



Overview of Victoria's Forest Management System

DECEMBER 2019



Acknowledgment

We acknowledge and respect Victorian Traditional Owners as the original custodians of Victoria's land and waters, their unique ability to care for Country and deep spiritual connection to it. We honour Elders past and present whose knowledge and wisdom has ensured the continuation of culture and traditional practices.

We are committed to genuinely partner, and meaningfully engage, with Victoria's Traditional Owners and Aboriginal communities to support the protection of Country, the maintenance of spiritual and cultural practices and their broader aspirations in the 21st century and beyond.



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Department of Environment, Land, Water and Planning

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Contents

Abbreviations and acronyms	viii
1. Introduction	1
1.1. Purpose of the report.....	1
2. Victoria's forests and forest values	2
2.1. Traditional Owners.....	3
2.1.1. <i>Traditional Owner Settlement Act 2010</i> (Vic).....	3
2.1.2. Policy frameworks	3
3. International and national policy context	4
3.1. International settings.....	4
3.2. National settings	4
3.2.1. Comprehensive, Adequate and Representative Reserve System.....	4
3.2.2. Regional Forest Agreements	4
3.2.3. National Reserve System.....	5
3.2.4. <i>Environment Protection and Biodiversity Conservation Act 1999</i> (Cth).....	5
3.2.5. Australia's Framework of Criteria and Indicators	6
3.2.6. Other national legislation and policy	6
4. Victorian forested land use categories	7
4.1. Public land	7
4.1.1. Parks and conservation reserves	7
4.1.2. State forests	8
4.1.3. Other public land	8
4.1.4. Victorian Plantations Corporation land.....	8
4.2. Private land.....	8
5. Structure of Victoria's forest management system	9
5.1. Key legislation for Victoria's forest management system.....	10
5.1.1. <i>Forests Act 1958</i> (Vic).....	10
5.1.2. <i>National Parks Act 1975</i> (Vic).....	10
5.1.3. <i>Crown Land (Reserves) Act 1978</i> (Vic).....	11
5.1.4. <i>Conservation, Forests and Lands Act 1987</i> (Vic).....	11
5.1.5. <i>Flora and Fauna Guarantee Act 1988</i> (Vic)	11
5.1.6. <i>Planning and Environment Act 1987</i> (Vic)	12
5.1.7. <i>Sustainable Forests (Timber) Act 2004</i> (Vic)	12
5.1.8. <i>Traditional Owner Settlement Act 2010</i> (Vic).....	12
5.1.9. <i>Wildlife Act 1975</i> (Vic)	12
5.2. Agencies and responsibilities	13
5.3. Victoria's policy, planning and regulatory framework for forest management.....	14
6. Victoria's CAR reserve system	15
6.1. Formal (dedicated) reserves	15
6.1.1. Parks and conservation reserves	16
6.2. Informal reserves	18
6.2.1. Forest management zones in State forests	18

6.3. Values Protected by Prescription.....	18
6.4. Private land.....	18
6.4.1. Bushtender, Ecotender and Bushbroker schemes.....	19
6.4.2. Trust for Nature covenants.....	19
7. Management of State forests	20
7.1. <i>Sustainability Charter for Victoria’s State forests</i>	20
7.2. Strategic planning for State forests	20
7.2.1. Forest Management Planning and Zoning.....	21
8. Fire management on public land	23
8.1. Preparing for and preventing bushfires	23
8.1.1. <i>Code of Practice for Bushfire Management on Public Land 2012</i>	23
8.1.2. Preparing to protect Victoria’s biodiversity.....	24
8.2. During bushfire	24
8.3. After bushfire.....	24
8.3.1. Post-fire management of public land and its values	24
8.3.2. Protection and management of Matters of National Environmental Significance during and after bushfires	25
9. Management of sustainable timber production	26
9.1. Public native forest – management system for timber harvesting.....	26
9.1.1. Resource Outlook.....	26
9.1.2. Allocation Order for VicForests	26
9.1.3. Timber Release Plans	27
9.1.4. Timber Utilisation Plans.....	27
9.1.5. Operational planning for timber harvesting	28
9.1.6. VicForests Pre-Harvest Assessment.....	28
9.1.7. <i>Code of Practice for Timber Production 2014</i>	28
9.1.8. Regeneration obligations	29
9.1.9. Forest Audit Program.....	29
9.1.10. Office of the Conservation Regulator.....	29
9.1.11. Harvest Level Limits in Regional Forest Agreements	30
9.2. Private land – plantations and native forest – management system for timber harvesting	30
9.2.1. Victoria Planning Provisions.....	30
9.2.2. Controls on the removal of native vegetation on private land	30
9.2.3. Other requirements for private land owners	31
9.2.4. Timber Harvesting Plan	31
9.2.5. <i>Code of Practice for Timber Production 2014</i> – on private land	31
10. Biodiversity and providing for the protection of MNES.....	32
10.1. Matters of National Environmental Significance in Victoria.....	32
10.2. Listed species and ecological communities	32
10.2.1. <i>Flora and Fauna Guarantee Act 1988 (Vic)</i>	32
10.2.2. <i>Wildlife Act 1975 (Vic)</i>	35
10.2.3. <i>Conservation, Forests and Lands Act 1987 (Vic)</i>	35
10.2.4. Forest management zoning scheme	37
10.2.5. <i>Sustainable Forests Timber Act 2004 (Vic)</i>	37
10.3. Migratory Species	38

10.4. Ramsar Wetlands	38
10.5. World Heritage properties and National Heritage places	39
10.5.1. World Heritage properties	39
10.5.2. National Heritage places	40
10.6. Providing for the protection of Matters of National Environmental Significance following bushfires	40
10.6.1. <i>Flora and Fauna Guarantee Act 1988</i> (Vic)	41
10.6.2. <i>Sustainable Forests (Timber) Act 2014</i> (Vic)	42
10.6.3. Biosecurity legislation	42
10.6.4. <i>Victorian Emergency Animal Welfare Plan</i>	42
10.6.5. World Heritage and National Heritage places.....	43
11. Management of ecosystem services	44
11.1. Water supply.....	44
11.2. Honey production	45
11.3. Domestic firewood	45
11.4. Commercial firewood.....	45
11.5. Earth resources	46
11.6. Recreation and tourism	46
12. Management of cultural heritage on public land.....	47
12.1. Management of Aboriginal cultural heritage sites	47
12.1.1. <i>Aboriginal Heritage Regulations 2018</i> (Vic).....	47
12.2. Management of other cultural heritage sites	47
12.3. Management of cultural heritage under the <i>Code of Practice for Timber Production 2014</i> and Forest Management Plans.....	48
13. Regulation and compliance	49
13.1. Enforcing compliance with legislation	49
13.1.1. Office of the Conservation Regulator.....	49
13.1.2. Other enforcement	50
13.2. Key regulations in forests	50
14. Monitoring and reporting	51
14.1. Public reporting.....	51
14.1.1. State of the Forests Report	51
14.1.2. Other reporting	51
14.2. Monitoring and decision-support tools	51
14.2.1. Forest Protection Survey Program	51
14.2.2. Victorian Forest Monitoring Program.....	51
14.2.3. Biodiversity monitoring and decision support tools	52
15. Reforms to the Forest Management System	54
15.1. Legislative and regulatory reform	54
15.1.1. Increasing environmental protections	54
15.1.2. Strengthening DELWP’s regulatory operating model	54
15.1.3. Strengthening the timber harvesting regulatory system	54
15.2. Forest management strategies and plans	55
15.2.1. Vision and strategies for the future management of our forests	55

15.2.2. Integrated Forest and Fire Management Planning.....	55
15.2.3. Modernisation of the RFAs.....	55
15.3. Increasing the efficiency of public land management	56

References.....57

Appendix A	Legislation, policies and strategies relevant to forest management in Victoria	60
Appendix B	National Heritage Places	67
Appendix C	Overview of statistics relating to key forested areas	68
Appendix D	Management of Commonwealth-listed ecological communities within the Victorian Forest Management System.....	69
Appendix E	Mitigating the impacts of forest practices on the Long-footed Potoroo	73
Appendix F	Mitigating the impacts of forest practices on the Leadbeater’s Possum.....	77
Appendix G	Mitigating the impacts of forest practices on the Blue-tongued Orchid	81

List of tables

Table 1: Summary of key types of forest land in land use categories and relevant Victorian legislation	7
Table 2: Elements of FFG Act that provide for the protection of MNES following a bushfire	41
Table 3: Ecosystem services from forests in Victoria	44
Table 4: Commonwealth legislation and policies relevant to Victoria’s forest management system ..	60
Table 5: Key State legislation and regulations relevant to Victoria’s forest management system	61
Table 6: Victorian National Heritage List places.....	67
Table 7: Area of forest by land tenure category in Victoria	68
Table 8: Proportion of State forest by Forest Management Zone.....	68
Table 9: Area of Alpine Sphagnum bogs in Victoria by land use category	69

List of figures

Figure 1: Overview of Victoria’s forest cover, 2018	2
Figure 2: Overview map of Victoria’s Regional Forest Agreements, 2018	5
Figure 3: Key element of Victoria’s forest management system	9
Figure 4 Overview of Victoria’s forest management responsibilities for public land.....	13
Figure 5: Victoria’s policy, planning and regulatory framework for forest management	14
Figure 6: Overview map of IUCN protected areas in Victoria, 2018.....	16
Figure 7: Victoria’s Forest Management Plans and Regional Forest Agreements, 2019	21
Figure 8: Victoria’s forest management zones for State forests, 2018	22
Figure 9: Victoria’s water supply catchments, 2018	45
Figure 10: Overview map of the VFMP monitoring plots	52

