be preferable to the ongoing construction of a network of firebreaks in Melbourne’s catchments (discussed in Chapter Four) and could reduce the impacts of bushfires while providing water and timber in the interim.⁶⁴¹

The National Association of Forest Industries (NAFI) is the peak national body representing the interests of Australia’s forest and timber industry. Like VAFI, NAFI’s submission to the Inquiry advocated the active management of forested public land in Victoria:

⁶³⁷ Victorian Association of Forest Industries, *Submission*, no. 174, 4 June 2007, p. 4.

⁶³⁸ Victorian Association of Forest Industries, *Submission*, no. 174, 4 June 2007, pp. 4-5, 8.

⁶³⁹ Victorian Association of Forest Industries, *Submission*, no. 174, 4 June 2007, pp. 4-5.

◇ DSE’s Forest Glossary defines thinning as the “removal of part of a stand, with the aim of increasing the growth rate and/or health of the retained trees...”: Department of Sustainability and Environment, ‘Forest Glossary’, viewed 18 June 2008, <<http://www.dse.vic.gov.au>>. Definitions of a range of other timber harvesting techniques are also provided.

⁶⁴⁰ Victorian Association of Forest Industries, *Submission*, no. 174, 4 June 2007, p. 8.

⁶⁴¹ Victorian Association of Forest Industries, *Submission*, no. 174, 4 June 2007, p. 6.

With so many variables affecting the functioning of forest ecosystems, and the often ineffective management of reserved areas, it is of concern to the forest industry that governments often believe the only way to protect the forests is to lock them up in reserves. To overcome both of these problems, greater consideration should be given to the possibilities of using selected forest harvesting and thinning techniques together with prescribed burning as complementary active management tools...⁶⁴²

NAFI also cited the recent adoption of an active management approach to forests in the United States under the “Healthy Forests Initiative”, which was developed as a response to large wildfires in that country in recent years.⁶⁴³ The Initiative called for “active forest management...through thinning and prescribed burns, to reduce the unnatural buildup of fuels”.⁶⁴⁴ According to the Initiative:

The real solution to catastrophic wildfires is to address their causes by reducing fuel hazards and returning our forests and rangelands to healthy conditions. Tree thinning and removal of dense underbrush can ensure thriving forests while reducing risks of catastrophic fires and the dangers they pose to firefighters.⁶⁴⁵

The Committee was provided with little evidence regarding the effectiveness of timber harvesting in mitigating the scale and intensity of bushfires. The view that timber harvesting represents an effective bushfire mitigation tool has been rejected by leading forest ecologists, such as Professor David Lindenmayer of the Centre for Resource and Environmental Studies at the Australian National University, who has noted:

Despite reading more than an estimated 10,000 papers and reports on forests and forest management over the last 20 years, I have been unable to find any evidence to support the argument that logging is needed to protect forests from fire. There are many examples where major fires have occurred in areas that were previously heavily logged – the 1983 Ash Wednesday fires in Victoria is one of many cases.⁶⁴⁶

Mr Rod Newnham, Regional Manager West, Parks Victoria, also questioned the effectiveness of timber harvesting as a bushfire mitigation strategy:

I have been involved in managing fires that have gone straight through areas where timber harvesting has been going on for quite a long time as well. Personally I cannot say I have noticed less fires where there has been timber harvesting, if that is what you are actually asking about..⁶⁴⁷

⁶⁴² National Association of Forest Industries, *Submission*, no. 245, 17 September 2007, p. 3.

⁶⁴³ National Association of Forest Industries, *Submission*, no. 245, 17 September 2007, pp. 10-11.

⁶⁴⁴ The White House, 'Reducing the Threat of Catastrophic Wildfires and Improving Forest Health', viewed 5 June 2008, <www.whitehouse.gov/ceq/hfi_12-02_wh_fact_sheet.pdf>.. More generally, see: The White House, 'Healthy Forest : An Initiative for Wildfire Prevention and Stronger Communities ', viewed 5 June 2008, <<http://www.whitehouse.gov/infocus/healthyforests/sect4.html>>.

⁶⁴⁵ The White House, 'Healthy Forest : An Initiative for Wildfire Prevention and Stronger Communities ', viewed 5 June 2008, <<http://www.whitehouse.gov/infocus/healthyforests/sect4.html>>.

⁶⁴⁶ G. Cary, D. Lindenmayer and S. Dovers, *Australia Burning: Fire Ecology, Policy and Management Issues*, CSIRO Publishing, Melbourne, 2003, p. 85.

⁶⁴⁷ R. Newnham, Regional Manager, West, Parks Victoria, *Transcript of evidence*, Halls Gap, 3 July 2007.

Mr Ewan Waller, DSE, noted that the effects of timber harvesting on bushfire severity remains an open question and is the subject of ongoing research by DSE:

It was interesting to observe after the recent fire, with the timber harvesting — and it went through quite a lot of the area around Bruthen that had been logged. It varied a lot. The fire actually went out or moved slowly through some of the regenerated areas, but other areas it ground through, so there is nothing really definitive, I do not think, with logging for or against with the spread of fire. There is some move around, particularly in southern Europe, the thinning of forests to reduce fuel loads, and that is also happening in the United States. It is something we will be looking at in the future — whether actually physically thinning the forest will actually reduce fuel loads. It is not definitive, and there is work going on with it.⁶⁴⁸

The Committee agrees that there is a need for more active management of Victoria's forested public land, including forests currently set aside in national parks and reserves, both for bushfire mitigation and for ecological reasons. However, the Committee believes that the active management of ecologically sensitive areas such as national parks and reserves should occur in a way that, as far as possible, reflects natural processes. The Committee therefore concludes that an increase in prescribed burning, as recommended in Chapter Two, is currently the most appropriate tool for the active management of Victoria's non-production public forests.

