# Parliament of Victoria

# Victoria's timber industry in a time of transition

Ellie Florence & Angus Tonkin

No. 3 | October, 2023

# Table of Contents

Table of Contents	1
Executive Summary	2
Abbreviations	3
Introduction	4
1   History of forestry in Victoria	5
2   Industry snapshot	10
3   Party policies	22
4   Recent debates and events	27
5   Challenges	41
Conclusion	51
Terminology	52
Reference List	54

# **Executive Summary**

In May 2023 the Victorian Government announced that its ban on native timber harvesting would begin on 1 January 2024, six years earlier than the original planned exit in 2030. This announcement has profound implications for Victoria's forestry industry and the state's forest management framework. The oncoming ban on native timber harvesting is the latest development in a long history of forestry in Victoria, which has led to a largely privatised timber industry that will soon be solely plantation-based. This Research Paper provides a brief history of forestry in Victoria and a snapshot of the industry as it stands on the eve of the ban. It also summarises the breadth of party policy on this issue, together with some of the reactions to the announcement and the associated transition program.

Debate around forestry is characterised by considerable debate among a wide variety of stakeholders across the political sphere, industry, community and academia, with diverse views on how the industry ought to proceed and what sustainable forestry looks like. Consensus has been historically hard to come by and this continues to be the case, with present concerns relating to the transition, timber supply, regional employment, forest sciences and management approaches, the use and impacts of fire, Traditional Owner knowledge and involvement, climate change and biodiversity. This paper provides a summary of some of the recent debates and events that have shaped discussion and party policy, together with some of the challenges facing Victoria's forestry industry as it moves into a new phase.

# Abbreviations

AO	Allocation Order (Vic)	
CFA	Country Fire Authority	
CFMEU	Construction, Forestry, Maritime, Mining and Energy Union	
DAFF	Department of Agriculture, Fisheries and Forests (Cth)	
DEECA	Department of Energy, Environment and Climate Action (Vic) (from 1 January 2023)	
DELWP	Department of Environment, Land, Water and Planning (Vic) (until 31 December 2022)	
EPBC Act	Environment Protection and Biodiversity Conservation Act 1999 (Cth)	
ESFM	Ecologically sustainable forest management	
FFMV	Forest Fire Management Victoria	
FMPs	Forest Management Plans (Vic)	
FSC	Forest Stewardship Council	
GDFLU	Glasgow Leaders' Declaration on Forests and Land Use	
GLaWAC	Gunaikurnai Land and Waters Aboriginal Corporation	
HVP	Hancock Victorian Plantations	
IPCC	Intergovernmental Panel on Climate Change	
LCEPC	Legislative Council Environment and Planning Committee	
NFPS	National Forest Policy Statement	
OCR	Office of the Conservation Regulator	
PEFC	Programme for the Endorsement of Forest Certification	
RFAs	Regional Forest Agreements	
RW	Responsible Wood	
SMZs	Special Management Zones (Vic)	
TLaWC	Taungurung Land and Waters Council	
TRP	Timber Release Plan	
TUP	Timber Utilisation Plan	
VAGO	Victorian Auditor-General's Office	
VEAC	Victorian Environmental Assessment Council	
VFPA	Victorian Forest Products Association	

#### Introduction

Timber harvesting and the forestry industry have long been central parts of Victoria's social, political and economic landscape—both as an economic driver for many regional communities but also as a battleground for the conservation movement and the issue of climate change.

The announcement of the end of native timber harvesting in 2019 once again brought the timber industry into focus as a point of considerable discussion and debate. The announcement also demonstrated the wide range of industries, stakeholders and communities across the state that are involved in the timber industry: mill workers, drivers, firefighters, environmental activists, construction and manufacturing workers, environmental lawyers, industry unions and associations, government agencies, plantation and mill businesses, state and federal governments, Traditional Owners, scientists and researchers, and more. The ban also highlighted ongoing competing philosophies and approaches regarding forest management, including 'mixed use', resource management, animal rights, and ecological concerns.¹ The Victorian timber harvesting industry is undergoing a significant period of change in the face of a changing legislative landscape, the growing impacts of climate change and catastrophic weather events, increasing concerns about environmental degradation and risks to biodiversity, together with shifts in supply and demand for timber and wood products.

The phase-out of native timber harvesting has also formed a flashpoint in Victorian state politics, and the upcoming dissolution of VicForests and changes to government departments and ministries will have implications for the legislative and regulatory structure surrounding the industry. Communities most affected by the wind-down of native timber harvesting, predominantly rural and regional communities, face the uncertainty of a rapidly changing industry, and environmental activist groups and political parties continue to express concern about the state's forests in relation to a rapidly changing climate and uncertainty in environmental protection laws.

This research paper provides an overview of the intersecting stakeholders, debates, policies, legislation and economic factors that make up the Victorian forestry sector, as well as the future challenges and directions facing the industry. The paper is focused on the timber industry, but also examines the forest management frameworks and policies that inform the industry and covers related issues such as environmental conservation and bushfire management, including Traditional Owner knowledges and practices. It provides a brief history of Victorian forestry from Indigenous land management through colonisation to the environmental conservation movement and contemporary forestry priorities and practices.

The paper outlines Victoria's legislative and regulatory framework and provides a snapshot of the industry as it prepares for the end of native timber harvesting in January 2024. The relevant policies of the Victorian major parties and the crossbench are explored, along with recent events and debates. Finally, this paper explores the future challenges and directions facing the industry in Victoria, including: gaps in data and knowledge about how to best manage forests; the need for more involvement of Traditional Owners in forest management and planning; the continued impacts of climate change and the incoming El Niño weather pattern; and the ongoing risks of catastrophic bushfires and extreme weather events. While not intended as a complete account of Victorian forestry, it aims to inform ongoing debate and decision-making about the timber industry during its transition.

<sup>&</sup>lt;sup>1</sup> B. Coffey (2019) 'Environmental policy', in P. J. Chen, N. Barry, J. R. Butcher, D. Clune, I. Cook, A. Garnier, Y. Haigh, S. C. Motta & M. Taflaga, (eds) *Australian politics and policy: senior edition*, Sydney, Sydney University Press, pp. 559-579. DOI: 10.30722/sup.9781743326671

# 1 | History of forestry in Victoria

# Pre-settlement to 1899: Landscape management and a growing colony

An estimated 30 per cent of Australia's landmass was covered by forest at the start of European settlement.² It is now widely accepted that the landscape was not 'untouched' by human intervention when European's arrived. Australia's First Peoples had managed and altered what would become the colony's landscapes for hundreds of thousands of years, including its forests and woodlands.³ The most commonly discussed Indigenous land management technique is the use of fire, particularly in regard to controlled burns and fuel management, but it was also used in hunting and habitat management.⁴ For example, settlers observed Indigenous Victorians' burning practices at Cape Schanck, Mt Arapiles, and in central Victoria.⁵ The fires were generally in small areas of grassland plains and open forests and had led to the development of 'park-like' areas around Melbourne and more heavily vegetated areas to the north-east.⁶ Experts have found that Victoria's forested areas have become more flammable since colonisation, suggesting they were managed by First Peoples to reduce the risk of large and destructive fires.⁵ Settler farmers in the early colonial period mimicked these forest management practices to reduce the risks of bushfires to their properties.⁵

Victoria's forests in the early 18th century were shaped by largely unregulated logging by squatters seeking access to pastoral land. Unregulated land-clearing resulted in a huge reduction of forested area, exacerbated by licence regulations and legislation (both Victorian and Commonwealth) that were designed to 'open up' the colony of Victoria to pastoral settlement and 'break the dominance of the squatters'. For most of the 19th century, timber harvesters 'used the forest under cheap, quarterly, fixed rate licences and did not have to pay royalties on the timber they extracted'. There was little planning or conservation of the landscape.

The discovery of gold in Ballarat and Bendigo in 1851 resulted in a population explosion, and a subsequent increase in demand for timber<sup>11</sup> meant a dramatic uptake in logging and harvesting, over which the government 'exerted only the slightest of controls'.<sup>12</sup> In particular, the Gold Rush fuelled an increased demand for local timber; until then, the bulk of Victoria's sawn log supply had been imported from Sydney, Launceston and the west coast of North

<sup>&</sup>lt;sup>2</sup> C. J. A. Bradshaw (2012) 'Little left to lose: deforestation and forest degradation in Australia since European colonization', *Journal of Plant Ecology*, 5(1) pp. 109-120.

<sup>&</sup>lt;sup>3</sup> These historical debates have influenced contemporary discussions around forest management, including the 'wilderness myth' and the possibility of ecologically sustainable forestry, particularly in relation to protected species and bushfire prevention (see 'Current debates').

<sup>&</sup>lt;sup>4</sup> T. Griffiths (2001) Forests of ash: An environmental history, Cambridge, Cambridge University Press; B. Gammage (2012) The biggest estate on earth: How Aborigines made Australia, Sydney, Allen & Unwin; M. S. Fletcher et al. (2021) 'Catastrophic bushfires, indigenous fire knowledge and reframing science in Southeast Australia', Fire, 4(3), p. 61; B. Gammage & B. Pascoe (2021) Country: Future fire, future farming, Sydney, Thames & Hudson Australia.

<sup>&</sup>lt;sup>5</sup> F. Cahir et al. (2016) 'Winda Lingo Parugoneit or Why set the bush [on] fire? Fire and Victorian Aboriginal people on the colonial frontier', *Australian Historical Studies*, 47(2) pp. 225–240, https://doi.org/10.1080/1031461X.2016.1156137

<sup>&</sup>lt;sup>6</sup> F. Cahir et al. (2016) op cit.

<sup>&</sup>lt;sup>7</sup> M. Mariani et al. (2023) 'Feeding the flames: how colonialism led to unprecedented wildfires across SE Australia', EGU General Assembly 2023, Vienna, Austria, 24-28 April, EGU23-3238.

<sup>&</sup>lt;sup>8</sup> M. S. Fletcher et al. (2022) 'How 1970s conservation laws turned this 'paradise on earth' into a tinder box', *The Conversation*, 1 November.

<sup>&</sup>lt;sup>9</sup> T. Griffiths (2001) op. cit., p. 33.

<sup>&</sup>lt;sup>10</sup> T. Griffiths (2001) op. cit., p. 77.

<sup>&</sup>lt;sup>11</sup> L. T. Carron (1995) *A history of forestry in Australia*, Canberra, Australian National University Press.

<sup>&</sup>lt;sup>12</sup> L. T. Carron (1995) op. cit., p. 179.

America.<sup>13</sup> The first sawmills in Victoria are believed to have been established in Portland in 1858, and another 71 were established across the state within a year.<sup>14</sup> The Gold Rush saw ballooning populations around Melbourne, and demand for building materials led to increased production of timber by local sawmills. Widespread destruction of forests in the goldfields districts resulted in the logging of the mountain forests surrounding the more remote mining settlements.<sup>15</sup> Furthermore, the expanding railway system both allowed deeper access to the resources of mountain forests and created demand for sleeper logs to build rail lines.

As well as the discovery of gold, 1851 was also marked by the largest bushfires recorded to date in the state, the 'Black Thursday' fires of 6 February. The fires further depleted Victoria's native forests and flagged the beginning of more conservation-oriented thinking in and about the timber industry. Calls for conservation came as early as the 1860s, when reports warned that 'unregulated clearing of forests could lead to "unwelcome climatic changes at no very distant date". <sup>16</sup> Environmental historian Tom Griffiths writes that the Land Act 1862 was 'the first Victorian legislation to create reserves for the "growth and preservation of timber", and over the next ten years 400,000 acres were set aside as state forest or timber reserves. <sup>17</sup> A Conservator of Forests was appointed in 1888. <sup>18</sup>

# 1900-1957: Developing industry

Despite a series of Victorian Land Acts designed to reserve land for timber production, concerns over continued widespread destruction and unregulated logging of the state's forests resulted in a Royal Commission into Forestry in Victoria in 1897.<sup>19</sup> One outcome was the establishment of the Forests Department and the Ministry for Forests in 1908, under the *Forests Act 1907*. The Act, which also appointed the Conservator as the head of the department, aimed to establish 'permanently reserved forest and provision for further dedication; for control of forest produce on unoccupied crown land; and for the collection of royalties'.<sup>20</sup> However, Griffiths points out that the dominant concern for governments and foresters remained 'to maximise timber production and hence revenue for the Crown',<sup>21</sup> rather than any ecological concerns.

A 'much more comprehensive'<sup>22</sup> Forests Act 1918 established a Forests Commission, and from 1919 half of any income made from royalties was funnelled into a Forest Fund. The Commission also established a statewide plantation program, particularly of exotic softwood species.<sup>23</sup> A wider plantation program would continue well into the late 20<sup>th</sup> century. The Forests Act also signalled a move towards a more scientific and rationalised approach to forestry as a field of expertise and 'guided by scientific and technical forest management principles'.<sup>24</sup> These changes in legislation and regulations signalled a shift in the perceptions of Victoria's forests, away from being the 'wastelands of the Crown'<sup>25</sup>—i.e. obstacles to developing land for agriculture—and towards an appreciation of their value in supplying a timber-processing industry.

In 1936 the Wood Pulp Agreement signalled another significant shift in the government's relationship to the timber industry through the establishment of the first commercial wood pulp mill, run by Australian Paper Manufacturers Ltd. (APM) in the Latrobe Valley. The sales

<sup>&</sup>lt;sup>13</sup> T. Griffiths (2001) op. cit.

<sup>&</sup>lt;sup>14</sup> F. R. Moulds (1991) *The dynamic forest: a history of forestry and forest industries in Victoria*, Richmond, Lynedoch Publications.

<sup>&</sup>lt;sup>15</sup> T. Griffiths (2001) op. cit.

<sup>&</sup>lt;sup>16</sup> ibid., p. 34.

<sup>&</sup>lt;sup>17</sup> ibid., p. 78.

<sup>&</sup>lt;sup>18</sup> ibid.

<sup>&</sup>lt;sup>19</sup> L. T. Carron (1995) op. cit.

<sup>&</sup>lt;sup>20</sup> ibid., p. 183.

<sup>&</sup>lt;sup>21</sup> T. Griffiths (2001) op. cit., p. 78.

<sup>&</sup>lt;sup>22</sup> L. T. Carron (1995) op. cit.

<sup>23</sup> ibid.

 <sup>&</sup>lt;sup>24</sup> B. Doolan (2017) Institutional Continuity and Change in Victoria's Forests and Parks 1900 – 2010, masters thesis, Monash University, p. 27.
 <sup>25</sup> ibid.

agreement, ratified by Parliament, meant the government was obliged to provide minimum supplies of timber—mostly mountain ash—to APM, and would stand in place for 50 years. The agreement marked a dramatic increase in private involvement in an otherwise largely government-managed industry. APM established its own plantations in 1950 to expand its operations. The agreement was enlarged in 1961 and would eventually be replaced by the Forests (Wood Pulp Agreement) Act 1996, an Act that would ensure 'fixed pulp log volumes from ash-type forests of the Central Highlands of Victoria were guaranteed by the state to a private company for 34 years'. 28

Following the devastating Black Friday fires of 1939 and a subsequent royal commission, a Department of State Forests was established and the management of forests moved from the Forestry Commission to the new entity (by the *Forests Act 1939*). This allowed the department to meet the increased demand for wood products amid the cessation of imports during the Second World War and the onset of the post-war construction boom.<sup>29</sup> The Royal Commission also reinforced the need for the department to be properly resourced for fire protection and management and expanded the Forestry Commission's remit to include national parks and other public lands. It has been argued that the Black Friday fires made 'control of fire the central problem of Victorian forest management for most of the next forty years'.<sup>30</sup> Timber production also moved into East Gippsland and the north-east region, as much of the Central Highlands had been over-logged or destroyed by fire.

# 1958–2000: Environmental conservation and plantations

The Forest Act 1958 succeeded the existing 1939 Act and remains the overarching legislation governing the management of state forests (see 'Industry snapshot'). The Act and other legislation further extended the state's plantation program. The Land (Plantations Areas) Act 1959 made crown land available for companies for pine planting and harvesting. This ultimately resulted in the clearing of native forests to make way for plantations, a practice that continued into the 1980s.<sup>31</sup>

While there were earlier efforts to conserve Victoria's forests, these remained largely focused on conserving the supply of timber for the state. A focus on conservation for the sake of protecting biodiversity and threatened ecologies did not gain traction until the 1960s and 70s. The Australian Forestry Council was established in 1964 and co-ordinated a national approach to preserving the environment. The 1960s also marked a significant expansion of the softwood plantation industry; the Softwood Forestry Agreements in 1967<sup>32</sup> and the Farm Forestry Program—which had begun in earnest in 1966<sup>33</sup>—further expanded the available areas for sourcing plantation timber.

The proposed clearing of the Little Desert bushland in western Victoria in 1969 for agricultural development was significant in increasing awareness about environmental issues in Victoria. This proposal drew attention to the government's expanding plantation program, which often relied on the clearing of native forests to make way for federally funded softwood plantations.<sup>34</sup> The environmental movement's impact on forestry can be seen in

<sup>&</sup>lt;sup>26</sup> B. Doolan (2017) op. cit.

<sup>&</sup>lt;sup>27</sup> E. K. Sinclair (1991) *The spreading tree: A history of APM and Amcor 1844–1989,* North Sydney, Allen & Unwin.

<sup>&</sup>lt;sup>28</sup> D. Lindenmayer & C. Taylor (2022) 'Diversifying forest landscape management–A case study of a shift from native forest logging to plantations in Australian wet forests', *Land*, *11*(3), 407, p. 5.

<sup>&</sup>lt;sup>29</sup> L. T. Carron (1995) op. cit.; J. Dargavel (2018) 'Views and perspectives: why does Australia have 'forest wars'?', *International Review of Environmental History, 4*(1), pp. 33-51.

<sup>&</sup>lt;sup>30</sup> B. Doolan (2017) op. cit., p. 39.

<sup>&</sup>lt;sup>31</sup> J. Dargavel (2018) op. cit.

<sup>&</sup>lt;sup>32</sup> L. T. Carron (1995) op. cit.

<sup>&</sup>lt;sup>33</sup> F. R. Moulds (1991) op. cit.

<sup>&</sup>lt;sup>34</sup> J. Dargavel (2018) op. cit.; P. Burnett (2023) 'Has time been called on the native forest logging deals of the 1990s? Here's what the Albanese government can do', *The Conversation*, 8 June.

the Land Conservation Act 1970 (which also established the Land Conservation Council),<sup>35</sup> the Wildlife Act 1975, and the establishment of the Wilderness Society in 1976 (then named Tasmanian Wilderness). The 1960s also marked the emergence of the environment as a major policy concern for the state government, with forestry subsequently moving in and out of environmental portfolios across the decades.<sup>36</sup>

Through the 1980s, a legislative landscape for forestry emerged that strove to balance environmental conservation with commercial timber production in Victorian forests (see 'Industry snapshot'). By that time, 30 per cent of Australia's forests had been severely modified by clearing.<sup>37</sup> The 1983 Ash Wednesday bushfires destroyed 200,000 hectares of forests in Victoria and further exacerbated the trend.<sup>38</sup> The Australian Conservation Foundation pushed for 'wood production [to] be transferred out of native forests ... to plantations established outside the current forest estate',<sup>39</sup> and a Board of Enquiry into the Timber Industry of Victoria (the Ferguson Inquiry) was established in December 1983.<sup>40</sup>

The year 1983 also marked the establishment of the Department for Conservation, Forests and Lands, bringing together both the Ministry of Conservation and the Lands Department. The new department represented a government policy focused on sustainable development and the provision of 'mixed use' forests—i.e. forests that balanced environmental conservation and recreation with supplying the timber and wood pulp industries. The conservation element was further developed within the *Flora and Fauna Guarantee Act 1988*. The first Timber Industry Strategy (TIS) was released in 1986, signalling a focus on ensuring a profitable and competitive industry that relied more on plantations than native forests. The *Conservation, Forests, and Lands Act 1987* introduced the Code of Practice for Timber Production, which also affected plantation timber companies through the *Planning and Environment Act 1987*. The Code of Practice continues to underpin forest management today (see 'Industry snapshot' and 'Recent debates and events').

Calls were growing in the early 1990s for a coordinated national approach to forestry. <sup>41</sup> In response, most state and territory governments committed to the Federal Government's National Forest Policy Statement. <sup>42</sup> Over the years that followed, Victoria established several Regional Forest Agreements (RFAs) for its main areas of forestry (see 'Industry snapshot'). This was a continuation of a shift away from native timber harvesting. At the same time, the Forests (Wood Pulp Agreement) Act 1996 ensured APM's supply of pulp logs for its Maryvale mills (see 'Industry snapshot'), maintaining significant demand for native timber into the future.

Privatisation of the industry continued alongside these agreements throughout the 1990s. The Victorian Plantations Corporation was established in 1993 under the *State Owned Enterprises Act 1992*, and all state-owned softwood and major hardwood plantations were transferred to the corporation. Further legislation in 1998 allowed for the privatisation of these plantations,<sup>43</sup> and later that year the licences for the plantations were leased in perpetuity to Hancock Victorian Plantations<sup>44</sup> (now operating as HVP), which remains one of

<sup>&</sup>lt;sup>35</sup> D. Clode (2006) As if for a thousand years: A history of Victoria's Land Conservation and Environment Conservation Councils, Melbourne, Victorian Environmental Assessment Council.

<sup>&</sup>lt;sup>36</sup> B. Coffey (2019) Towards good environmental governance? Assessing the evolution of Victoria's environment portfolio, Parliamentary Library & Information Service, Parliament of Victoria.
<sup>37</sup> C. J. A. Bradshaw (2012) op. cit.; K. F. Wells et al. (1984) Loss of forests and woodlands in Australia: a summary by state, based on rural local government areas, Canberra, CSIRO Division of Water and Land Resources.

<sup>&</sup>lt;sup>38</sup> Victoria Bushfire Review Committee (1984) *Report of the Bushfire Review Committee on bushfire disaster preparedness and response in Victoria, Australia, following the Ash Wednesday fires of 16 February, 1983*, final report, Melbourne, The Committee, April; Country Fire Authority (2023) Ash Wednesday 1983, CFA website.

<sup>&</sup>lt;sup>39</sup>J. Dargavel (2019) op. cit. p. 38; See also S. Ferguson (1985) *Report of the Board of Inquiry into the Timber Industry in Victoria*, Department of Conservation, Forests, and Lands, Melbourne.

<sup>&</sup>lt;sup>40</sup> B. Doolan (2017) op. cit.

<sup>&</sup>lt;sup>41</sup> P. Burnett (2023) op. cit.

<sup>&</sup>lt;sup>42</sup> M. Mariani et al. (2023) op. cit.

<sup>&</sup>lt;sup>43</sup> B. Doolan (2017) op. cit., p. 73.

<sup>&</sup>lt;sup>44</sup> B. Doolan (2017) op. cit., p. 73.

the largest exporters of timber in the state.<sup>45</sup> The *Sustainable Forests (Timber) Act 2004* established VicForests, 'separat[ing] timber utilisation from environmental management of state forests',<sup>46</sup> and mandating that VicForests enact a Sustainability Charter in line with the above RFAs.

Today's forestry industry in Victoria remains a complex network of private and state interests, managed through a complex regulatory framework (see 'Industry snapshot'). It continues to evolve in response to changing priorities and forestry philosophies (see 'Recent debates and events').

<sup>&</sup>lt;sup>45</sup> DEECA (2023) 'Plantations', DEECA website.

<sup>&</sup>lt;sup>46</sup> B. Doolan (2017) op. cit., p. 83.

# 2 | Industry snapshot

Victoria's timber industry is presently geared towards the goal of sustainable forest management, balancing environmental values with a reliable supply of timber resources. Its regulatory framework is spread across all levels of government through a combination of policy, codes, planning documents and legislative instruments. The following is a snapshot of the industry as it stands today. Although, with Victoria bringing forward its exit from native timber harvesting to 1 January 2024, it is likely to change soon.

#### Administration

#### Federal

Forest management policy in Australia is underpinned by the principles of ecologically sustainable forest management (ESFM). While state and territory governments have principal responsibility, the principle of ESFM stems from the 1992 *National Forest Policy Statement* (NFPS), which outlined how Australia's native forests ought to be managed. This approach recognises the importance of forests for a range of values—not just the resources and benefits they provide for humans through wise use, including cultural value, but also the central role forest ecosystems play in our environment and the need to protect the breadth of biodiversity they host. Regional Forest Agreements were established for ten commercial native timber harvesting regions around Australia.<sup>47</sup> Victoria contains five of these, being one of the most productive timber-producing states: East Gippsland (signed 3 February 1997); Central Highlands (signed 27 March 1998); North East (signed 23 August 1999); Gippsland (signed 31 March 2000); West (signed 31 March 2000).<sup>48</sup>

The RFAs provide the framework for management of native forests, including provisions for timber harvesting operations but also conservation of ecological value. The federal Department of Agriculture, Fisheries and Forestry (DAFF) manages these agreements with its state and territory counterparts, currently under the remit of the Minister for Agriculture, Fisheries and Forestry.<sup>49</sup> In 2019, a study found that native forest ecosystems protected by reserves in Victoria's RFAs had increased by 19 per cent since the signing of the RFAs, but a mix of fire and harvesting had seen old growth forests within reserve systems decrease.<sup>50</sup>

It was originally planned these RFAs would last 20 years. In March 2020 the Victorian agreements were updated and extended to 2030 to align with the Victorian Government's proposed timeline for phasing out native timber harvesting in state forests in favour of private plantations. Updates included the ability for the state to terminate an RFA when 12 months' notice is provided and the integration of climate change and Traditional Owners' knowledge into planning and management operations.

Another RFA change included a shift from 'sustainable yield' forecasts—a limit for how much wood can be sustainably extracted from forests—which can apply in perpetuity, to 'harvest level'. <sup>51</sup> The 'harvest level', which is reviewed at regular intervals, is the forecast amount of wood 'that can be harvested from native forests in any financial year, consistent with Ecologically Sustainable Forest Management'. The harvest level is also subject to major event reviews (MERs), such as the one conducted after the 2019–20 Black Summer fires to assess impacts on state forest estate (see 'Recent debates and events'). <sup>52</sup> The Victorian

<sup>&</sup>lt;sup>47</sup> Department of Agriculture, Fisheries and Forestry (DAFF) (2023) 'RFA history', DAFF website.

<sup>&</sup>lt;sup>48</sup> DAFF (2023) 'Victorian Regional Forest Agreements', DAFF website.

<sup>&</sup>lt;sup>49</sup> DAFF (2023) 'Who we are', DAFF website.

<sup>&</sup>lt;sup>50</sup> Jacobsen, R., Davey, S. & Read, S. (2020) '*Regional forest agreements: compilation of reservation and resource availability outcomes*, report prepared for the Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES) Canberra, DAFF, December, pp. 17–19.

<sup>&</sup>lt;sup>51</sup> Department of Energy, Environment and Climate Action (DEECA) (2022) 'Victorian Regional Forest Agreements', DEECA website; DEECA (2023) 'Commercial timber production from public forests', DEECA website.

<sup>&</sup>lt;sup>52</sup> DEECA (2023) 'Commercial timber production from public forests', op. cit.; DEECA (2022) 'The Major Event Review of Regional Forest Agreements', DEECA website.

Government is required to report to the Federal Government on the harvest level of its state native forests.

Management performance and forest health are also monitored through the Australian Government's *State of the Forests* publication series, published every five years. The last of these was published in 2018, with the next expected later in 2023.

#### State

At a state level, Victoria's timber harvesting industry has sat under the purview of the **Department of Energy, Environment and Climate Action (DEECA)** since 1 January 2023 when it succeeded the Department of Environment, Land, Water and Planning (DELWP). The bulk of forestry-related legislation is administered by the **Minister for Agriculture** and the **Minister for Environment**. DEECA oversees the relevant agencies, VicForests and Forest Fire Management Victoria (FFMV), and is responsible for:

- forest management policy and planning, including the regulation of commercial forest uses, such as timber harvesting across the state;
- bushfire management as well as the administration and approval of fire in the landscape, including regeneration burning; and
- landscape-level biodiversity, weed and pest management.

DEECA may request the independent **Victorian Environmental Assessment Council (VEAC)** to investigate the sustainable use of public land, reporting to the Minister for Environment.<sup>54</sup> The department also holds various management agreements with Traditional Owner groups to manage public land covered by native title.<sup>55</sup>

Until recently, **VicForests** was the statutory authority responsible for commercial timber harvesting activities in state forests and the regeneration of harvested areas. VicForests was deregistered as a government business on 5 September 2023 and declared to be a reorganising body, with its components to be absorbed into other areas of DEECA.<sup>56</sup>

The *Victorian Forestry Plan*, established in 2019, is the Victorian Government's chief planning document for the forestry industry. It charts the state's move away from native timber harvesting in state forests towards a plantation-based industry.<sup>57</sup> A complete phase-out of native timber harvesting in state forests was to happen by 2030, but in early 2023 this deadline was brought forward to 1 January 2024.<sup>58</sup> The implementation of this plan is aided by the government's Forestry Transition Program.

In addition to the national *State of the Forests* report, the Victorian Commissioner for Environmental Sustainability also produces a five-yearly *State of the Forests* report for Victoria. The last such Victorian report was published in 2018, with the next to be published in 2023, in line with the national *State of the Forests* reporting timeline.

# Legislation

A number of Acts create the overarching framework for management of state forests, timber resources and forest values. These are subject to change, although there is no indication at the time of writing of what legislative reform will accompany the end of native timber harvesting and expansion of plantation activity.

Victoria's *Forests Act 1958* is the overarching legislation governing the management of state forests and is administered jointly by the Minister for Agriculture and the Minister for

<sup>&</sup>lt;sup>53</sup> Victorian Government (2023) 'General Order dated 5 December 2022', Victorian Government website.