Abbreviations and acronyms

AO	Allocation Order
AH Act	<i>Aboriginal Heritage Act 2006 (Vic)</i>
ARI	Arthur Rylah Institute for Environmental Research
Bushfire Code	<i>Code of Practice for Bushfire Management on Public Land 2012</i>
CALP Act	<i>Catchment and Land Protection Act 1994 (Vic)</i>
CAM	Common Assessment Method
CAR	Comprehensive, Adequate and Representative
CFL Act	<i>Conservation, Forests and Lands Act 1987 (Vic)</i>
CLR Act	<i>Crown Land Reserves Act 1978 (Vic)</i>
CMA	Catchment Management Authority
CRA	Comprehensive Regional Assessment
DELWP	Department of Environment, Land, Water and Planning (Vic)
DJPR	Department of Jobs, Precincts and Regions (Vic)
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999 (Cth)</i>
ESFM	ecologically sustainable forest management
FFG Act	<i>Flora and Fauna Guarantee Act 1988 (Vic)</i>
FMP	Forest Management Plan
Forests Act	<i>Forests Act 1958 (Vic)</i>
FPSP	Forest Protection Survey Program
GMZ	General Management Zone
HDM	Habitat Distribution Model
Heritage Act	<i>Heritage Act 2017 (Vic)</i>
Ha	hectare
IUCN	International Union for Conservation of Nature
LPAG	Leadbeater's Possum Advisory Group
MNES	Matters of National Environmental Significance
MSPs	<i>Management Standards and Procedures for Timber Harvesting Operations in Victoria's State Forests 2014</i>
NFPS	National Forest Policy Statement
NP Act	<i>National Parks Act 1975 (Vic)</i>
NRS	National Reserve System
NT Act	<i>Native Title Act 1993 (Cth)</i>
OCR	Office of the Conservation Regulator
PE Act	<i>Planning and Environment Act 1987 (Vic)</i>
PV	Parks Victoria
PV Act	<i>Parks Victoria Act 2018 (Vic)</i>

PVP	Property Vegetation Plan
RAP	Registered Aboriginal Party
RFA	Regional Forest Agreement
RSA	Recognition and Settlement Agreement
SFT Act	<i>Sustainable Forests (Timber) Act 2004 (Vic)</i>
SMZ	Special Management Zone
SPZ	Special Protection Zone
THEZs	timber harvesting exclusion zones
THP	Timber Harvesting Plan
Timber Code	<i>Code of Practice for Timber Production 2014</i>
TOS Act	<i>Traditional Owner Settlement Act 2010 (Vic)</i>
TOLMB	Traditional Owner Land Management Board
TRP	Timber Release Plan
TUP	Timber Utilisation Plan
VBA	Victorian Biodiversity Atlas
VEAC	Victorian Environmental Assessment Council
VFMP	Victorian Forest Monitoring Program
VPP	Victoria Planning Provisions
Wildlife Act	<i>Wildlife Act 1975 (Vic)</i>

1. Introduction

Victoria's forests are precious natural assets that provide a range of environmental, social and economic benefits to the State's communities. The Victorian Government is responsible for forest management across public land and for regulatory functions that extend across both public and private land.

1.1. Purpose of the report

This document provides an overview of Victoria's forest management system as at December 2019 and its various components, including legislation, policies, codes, plans and management practices and processes.

Victoria's forest management system is a comprehensive system for delivering sustainable forest management across all land tenures. The legislative and policy framework and associated planning and operational systems are complemented by compliance and enforcement systems, stakeholder and community engagement, and monitoring, review and continuous improvement processes.

The Victorian Government is implementing a forest management reform program to modernise Victoria's forest management system.

Forest management is an adaptive and ongoing process, and this document will be amended incrementally to reflect changes made to the forest management system.

This document follows the lead of Victoria's *State of the Forests 2018 Report*¹, by adopting the Australian Government's definition of 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 per cent. This includes Australia's diverse native forests and plantations, regardless of age. It is also sufficiently broad to encompass areas of trees that are sometimes described as woodlands.²

2. Victoria's forests and forest values

Victoria has approximately 8.2 million hectares (ha) of forests, including native forest and plantations on public and private land. Of this, 6.2 million ha is in the five Victorian Regional Forest Agreement (RFA) regions, with 5.6 million ha of native forest, 0.41 million ha of commercial plantation and 0.13 million ha of other forest (Figure 1)³.

Approximately 81 per cent of Victoria's forested land is Crown land – including around 3 million ha in forested parks and conservation reserves and around 3 million ha in State forests.⁴

In addition, private landholders manage 1.45 million ha of forest of which around 422,000 ha are plantations.⁵



Figure 1: Overview of Victoria's forest cover, 2018

Source: Victorian State of the Forests Report 2018. Forest values

Victorian forests support a broad range of values and provide services to the State and local communities, including:

- ecosystem regulation, such as biodiversity habitat, water filtration and carbon sequestration;
- providing goods such as wood and non-wood products (e.g. honey); and
- cultural services such as recreation and tourism, education opportunities, preservation of species and ecosystems, and opportunities for cultural and spiritual connection and practice.⁶

The Department of Environment, Land, Water and Planning (DELWP) and Parks Victoria (PV) between them have primary responsibility for the management of most of Victoria's public land.

Many government agencies, statutory authorities and state-owned corporations are involved in aspects of managing values and services across public land and wider landscapes.^a

In November 2019, the Victorian Government announced its decision to phase out all timber harvesting in native forests and transition Victoria's timber industry fully to plantation feedstocks by 30 June 2030. Under

^a Statutory authorities include PV, Melbourne Water and CMAs. State-owned corporations include water corporations such as East Gippsland Water (the trading name for East Gippsland Region Water Corporation, which was established by Ministerial Order and under powers conferred by the *Water Act 1989* (Vic)).

the Government's plan, harvest levels in State forests will be progressively stepped down over the next 10 years.

2.1. Traditional Owners

Victoria's Traditional Owners have intrinsic cultural and spiritual connection to land, water and other resources through their associations and relationship with Country. Traditional Owners have managed land and water sustainably over thousands of years, and access and connection to Country are important for Aboriginal people's health and wellbeing. This relationship is supported in land and forest management through access and joint management arrangements that help foster self-determination.

Victoria's Traditional Owners can also have legal recognition as Registered Aboriginal Parties under the *Aboriginal Heritage Act 2006* (Vic) with responsibility for managing and protecting Aboriginal cultural heritage for a particular area. See further info at 12.

Aboriginal cultural and economic wellbeing is a priority for the Victorian Government and DELWP.⁷ The Victorian Government recognises Traditional Owners through specific legislation and policy settings. Primary legislation includes the *Native Title Act 1993* (Cth) (NT Act) and the *Traditional Owner Settlement Act 2010* (Vic) (TOS Act), which enable settlement determinations. The Victorian Government has also developed a number of policy frameworks that provide direction for government programs and agencies in their interactions with Traditional Owners and other Aboriginal Victorians.

2.1.1. Traditional Owner Settlement Act 2010 (Vic)

The TOS Act establishes a framework that allows the State of Victoria to recognise Traditional Owners and confer certain rights in public land and natural resource management, including the granting of Aboriginal title and joint management arrangements over public parks and reserves, procedural rights over certain activities on public land (Land Use Activity Agreement) and the right to take and use natural resources on public land in the agreement area (Natural Resource Agreement). To document these rights, Traditional Owner groups can enter into a Recognition and Settlement Agreement (RSA).

Aboriginal title is a modified form of freehold whereby the park or reserve is granted in fee simple to a Traditional Owner group, but the right to occupy, use, control and manage the park or reserve remains with the State (section 20(1) of the TOS Act). Additionally, the Aboriginal title lands continue to be managed in accordance with their previous Crown land status.

Where an RSA provides for the granting of Aboriginal title, a Traditional Owner Land Management Board (TOLMB) must be established to provide for the joint management of the Aboriginal title lands. The *Conservation, Forests and Lands Act 1987* (Vic) (CFL Act) enables the responsible minister to establish a TOLMB in relation to most categories of public land to give effect to an RSA.⁸ The majority of TOLMB members are nominated by the Traditional Owner Group Entity; the remaining members, representing the State and the broader community, are nominated by the State.

One of the key responsibilities of the TOLMB is to develop a joint management plan for the Aboriginal title lands, which recognises and incorporates the knowledge and culture of the Traditional Owner group(s). Joint management is a formal partnership arrangement between Traditional Owners and the Victorian Government, where both share their knowledge to manage specific Aboriginal title parks and reserves and other protected areas.⁹

2.1.2. Policy frameworks

The *Victorian Aboriginal Affairs Framework 2018–2023* is the Victorian Government's overarching framework for working with Aboriginal Victorians, organisations and the wider community to drive action and improve outcomes.

The framework sets a direction for how government will plan, act, measure and evaluate to progress change across government, address inequity and deliver stronger outcomes for and with Aboriginal Victorians.¹⁰

The *Self-Determination Reform Framework 2019* guides public service action to enable self-determination in line with the *Victorian Aboriginal Affairs Framework 2018–2023*. It also provides a framework for reporting annually on progressing change towards self-determination.

The Victorian Government is also working in equal partnership with Aboriginal Victorians toward a treaty or treaties with Aboriginal Victorians that reflects the aspirations of Aboriginal Victorians and benefits all Victorians.