Recommendation 5.1:

That the Department of Sustainability and Environment and its partner agencies conduct or commission research, and a possible trial study, to determine the potential of thinning and other silvicultural practices – whether alone or in combination with prescribed burning – as a means of reducing fuel loads and as a bushfire management strategy in Victoria's forests.

Grazing

The Committee received evidence from a significant number of stakeholders who argued in favour of grazing on public land as an effective fuel reduction tool. A number of these stakeholders were particularly critical of the Government's decision in 2005 to end grazing in Victoria's Alpine National Park and argued that this had contributed to an increase in fuel loads and the severity of recent bushfires. While the Committee notes that grazing continues in some Alpine areas outside of the Alpine National Park, the timing and duration of grazing access, as in other areas of public land, is significantly more regulated than in previous years.

A number of stakeholders also argued that there is a close association between grazing and effective prescribed burning, both in Alpine and non-Alpine areas. Stakeholders argued that an inadequate level of prescribed burning had altered forest vegetation from a relatively open and grassy

⁶⁴⁸ E. Waller, Chief Officer, Fire and Emergency Management, Department of Sustainability and Environment, *Transcript of evidence*, Halls Gap, 3 July 2007.

condition to a more closed and dense environment which is no longer suitable for grazing. In relation to Alpine areas, stakeholders also argued that grazing had previously maintained Alpine vegetation at a level which allowed the safe conduct of prescribed burning.

Ms Heather Livingstone, President, Buchan/Gelantipy Branch, Victorian Farmers Federation, outlined the extent of cattle grazing in native forests in previous decades, citing the particular example of Gippsland:

After Europeans arrived the settlers followed the Aboriginal ways and the country was all open, rolling grassland. My father said it was paradise on earth. Orbost right through Gelantipy, Wulgulmerang, Omeo and all that country was rolling grassland, and the settlers came there because it was great for their cattle. Now ... [it has] changed it into just scrub land. I can remember driving from Gelantipy to Bairnsdale and there were cattle grazing all through the open, grassy land. There were gum trees, yes, but lots of patches of open grassland — it was really great. That gradually got overtaken with scrub...⁶⁴⁹

Mr Chris Commins of the Mountain Cattlemen's Association stated that although the Association had never argued that grazing prevents bushfires, it was strongly of the view that it plays an important role in mitigating its effects:

I also think that cattle — contrary to some evidence that was stated before — do have a very good mitigating effect on fire. It is absolute nonsense — Bruce Esplin's comment after the 2003 fires — that there is no scientific evidence that grazing prevents blazing. It was a rather curious statement, because we have never, ever said that. We have always said that grazing mitigates the effects of fire.⁶⁵⁰

Mr Bob Adams of the Alpine Conservation Access Group was also critical of the finding in the Esplin Report that available scientific evidence does not support cattle grazing in Alpine areas for the purposes of bushfire mitigation:

ACAG has no confidence in Mr Esplin's highly flawed report, especially about high country grazing not reducing blazing. Some people within the scientific community involved in the recent decision making process regarding the banning of high country cattle grazing were biased in their findings to have cattle removed from the high country.⁶⁵¹

Mr Adams went on to cite the 2002/03 fires as an example of the effectiveness of grazing in mitigating the severity of bushfires in Alpine areas:

...during the 2003 fires large grazed areas of the Bogong High Plains did not burn. The reason for this was fuel reduction by cattle grazing. Three years later, with cattle grazing excluded, the majority of the alpine grasslands were burnt pitch black, even

⁶⁴⁹ H. Livingstone, President, Buchan/Gelantipy Branch of the Victorian Farmers Federation, *Transcript of evidence*, Bairnsdale, 31 July 2007.

⁶⁵⁰ C. Commins, Mountain Cattleman's Association of Victoria, *Transcript of evidence*, Omeo, 29 November 2007.

⁶⁵¹ B. Adams, Media Officer, Alpine Conservation and Access Group, *Transcript of evidence*, Mount Beauty, 28 November 2007.

killing snow gum trees several hundred years old. The exception was the brumby grazed areas, which did not burn.⁶⁵²

Similar views were expressed by a number of stakeholders, including Mr Ralph. Barraclough,⁶⁵³ Mr Kevin Higgins,⁶⁵⁴ Mr David Evans,⁶⁵⁵ and Mr John O'Brien.⁶⁵⁶ Mr O'Brien described the effectiveness of grazing in reducing the fine fuel on the forest floor and the associated prescribed burning previously practiced by graziers as follows:

Cattle tended to take out the fines of the base of the forest — that is, the grass. You might not think they did a lot there, but they took out those fines and during the autumn period when the cattlemen returned with their herds in April ... they had a great tendency to throw out a match every couple of hundred metres along the ridge lines. They knew they were coming out just about a fortnight ahead of the snow season, so the weather was changing, and those burns just trickled down. The fires might have gone 100 metres or 200 metres and then they stopped because of the wetness and that was coming in. That had a major effect.⁶⁵⁷

This view was essentially echoed by Mr Jack Hicks of the Alpine Conservation and Access Group, who stated that grazing in Alpine areas previously supported the practice of prescribed burning by maintaining grassy vegetation at a level which minimised the risks associated with subsequent burns:

...pre the 1939 bushfires the cattlemen basically did the fuel reduction burning adjoining the alpine grasslands. So what you saw was the cattlemen actually did the fuel reduction burning straight immediately under those runs, so you did not have the high build up of fuel loads to run out across the grasslands.