<sup>&</sup>lt;sup>54</sup> DEECA (2023) 'Victorian Environmental Assessment Council (VEAC)', DEECA Website.

<sup>&</sup>lt;sup>55</sup> DEECA (2023) 'Agreements with Traditional Owners', DEECA Website.

<sup>&</sup>lt;sup>56</sup> Victorian Government (2023) *Victoria Government Gazette*, no. s 475; K. Rooney (2023) 'Victoria moves towards winding up logging business VicForests', *The Age*, 7 September.

<sup>&</sup>lt;sup>57</sup> Victorian Government (2019) *Victorian Forestry Plan*, Melbourne, Victorian Government.

<sup>&</sup>lt;sup>58</sup> DEECA (2023) 'Ending native timber harvesting', DEECA website.

Environment.<sup>59</sup> It provides for the creation of Forest Management Plans (FMPs), which give operation to Forest Management Zones.<sup>60</sup>

The Forest Management Zoning Accountability Framework, released in 2022, explains how forests are managed for different priorities through different zones:

- Special Protection Zones—managed specifically for conservation values
- Special Management Zones (SMZs)—managed to conserve specific features
- General Management Zones (GMZs)—managed for many uses and values.<sup>61</sup>

Timber harvesting operations are prioritised only in GMZs, but may also be conducted in SMZs with special conditions.

VicForests' harvesting and regenerative operations are provided for under the **Sustainable Forests (Timber) Act 2004.** 62 The Act creates a framework for the responsible and sustainable management of state forests and forest products. It provides for the *Sustainability Charter for Victoria's State Forests* 63 and an Allocation Order (AO), whereby DEECA allocates a prescribed amount of state forest timber resources to VicForests for harvest and/or sale. The Act also requires VicForests to supply a Timber Release Plan (TRP) for departmental approval, which provides details of coupes approved for harvesting, among other operations.

The Sustainable Forests (Timber) Act also mandates that operators comply with a code of practice. The Code of Practice for Timber Production 2014 (the Code of Practice)—updated in 2021 and 2022—is created under the Conservation, Forests and Lands Act 1987.<sup>64</sup>

Together, the Code of Practice and the Forest Management Zoning Accountability Framework provide a baseline for operating behaviour in controlling industry operations. Supplementary to the Code of Practice are the Management Standards and Procedures for timber harvesting operations in Victoria's State forests 2021,<sup>65</sup> which advise VicForests and state forest contractors on operating obligations. Private operators must also comply with the Code of Practice by adhering to the Management guidelines for private native forests and plantations.<sup>66</sup>

Core principles for the Code of Practice include biodiversity, sustainability, ecosystem health, river health and a commitment that 'Historic places and Aboriginal cultural heritage within forests are protected and respected'. For VicForests is required to consult with the Traditional Owner (TO) groups with agreements through the *Traditional Owner Settlement Act 2010*. Such as required to collaborate on Aboriginal Cultural heritage assessments with relevant TO groups in planning for things such as road construction and harvesting.

Forestry operations within RFAs (subject to approval) are controversially exempt from standards imposed by the federal *Environment Protection and Biodiversity Conservation Act* 

<sup>&</sup>lt;sup>59</sup> Forests Act 1958; Victorian Government (2023) 'General Order dated 5 December 2022', op. cit.

<sup>&</sup>lt;sup>60</sup> Department of Environment, Land, Water and Planning (DELWP) (2019) Overview of Victoria's Forest Management System, Melbourne, DELWP, December, p. 10; DELWP (2022) Forest Management Zoning Accountability Framework 2022, Melbourne, DELWP, p. 11.

<sup>&</sup>lt;sup>61</sup> DELWP (2022) Forest Management Zoning Accountability Framework 2022, op. cit., p. 12.

<sup>&</sup>lt;sup>62</sup> Sustainable Forests (Timber) Act 2004. See also 'Recent events and debates' for detail around amendments made through the Sustainable Forests Timber Amendment (Timber Harvesting Safety Zones) Act 2022.

<sup>&</sup>lt;sup>63</sup> Department of Sustainability and Environment (DSE) (2023) *Sustainability Charter for Victoria's Forests*, Melbourne, DSE.

<sup>&</sup>lt;sup>64</sup> Conservation, Forests and Lands Act 1987, part 5; DELWP (2022) Code of Practice for Timber Production 2014 (as amended 2022), Melbourne, DELWP.

<sup>&</sup>lt;sup>65</sup> DELWP (2021) Management Standards and Procedures for timber harvesting operations in Victoria's State forests 2021, Melbourne, DELWP.

<sup>&</sup>lt;sup>66</sup> DELWP (2014) Management guidelines for private native forests and plantations: Code of Practice for Timber Production 2014, Melbourne, DEPI.

<sup>&</sup>lt;sup>67</sup> DELWP (2022) Code of Practice for Timber Production 2014 (as amended 2022), op. cit., p. 31.

<sup>&</sup>lt;sup>68</sup> Legislative Council Environment and Planning Committee (2021) *Inquiry into ecosystem decline in Victoria*, volume 1, Melbourne, The Committee, December, p. 215.

<sup>69</sup> Department of Environment and Primary Industries (DEPI) (2014) op. cit., pp. 47, 61, 65–67.

1999 (Cth) (see 'Recent debates and events'). <sup>70</sup> However, Victorian forestry operations are subject to the *Illegal Logging Prohibition Act 2012* (Cth) and its associated *Illegal Logging Prohibition Regulations 2012*. <sup>71</sup> Other Victorian Acts and associated regulations influencing timber industry operations include but are not limited to the *Owner Drivers and Forestry Contractors Act 2005*, the *Wildlife Act 1975*, the *Flora and Fauna Guarantee Act 1988* and a range of other legislation. <sup>72</sup>

#### Certification and standards

Industry participants may also obtain independent certification of their activities, enabling them to promote their compliance with sustainable and responsible practices. This is not part of the official regulatory system, however DAFF has stipulated that forest managers and owners in Australia can obtain certification from the Programme for the Endorsement of Forest Certification (PEFC) and the Forest Stewardship Council (FSC) (Figure 1).<sup>73</sup>

Figure 1: Logos of FSC, PEFC and Responsible Wood







Sources: FSC, Responsible Wood

Responsible Wood (RW) is the dominant certification body in Australia and is recognised by the PEFC. As of January 2023, there were 19.7 million hectares of RW-certified forest in Australia. The standards RW manage include: Sustainable Forest Management (AS/NZS 4708) (also commonly referred to as the Australian Forestry Standard); and Chain of Custody for Forest Products (AS 4707). Currently, Victorian businesses certified for Sustainable Forest Management include VicForests, Midway, Pentarch Forestry, PF Olsen (Aus) and HVP, among others. Many more are endorsed under the Chain of Custody standard.

The Forest Stewardship Council also offers forest management, 'chain-of-custody' and project certification, and licences for the promotional use of the FSC logo. VicForests was an FSC member from 2011 until 2020, when FSC determined the company had failed to meet its membership requirements.<sup>77</sup> FSC is a widely recognised label in wood products throughout Australia, with a large cross-section of Victorian businesses certified—from timber production through to end-use applications such as packaging.<sup>78</sup>

#### Fire mitigation

Forests in Victoria are managed for fire in a mixture of ways. The approach for managing fire risk in native forests is currently one of 'active management', undertaken by DEECA agencies

<sup>&</sup>lt;sup>70</sup> Department of Climate Change, Energy, the Environment and Water (DCCEEW) (2023) 'Permits and other regulation under the EPBC Act', DCCEEW website.

<sup>&</sup>lt;sup>71</sup> Australian Government and Victorian Government (2022) *State Specific Guideline for Victoria*, Canberra, DAFF, October, p. 3.

<sup>&</sup>lt;sup>72</sup> DELWP (2022) Code of Practice for Timber Production 2014 (as amended 2022), op. cit., pp. 78-80.

<sup>&</sup>lt;sup>73</sup> DAFF (2019) 'Forest Certification in Australia', DAFF website.

<sup>&</sup>lt;sup>74</sup> Responsible Wood (2023) 'Why We Exist', Responsible Wood website.

<sup>&</sup>lt;sup>75</sup> Responsible Wood (2023) 'Australian Forest Certification Schemes', Responsible Wood website.

<sup>&</sup>lt;sup>76</sup> Responsible Wood (2023) 'Custody Certified Organisations Australia', Responsible Wood website.

<sup>&</sup>lt;sup>77</sup> Forest Stewardship Council (FSC) (2023) 'FSC Certificates Public Dashboard', FSC website; FSC ANZ (2021) *Media Statement: FSC ANZ and the ABC's allegations against VicForests*, media release, 1 December.

<sup>&</sup>lt;sup>78</sup> FSC (2023) op. cit.

in cooperation with Traditional Owner groups, the main objective being protection of human life and property, while also considering ecosystem resilience.<sup>79</sup>

Fuel management and bushfire preparedness and planning are managed under DEECA by FFMV,<sup>80</sup> which includes staff employed by VicForests, Parks Victoria and Melbourne Water.<sup>81</sup> As well as providing staff and equipment to FFMV's operations (including fuel-reduction burns), VicForests is required to manage fuel loads in designated logging coupes and conducts fuel-reduction burns.<sup>82</sup> FFMV has also begun to reintroduce 'cultural fire' into the landscape in collaboration with the Federation of Victorian Traditional Owner Corporations through the *Victorian Traditional Owner Cultural Fire Strategy*.<sup>83</sup> After the announcement in May 2023 of the accelerated native timber ban, FFMV stated that harvest and haulage contractors will remain contracted by VicForests until 30 June 2024, continuing to support FFMV's fuel-reduction activities.<sup>84</sup>

While there is no single authorising entity guiding bushfire fuel management on private land,<sup>85</sup> plantation operators over a certain size are required to maintain fire brigades to mitigate the risk of forest fire either starting in or moving into plantation land. Plantation brigades are part of the CFA Forest Industry Brigades and are trained alongside CFA firefighters.<sup>86</sup> They also provide leadership and guidance as well as specialist equipment and expertise in plantation fire management that CFA firefighters may lack.<sup>87</sup>

# Regulation

#### Office of the Conservation Regulator

The Office of the Conservation Regulator (OCR), led by the Chief Conservation Regulator, was established in 2019, separating the regulatory role from the department (then DELWP). The separation was a recommendation of an independent review of DELWP's performance in regulating native timber harvesting. 88 The OCR's timber harvesting compliance unit sets standards, provides clarity and education, monitors, and enforces compliance. 89

From March 2022, the Forests Legislation Amendment (Compliance and Enforcement) Act 2021 enhanced the OCR's powers to respond to non-compliance and allowed it to consider complaints going back three years. In October 2022, the Victorian Auditor-General's Office (VAGO) reviewed the OCR's performance, concluding that while it had 'made progress in improving timber harvesting regulation', there remained 'weaknesses in its systems, processes and reporting', 90 potentially significant gaps in data-gathering practices, and inadequate processes for reviewing histories of noncompliance and evidence of change. 91 How these roles will change with the end of native timber harvesting is yet to be revealed. The current FMPs are also being reviewed and expected to be updated by the end of 2023. 92

<sup>&</sup>lt;sup>79</sup> DELWP (2022) Code of Practice for Bushfire Management for Public Land (as amended June 2022), Melbourne, DELWP, June, p. 1.

<sup>&</sup>lt;sup>80</sup> Inspector-General for Emergency Management (IGEM) (2020) *Inquiry into the 2019–20 Victorian fire season: Phase 1—Community and sector preparedness for and response to the 2019–20 fire season*, Melbourne, IGEM, July, p. 146.

<sup>81</sup> Forest Fire Management Victoria (FFMV) (2023) 'Forest Fire Management Victoria', FFMV website.

<sup>82</sup> VicForests (2022) VicForests and active forest management, media release, 1 March.

<sup>&</sup>lt;sup>83</sup> Royal Commission into National Natural Disaster Arrangements (2020) *Royal Commission into National Natural Disaster Arrangements: report*, Canberra, Commonwealth of Australia, October, pp. 395–96.

<sup>84</sup> FFMV (2023) op. cit.

<sup>85</sup> IGEM (2020) op. cit., p. 148.

<sup>&</sup>lt;sup>86</sup> Country Fire Authority (2023) 'Forest Industry Plantations', CFA website.

<sup>87</sup> ibid.

<sup>&</sup>lt;sup>88</sup> Victorian Auditor-General's Office (VAGO) (2022) *Regulating Victoria's Native Forests*, Melbourne, VAGO, p. 9.

<sup>&</sup>lt;sup>89</sup> DELWP (2019) Regulating timber harvesting in State forests under the Allocation Order: Statement Of Regulatory Intent, Melbourne, DELWP, June, pp. 9–16.

<sup>90</sup> VAGO (2022) op. cit., p. 1.

<sup>&</sup>lt;sup>91</sup> ibid. pp. 2, 4.

<sup>92</sup> DEECA (2021) 'Forest management plans', DEECA website.

# Plantations and private forestry

Managing timber harvesting on private land (most often in plantations) occurs through the Victorian Planning Provisions under the *Planning and Environment Act 1987*. Regulation of timber harvesting and management activities in private native forests and plantations, together with code compliance, is therefore the responsibility of local government through its administration of local planning schemes. He management guidelines for private plantations specify that plantation planning should ensure that management does not cause any reduction in water and soil quality or impact on Aboriginal heritage, flora and fauna, wildlife habitat or road quality.

# Industry make-up

The Victorian timber harvesting industry consists of a wide array of stakeholders. In addition to VicForests and other state entities, stakeholders also include: Traditional Owners groups; state forest contractors; plantation operators; processing mills; transport and logistics operators; timber wholesalers; construction companies; and furniture producers.

Estimates vary as to how many people the timber industry employs. When the industry categories 'Forestry and logging', 'Forestry support services', 'Timber wholesaling', 'Wood product Manufacturing' and 'Pulp and Paper Product Manufacturing' are included, Census data indicate that 17,685 people were employed in the Victorian industry in 2021.<sup>95</sup> With only about one in five employees female, the workforce is largely male (Table 1).

Maps 1 and 2 indicate the workforce is predominantly regionally based, especially in the Latrobe and Hume areas in the east, where state forests are most highly concentrated. These areas are likely to be most heavily affected by the cessation of state native timber harvesting. Meanwhile supply chain roles in manufacturing and wholesaling are still focused in the east, but are more evenly spread across the state.

Table 1: Breakdown of forestry industry employment in Victoria as of 2021, with proportion of women in workforce 96

	Total employed	Women (%)
Forestry, logging and forestry support services	2,339	22.8
Timber wholesaling	2,438	19.5
Wood product manufacturing	7,222	17.9
Pulp, paper and converted paper product manufacturing	5,693	22.5
Total	17,685	20.3

Source: ABS Census (2021)

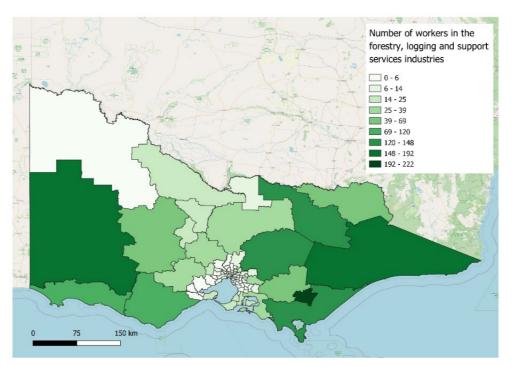
<sup>93</sup> Planning and Environment Act 1987, part 1A.

<sup>94</sup> DELWP (2019) Overview of Victoria's Forest Management System, op. cit., p. 30.

<sup>95</sup> Australian Bureau of Statistics (ABS) (2021) Census Tablebuilder, Canberra, ABS.

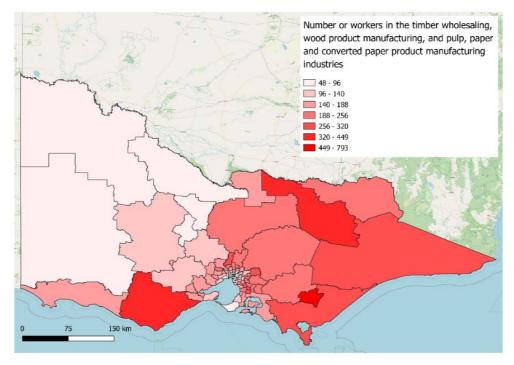
<sup>96</sup> ibid.

Map 1: Distribution of workers in forestry, logging and forestry support services roles by district  $^{97}\,$ 



Source: ABS Census (2021)

Map 2: Distribution of workers in timber wholesaling, wood product manufacturing, and pulp, paper and converted paper product manufacturing roles, by district 98



Source: ABS Census (2021)

<sup>97</sup> ibid.

<sup>98</sup> ibid.

#### Stakeholder representation

The Victorian Forestry Industry Council oversees the timber sector's industrial relations and comprises both employer and employee stakeholders. 99 Its eight full-time members include representatives from: the Victorian Forest Products Association (formerly Victorian Association of Forest Industries); the Australian Forest Products Association (the national body for the aforementioned branch); the Construction, Forestry, Maritime, Mining and Energy Union (CFMEU); the Australian Forest Contractors Association; and VicForests.

How the end of native timber harvesting and the deregistration of VicForests will impact this body has not been announced. The council, reporting to the Minister for Industrial Relations, also includes an independent chairperson, and a part-time member nominated by a government department who doesn't have voting rights. That department is listed in legislation as the former Department of Jobs, Precincts and Regions. <sup>100</sup> In June 2022, the council sat under the purview of the Department of Premier and Cabinet according to the Victorian Public Sector Commission, <sup>101</sup> not taking into account machinery-of-government changes made since.

A further body, the six-member Victorian Forestry Plan Advisory Committee, advises the Minister for Agriculture on progress of the *Victorian Forestry Plan*. <sup>102</sup> Federally, in May 2023 DAFF established a national Strategic Forest and Renewable Materials Partnership, 'a forum for industry, unions and government' to cooperate within the forest and wood products industries. <sup>103</sup>

A number of other bodies have consolidated advocacy from various parts of the forestry industry. Forestry Australia (a professional association for forestry scientists and workers) is an amalgamation of the former Institute of Foresters of Australia (IFA) and Australian Forest Growers (AFG). Environmental and conservationist stakeholders are represented by the Victorian Forest Alliance, which includes 38 grassroots environmental groups, many of which have been involved in litigation against VicForests. Further stakeholders include bodies such as Timber Towns Victoria (a joint local government body) and regional timber associations.

#### Training and career pathways

The Victorian Government currently provides assistance to Victorian students enrolling in relevant skills-development courses, including certificates and diplomas in sawmilling and processing and conservation and ecosystem management.

Part of the Forestry Transition Program includes providing existing forestry workers with retraining opportunities and/or free TAFE.<sup>104</sup> DEECA funds ForestWorks, a local training and skills provider for the forestry industry, to deliver the Victorian Forestry Worker Support Program, including support for harvest, milling and haulage workers and those employed at Opal Australian Paper.<sup>105</sup> One of ForestWorks' stated aims is 'to support forestry and timber workers who are made redundant, had their employment ended or contract finished as the result of the Victorian Forestry Plan'.<sup>106</sup> There is also support to access free TAFE through TAFE Gippsland.<sup>107</sup>

Providers of forestry programs are predominantly TAFE institutions, but tertiary education providers also provide additional career pathways. According to the National Centre for Vocational Education Research data, the number of enrolments in VET forestry studies

<sup>99</sup> Owner Drivers and Forestry Contractors Act 2005, div 2.

<sup>&</sup>lt;sup>100</sup> ibid, s 59; This department was renamed the Department of Jobs, Skills, Industry and Regions on 1 January 2023.

<sup>&</sup>lt;sup>101</sup> Victorian Public Sector Commission (2022) SOPS Workforce 2022: Board and board member profile, Melbourne, VSPS, June.

<sup>102</sup> ibid

<sup>&</sup>lt;sup>103</sup> DAFF (2023) 'Strategic Forest and Renewable Materials Partnership', DAFF website.

<sup>&</sup>lt;sup>104</sup> Victorian Government (2023) *Forestry Transition Program: May 2023 update*, Melbourne, Victorian Government.

<sup>&</sup>lt;sup>105</sup> ForestWorks (2023) 'Victorian Forestry Plan Workers Support Program', ForestWorks website.
<sup>106</sup> ibid.

<sup>&</sup>lt;sup>107</sup> DEECA (2023) 'Forestry Transition Program', DEECA website.

dropped from approximately 440 in 2018 to 230 in the pandemic year of 2020; enrolments rallied slightly in 2022 to 325.<sup>108</sup>

# Industry output

The Victorian timber industry is currently split across state forests and private land, with Victorian wood products from each source going to a range of uses—from high-end furniture to pulp. This will change to a largely private plantation industry beyond the end of 2023.

#### State forests

VicForests has managed the timber output from state forests since 2003, supplying ash and mixed-species timber to sawmills, pulpmills and other supply-chain customers. VicForests' timber produce from state forests has always been limited due to the confines of the state's AO, but supply has further contracted in recent years.

In figures updated to June 2023, VicForests indicates that of the 3.2 million hectares of state forest—managed in accordance with the Forest Management Zoning Scheme—only 155,000 hectares were deemed operable for commercial harvesting. This is a marked decrease from November 2021, when the Department of Jobs, Precincts and Regions had determined that as much as 458,714 hectares were 'available and suitable'.<sup>109</sup> The majority of these areas were in East Gippsland (223,300 ha) and Central Highlands (125,081 ha). VicForests asserts that it has been harvesting around 3,000 hectares each year.<sup>110</sup> As of 2021–22 VicForests held approximately 3100 hectares of plantation, relying mainly on native timber.<sup>111</sup>

#### Timber Release Plan

The Timber Release Plan (TRP) is prepared by VicForests and updated annually to account for new planned coupes, coupe boundary changes, proposed access driveways and updates on harvest status. Operations under the TRP, conducted in the east of the state, make up the bulk of VicForests' native timber supply. The plan, together with amendments, must comply with the Code of Practice's supplementary *Management Standards and Procedures for timber harvesting operations in Victoria's State Forests* and is evaluated by DEECA, Parks Victoria and Aboriginal Victoria. The most recent amendments to the TRP were approved in June 2023 to 'support the new transition timeframe out of native harvesting'.

#### Timber and harvesting types

Timber resources coming from Victoria's native forests have been split into about one-third ash and the rest mixed-species products (all characterised as hardwood). 114 Ash species include mountain ash, alpine ash and shining gum, with these making up the bulk of Victoria's old growth forest. Mixed-species products have generally consisted of species such as messmate, silvertop, mountain grey gum and cuttail. These hardwood species serve a number of purposes, each species having slightly different manufacturing values, with uses including furniture, decorative pieces, flooring, joinery, structural uses and fence construction. 115

<sup>&</sup>lt;sup>108</sup> National Centre for Vocational Education Research (2023) 'Total VET students and courses 2022: program enrolments', DataBuilder, NCVER website.

<sup>&</sup>lt;sup>109</sup> VicForests (2023) 'Forest facts: Q&A', VicForests website; Department of Jobs, Precincts and Regions (2021) *Harvest Level in Victorian Regional Forest Agreement regions*, Melbourne, DJPR, November, p. 15. <sup>110</sup> VicForests (2023) 'Forest facts: Q&A', op. cit.

<sup>&</sup>lt;sup>111</sup> DAFF (ABARES) (2023) 'Public plantation ownership, by state/territory and type ('000 ha)', *Australian plantation statistics update: supporting data tables*, Canberra, ABARES, August.

<sup>&</sup>lt;sup>112</sup> DEECA (2023) 'Commercial timber production from public forests', op. cit.

<sup>&</sup>lt;sup>113</sup> VicForests (2023) *VicForests' Timber Release Plan approved to support transition*, media release, 23 June.

<sup>&</sup>lt;sup>114</sup> DJPR (2021) op. cit., p. 20.

<sup>&</sup>lt;sup>115</sup> VicForests (2023) 'Products', VicForests website.

Traditionally, harvested forests have been clearfelled, although VicForests guidelines were changed in recent years to adopt a 'variable retention harvesting' approach. As described in the Legislative Council Environment and Planning Committee's (LCEPC) *Inquiry into* ecosystem decline in Victoria report, this approach of retaining between ten and 20 trees per hectare in harvesting coupes was implemented in order to maintain connections between harvested and unharvested areas, highlighting the consideration of forest regeneration and conservation as key management priorities.<sup>116</sup>

#### Supply

VicForests' supply has been dropping consistently over recent years. In 2017–18, total sales volume was 1,211,330 cubic metres, a number that dropped to 954,997 m³ for the 2021–22 year. The ABARES statistics show this to be less than half of native timber volumes produced between the years of 2002 and 2006, when annual totals were consistently over 2 million cubic metres. Some estimates from the 2022–23 financial year indicate a sharp drop-off in supply to mills such as Australian Sustainable Hardwoods' (ASH) Heyfield mill from local forests, forcing diversification of timber sources to include hardwood imports from other jurisdictions such as Tasmania, New South Wales and the United States.

Victorian forestry log volumes, by timber type
2002 to 2021 ('000 m³)

4,500
4,000
3,500
2,500
2,500
1,500
1,000
500

Hardwood native

Hardwood plantation

Softwood

Graph 1: Annual log production volumes by timber type for Victoria from 2002 to 2021 ('000  $m^3$ )  $^{120}$ 

Source: ABARES

As a result, there is a particular focus on millworkers and Opal employees for transition packages due to interrupted or cancelled supply. ASH has faced struggles with the accelerated timeline. 121 Opal Australian Paper (formerly APM) is also entitled to a supply of 350,000 cubic metres of pulp wood through the Forests (Wood Pulp Agreement) Act 1996 122—predominantly ash timber delivered to the company's Maryvale pulpmill in the Latrobe Valley. However, the dry-up of supply has forced job losses, compensation arrangements and closure of white-paper operations at the Maryvale mill and triggered plans to transition the

<sup>&</sup>lt;sup>116</sup> Legislative Council Environment and Planning Committee (2021) op. cit., pp. 216–17.

<sup>&</sup>lt;sup>117</sup> VicForests (2022) *Annual Report 2022*, Melbourne, VicForests, p. 25.

<sup>&</sup>lt;sup>118</sup> DAFF (ABARES) (2023) 'Log volume, by state and type', *Australian forest and wood products statistics: March–June quarters* 2022, Canberra, ABARES, August.

<sup>&</sup>lt;sup>119</sup> Kelly, C. (2023) 'With native forest logging in Victoria to end early, hundreds of workers face an uncertain future', *The Guardian Australia*, 26 May.

<sup>&</sup>lt;sup>120</sup> DAFF (ABARES) (2023) 'Log volume, by state and type' op. cit.

<sup>&</sup>lt;sup>121</sup> Askew, Z. (2023) 'Heyfield reacts to timber axe', Latrobe Valley Express, 31 May.

<sup>&</sup>lt;sup>122</sup> Forests (Wood Pulp Agreement) Act 1996, Schedule, clause 14(2).

mill to other uses.<sup>123</sup> VicForests' activities have been impacted by a number of factors, most notably litigation, which has led to a number of ongoing and costly injunctions on timber operations.<sup>124</sup> See 'Recent debates and events' for more detail.

#### Timber Utilisation Plan

A Timber Utilisation Plan (TUP) allows VicForests to approve forest management operations in state forests not included within the AO. TUP activities, mostly conducted in the west of Victoria, are described as 'generally small scale, low intensity community forestry operations' and constitute only a small revenue stream for VicForests (only \$0.5 million in the 2021–22 year). Harvested wood may go toward a number of end uses, such as 'musical instrument manufacture, sawn timber products (including high-quality furniture), fencing materials and firewood'. TUPs can fall within any forest management area. The most recent TUP was approved in May 2023 and covers a four-year timeframe from 2023 until 2026–27. Forest management operations may include 'recovery management' (for example, post-storm or fire damage), with VicForests having been approved, for example, to conduct post-storm salvage logging operations in the Wombat State Forest in conjunction with restoration of Country by the Dja Dja Wurrung Clans Aboriginal Corporation (DJAARA). However, court developments in September 2023 have ordered a halt to Wombat State Forest salvage logging operations.

#### Victorian Forestry Plan and transition

Through a mixture of intense public scrutiny, costly litigation and the threat of biodiversity loss highlighted by the Black Summer bushfires, the viability of VicForests has declined over the years. Through the *Victorian Forestry Plan*, a range of measures have been put in place to upscale preparations for the 1 January 2024 end date, including a Supply Chain Resilience package and an increase in funding to private plantation companies such as HVP. <sup>132</sup> See the 'Party policies' section for funding and details behind the transition announcements.

#### **Plantations**

Victoria currently holds the country's largest plantation estate, with about 22 per cent of the country's stock. In 2022, it was calculated at about 380,900 hectares. <sup>133</sup> Of the National Plantation Inventory regions spread across Australia, five are at least partly located in Victoria: 'The Green Triangle' in far south-west Victoria—Victoria's most productive plantation zone, shared with South Australia; Central Victoria; Murray Valley; Central Gippsland: and East Gippsland—Bombala.

Plantations comprise the majority of Victoria's timber production and export. In the latest figures available for the 2020–21 financial year, ABARES calculated that plantations accounted for 86 per cent of timber production: 1,986,000 cubic metres of that from

<sup>&</sup>lt;sup>123</sup> Opal ANZ (2023) *Opal Maryvale Mill update*, media release, 15 June; Cameron, J. (2023) 'The Andrew's government's industry transition delivers job losses in Gippsland', *Latrobe Valley Express*, 5 July, pp. 8–9; Perkins, M. & Millar, R. (2023) 'Logging future uncertain as Japanese giant Nippon closes Australia's last white paper plant', *The Sydney Morning Herald*, 15 February.

<sup>&</sup>lt;sup>124</sup> Whittaker, J. (2023) 'Victorian government to provide hundreds of millions in support for workers leaving embattled logging industry', *ABC News*, 23 May.