3. International and national policy context

3.1. International settings

Australia is a signatory to several international agreements on sustainable forest management, the obligations of which are embodied in Victoria's forest management system. They include the International Convention on Biological Diversity^b (1992) and the 'Global Statement of Principles on Forests' (1992), which both arose from the United Nations Conference on Environment and Development in Rio de Janeiro in 1992.¹¹ Australia is also a Member State of the UN Forum on Forests.

In addition, Australia is a member of the Montreal Process Working Group, which developed a set of international criteria and associated indicators for sustainable forest management in temperate and boreal forests.¹² Australia's Sustainable Forest Management Framework Criteria and Indicators 2008 provide the national framework for forest management, consistent with the Montreal Process criteria and indicators. Australia is also a signatory to the *Convention on Wetlands of International Importance especially as Waterfowl Habitat* (the 'Ramsar Convention').¹³ Several forests in Victoria are listed Ramsar sites, including Barmah Forest and Gunbower Forest in northern Victoria.

3.2. National settings

At the national level, the National Forest Policy Statement (NFPS), first published in 1992, sets out a nationally shared vision for the ecologically sustainable management of Australia's forests. Through this Statement, the Australian, State and Territory governments agreed that:

... the public and private native forest estate will be managed for the broad range of commercial and non-commercial benefits and values it can provide for present and future generations.

Efficiently and sustainably managed public and private forests will provide the basis for nature conservation and maintaining forest biological diversity, and for regional economic development and employment opportunities in a wide range of sectors, including wood production from native and plantation forests, tourism and recreation, water supply, grazing and the pharmaceutical industry.¹⁴

3.2.1. Comprehensive, Adequate and Representative Reserve System

To support implementation of the NFPS, a national subcommittee developed a set of nationally agreed criteria for the establishment of a Comprehensive, Adequate and Representative (CAR) system of reserves within forests in Australia (commonly known as the JANIS criteria).¹⁵ In Victoria, this CAR reserve system was incorporated into the forest management system through the RFAs, that cover forested areas in particular regions.

The reserve system established in each region is required to include the full range of forest communities (*comprehensive*), maintain the ecological viability of forest species (*adequate*) and reflect the biodiversity of forest communities (*representative*).

3.2.2. Regional Forest Agreements

There are five RFAs in effect in Victoria. These are:

- East Gippsland (signed 3 February 1997)
- Central Highlands (signed 27 March 1998)
- North East (signed 9 August 1999)
- West (signed 31 March 2000)
- Gippsland (signed 31 March 2000).

The *Regional Forest Agreements Act 2002* (Cth) gives effect to certain obligations of the Commonwealth under RFAs.

^b The International Convention on Biological Diversity is a legally binding treaty with three main goals: conservation of biodiversity, sustainable use of biodiversity, and the fair and equitable sharing of the benefits arising from the use of genetic resources

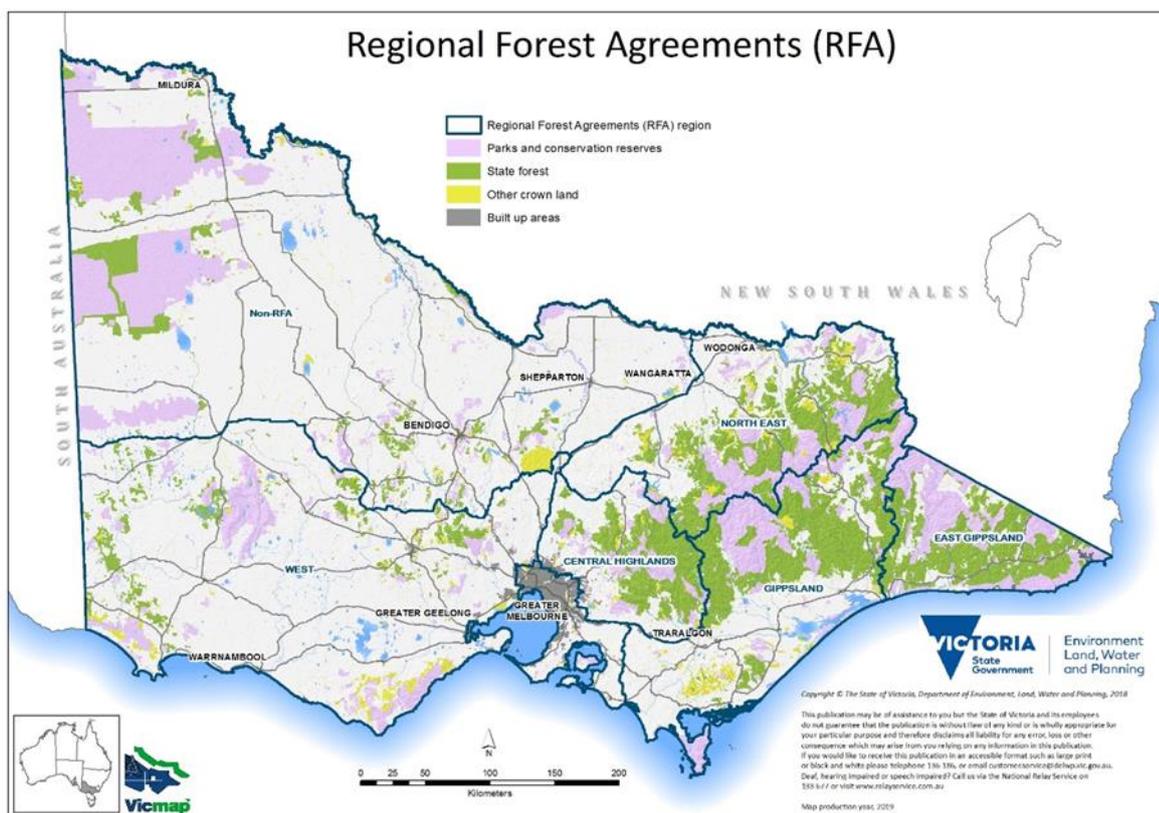


Figure 2: Overview map of Victoria's Regional Forest Agreements, 2018

Source: DELWP, 2019

Each RFA in Victoria was developed following a comprehensive regional assessment (CRA) within the relevant region. The CRA considered timber production, regional employment, biodiversity conservation, wilderness, water catchment protection, tourism, recreation, and cultural and heritage values. In this context, the RFAs recognise the economic, social and environmental values of forests, which they seek to protect by setting obligations and commitments for forest management that:

- provide for ecologically sustainable forest management (ESFM), i.e. the management of forest on all land use categories to maintain the overall capacity of forests to provide goods, protect biodiversity, and safeguard the full suite of forest values at the regional level;
- provide for certainty for conservation of the environment and heritage values, through the establishment and maintenance of a CAR reserve system; and
- are expressed to provide for long-term stability of forests and forest industries.

3.2.3. National Reserve System

Another important component of the national policy for managing forests is Australia's National Reserve System (NRS), a national network of formally recognised parks, reserves and protected areas dedicated to the long-term protection of Australia's biodiversity.

The NRS has evolved since 1992, including through the acquisition of land, expansion of national parks and regional parks, and the inclusion of Indigenous Protected Areas.¹⁶

3.2.4. Environment Protection and Biodiversity Conservation Act 1999 (Cth)

The *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (EPBC Act) is the Australian Government's central piece of environmental legislation. The EPBC Act aims to balance the protection of environmental and cultural values with society's economic and social needs by creating a legal framework and decision-making process based on the guiding principles of ecologically sustainable development. The EPBC Act provides a legal framework to protect and manage Matters of National Environmental Significance (MNES),

as well as conferring Commonwealth jurisdiction over actions that have a significant impact on the environment where the actions affect, or are taken on, Commonwealth land, or are carried out by a Commonwealth agency.

In accordance with the EPBC Act, a proposed action that has, will have, or is likely to have a significant impact on a protected matter requires Commonwealth approval.

Under the EPBC Act, forestry operations undertaken in accordance with an RFA are not subject to the assessment and approval requirements of Part 3 of the EPBC Act, unless the forestry operation is proposed within a World Heritage or Ramsar site. This exemption is provided in recognition of the undertaking of the CRA process and the resulting development of the RFAs that provide for a CAR reserve system and ESFM and expressed to provide for long-term stability of forests and forest industries. Hence the RFAs provide a framework for MNES to be protected and managed through Victoria's forest management system, including its reserves, and avoid duplication of environmental regulation.

3.2.5. Australia's Framework of Criteria and Indicators

Australia's Sustainable Forest Management Framework of Criteria and Indicators 2008 – Policy Guidelines details the seven criteria and 44 indicators in the framework used for reporting on the state of Australia's forests. This set of indicators is the international reporting standard developed under the Montreal Process Working Group and informs Victoria's *Criteria and Indicators for Sustainable Forest Management in Victoria*, which establishes Victoria's criteria and indicators for reporting on the state of Victoria's forests (see [7.1](#) of this document).

3.2.6. Other national legislation and policy

There is a wide range of national legislation and policy that affect forest management in Victoria. [Appendix A](#) provides an overview of these laws and policies.

4. Victorian forested land use categories

Forested land in Victoria exists across multiple land use categories¹⁷. This chapter describes how Victoria's forest management system is applied across the State's forested land use categories of parks and conservation reserves, State forest, other public land and private land.

A summary of forested land in land use categories, the relevant legislation, primary management objectives and the responsible management agency/agencies are set out in Table 1. The areas and proportions of forested land by land use category are detailed in [Appendix C](#).