In extreme weather ... if the grasses are grazed, the fire will run out. ... the cattle have been taken off the grasslands up here, so there is no way of doing fuel reduction burning on the adjoining forest montane, because it is going to run out into the grass. To effectively manage this high country ... we are going to have to find a way of managing the fuel loads. If you take the cattle off the tops, you cannot do fuel reduction burning straight immediately under them.⁶⁵⁸

Mr Hicks also referred to the effectiveness of cattle grazing in reducing the mid storey of fuel within forests, thereby reducing the subsequent severity of bushfires:

Cattle would go through and selectively take out — they would trample or eat or whatever they do — the trees that did not grow as quickly, so after 10 or 15 years, with the proper stocking rate and the proper fuel reduction, you would find that you would have a more open forest.

...you have got to have something there to push them [the smaller trees] onto the floor and trample them down so that you have not got a mid storey of fuel. What

⁶⁵² B. Adams, Media Officer, Alpine Conservation and Access Group, *Transcript of evidence*, Mount Beauty, 28 November 2007.

⁶⁵³ R. Barraclough, *Transcript of evidence*, Heyfield, 1 August 2007.

⁶⁵⁴ K. Higgins, *Transcript of evidence*, Heyfield, 1 August 2007.

⁶⁵⁵ D. Evans, *Transcript of evidence*, Mansfield, 26 November 2007.

⁶⁵⁶ J. O'Brien, Volunteer Fire Brigades Victoria, *Transcript of evidence*, Traralgon, 2 August 2007.

⁶⁵⁷ J. O'Brien, Volunteer Fire Brigades Victoria, *Transcript of evidence*, Traralgon, 2 August 2007.

⁶⁵⁸ J. Hicks, Vice-President, Alpine Conservation and Access Group, *Transcript of evidence*, Mount Beauty, 28 November 2007.

selective grazing or selective fuel reduction burning does is take out that fine mid storey fuel. Then when you get a lightning strike that comes through and it is on the ground, there is nothing to take it from that ground area to the treetops, because you have knocked out the mid fuel, and that is hop scrub and dogwood, and it grows as high as your head sitting on a horse and you cannot get through it. But once you put a cool burn through that or some cattle through it, it is not a problem.⁶⁵⁹

In summary, many stakeholders were of the view that the previously synergistic relationship between grazing and prescribed burning had been lost because: graziers are no longer active on public land to regulate fuel loads through grazing and prescribed burning; much of Victoria's public land has been altered such that it is now less suitable for grazing and a more difficult environment in which to conduct prescribed burns. These trends were captured by Mr Simon Turner of the Mountain Cattlemen's Association, who noted that many areas were now:

...ungrazable, not through legislation or any other methods other than due to changes in the forest type. That has been a sort of scrubbing up effect, I suppose, a change in vegetation type where it is just not suitable for cattle to utilise those regions. That highlights the changes we see and therefore reflects the extent of the management [changes] ...The timing and the effectiveness of prescribed burning goes hand in hand.⁶⁶⁰

Mr Turner emphasised that this trend was not restricted to Alpine areas:

If you look at grazing maps of the coastal region, you will find that at Cann River through Mallacoota, that region through there, contains significant amounts of open areas that were suited to grazing. Those licensees were not forced off there by legislation or anything like that. They were forced off there by change in the environment. You had less fire — no fire, in some cases — in the environment and therefore you had the scrubby species. If you do not have a disturbance there to break that cycle of dominance by the dominant growing species in that ecosystem, it takes over.

...the evidence in itself was in the grazing licences that are no longer used, purely because they are not useable. The environment has changed. It is not a grassy forest any more; it is a thicket in those regions. That is why they are not used. ...You do not have to go into the alpine region to find that sort of a change. It is all related back to fire.⁶⁶¹

In relation to this issue, Mr Howard Crothers advocated the use of grazing in small Crown reserves located near townships as a fuel reduction strategy:

Another area of concern to us is the bushland reserves surrounding the small towns in this region. In many cases native vegetation, introduced grasses and weeds are growing alongside residential properties. ... There are a lot of small Crown land reserves in this region most ranging in area from 10 hectares to 200 hectares with no fire management program at all — to our knowledge. Some are trees and scrub, some are open grassland. It is rather difficult to have some sort of a fire management

⁶⁵⁹ J. Hicks, Vice-President, Alpine Conservation and Access Group, *Transcript of evidence*, Mount Beauty, 28 November 2007.

⁶⁶⁰ S. Turner, Mountain Cattleman's Association of Victoria, *Transcript of evidence*, Omeo, 29 November 2007.

⁶⁶¹ S. Turner, Mountain Cattleman's Association of Victoria, *Transcript of evidence*, Omeo, 29 November 2007.

plan for these small reserves. The fuel load in some of the reserves could be greatly reduced by strategic grazing as controlled burns would be difficult in those reserves.⁶⁶²

Despite the number of submissions provided to the Committee in support of grazing as a bushfire mitigation strategy, agency stakeholders were generally unsupportive of this view.