<sup>&</sup>lt;sup>125</sup> VicForests (2022) *Annual Report 2022*, op. cit., p. 18.

<sup>&</sup>lt;sup>126</sup> VicForests (2023) 'Timber Utilisation Plan (TUP)', VicForests website.

<sup>&</sup>lt;sup>127</sup> VicForests (2023) *Approved Timber Utilisation Plan*, Melbourne, VicForests, May, p. 5. <sup>128</sup> ihid.

<sup>129</sup> VicForests (2023) 'Wombat State Forest storm timber recovery', VicForests website.

<sup>&</sup>lt;sup>130</sup> VicForests (2022) *Annual Report 2022*, op. cit., p. 18.

<sup>&</sup>lt;sup>131</sup> Kirkham, R. (2023) 'Supreme Court orders VicForests to halt salvage logging in Wombat State Forest coupe', *ABC News*, 26 September.

<sup>&</sup>lt;sup>132</sup> D. Andrews, Premier of Victoria (2023) *Delivering certainty for timber workers*, media release, 23 May; Cameron, J. (2023) op cit., pp. 8–9; G. Tierney, Minister for Agriculture (2022) *Planting millions more trees for thousands of jobs*, media release, 29 September.

<sup>&</sup>lt;sup>133</sup> DAFF (ABARES) (2023) 'Plantation area, by state/territory and type ('000 ha)', *Australian plantation statistics update: supporting data tables*, Canberra, ABARES, August.

hardwood plantations and 3,693,000 m³ from softwood plantations.¹³⁴ Though these volumes have dropped significantly—particularly for hardwood plantations—from 2016–17 peaks of 3,996,000 and 4,274,000 cubic metres respectively (see Graph 1).¹³⁵ Plantations have dropped gradually since a high mark of 433,600 hectares in 2011–12, with a lack of new plantations coming online (see Graph 2).¹³⁶

New plantations planted in Victoria per year
1974–75 to 2020–21 ('000 ha)

80
70
60
50
40
30
20
10
Victoria (new hardwood plantations)

Victoria (total new plantations)

Graph 2: New plantations planted per year from 1974-75 to 2020-21 by '000 hectares 137

Source: ABARES

#### Timber types

A majority of existing plantations are softwood, with the dominant type being radiata pine. Radiata pine is favoured for its capacity to be used in almost all types of construction as well as in decorative uses. <sup>138</sup> Hardwood plantations are rarer but still form a significant proportion of Victoria's plantation estate. The most common hardwood species in Victorian plantation timber is Tasmanian gum (also known as southern blue gum), a species largely grown in short rotations, the majority of which is exported. <sup>139</sup> Southern blue gum may also have an upmarket array of uses (flooring, furniture) and is aimed to offset some loss of native forest supply. <sup>140</sup>

#### Privatisation

Since the perpetual lease of Victoria's public land plantation estate to HVP in 1998, plantation timber has been overwhelmingly a private industry. HVP remains one of Victoria's largest exporters of timber product and is partnering with the Victorian Government to expand Victoria's plantation industry, planting 16 million trees (predicted to be 14,000 hectares) over ten years through the government's Gippsland Plantations Investment Program. 141 Other companies supplying Victoria's timber supply chain include OneFortyOne, New Forests and Australian Bluegum Plantations, among other smaller players. VicForests is helping to stock the seedling supply chain and establish new eucalyptus plantation sites. 142

<sup>&</sup>lt;sup>134</sup> DAFF (ABARES) (2023) 'Log volume, by state and type', op. cit.

<sup>&</sup>lt;sup>135</sup> ihid

<sup>136</sup> DAFF (2023) 'Plantation area, by state/territory and type ('000 ha)', op. cit.

<sup>&</sup>lt;sup>137</sup> DAFF (ABARES) (2023) 'New plantations established, by state/territory and type ('000 ha)', *Australian plantation statistics update: supporting data tables*, Canberra, ABARES, August.

<sup>&</sup>lt;sup>138</sup> WoodSolutions (2023) 'Pine, Radiata', WoodSolutions website; HVP (2023) 'Our products', HVP website.

<sup>&</sup>lt;sup>139</sup> Australian Government & Victorian Government (2022) op. cit., pp. 8–9.

<sup>&</sup>lt;sup>140</sup> WoodSolutions (2023) 'Gum, Southern Blue', WoodSolutions website.

<sup>&</sup>lt;sup>141</sup> Tierney, G., Minister for Agriculture (2022) op. cit.; DEECA (2023) 'Plantations', DEECA website.

<sup>&</sup>lt;sup>142</sup> VicForests (2020) *Annual Report 2019–20*, Melbourne, VicForests, October, p. 26.

# 3 | Party policies

Policies relating to forestry largely fall into one of two focus areas: environmental conservation, or jobs and industry. The 2022 state election saw most policies relate specifically to the ban on native timber harvesting and the expected impacts, while broader policies and commentary also address bushfire prevention, climate change mitigation, Traditional Owner knowledge and involvement, activism and ongoing litigation against VicForests.

#### Labor

Victorian Labor have mostly tried to balance environmental conservation with regional jobs and industries in their forestry policy. After signalling an environmental focus with their 'Biodiversity 2037' environmental policy in 2014, the ALP established a sustainable timber industry policy in the years leading up to the 2017–18 Budget, in which \$110 million was allocated towards increasing plantation logging. <sup>143</sup> This sustainability-focused policy culminated in the announcement in November 2019 of an 11-year phase-out of native timber harvesting through the Victorian Forestry Plan. <sup>144</sup> The announcement immediately ceased all logging in old growth forests and allocated 96,000 hectares of Greater Glider habitat as exempt from logging. <sup>145</sup>

In 2021, the plan was bolstered with another \$14 million towards a 'coupe regeneration plan', <sup>146</sup> and was supported by a series of environmental conservation policies ahead of the 2022 election. <sup>147</sup> In a May 2023 update to the plan, the initial date of 2030 for the end of native timber harvesting was brought forward to 2024, which the government said was a way of 'providing certainty to timber industry workers'. <sup>148</sup> The announcement came with an additional \$200 million in funding for the expedited transition of the industry away from native timber and towards plantation supply in the Forestry Transition Program.

These environmental conservation policies have been balanced against transitioning the Victorian timber industry to plantation logging to maintain regional employment and economic support in logging communities. A sum of \$120 million was allocated with the first announcement of the end of native timber harvesting in 2019, to be spent on providing native logging workers with re-employment and re-training services to transition the paper industry into plantation-only supply. Another \$100 million was announced in 2021 for workers, communities, and businesses effected by the ban. The Forestry Plan included 'Local Development Strategy grants' designed to transition local economies heavily supported by the timber industry to more sustainable models, as well as the Victorian Timber Innovation Fund, the Sawmill Opt-out Scheme, the Community Development Fund, and the Forestry Business Transition Vouchers program. The slowing of production and subsequent layoffs at the Opal Maryvale Mill in December 2022 also saw the government establish a Worker Support Service to support workers in the industry as mills supplied by native timber were closed. The full investment in the transition program has been estimated to be \$875 million.

<sup>&</sup>lt;sup>143</sup> J. Symes, Minister for Regional Development (2019) *Plantation timber to take root in Gippsland*, media release, 24 April.

D. Andrews, Premier (2019) Securing the future for forestry industry workers, media release, November.

<sup>145</sup> ibid.

M.-A. Thomas, Minister for Regional Development (2021) Bolstering the Victorian Forestry Plan, media release, 17 December.

<sup>&</sup>lt;sup>147</sup> Victorian Parliamentary Budget Office (2022) '2022 Election Commitment Tracker', PBO website.

<sup>&</sup>lt;sup>148</sup> D. Andrews, Premier (2023) op. cit.

<sup>&</sup>lt;sup>149</sup> M.-A. Thomas Minister for Regional Development (2021) op. cit.

<sup>&</sup>lt;sup>150</sup> G. Tierney, Minister for Training and Skills (2022) *More support for timber workers and communities,* media release, 25 October.

<sup>&</sup>lt;sup>151</sup> A Thomas, Minister for Regional Development (2021) Powering up new jobs in our forestry transition, media release, 13 October; M. A Thomas, Minister for Regional Development (2021) op. cit. <sup>152</sup> J. Whittaker (2023) op. cit.

The shift away from native logging also entailed significant investments in plantations. The Victorian Forestry Plan included the Gippsland Plantation Investment Program in 2020, 153 which included investments like a new plantation estate in partnership with Hancock Victorian Plantation in 2022, 154 and the establishment of Farm Forestry through VicForests. 155

The government's forestry policy has also been significantly guided by bushfire prevention and recovery. In response to the 2019–20 bushfire season, the Victorian government announced a series of initiatives to further protect native forests and old growth forests, much of which had been damaged or destroyed by the fires. This included the Major Event Review of the RFAs in 2021 which was a provision under the RFAs signed in March 2020. The series of the RFAs in 2021 which was a provision under the RFAs signed in March 2020.

The government has advocated for the inclusion of Traditional Owners and Indigenous knowledges and practices in forest and land management, with \$250,000 directed towards establishing a cultural burning program in 2017<sup>158</sup> as part of its \$310 million bushfire preparedness budget of that year. In 2022, they also provided \$14.5 million in projects that allow Traditional Owners to lead programs in the BushBank program.<sup>159</sup>

The government also passed legislation that aimed to introduce 'stronger penalties to deter dangerous protest activities that puts the safety of both forestry workers and people who illegally enter dangerous work sites at risk' (the *Sustainable Forests Timber Amendment (Timber Harvesting Safety Zones) Act* 2022), a move supported by the Coalition but strongly opposed by the Greens.<sup>160</sup>

#### Coalition

The Victorian Liberals and Nationals have prioritised maintaining a timber industry that balances environmental protection with support for regional jobs and economies. In the lead-up to the 2022 election, the Coalition vowed to reverse the native timber harvesting ban if they formed government, citing concerns for the timber industry and workers and the supply of building materials. While opposing the end of native timber harvesting, the Coalition supports the 'responsible and sustainable harvest of native timber', <sup>161</sup> including the replacement of all trees that are harvested in available old growth forests. The Coalition has also focused on the link between native logging and the personnel and specialist machinery that forestry contractors provide to firefighting efforts and fuel load reduction. <sup>162</sup>

Several of the electoral districts most affected by the native timber harvesting ban—i.e. that have high levels of employment in the timber and wood products industry—are held by the Nationals (see Maps 1 and 2). The Nationals promised to 'work with industry, forest scientists and communities to ensure harvesting continues on a sustainable level with threatened species managed on a landscape wide basis'. The Nationals campaigned for the

<sup>&</sup>lt;sup>153</sup> J. Symes, Minister for Regional Development (2023) *Preparing ground for Victoria's plantation timber future*, media release, 8 October.

<sup>&</sup>lt;sup>154</sup> Tierney, Minister for Training and Skills (2023) op. cit.

<sup>&</sup>lt;sup>155</sup> VicForests (2023) 'Farm forestry', VicForests website.

Biodiversity response and recovery', DEECA website; L. Neville, Minister for the Coordination of Environment, Land, Water, and Planning – COVID-19 (2020) Funding boost for next steps in long-term bushfire recovery, media release, 23 August; L. D'Ambrosio, Minister for Energy, the Environment and Climate Change (2023) Airlift operation to bring forest back to life after bushfire, media release, 2 October.

<sup>157</sup> DEECA (2022) 'The Major Event Review of Regional Forest Agreements', DEECA.

<sup>&</sup>lt;sup>158</sup> L. D'Ambrosio, Minister for Energy, Environment, and Climate Change (2017) Celebrating the return of traditional burning, media release, 19 July.

<sup>&</sup>lt;sup>159</sup> L. D'Ambrosio, Minister for the Environment and Climate Action (2022) Regenerating ten thousand MCGs of habitat, media release, 4 September.

<sup>&</sup>lt;sup>160</sup> S. Ratnam (2022) 'Second reading debate: Sustainable Forests Timber Amendment (Timber Harvesting Safey Zones) Bill 2022', *Debates*, Legislative Council, p. 2603; D. Andrews, Premier (2022) *Legislation To Protect Forestry Workers Passed*, media release, 5 August.

<sup>&</sup>lt;sup>161</sup> M. Guy (2022) *Illegal protests cut at the heart of Victoria's sustainable native timber industry,* media release, 31 January.

<sup>&</sup>lt;sup>162</sup> The Nationals (2023) *Victoria's bushfire response in jeopardy*, media release, 23 February.

<sup>&</sup>lt;sup>163</sup> The Nationals (2023) *Labor's timber strangulation heartbreaking for Orbost*, media release, 5 October.

management of Victorian forests in line with the recommendations of the 2009 Victorian Royal Commission into the Black Saturday bushfires, including pushing for an increase in planned burning in native growth forests and the advantages of logging as a way to reduce flammable fuel. 164 The Nationals have proposed increased Indigenous participation in burning practices, calling the Labor investment in Traditional Owner-led cultural land and fire management practices 'encouraging'. 165 The Nationals have also argued salvage harvesting in native forests is supported by and in line with Traditional Owners' land management principles of reducing fire fuel in partnership with timber harvesters, 166 and supported a petition to increase fuel-reduction burning in 2022. 167

The Nationals campaigned for changes to the *Sustainable Forests (Timber) Act 2004* to 'better protect workers' from interruptions to their operations caused by protesters, and supported the Government's legislation that increased fines to \$21,000.<sup>168</sup> The Coalition also proposed amendments to a government Bill that would block environmental groups from taking legal action against VicForests and therefore slowing and halting logging activities, arguing that only the Conservation Regulator, not the courts, should enforce the Code of Practice.<sup>169</sup>

#### The Australian Greens - Victoria

The Victorian Greens have a strong biodiversity conservation focus around forestry. They have campaigned for the end of native timber harvesting for over 20 years and entered the 2022 election with a Parliamentary Budget Office-costed (PBO) plan to end native logging by 2023<sup>170</sup> and strongly supported the government bringing forward the end date to 2024.<sup>171</sup> The Greens released a forests policy ahead of the 2022 election, containing 20 specific goals for the industry.<sup>172</sup> These goals included a 'wood production industry plan' to transition the industry to plantation and recycled timber and retraining workers; replacing RFAs with Commonwealth-State Forest Biodiversity and Climate Agreements, and only classing plantation-grown wood as 'renewable'.<sup>173</sup> The Greens also announced a biodiversity policy in which they supported broad legislative review and reform to reduce harm to Victoria's landscapes, flora and wildlife, specifically citing the reduction of land clearing in native forests and several measures aimed at reducing threats to biodiversity and ecologies.<sup>174</sup>

The Greens expressed support for the development of a sustainable timber industry without native timber harvesting, proposing a set of initiatives to reinvest the \$205 million they calculated would be 'saved' from ending native logging. This included \$21 million towards retraining former logging workers into a disaster response team, an acceleration of Labor's \$120 million timber worker transition package, and a \$1 billion-per-year 'Zero Extinction Fund'. The Greens also support the transition of rural and regional communities supported by the native logging industry towards more sustainable and low-carbon economies as part

<sup>&</sup>lt;sup>164</sup> The Nationals (2022) *Petition back increase in fuel reduction burning*, media release, 26 July.

<sup>&</sup>lt;sup>165</sup> The Nationals (2022) *Indigenous knowledge is key to plan burns*, media release, 18 August.

<sup>&</sup>lt;sup>166</sup> The Nationals (2022) *Illegal green warfare disrespecting Traditional Owners*, media release, 10 May.

<sup>&</sup>lt;sup>167</sup> The Nationals (2022) Bath tables bushfire fuel reduction petition, media release, 20 September.

<sup>&</sup>lt;sup>168</sup> The Nationals (2022) *Labor playing politics with harvesters' lives*, media release, 8 August.

<sup>&</sup>lt;sup>169</sup> P. Hunt (2022) 'Victoria's native forest timber industry: Bid to save jobs lost', *The Weekly Times*, 25 March.

<sup>&</sup>lt;sup>170</sup> Parliamentary Budget Office (2023) 'Election police costing: End native forest logging', PBO website.

<sup>&</sup>lt;sup>171</sup> The Greens Victoria (2023) Win for environmental activists as Labor finally pressured to end native forest logging, media release, 23 May.

<sup>&</sup>lt;sup>172</sup> The Greens Victoria (date unknown) 'Forests Policy', Greens Victoria website.

<sup>&</sup>lt;sup>173</sup> The Greens Victoria (2022) Forestry workers would form emergency response team under Greens plan, media release, 27 September.

<sup>&</sup>lt;sup>174</sup> The Greens Victoria (date unknown) 'Biodiversity Policy', Greens Victoria website.

<sup>&</sup>lt;sup>175</sup> The Greens Victoria (2023) *Native forest logging in Victoria would end from June, under Greens Bill,* media release, February 21.

<sup>&</sup>lt;sup>176</sup> The Greens Victoria (2022) Tackling the climate crisis: The Victorian Greens' plan to fight the climate crisis, grow jobs, and power Victoria with 100% renewable energy by 2030, Victorian Greens.

of their rural and regional policy, including providing communities with resourcing for more effective management of state parks and forests.<sup>177</sup>

A key pillar of the Greens' forests policy is the proposed repeal of recent amendments to the Forests (Wood Pulp Agreement) Act 1996, which they had also opposed in Parliament and which introduced harsher penalties for protesters around timber harvesting zones. The Greens also support stronger rights for First Nations people in land management practices, including repurposing native forests with Traditional Owners once the native timber harvesting ban is implemented, and a First Nations Ranger program as part of their Zero Extinction fund.<sup>178</sup>

#### Crossbench

#### Animal Justice Party

The Animal Justice Party (AJP) identify the timber industry as a major threat to animal welfare and biodiversity, and incorporate the forestry industry into their wildlife protection and environmental law policies. In the lead-up to the 2022 state election, the AJP supported the end of native timber harvesting, along with expanding native reserves and national parks to protect habitats from logging and other activities. They also advocated for reform of wildlife protection laws and better funding to provide government agencies with more power to enforce protection of threatened species. This would include removing exemptions that permit industries like forestry to 'allow harm to be caused to native wildlife for commercial activities' under state legislation. The AJP also released a detailed anti-land-clearing policy in the lead-up to the 2022 election, in which it proposed 'to reverse land clearing by addressing the underlying causes' animal agriculture, urban development, mining and forestry. The AJP also proposed a policy that would require that forest managers engage an independent organisation 'to visually inspect all trees and undergrowth as part of a Timber Harvesting Plan to determine what animals may be present', with costs to be incurred by private landowners.

#### Democratic Labour Party

Concerned with Victorians' freedoms to use forested areas, including those on private property, the Democratic Labour Party (DLP) campaigned in 2022 for less regulation around state forests and national parks, which would incorporate forestry activities. They opposed the protection of habitat areas in the lead-up to the 2018 election, stating, 'The Andrews Government and assorted greenies plan to lock-up, for ever, 800,000 acres of our state forests, by stealing our birthright to freely access and enjoy Victorian bushlands and forests'. <sup>183</sup> While not releasing a formal forestry policy ahead of the 2022 election, the DLP promised to 'End all state government controls on tree clearing and other similar interference in the use of private property' under its 'Restoring Agriculture' policy. <sup>184</sup> The DLP also promised to create a new offence of 'politically motivated trespass', aimed specifically at 'left wing activists' attempting to disrupt land clearing and other agricultural work but also appearing to be aimed at anti-logging protesters. <sup>185</sup>

<sup>177</sup> The Greens Victoria (2021) 'Rural and Regional Policy', Greens Victoria website.

<sup>&</sup>lt;sup>178</sup> The Greens Victoria (date unknown) 'Protect the environment', Greens Victoria website.

<sup>&</sup>lt;sup>179</sup> Animal Justice Party (date unknown) 'Wildlife protection', Animal Justice Party website.

<sup>&</sup>lt;sup>180</sup> Animal Justice Party (date unknown) 'Wildlife protection', Animal Justice Party website.

<sup>&</sup>lt;sup>181</sup> Animal Justice Party (date unknown) 'Landclearing', Animal Justice Party website.

<sup>&</sup>lt;sup>182</sup> Parliamentary Budget Office (2022) 'Election policy costing: Evaluate resident wildlife populations prior to timber harvesting', PBO website.

<sup>&</sup>lt;sup>183</sup> Democratic Labour Party (2018) *Labour DLP will stop the greenie enclosure of our public lands*, media release, 6 November.

<sup>&</sup>lt;sup>184</sup> Democratic Labour Party (date unknown) 'Policies', DLP website.

<sup>&</sup>lt;sup>185</sup> ibid.

#### Legalise Cannabis Victoria

Legalise Cannabis Victoria supported the government's plan to end native timber harvesting, 186 and have put forward an industrial hemp industry as a potential replacement for the native timber industry. 187

#### Libertarian Party Victoria

The Libertarian Party (formerly the Liberal Democrats) campaigned on their 'Unlock Victoria' policy into the 2022 election, which proposed converting 4.1 million hectares of national parks to state forests to end what they see as restrictions that 'hamper valuable community management activities such as pest control, fuel load reduction and maintenance of fire trails'. <sup>188</sup> The PBO costed the commitment at nearly \$3 million over three years. <sup>189</sup>

#### Pauline Hanson's One Nation

Pauline Hanson's One Nation have opposed the native timber harvesting ban at a federal level, but have no explicit forestry policy at the state level. State MP Rikkie-Lee Tyrrell has also opposed the ban on native logging, <sup>190</sup> and has called for the easing of restrictions on state forests to allow more access to firewood. <sup>191</sup>

#### Shooters, Fishers and Farmers Party Victoria

The Shooters, Fishers and Farmers Party Victoria's (SFFPV) forestry policy favours protection of regional timber industry jobs. <sup>192</sup> It specifically advocates for the reinstatement of native timber harvesting in line with current RFAs, the removal of the 200-metre exclusion zone rule and the review of native vegetation laws. SFFPV also called for 'a fundamental change to land management' and for expanding activities allowed in parks to include those allowed in state forests. <sup>193</sup> SFFPV oppose 'restrictive land classifications', the introduction of new parks, the ban on alpine cattle grazing, and restrictions on firewood collection. <sup>194</sup> The party also wishes to impose harsher penalties on activists and protesters hindering logging activities and to enshrine the 'right to farm' in the Victorian Constitution. <sup>195</sup>

<sup>&</sup>lt;sup>186</sup> D. Ettershank (2023) 'Adjournment: Timber industry', *Debates*, Legislative Council, 1 June, p. 1873

<sup>&</sup>lt;sup>187</sup> R. Payne (2023) *A push for a future-proof Victorian hemp industry*, media release, 30 May; 4BC Brisbane (2023) 'Hemp helping shore-up building material supply', *4BC Brisbane*, 1 June.

<sup>&</sup>lt;sup>188</sup> Libertarian Party Victoria (date unknown) 'Victorian state politics', Libertarian Party Victoria website. <sup>189</sup> Parliamentary Budget Office (2022) Election policy costing: Election policy costing: Evaluate resident wildlife populations prior to timber harvesting, PBO website.

<sup>&</sup>lt;sup>190</sup> R.-L. Tyrrell (2023) 'When the Andrew's Labor Government...', Facebook post [accessed 11 October 2023], Rikkie-Lee Tyrrell MLC, 1 June.

<sup>&</sup>lt;sup>191</sup> R.-L. Tyrrell (2023) Adjournment: Firewood collection', *Debates*, Legislative Council, 20 June, p. 1968. <sup>192</sup> Shooters Fishers and Farmers Party (date unknown) *How we're Victoria's powerful voice*, SFFP Victoria.

<sup>&</sup>lt;sup>193</sup> ibid., p. 5.

<sup>&</sup>lt;sup>194</sup> ibid., p. 5.

<sup>&</sup>lt;sup>195</sup> ibid., p. 6.

# 4 | Recent debates and events

Recent debates surrounding the Victorian timber industry have been dominated by the native timber harvesting ban. Particular focus has centred around its impact on jobs and economies supported by the industry in regional communities, and around members of the environmental movement and their litigation against VicForests. Media have focused on the ban, with regional news outlets mostly foregrounding stories that highlight the impact of the ban on communities, whilst metropolitan and national coverage has tended to focus on the political fallout from the Labor policy. There has also been noted interest in the activities of protesters, their legal rights and the application of penalties, all of which saw renewed scrutiny in response to the increases to fines under the Sustainable Forests Timber Amendment (Timber Harvesting Safety Zones) Act 2022.

The impact of bushfires on the industry and, conversely, the impact of the industry on bushfires has also been a key debate point. The Black Summer bushfires were a key moment in distilling the issues surrounding forestry, particularly because they occurred so soon after the announced native timber harvesting ban in 2019. They also further fuelled debate regarding the best forestry practices for reducing the likelihood of catastrophic fires. Significant coverage was afforded to fuel reduction through hearings for the Royal Commission into National Natural Disaster Arrangements, as it was through continued academic and scientific debate regarding fuel-reduction burning and Indigenous cultural burning.

# End of native timber harvesting

The ban on native timber harvesting has dominated debates surrounding the Victorian forestry landscape since it was announced in 2019, and more so since May 2023 when the deadline was brought forward by six years. The decision has been lauded for its expected positive impact on biodiversity, protected and vulnerable species, bushfire prevention and management, and the effects of climate change. At the same time, the decision has been condemned for its negative effects on the timber industry and associated jobs and regional economies, risks of over-reliance on timber imports, and potential stock shortages for the construction industry.

A move away from harvesting in native forests has been foreshadowed for decades, dating back to the environmental movement's rise in the 1960s and 70s, and particularly in response to the 1969 Little Desert controversy over clearing of native forests (see 'History'). The Brumby government had considered a total ban on native timber harvesting as a policy to take to the 2010 election, but decided against it after a report detailed the high costs of the plan and expected impacts on employment in the industry. After the Baillieu and Napthine governments cemented a commitment to the industry in the following years, Labor took a strong environmental conservation policy to the 2014 election. Calls for stronger protection of Victoria's native landscape had also been growing ever since the 2009 Black Saturday bushfires burnt through large areas of native forest. As a result, a tussle between the interests of government, industry and community groups has propelled ongoing debate about how forests are managed and how the timber industry can progress sustainably in Victoria.

#### Forest industry taskforce

In 2015, the Department of Premier and Cabinet established a Forest Industry Taskforce, <sup>197</sup> as part of the *Our Environment*, *Our Future* policy it took to the 2014 election. The members of the taskforce were made up of a mix of industry, conservation and union groups, including the Wilderness Society, Australian Conservation Foundation, ASH, Australian Paper, the Victorian Association of Forest Industries (VAFI), CFMEU, MyEnvironment, the Victorian

 <sup>&</sup>lt;sup>196</sup> M. Fyfe & A. Morton (2012) 'Labor eyed shutdown of native logging', *The Age*, 4 February.
 <sup>197</sup> L. Neville, Minister for Environment, Climate Change & Water (2015) *Protecting Victoria's iconic Leadbeater's Possum*, media release, 17 April.

National Parks Association (VNPA) and a representative of several harvest and haulage contractors. 198

The taskforce was given its full terms of reference in November 2015, 199 which stated the taskforce was to provide a 'durable, long-term set of recommendations and proposal to government, about future issues facing the industry, job protection, economic activity, protection of our unique native flora and fauna and threatened species, such as the Leadbeater's possum'. 200

Whilst the Taskforce never provided any official recommendations, its statement of intent made several interim recommendations for the next steps required to ensure 'a more durable future for all stakeholders'. Among these recommendations was the request for two initial—separate but concurrent and rapid—Victorian Environmental Assessment Council (VEAC) investigations into conservation values of state forests and fibre and wood supply, which the government requested from VEAC in 2016 and 2017, respectively.

VEAC's report on conservation values found timber harvesting to be a potential threat to biodiversity, <sup>203</sup> while the assessment of wood and fibre supply found several significant challenges facing VicForests and the native forest industry in ensuring supply. These included the exhaustion of the regrowth ash seeded after the 1939 Black Friday bushfires in Victoria's Central Highlands forest region (the primary source of high-value sawlogs in Victoria), potential fires, detection of additional new Leadbeater's possum colonies and reduction in volume due to climate or other disturbances. <sup>204</sup> VEAC estimated these disturbances had the potential to contribute to a 25–35 per cent reduction in wood supply over the next 20 years (on top of that already estimated by VicForests). <sup>205</sup>

In 2019, then Premier Daniel Andrews stated the taskforce had 'come to the conclusion that no consensus could be reached, and given that it was a consensus-based process, then its work is finished'.<sup>206</sup> The government indicated it would give no official response to the interim recommendations, as they were not official recommendations, but the then Minister for Agriculture, Jaclyn Symes, stated she had continued to meet with members of the taskforce individually and to seek their input on the development of the government's forestry policy and transition plan.<sup>207</sup> The taskforce was praised by conservation groups for highlighting 'the breathtaking underestimations of wood supply after decades of forest mismanagement and overlogging' and 'securing initial acknowledgement from the Victorian government that wood supply constraint was a serious problem for the industry'.<sup>208</sup>

#### Inquiry into VicForests' operations

In 2017, the Legislative Council Economy and Infrastructure Committee conducted an inquiry into VicForests' operations. The inquiry did not open for formal submissions, but it heard

<sup>&</sup>lt;sup>198</sup> Forest Industry Taskforce (2018) 'Terms of Reference', Forest Industry Taskforce website [accessed 11 March 2018].

<sup>&</sup>lt;sup>199</sup> D. Andrews, Premier (2015) *Forest Industry Taskforce Terms of Reference Released*, media release, 20 November.

<sup>&</sup>lt;sup>200</sup> Forest Industry Taskforce (2018) op. cit.

<sup>&</sup>lt;sup>201</sup> Victorian Forest Industry Taskforce (2016) *Victorian Forest Industry Taskforce Statement of Intent*, the Wilderness Society, p. 10.

<sup>&</sup>lt;sup>202</sup> Victorian Environmental Assessment Council (2017) *Conservation values of state forests: Assessment report*, VEAC; Victoria Environmental Assessment Council (2017) *Fibre and wood supply: Assessment report*, VEAC.