Table 1: Summary of key types of forest land in land use categories and relevant Victorian legislation

Land use category / class	Key primary legislation	Primary use of land / coverage	Managing agency / entity
State forests	<i>Forests Act 1958</i>	<ul style="list-style-type: none"> • Timber production • Minor forest produce • Recreation • Protection of flora and fauna 	DELWP, VicForests
Parks and conservation reserves	<i>National Parks Act 1975</i>	<ul style="list-style-type: none"> • Ecosystem and heritage protection • Recreation 	PV
<ul style="list-style-type: none"> • national parks • state parks • regional parks • wilderness parks • nature conservation reserves • wildlife reserves • forest parks • natural features reserves • historic reserves 	<i>Crown Land (Reserves) Act 1978</i> <i>Forests Act 1958</i>	<ul style="list-style-type: none"> • Preservation of ecological significance • Conservation of areas of natural interest or beauty • Recreation • Public infrastructure 	PV, Committees of Management, local government
Private land	<i>Planning and Environment Act 1987</i>	<ul style="list-style-type: none"> • Private use at land-owners discretion (subject to legislative constraints). May or may not be productive use • Ensuring that private timber production complies with appropriate regulatory requirements including the <i>Code of Practice for Timber Production 2014</i> 	Private landholders, local government responsible for regulating activities under the <i>Code of Practice for Timber Production 2014</i>
Victorian Plantations Corporation land	<i>Victorian Plantations Corporation Act 1993</i>	<ul style="list-style-type: none"> • Timber plantations 	HVP Plantations (under perpetual licence)

4.1. Public land

4.1.1. Parks and conservation reserves

Parks and conservation reserves total around 3.7 million ha of forested and non-forest lands (terrestrial area only), covering in the order of 18 per cent of Victoria, and making up 46 per cent of Crown land. These reserves are managed primarily for ecosystem and biodiversity protection as well as recreation, tourism, and the protection of cultural, archaeological and historic values.

4.1.2. State forests

State forests (which extend over approximately 3.2 million ha and approximately 41 per cent of Crown land) are managed for multiple uses.¹⁸ These include the conservation of flora and fauna; the contribution to protection of water catchments and water supply from public land; the provision of timber, domestic firewood and honey production, and other non-wood products; the protection of landscape, cultural, archaeological and historic values; and the provision of recreational and educational opportunities.

Forest management zones determine which types of activities can take place in particular areas of State forests. Forest management zones comprise the Special Protection Zone (SPZ), Special Management Zone (SMZ) and General Management Zone (GMZ). These are detailed in [7.2.1](#) of this document.

4.1.3. Other public land

Other forested public land includes areas managed by various entities – including local governments, and Crown land Committees of Management – and land held under lease or licence. This other public land category makes up almost 1 million ha (or 13 per cent of all public land) and includes all remaining forested Crown land outside of State forest, and parks and conservation reserves (plus many parcels of non-forested land).

4.1.4. Victorian Plantations Corporation land

Crown land vested in the Victorian Plantations Corporation under the *Victorian Plantations Corporation Act 1993* (Vic) is perpetually licensed to Hancock Victorian Plantations to use as plantation. It is regulated by the *Code of Practice for Timber Production 2014* (Timber Code), which deals with the management of timber plantations in Part 3. While it remains public land, the State has no role in its management (aside from regulatory oversight).

4.2. Private land

Private land comprises freehold land held by private individual and institutional interests. Forested private land, including plantations, is estimated to be around 1.45 million ha in Victoria, with approximately 422,000 ha of private plantations.¹⁹

5. Structure of Victoria’s forest management system

Victoria’s forest management system comprises legislation, policy, regulatory instruments and programs that regulate and support ESFM and the protection and management of environmental and heritage values in Victoria. The system is administered by a number of State government agencies and local government and applies to both public and private land. Figure 3 depicts the key elements of the system.

Victorian legislation is described below, in [5.1](#). Agency responsibilities relevant to forest management are set out in [5.2](#).

Management objectives and functions are specified in legislation, agreements and policy. These focus on three main outcomes:

1. protecting forests and their values – including native vegetation, biodiversity, soils, water, cultural heritage and amenity;
2. regulating and facilitating the use of resources such as timber, honey, water and minerals; and
3. providing for community uses such as Traditional Owner connections, recreation and tourism.

The forest management system provides for:

- CAR reserves that protect environment and heritage values on public and private land;
- managing and regulating forestry in State forests and providing for sustainable environmental, social and economic outcomes on public land; and
- regulating plantation establishment and management, and native forestry on private land, including contributing to sustainable environmental, social and economic outcomes.

Each of these elements is described in detail in the following chapters of this document:

- [Chapter 9](#) outlines how the forest management system provides for the protection and management of MNES as defined in the EPBC Act; and
- [Chapter 13](#) provides an overview of monitoring, reporting and public consultation approaches under Victoria’s forest management system.

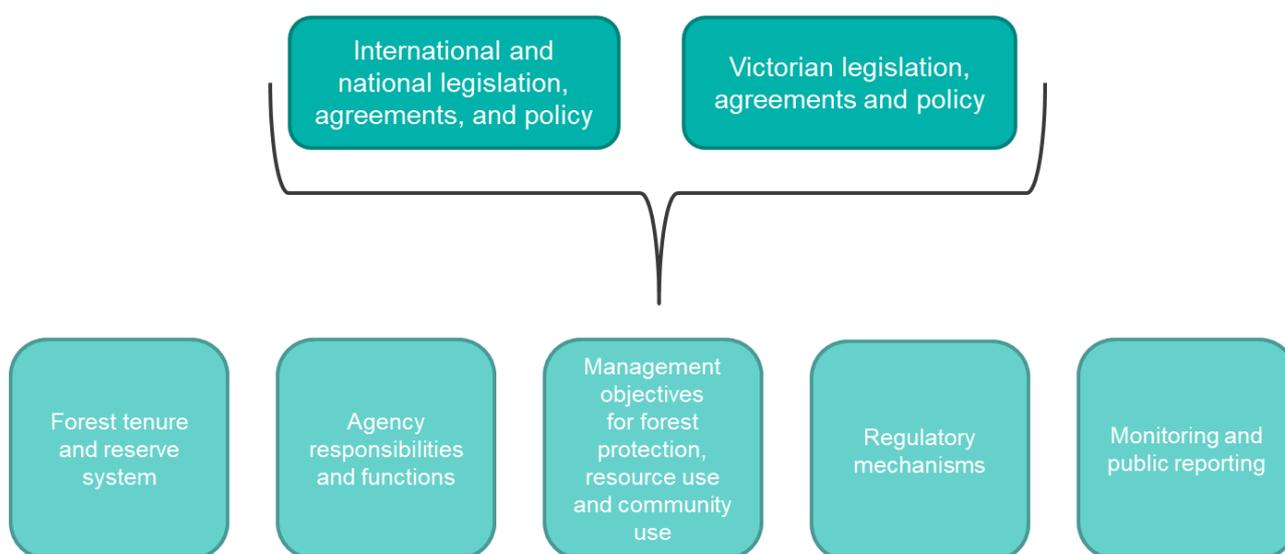


Figure 3: Key element of Victoria’s forest management system

Source: DELWP, 2019

5.1. Key legislation for Victoria's forest management system

A list of State legislation relevant to Victoria's forest management system is provided in Table 5 of [Appendix A](#), with the most significant highlighted here.

5.1.1. *Forests Act 1958 (Vic)*

The *Forests Act 1958 (Vic)* (Forests Act) provides for the management of State forests, including the development of working plans (currently represented by Forest Management Plans (FMPs)) to maintain and improve State forests, and for licensed occupations including grazing and taking away forest produce. It includes regulatory controls for Crown land subject to the Forests Act, except for the licensing of bee sites, which is controlled by the *Land Act 1958 (Vic)* (Land Act).

The Forests Act also creates certain obligations with respect to fire management activities within State forests, parks managed under the *National Parks Act 1975 (Vic)* (NP Act) and protected public land. It requires the Secretary to DELWP to undertake proper and sufficient work within such lands for both the immediate prevention and suppression of fire and the planned prevention of fire (section 62(2)). In part, the Secretary to DELWP fulfils these obligations through Strategic Bushfire Management Plans, which are established under the *Code of Practice for Bushfire Management on Public Land 2012* (Bushfire Code) (see part [5.1.4](#)).

Regulations under the Forests Act include:

5.1.1.1. *Forests (Licences and Permits) Regulations 2019 (Vic)*

These regulations prescribe certain acts which may not be undertaken within a reserved forest without a licence, permit or authority (for example, enter with cattle; fell a tree bearing a survey mark; or sell or offer for sale any goods, things or services). They also set out the manner in which applications for licences and permits granted or issued under the Forests Act must be made and the terms and conditions of those licences and permits. This includes the modes of branding of forest produce (whether with a Crown brand or a licensee's brand, which has been registered with the Secretary to DELWP).

5.1.1.2. *Forests (Fire Protection) Regulations 2014 (Vic)*

These regulations provide for the restriction of activities that can cause bushfires – for example, the lighting of fires (including campfires) in the open air and the use of engines (including chainsaws and generators). The regulations apply in the fire protected area during the prohibited period. For national parks, State forests and protected public land, this is all year round. The prohibited period for private land within the fire protected area is generally the time of year when risk of bushfire ignitions is higher – usually between November and April.

5.1.1.3. *Forests (Domestic Firewood) Regulations 2012 (Vic)*

Made under the Forests Act, these regulations provide for the regulation and prohibition of certain conduct in firewood collection areas during a firewood collection season in State forest and prescribe offences.