Mr Ken King, DSE referred to both the *Esplin Report* and the McLeod inquiry in the ACT in relation to the effectiveness of grazing in bushfire mitigation. Mr King noted the finding of the *Esplin Report* that grazing by cattle on high country grasslands and herb fields does not reduce the flammability of associated shrubs and the finding of the *McLeod Report* that while grazing can have some impact in reducing fuel loads, it has little effect on the accumulation of dry forest fuels.⁶⁶³

Dr Dick Williams of CSIRO's Sustainable Ecosystems was also critical of the view that grazing in Alpine areas is effective as a bushfire mitigation tool:

...the CSIRO has long been involved in research on livestock grazing in alpine environments. This research has shown that livestock grazing in alpine environments is not an effective fire mitigation tool and had no detectable influence on the extent or severity of fire on the treeless vegetation of the Bogong High Plains following the 2003 fires.⁶⁶⁴

This view was essentially reiterated by Mr David Nugent of Parks Victoria:

On the question about alpine grazing, after the 2003 fires some work was done by the CSIRO to assess the occurrence of burning in those areas that were grazed and ungrazed. It was found that both the areas that were grazed and those that were not grazed were burnt. During 2003, 45 of the licensed areas were burnt, and of those grazed and burnt licences, 93 per cent burnt to varying degrees of severity. Certainly in relation to the high plains area it was found that areas of the grassland did not burn. I think that one of the things that we have found in the fires in the high plains, through some of the work that CSIRO has done for us, is that the things that we call the closed heaths and the open heaths hold very flammable fuels and in fact they are more flammable than the actual grasslands. CSIRO has been able to demonstrate that for us.⁶⁶⁵

While grazing in Alpine areas and in national parks is generally not endorsed by land and fire management agencies as an effective or appropriate bushfire mitigation strategy, its role in fuel reduction in some circumstances, primarily in State forest, has been recognised by DSE. The Code of Practice provides:

⁶⁶² H. Crothers, President, Underbool Branch of the Victoria Farmers Federation, *Transcript of evidence*, Ouyen, 11 September 2007.

⁶⁶³ K. King, Executive Director, Land and Fire Management, Department of Sustainability and Environment, *Transcript of evidence*, Melbourne, 4 June 2007.

⁶⁶⁴ Dr. D. Williams, CSIRO Sustainable Ecosystems, *Transcript of evidence*, Melbourne, 27 August 2007.

⁶⁶⁵ D. Nugent, Parks Victoria, *Transcript of evidence*, Omeo, 29 November 2007.

The Department may authorise grazing regimes by farm animals for fuel management but only where it is the most appropriate means of fuel management consistent with other land management objectives.

Grazing is generally appropriate only for significantly modified habitats.

All grazing for fuel management must occur within the context of a Fire Management Plan and the areas where it is appropriate will generally be specified in that plan.

Any authority issued by the Department to graze for fuel management purposes must specify the type of livestock, intensity, and period of grazing as determined by the fire specialist after consultation with the flora/ fauna, any other relevant specialists and the authorised grazier.

The Department must monitor the progress of grazing and suspend it when fuel management objectives have been achieved.⁶⁶⁶

According to Victoria's *State of the Forests Report*, cattle grazing in Victoria's public forests:

... is usually [allowed] for periods of up to 12 weeks each year in summer and early autumn. Licensed grazing blocks are generally used to supplement the capacity of the private lands used by licence holders. While access to these forested areas is important to individual operators, their economic importance in terms of revenue generated to Victoria is minimal. The majority of 'bush grazing' occurs in sub-alpine areas and along river frontages on Crown Land. Cattle grazing can impact on regenerating forest through trampling and browsing of young seedlings. This can reduce regeneration of forest areas, particularly following harvesting. Grazing, therefore, needs to be monitored to ensure that impacts are minimised.⁶⁶⁷

Conclusion

In conclusion, the Committee notes the scientific evidence that grazing may not be an effective or preferable bushfire mitigation strategy alone but believes that it can be used as a tool to complement other fuel reduction strategies on public land.

Four wheel driving

The Committee received submissions from a number of Victorian Four Wheel Drive (4WD) clubs, each of which argued that four-wheel driving has a positive impact on bushfire prevention and suppression, primarily by ensuring that access tracks are maintained and remain open for bushfire suppression. The clubs also raised a number of concerns with the current level of access provided for owners of 4WD vehicles and noted that greater use could be made of the maintenance resource which their members represent.

⁶⁶⁶ Department of Sustainability and Environment, *Code of Practice for Fire Management on Public Land*, Department of Sustainability and Environment, Melbourne, 2006, p. 25.

⁶⁶⁷ Department of Sustainability and Environment, *Victoria's State of the Forests Report*, Department of Sustainability and Environment, Melbourne, 2005, p. 130.

The Victorian Four Wheel Drive Club Inc. was critical of what it described as the Government's policy of closing fire access tracks and allowing them to re-vegetate, noting that almost 50 tracks had been closed under the Bunyip State Park Recreation Framework. According to the Club:

Access to our State and National Parks is becoming increasingly more difficult to achieve at a time when the Fire Authorities need is greatest. In view of the past cooperation between Four Wheel Drive Clubs and the state authorities it is disappointing that the lessons of the past have not been heeded. It is of further disappointment that the state does not make greater use of this often and willing and experienced volunteer resource to regularly conduct the types of track surveys that the authorities are simply not able to complete.⁶⁶⁸

Similar concerns regarding the poor condition and closure of access tracks, and the under-utilisation of recreational 4WD owners for track maintenance, were expressed by the Hamilton District Four Wheel Drive Club Inc.⁶⁶⁹ and the Warrnambool Four Wheel Drive Club Inc.⁶⁷⁰ The Bushtrek 4WD club also referred to the role of 4WD clubs in ensuring that tracks remain open for firefighting by assisting with the clearance of overgrowth and in providing feedback to DSE regarding track conditions and hazards.⁶⁷¹