<sup>&</sup>lt;sup>203</sup> Victorian Environmental Assessment Council (2017) Conservation values of state forests: Assessment report, VEAC, p. 35

Victoria Environmental Assessment Council (2017) Fibre and wood supply: Assessment report, VEAC.
 ibid.

<sup>&</sup>lt;sup>206</sup> D. Andrews, Premier (2019) 'Transcript of public hearing: Budget Estimates 2019–2020 (Premier)', Estimates, Public Accounts and Estimates Committee, 31 May, Melbourne, The Committee, p. 13.
<sup>207</sup> J. Symes, Minister for Agriculture (2019) 'Transcript of public hearing: Budget Estimates 2019–2020 (Agriculture)', Estimates, Public Accounts and Estimates Committee, 12 June, Melbourne, The Committee.

<sup>&</sup>lt;sup>208</sup> Wilderness Society (2023) Fast-tracked end to native forest logging welcomed; hard fought forest protections now in sight, media release, 23 May.

evidence from representatives from VicForests, DELWP, the Department of Treasury and Finance, and the Department of Economic Development, Jobs, Transport and Resources, as well as industry representatives and associations like Radial Timber, the Hermal Group, ASH, the Victorian Association of Forests, and environmental groups Environmental Justice Australia and the Wilderness Society Victoria. The inquiry had relatively narrow terms of reference, largely to examine VicForests' utilisation standards and its compliance, as well as the results of this compliance in terms of environmental conservation. The inquiry was particularly focused on the government's purchase of the Heyfield mill and what it considered as a developing dependence of many communities on a timber industry that was beginning to look unviable and unable to provide adequate supply to mills and timber factories.

Among the seven recommendations of the inquiry was a request for more government investment in transitioning the industry to plantation timber, as well as more oversight of VicForests' compliance with regulatory legal frameworks. The Victorian Greens' Samantha Dunn was the only member of the committee to submit a minority report, in which she said native forest logging 'has no long term future in Victoria ... considering the opportunity costs to regional economies and the environmental damage that comes with logging'. <sup>209</sup> The inquiry also recommended the government request advice from VEAC on the conservation values of state forests and on future timber supply. <sup>210</sup>

By 2019, only around 12 per cent of timber harvested in Victoria came from native forests, <sup>211</sup> and pressure was growing on the government both to revitalise a failing industry and to ban native timber harvesting altogether. The operations of VicForests were becoming less and less profitable for the government, and this—plus legal costs from ongoing litigation with environmental groups—meant VicForests had been running at a loss for several years.

A report from conservative think tank Blueprint Institute found that ending native forest logging would generate an extra \$60 million of benefits for the state, <sup>212</sup> while a policy costing from the PBO commissioned by the Victorian Greens found that an immediate ban would increase the state's net budget position over ten years by \$205 million. <sup>213</sup> The Commissioner for Environmental Sustainability also pointed to the decline of employment in Victoria's forestry industry, demonstrating that Victoria was becoming 'less dependent upon the forestry industry'. <sup>214</sup>

#### Financial struggles

VicForests' annual report for the 2021–22 year indicates that legal battles have hampered the company in a number of ways, with litigation costs totalling \$10.4 million. The report notes that operational 'delays and constraints' precipitated increases in stand-down payments to contractors (\$6.2 million) and compensation to customers for failure to supply agreed volumes (\$7.5 million). Combined with dropping lower sales volume, an increase in liabilities and a decrease in assets, the company ultimately posted a \$54.2 million loss for the year 2021–22 and ended with the company reporting negative \$2.95 million total equity as of 30 June 2022.

In more recent reports from March 2023, VicForests CEO Monique Dawson indicated the organisation had paid more than \$12 million in compensation to contractors and \$25 million

29

<sup>&</sup>lt;sup>209</sup> S. Dunn (2017) 'Minority report by Samantha Dunn MLC', *Inquiry into VicForests Operations*, October, Melbourne, The Committee, p. 65.

<sup>&</sup>lt;sup>210</sup> Victorian Government (2018) *Government response to the Parlimentary Inquiry into VicForests'* Operations, Legislative Council Economy and Infrastructure Committee, April, Melbourne.

<sup>&</sup>lt;sup>211</sup> DAFF (ABARES) (2023) 'Log volume, by state and type', op. cit.

<sup>&</sup>lt;sup>212</sup> J. Greber (2022) 'Stopping native forest logging more profitable', *Australian Financial Review*, 15 November, p. 3.

<sup>&</sup>lt;sup>213</sup> Parliamentary Budget Office (2023) Election police costing: End native forest logging, PBO website.

<sup>&</sup>lt;sup>214</sup> Commissioner for Environmental Sustainability Victoria (2019) Victorian Government's action for long-term sustainability of Victoria's native timber forests, CESV website, 12 December.

<sup>&</sup>lt;sup>215</sup> VicForests (2022) *Annual Report 2022*, op. cit., p. 4.

<sup>&</sup>lt;sup>216</sup> ibid., pp. 42-43.

to customers for failure to supply timber, although the timeline of these costs was not specified.<sup>217</sup>

#### **Announcements**

In November 2019, Labor made the announcement that native timber harvesting would be completely phased out through its Victorian Forestry Plan.<sup>218</sup> The plan set the goal of phasing out harvesting in native forests by 2030 and transitioning forestry workers, mill workers, contractors and others in the industry into other jobs within the state's forest management framework, including the new plantation-only supply chain (see 'Party policies' for more detail on this and subsequent boosts to the Forestry Transition Program).<sup>219</sup> The announcement came after the ALP had allocated \$110 million towards increasing plantation harvesting earlier that year.<sup>220</sup>

In the 2023–24 state budget, the government announced the ban would come into place on 1 January 2024, six years earlier than originally planned. The date was brought forward in no small part due to the ongoing litigation against VicForests by various environmental groups (see below). At the time of the announcement, much of VicForests' logging activity was halted by injunction as a result of the Supreme Court case brought by Kinglake Friends of the Forest and Environment East Gippsland. Injunctions also meant many mills were required to halt production, and the Opal Maryvale mill had almost stopped producing paper altogether due to lack of supply. By the time of the announcement of the accelerated timeline in 2023, Environment Victoria chief executive Jono La Nauze had said the industry was 'untenable', citing the Supreme Court injunctions and ongoing uncertainty regarding the legality of harvesting activities.<sup>221</sup> The Wilderness Society stated the 'forests have been so badly mismanaged, it's not sustainable to keep logging them'.<sup>222</sup>

Coupled with a similar ban in Western Australia, the ban on native timber harvesting also placed pressure on the Federal Government to introduce a national ban. <sup>223</sup> Opponents of the ban pointed out that a ban in one state would result in imports of native timber from another where no such ban was in place, resulting in no net reduction of destruction of native forests. The decision as well as the ongoing litigation surrounding VicForests' obligations under the Code of Practice and the Regional Forest Agreements have also called federal environmental protection laws into question, in particular the *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (the EPBC Act).

In September 2023, VicForests was deregistered as a state-owned enterprise and changed to a 'reorganising body', effectively allowing the body to be reorganised into various government departments and dissolving its ability to operate as a business and ensuring timber supply.<sup>224</sup> See the 'Party policies' section for more on the transition plan.

### Supporters

Perhaps unsurprisingly, the ban was strongly supported by environmental conservation groups and many ecological scientists, while also having the parliamentary backing of the Victorian Greens, the Animal Justice Party and Legalise Cannabis Victoria (see 'Party policies'). The initial 2019 announcement was supported by conservation groups, many of

<sup>&</sup>lt;sup>217</sup> M. Perkins (2023) 'Taxpayers billed \$38 million as logging agency fails to supply timber', *The Age*, 9 March.

<sup>&</sup>lt;sup>218</sup> L. D'Ambrosio, Minister for Energy, Environment and Climate Change (2019) *Protecting Victoria's forests and threatened species*, media release, 7 November.
<sup>219</sup> ibid.

<sup>&</sup>lt;sup>220</sup> J. Symes, Minister for Regional Development (2019) *Plantation timber to take root in Gippsland*, media release, 24 April.

<sup>&</sup>lt;sup>221</sup> J. Whittaker (2023) 'Victorian government to provide hundreds of millions in support for workers leaving embattled logging industry', *ABC News*, 23 May.

<sup>&</sup>lt;sup>222</sup> Wilderness Society (2019) Andrews government announces steps to improved management and protection for Victoria's forests, media release, 7 November.

<sup>&</sup>lt;sup>223</sup> P. Karp & S. Basford Canales (2023) 'Labor rejects ban on native forest logging and PM accuses Greens of hypocrisy on housing', *The Guardian*, 17 August.

<sup>&</sup>lt;sup>224</sup> Victorian Government (2023) *Victoria Government Gazett*e, no. s 475 p. 1.

whom campaigned for the next three years to bring the end date forward.<sup>225</sup> The Wilderness Society and the Biodiversity Council supported the initial ban announcement and the subsequently accelerated start date, calling it 'long overdue'<sup>226</sup> and 'a great decision for the economy and the climate',<sup>227</sup> respectively. The Wilderness Society also used the announcement of the earlier start date of the ban to further push for the establishment of a Great Forest National Park,<sup>228</sup> a promise made by Labor and supported by the Greens ahead of the 2014 election but from which both parties have since backed away.

The Federation of Victorian Traditional Owner Corporations supported the ban in principle, but flagged the 2023 budget commitments as 'continu[ing] to remove Traditional Owners from key decisions about managing Country and how to benefit from Country. The current forest management system is broken, systemically prejudicing a cultural landscape approach to be applied to healing country'. <sup>229</sup> The federation also stated it had not been consulted on the government's plan to bring forward the transition date. <sup>230</sup>

Environmental scientists praised the ban as a win for biodiversity, climate change management and habitat protection.<sup>231</sup> However, many lamented that it had come far too late,<sup>232</sup> and pushed for the government not to miss opportunities for better forest management practices, including the foregrounding of Indigenous knowledges.<sup>233</sup> The announcement in May 2023 added to ongoing debates regarding reforestation, afforestation, fuel reduction burning, and environmental conservation and landscape management policies, that have often spilled out of academic circles and into political and cultural spheres (see 'Environmental conservation').

The shift was also marked by divestment by private companies. Bunnings stopped selling native timber from VicForests in 2020.<sup>234</sup> Major paper retailer Opal supported the ban in 2019, stating it 'expected this decision ... provides a plan towards addressing industry supply uncertainty' and subsequently closing white-paper manufacturing in Maryvale.<sup>235</sup> However, Opal cooled its support when the government announced an accelerated ban in May 2023, saying it 'in no way goes far enough for the Maryvale Mill and the industry'.<sup>236</sup>

#### Opponents

Opponents of the end of native timber harvesting warned of the impact the ban would have on economies and timber industry workers, particularly those in the regions most heavily reliant on the industry.<sup>237</sup> Industry associations, unions, and forestry groups slammed the decision for dramatically and, they argue, suddenly ending an industry already struggling with reduced supply due to bushfires and uncertainty from ongoing litigation (see below).

<sup>&</sup>lt;sup>225</sup> Wilderness Society (2019) op cit.

Wilderness Society (2023) Fast-tracked end to native forest logging welcomed; hard fought forest protections now in sight, media release, 23 May.
 Biodiversity Council (2023) Victoria takes step toward becoming nature-positive with early exit from

<sup>221</sup> Biodiversity Council (2023) Victoria takes step toward becoming nature-positive with early exit from native forest logging, media statement, 23 May.

<sup>&</sup>lt;sup>228</sup> Wilderness Society (2023) Fast-tracked end to native forest logging welcomed; hard fought forest protections now in sight, media release, 23 May.

<sup>&</sup>lt;sup>229</sup> Federation of Victorian Traditional Owner Corporation (2023) *Victorian Traditional Owners must lead* the future of Victoria's forested Country, media release, 23 May.

<sup>&</sup>lt;sup>230</sup> J. Ross (2023) 'Traditional Owners not consulted before Vic native forest ban', WoodCentral, 1 June.

<sup>&</sup>lt;sup>231</sup> D. Lindenmayer & C. Taylor (2023) 'We can't just walk away after the logging stops in Victoria's native forests. Here's what must happen next', *The Conversation*, 5 June.

<sup>&</sup>lt;sup>232</sup> D. Lindenmayer & C. Taylor (2023) 'After the chainsaws, the quiet: Victoria's rapid exit from native forest logging is welcome – and long overdue', *The Conversation*, 23 May

<sup>&</sup>lt;sup>233</sup> J. Pascoe, M. Shanks, M. & M.-S. Fletcher (2023) 'What should happen to native forests when logging ends? Ask Victoria's First Peoples', *The Conversation*, 30 May.

<sup>&</sup>lt;sup>234</sup> L. Cox (2020) 'Bunnings stops selling timber logged by VicForests after court ruling', *The Guardian Australia*, 1 July.

<sup>&</sup>lt;sup>235</sup> Opal ANZ (2019) *Opal Australia Paper support for investment in new Gippsland plantations*, media release, 8 November.

<sup>&</sup>lt;sup>236</sup> Opal ANZ (2023) Opal's response to the Victorian Government announcement on forestry, media release, 23 May.

<sup>&</sup>lt;sup>237</sup> Timber Towns Victoria (2023) *The Cessation Of Native Forest Harvesting In Victoria: Position Paper*, Timber Towns Victoria, September.

The CFMEU's national secretary for manufacturing resigned from the government's forestry advisory committee in protest, <sup>238</sup> despite the union being initially supportive of the transition package. The Coalition opposition foregrounded constituent accounts from regional communities that were heavily reliant on mills, factories, and contracts in the sector for local employment. The Australian Forest Products Association called the decision an 'unnecessary surrender to environmental activists'.<sup>239</sup> Members from the Community and Public Sector Union held a meeting with VicForests staff impacted by the closures, with a spokesperson stating that workers' 'mental heath and well-being are being impacted from this extended uncertainty'.<sup>240</sup>

Much of the opposition to the ban was in response to the suddenness of the 2023 announcement accelerating the transition by six years. The Coalition stated that the 2024 deadline created insufficient time for the industry to transition, and forestry associations and workers' unions alleged the decision was made with insufficient consultation with workers in the industry.<sup>241</sup> The transition program was also criticised as insufficient and the training opportunities as unsuitable for a regional and remote workforce.<sup>242</sup>

Concerns were raised regarding the workforces and ecologies in developing nations, due to the expected increase in timber exports from countries like Brazil, China, Myanmar and Indonesia, among others.<sup>243</sup> These countries have lower standards in terms of environmental protections, which may mean the transition to plantation logging could merely shift environmental damage offshore.

Forestry Australia pointed out the ban would leave native forests unmanaged and thus at higher risk of bushfires, condemning the decision as one 'motivated by ideology' rather than science.<sup>244</sup> Forestry Australia also challenged claims the ban would protect and recover biodiversity, arguing that active management of native forests is required to manage the threats of invasive species, bushfires and climate change.<sup>245</sup>

Additionally, the ban was flagged as putting more pressure on a struggling construction industry and subsequently worsening the housing crisis. Victorian Forest Products Association chief Deb Kerr, for example, maintained that imported timber would be insufficient to meet the growing demand for timber construction supplies. <sup>246</sup> Concerns over access to firewood as a heating source were also raised. <sup>247</sup>

# Ongoing litigation against VicForests

With the government's 2023 announcement of the accelerated timeline for the end of native timber harvesting, then Premier Daniel Andrews stated that the industry had become a 'lawyers' picnic'.<sup>248</sup> From 2017 VicForests had been subject to a series of court cases brought by environmental groups in relation to their logging activities, including injunctions on its

<sup>&</sup>lt;sup>238</sup> C. Morgan & T. Cosoleto (2023) 'Union boss blasts forests committee after logging exit', *The Canberra Times*, 24 May.

<sup>&</sup>lt;sup>239</sup> Australian Forest products Association (2023) Its time for a National Cabinet discussion on sustainable forest resource security, media release, 23 May.

<sup>&</sup>lt;sup>240</sup> P. Hopkins (2023) 'CPSU and VicForests gathering', *Latrobe Valley Express*, p. 10.

<sup>&</sup>lt;sup>241</sup> Australian Forest Contractors Association (2023) *End of State forestry in Victoria*, media release, 24 May.

<sup>&</sup>lt;sup>242</sup> R. Eddie & A. Smethurst (2023) "It's like we don't exist': Timber towns grapple with log ban', *The Age*, May 28.

<sup>&</sup>lt;sup>243</sup> Australian Forests Products Association (2023) *Skyrocketing hardwood imports and Victoria, WA industry closures should sound alarm bells for Federal Government on sovereign capability*, media release, 31 May; T. Lee (2023) 'Environment groups, Greens and parts of federal Labor Party call for nationwide end to native logging', *ABC News*, 20 August.

 <sup>&</sup>lt;sup>244</sup> Forestry Australia (2023) Forestry sector dismayed by decision to end Victorian native forestry, media release, 23 May.
 <sup>245</sup> ibid.

<sup>&</sup>lt;sup>246</sup> Forestry Australia (2021) *Housing timber shortage driving native timber demand*, media release, 2 July.

<sup>&</sup>lt;sup>247</sup> P. Hunt (2023) 'Regions out in the cold', *The Weekly Times*, p. 5.

<sup>&</sup>lt;sup>248</sup> G. McCubbing (2023) 'Victoria faces timber supply crisis after logging exit, industry warns', *Australian Financial Review*, 25 May.

loggings areas and rulings that called its position under federal and state environmental law into question. This litigation was cited as the main reason for bringing forward the end of native logging, as these injunctions and associated legal costs cast doubt on the viability of the industry and the ability of VicForests to continue to operate in native forests (see also 'Industry snapshot').<sup>249</sup>

Perhaps the most significant of these cases was that brought by Friends of Leadbeater's Possum (FLP) to the Federal Court in 2017. The case was significant in that the plaintiffs alleged that VicForests' activities in 66 areas of habitat for the critically endangered Leadbeater's possum and the Greater Glider did not comply with the Victorian timber industry's Code of Practice. This would mean VicForests had lost its exemption to the EPBC Act that it received under the RFAs. The case related specifically to the 'precautionary principle' under the Code of Practice, which means that 'if there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation'.<sup>250</sup>

In 2020, Justice Mortimer found that VicForests had not complied with the precautionary principle in its logging activities in areas where the Greater Gliders were known to be living and was therefore in breach of the Code of Practice.<sup>251</sup> This meant that VicForests was no longer exempt under the RFAs and had therefore contravened the EPBC Act. The ruling was accompanied by injunctions against VicForests in 66 areas of forest and legal costs were ordered to be paid to FLP.<sup>252</sup> The ruling cast uncertainty over other RFAs and whether the Code of Practice ensured that all timber harvesting activities are exempt from the EPBC Act.

However, this decision was overturned through VicForests' successful appeal of one of the 31 counts in 2021, in which the full Federal Court found that while VicForests' activities had breached the state Code of Practice, the RFAs meant they remained exempt from the EPBC Act. <sup>253</sup> FLP sought leave to appeal the decision in the High Court, but the application was not granted. The full Federal Court upheld the remaining 30 findings of Justice Mortimer's 2020 ruling, including its injunction on logging in the designated areas, and ruled that VicForests must pay legal costs to FLP. <sup>254</sup>

Some commentators have interpreted this ruling to mean logging companies do not need to abide by state-based laws in order to maintain their exemption from the EPBC Act,<sup>255</sup> while others have seen the ruling as a need to review the RFAs altogether—in particular their relationship to federal conservation law.<sup>256</sup>

In November 2022, the Supreme Court again found VicForests broke the Code of Practice when it failed to adequately survey and protect endangered animals, in a case brought by two environmental groups, Kinglake Friends of the Forest and Environment East Gippsland.<sup>257</sup> The judgement was based again on the precautionary principle and found that VicForests' operations had threatened the survival of the Greater Gliders and Yellow-Bellied Gliders. After this verdict, VicForests was ordered to cease all native timber harvesting.

This injunction had significant impacts on the industry, all but halting the supply of timber to sawmills in regional Victoria, causing many mills to shut and rendering many employees redundant.<sup>258</sup> VicForests appealed the decision but the decision was upheld by the Court of

<sup>&</sup>lt;sup>249</sup> ibid.

<sup>&</sup>lt;sup>250</sup> Department of Environment and Primary Industries (2014) *Management guidelines for private native forests and plantations: Code of Practice for Timber Production 2014*, DEPI.

<sup>&</sup>lt;sup>251</sup> Friends of Leadbeater's Possum Inc v VicForests (No 5) [2020] FCA 705

<sup>&</sup>lt;sup>252</sup> ibid.

<sup>&</sup>lt;sup>253</sup> VicForests v Friends of Leadbeater's Possum Inc [2021] FCAFC 66

<sup>&</sup>lt;sup>254</sup> ibid.

<sup>&</sup>lt;sup>255</sup> M. Slezak (2021) 'Federal Court finds in favour of VicForests in battle over destruction of Leadbeater's possum habitat', *ABC News*, 10 May.

<sup>&</sup>lt;sup>256</sup> B. Wintle et al. (2021) 'A Victorian logging company just won a controversial court appeal. Here's what it means for forest wildlife', *The Conversation*, 17 May; P. Burnett (2023) 'Has time been called on the native forest logging deals of the 1990s? Here's what the Albanese government can do', *The Conversation*, 8 June.

<sup>&</sup>lt;sup>257</sup> Environment East Gippsland Inc v VicForests (No 4) [2022] VSC 668 (4 November 2022)

<sup>&</sup>lt;sup>258</sup> N. Schapova (2023) 'Victorian timber worker moves interstate amid sawmill closures, strict VicForests rules', *ABC News*, 20 June.

Appeal in June 2023,<sup>259</sup> just a month after the announcement of an accelerated transition time line. This meant that the injunction would be upheld until the ban in January 2024, severely reducing the timber harvesting activities allowed to VicForests for the remainder of the year. A few weeks earlier, VicForests had also lost a case in the Supreme Court against Warburton Environment, in which the court found the agency must better survey for and protect the threatened tree geebung, a large shrub endemic to Victoria.<sup>260</sup>

VicForests has cited legal costs from these cases as one of the key reasons it is no longer profitable and a significant driver bringing forward the ban on native timber harvesting. In his 23 May 2023 announcement of the expediated date, Premier Daniel Andrews stated, 'We had a plan for 2030—the courts have essentially brought that forward'.<sup>261</sup>

# Impacts on federal environment law

The ongoing litigation against VicForests has also had impacts on federal environmental laws and other RFAs across the country. The finding from the 2021 Supreme Court that VicForests' operations were in breach of the RFAs and therefore not exempt from the EPBC Act encouraged a wide-ranging review of federal environmental laws. In 2020, Graeme Samuel AC led an independent review of the EPBC Act and found several significant problems with the RFAs, including the fact that timber harvesting in native forests remained exempt from federal laws. The Samuel review recommended the RFAs be overhauled and that their exemption from national environmental standards be removed.<sup>262</sup>

Senator Bridget McKenzie introduced a private member's Bill to the federal Senate in December 2020, seeking to strengthen the RFAs and make clear that logging activities were exempt from the EPBC Act regardless of whether they followed the state codes of practice. <sup>263</sup> The Bill was referred to the Senate Environment and Communications Legislation Committee in 2021, where the Leadbeater's possum case was debated in detail, particularly the implications it might have on the RFAs' exemptions from accountability under federal law. <sup>264</sup> Then in opposition, federal Labor argued the Federal Court's decision indicated that VicForests' operations were subject to the EPBC Act where they impacted the Leadbeater's possums' habitat, but that this signalled reform of RFAs was needed to better protect endangered species and habitats. <sup>265</sup> Labor promised a review of the EPBC Act ahead of the 2022 election and has since released a Nature Positive Plan, indicating the party will review the RFAs' position in relation to the EPBC Act and other environmental protection laws. <sup>266</sup>

The Federal Court's findings that the activities of VicForests were not in accordance with the EPBC Act also created an uncertain legislative environment nationally, in which timber operators did not know if their activities would be protected under the RFAs. While this disruption contributed to the ban on native timber harvesting in Victoria, it has also caused other states to review their RFAs. Both timber industry and conservationist representatives have indicated that the decision may cause state logging activities to be brought under heightened scrutiny.<sup>267</sup> One study found that destruction of the Greater Glider's habitat

<sup>&</sup>lt;sup>259</sup> VicForests v Environment East Gippsland Inc & Anor [2023] VSCA 159

<sup>&</sup>lt;sup>260</sup> Warburton Environment Inc v VicForests (No 5) [2022] VSC 633 (25 October 2022)

<sup>&</sup>lt;sup>261</sup> G. McCubbing (2023) 'Victoria faces timber supply crisis after logging exit, industry warns', *Australian Financial Review*, 25 May.

<sup>&</sup>lt;sup>262</sup> G. Samuel (2020) *Independent Review of the EPBC Act—Final Report*, Department of Climate Change, Energy, the Environment and Water, Canberra, October, p. 28.

<sup>&</sup>lt;sup>263</sup> Environment Protection and Biodiversity Conservation Amendment (Regional Forest Agreements) Bill 2020

<sup>&</sup>lt;sup>264</sup> Environment and Communications Legislation Committee (2021) *Environment Protection and Biodiversity Conservation Amendment (Regional Forest Agreements) Bill 2020*, final report, Canberra, The Committee, May.
<sup>265</sup> ibid.

<sup>&</sup>lt;sup>266</sup> Department of Climate Change, Energy, the Environment and Water (2022) *Nature Positive Plan:* better for the environment, better for business, Canberra, DCCEEW, December.

<sup>&</sup>lt;sup>267</sup> B. Wintle et al. (2021) 'A Victorian logging company just won a controversial court appeal. Here's what it means for forest wildlife', *The Conversation*, 17 May; P. Burnett (2023) op. cit.

actually increased after it was listed as vulnerable under the EPBC Act in 2016, largely because of the RFAs in place.<sup>268</sup>

#### Environmental conservation

The end of native timber harvesting in Victoria's forests is the latest development in an ongoing and often highly politicised clash between the environment movement and the forestry and timber industries, often representing competing philosophies towards the value of forests. Whilst the forestry industry has been in tension with the conservation movement since the latter's inception, there is significant support for 'sustainable forestry', the aim of which is for the state's forests to be managed to sufficiently balance the competing—and often conflicting—priorities of the wood products industry and biodiversity and environmental heritage protections.

#### The wilderness myth

The forestry industry has always been entwined with the conservation movement (see 'History'). The leading philosophy for forest management in the conservation movement has historically subscribed to the concept of 'wilderness', which supposes that with limited intervention—either the minimal or complete removal of human elements—natural environments, including ecologies and habitats, will thrive.<sup>269</sup> Under this philosophy, forestry has often been seen as posing a risk to natural habitats and 'untouched' ecosystems, as shown in the litigation between VicForests and environmental groups above, in addition to those environmental groups' persistent public opposition to native timber harvesting.

Recent challenges to this philosophy, however, have included rejection of what some call the 'wilderness myth'. <sup>270</sup> Proponents of this concept, which include both supporters and opponents of native timber harvesting, push against the idea of 'wilderness', arguing that management of natural resources is necessary to both halt ecological collapse and reduce mass extinction and threats to human life and property. Some experts have suggested the conservation movement of the 1970s may have actually worsened ecological damage by furthering the idea of 'wilderness' and pushing for minimal human intervention in ecologies. <sup>271</sup> Debates over the merits of 'wilderness' have influenced conversations around best practice in bushfire prevention, landscape regeneration, timber harvesting and reforestation (see below). <sup>272</sup> Interestingly, some forestry industry groups oppose the wilderness concept—Victorian Forests Products Association, for example, said a 'lock up and leave' approach, such as the native timber harvesting ban, could risk further ecological decline and create a greater risk of catastrophic bushfires and floods. <sup>273</sup>

Other experts have pointed out how the wilderness theory has also actively excluded Indigenous land management practices and knowledges, often to the detriment of ecologies.<sup>274</sup> In the Australian context, 'wilderness' has been argued to have particular association with *terra nullius*, or the designation of the lands of Australia as 'unoccupied' and therefore unmanaged at European settlement.<sup>275</sup> Those who oppose the wilderness philosophy claim that Australia's landscape has been managed by its First Nations for nearly 60,000 years, and that to now minimise intervention in favour of 'pristine' and 'untouched'

<sup>&</sup>lt;sup>268</sup> D. Watchorn (2021) 'Australia has failed greater gliders: since they were listed as 'vulnerable' we've destroyed more of their habitat', *The Conversation*, 26 August.

<sup>&</sup>lt;sup>269</sup> J. Watson et al. (2018) 'Protect the last of the wild', *Nature*, *563*, pp. 27-30, doi.org/10.1038/d41586-018-07183-6.

<sup>&</sup>lt;sup>270</sup> A. Taivalkoski (2021) 'Stop calling the Aleutians pristine', Sapiens, 10 August; M.-S. Fletcher et al. (2021) 'Indigenous knowledge and the myth of 'wilderness'', *Pursuit*, 11 October.

<sup>&</sup>lt;sup>271</sup> M.-S. Fletcher (2022) 'How 1970s conservation laws turned this 'paradise on Earth' into a tinder box', *The Conversation*, 1 November.

<sup>&</sup>lt;sup>272</sup> J. Pascoe, M. Shanks, M. & M.-S. Fletcher (2023) op. cit.

<sup>&</sup>lt;sup>273</sup> Victorian Forests Products Association (2023) *Neglect is the real threat to our forests*, media release,

<sup>&</sup>lt;sup>274</sup> M.-S. Fletcher et al. (2021) 'Indigenous knowledge and the shackles of wilderness', *PNAS*, *118*(40) e2022218118, https://doi.org/10.1073/pnas.2022218118.