5.1.1.4. *Forests (Recreation) Regulations 2010 (Vic)*

These regulations provide for the regulation of camping, recreation grounds and roads in State forests and provide for the management and care of specified forest reserves by the Secretary to DELWP, PV or a committee by:

- restricting or prohibiting access to specified areas by persons and vehicles;
- setting aside areas for specific purposes, in particular for prohibiting or regulating particular activities;
- prescribing fees for entry or use of land activities in a forest reserve; and
- prescribing offences.

5.1.2. *National Parks Act 1975 (Vic)*

The NP Act establishes the statutory basis for the protection, use and management of a system of more than 100 national and other parks in Victoria covering over 3 million ha (comprising both forests and non-forest vegetation). National parks generally include areas of national significance, outstanding natural values and diverse land types. Together with State and wilderness parks (and nature conservation reserves established under the *Crown Land (Reserves) Act 1978 (Vic)* (CLR Act)), national parks contribute significantly to the

representativeness of Ecological Vegetation Classes and biodiversity across the state, and they make significant contributions to Victoria's CAR reserve system. Management of land regulated by the NP Act is primarily the responsibility of PV which is statutorily obliged by the *Parks Victoria Act 2018* (Vic) (PV Act) and *Flora and Fauna Guarantee Act 1988* (Vic) (FFG Act) to manage the land in way that is consistent with the purposes for which it was reserved. Generally, such land is reserved for conservation purposes, and thus aligns with the objectives of the CAR reserve system.

5.1.3. Crown Land (Reserves) Act 1978 (Vic)

The CLR Act provides for the reservation and management of Crown land for a range of public purposes, including nature conservation.

5.1.3.1. Crown Land (Reserves) (Domestic Firewood) Regulations 2012 (Vic)

Similar to the *Forests (Domestic Firewood) Regulations 2012*, these regulations apply to firewood collection in a firewood collection area during a firewood collection season in certain regional parks under the CLR Act, for which PV is responsible.

5.1.4. Conservation, Forests and Lands Act 1987 (Vic)

The CFL Act provides for:

- a body corporate called the Secretary to Department of Environment, Land, Water and Planning;
- a framework for a land management system and to enable necessary administration, finance and enforcement; and
- a system of land management cooperative agreements.

The CFL Act gives the responsible minister the power to make codes of practice, such as the Timber Code²⁰ and the Bushfire Code, and to establish TOLMBs (as discussed in [2.1](#) of this document) in relation to most categories of public land.

Strategic Bushfire Management Plans, which outline landscape and regional strategies for achieving the objectives for bushfire management identified in the Bushfire Code, are prepared pursuant to clause 66 of the Bushfire Code.

5.1.5. Flora and Fauna Guarantee Act 1988 (Vic)

The FFG Act establishes a legal and administrative structure to enable and promote the conservation of Victoria's native flora and fauna, and to provide for the conservation, management or control of flora and fauna and the management of potentially threatening processes. The FFG applies across all land tenures, including private land.^c

The FFG Act aims to conserve all of Victoria's flora and fauna (apart from those in the Excluded List made under section 5), to ensure that any use by humans is sustainable and that the genetic diversity of flora and fauna is maintained.

The FFG Act also establishes the Threatened List, comprised of threatened species and communities which have met established criteria for inclusion (described in detail in [10.2](#) of this document).

Legislation to amend the FFG Act, namely the *Flora and Fauna Guarantee Amendment Act 2019* (Vic), is due to come into effect on or before 1 June 2020. The amendments, once in force, will give effect to a consistent national approach to assessing and listing threatened species, 'the Common Assessment Method (CAM)', which will increase the consistency between Victoria's list of threatened species and communities maintained under the FFG Act and those under the EPBC Act (see [10.2](#) of this document). They will also incorporate a set of principles, including the precautionary principle, within the FFG Act and require that decisions, policies, programs or processes give these proper consideration.

In addition to strengthening the FFG's objectives, the amendments will add a provision requiring that, in performing any of their functions that may reasonably be expected to impact on biodiversity in Victoria, Ministers and public authorities must give proper consideration to the objectives the FFG Act, so far as is consistent with the proper exercise of their functions.

^c See for example, section 47, which enables the taking of protected flora from private land in certain specified circumstances.

5.1.6. Planning and Environment Act 1987 (Vic)

The *Planning and Environment Act 1987* (Vic) (PE Act) establishes a framework for planning the use, development and protection of all land in Victoria. It sets out requirements for the Victoria Planning Provisions (VPP), which forms a template for all local government planning schemes.

Planning schemes are subordinate instruments made under the PE Act, setting out policies and requirements for the use, development and protection of land, including private forests and plantations. All planning schemes consist of standard State provisions from the VPP and specific local provisions. Planning schemes are administered by local government.

Timber production is a specified land use in the VPP and therefore all planning schemes. The VPP underpins regulation of private native forests and plantations and provides that all timber production activities (with some exceptions) must comply with the Timber Code. The VPP also provides for specific requirements regarding the removal, destruction or lopping of native vegetation, and includes a range of other planning tools that play a role in regulating activities that may otherwise undermine conservation objectives and environmental and heritage values, such as zones, overlays and specific clauses.

5.1.7. Sustainable Forests (Timber) Act 2004 (Vic)

The *Sustainable Forests (Timber) Act 2004* (Vic) (SFT Act) provides a framework for the sustainable management of timber harvesting in State forests. The Act contains three key components for the management of Victoria's forests:

- the *Sustainability Charter for Victoria's State Forests*, which sets the objectives for sustainable forest management in Victoria;
- Victoria's State of the Forests report, which compiles monitoring data and assesses the State's performance in achieving objectives for sustainable forest management in Victoria; and
- the Allocation Order (AO), which provides for the sustainable allocation and harvesting and sale; or harvesting or sale, of timber resources from State forests and sets conditions for those activities.

5.1.8. Traditional Owner Settlement Act 2010 (Vic)

The Victorian TOS Act allows the Victorian Government to recognise Traditional Owners and certain rights in Crown land. In return for entering into a settlement, Traditional Owners must agree to withdraw any Native Title claim made pursuant to the NT Act and not to make any future Native Title claims (see also [Chapter 2](#)).

Under the TOS Act, a settlement package can include:

- an RSA to recognise a Traditional Owner group and certain Traditional Owner rights over Crown land;
- a Land Agreement which provides for grants of land in freehold title for cultural or economic purposes, or as Aboriginal title to be jointly managed in partnership with the state;
- a Land Use Activity Agreement which allows Traditional Owners to comment on or consent to certain activities on public land;
- a Funding Agreement to enable Traditional Owner corporations to manage their obligations and undertake economic development activities; and
- a Natural Resource Agreement to recognise Traditional Owners' rights to take and use specific natural resources and provide input into the management of land and natural resources.

Under the Act, the State Government decides whether to enter into a settlement with a particular group. The group must meet the definition of 'traditional owner group' under the Act.

5.1.9. Wildlife Act 1975 (Vic)

The *Wildlife Act 1975* (Vic) (Wildlife Act) provides a framework for the protection and conservation of wildlife in Victoria, including the sustainable use of and access to wildlife. The Act creates various offences associated with actions that kill, take, control or harm wildlife. Severe penalties (including imprisonment and fines) apply to those found guilty of an offence under the Act.

5.1.9.1. Wildlife Regulations 2013 (Vic)

The objectives of these regulations are to provide for the management and conservation of wildlife and wildlife habitat, as well as the humane use of and access to wildlife. The regulations make further provision in relation to administration of the licensing system established by the Wildlife Act (under section 22), and prescribe fees, offences, royalties and various other matters for the purposes of the Act.

5.1.9.2. Wildlife (Game) Regulations 2012 (Vic)

The objectives of these regulations include to make provision for effective management of game species and game hunting in Victoria across public and private land. The regulations regulate: hunting areas; the procedure for granting and administering game licences; procedures for opening and closing hunting seasons; bag limits; acceptable methods of hunting (including, for example, the use of hunting dogs); and requirements for providing for the identification, possession and use of game. As these regulations apply across public and private land, DELWP liaises with other agencies involved in regulation and compliance, notably:

- Game Management Authority – an independent statutory authority responsible for the regulation of game hunting in Victoria and reporting to the Minister for Agriculture; and
- PV – for hunting activities in relevant parks and reserves.

5.2. Agencies and responsibilities

Many agencies and institutions hold lead roles in the management of forests in Victoria. Figure 4 illustrates the key agencies, the legislation they administer, and responsibilities that are integral to Victoria’s forest management system. These agencies interact regularly on a range of policy and operational matters.

	Minister for Energy, Environment & Climate Change		Minister for Water	Minister for Agriculture	
Agency / Authority	DELWP	Parks Victoria	DELWP / Melbourne Water / CMAs	DJPR	VicForests
Key legislation	<i>Forests Act 1958</i> <i>Land Act 1958</i> <i>Crown Land (Reserves) Act 1978</i> <i>Conservation Forests and Lands Act 1987</i> <i>Flora and Fauna Guarantee Act 1988</i> <i>Sustainable Forests (Timber) Act 2004</i> <i>Wildlife Act 1975</i>	<i>National Parks Act 1975</i> <i>Crown Land (Reserves) Act 1978</i> <i>Parks Victoria Act 2018</i> <i>Wildlife Act 1975</i>	<i>Water Act 1989</i>	<i>Sustainable Forests (Timber) Act 2004</i>	<i>Sustainable Forests (Timber) Act 2004</i>
Key forest management responsibilities	<ul style="list-style-type: none"> • Establish Forest Management Plans • Administer Forest Zoning Scheme in State Forests • RFA implementation • Regulate timber harvesting • Action Statements for threatened species • Forest fire management • Prepare State of the Forests report 	<ul style="list-style-type: none"> • Manage parks and reserves and ensure they are healthy and resilient for current and future generations • Contribute to forest fire management in proximity to parks 	<ul style="list-style-type: none"> • Manage water resources within Melbourne’s designated water catchments • Contribute to forest fire management in proximity to catchments 	<ul style="list-style-type: none"> • Advice to Government on forest policy settings • Approve Allocation Order to VicForests • Oversee VicForests’ development of Timber Release Plans 	<ul style="list-style-type: none"> • Harvest, regrowing and commercial sale of timber from public native forests • Manage operations in accordance with Allocation Order under <i>Sustainable Forests (Timber) Act 2004</i> • Develop Timber Release Plans for stakeholder review • Develop Timber Utilisation Plans for areas outside Allocation Order

Figure 4 Overview of Victoria’s forest management responsibilities for public land

(NB this is a high level, non-exhaustive, pictorial overview)

Source: DELWP, 2019.