In its submissions to the Inquiry, the Macalister Four Wheel Drive Touring and Social Club Inc. informed the Committee that its members shared a sense of responsibility for the good management of the State's public land. The club also stated that its members had adhered to the Seasonal Closure of four wheel drive tracks each year (from the Queen's Birthday long weekend in June until November on the Melbourne Cup long weekend) since the policy began in 1977 because they accepted that many tracks were unsuitable for Winter use.⁶⁷²

However, the club stated that there are currently no track maintenance workers employed to keep fire access tracks open and that this work is now undertaken by 4WD clubs, the majority of which are based in metropolitan areas and are only available to carry out such work on weekends.⁶⁷³

The club also stated that commercial and recreational users had effectively ensured that fire access tracks had remained accessible and open during the recent fires, in contrast to "management vehicle only tracks" which had become un-roadworthy due to a lack of use:

The effect that commercial and recreation interests have upon public land management is obvious because fire access tracks that were kept open in our recent fires were those used by commerce and recreation.

⁶⁶⁸ Victorian Four Wheel Drive Club Inc., *Submission*, no. 189, 4 June 2007, pp. 2-3.

⁶⁶⁹ Hamilton and District Four Wheel Drive Club, *Submission*, no. 59, 16 May 2007, p. 1.

⁶⁷⁰ Warrnambool 4WD Club Inc., *Submission*, no. 126, 25 May 2007, p. 2.

⁶⁷¹ Bushtrek 4WD Club, *Submission*, no. 226, 18 July 2007, p. 1.

⁶⁷² MacAlister Four Wheel Drive Club Inc., *Submission*, no. 52, 9 May 2007. Covering Letter.

⁶⁷³ MacAlister Four Wheel Drive Club Inc., *Submission*, no. 52, 9 May 2007, p. 1.

Management vehicle only tracks were inaccessible to fire fighters due to a lack of Management Vehicle use. This lack of management use was due to the lack of management staff [employed in land and fire management].⁶⁷⁴

The club suggested that allowing trained industry and recreational drivers to access Management Vehicle Only tracks, and an increase in workers on the public land estate, would ensure that such tracks remain open for use during future fires.⁶⁷⁵ The club also stated that the Government had promised to provide 4WD Clubs with access to Management Vehicle Only Tracks prior to the last State Election but that this had yet to occur.⁶⁷⁶

The Bendigo Four Wheel Drive Club Inc. referred to the problem of track closures in response to damage caused by users who were not responsible members of a 4WD club and suggested that instead of closing such tracks, it would be preferable to engage 4WD clubs in education and awareness raising within the community. The club also stated that considerate 4WD users provide a basic level of track maintenance by removing debris and fallen branches.⁶⁷⁷ The club also referred to the repair and recovery assistance provided by 4WD clubs following fires, noting that this activity is coordinated at both a local and state level.⁶⁷⁸

Finally, the club noted that although the presence of campers can be of concern to land and fire agencies during bushfire suppression operations, 4WD users pose less of a problem in this regard:

...this issue is minimal with an organized group of four-wheel drivers. Our vehicles are all equipped with radios and we travel in convoys; in the event of the detection of a fire or another emergency, the club group is well equipped to deal with the emergency and raise an early alarm.⁶⁷⁹

A number of other stakeholders also supported increased access to tracks by 4WD owners and clubs as a cost-effective means of maintaining tracks for bushfire suppression, including: Councillor Roslyn MacInnes of Horsham Rural City Council⁶⁸⁰ and Mr Jack Hicks, Vice President of the Alpine Conservation and Access Group.⁶⁸¹

The view that 4WD access is of benefit to bushfire prevention and suppression, however, was not universally shared. Mr Rod Newnham, Parks Victoria, argued that four-wheel driving made only a minor contribution to fire management:

⁶⁷⁴ MacAlister Four Wheel Drive Club Inc., *Submission*, no. 52, 9 May 2007, p. 6.

⁶⁷⁵ MacAlister Four Wheel Drive Club Inc., *Submission*, no. 52, 9 May 2007, pp. 6-7.

⁶⁷⁶ MacAlister Four Wheel Drive Club Inc., *Submission*, no. 52B, 9 August 2007, p. 1.

⁶⁷⁷ Bendigo 4WD Club Inc., *Submission*, no. 110, 25 May 2007, p. 1.

⁶⁷⁸ Bendigo 4WD Club Inc., *Submission*, no. 110, 25 May 2007, p. 2.

⁶⁷⁹ Bendigo 4WD Club Inc., *Submission*, no. 110, 25 May 2007, p. 2.

⁶⁸⁰ Councillor R. MacInnes, Horsham Rural City Council, *Transcript of evidence*, Halls Gap, 3 July 2007.

⁶⁸¹ J. Hicks, Vice-President, Alpine Conservation and Access Group, *Transcript of evidence*, Mount Beauty, 28 November 2007.