<sup>&</sup>lt;sup>275</sup> M.-S. Fletcher et al. (2021) 'Indigenous knowledge and the myth of 'wilderness", *Pursuit*, 11 October.

forests actively excludes Indigenous participation in caring for Country (see also 'Challenges'). <sup>276</sup> Particularly in light of the 2019–20 Black Summer bushfires, calls have been growing for more Indigenous-led management practices to be involved in forestry policy. <sup>277</sup> These debates have often related to the ongoing debate over prescribed or cultural burning (see below).

#### Industry status quo

In response to the ban on native forestry logging, many have argued that there is a place for the timber industry in sustainable forest management, championing the leading philosophy of ecologically sustainable forest management (see 'Industry snapshot'). VicForests and other industry bodies have argued that a sustainable forestry industry is possible through careful regeneration practices and selective clearing. They also demonstrate the need for forestry work and workers in bushfire management practices, much of which includes planned burning to reduce fuel loads. Planned

In 2021, a parliamentary inquiry into ecosystem decline in Victoria reported mixed results on the impact of salvage logging in relation to biodiversity and conservation, but identified human intervention as a significant threat to biodiversity in Victoria's forests.<sup>280</sup>

## 2019–20 Black Summer fires

Forestry in Victoria has always been entwined with fire, as far back as pre-colonial days when First Nations groups used fire to manage the landscape. The first major bushfires after colonisation in 1851 (Black Thursday) led to increased calls for more fire-aware forestry management. The major fires of Black Friday in 1939, Ash Wednesday in 1983, and Black Saturday in 2009 (see 'History') all impacted significantly on forestry policy, industry, debates and commentary. Today fire continues to be a key discussion point across many forestry issues, including environmental conservation and climate change concerns, the impacts of fire on lives and livelihoods of people in the industry, and the responsibilities of state and federal governments in protecting both forests and the industry.

The 'Black Summer' fires of 2019–20 have significantly impacted on Victoria's forestry priorities. The 2019–20 fire season was the most devastating Victoria had seen since Black Saturday in 2009. Out-of-control burns were seen across Australia but mostly focused in the south-east, with over 1.5 million hectares burnt across Victoria and New South Wales, of which 1.39 million hectares were in forests and parks, plantation and native timber assets, critical animal habitats and water catchments.<sup>281</sup> One study found 19 per cent of Victoria's native forests were burnt in the fires.<sup>282</sup> Research has since found that the Black Summer

<sup>&</sup>lt;sup>276</sup> M.-S. Fletcher et al. (2021) 'Indigenous knowledge and the persistence of the 'wilderness' myth', *The Conversation*, 1 October.

<sup>&</sup>lt;sup>277</sup> Royal Commission into National Natural Disaster Arrangements (2020) *Final report: Royal Commission into National Natural Disaster Arrangements*,

https://naturaldisaster.royalcommission.gov.au/system/files/2020-11/Royal Commission into National Natural Disaster Arrangements - Report [accessible].pdf, Canberra, 28 October, p. 43.

<sup>&</sup>lt;sup>278</sup> Forestry Australia (2023) Forestry sector dismayed by decision to end Victorian native forestry, media release, 23 May; VicForests (2023) Setting the record straight, VicForests website; Victorian Forest Products Association (2023) Recognising the climate change fighting potential of forest industries on International Day of Forests, media release, 21 March.

<sup>&</sup>lt;sup>279</sup> A. Chisholm (2023) 'Fears bushfires could be 'catastrophic' in Upper Murray as end of native timber logging approaches', *ABC News*, 27 August.

<sup>&</sup>lt;sup>280</sup> Legislative Council Environment and Planning Committee (2021) op. cit., p. xxii.

<sup>&</sup>lt;sup>281</sup> Australian Institute for Disaster Resilience (date unknown) Victoria, November 2019-February 2020: Bushfires – Black Summer, AIDR website.

<sup>&</sup>lt;sup>282</sup> Forests Australia (2020) Forest fire data, ABARES website.

bushfires were part of 'a clear trend of worsening fire weather',<sup>283</sup> and most experts expect such severe and extensive fires to continue and become more frequent into the future.<sup>284</sup>

## Royal Commission major findings

The 2020 Royal Commission into National Natural Disaster Arrangements (quickly dubbed the 'Bushfire Royal Commission') examined Australia's preparedness for, responses to and recovery from natural disasters, but focused largely on bushfires, coming as it did mostly in response to the Black Summer bushfires. One of the notable findings of the commission was that climate change had increased the intensity and severity of the fire season and that Australia was likely to see more catastrophic fires in the future. <sup>285</sup> Other major findings from the commission included a recommendation for a restructure of federal and state decision-making processes regarding natural disasters; a renewed system to facilitate better communication and co-ordination of emergency services; and data on the environmental impact of the fires.

Of particular relevance to Victorian forestry, the commission recommended that public land managers should communicate their fuel load management strategies and that current bushfire mitigation and hazard reduction through vegetation management should be reviewed. Among the testimony was discussion of whether adequate fuel-reduction burning had occurred in the areas worst burnt by the fires. This stretched into wider debates about responsible and sustainable forestry practices. Former Victorian emergency chief Craig Lapsley called for a 'national reset' of prescribed burning, pointing to the fact that scientific evidence regarding burning and its relationship to catastrophic bushfires was 'split'. 287

The commission found that land management and fuel reduction information was often under-reported or unknown across jurisdictions. The commission also reported 'significant gaps in the science'<sup>288</sup> regarding fuel management, particularly in relation to prescribed burning, and that further research is required to assist states and territories to 'determine how to adapt their land management approaches to respond to changing climatic conditions' (see 'Challenges').<sup>289</sup>

#### Forestry and bushfire reduction

The Black Summer fires drove debate over land management techniques, in particular those relating to fuel-reduction burning and the flammability of native forests with and without logging activities.<sup>290</sup>

## Fuel-reduction burning

Also called 'prescribed burning' or 'hazard-reduction burning', fuel-reduction burning is a form of planned burning—the deliberate and targeted burning of bushland to control fire behaviour.<sup>291</sup> It works by removing fuels such as leaf litter from forested areas to reduce the intensity of any future fires in that area, increasing 'the window of opportunity for fire fighters to control bushfires'.<sup>292</sup> Since the Black Summer fires, fuel-reduction burning

<sup>&</sup>lt;sup>283</sup> G. Cook et al. (2021) 'Australia's Black Summer of fire was not normal – and we can prove it', *CSIRO* website, 29 November.

<sup>&</sup>lt;sup>284</sup> N. Abram et al. (2021) 'Connections of climate change and variability to large and extreme forest fires in southeast Australia', *Communications Earth & Environment*, 2, 8.

<sup>&</sup>lt;sup>285</sup> Royal Commission into National Natural Disaster Arrangements (2020) op. cit.

<sup>&</sup>lt;sup>286</sup> Royal Commission into National Natural Disaster Arrangements (2020) op. cit., Chapter 17.

<sup>&</sup>lt;sup>287</sup> P. Hannam & M. Foley (2020) 'Major fire changes needed: Lapsley', *The Age*, 28 April, p. 16.

<sup>&</sup>lt;sup>288</sup> Royal Commission into National Natural Disaster Arrangements (2020) op. cit., p. 373.

<sup>&</sup>lt;sup>289</sup> ibid., p. 374.

<sup>&</sup>lt;sup>290</sup> B. Huf & H. Mclean (2020) *2019–20 Bushfires: Quick Guide*, Parliamentary Library & Information Service, Melbourne, Parliament of Victoria.

<sup>&</sup>lt;sup>291</sup> Note that the 'fuel-reduction burning' is distinct from 'back burning', which is a last-resort method of burning to control an active fire.

<sup>&</sup>lt;sup>292</sup> D. Bowman (2014) 'Explainer: back burning and fuel reduction', *The Conversation*, 8 August.

remains a point of contention when discussing responsibility for and the causes of the fires and looking to future forest management issues (see 'Challenges'). <sup>293</sup>

The science remains somewhat contested and hotly debated.<sup>294</sup> The decision in 2015 to scrap the prescribed-burning targets recommended by the 2009 Victorian Bushfires Royal Commission was just one flashpoint highlighting the differences of opinion over the merits, aims and techniques of fuel-reduction burning.<sup>295</sup>

Many, including the Climate Council, argue that prescribed burning has little to no effect on catastrophic bushfires. <sup>296</sup> Others argue that, while not a 'panacea', it actively reduces the extent and intensity of bushfires and aids firefighting capacity to respond—a finding backed by the Victorian Bushfires Royal Commission in 2009. <sup>297</sup> One research team found that hazard reduction burning disrupts forests' 'self-thinning' processes and can make them more flammable. <sup>298</sup> Another study found that the worsening climate conditions were to blame for the worsening fire seasons facing Australia, not fuel loads and prescribed burning. <sup>299</sup>

The debate became particularly politicised following the Black Summer bushfires, after then Prime Minister Scott Morrison commented on the issue of managing fuel loads, and Nationals MP Barnaby Joyce claimed a 'greens policy' was 'locking up' national parks and preventing effective fuel-reduction burning, and so exacerbating the fires.<sup>300</sup> Community backlash against activities of agencies such as VicForests and the CFA has further stoked debate.<sup>301</sup> The natural disaster arrangements royal commission in 2020 received several submissions relating to prescribed burning, arguing either for an increase as insurance against future fires<sup>302</sup> or for more research and careful use of prescribed burning.<sup>303</sup>

Yet more submissions claimed that prescribed burning had done little to reduce the risk of catastrophic fires and could make landscapes more combustible if done incorrectly.<sup>304</sup> The commission concluded that there were 'community tensions' about prescribed burning and fuel management that may be due to 'a lack of community understanding about its effectiveness and the factors that influence the choice of strategy',<sup>305</sup> and that 'state and

<sup>&</sup>lt;sup>293</sup> Z. Cumpston (2020) 'To address the ecological crisis, Aboriginal people must be restored as custodians of Country', *The Conversation*, 31 January; E. Kinsella & W. Jackson (2020) 'What are hazard reduction burns, are we doing enough of them, and could they have stopped Australia's catastrophic bushfires?', ABC News, 10 January.

<sup>&</sup>lt;sup>294</sup> K. Tolhurst (2020) 'The burn legacy: why the science on hazard reduction is contested', *The Conversation*, 20 February.

<sup>&</sup>lt;sup>295</sup> T. Penman (2015) 'Saving homes, saving wildlife: Victoria ditches burnoff targets', *The Conversation*, 25 November; D. Nimmo, A. Bennett & M. Clarke (2014) 'Burnoff policies could be damaging habitats for 100 years', *The Conversation*, 8 August; L. Mannix (2020) 'These scientists think we're in a 'bushfire spiral'. They have a plan', *The Sydney Morning Herald*, 26 January.

<sup>&</sup>lt;sup>296</sup> The Climate Council (2020) The facts about hazard reduction, Climate Council website, 23 January. A. Morton (2020) 'Hazard reduction burning had little to no effect in slowing extreme bushfires', The Guardian, 6 February; J. Alexander & D. Bowan (2020) 'There's no evidence 'greenies' block bushfire hazard reduction but here's a controlled burn idea worth trying', The Conversation, 7 January.

<sup>297</sup> R. Keenan (2020) 'There's only one way to make bushfires less powerful: take out the stuff that burns', *The Conversation*, 6 January; R. Dawkins (2021) Why hazard reduction burning is no smokescreen, CSIRO website, 4 October; 2009 Victorian Bushfires Royal Commission (2010) Final report: 2009 Victorian Bushfires Royal Commission, Melbourne, July.

<sup>&</sup>lt;sup>298</sup> P. Zylstra (2022) 'Coming of age: research shows old forests are 3 times less flammable than those just burned', *The Conversation*, 23 March.

<sup>&</sup>lt;sup>299</sup> G. Cook et al. (2021) op. cit.

<sup>&</sup>lt;sup>300</sup> G. Readfearn (2019) 'Factcheck: Is there really a green conspiracy to stop bushfire hazard reduction?', *The Guardian,* 12 November.

<sup>&</sup>lt;sup>301</sup> Morgan et al. (2020) 'Prescribed burning in south-eastern Australia: history and future directions', *Australian Forestry*, 83 (1), p. 21; P. Hunt, (2022) 'Roadside fuel loads ready to explode: CFA volunteers abandon burns', *The Weekly Times*, 31 August.

<sup>&</sup>lt;sup>302</sup> M. Foley (2020) "Diminishing effectiveness": Value of hazard reduction during extreme fires questioned", *The Age*, 2 November.

<sup>&</sup>lt;sup>303</sup> J. Davis (2020) 'Hazard reduction burns done incorrectly 'bring back more flammable species', bushfire royal commission hears', *ABC News*, 16 June.

D. Bowman (2020) Transcript of proceedings: Royal Commission into National Natural Disaster Arrangements, Day 7 transcript, Canberra, Commonwealth of Australia, p. 13.
 Royal Commission into National Natural Disaster Arrangements (2020) op. cit. p. 375.

territory governments should take steps to improve public understanding of fuel management'. 306

Prescribed burning is often debated in relation to Indigenous cultural burning and cultural fire practices as a form of landscape management. The Black Summer fires, Victoria's former emergency management commissioner, Craig Lapsley, called for more integration of Indigenous cultural burning practices into Victorian bushfire prevention strategies, but warned that it was 'no silver bullet' for bushfire reduction. Ultural burning differs dramatically from current state and national prescribed burning practices, which generally focus on preventing property loss and fuel reduction, as cultural burns also seek to rejuvenate local flora and protect native habitat.

Whilst some have identified that cultural burning is not a substitute for prescribed burning and fuel management, others have pointed out the philosophy of healthy country that is at the heart of cultural burning (see 'Challenges') and that its use across much smaller areas makes it more suitable for responsible bushfire reduction and forestry than current practice. <sup>310</sup> In 2019, the Victorian Government announced a Traditional Owners Cultural Fire Strategy, which continues to develop policy directives and frameworks to influence statewide fire and land management. <sup>311</sup>

#### Native timber harvesting and fuel reduction

Much of the debate surrounding the end of native timber harvesting drew on the Black Summer bushfires as evidence of the need for more active management of native forests, and many opposing the ban flagged that removing VicForests' ability to conduct native logging would impact the fuel levels in native forests.

Prescribed burning is the main form of fuel management undertaken in Victoria under the Joint Fuel Management Plans, but mechanical fuel reduction and other methods are also used. 'Non-burning treatments' include establishing strategic fuel breaks, mulching, and slashing/mowing. <sup>312</sup> After the 2023 announcement of the accelerated time frame for the native timber ban, Forestry Australia contended that the ban 'is reducing our capacity to implement effective forest management plans and mitigate and respond effectively to bushfire emergencies'. <sup>313</sup> Some experts have argued that native timber harvesting creates more flammable forests by creating a wider spread of younger forests, <sup>314</sup> a finding supported by other research that the Black Summer fires may have been made worse by logging. <sup>315</sup> Conversely, another study found that the hot, dry weather, exacerbated by climate change, had more of an impact on the Black Summer fires than did clear-fell logging of native forests. <sup>316</sup>

Victoria's independent inquiry into the Black Summer fires also looked at 'selective logging', 'forest thinning' and silviculture as mechanical means of bushfire fuel reduction.<sup>317</sup> In October 2020, VAGO conducted an audit of fuel-reduction activities and made

<sup>&</sup>lt;sup>306</sup> Royal Commission into National Natural Disaster Arrangements (2020) op. cit. p. 378.

<sup>&</sup>lt;sup>307</sup> I. Higgins (2020) 'Indigenous fire practices have been used to quell bushfires for thousands of years, experts say', *ABC News*, 9 January.

<sup>308</sup> ibid

<sup>&</sup>lt;sup>309</sup> A. N. Williams, M. Costantine, & S. Mooney (2023) 'A dive into the deep past reveals Indigenous burning helped suppress bushfires 10,000 years ago', *The Conversation*, 17 April; I. Higgins (2020) op. cit. <sup>310</sup> R. Williams (2023) 'Before the colonists came, we burned small and burned often to avoid big fires. It's time to relearn cultural burning', *The Conversation*, 22 June.

<sup>&</sup>lt;sup>311</sup> Forest Fire Management Victoria (2022) Planned burns: Traditional Owner burns, FFMV website.

<sup>&</sup>lt;sup>312</sup> Forest Fire Management Victoria (2022) Planned burns: Joint Fuel Management Program (JFMP), FFMV website

<sup>&</sup>lt;sup>313</sup> Forestry Australia (2023) *Our forests are too important*, media release, 6 June.

<sup>&</sup>lt;sup>314</sup> D. Lindenmayer & C. Taylor (2023) 'After the chainsaws, the quiet: Victoria's rapid exit from native forest logging is welcome—and long overdue', *The Conversation*, 23 May.

<sup>&</sup>lt;sup>315</sup> D. Lindenmayer et al. (2020) 'Recent Australian wildfires made worse by logging and associated forest management', *Nature Ecology and Evolution*, *4*, pp. 898–900.

<sup>&</sup>lt;sup>316</sup> D. Bowman et al. (2021) 'The severity and extent of the Australia 2019–20 Eucalyptus forest fires are not the legacy of forest management', *Nature Ecology Evolution*, 5, pp. 1003–1010.

<sup>317</sup> Inspector General for Emergency Management (2020) op. cit.

17 recommendations, including that more reporting be done on non-burn reduction activities like logging.<sup>318</sup> The Office of the Conservation Regulator developed a bushfire recovery timber harvesting program following the Black Summer fires, which allowed VicForests to harvest timber from the burnt areas. The impact of native timber harvesting on bushfires continues to be debated and is widely agreed to need more investigation.

A significant part of the government's Transition Plan is the retraining of timber industry workers and equipment to be redeployed in jobs associated with fire management and emergency response roles, which the government acknowledged would require more investment in light of the increase in catastrophic events due to climate change.<sup>319</sup>

<sup>&</sup>lt;sup>318</sup> Victorian Auditor-General's Office (2020) *Reducing Bushfire Risks: Independent assurance report to Parliament*, VAGO, Melbourne, October.

<sup>&</sup>lt;sup>319</sup> D. Andrews, Premier (2023) *Delivering certainty for timber workers*, media release, 23 May.

# 5 | Challenges

The timber industry and Victoria's forest management framework face a number of challenges. Current forestry practice under the principles of ESFM—evident in the current regulatory framework—highlight the need to manage forests wisely in recognition of their many values, not just their resource value. These include cultural value to Traditional Owners, intrinsic value to the wider public and particularly environmental value as hosts of much of the land's biodiversity and ecosystems and a key part of wider climate change mitigation strategies.

Integrating and balancing these priorities in forest management planning is a challenge in itself, with many experts and industry stakeholders holding conflicting opinions on how to address them. The transition of management priorities for state forests from harvesting to restoration, the increase in plantation dependence, the increasing risk of bushfire, a well-recorded loss of biodiversity and the onset of climate change have provoked a range of commentary on what best practice should look like. The following section of this paper discusses some of these challenges.

# Industry transition

The transition from native timber to plantation-based timber by 2030 set in train a reorientation of Victoria's timber industry, including its management priorities and supply chains. With the acceleration of the native timber harvesting ban to 1 January 2024, an already large logistical exercise was made more challenging for the industry. While the native timber industry is a small workforce, impacts are expected to be considerable for communities dependent on the industry, like Orbost, where around 25 per cent of the population work in forestry by some estimates, and Wellington Shire.<sup>320</sup>

There is also concern around the extra pressure the native timber ban may have on regions also impacted by the closure of coal-fired power stations, <sup>321</sup> with many in the industry, including the Australian Forest Contractors Association, believing the government's announcement has left many in timber-reliant towns unprepared, given the lack of immediate local options for re-employment (see 'Recent debates and events' for more detail). <sup>322</sup> This raises questions for how the *Victorian Forestry Plan* and the Forestry Transition Program can accommodate both alternative sourcing of timber and retraining and re-employment of workers.

Some of the retraining will target native timber harvesting and haulage operators to prepare them for similar jobs in private plantations. In the case of state forests, however, government focus moves to succession planning for about 1.8 million hectares of land previously covered by the AO. 323 With VicForests having been deregistered and declared as a reorganising body so operations can be reabsorbed into other areas of DEECA, previously operable inventory will now face new management priorities concerned with restoration and regeneration.

Environment Victoria's Jono Le Nauze said many workers will still be needed in the state's forests, highlighting the need to restore damaged landscapes and manage the threat of fires such as those seen in 2019–20. He hoped for a 'big [budget] package looking to secure the future of those workers, still working in the forest for many of them but actually deriving a public benefit from ensuring those forests remain intact and are restored'.<sup>324</sup>

Experts in the industry indicate that supply is a concern, with some noting a lack of new plantations having been established to make up for the loss of native hardwood timber

<sup>&</sup>lt;sup>320</sup> Wood Central (2023) 'Workers Respond to 2024 Victorian State Native Forest Ban', *Wood Central*, 29 May; Kelly (2023) op. cit. See also Maps 1 and 2.

<sup>&</sup>lt;sup>321</sup> B. Preiss (2023) 'Axe falls on Victorian native forest logging', *The Age*, 23 May; Wood Central (2023) op. cit.; C. Kelly (2023) op. cit.

<sup>322</sup> Wood Central (2023) op. cit.

<sup>&</sup>lt;sup>323</sup> Andrews (2023) op. cit.

<sup>324</sup> Whittaker (2023) op. cit.

supply from state forests.<sup>325</sup> In recent times, some have attributed this stagnation to the 'water rule' conditions placed on plantation and farm forestry operators in applying for carbon credit units under the national Carbon Farming Initiative.<sup>326</sup> In Victoria, this water rule—which meant plantations in high-rainfall areas could not claim carbon credits—was removed for plantation forestry operators by ministerial exemption in 2021, and it will be removed nationally for plantation forestry and farm forestry projects on 1 June 2024 to 'reduce regulatory burden and thereby facilitate uptake of projects'.<sup>327</sup> Further suggested barriers to increasing supply include lack of domestic processing capacity, low returns on investment, high land costs, community resistance to increased trees in the landscape and 'poor perception of Victoria as a plantation investment environment'.<sup>328</sup>

Immediate costs of importation are also a challenge for ensuring supply meets demand. According to Victorian Forest Products Association chief executive Deb Kerr, Victoria is already more reliant on timber imports than any other state or territory, importing more than 40 per cent of the national total. 329 Victoria also imports 36 per cent of the nation's total softwood imports as of August 2022, according to Forest and Wood Products Australia. 330 With demand to increase faster than supply in the near future, Kerr and others have warned the state against increasing this reliance, with events such as the war in Ukraine creating uncertainty around international supply chains. 331

# Data and knowledge gaps

While knowledge around forests and management approaches is improving, gaps persist in several areas of Victoria's forest management system, impacting both DEECA's transition from harvesting to restoration of state forests and the development of new plantations. Various forest management and data-gathering practices having been employed in Victoria since European settlement, and understanding the landscape is limited by what data has been recorded in that time. As such, there is dispute around how best to measure and respond to a number of factors—native habitat loss; bushfire risk; biodiversity and species vulnerability—not to mention disputes over what a 'healthy' forest looks like and how one might function sustainably (see also 'Recent debates and events'). These gaps pose a number of challenges to future planning.

In the case of forest ecosystems, Clay and Cooper explain that data scarcity in relation to forest management can pose 'profound difficulty in terms of assessing impact and then navigating decision making' around management interventions.<sup>333</sup> They say:

With any intervention, there will be tradeoffs between social, economic, ecological, and climate benefits ... Taking a systematic approach to identifying and addressing those tradeoffs is heavily compromised by a lack of reliable data.<sup>334</sup>

Data gaps in Victoria are spread across a number of areas and can be in part attributed to an inconclusive body of academic research about historical patterns and impacts of fire, deforestation, biodiversity and management techniques in Victorian forests. In terms of succession planning for state forests, the temporal changes to old growth forest from fire

<sup>325</sup> Wood Central (2023) op. cit.

<sup>&</sup>lt;sup>326</sup> Victorian Forest Products Association (VFPA) (2023) Scrapping of perverse rainfall regulation welcomed, means more trees planted; more carbon stored, media release, 7 July.

<sup>&</sup>lt;sup>327</sup> DCCEEW (2023) Removal of the water rule for forest carbon credit projects, media release, 7 July; VFPA (2023) op. cit.; DCCEEW (2023) 'Explanatory Statement', Carbon Credits (Carbon Farming Initiative) Amendment (Specified Tree Planting) Rule 2023, Canberra, DCCEEW, 7 July, p. 2.

Regional Forest Agreements Scientific Advisory Panel (2019) Scientific Advice to Support Regional Forest Agreement Negotiations, prepared for DELWP, Melbourne, DEECA, November, pp. 5, 56.
 McCubbing (2023) op. cit.

<sup>&</sup>lt;sup>330</sup> VFPA (2022) Victoria—the 'import state' of Australia?, media release, 4 August.

<sup>&</sup>lt;sup>331</sup> McCubbing (2023) op. cit.

<sup>&</sup>lt;sup>332</sup> W. Jackson (2019) *Independent Consultation Paper—Modernisation of the Victorian Regional Forest Agreements*, Melbourne, DELWP, May, p. 40.

<sup>&</sup>lt;sup>333</sup> K. Clay & L. Cooper (2022) 'Safeguarding against Harm in a Climate-Smart Forest Economy: Definitions, Challenges, and Solutions', *Sustainability* 2022, 14, 4209, p. 7.
<sup>334</sup> ibid., p. 7.

disturbance is one of the many knowledge gaps that have been raised, particularly as the government looks to focus its energy towards regeneration of logged landscapes and management of protected forest. Academic and predictive approaches to forest management can also be problematic when studying the effects of fire, as a reliance on 'opportunistic events' leaves scientists trying to account for all contributing factors in retrospect. 336

In 2019, with the industry in a state of flux, a Victorian scientific advisory panel (SAP) reviewed the potential modernisation of RFAs and identified areas in which existing knowledge was inconclusive due to disagreement among experts. One such area was the concept of 'active management'. The report found that the panel could not reach consensus on some active management practices: 'Currently, the knowledge base in relation to active management is variable, and there have been few rigorous scientific studies to support evidence-based decision making in relation to some active-management practices'. <sup>337</sup>

Gaps also present in state-administered monitoring programs that are designed to provide oversight of industry activities and environmental health. In the case of native timber harvesting regulation, VAGO found in October 2022 that insufficient data was preventing the OCR from assessing non-compliance with industry performance standards in native timber harvesting operations. Elsewhere, the SAP stated that federally administered RFAs still contained gaps in reporting data and recommended an update to reporting indicators—in particular, reporting on biodiversity, soil and water resources, and carbon sequestration and storage. 339

Further gaps were highlighted in relation to the challenges of industry transition. An independent review of the RFAs recommended further research on the 'state and trends of pressures on forests', the increasing gap between demand and Victoria's capacity to supply wood products, and the implications of declines in forestry graduates.<sup>340</sup> Regarding the ability of the industry to transition to plantations effectively, the SAP also raised a number of uncertainties, including the following:

- total merchantable volumes of timber—due to decreased tree growth and wood product yield (among other factors) and the current lack of ability to predict volumes
- changed species and product mixes—due to new sources of timber within the industry and uncertainty around the properties of new species and products
- changing costs in providing forest products—due to changes in forest operations and wood processing and uncertainty around the sector's capacity to adapt.<sup>341</sup>

One of the Victorian Commissioner for Environmental Sustainability's *State of the Forests* 2018 recommendations was to conduct 'an analysis of knowledge gaps and a review of the current criteria and indicators for forests reporting', <sup>342</sup> with several of the indicators labelled as having data quality too poor to effectively evaluate performance. The national *State of the Environment 2021* report indicates, more promisingly, that while rich datasets are available for land use and management—particularly for forests—what is lacking is a way to transform the data into products to support monitoring and reporting, including as it relates to greenhouse gas accounting. <sup>343</sup>

The limits of current data and monitoring practices were particularly highlighted in the wake of the 2019–20 bushfires, prompting suggestions that Australia will struggle to address the risks of wildfires while the status quo of monitoring practices is in place. Rumpff et al. said,

<sup>&</sup>lt;sup>335</sup> D. Lindenmayer & C. Taylor (2020) 'Extensive recent wildfires demand more stringent protection of critical old growth forest', *Pacific Conservation Biology*, 26, Abstract.

<sup>&</sup>lt;sup>336</sup> K. Tolhurst & J. Vanclay (2022) *Does timber harvesting make forests more flammable?*, media release for Institute of Foresters of Australia, March.

<sup>&</sup>lt;sup>337</sup> Regional Forest Agreements Scientific Advisory Panel (2019) op. cit., pp. 52–53.

<sup>&</sup>lt;sup>338</sup> Victorian Auditor-General's Office (2022) op. cit., p. 2.

<sup>&</sup>lt;sup>339</sup> Regional Forest Agreements Scientific Advisory Panel (2019) op. cit., pp. 40–42.

<sup>&</sup>lt;sup>340</sup> Jackson (2019) op. cit., pp. 45-46.

<sup>&</sup>lt;sup>341</sup> Regional Forest Agreements Scientific Advisory Panel (2019) op. cit., pp. 42, 58.

<sup>&</sup>lt;sup>342</sup> Commissioner for Environmental Sustainability Victoria (2019) *State of the Forests 2018*, Melbourne, CESV, p. 31.