5.3. Victoria's policy, planning and regulatory framework for forest management

In addition to the legislation described above, Victoria's forest management system incorporates key regulatory instruments that control and guide forest protection, management and use. These are outlined below in Figure 5, with further consideration of the forest management arrangements that are specific to parks and conservation reserves, State forests and private land.

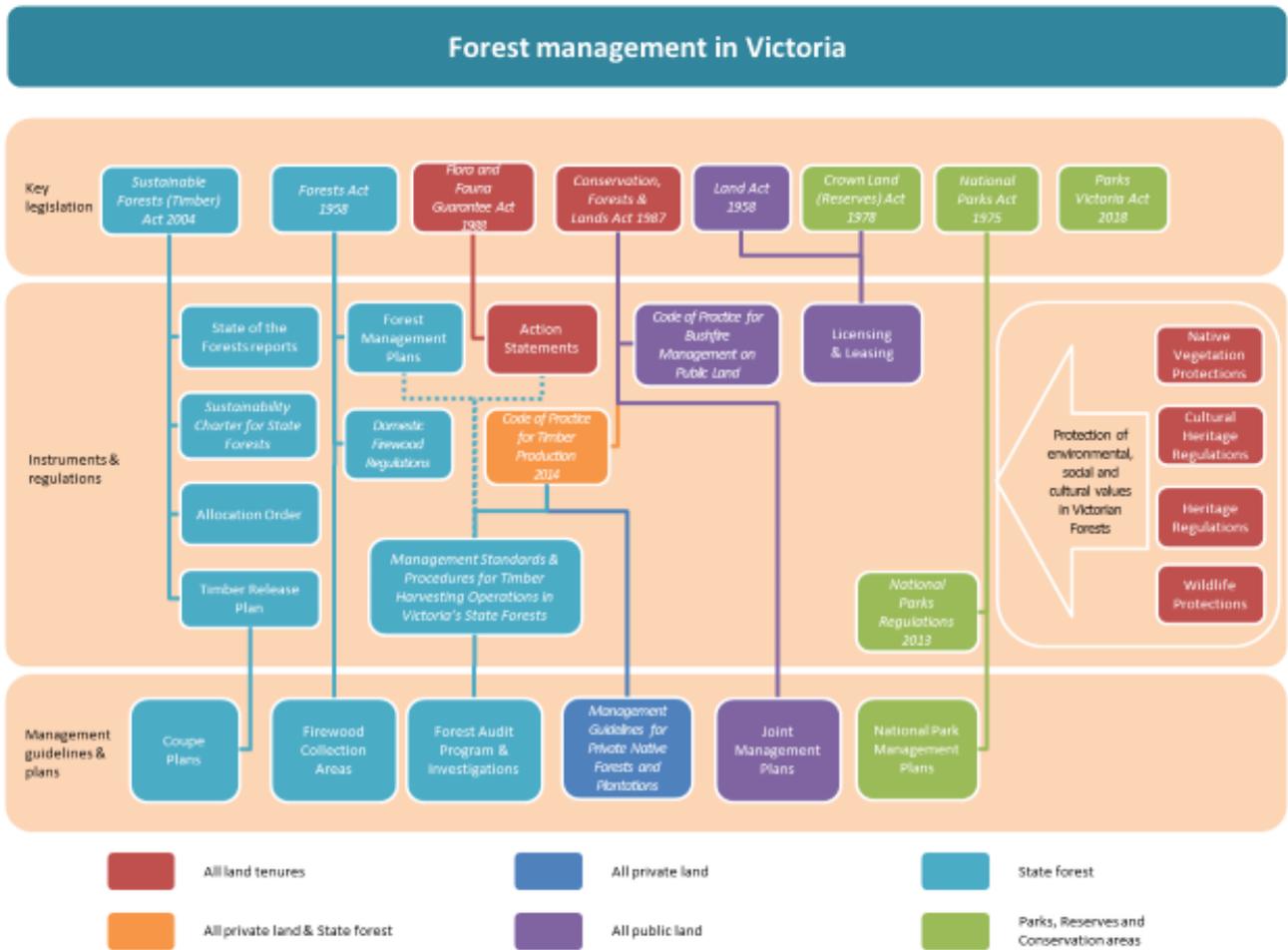


Figure 5: Victoria's policy, planning and regulatory framework for forest management

(NB this a high level, non-exhaustive pictorial representation of the key components of the forest management system)

Source: DELWP, 2019.

6. Victoria's CAR reserve system

The CAR reserve system is the primary mechanism within each RFA region for protection of biodiversity, old-growth forests and wilderness values. Victoria's forest management system provides for a CAR reserve system, which is comprised of areas of both public and private land within Victoria that are reserved specifically for conservation purposes, and where the use of those areas is regulated by legislation or other methods appropriate for the area concerned.

A CAR reserve system is one that comprehensively samples the natural environments (comprehensive), includes representative examples of the natural variability of those environments (representative) and adequately protects these values within a system of reserves which are resilient enough (in size, shape and condition) to ensure these environments and their component species are sustainable in the long term (adequate).

There are four reserve components (on both public and private land) outlined in the JANIS criteria:

1. Formal (Dedicated) Reserve – includes Crown land formally reserved for environmental protection and where timber harvesting is prohibited (such as national parks, state parks, forest parks, nature conservation reserves and other conservation reserves);
2. Informal Reserve – includes public land protected to achieve conservation values while excluding timber harvesting, or protected under an approved management plan; this is mostly defined by areas of SPZ within State forest;
3. Values Protected by Prescription – in Victoria, these prescriptions are defined under the Timber Code and include prescriptions related to areas of steep slopes, or very rare values, values with fragmented distributions, or values naturally occurring in linear form such as riparian vegetation; and
4. Private Land – includes offset sites protected under conservation covenants or by agreements registered on-title.

The sections below describe how the above components of the reserve system are implemented into Victoria's forest management system.

6.1. Formal (dedicated) reserves

Formal reserves, also referred to as dedicated reserves, are created through the NP Act, the Forests Act and the CLR Act. Most parks and conservation reserves in Victoria are categorised according to the International Union for Conservation of Nature (IUCN) protected area categories.²¹ According to the *State of the Forests Report 2018*, terrestrial IUCN protected areas make up around 16.8 per cent per cent of Victoria's total land, and approximately 78.3 per cent of these protected areas is forested.²² An overview map of IUCN protected areas in Victoria is presented in Figure 6.

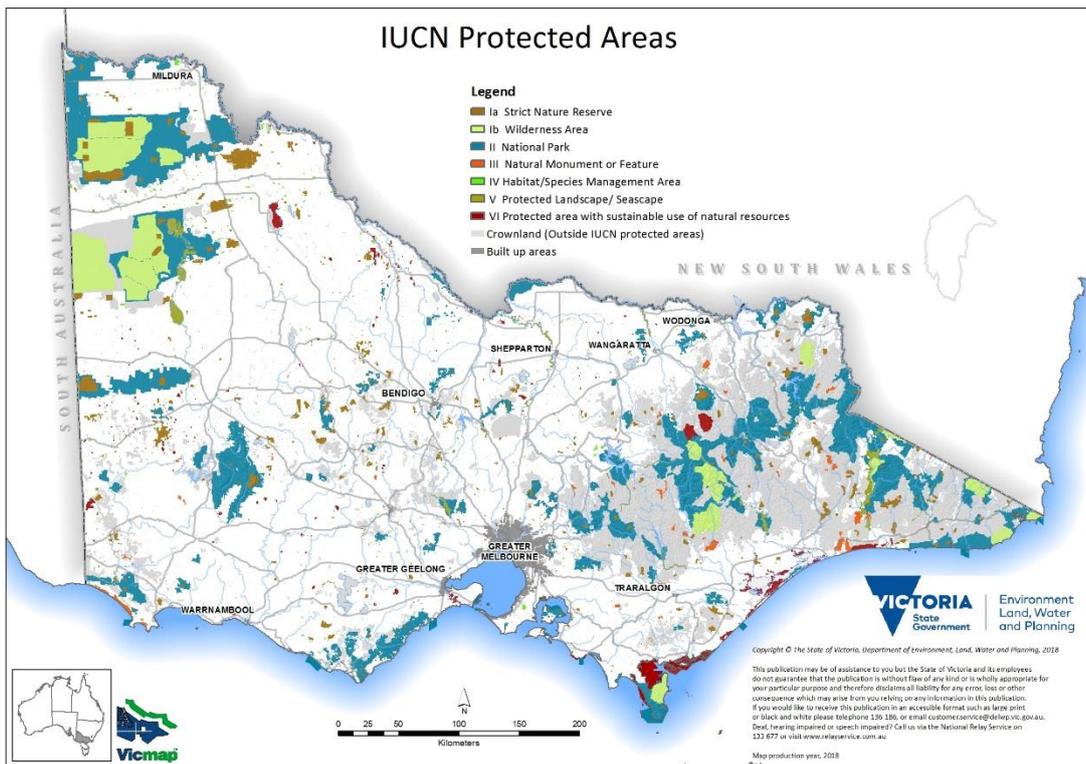


Figure 6: Overview map of IUCN protected areas in Victoria, 2018

Source: State of the Forest Report 2018

6.1.1. Parks and conservation reserves

In Victoria, parks and conservation reserves are the dedicated components of the CAR reserve system. As relevant to Victoria's forest management system, it includes land formally reserved as national park, State park, wilderness park, nature conservation reserve, forests park and other conservation area.²³