As to four wheel drives, I would say again there is probably not a great impact either way. We would maintain some tracks quite specifically for the primary function of access for four wheel drives but that allows access for firefighters as well. Four wheel drives would sometimes use tracks that we have maintained for fire access purposes anyway, so there is some synergy there; but if there was no four wheel driving, then probably we would maintain a lot of those tracks at least to the standards that we require for fire access. I do not think there would be too many negative impacts in regard to fire from a four wheel drive perspective, and sometimes there might be some incidental benefits as far as some rubbish being cleared off tracks as vehicles go through the less used tracks.⁶⁸²

Some stakeholders argued that four-wheel driving can in fact damage tracks which are required for bushfire suppression. Mr Gentle of Timber Communities Australia stated that maintenance tracks established following the Ash Wednesday fires, particularly in the Powelltown area, had been “chewed up” by 4WD vehicles, as well as bike riders and other users.⁶⁸³ The potential damage to water quality through increased erosion from four-wheel driving was also cited by some stakeholders.⁶⁸⁴

The Committee notes that both DSE and PV publish information regarding the accessibility of 4WD tracks on their websites, including maps of existing tracks and details of closure periods. Maps of 4WD tracks are shown on DSE’s website, on *Fireplan* and on other interactive maps. The DSE website also provides a link to a touring code for 4WD users while the PV website contains a link to the Memorandum of Understanding that it has signed with 4WD Victoria Inc.⁶⁸⁵

Both PV and DSE are also parties to a *Memorandum of Cooperation between Four Wheel Drive Victoria, Parks Victoria & DSE* which sets out the responsibilities of both agencies in relation to the network of four wheel drive tracks under their respective administration. Under the Memorandum, both PV and DSE have agreed to:

- provide appropriate and equitable access to parks and reserves for a diverse range of recreation and tourism opportunities;
- plan and manage four wheel drive use of parks and reserves to conserve, protect and enhance environmental and cultural values; and

⁶⁸² R. Newnham, Regional Manager, West, Parks Victoria, *Transcript of evidence*, Halls Gap, 3 July 2007.

⁶⁸³ S. Gentle, Victorian State Manager, Timber Communities Australia, *Transcript of evidence*, Melbourne, 16 July 2007.

⁶⁸⁴ G. Harper, Manager, Assets, Grampians Wimmera Mallee Water, *Transcript of evidence*, Dunkeld, 4 July 2007.

⁶⁸⁵ Department of Sustainability and Environment and Parks Victoria, 'Memorandum of Cooperation between Four Wheel Drive Victoria and the Department of Sustainability and Environment', viewed 16 June 2008, <http://www.parkweb.vic.gov.au/resources/14_1146.pdf>.

- responsibly meet the needs of four wheel drivers for quality information, services, and experiences.⁶⁸⁶

Discussion and Conclusion

The Committee acknowledges that while there is a need to regulate the access of 4WD vehicles to public land, this recreational activity does have significant potential to contribute to land and fire management. While this potential is increasingly recognised by both DSE and PV, the Committee considers that further efforts could be made to consolidate the agencies' partnership approach to track management with 4WD clubs. The Committee also considers that four-wheel driving on public land is one of a number of public land uses that could be better managed through increased community engagement. Effectively managed, 4WD access has the potential to play a greater role in ensuring that tracks remain open and accessible for bushfire prevention and suppression, since responsible users do play an important role in minor track maintenance and in providing feedback to agencies regarding track and fire hazards. The ongoing efforts of the agencies to utilise this important resource should therefore be encouraged.

Recommendation 5.2:

That the Victorian Government expedite the implementation of its 2006 election commitment to provide four wheel drive clubs with access to management vehicle only tracks.

Prospecting and mining

Introduction

In this section, the Committee focuses on prospecting and small-scale mining as these are the extractive activities that have traditionally occurred on public land in relation to which the Committee received evidence.

Prospecting involves the search for minerals, such as gold nuggets and gemstones, under a Miners Right (available from the Department of Primary Industries) and is primarily conducted using a metal-detector, gold pan or small riffle-box. Prospectors are restricted to the use of hand tools when digging. Prospectors are prohibited from disturbing native vegetation and must rehabilitate any excavations.⁶⁸⁷ Prospecting is allowed in most State

⁶⁸⁶ Department of Sustainability and Environment and Parks Victoria, 'Memorandum of Cooperation between Four Wheel Drive Victoria and the Department of Sustainability and Environment', viewed 16 June 2008, <http://www.parkweb.vic.gov.au/resources/14_1146.pdf>.

⁶⁸⁷ Prospectors and Miners Association of Victoria, *Submission*, no. 233, 23 June 2007, p. 1. See also: Parks Victoria, 'Prospecting and Fossicking', viewed 12 June 2008, <http://www.parkweb.vic.gov.au/1process_details.cfm?activity=35>.

forests and many reserves but is prohibited in Reference Areas, most state or national parks (with some exceptions) and certain streams and rivers.⁶⁸⁸

Smaller-scale mining involves the extraction of minerals under a Mining Licence, usually on areas of under five hectares. Mining methods vary but can include the sinking of a mine-shaft, the use of a bulldozer and a metal detector, or the use of a washplant. Miners are also required to rehabilitate and revegetate any excavations.⁶⁸⁹ In 2002, approximately 800 mining licences were granted in Victoria's forests, covering a total area of around 360,000 hectares.⁶⁹⁰

Evidence from stakeholders

The Prospectors and Miners Association of Victoria (the peak body representing the interests of prospectors and smaller-scale miners in Victoria) expressed the view that there had been an increase in the frequency and intensity of bushfires on public land as a result of changes to public land management practices.⁶⁹¹ In common with a range of other stakeholders, the Association identified the reduced access to public land by traditional land users as having contributed to this trend.

The Association noted that prospecting provides a benefit to land and fire management because prospectors often clear areas that are overgrown with blackberries or other weeds to gain access to sites.⁶⁹² According to the Association:

There is no valid reason to exclude prospecting; it is a waste of government time and resources. The bush would be better off with prospectors there as eyes and ears contributing to track clearance, albeit maybe just moving the odd fallen tree. To me this is evidence that the whole direction of public land management is definitely askew.⁶⁹³

The Association also noted that although mining provides a comparatively greater contribution to bushfire prevention and suppression than prospecting, this contribution had been significantly reduced by the decline of the industry on public land since the 1980s and the associated loss of its earth-moving machinery for use in bushfire suppression:

Having small-scale mines on Crown land should be seen as a bonus, as small-miners have earth moving machinery which can be called upon during fire-fighting operations. No recognition is ever given to this positive nature of small-scale mining in relation to fighting bushfires. Small miners and their earth moving equipment were, until recent times, able to be called upon to join fire fighters to establish firebreaks,

⁶⁸⁸ Parks Victoria, 'Prospecting Guide', viewed 11 June 2008, <http://www.parkweb.vic.gov.au/resources/04_0157.pdf>.