<sup>&</sup>lt;sup>343</sup> DCCEEW (2021) 'Overview', State of the Environment 2021, Canberra, DCCEEW, pp. 191–93.

following the 2019–20 bushfires, that knowledge gaps 'cloud almost all decisions made about biodiversity conservation, and introduce biases against the most poorly known species'.<sup>344</sup> Another group of experts called for a national monitoring agency to be established that could ease the challenge of responding to future emergencies through collection of more reliable data on variables such as wildfire causes, biodiversity and vegetation coverage and greenhouse gas emissions.<sup>345</sup>

# Traditional Owner involvement and land management

Part of the knowledge gap in native forest management is often attributed to a dearth of Traditional Owner involvement in planning and implementation of forest management practices. As far back as 2003, a scoping report recommended the establishment of an 'Indigenous Forestry Unit' to act as a focal point for the Federal Government's National Indigenous Forestry Strategy, recognising 'the role Indigenous communities can play in the conservation and management of forested lands and the range of wood and non-wood products they can provide, and incorporate this role in forestry industry, Indigenous community and government management plans'.<sup>346</sup>

Criticism persists, however, around a lack of First Nations perspectives in forest management and planning. Jack Pascoe, Matthew Shanks and Michael-Shawn Fletcher, all Aboriginal Victorians with academic expertise in forestry (among other related fields), acknowledge the importance of 'conservationists, nature and timber workers' in conversation but simultaneously lament that 'the commentary has largely failed to include the voices of First Peoples in asserting their rights and obligations as they relate to Forest Country'. Some suggest that the neglect of First Nations voices may even amount to current scientific practice being 'misguided' due to historical biases against their consideration, arguing that barriers preventing implementation of Indigenous knowledge are undermining research and further contributing to knowledge gaps—a view which echoes calls for a 'decolonisation' of forest sciences. Als

A chief concern among calls for greater integration of Traditional Owner perspectives and knowledge is averting further damage to Country. The summary report of the Major Event Review following the 2019–20 fires acknowledged that 'further work is required to understand impacts on Aboriginal heritage places', highlighting the importance of working with Traditional Owners to gain permission and access to their knowledge to inform decision-making. The report on the LCEPC inquiry into ecosystem decline recommended the integration of First Nations input in land restoration and halting biodiversity decline. The Gunaikurnai Land and Waters Aboriginal Corporation (GLaWAC), which jointly manages a number of parks and reserves in Gippsland with the Victorian Government, has also raised the prospect of support to help older community members lead and share knowledge and to

<sup>&</sup>lt;sup>344</sup> L. Rumpff et al (2023) 'Chapter 32: A precautionary tale: the consequences of, and remedies for, data deficiencies and uncertainty in conservation decisions related to the 2019–20 wildfires', *Australia's Megafires: biodiversity impacts and lessons from 2019–20*, Clayton, CSIRO Publishing, p. 417.

<sup>&</sup>lt;sup>345</sup> D. Bowman et al. (2020) 'Wildfires: Australia needs a national monitoring agency', *Nature*, 584, 13 August, p. 188.

<sup>&</sup>lt;sup>346</sup> BDO Consulting (2004) Opportunities and barriers for greater Indigenous involvement in Australia's forestry industry: a scoping report addressing Indigenous involvement in the forestry and associated sectors for the National Indigenous Forestry Strategy Steering Committee, Canberra, Commonwealth of Australia, pp. 17, 20.

<sup>&</sup>lt;sup>347</sup> Pascoe, Shanks & Fletcher (2023) op. cit.

<sup>&</sup>lt;sup>348</sup> Rumpff et al. (2023) op. cit., p. 423; Fletcher, M.-S. et al (2021) 'Catastrophic Bushfires, Indigenous Fire Knowledge and Reframing Science in Southeast Australia', *Fire* 2021, 4(3), 61, p. 1 of 11.

<sup>&</sup>lt;sup>349</sup> DELWP (2021) Summary report: information and data to inform public consultation, Victorian Regional Forest Agreements Major Event Review of the 2019–20 bushfires, Melbourne, DELWP, June, p. 25; Rumpff et al (2023) op. cit., p. 427.

<sup>&</sup>lt;sup>350</sup> Legislative Council Environment and Planning Committee (2021) op. cit., p. 228.

ensure younger community members feel 'safe in learning and practising it'.<sup>351</sup> New agreements have been initiated with some Registered Aboriginal Parties (RAPs) to allow local Traditional Owners more agency to care for Country.<sup>352</sup> Funding was also committed in the 2021–22 state budget to 'reinvigorate Traditional Owner-led cultural land and fire management practices'.<sup>353</sup>

At the root of the integration challenge are changing ideas of what a healthy forest looks like—particularly now with the ending of native timber harvesting—and what 'active management' involves (see discussion of wilderness in 'Recent debates and events'). 354 Table 2 from the *Victorian Traditional Owner Cultural Fire Strategy* explains the general tenets of Aboriginal land management as a process of forest stewardship, including the recognition of fire as a tool for many purposes, including risk prevention and forest regeneration—i.e. cultural burning or 'cool burns'—rather than something to be suppressed.

Fletcher et al. describe it as a 'holistic approach at landscape management' that is 'reflexive to local environmental conditions and cues' and is representative of 'the reciprocity between Australian Indigenous people and the world'.<sup>355</sup> The strategy indicates that Traditional Owners consider that the fire behaviour of some government-planned burns can be 'too intense' and 'damaging to Country', noting that in some circumstances 'a changed environment' can make 'initial conditions difficult to effect a cool burn'.<sup>356</sup>

Table 2: Plan for transitioning from 'sick' Country to 'healthy' Country using cultural burning<sup>357</sup>

SICK COUNTRY	$\longrightarrow$	HEALTHY COUNTRY
Landscapes with high fuel load.	Creation of firm policy and structural governance relationships reflecting partnership, with appropriate bodies (DELWP/CFA/Parks Victoria etc.).	Landscapes with normal fuel load.
Public safety is the first consideration.	Development of complementary practices and processes.	Public safety is the first consideration.
Management to largely a single objective (fuel reduction).	Reducing harmful effects on Country due to 'hot burns'. <sup>30</sup>	Management to multiple objectives and values (healing Country and culture).
The risks of introducing a cultural burning regime are high.	Development of culturally appropriate learning (education, training) and research relationships.	The risks of introducing a cultural burning regime are low.
Practices need to be developed in order to reduce fuel load while lessening the impact on Country.	Development of practices in order to transition to cultural burning whilst working with fuel reduction regimes.	Authentic cultural burning on a Country level involving groups of Traditional Owners as part of a Community of Practice.

Source: Victorian Traditional Owner Cultural Fire Knowledge Group

There are also complications with implementing cultural burning at scale. Taungurung Land and Waters Council (TLaWC) CEO Matthew Burns, while heralding the opportunity to manage land that 'apart from forestry, hasn't been actively managed since colonisation', says that implementation will take a long time because of an historical build-up of fuel. <sup>358</sup> A background paper for the 2020 Royal Commission into National Natural Disaster

<sup>&</sup>lt;sup>351</sup> Royal Commission into National Natural Disaster Arrangements (2020) 'Chapter 18 Indigenous land and fire management', *Royal Commission into National Natural Disaster Arrangements: report*, Canberra, Commonwealth of Australia, October, p. 397.

<sup>&</sup>lt;sup>352</sup> Crivellaro, G. (2021) 'Taungurung agreement creates jobs for mob', *National Indigenous Times*, 11 January.

<sup>&</sup>lt;sup>353</sup> Forest Fire Management Victoria (2022) 'Traditional Owner burns', FFMV website; D'Ambrosio, The Hon. L., Minister for Energy, Environment and Climate Change (2022) *Cultural Burning To Protect Local Communities*, media release, 1 April.

<sup>&</sup>lt;sup>354</sup> Fletcher, M.-S. et al (2021) 'Indigenous knowledge and the persistence of the 'wilderness' myth', *The Conversation*, 1 October.

<sup>&</sup>lt;sup>355</sup> Fletcher, M.-S. et al. (2021) op. cit., p. 4.

Victorian Traditional Owner Cultural Fire Knowledge Group (2020) The Victorian Traditional Owner Cultural Fire Strategy, Melbourne, FFMV, December, p. 17.
 ibid.

<sup>358</sup> Crivellaro (2021) op. cit.

Arrangements echoed this view, finding that around three years of fuel-reduction burning was needed before cultural burning could begin, that it must happen in cooperation with Victorian fire agencies alongside 'common fuel reduction burning techniques', and that relearning cultural fire management and adapting it to current conditions would also take time. The incorporation of Aboriginal knowledge into forest practices through both Indigenous and non-Indigenous custodians also presents as a key challenge, the LCEPC recommending Victoria offer training similar to the Certificate III in Indigenous Land Management offered in NSW. The incorporation burning similar to the Certificate III in Indigenous Land

## El Niño and bushfires

With fire being a natural part of the state's landscape, particularly its forests, Victoria is recognised as one of the most fire-prone areas in the world. An increase in protected areas of forest and an expansion of plantation areas present challenges to the capacity of both public and private stakeholders to manage Victoria's forests with and for fire. With the official onset of the hot-dry El Niño weather system across Australia, experts also see a warming climate, high fuel loads, past land-clearing practices and fire suppression approaches adding yet further dimensions to the challenge of fire for both humans and forest ecosystems.

The Victorian Bushfires Royal Commission had warned in 2010 that it would be a mistake to treat the Black Saturday fires as a 'one-off', <sup>364</sup> and with the recent 2019–20 events, Victoria has now been described as entering a 'bushfire spiral' due to a variety of factors such as the increased flammability of young, recovering forest, the likelihood of more days of high fire risk and fewer days suitable to conduct fuel-reduction burning. <sup>365</sup> Considering the impact on an estimated 3 billion animals through Black Summer, <sup>366</sup> the recurrence of such megafires has been touted as even threatening ecosystem collapse, <sup>367</sup> as well as further impacts including reductions in water provision, soil erosion and excessive carbon emissions. <sup>368</sup>

The onset of El Niño is predicted to bring about the conditions for more such events, with the OCR predicting 'reduced rainfall and warmer temperatures'<sup>369</sup>. Australasian Fire Authorities Council CEO Rob Webb indicated that, with high fuel loads from a few years of the La Niña weather system, preparations should be made for challenging and prolonged fire risk.<sup>370</sup>

This presents as a key challenge for both public and private forest managers. CSIRO's Dr Pep Canadell expects 'forests to continue to be wetter than average from La Niña years', lessening the immediate threat to forests, but CSIRO's leader in bushfire behaviour and risks,

<sup>&</sup>lt;sup>359</sup> Royal Commission into National Natural Disaster Arrangements (2020) *Background paper: cultural burning practices in Australia*, Canberra, Commonwealth of Australia, p. 9–10.

<sup>&</sup>lt;sup>360</sup> D. Bowman & G. Lehman (2020) 'Australia, you have unfinished business. It's time to let our 'fire people' care for this land', *The Conversation*, 28 May.

<sup>&</sup>lt;sup>361</sup> Legislative Council Environment and Planning Committee (2021) op. cit., p. 366.

<sup>&</sup>lt;sup>362</sup> Country Fire Authority (2023) 'Am I at risk?', CFA website.

<sup>&</sup>lt;sup>363</sup> K. Tolhurst (2023) 'It's official: Australia is set for a hot, dry El Niño. Here's what that means for our flammable continent', *The Conversation*, 5 July; CSIRO (2023) 'Expert Commentary: 2023/24 El Niño for Australia', CSIRO website; Morgan et al (2020) op. cit., p. 21; P. Attiwill & M. Adams (2013) 'Mega-fires, inquiries and politics in the eucalypt forests of Victoria, south-eastern Australia', *Forest Ecology and Management*, 294, p. 46.

<sup>&</sup>lt;sup>364</sup> 2009 Victorian Bushfires Royal Commission (2010) 'Summary', 2009 Victorian Bushfires Royal Commission Final Report. Melbourne, Government Printer, July, p. 1.

<sup>&</sup>lt;sup>365</sup> Mannix (2020) op. cit.

<sup>&</sup>lt;sup>366</sup> WWF (2020) New WWF report: 3 billion animals impacted by Australia's bushfire crisis, media release, 28 July.

<sup>&</sup>lt;sup>367</sup> Forestry Australia (2023) *Seed shortage and fire puts Victorian forests at risk of collapse*, media release, 30 August; Godfree, R.C. et al. (2021) 'Implications of the 2019–2020 megafires for the biogeography and conservation of Australian vegetation', *Nature Communications*, 12, 1023.

<sup>368</sup> DELWP (2021) Summary report: information and data to inform public consultation, op. cit., p. 28.

<sup>&</sup>lt;sup>369</sup> Victorian Government (2023) 'Trends we are seeing', Victorian Government website.

<sup>&</sup>lt;sup>370</sup> A. Vidler (2023) 'Seasonal bushfire outlook warns danger rising in spring', 9News, 23 August.

Dr Andrew Sullivan, says the threat will soon transition from open woodlands and grass plains to denser forests as the landscape dries out.<sup>371</sup>

This increased fire risk applies equally to state forests and plantations, particularly as a proposed increase in plantation estates introduces more trees to the landscape. While native forest is known to be susceptible to fire and recent impacts on state forests are well-documented, plantations have also borne the brunt of wildfire: in 2019–20, more than 50 per cent of New South Wales's forestry estate was affected by fires, with 33 per cent of the damage impacting short-rotation plantation forests used to produce structural timbers; 372 and in Victoria in 2009–10, HVP reported 22,000 hectares of plantation and custodial land burnt in the week of Black Saturday. 373

While acknowledging plantations' value, some experts have found that the 'mechanisms governing the flammability of plantations remain unclear' and that 'risks to plantations posed by wildfires are a major concern for resource management', with flammability affected by factors such as density, age, climate and soil conditions.<sup>374</sup> This ongoing challenge is somewhat offset by the existence of plantation industry fire brigades, who are active year-round.<sup>375</sup> HVP, for instance, states that it attends on average 65 fires every year,<sup>376</sup> that its fire protection guidelines 'are in excess of those required under current CFA regulations' and that the company 'work closely with neighbouring land owners on fire breaks and fuel reduction activities around common boundaries'.<sup>377</sup>

Nonetheless, some forestry experts have proposed a 'checklist' of risk factors to consider in establishing plantations as Victoria moves to expand its plantation estate, including consideration of: regional climatic conditions and natural fire regime; landscape design (including buffers to community); and plantation compartment size, particularly the use of smaller compartments to limit potential spread of fire, among other measures.<sup>378</sup> See the 'Industry snapshot' for more detail on plantations and their contributions to fire prevention.

# Climate change

Climate change and forest sustainability are intimately connected, with forests acting as significant carbon sinks drawing down carbon from the atmosphere.<sup>379</sup> Allowing for variation in data-gathering practices between countries, a 2022 study predicted that limiting warming to 1.5°C 'with no or limited overshoot' involves—among other things—forest cover increasing in the order of 322 million hectares worldwide by 2050.<sup>380</sup> The report also indicated that forestry is uniquely placed to deliver large benefits in mitigating the acceleration of human-induced climate change and states with 'medium confidence' that mitigation measures in forests have large economic potential, albeit with 'persistent' financing barriers.<sup>381</sup> Much of this potential lies in carbon dioxide removal through reductions in deforestation, improved forest management, afforestation and agroforestry.

Australia was one of 143 countries to sign the Glasgow Leaders' Declaration on Forests and Land Use (GDFLU) in 2021 at the United Nations Climate Change Conference, aiming to avoid

<sup>371</sup> CSIRO (2023) op. cit.

<sup>&</sup>lt;sup>372</sup> Wood Central (2023) 'El Nino Alert: High Fire Risk in Australia & Indonesia Forests', *Wood Central*, 18 August.

<sup>&</sup>lt;sup>373</sup> HVP (2020) *A Fire Force*, Melbourne, HVP website, March, p. 6.

<sup>&</sup>lt;sup>374</sup> D. Lindenmayer, M. Yebra & GJ. Cary (2023) 'Perspectives: Better managing fire in flammable tree plantations', *Forest Ecology and Management*, vol 528, 120641, p. 2.

<sup>&</sup>lt;sup>375</sup> Country Fire Authority (2023) 'Forest Industry Plantations' op. cit.

<sup>&</sup>lt;sup>376</sup> HVP (2020) *A Fire Force*, op. cit., p. 6.

<sup>&</sup>lt;sup>377</sup> HVP (2023) 'Fire management', HVP website.

<sup>&</sup>lt;sup>378</sup> Lindenmayer, Yebra & Cary (2023) op. cit., p. 4.

<sup>&</sup>lt;sup>379</sup> Commissioner for Environmental Sustainability Victoria (2019) op. cit., p. 127.

<sup>&</sup>lt;sup>380</sup> Intergovernmental Panel on Climate Change (IPCC), ed. (2023) 'Technical Summary', Frontmatter in , Cambridge, Cambridge University Press, p. 85. Intergovernmental Panel on Climate Change (IPCC), ed. (2023) *Climate Change 2022—Mitigation of Climate Change: Working Group III Contribution to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change*, Cambridge, Cambridge University Press, p. 85.

<sup>&</sup>lt;sup>381</sup> ibid., pp. 750-51.

forest diebacks as a result of climate tipping points and to ultimately 'halt and reverse forest loss and land degradation'. And while a focus on restoring forest ecosystems and halting deforestation has contributed to Victoria's retreat from native timber harvesting, Victoria's State of the Forests 2018 report indicates that the state's performance to that time had been poor in measuring the contribution of forest ecosystems to the global greenhouse gas balance. Plantations can complicate these carbon accounting measures, given that 'while plantation monoculture forests may maintain forest area, they generally hold and sequester significantly less carbon than old or natural growth forests'. All the state's performance to that time had been poor in measuring the contribution of forest ecosystems to the global greenhouse gas balance.

Climate change also poses a threat to industry. Many experts and commentators have attributed the 2019–20 Black Summer bushfires to the effects of a warming and more volatile climate that has both dried out the landscape but also reduced the number of days on which fuel-reduction burns can be safely conducted.<sup>385</sup> With the commencing El Niño weather event, the risk of forest fires getting out of control is further exacerbated by what the *State of the Climate 2022* report calls a climate-driven trend towards 'fire-generated thunderstorms' generated in the plumes of smoke, potentially leading to further fire-causing lightning strikes and putting resource management at risk.<sup>386</sup>

With a warming climate, there are suggestions trees may be less effective as carbon stores due to slower growth in warmer weather, among other factors.<sup>387</sup> A study in the US has suggested that timber forest inventory in the US will be cut by up to one-fifth by 2100, due to a combination of slower growth, quicker die-off of trees, increasing development and high demand for timber resources.<sup>388</sup> In Australia, there is uncertainty about what climate change will mean for local growth rates. The SAP on RFA modernisation negotiations says that, while pest and fire danger may increase with climate change:

Adapting to climate change, in terms of timber production, may be easier in plantations than in native forests because management is more focused (the major objective is wood production), rotations are shorter, there is some opportunity to change the land base (e.g. not to replant very drought-prone sites) and silvicultural input (e.g. thinning, fertiliser application) can be more intensive and flexible.<sup>389</sup>

Certification has become a well-established way of promoting sustainable forest management and supply-chain practices in the context of climate change pressures. Advocates argue that this market-driven process can apply pressure on the timber industry to keep up with societal expectations around climate action.<sup>390</sup> Certification has been described as an essential part of a 'climate-smart forest economy' (CSFE), aiming to drive behavioural change through a system of sequestration, storage and substitution (i.e. substitution of more fossil-fuel intensive products such as steel and cement with wood products).<sup>391</sup>

These mechanisms are not without criticism, however, facing questions around monitoring of certification compliance, traceability of timber products through the supply chain and accusations of greenwashing.<sup>392</sup> Other challenges for a CSFE include a concern that the

<sup>&</sup>lt;sup>382</sup> UN Climate Change Conference UK 2021 (2021) *COP26: The Glasgow Climate Pact*, Glasgow, UNCCC UK 2021, p. 11.

<sup>&</sup>lt;sup>383</sup> Commissioner for Environmental Sustainability Victoria (2019) op. cit., p. 24.

<sup>&</sup>lt;sup>384</sup> Clay & Cooper (2022) op. cit., p. 5.

<sup>&</sup>lt;sup>385</sup> GJ. Van Oldenborgh, F. Krikken, S. Lewis et al. (2021) 'Attribution of the Australian bushfire risk to anthropogenic climate change', *Natural Hazards and Earth System Sciences*, 21; Royal Commission into National Natural Disaster Arrangements (2020) op. cit., p. 55.; Cook et al. (2021) op. cit.

<sup>&</sup>lt;sup>386</sup> CSIRO & Bureau of Meteorology (2022) *State of the Climate 2022*, Commonwealth of Australia, p. 5. <sup>387</sup> T. Fairman, C. Nitschke, & L. Bennett (2021) 'Australian forests will store less carbon as climate change worsens and severe fires become more common', *The Conversation*, 9 December.

<sup>&</sup>lt;sup>388</sup> North Carolina State University (2023) 'Climate change may cut US forest inventory by a fifth this century', *Science Daily*, 1 February.

<sup>&</sup>lt;sup>389</sup> Regional Forest Agreements Scientific Advisory Panel (2019) op. cit., pp. 58.

<sup>&</sup>lt;sup>390</sup> ER. Briales & S. Flinn (2023) *Can Rising Demand for Timer in Construction Accelerate Deforestation?*, conference paper, prepared for the World Conference on Timber Engineering Oslo 2023, January.
<sup>391</sup> Clay & Cooper (2022) op. cit., p. 1.

<sup>&</sup>lt;sup>392</sup> ibid., p. 5; Briales & Flinn (2023) op. cit.

costs of certification can entrench 'uneven power dynamics' if some operators can afford certification and others can't.<sup>393</sup>

Yet more challenges exist in regard to construction and the timber supply chain. There have been calls for Australian construction to be fully decarbonised by 2050, with some even calling for a 2030 goal.<sup>394</sup> The building sector already represents 37 per cent of global greenhouse gas emissions—with about one-sixth of that created through concrete, steel and aluminium construction—and concerns have been raised over how increased demand for more carbon-efficient materials, such as timber, might impact on forest stocks, associated ecosystems and forest-reliant communities.<sup>395</sup> The 2018 Global Status Report compiled by the Global Alliance for Buildings and Construction found that transitioning 'from concrete and steel construction to composite, timber or bio-based materials could potentially reduce embodied carbon in buildings', thereby necessitating an increase in timber supply for non-residential buildings (where timber is currently more rarely used).<sup>396</sup>

# Biodiversity

One of the main takeaways from the 2021 LCEPC inquiry into ecosystem decline was an immediate need to halt and reverse the loss of biodiversity across the landscape, notably in our forests. The report explores a number of factors in forests that pose threats to biodiversity, including climate change, bushfires, invasive species and human interventions resulting in fragmentation and habitat loss.<sup>397</sup> Particular scrutiny was reserved for salvage logging in fire-affected areas, a much-debated issue among experts and one the committee inquiry did not come to a conclusion on other than to recommend that government consult with Traditional Owners on future forestry policy.<sup>398</sup> The LCEPC recommended a range of measures, which included better resourcing for managers and Traditional Owners, together with equipping private land owners with 'ecological expertise and education to support environmental restoration'.<sup>399</sup>

In 2017, VEAC also provided a list of processes potentially threatening to biodiversity, listing timber harvesting, fragmentation, planned and unplanned burning, and planned absence of fire as potentially threatening processes, among many others. 400 VicForests routinely undertakes regrowing, seed collection and regenerative burning and, as it exits native timber harvesting, has recently begun the process of repopulating harvested and fire-affected areas. 401

Regulatory and legislative reform is a big piece in the biodiversity puzzle. The current RFAs were designed to combat the adverse impacts of timber harvesting processes and have been amended to include major event reviews and require threatened species assessment and protections, following the Samuel review of the EPBC Act. However, the RFAs are still criticised as inadequate for the purposes of maintaining biodiversity in forest management,

<sup>&</sup>lt;sup>393</sup> Clay & Cooper (2022) op. cit., p. 2.

<sup>&</sup>lt;sup>394</sup> R. Harley (2021) 'Net zero won't be easy for Australia's housing sector', *Australian Financial Review*, 4 November.

<sup>&</sup>lt;sup>395</sup> United Nations Environment Programme (2022) 2022 Global Status Report for Buildings and Construction: Towards a Zero-emission, Efficient and Resilient Buildings and Construction Sector, Nairobi, UNEP, p. 42; Clay & Cooper (2022) op. cit. p. 2.

<sup>&</sup>lt;sup>396</sup> UNEP (2018) op. cit., p. 46.; ibid., p. 45.

<sup>&</sup>lt;sup>397</sup> Legislative Council Environment and Planning Committee (2021) op. cit., p. xxii.

<sup>&</sup>lt;sup>398</sup> ibid., p. 228; Pascoe, Shanks & Fletcher (2023) op. cit.; D. Lindenmayer & C. Taylor (2023) 'After the chainsaws, the quiet: Victoria's rapid exit from native forest logging is welcome—and long overdue', *The Conversation*, 23 May.

<sup>&</sup>lt;sup>399</sup> Legislative Council Environment and Planning Committee (2021) op. cit., p. 142.

<sup>&</sup>lt;sup>400</sup> Victorian Environmental Assessment Council (2017) Conservation values of state forests: assessment report, Melbourne, VEAC, pp. 34–35.

VicForests (2023) 'Regrowing our forests', VicForests website; VicForests (2023) VicForests prepares for planting season with over 200,000 seedlings delivered, media release, 29 August.
 DEECA (2023) 'Victorian Regional Forest Agreements', op. cit.; Samuel (2020) op. cit.

and it remains to be seen how far federal reforms will go in ensuring that the provisions of the EPBC Act apply to RFAs.<sup>403</sup>

While native timber harvesting will cease, some challenges remain for biodiversity around the expansion of plantations. Victoria's SAP to the RFA negotiations indicated that there were potential benefits to biodiversity from more trees in the landscape and from the potential for integrated pest management, but said a strategic approach was needed. The panel also raised questions about what should happen if an EPBC-listed protected species were to occupy a plantation—noting that particularly native species plantations can take on the characteristics of native forest—and what harvesting and compensation rights then exist for plantation owners.

Ultimately, the SAP concluded that plantations have potential for both positive and negative biodiversity outcomes, depending on the adequacy of planning, placement and design.<sup>406</sup>

<sup>&</sup>lt;sup>403</sup> Cox, L. & Smee, B. (2022) 'Tanya Plibersek confirms new environmental protection agency to enforce conservation laws', *The Guardian Australia*, 8 December.

<sup>&</sup>lt;sup>404</sup> Regional Forest Agreements Scientific Advisory Panel (2019) op. cit., pp. 54, 62–63.

<sup>&</sup>lt;sup>405</sup> ibid, p. 65.

<sup>406</sup> ibid.

# Conclusion

A time of transition for Victorian forestry, heralded by the introduction of the government's *Victorian Forestry Plan* in 2019, has had profound impacts on the timber industry and its supply chains. The acceleration of the native timber harvesting ban to 1January 2024 has brought praise from some sections of the community, concern from others and additional uncertainty around how the transition will be managed and whether the supports in place through the plan will be enough for the industry to accommodate the change.

Much of the reason for the state's retreat from native timber harvesting was lengthy litigation processes around native wildlife protections, leaving VicForests' position untenable. The government's plan has identified and provided a suite of programs and funding to be spread across four main areas requiring address: timber supply, industry transition (aided by the Victorian Forestry Plan Advisory Committee), business support and community support. However, concerns remain over the preparedness of these communities to compensate for the loss of state forest timber supply through transition to alternative sources such as plantations, with new plantation establishment having stagnated in recent years.

The accelerated timeline and changes to departments and ministries through the election cycle have also left certain parts of the legislative structure around forestry unclear. VicForests has been deregistered, with its operations to be absorbed into other areas of DEECA, though it is yet to be determined what this reallocation of responsibilities will look like with regard to a number of factors, including: the legislative, zoning and regulatory frameworks; the redistribution of responsibilities within Government and its various agencies; stakeholder representation on bodies such as the Victorian Forestry Industry Council; management approaches in land previously part of the AO; and how the re-routing of forestry to plantation-based supply will affect industry participants in both the short and long term.

In the immediate future, authorities will be looking at ways to mitigate the risk of a repeat of the 2019–20 bushfires, as the state enters an El Niño weather system with high fuel loads from La Niña and the threat of hot, dry weather. With plantations needing considerable time to mature from planting, there are also immediate concerns around a lack of short-term supply to local markets, particularly of hardwood previously supplied from state forests. A range of considerations are set to influence decision-making around forest management in the coming years, including: the capacity of industry to adapt to new supply chains; existing data gaps; climate change; bushfire preparedness; biodiversity; and Traditional Owner agency and involvement in management of Country.

A new-look forestry industry will also be informed by the release of two reports: the federal Department of Agriculture, Fisheries and Forestry's *State of the Forests 2023* report and the Victorian Commissioner for Environmental Sustainability's *State of the Forests 2023*. These will provide up-to-date data on forest health at a time when the management of forests undergoes broad changes.

# Terminology

Afforestation	'establishment of forest through planting and/or deliberate seeding on land that, until then, was not classified as forest.' <sup>407</sup>	
Coupe	'A single area of forest or plantation of variable size, shape and orientation from which timber is harvested in one operation.'408	
Clear-felling	Cutting or harvesting all the trees in a block or <b>coupe.</b> <sup>409</sup>	
Forest	'An area, incorporating all living and non-living components, that is dominated by trees having usually a single stem and a mature or potentially mature stand height exceeding 2 metres and with existing or potential crown cover of overstorey strata about equal to or greater than 20%.'410	
Fuel-reduction burning	'Targeted burning of bushland to control fire behaviour to reduce the intensity of subsequent fires at the same place by removing fine surface fuels such as leaf litter. Reducing these hazards increases the window of opportunity for fire fighters to control bushfires.'	
	Also called prescribed burning, planned burning, controlled burning, or hazard-reduction burning.	
	Differs from 'back burning', which is a last resort firefighting measure to prevent fire moving into specific areas by burning available fuel.	
Native timber	Trees or felled logs harvested from <b>native forest</b> for use as <b>timber.</b>	
Native forest	'An area originally naturally occurring, that is dominated by trees having usually a single stem and a mature or potentially mature stand height exceeding two metres and with existing or potential crown cover of overstorey strata about equal to or greater than 20 per cent. This	

<sup>&</sup>lt;sup>407</sup> Food and Agriculture Organisation of the United Nations (2010) 'Global forest resources assessment', *FAO Forestry Paper 163*, 378, Rome, FAO.