Victoria's parks and conservation reserves are established under legislation which sets out the objectives for which such areas are reserved. Various, parks and conservation areas are reserved with the objective of, amongst other things, providing for the protection and of conservation of the natural environment, flora and fauna, and ecosystems within reserves. Specifically:

- under the NP Act, parks within the meaning of 'park' are established to preserve and protect land characterised by its predominantly unspoilt landscape, and its flora, fauna or other features permanently for the benefit of the public. PV is responsible for the control and management of such parks, which include national parks, State parks, wilderness parks as well as all other parks within the meaning of 'park' in the NP Act;
- under the CLR Act, the Governor in Council may reserve any Crown lands required for any public purposes. The relevant Order specifies the purpose or purposes of each reservation. A wide variety of reservations, from cemeteries to zoological gardens, have been made under the CLR, but the key categories of reserves with conservation purposes include nature conservation, historic and cultural features, natural features reserves, flora and fauna reserves and forest parks (see below); and
- the Forests Act (section 50) empowers the Governor in Council to reserve State forest under the CLR Act for a variety of purposes and to appoint a Committee of Management for any reserve. Forest parks, flora and fauna reserves and nature conservation reserves have been established under these provisions.

Generally, PV is appointed as the Committee of Management for reserves under both the CRL Act and the Forests Act.

6.1.1.1. Management planning of parks

Each type of park designated under the NP Act is linked to a set of objectives and conditions that normally apply under the NP Act to that type of park. These may be varied by specific provisions of the NP Act. For example, while mining infrastructure is not normally allowed in national parks, minor mining infrastructure may be permitted in the Greater Bendigo National Park with the Minister's consent.

In some cases, the NP Act also designates a part of a park to be a zone that recognises special characteristics to be maintained. For example, the NP Act designates an area of the Alpine National Park around the Viking and the Razor as Wilderness Zone (NP Act, Schedule Five). The NP Act provides special safeguards for these areas, including strict limits on the activities that are permitted (NP Act, sections 21B – 21D).

Under section 22 of the NP Act, zones in parks may also be established and areas declared as particular zones by the Governor in Council. The *Reference Areas Act 1978* (Vic) also empowers the Governor in Council to declare any area of public land, including of State forest or of park under the NP Act, a Reference Area. Each Reference Area is required to be preserved in its natural state as far as is possible, because of its ecological interest and significance.

PV must prepare a plan of management in accordance with the term of the Act for each national park, State park and wilderness park, as well as other parks within the meaning of 'park' in the NP Act taking into account the park designation and zones specified.²⁴

6.1.1.2. Parks management zoning scheme

Park Management Plans approved by the PV Board determine the activities allowed in particular zones of each park and the action that PV will take to cater for those activities, depending on community needs and the values that need to be maintained in each zone.

During the development of a Park Management Plan, areas are evaluated based on the values and opportunities for use they represent. Unless a zone that provides for the protection of the values and opportunities identified has already been established under legislation, PV designates that area to a management zone. Management zoning is used by PV as a planning tool to designate areas for particular uses and corresponding appropriate management regimes. The park management zoning scheme provides for the consistent application of management regimes to all parks and reserves across the State.

PV uses six management zones for planning purposes which contribute to the protection of environmental values and enable other uses of areas within the zones, where appropriate. The management zones are:

- Reference Area – areas proclaimed or recommended to be proclaimed under *the Reference Areas Act 1978* (Vic). All human interference is kept to the essential minimum and, as far as practicable, the only long-term change results from natural processes;
- Conservation Zone – areas of high natural value and areas that cannot sustain high levels of use where the emphasis is on protection of the environment. This zone is the priority for environmental management programs and actions;
- Wilderness Zone (equivalent management requirements to Remote and Natural Area) – areas that provide for the preservation and protection of natural environment including indigenous flora and fauna and features of ecological significance, among other things. One objective is to maximise the extent to which these areas are undisturbed by the influences of the European settlement of Australia;
- Education Zone – small, relatively undisturbed areas that are primarily available for environmental and cultural educational activities;
- Conservation and Recreation Zone – areas where the management emphasis is on protection of environmental and cultural values while allowing for recreation; and
- Recreation Development Zone – small areas with a high level of facility development catering for high numbers of visitors.

In general, areas are zoned as a Conservation and Recreation Zone, unless there is a specific reason to zone for another purpose. Areas of high environmental value are generally zoned for conservation.

Overlays may also be applied to provide additional management direction where required to allow for specified activities, protect certain values or recognise particular legislative requirements.

6.1.1.3. Regulation and compliance

PV has primary regulatory responsibility for compliance and enforcement matters related to PV managed land (with assistance from DELWP in relation to prosecutions). PV Authorised Officers are appointed under the CFL Act to enforce relevant Acts and regulations.

PV also observes and variously manages or administers codes of practice applicable to forest land within parks and conservation reserves.²⁵ These codes relate to:

- animal welfare (various codes and guidelines);
- beekeeping (*Apiary Code of Practice*); and
- bushfire management (Bushfire Code).

6.2. Informal reserves

Informal reserves are created under legislation including the Forests Act and Wildlife Act. Informal reserves within State forests make up the balance of the network of forest conservation areas across the state. Informal reserves include SPZs in State forest and other areas of public land.

6.2.1. Forest management zones in State forests

Victoria's FMPs for State forests incorporate forest management zones, which contribute to the CAR reserve system. Zones are designed to balance objectives for conservation, management and uses (including timber harvesting).

The Forest Management Zoning Scheme is based on nationally agreed JANIS criteria and differentiates between those areas of State forests that are specifically set aside for conservation and those that are available for other activities including timber harvesting.

Forest management zoning is discussed further in [7.2.1](#) of this document. [Appendix B](#) provides information of the area of each forest management zone within State forests.

6.3. Values Protected by Prescription

Forests and forest values are also protected by operating instructions or prescriptions that further provide for ESFM. This element of the CAR reserve system comprises those elements of GMZs or SMZs protected by regional prescriptions, including stream buffers and rainforest. These forest values may be rare or fragmented and therefore may be impractical to include in dedicated or informal reserves. They are instead protected by instructions or prescriptions included in codes of practice, such as the Timber Code.

6.4. Private land

The permanent protection of private land for conservation makes a valuable long-term contribution to Victoria's environment. Private land hosts some of the State's most threatened species and some of its most important and irreplaceable native vegetation. Private landholders manage two-thirds of the Victorian landscape, and therefore play a critical role in conserving biodiversity.

The CAR reserve system includes areas of private land where biological diversity, heritage and cultural values are protected under secure management arrangement by agreement with private landholders.

In Victoria, protection of values on private land is achieved through private conservation reserves and through agreements that are registered on the land title. Under Victorian legislation, covenants and agreements for conservation purposes can be recorded on title pursuant to:

- the provisions of the *Victorian Conservation Trust Act 1972 (Vic)* (known as Trust for Nature covenants);
- section 69 agreement under the CFL Act; and
- section 173 agreement under the PE Act.

For landowners seeking to establish formalised conservation measures for native forest holdings on their private land through these mechanisms, there are programs to facilitate conservation covenants and agreements (see below).

Protecting Victoria's Environment – Biodiversity 2037 commits to increase incentives and explore market opportunities for private landholders to conserve biodiversity as one of its priorities (see [10.2.2](#) of this document).

6.4.1. Bushtender, Ecotender and Bushbroker schemes

Victoria has a strong track record of innovative approaches to conservation on private land through ecomarkets such as Bushtender, Ecotender and Bushbroker schemes. These market-based systems aim to support increased protection and improved management of native vegetation and threatened species, as well as broader environmental services. Under these schemes land owners enter into agreements under either the CFL Act or the P&E Act that oblige them to retain native vegetation present on their land as an offset to clearing of the same EVCs that is taking place elsewhere. These agreements are registered on title and create binding legal obligations.

6.4.2. Trust for Nature covenants

Conservation covenants seek to protect the values on the land by limiting or restricting the way in which the land can be used and developed. These covenants are voluntary agreements formed under the *Victorian Conservation Trust Act 1972 (Vic)*. They are registered on the land title and therefore legally binding with the intent to conserve natural or cultural values.²⁶

As of 2018, Trust for Nature reports that it has registered over 1,400 conservation covenants covering more than 67,000 ha of private land across Victoria.²⁷ DELWP's Native Vegetation Credit Register provides a list of sites available for offsets. Private land covenants can cover forest areas, grasslands, wetlands and agricultural landscapes, but a significant proportion of these covenants cover privately owned forests.

7. Management of State forests

State forests cover approximately 3.2 million ha of Victoria.²⁸ They are managed to provide for a range of values and uses, including conservation of flora and fauna; protection of water catchments and water supply; access for forest-based industries; carbon storage; provision of forest produce; protection of landscape, archaeological, cultural and historic values; and the provision of recreational and educational opportunities.