⁶⁸⁹ Prospectors and Miners Association of Victoria, *Submission*, no. 233, 23 June 2007, p. 1.

⁶⁹⁰ Department of Sustainability and Environment, *Victoria's State of the Forests Report*, Department of Sustainability and Environment, Melbourne, 2005, p. 130.

⁶⁹¹ Prospectors and Miners Association of Victoria, *Submission*, no. 233, 23 June 2007.

⁶⁹² R. Bentley, President, Prospectors and Miners Association of Victoria, *Transcript of evidence*, Melbourne, 19 November 2007.

⁶⁹³ R. Bentley, President, Prospectors and Miners Association of Victoria, *Transcript of evidence*, Melbourne, 19 November 2007.

conduct track clearance or similar activities. With the systematic removal of opportunities for small-scale mining in Victoria, the opportunities for small-miners to contribute are also disappearing.⁶⁹⁴

Ms Rita Bentley, President of the Prospectors and Miners Association of Victoria, quoted the following comments of a colleague, Mr Neil Saville, who had used mining equipment to assist in fighting the Maryborough fires of 1985:

The Maryborough fires were extensive and we were in all kinds of trouble, as were many other people, trying to fight the fire. ... We used our CAT 988 front end loader along with the CFA to cut firebreaks and made our dam water available to the CFA. Our mining activity, along with other people using the bush, put us in a position to fight the fire and reduce the damage to the bush and private property. This defence will never happen in parks and reserves where no one is allowed to do anything any more. This policy will see a disaster one day, beyond our imagination.⁶⁹⁵

The Association also noted that both prospectors and miners were major users of access tracks and played an important role in ensuring that these remained open and clear of debris.⁶⁹⁶

As noted in the introduction to this chapter, the land and fire agencies were generally of the view that mining and prospecting, like other traditional land uses, did not have an intrinsically positive or negative effect on the severity of bushfires or the ability of agencies to respond. However, the agencies did acknowledge that, as with a range of other traditional land uses, mining and prospecting on public land do contribute to vehicle track maintenance and access.⁶⁹⁷

Hunting

Hunting is a popular traditional land use in Victoria, in which more than 30,000 licensed hunters currently participate.⁶⁹⁸ Hunting is managed and administered by DSE, which issues licences to hunt the following species:

- ducks;
- stubble quail;
- sambar deer;
- hog deer;
- red deer; and

⁶⁹⁴ J. Malloy, *Submission*, no. 223, 3 July 2007, p. 2.

⁶⁹⁵ R. Bentley, President, Prospectors and Miners Association of Victoria, *Transcript of evidence*, Melbourne, 19 November 2007.

⁶⁹⁶ R. Bentley, President, Prospectors and Miners Association of Victoria, *Transcript of evidence*, Melbourne, 19 November 2007.

⁶⁹⁷ See for example: R. Newnham, Regional Manager, West, Parks Victoria, *Transcript of evidence*, Halls Gap, 3 July 2007.

⁶⁹⁸ Parks Victoria, 'Hunting', viewed 11 June 2008, <http://www.parkweb.vic.gov.au/1process_details.cfm?activity=12>.

- fallow deer.⁶⁹⁹

The Committee received comparatively little evidence regarding the impact of hunting on the scale and intensity of bushfires and on the ability of relevant agencies to respond.

The Gippsland Deerstalkers Association Inc. referred to the detailed knowledge of the Alpine terrain and its flora and fauna acquired by its members over many years.⁷⁰⁰ Both the Gippsland Deerstalkers Association Inc. and the North East Deerstalkers Association expressed support for increased access to public land by various traditional land users. Mr Rod Newnham, Parks Victoria, stated that hunting had a negligible impact on bushfire prevention and suppression.⁷⁰¹

In conclusion, the Committee notes the strong interest that recreational hunters have in effective land and fire management and finds that hunting has had a negligible impact upon the scale and intensity of recent fires. The Committee also notes that hunting on public land is a valuable source of local knowledge and, in common with other traditional land uses, plays an important role in sustaining the network of vehicle access tracks used in bushfire suppression.

Camping

As with hunting, the Committee did not receive any evidence to suggest that camping contributes directly to the scale and intensity of bushfires or that it detracts from the ability of relevant agencies to respond. However, the Committee did receive evidence regarding the associated risks of campfires. Unlike the traditional land uses discussed above, the Committee received no significant evidence of a decline in access to public land for camping.

The bushfire risks associated with campfires, which are a common but not universal feature of camping and which are not restricted to camping per se, are well recognised and addressed in various publications of land and fire management agencies. Both DSE and Parks Victoria have published Camping Codes which seek to regulate this risk. Parks Victoria has also published the following restrictions in relation to campfires in national parks:

Fires may be lit only in fireplaces provided, or as directed by signs. No fires at all may be lit on days of Total Fire Ban. Gas or fuel stoves have less environmental impact and are preferred. Fires are not permitted in some parks.

...

No fires at all (including gas or fuel stoves in tents) may be lit on days of Total Fire Ban.