<sup>&</sup>lt;sup>408</sup> Department of Environment and Primary Industries (DELWP) (2022) Code of Practice for Timber Production 2014 (as amended 2022), Melbourne, DELWP.

<sup>&</sup>lt;sup>409</sup> Dargavel (2018) op. cit.

<sup>&</sup>lt;sup>410</sup> Department of Agriculture, Fisheries, and Forestry (2023) *Australia's forests and forestry glossary*, Australian Bureau of Agricultural and Resource Econimics and Sciences.

<sup>&</sup>lt;sup>411</sup> Bowman (2023) op. cit.

	definition includes areas of trees that are sometimes described as 'woodlands', but does not include <b>plantations</b> .'412
Old growth forest	'Forest which contains significant amounts of its oldest growth stage, usually senescent trees, in the upper stratum and has been subject to any disturbance, the effect of which is now negligible. For a stand to qualify as old growth, the regrowth growth stage, if present, must be sparse (less than 10% of the total crown cover of the stand).'413
Plantation	'Managed stands of trees of either native or exotic species, planted or sown primarily for timber harvesting operation purposes.'414
State forest	'i. "State forest" within the meaning of the Forests Act 1958 ["reserved forests and protected forests", proclaimed by the minister"]; and
	ii. any other category of public land where timber harvesting operations occur or are proposed to occur.' 415
Timber	'A general term used to describe standing trees or felled logs before processing into wood products. This includes timber from trees or parts of trees which are specified as available for timber harvesting operations but does not include firewood collected for domestic use.'416

<sup>&</sup>lt;sup>412</sup> Department of Environment and Primary Industries (DELWP) (2022) Code of Practice for Timber Production 2014 (as amended 2022), Melbourne, DELWP.

<sup>&</sup>lt;sup>413</sup> ibid.

<sup>414</sup> ibid.

<sup>&</sup>lt;sup>415</sup> ibid.; Forests Act 1958.

<sup>&</sup>lt;sup>416</sup> Department of Environment and Primary Industries (DELWP) (2022) Code of Practice for Timber Production 2014 (as amended 2022), Melbourne, DELWP.

# Reference List

# Legislation

Aboriginal Heritage Act 2006

Conservation, Forests and Lands Act 1987

Environment Protection and Biodiversity Conservation Act 1999 (Cth)

Environment Protection and Biodiversity Conservation Amendment (Regional Forest Agreements) Bill 2020

Flora and Fauna Guarantee Act 1988

Forests (Wood Pulp Agreement) Act 1996

Forests Act 1958

Illegal Logging Prohibition Act 2012 (Cth)

Land (Plantation Areas) Act 1959

Land Act 1862

Land Conservation Act 1970

Owner Drivers and Forestry Contractors Act 2005

Planning and Environment Act 1987

Sustainable Forests (Timber) Act 2004

Sustainable Forests Timber Amendment (Timber Harvesting Safety Zones) Act 2022

Traditional Owner Settlement Act 2010

Wildlife Act 1975

## Case law

Environment East Gippsland Inc v VicForests (No 4) [2022] VSC 668 (4 November 2022)

Friends of Leadbeater's Possum Inc v VicForests (No 5) [2020] FCA 705

VicForests v Environment East Gippsland Inc & Anor [2023] VSCA 159

VicForests v Friends of Leadbeater's Possum Inc [2021] FCAFC 66

Warburton Environment Inc v VicForests (No 5) [2022] VSC 633 (25 October 2022)

#### References

2009 Victorian Bushfires Royal Commission (2010) *Final report: 2009 Victorian Bushfires Royal Commission*, Melbourne, July.

4BC Brisbane (2023) 'Hemp helping shore-up building material supply', 4BC Brisbane, 1 June.

Abram, N., B. J. Henley, A. S. Gupta, T. J. Lippmann, H. Clarke, A. J. Dowdy, J. J. Sharples, R. H. Nolan, T. Zhang, M. J. Wooster, J. B. Wurtzel, K. J. Meissner, A. J. Pitman, A. M. Ukkola, B. P. Murphy, N. J. Tapper, & M. M. Boer (2021), 'Connections of climate change and variability to large and extreme forest fires in southeast Australia', *Communications Earth & Environment*, 2, 8.

Alexander, J. & D. Bowan (2020) 'There's no evidence 'greenies' block bushfire hazard reduction but here's a controlled burn idea worth trying', *The Conversation*, 7 January.

Andrews, D., Premier (2015) Forest Industry Taskforce Terms of Reference Released, media release, 20 November.

Andrews, D., Premier (2019) Securing the future for forestry industry workers, media release, 7 November.

Andrews, D., Premier (2022) *Legislation To Protect Forestry Workers Passed*, media release, 5 August.

Andrews, D., Premier (2023) Delivering certainty for timber workers, media release, 23 May.

Animal Justice Party (date unknown) 'Landclearing', Animal Justice Party website. https://vic.animaljusticeparty.org/land\_clearing

Animal Justice Party (date unknown) 'Wildlife protection', Animal Justice Party website. https://vic.animaljusticeparty.org/wildlife\_protection

Askew, Z. (2023) 'Heyfield reacts to timber axe', *Latrobe Valley Express*, 31 May. https://latrobevalleyexpress.com.au/news/2023/05/31/heyfield-reacts-to-timber-axe/

Attiwill, P. & M. Adams (2013) 'Mega-fires, inquiries and politics in the eucalypt forests of Victoria, south-eastern Australia', *Forest Ecology and Management*, 294, pp. 45–53. DOI: 10.1016/j.foreco.2012.09.015.

Australian Bureau of Statistics (ABS) (2021) *Census Tablebuilder*, Canberra, ABS. https://www.abs.gov.au/statistics/microdata-tablebuilder/tablebuilder

Australian Forest Contractors Association (2023) *End of State forestry in Victoria*, media release, 24 May.

Australian Forest Products Association (2023) *It's time for a National Cabinet discussion on sustainable forest resource security*, media release, 23 May.

Australian Forests Products Association (2023) Skyrocketing hardwood imports and Victoria, WA industry closures should sound alarm bells for Federal Government on sovereign capability, media release, 31 May.

Australian Government and Victorian Government (2022) *State Specific Guideline for Victoria*, Canberra, DAFF, October.

Australian Institute for Disaster Resilience (date unknown) 'Victoria, November 2019-February 2020: Bushfires – Black Summer', AIDR website. https://knowledge.aidr.org.au/resources/black-summer-bushfires-vic-2019-20/

BDO Consulting (2004) Opportunities and barriers for greater Indigenous involvement in Australia's forestry industry: a scoping report addressing Indigenous involvement in the forestry and associated sectors for the National Indigenous Forestry Strategy Steering Committee, Canberra, Commonwealth of Australia.

Biodiversity Council (2023) Victoria takes step toward becoming nature-positive with early exit from native forest logging, media statement, 23 May.

Bowman, D. & G. Lehman (2020) 'Australia, you have unfinished business. It's time to let our 'fire people' care for this land', *The Conversation*, 28 May.

https://theconversation.com/australia-you-have-unfinished-business-its-time-to-let-our-fire-people-care-for-this-land-135196

Bowman, D. (2014) 'Explainer: back burning and fuel reduction', *The Conversation*, 8 August. https://theconversation.com/explainer-back-burning-and-fuel-reduction-20605

Bowman, D. (2020) *Transcript of proceedings: Royal Commission into National Natural Disaster Arrangements*, Day 7 transcript, Canberra, Commonwealth of Australia.

Bowman, D., G. J. Williamson, R. K. Gibson, R. A. Bradstock, & R. J. Keenan. (2021) 'The severity and extent of the Australia 2019–20 Eucalyptus forest fires are not the legacy of forest management', *Nature Ecology Evolution*, 5, pp. 1003–1010.

Bowman, D., G., Williamson, M. Yebra, J. Lizundia-Loiola, ML. Pettinari, S. Shah, R. Bradstock & E. Chuvieco (2020) 'Wildfires: Australia needs national monitoring agency', *Nature*, Aug, 584(7820), pp. 188–191 doi: 10.1038/d41586-020-02306-4. PMID: 32788729.

Bradshaw, C. J. A. (2012) 'Little left to lose: deforestation and forest degradation in Australia since European colonization', *Journal of Plant Ecology*, 5(1), pp. 109-120.

Bremer, L.L., Farley, K.A. (2010) 'Does plantation forestry restore biodiversity or create green deserts? A synthesis of the effects of land-use transitions on plant species richness', *Biodiversity and Conservation*, 19, pp. 3893–3915. https://doi.org/10.1007/s10531-010-9936-4.

Briales, E.R. & S. Flinn (2023) Can Rising Demand for Timer in Construction Accelerate Deforestation?, conference paper, prepared for the World Conference on Timber Engineering Oslo 2023, January.

Burnett, P. (2023) 'Has time been called on the native forest logging deals of the 1990s? Here's what the Albanese government can do', *The Conversation*, 8 June. https://theconversation.com/has-time-been-called-on-the-native-forest-logging-deals-of-the-1990s-heres-what-the-albanese-government-can-do-206860

Cahir, F., S. McMaster, I. Clark, R. Kerin, & W. Wright (2016) 'Winda Lingo Parugoneit or Why set the bush [on] fire? Fire and Victorian Aboriginal people on the colonial frontier', *Australian Historical Studies*, 47(2) pp. 225–240, https://doi.org/10.1080/1031461X.2016.1156137

Cameron, J. (2023) 'The Andrew's government's industry transition delivers job losses in Gippsland', *Latrobe Valley Express*, 5 July.

Carron, L. T. (1995) *A history of forestry in Australia*, Canberra, Australian National University Press

CFA (2023) 'Am I at risk?', CFA website. https://www.cfa.vic.gov.au/plan-prepare/am-i-at-risk

Chisholm, A. (2023) 'Fears bushfires could be 'catastrophic' in Upper Murray as end of native timber logging approaches', *ABC News*, 27 August. https://www.abc.net.au/news/2023-08-27/bushfire-concerns-in-corryong-as-native-logging-ends-victoria/102552744

Clay, K. & L. Cooper (2022) 'Safeguarding against Harm in a Climate-Smart Forest Economy: Definitions, Challenges, and Solutions', *Sustainability* 2022, 14, 4209.

Clode, D. (2006) As if for a thousand years: A history of Victoria's Land Conservation and Environment Conservation Councils, Melbourne, Victorian Environmental Assessment Council.

Coffey, B. (2019) 'Environmental policy', in P. J. Chen, N. Barry, J. R. Butcher, D. Clune, I. Cook, A. Garnier, Y. Haigh, S. C. Motta & M. Taflaga (eds) *Australian politics and policy: senior edition*, Sydney, Sydney University Press, pp. 559-579. DOI: 10.30722/sup.9781743326671

Coffey, B. (2019) Towards good environmental governance? Assessing the evolution of *Victoria's environment portfolio*, Parliamentary Library & Information Service, Parliament of Victoria.

Commissioner for Environmental Sustainability Victoria (2019) *State of the Forests 2018*, Melbourne, CESV.

Commissioner for Environmental Sustainability Victoria (2019) Victorian Government's action for long-term sustainability of Victoria's native timber forests, CESV website, 12 December. https://www.ces.vic.gov.au/news/victorian-governments-action-long-term-sustainability-victorias-native-timber-forests

Cook, G., A. Dowdy, J. Knauer J. Knauer, M. Meyer, P. Canadell & P. Briggs (2021) 'Australia's Black Summer of fire was not normal—and we can prove it', *The Conversation*, 26 November. https://theconversation.com/australias-black-summer-of-fire-was-not-normal-and-we-can-prove-it-172506

Cook, G., A. Dowdy, J. Knauer, M. Meyer, P. Canadell, P. Briggs (2021) 'Australia's Black Summer of fire was not normal – and we can prove it', *CSIRO website*, 29 November. https://www.csiro.au/en/news/All/Articles/2021/November/bushfires-linked-climate-change

Country Fire Authority (2023) 'Ash Wednesday 1983', CFA website. https://www.cfa.vic.gov.au/about-us/history-major-fires/major-fires/ash-wednesday-1983

Country Fire Authority (2023) 'Forest Industry Plantations', CFA website. https://www.cfa.vic.gov.au/about-us/what-we-do/forest-industry-plantations

Cox, L. (2020) 'Bunnings stops selling timber logged by VicForests after court ruling', *The Guardian Australia*, 1 July.

Cox, L. & B. Smee (2022) 'Tanya Plibersek confirms new environmental protection agency to enforce conservation laws', *The Guardian Australia*, 8 December. https://www.theguardian.com/australia-news/2022/dec/08/tanya-plibersek-confirms-new-environmental-protection-agency-to-enforce-conservation-laws

Crivellaro, G. (2021) 'Taungurung agreement creates jobs for mob', *National Indigenous Times*, 11 January. https://nit.com.au/11-01-2021/1631/taungurung-agreement-creates-jobs-for-mob

CSIRO & Bureau of Meteorology (2022) *State of the Climate 2022*, Commonwealth of Australia.

CSIRO (2023) 'Expert Commentary: 2023/24 El Niño for Australia', CSIRO website, 20 September. https://www.csiro.au/en/news/all/news/2023/september/expert-commentary-el-nino

Cumpston, Z. (2020) 'To address the ecological crisis, Aboriginal people must be restored as custodians of Country', *The Conversation*, 31 January. https://theconversation.com/to-address-the-ecological-crisis-aboriginal-peoples-must-be-restored-as-custodians-of-country-108594

D. Andrews, Premier (2019) 'Transcript of public hearing: Budget Estimates 2019-2020 (Premier)', *Estimates*, Public Accounts and Estimates Committee, 31 May, Melbourne, The Committee.

D'Ambrosio, L., Minister for Energy, Environment, and Climate Change (2017) Celebrating the return of traditional burning, media release, 19 July.

D'Ambrosio, L., Minister for Energy, Environment and Climate Change (2019) *Protecting Victoria's forests and threatened species*, media release, 7 November.

D'Ambrosio, L., Minister for Energy, the Environment and Climate Change (2023) *Airlift* operation to bring forest back to life after bushfire, media release, 2 October.

D'Ambrosio, L., Minister for the Environment and Climate Action (2022) Regenerating ten thousand MCGs of habitat, media release, 4 September.

D'Ambrosio, L., Minister for Energy, Environment and Climate Change (2022) *Cultural Burning To Protect Local Communities*, media release, 1 April.

Dargavel, J. (2018) 'Views and perspectives: why does Australia have 'forest wars'?', *International Review of Environmental History*, 4(1), pp. 33-51.

Davis, J. (2020) 'Hazard reduction burns done incorrectly 'bring back more flammable species', bushfire royal commission hears', *ABC News*, 16 June. https://www.abc.net.au/news/2020-06-16/bushfire-royal-commission-hazard-reduction-burn-warning/12355504

Dawkins, R. (2021) Why hazard reduction burning is no smokescreen, CSIRO website, 4 October. https://www.csiro.au/en/news/All/Articles/2021/October/hazard-reduction-burn

Democratic Labour Party (2018) *Labour DLP will stop the greenie enclosure of our public lands*, media release, 6 November.

Democratic Labour Party (date unknown) 'Policies', DLP website. https://dlp.org.au/policies/

Department of Agriculture, Fisheries and Forestry (2019) 'Forest Certification in Australia', DAFF website. https://www.agriculture.gov.au/agriculture-land/forestry/australias-forests/certification

Department of Agriculture, Fisheries and Forestry (2023) 'RFA history', DAFF website. https://www.agriculture.gov.au/agriculture-land/forestry/policies/rfa/about/history

Department of Agriculture, Fisheries and Forestry (2023) 'Strategic Forest and Renewable Materials Partnership', DAFF website. https://www.agriculture.gov.au/agriculture-land/forestry/policies/rfa/regions/victoria

Department of Agriculture, Fisheries and Forestry (2023) 'Victorian Regional Forest Agreements', DAFF website.

Department of Agriculture, Fisheries and Forestry (2023) 'Who we are', DAFF website. https://www.agriculture.gov.au/about/who-we-are

Department of Agriculture, Fisheries and Forestry (Australian Bureau of Agricultural and Resource Economics and Sciences) (2023) 'Log volume, by state and type', *Australian forest and wood products statistics: March–June quarters* 2022, Canberra, ABARES, August.

Department of Agriculture, Fisheries and Forestry (Australian Bureau of Agricultural and Resource Economics and Sciences) (2023) 'Australian plantations statistics update', ABARES website. https://www.agriculture.gov.au/abares/research-topics/forests/forest-economics/plantations-update

Department of Agriculture, Fisheries and Forestry (Australian Bureau of Agricultural and Resource Economics and Sciences) (2023) 'New plantations established, by state/territory and type ('000 ha)', *Australian plantation statistics update: supporting data tables*, Canberra, ABARES, August.

Department of Agriculture, Fisheries and Forestry (Australian Bureau of Agricultural and Resource Economics and Sciences) (2023) 'Plantation area, by state/territory and type ('000 ha)', *Australian plantation statistics update: supporting data tables*, Canberra, ABARES, August.

Department of Agriculture, Fisheries and Forestry (Australian Bureau of Agricultural and Resource Economics and Sciences) (2023) 'Public plantation ownership, by state/territory and type ('000 ha)', *Australian plantation statistics update: supporting data tables*, Canberra, ABARES, August.

Department of Climate Change, Energy, the Environment and Water (2022) *Nature Positive Plan: better for the environment, better for business*, Canberra, DCCEEW, December.

Department of Climate Change, Energy, the Environment and Water (2023) 'Permits and other regulation under the EPBC Act', DCCEEW website.

https://www.dcceew.gov.au/environment/epbc/permits-and-regulation

Department of Climate Change, Energy, the Environment and Water (2021) 'Overview', *State of the Environment 2021*, Canberra, DCCEEW.

Department of Climate Change, Energy, the Environment and Water (2023) Removal of the water rule for forest carbon credit projects, media release, 7 July.

https://www.dcceew.gov.au/about/news/removal-water-rule-for-forest-carbon-credit-projects

Department of Climate Change, Energy, the Environment and Water (2023) 'Explanatory Statement', Carbon Credits (Carbon Farming Initiative) Amendment (Specified Tree Planting) Rule 2023, Canberra, DCCEEW, July.

Department of Energy, Environment and Climate Action (2021) 'Forest management plans', DEECA website. https://www.forestsandreserves.vic.gov.au/forest-management/forest-management-plans

Department of Energy, Environment and Climate Action (2022) 'The Major Event Review of Regional Forest Agreements', DEECA website.

https://www.deeca.vic.gov.au/futureforests/what-were-doing/the-major-event-review-of-regional-forest-agreements

Department of Energy, Environment and Climate Action (2023) 'Agreements with Traditional Owners', DEECA website. https://www.forestsandreserves.vic.gov.au/land-management/what-we-do/agreements-with-traditional-owners

Department of Energy, Environment and Climate Action (2023) 'Commercial timber production from public forests', DEECA website.

https://www.deeca.vic.gov.au/forestry/forestry-in-victoria/commercial-timber-production-from-public-forests

Department of Energy, Environment and Climate Action (2023) 'Ending native timber harvesting', DEECA website. https://www.deeca.vic.gov.au/futureforests/immediate-protection-areas/victorian-forestry-plan

Department of Energy, Environment and Climate Action (2023) 'Forestry Transition Program', DEECA website. https://www.deeca.vic.gov.au/forestry/forestry-transition-program

Department of Energy, Environment and Climate Action (2023) 'Plantations', DEECA website. https://www.deeca.vic.gov.au/forestry/forestry-in-victoria/plantations

Department of Energy, Environment and Climate Action (2023) 'Victorian Environmental Assessment Council (VEAC)', DEECA Forests and Reserves website. https://www.forestsandreserves.vic.gov.au/land-management/managing-crown-land/victorian-environment-assessment-council

Department of Energy, Environment and Climate Action (2023) Victoria's bushfire emergency: Biodiversity response and recovery', DEECA website. https://www.wildlife.vic.gov.au/home/biodiversity-bushfire-response-and-recovery

Department of Energy, Environment and Climate Action (2022) 'Victorian Regional Forest Agreements', DEECA website. https://www.deeca.vic.gov.au/futureforests/what-were-doing/victorian-regional-forest-agreements

Department of Energy, Environment, and Climate Action (2022) *The Major Event Review of Regional Forest Agreements*, DEECA.

Department of Environment and Primary Industries (DEPI) (2014) *Management guidelines for private native forests and plantations: Code of Practice for Timber Production 2014*, Melbourne, DEPI.

Department of Environment, Land, Water and Planning (DELWP) (2019) Overview of Victoria's Forest Management System, Melbourne, DELWP, December.

Department of Environment, Land, Water and Planning (2019) Regulating timber harvesting in State forests under the Allocation Order: Statement Of Regulatory Intent, Melbourne, DELWP, June.

Department of Environment, Land, Water and Planning (2021) *Management Standards and Procedures for timber harvesting operations in Victoria's State forests 2021*, Melbourne, DELWP.

Department of Environment, Land, Water and Planning (2021) *Summary report: information and data to inform public consultation*, Victorian Regional Forest Agreements Major Event Review of the 2019–20 bushfires, Melbourne, DELWP, June.

Department of Environment, Land, Water and Planning (2022) Code of Practice for Timber Production 2014 (as amended 2022), Melbourne, DELWP.

Department of Environment, Land, Water and Planning (2022) Code of Practice for Bushfire Management for Public Land (as amended June 2022), Melbourne, DELWP, June.

Department of Environment, Land, Water and Planning (2022) Forest Management Zoning Accountability Framework 2022, Melbourne, DELWP.

Department of Jobs, Precincts and Regions (DJPR) (2021) *Harvest Level in Victorian Regional Forest Agreement regions*, Melbourne, DJPR, November.

Department of Sustainability and Environment (DSE) (2023) Sustainability Charter for Victoria's Forests, Melbourne, DSE.

Doolan, B. (2017) *Institutional Continuity and Change in Victoria's Forests and Parks 1900 – 2010*, masters thesis, Monash University.

Dunn, S. (2017) 'Minority report by Samantha Dunn MLC as member of the Legislative Council Economy and Infrastructure Committee', *Inquiry into VicForests Operations*, October, Melbourne, The Committee.

Eddie, R. & A. Smethurst (2023) "It's like we don't exist": Timber towns grapple with log ban', *The Age*, May 28. https://www.theage.com.au/politics/victoria/it-s-like-we-don-t-exist-timber-towns-grapple-with-log-ban-20230524-p5db03.html

Environment and Communications Legislation Committee (2021) *Environment Protection and Biodiversity Conservation Amendment (Regional Forest Agreements) Bill 2020*, final report, Canberra, The Committee, May.

Ettershank, D. (2023) 'Adjournment: Timber industry', *Debates*, Legislative Council, 1 June, p. 1873.

Fairman, T., C. Nitschke & L. Bennett (2021) 'Australian forests will store less carbon as climate change worsens and severe fires become more common', *The Conversation*, 9 December. https://theconversation.com/australian-forests-will-store-less-carbon-as-climate-change-worsens-and-severe-fires-become-more-common-173233

Federation of Victorian Traditional Owner Corporation (2023) Victorian Traditional Owners must lead the future of Victoria's forested Country, media release, 23 May.

Ferguson, I. S. (1985) Report of the Board of Inquiry into the Timber Industry in Victoria, Department of Conservation, Forests, and Lands, Melbourne.

Fletcher, M.-S., A. Romano, M. Mariani, R. Mullett & S. Connor (2022) 'How 1970s conservation laws turned this 'paradise on earth' into a tinder box', *The Conversation*, 1 November. https://theconversation.com/how-1970s-conservation-laws-turned-this-paradise-on-earth-into-a-tinderbox-192401

Fletcher, M.-S., R. Hamilton, W. Dressler & L. Palmer (2021) 'Indigenous knowledge and the shackles of wilderness', *PNAS*, *118*(40) e2022218118, https://doi.org/10.1073/pnas.2022218118

Fletcher, M.-S., W. Dressler, L. Palmer & R. Hamilton. (2021) 'Indigenous knowledge and the myth of 'wilderness", *Pursuit*, 11 October. https://pursuit.unimelb.edu.au/articles/indigenous-knowledge-and-the-myth-of-wilderness

Fletcher, M.-S., A. Romano, S. Connor, M. Mariani & S. Y. Maezumi (2021) 'Catastrophic Bushfires, Indigenous Fire Knowledge and Reframing Science in Southeast Australia' *Fire*, 4(3):61. https://doi.org/10.3390/fire4030061

Fletcher, M.-S., L. Palmer, R. Hamilton & W. Dressler (2021) 'Indigenous knowledge and the persistence of the 'wilderness' myth', *The Conversation*, 1 October. https://theconversation.com/indigenous-knowledge-and-the-persistence-of-the-wilderness-myth-165164

Foley M. (2020) "Diminishing effectiveness": Value of hazard reduction during extreme fires questioned, *The Age*, 2 November. https://www.smh.com.au/politics/federal/diminishing-effectiveness-value-of-hazard-reduction-during-extreme-fires-questioned-20201030-p56a65.html

Food and Agriculture Organisation of the United Nations (2010) 'Global forest resources assessment', FAO Forestry Paper 163, 378, Rome, FAO.

Forest Fire Management Victoria (FFMV) (2022) 'Traditional Owner burns', FFMV website. https://www.ffm.vic.gov.au/bushfire-fuel-and-risk-management/traditional-owner-burns

Forest Fire Management Victoria (2022) 'Planned burns: Joint Fuel Managament Program (JFMP)', FFMV website. https://www.ffm.vic.gov.au/bushfire-fuel-and-risk-management/joint-fuel-management-program

Forest Fire Management Victoria (2022) 'Planned burns: Traditional Owner burns', FFMV website. https://www.ffm.vic.gov.au/bushfire-fuel-and-risk-management/traditional-owner-burns

Forest Fire Management Victoria (2023) 'Forest Fire Management Victoria', FFMV website. https://www.ffm.vic.gov.au/who-we-are/forest-fire-management-victoria

Forest Industry Taskforce (2018) 'Terms of Reference', Forest Industry Taskforce website [accessed 11 March 2018].

https://webarchive.nla.gov.au/awa/20180310225254/https:/forestindustrytaskforce.com.au/?page\_id=20

Forest Stewardship Council (2023) 'FSC Certificates Public Dashboard', FSC website.

Forest Stewardship Council ANZ (2021) *Media Statement: FSC ANZ and the ABC's allegations against VicForests*, media release, 1 December. https://www.anz.fsc.org/newsfeed/media-statement-fsc-anz-and-the-abcs-allegations-against-vicforests

Forestry Australia (2021) *Housing timber shortage driving native timber demand*, media release, 2 July. https://vfpa.com.au/housing-timber-shortage-driving-native-timber-demand/

Forestry Australia (2023) Seed shortage and fire puts Victorian forests at risk of collapse, media release, 30 August. https://www.forestry.org.au/media-release-seed-shortage-and-fire-puts-victorian-forests-at-risk-of-collapse/

Forestry Australia (2023) Forestry sector dismayed by decision to end Victorian native forestry, media release, 23 May. https://www.forestry.org.au/media-release-forestry-sector-dismayed-by-decision-to-end-victorian-native-forestry/

Forestry Australia (2023) *Our forests are too important*, media release, 6 June. https://www.forestry.org.au/media-release-our-forests-are-too-important/

Forests Australia (2020) 'Forest fire data', ABARES website. https://www.agriculture.gov.au/abares/forestsaustralia/forest-data-maps-and-tools/data-by-topic/fire#area-of-native-forest-in-fire-area-by-forest-tenure-and-jurisdiction

ForestWorks (2023) 'Victorian Forestry Plan Workers Support Program', ForestWorks website. https://forestworks.com.au/victorian-forestry-plan-workers-assist-program/

Fyfe, M. & A. Morton (2012) 'Labor eyed shutdown of native logging', *The Age*, 4 February. https://www.theage.com.au/national/victoria/labor-eyed-shutdown-of-native-logging-20120203-1qxw7.html

Gammage, B. & B. Pascoe (2021) Country: Future fire, future farming, Sydney, Thames & Hudson Australia.

Gammage, B. (2012) The biggest estate on earth: How Aborigines made Australia, Sydney, Allen & Unwin.

Godfree, R. C., N. Knerr, F. Encinas-Viso, D. Albrecht, D. Bush, D. C. Cargill, M. Clements, C. Gueidan, L. K. Guja, T. Harwood, L. Joseph, B. Lepschi, K. Nargar, A. Schmidt-Lebuhn & L. M. Broadhurst (2021) 'Implications of the 2019–2020 megafires for the biogeography and conservation of Australian vegetation', *Nature Communications*, 12, 1023. https://doi.org/10.1038/s41467-021-21266-5.

Greber, J. (2022) 'Stopping native forest logging more profitable', *Australian Financial Review*, 15 November, p. 3.

Griffiths, T. (2001) Forests of ash: An environmental history, Cambridge, Cambridge University Press.

Guy, M. (2022) Illegal protests cut at the heart of Victoria's sustainable native timber industry, media release, 31 January.

Hannam, P. & M. Foley (2020) 'Major fire changes needed: Lapsley', *The Age*, 28 April, p. 16.

Harley, R. (2021) 'Net zero won't be easy for Australia's housing sector', *Australian Financial Review*, 4 November. https://www.afr.com/property/commercial/going-green-won-t-be-easy-for-the-housing-sector-20211103-p5950e

Higgins, I. (2020) 'Indigenous fire practices have been used to quell bushfires for thousands of years, experts say', *ABC News*, 9 January. https://www.abc.net.au/news/2020-01-09/indigenous-cultural-fire-burning-method-has-benefits-experts-say/11853096

Hopkins, P. (2023) 'CPSU and VicForests gathering', Latrobe Valley Express, p. 10.

Huf, B. & H. Mclean (2020) 2019–20 Bushfires: Quick Guide, Parliamentary Library & Information Service, Melbourne, Parliament of Victoria.

Hunt, P. (2022) 'Roadside fuel loads ready to explode: CFA volunteers abandon burns', *The Weekly Times*, 31 August. https://www.weeklytimesnow.com.au/news/roadside-fuel-loads-ready-to-explode-cfa-volunteers-abandon-burns/news-story/0a5fc0e277a0b2b40d6322e5c26a93e4

Hunt, P. (2022) 'Victoria's native forest timber industry: Bid to save jobs lost', *The Weekly Times*, 25 March. https://www.weeklytimesnow.com.au/news/victoria/victorias-native-forest-timber-industry-bid-to-save-jobs/news-story/7ac56660fb0093db04a837f888d08d2f

Hunt, P. (2023) 'Regions out in the cold', The Weekly Times, p. 5.

HVP (2020) A Fire Force, Melbourne, HVP, March.

HVP (2023) 'Fire management', HVP website. https://www.hvp.com.au/hvp-forest-management/hvp-fire-management/

HVP (2023) 'Our products', HVP website. https://www.hvp.com.au/about-hvp/our-products/

Inspector General for Emergency Management (2020) *Inquiry into the 2019–20 Victorian fire season - Phase 1: Community and sector preparedness for and response to the 2019–2020 fire season*, final report, IGEM, Melbourne, July.

Intergovernmental Panel on Climate Change (IPCC), ed. (2023) Climate Change 2022 - Mitigation of Climate Change: Working Group III Contribution to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change. Cambridge: Cambridge University Press, 2023. doi:10.1017/9781009157926.

Jackson, W. (2019) *Independent Consultation Paper—Modernisation of the Victorian Regional Forest Agreements*, Melbourne, DELWP, May.

Jacobsen, R., Davey, S. & Read, S. (2020) *Regional forest agreements: compilation of reservation and resource availability outcomes*, report prepared for the Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES), Canberra, DAFF, December.

Karp, P. & S. Basford Canales (2023) 'Labor rejects ban on native forest logging and PM accuses Greens of hypocrisy on housing', *The Guardian*, 17 August. https://www.theguardian.com/australia-news/2023/aug/17/alp-national-conference-labor-rejects-push-to-ban-native-forest-logging-as-pm-lambasts-greens-over-housing-bill

Keenan, R. (2020) 'There's only one way to make bushfires less powerful: take out the stuff that burns', *The Conversation*, 6 January. https://theconversation.com/theres-only-one-way-to-make-bushfires-less-powerful-take-out-the-stuff-that-burns-129323

Kelly, C. (2023) 'With native forest logging in Victoria to end early, hundreds of workers face an uncertain future', *The Guardian Australia*, 26 May.

https://www.theguardian.com/australia-news/2023/may/26/with-native-forest-logging-in-victoria-to-end-early-thousands-of-workers-face-an-uncertain-future

Kinsella, E. & W. Jackson (2020) 'What are hazard reduction burns, are we doing enough of them, and could they have stopped Australia's catastrophic bushfires?', *ABC News*, 10 January. https://www.abc.net.au/news/2020-01-10/hazard-reduction-burns-bushfire-prevention-explainer/11853366

Kirkham, R. (2023) 'Supreme Court orders VicForests to halt salvage logging in Wombat State Forest coupe', *ABC News*, 26 September. https://www.abc.net.au/news/2023-09-26/vicforests-court-order-stops-logging-wombat-state-forest/102889450

Lee, T. (2023) 'Environment groups, Greens and parts of federal Labor Party call for nationwide end to native logging', *ABC News*, 20 August. https://www.abc.net.au/news/2023-08-20/calls-for-nationwide-ban-on-native-logging/102743498

Legislative Council Environment and Planning Committee (2021) *Inquiry into ecosystem decline in Victoria*, volume 1, Melbourne, The Committee, December.

Libertarian Party Victoria (date unknown), Victorian state politics, Libertarian Party Victoria website. https://vic.ldp.org.au/policies

Lindenmayer, D. & C. Taylor (2020) 'Extensive recent wildfires demand more stringent protection of critical old growth forest', *Pacific Conservation Biology*, 26. DOI: 10.1071/PC20037.

Lindenmayer, D. & C. Taylor (2022) 'Diversifying forest landscape management–A case study of a shift from native forest logging to plantations in Australian wet forests', *Land*, *11*(3), 407, p. 5.

Lindenmayer, D. & C. Taylor (2023) 'After the chainsaws, the quiet: Victoria's rapid exit from native forest logging is welcome—and long overdue', *The Conversation*, 23 May. https://theconversation.com/after-the-chainsaws-the-quiet-victorias-rapid-exit-from-native-forest-logging-is-welcome-and-long-overdue-206181

Lindenmayer, D. & C. Taylor (2023) 'We can't just walk away after the logging stops in Victoria's native forests. Here's what must happen next', *The Conversation*, 5 June. https://theconversation.com/we-cant-just-walk-away-after-the-logging-stops-in-victorias-native-forests-heres-what-must-happen-next-206596

Lindenmayer, D., M. Yebra & G. J. Cary (2023) 'Perspectives: Better managing fire in flammable tree plantations', *Forest Ecology and Management*, vol 528, 120641, ISSN 0378-1127. https://doi.org/10.1016/j.foreco.2022.120641.

Lindenmayer, D., R. M. Kooymanm, C. Taylor, M. Ward, J. E. M. Watson (2020) 'Recent Australian wildfires made worse by logging and associated forest management', *Nature Ecology and Evolution*, 4, pp. 898–900.

Mannix, L. (2020) 'These scientists think we're in a 'bushfire spiral'. They have a plan', *The Sydney Morning Herald*, 26 January. https://www.smh.com.au/national/these-scientists-think-we-re-in-a-bushfire-spiral-they-have-a-plan-20200123-p53u68.html

Mariani, M., S. Connor, M.-S. Fletcher, S. Harberele, J. Stevenson, P. Keshaw, A. Herbert, M. Theuerkauf & D. Bowman (2023) 'Feeding the flames: how colonialism led to unprecedented wildfires across SE Australia', EGU General Assembly 2023, Vienna, Austria, 24-28 April 2023, EGU23-3238. https://doi.org/10.5194/egusphere-egu23-3238

McCubbing, G. (2023) 'Victoria faces timber supply crisis after logging exit, industry warns', *Australian Financial Review*, 25 May. https://www.afr.com/policy/energy-and-climate/victoria-to-face-supply-crisis-after-logging-exit-industry-warns-20230525-p5db8z

Millar, R. & M. Perkins (2023) 'Logging future uncertain as Japanese giant Nippon closes Australia's last white paper plant', *The Sydney Morning Herald*, 15 February. https://www.smh.com.au/environment/sustainability/logging-future-uncertain-as-japanese-giant-nippon-closes-australia-s-last-white-paper-plant-20230215-p5ckm3.html

Morgan, C. & T. Cosoleto (2023), 'Union boss blasts forests committee after logging exit', *The Canberra Times*, 24 May. https://www.canberratimes.com.au/story/8207118/union-boss-blasts-forests-committee-after-logging-exit/

Morgan, G. W., K. G. Tolhurst, M. W. Poynter, N. Cooper, T. McGuffog, R. Ryan, M. A. Wouters, N. Stephens, P. Black, D. Sheehan, P. Leeson, S. Whight & SM. Davey (2020) 'Prescribed burning in south-eastern Australia: history and future directions', *Australian Forestry*, 83:1, pp. 4–28, DOI: 10.1080/00049158.2020.1739883

Morton, A. (2020) 'Hazard reduction burning had little to no effect in slowing extreme bushfires', *The Guardian*, 6 February.

https://www.theguardian.com/environment/2020/feb/06/hazard-reduction-burning-had-little-to-no-effect-in-slowing-this-summers-bushfires

Moulds, F. R. (1991) The dynamic forest: a history of forestry and forest industries in Victoria, Richmond, Lynedoch Publications.

National Centre for Vocational Education Research (2023) 'Total VET students and courses 2022: program enrolments', DataBuilder, NCVER website.

https://www.ncver.edu.au/research-and-statistics/data/databuilder

Neville, L., Minister for Environment, Climate Change & Water (2015) *Protecting Victoria's iconic Leadbeater's Possum*, media release, 17 April.

Neville, L., Minister for the Coordination of Environment, Land, Water, and Planning – COVID-19 (2020) *Funding boost for next steps in long-term bushfire recovery,* media release, 23 August.

Nimmo, D., A. Bennett & M. Clarke (2014) 'Burnoff policies could be damaging habitats for 100 years', *The Conversation*, 8 August. https://theconversation.com/burnoff-policies-could-be-damaging-habitats-for-100-years-30240

North Carolina State University (2023) 'Climate change may cut US forest inventory by a fifth this century', *Science Daily*, 1 February.

https://www.sciencedaily.com/releases/2023/02/230201134216.htm

Opal ANZ (2023) *Opal Maryvale Mill update*, media release, 15 June. https://opalanz.com/news/opal-maryvale-mill-update/

Opal ANZ (2019) Opal Australia Paper support for investment in new Gippsland plantations, media release, 8 November.

Opal ANZ (2023) Opal's response to the Victorian Government announcement on forestry, media release, 23 May.

Parliamentary Budget Office (2022) Election policy costing: Evaluate resident wildlife populations prior to timber harvesting, PBO website. https://pbo.vic.gov.au/response/5299

Parliamentary Budget Office (2023) Election police costing: End native forest logging, PBO website. https://pbo.vic.gov.au/response/6220

Pascoe, J., M. Shanks & M.-S. Fletcher (2023) 'What should happen to native forests when logging ends? Ask Victoria's First Peoples', *The Conversation*, 30 May.

https://theconversation.com/what-should-happen-to-native-forests-when-logging-ends-ask-victorias-first-peoples-206412

Payne, R. (2023) A push for a future-proof Victorian hemp industry, media release, 30 May.

Penman, T. (2015) 'Saving homes, saving wildlife: Victoria ditches burnoff targets', *The Conversation*, 25 November. https://theconversation.com/saving-homes-saving-wildlife-victoria-ditches-burnoff-targets-51114

Perkins, M. (2023) 'Taxpayers billed \$38 million as logging agency fails to supply timber', *The Age*, 9 March. https://www.smh.com.au/environment/conservation/taxpayers-fork-out-38-million-as-logging-agency-fails-to-supply-timber-20230307-p5cq1a.html

Preiss, B. (2023) 'Axe falls on Victorian native forest logging', *The Age*, 23 May. https://www.theage.com.au/politics/victoria/axe-falls-on-native-forest-logging-20230523-p5dahd.html

Ratnam, S. (2022) 'Second reading debate: Sustainable Forests Timber Amendment (Timber Harvesting Safey Zones) Bill 2022', *Debates*, Legislative Council, p. 2603.

Readfearn, G. (2019) 'Factcheck: Is there really a green conspiracy to stop bushfire hazard reduction?', *The Guardian*, 12 November. https://www.theguardian.com/australianews/2019/nov/12/is-there-really-a-green-conspiracy-to-stop-bushfire-hazard-reduction

Regional Forest Agreements Scientific Advisory Panel (2019) *Scientific Advice to Support*Regional Forest Agreement Negotiations, prepared for DELWP, Melbourne, DEECA, November.

Responsible Wood (2023) 'Australian Forest Certification Schemes', Responsible Wood website. https://www.responsiblewood.org.au/what-we-do/our-approach/what-is-certification/

Responsible Wood (2023) 'Custody Certified Organisations Australia', Responsible Wood website. https://www.responsiblewood.org.au/what-you-can-do/find-certified/

Responsible Wood (2023) 'Why We Exist', Responsible Wood website. https://www.responsiblewood.org.au/what-we-do/why-we-exist/

Rooney, K. (2023) 'Victoria moves towards winding up logging business VicForests', *The Age*, 7 September. https://www.theage.com.au/politics/victoria/victoria-moves-towards-winding-up-logging-business-vicforests-20230906-p5e2hi.html

Ross, J. (2023) 'Traditional Owners not consulted before Vic native forest ban', *WoodCentral*, 1 June. https://woodcentral.com.au/traditional-owners-not-consulted-before-vic-native-forest-ban/

Royal Commission into National Natural Disaster Arrangements (2020) Royal Commission into National Natural Disaster Arrangements: report, Canberra, Commonwealth of Australia, October

Royal Commission into National Natural Disaster Arrangements (2020) *Background paper:* cultural burning practices in Australia, Background paper, Canberra, Commonwealth of Australia, June.

Rumpff, L., S. M. Legge, S. van Leeuwen, B. A. Wintle & J. C. Z. Woinarski (2023) 'Chapter 32: A precautionary tale: the consequences of, and remedies for, data deficiencies and uncertainty in conservation decisions related to the 2019–20 wildfires', *Australia's Megafires: biodiversity impacts and lessons from 2019–20*, Clayton, CSIRO Publishing.

Samuel, G. (2020) *Independent Review of the EPBC Act—Final Report*, Department of Climate Change, Energy, the Environment and Water, Canberra, October.

Schapova, N. (2023) 'Victorian timber worker moves interstate amid sawmill closures, strict VicForests rules', *ABC News*, 20 June. https://www.abc.net.au/news/2023-06-30/victorian-timber-industry-worker-moves-interstate-sawmill/102534538

Schirmer, J., M. Mylek, A. Magnusson, B. Yabsley & J. Morison (2018) *Socio-economic impacts of the forest industry: Victoria (exc. the Green Triangle)*, Canberra, Forest & Wood Products Australia, March.

Shooters Fishers and Farmers Party Victoria (date unknown) *How we're Victoria's powerful voice*, SFFP Victoria.

Sinclair, E. K. (1991) *The spreading tree: A history of APM and Amcor 1844–1989*, North Sydney, Allen & Unwin.

Slezak, M. (2021) 'Federal Court finds in favour of VicForests in battle over destruction of Leadbeater's possum habitat', *ABC News*, 10 May. https://www.abc.net.au/news/2021-05-10/possums-logging-appeal-win-for-vicforests/100128352

Symes, J., Minister for Agriculture (2019) 'Transcript of public hearing: Budget Estimates 2019–2020 (Agriculture)', *Estimates*, Public Accounts and Estimates Committee, 12 June, Melbourne, The Committee.

Symes, J., Minister for Regional Development (2019) *Plantation timber to take root in Gippsland*, media release, 24 April.

Symes, J., Minister for Regional Development (2023) *Preparing ground for Victoria's plantation timber future*, media release, 8 October.

Taivalkoski, A. (2021) 'Stop calling the Aleutians pristine', Sapiens, 10 August.

The Climate Council (2020) 'The facts about hazard reduction', Climate Council website, 23 January. https://www.climatecouncil.org.au/facts-about-hazard-reduction/

The Greens Victoria (2021) 'Rural and Regional Policy', Greens Victoria website. https://greens.org.au/vic/policies/rural-and-regional-policy

The Greens Victoria (2022) Forestry workers would form emergency response team under Greens plan, media release, 27 September.

The Greens Victoria (2022) Tackling the climate crisis: The Victorian Greens' plan to fight the climate crisis, grow jobs, and power Victoria with 100% renewable energy by 2030, Victorian Greens.

The Greens Victoria (2023) Win for environmental activists as Labor finally pressured to end native forest logging, media release, 23 May.

The Greens Victoria (2023) *Native forest logging in Victoria would end from June, under Greens Bill,* media release, February 21.

The Greens Victoria (date unknown) 'Forests Policy', Greens Victoria website. https://greens.org.au/vic/policies/forests-policy

The Greens Victoria (date unknown) 'Biodiversity Policy', Greens Victoria website. https://greens.org.au/vic/policies/biodiversity-policy

The Greens Victoria (date unknown) 'Protect the environment', Greens Victoria website. https://greens.org.au/vic/platform/environment

The Nationals (2022) Bath tables bushfire fuel reduction petition, media release, 20 September.

The Nationals (2022) *Illegal green warfare disrespecting Traditional Owners*, media release, 10 May.

The Nationals (2022) Indigenous knowledge is key to plan burns, media release, 18 August.

The Nationals (2022) Petition back increase in fuel reduction burning, media release, 26 July.

The Nationals (2022) Labor playing politics with harvesters' lives, media release, 8 August.

The Nationals (2023) *Labor's timber strangulation heartbreaking for Orbost*, media release, 5 October.

The Nationals (2023) Victoria's bushfire response in jeopardy, media release, 23 February.

Thomas, M. A., Minister for Regional Development (2021) *Powering up new jobs in our forestry transition*, media release, 13 October.

Thomas, M. A., Minister for Regional Development (2021), *Bolstering the Victorian Forestry Plan*, media release, 17 December.

Tierney, G., Minister for Agriculture (2022) *Planting millions more trees for thousands of jobs*, media release, 29 September. https://www.premier.vic.gov.au/planting-millions-more-trees-thousands-jobs

Tierney, G., Minister for Training and Skills (2022) More support for timber workers and communities, media release, 25 October.

Timber Towns Victoria (2023) *The Cessation Of Native Forest Harvesting In Victoria: Position Paper*, Timber Towns Victoria, September.

Tolhurst, K. & J. Vanclay (2022) Does timber harvesting make forests more flammable?, media release for Institute of Foresters of Australia, March.

Tolhurst, K. (2020) 'The burn legacy: why the science on hazard reduction is contested', *The Conversation*, 20 February. https://theconversation.com/the-burn-legacy-why-the-science-on-hazard-reduction-is-contested-132083

Tolhurst, K. (2023) 'It's official: Australia is set for a hot, dry El Niño. Here's what that means for our flammable continent', *The Conversation*, 5 July. https://theconversation.com/its-

official-australia-is-set-for-a-hot-dry-el-nino-heres-what-that-means-for-our-flammable-continent-209126

Tyrrell, R.-L. (2023) Adjournment: Firewood collection', *Debates*, Legislative Council, 20 June, p. 1968.

Tyrrell, R.-L. (2023) 'When the Andrew's Labor Government...', Facebook post [accessed 11 October 2023], Rikkie-Lee Tyrrell MLC, 1 June.

https://www.facebook.com/RikkieLeeTyrrellMLC/posts/pfbid02S5FiaQ54LWstNeJQAf1xYkAoYKiiCtHmYZfVeNcRvjs3yvTC8PJgU2QCAy7jpAAEl

United Nations Climate Change Conference UK 2021 (2021) COP26: The Glasgow Climate Pact, Glasgow, UNCCC UK 2021, November.

United Nations Environment Programme (2022) 2022 Global Status Report for Buildings and Construction: Towards a Zero-emission, Efficient and Resilient Buildings and Construction Sector, Nairobi, UNEP.

Van Oldenborgh, G. J., F. Krikken, S. Lewis, N. J. Leach, F. Lehner, K. R. Saunders, M. van Weele, K. Haustein, S. Li, D. Wallom, S. Sparrow, J. Arrighi, R. K. Singh, M. K. van Aalst, S. Y. Philip, R. Vautard, & F. E. L. Otto (2021) 'Attribution of the Australian bushfire risk to anthropogenic climate change', *Natural Hazards and Earth System Sciences*, 21, pp. 941–60. DOI: 10.5194/nhess-21-941-2021.

VFPA (2022) *Victoria—the 'import state'* of *Australia*?, media release, 4 August. https://vfpa.com.au/victoria-the-import-state-of-australia/.

VicForests (2020) *Annual Report 2019–20*, Melbourne, VicForests, October. https://www.vicforests.com.au/static/uploads/files/vf-annual-report-2020-lowres-v2-1-wfagfcwlxydu.pdf

VicForests (2022) Annual Report 2022, Melbourne, VicForests.

https://www.vicforests.com.au/static/uploads/files/vf-annual-report-2022-final-201222-wfjdjhwlojpk.pdf

VicForests (2022) *VicForests and active forest management*, media release, 1 March. https://www.vicforests.com.au/publications-media/latest-news/vicforests-and-active-forest-management

VicForests (2023) 'Forest facts: Q&A', VicForests website. https://www.vicforests.com.au/publications-media/forest-facts/ganda

VicForests (2023) 'Products', VicForests website. https://www.vicforests.com.au/sales-and-supply/customers-and-products/products-1

VicForests (2023) 'Regrowing our forests', VicForests website.

https://www.vicforests.com.au/vicforest-forest-management/regrowing-our-forests-1

VicForests (2023) 'Timber Utilisation Plan (TUP)', VicForests website.

https://www.vicforests.com.au/vicforest-forest-management/ops-planning/where-vicforests-operates/tup

VicForests (2023) 'Wombat State Forest storm timber recovery', VicForests website. https://www.vicforests.com.au/publications-media/forest-facts/wombat-storm-timber-recovery

VicForests (2023) *Approved Timber Utilisation Plan*, VicForests website, May. https://www.vicforests.com.au/static/uploads/files/approved-tup-schedule-may-2023-wfjtnjoavbws.pdf

VicForests (2023) 'Farm forestry', VicForests website.

https://www.vicforests.com.au/vicforest-forest-management/farm-forestry

VicForests (2023) 'Setting the record straight', VicForests website.

https://www.vicforests.com.au/publications-media/forest-facts/setting-the-record-straight

VicForests (2023) VicForests prepares for planting season with over 200,000 seedlings delivered, media release, 29 August. https://www.vicforests.com.au/publications-

media/latest-news/vicforests-prepares-for-planting-season-with-over-200-000-seedlings-delivered

VicForests (2023) VicForests' Timber Release Plan approved to support transition, media release, 23 June. https://www.vicforests.com.au/publications-media/latest-news/vicforests-timber-release-plan-approved-to-support-transition

Victoria Bushfire Review Committee (1984) Report of the Bushfire Review Committee on bushfire disaster preparedness and response in Victoria, Australia, following the Ash Wednesday fires of 16 February, 1983, final report, Melbourne, The Committee, April.

Victoria Environmental Assessment Council (2017) Fibre and wood supply: Assessment report, VEAC.

Victorian Auditor-General's Office (VAGO) (2020) *Reducing Bushfire Risks: Independent assurance report to Parliament*, VAGO, Melbourne, October.

Victorian Auditor-General's Office (2022) *Regulating Victoria's Native Forests*, Melbourne, VAGO.

Victorian Environmental Assessment Council (2017) Conservation values of state forests: Assessment report, Melbourne, VEAC.

Victorian Forest Industry Taskforce (2016) Victorian Forest Industry Taskforce Statement of Intent, Wilderness Society website.

Victorian Forest Products Association (2023) Recognising the climate change fighting potential of forest industries on International Day of Forests, media release, 21 March.

Victorian Forest Products Association (2023) Scrapping of perverse rainfall regulation welcomed, means more trees planted; more carbon stored, media release, 7 July.

Victorian Forests Products Association (2023) *Neglect is the real threat to our forests*, media release, 1 June.

Victorian Government (2018) Government response to the Parliamentary Inquiry into VicForests' Operations, Legislative Council Economy and Infrastructure Committee, Melbourne, April.

Victorian Government (2019) Victorian Forestry Plan, Melbourne, Victorian Government.

Victorian Government (2023) 'General Order dated 5 December 2022', Victorian Government website. https://www.vic.gov.au/general-order-dated-5-december-2022

Victorian Government (2023) 'Trends we are seeing'. Victorian Government website. https://www.vic.gov.au/regulatory-priorities-2023-2024/trends-we-are-seeing

Victorian Government (2023) Forestry Transition Program: May 2023 update, Melbourne, Victorian Government.

Victorian Government (2023) Victoria Government Gazette, no. s 475.

Victorian Parliamentary Budget Office (2022) '2022 Election Committment Tracker', PBO website.

https://app.powerbi.com/view?r=eyJrIjoiYmFmYThhMDAtZGE5MC00YjFjLWFkYWYtODU5YzdiODJkOWVlliwidCl6ImJhMWU3OGIzLTIwYmMtNDBjNS05NTE3LTMyMTQxZGQ5ZjFmZiJ9&pageName=ReportSectiona66201384363f5d73e35

Victorian Public Sector Commission (2022) SOPS Workforce 2022: Board and board member profile, Melbourne, VPSC, June.

Victorian Traditional Owner Cultural Fire Knowledge Group (2020) *The Victorian Traditional Owner Cultural Fire Strategy*, Melbourne, FFMV, December.

Vidler, A. (2023) 'Seasonal bushfire outlook warns danger rising in spring', *9News*, 23 August. https://www.9news.com.au/national/bushfire-outlook-for-spring-communities-urged-to-prepare-dry-weather/3609f56d-87d2-4f16-ba17-9fdead1a832d

Watchorn, D. (2021) 'Australia has failed greater gliders: since they were listed as 'vulnerable' we've destoryed more of their habitat', *The Conversation*, 26 August. https://theconversation.com/australia-has-failed-greater-gliders-since-they-were-listed-as-vulnerable-weve-destroyed-more-of-their-habitat-164872

Watson, J. E. M., O. Venter, J. Lee, K. R. Jones, J. G. Robinson, H. P. Possingham & J. R. Allan (2018) 'Protect the last of the wild', *Nature*, *563*, pp. 27-30, doi.org/10.1038/d41586-018-07183-6

Wells, K. F., N. H. Wood & P. Laut (1984). Loss of forests and woodlands in Australia: a summary by state, based on rural local government areas, Canberra, CSIRO Division of Water and Land Resources.

Whittaker, J. (2023) 'Victorian government to provide hundreds of millions in support for workers leaving embattled logging industry', *ABC News*, 23 May. https://www.abc.net.au/news/2023-05-23/victoria-native-timber-logging-industry-budget/102379388

Wilderness Society (2019) Andrews government announces steps to improved management and protection for Victoria's forests, media release, 7 November.

Wilderness Society (2023) Fast-tracked end to native forest logging welcomed hard fought forest protections now in sight, media release, 23 May.

Williams, A. N., M. Constantine & S. Mooney (2023) 'A dive into the deep past reveals Indigenous burning helped suppress bushfires 10,000 years ago', *The Conversation*, 17 April. https://theconversation.com/a-dive-into-the-deep-past-reveals-indigenous-burning-helped-suppress-bushfires-10-000-years-ago-203754

Williams, R. (2023) 'Before the colonists came, we burned small and burned often to avoid big fires. It's time to relearn cultural burning', *The Conversation*, 22 June. https://theconversation.com/before-the-colonists-came-we-burned-small-and-burned-often-to-avoid-big-fires-its-time-to-relearn-cultural-burning-201475

Wintle, B., L. Schuijers & S. Bekessy (2021) 'A Victorian logging company just won a controversial court appeal. Here's what it means for forest wildlife', *The Conversation*, 17 May. https://theconversation.com/a-victorian-logging-company-just-won-a-controversial-court-appeal-heres-what-it-means-for-forest-wildlife-160103

Wood Central (2023) 'El Nino Alert: High Fire Risk in Australia & Indonesia Forests', *Wood Central*, 18 August. https://woodcentral.com.au/el-nino-alert-high-fire-risk-in-australia-indonesia-forests/

Wood Central (2023) 'Workers Respond to 2024 Victorian State Native Forest Ban', *Wood Central*, 29 May. https://woodcentral.com.au/workers-respond-to-2024-victorian-state-native-forest-ban/

WoodSolutions (2023) 'Gum, Southern Blue', WoodSolutions website. https://www.woodsolutions.com.au/wood-species/hardwood/gum-southern-blue

WoodSolutions (2023) 'Pine, Radiata', WoodSolutions website. https://www.woodsolutions.com.au/wood-species/softwood/pine-radiata

WWF (2020) New WWF report: 3 billion animals impacted by Australia's bushfire crisis, media release, 28 July. https://wwf.org.au/news/2020/3-billion-animals-impacted-by-australia-bushfire-crisis/

Zylstra, P. (2022) 'Coming of age: research shows old forests are 3 times less flammable than those just burned', *The Conversation*, 23 March. https://theconversation.com/coming-of-age-research-shows-old-forests-are-3-times-less-flammable-than-those-just-burned-179571

#### Suggested citation

Florence, E. & A. Tonkin (2023), *Victoria's timber industry in a time of transition*, Parliamentary Library & Information Service, Melbourne, Parliament of Victoria.

#### Acknowledgements

The Parliament of Victoria Library acknowledges the Traditional Owners of the lands on which we work and live. We pay our respects to Aboriginal and Torres Strait Islander Elders past and present, and we value Aboriginal and Torres Strait Islander history, culture and knowledge.

The authors would like to thank Annie Wright, Ben Reid, Caleb Triscari, Caley Otter, Debra Reeves and Marianne Aroozoo for their assistance in the preparation of this paper. We are also grateful to Dr Brian Coffey for his insights and feedback during the research process.

Information in this paper was current as at the time of publication. It should not be considered as a complete guide to the particular subject or legislation covered. While it is intended that all information provided is accurate, it does not represent professional legal opinion. Any views expressed are those of the author(s). Some hyperlinks may only be accessible on the Parliament of Victoria's intranet.

© 2023 Parliamentary Library & Information Service, Parliament of Victoria



Research Papers produced by the Parliamentary Library & Information Service, Department of Parliamentary Services, Parliament of Victoria are released under a Creative Commons 3.0 Attribution-NonCommercial-NoDerivs licence.

By using this Creative Commons licence, you are free to share – to copy, distribute and transmit the work under the following conditions.

**Attributions** – You must attribute the work in the manner specified by the author or licensor (but not in any way that suggests that they endorse you or your use of the work).

Non-Commercial - You may not use this work for commercial purposes without our permission.

No Derivative Works – You may not alter, transform, or build upon this work without our permission.

The Creative Commons licence only applies to publications produced by the Library, Department of Parliamentary Services, Parliament of Victoria.

All other material produced by the Parliament of Victoria is copyright. If you are unsure, please contact us.

#### Enquiries

Victorian Parliamentary Library & Information Service Parliament House, Spring Street Melbourne VIC 3002 Telephone: (03) 9651 8640

https://new.parliament.vic.gov.au/

Research Paper
Parliamentary Library & Information Service
ISSN 2204-4752 (Print) 2204-4760 (Online)