⁶⁹⁹ Department of Sustainability and Environment, 'What Can I Hunt?' viewed 11 June 2008, <<http://www.dse.vic.gov.au>>.

⁷⁰⁰ Gippsland Deer Stalkers Association Inc., *Submission*, no. 26, 4 May 2007, p. 1.

⁷⁰¹ R. Newnham, Regional Manager, West, Parks Victoria, *Transcript of evidence*, Halls Gap, 3 July 2007.

Such bans do not necessarily apply to the whole State; it's your responsibility to find out which Fire Ban district you're in, and whether a Total Fire Ban has been declared on a particular day.⁷⁰²

Both Parks Victoria and DSE acknowledged that campfires are a small but significant source of bushfires.⁷⁰³ Mr Ken King, Executive Director, Land and Fire Management DSE, quantified the bushfire risk associated with campfires as follows:

In terms of access, about 10 per cent of fires have been started by campfire escapes over the last 30 years, and that has been relatively consistent; that is in our data. I suppose the measure there is people who go around and use campfires. We do not have any data which would give an indication of whether there has been an increase in the number of people going out and lighting campfires, [and] therefore [whether] in relative terms it has diminished.⁷⁰⁴

In conclusion, the Committee notes that while campfires are a small but significant source of bushfires, it received no evidence to suggest that camping has had a significant impact on the scale and intensity of bushfires in recent years. While the presence of campers may present some complications for land and fire agencies during bushfire suppression operations, the Committee received no evidence to suggest that this challenge was any greater than that posed by the presence of other land users. Finally, the Committee notes that, as with the range of traditional land uses discussed above, access to public land for the purposes of camping also encourages the maintenance of a network of vehicle access tracks on public land.

Apiary

Although not specifically referred to in the terms of reference, apiary is a commercial activity which is especially vulnerable to the environmental damage caused by large bushfires and which was particularly adversely affected by the recent fires.

Honey production in Victoria is largely reliant on access to native flora. Approximately 5,100 tonnes of honey is produced annually in Victoria, around 15.6 per cent of the national total, with a farm gate value of \$7.9 million in 1997/98.⁷⁰⁵

According to the Victorian Apiarists Association Inc. there are nearly 2,000 registered beekeepers currently operating in Victoria, either part-time as hobbyists or as commercial producers of honey.⁷⁰⁶ The Association notes

⁷⁰² Parks Victoria, 'Looking After Our Parks', viewed 11 June 2008, <http://www.parkweb.vic.gov.au/1process_content.cfm?main=15&page=2>.

⁷⁰³ R. Newnham, Regional Manager, West, Parks Victoria, *Transcript of evidence*, Halls Gap, 3 July 2007; K. King, Executive Director, Land and Fire Management, Department of Sustainability and Environment, *Transcript of evidence*, Melbourne, 4 June 2007.

⁷⁰⁴ K. King, Executive Director, Land and Fire Management, Department of Sustainability and Environment, *Transcript of evidence*, Melbourne, 4 June 2007.

⁷⁰⁵ Department of Sustainability and Environment, *Victoria's State of the Forests Report*, Department of Sustainability and Environment, Melbourne, 2005, p. 9.

⁷⁰⁶ Victorian Apiarists Association, *Submission*, no. 191, 5 June 2007, p. 1.

that the industry is an important source of crop pollination for horticulture and agriculture, with a national benefit to crop yields which has been estimated at \$2 billion each year.⁷⁰⁷ The Association also notes that because around 85 per cent of Victorian honey production is obtained from eucalypt species “native forests on public and freehold land ... play a critical role in maintaining prosperous commercial honeybee populations”.⁷⁰⁸ The Association described the land and fire management knowledge held by Victoria’s apiarists as follows:

Victorian beekeepers spend much of their working life in the forests of the state’s public lands and ...[have] considerable experience in dealing with the threat and aftermath of fire events.⁷⁰⁹

This point was reiterated by the Sunraysia Apiarists Association, which stated that beekeepers are a valuable resource that could be used more extensively in fire management.⁷¹⁰

According to the Gippsland Apiarists Association Inc., 201 apiary sites were affected by the Great Divide Complex South fire out of a total of 870 sites.⁷¹¹ The Association stated that the industry “desperately needs greater access to areas we are presently restricted and excluded from such as national and state parks”.⁷¹²

The Committee received no evidence to suggest that apiarists have had a significant impact on the scale and intensity of bushfires in recent years. The Committee also notes that apiarists play an important role in maintaining the network of vehicle tracks on public land in the same way as general 4WD users outlined above. The Committee is particularly mindful of the pressures faced by apiarists following the recent fires and of the important role that the industry plays in agriculture. For these reasons, the Committee believes that the Government should consider all available means, consistent with conservation values, for increasing the access of apiarists to the public land estate.

Recommendation 5.3:

That the Victorian Government consider all available means, consistent with conservation values, for substantially increasing the access of apiarists to the public land estate.

⁷⁰⁷ Victorian Apiarists Association, *Submission*, no. 191, 5 June 2007, p. 1.

⁷⁰⁸ Victorian Apiarists Association, *Submission*, no. 191, 5 June 2007, p. 2.

⁷⁰⁹ Victorian Apiarists Association, *Submission*, no. 191, 5 June 2007, p. 2.

⁷¹⁰ Sunraysia Apiarists Association, *Submission*, no. 220, 19 June 2007, p. 2.

⁷¹¹ Gippsland Apiarists, *Submission*, no. 192B, 17 September 2007, p. 2.

⁷¹² Gippsland Apiarists, *Submission*, no. 192B, 17 September 2007, p. 2.