7.1. Sustainability Charter for Victoria's State forests

The SFT Act enables the Minister to develop a Sustainability Charter that sets out the objectives for sustainable forest management in Victoria. A charter is not mandatory.

The *Sustainability Charter for Victoria's State Forests* (2006) sets the direction to achieve ESFM including the vision and objectives for sustainable forest management. The current Charter is informed by the internationally recognised Montreal Process criteria.

Progress on commitments and associated obligations under the Sustainability Charter are monitored through the *Criteria and Indicators for Sustainable Forest Management in Victoria*, and publicly reported on through Victoria's five-yearly *State of the Forests Report*.

7.2. Strategic planning for State forests

Strategic planning for State forests in Victoria is delivered through FMPs and Strategic Bushfire Management Plans required by the Bushfire Code.

Forest Management Plans establish strategic objectives and strategies for the management of key forest values at a landscape scale. The forest management planning process identifies important forest values, threats to those values and considers the most appropriate passive and active management actions that will reduce threats and enhance the persistence of values in line with legislative requirements. Strategic planning at the landscape scale facilitates the ongoing implementation and achievement of ESFM on public land through the continued implementation of, and improvements to, Victoria's forest management system and adaptive forest management.

As part of the Forest Modernisation Program (see [Chapter 15](#)), work is underway to integrate forest and fire management planning to better reflect supporting legislation, policy and contemporary values, planning approaches and challenges associated with public land management across all tenures.

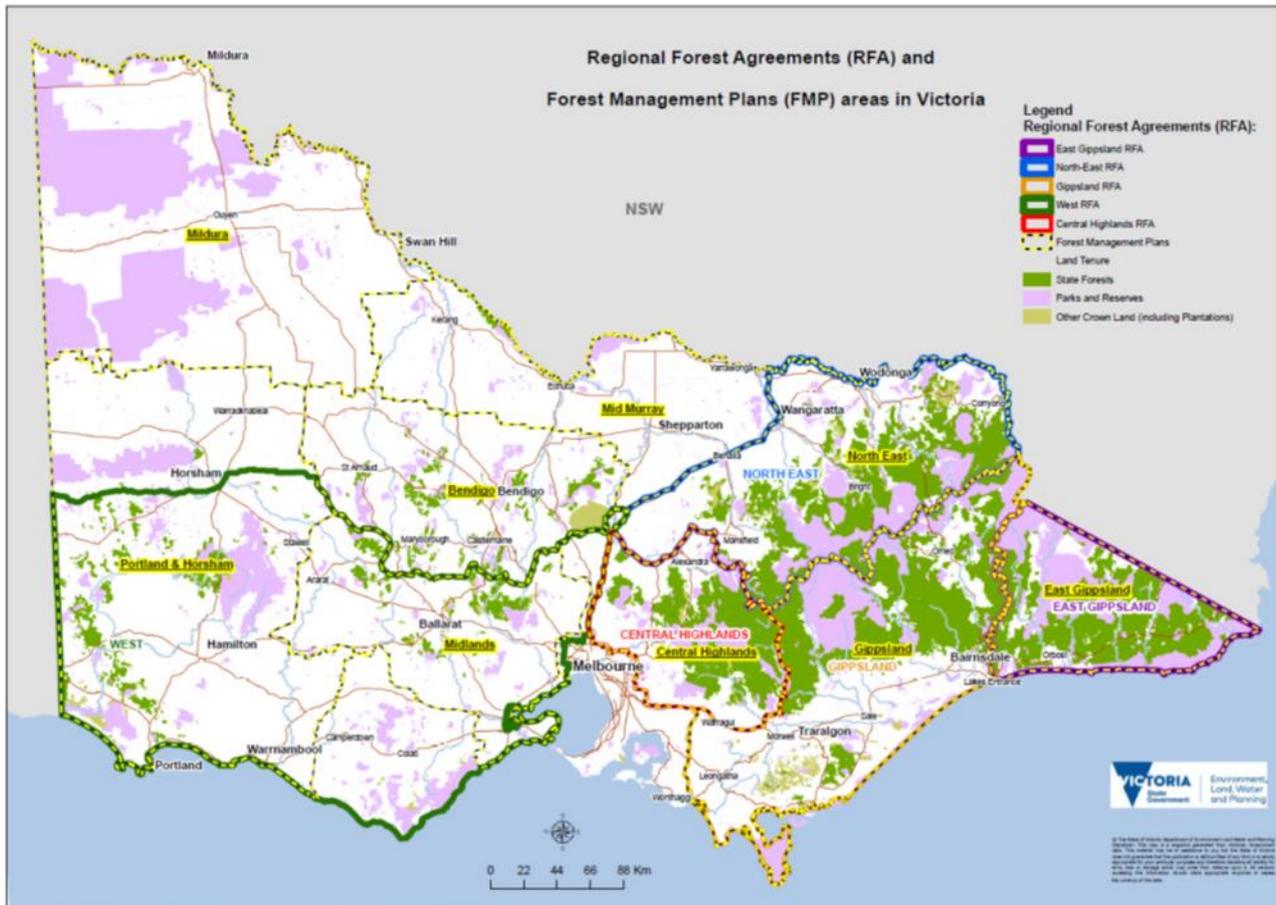


Figure 7: Victoria’s Forest Management Plans and Regional Forest Agreements, 2019

Source: DELWP, 2019

7.2.1. Forest Management Planning and Zoning

FMPs establish strategic objectives for the conservation, management and use of forests, and map State forests into zones.

As discussed in [6.2.1](#) above, the Forest Management Zoning Scheme establishes three management zones within State forest:

- **Special Protection Zones (SPZs)** are managed specifically for conservation values and designed to complement the formal reserves within the system. These may be established to protect occurrences of listed species and communities. Timber harvesting operations are excluded from SPZs;
- **Special Management Zones (SMZs)** are managed to conserve specific features, while catering for timber harvesting operations under special conditions specified in SMZ plans and the *Planning Standards for Timber Harvesting Operations in Victoria’s State Forests 2014* (Planning Standards); and
- **General Management Zones (GMZs)** are managed for a range of uses and values, but timber harvesting operations have high priority.

The Forest Management Zoning Scheme reflects the strategic planning incorporated in FMPs and is supplemented by zoning changes resulting from additional measures to protect threatened species. The Scheme guides permitted uses across State forest.

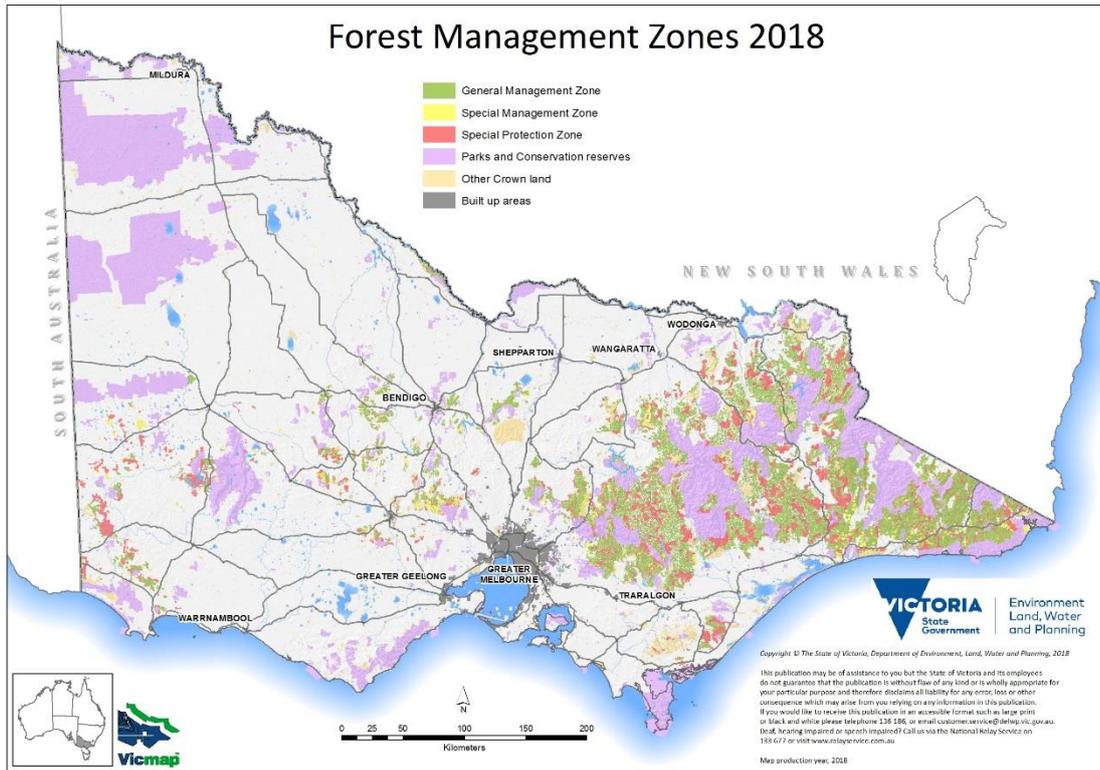


Figure 8: Victoria's forest management zones for State forests, 2018

Source: Commissioner for Environmental Sustainability, State of the Forest Report 2018

8. Fire management on public land

8.1. Preparing for and preventing bushfires

Fire management in national parks, State forests and other protected areas is delivered as part of the Secretary to DELWP's broader duty to carry out proper and sufficient work in State forests, national parks^d and on protected public land for the immediate prevention and suppression of fire and planned prevention of fire contained in section 62(2) of the Forests Act. For fire management on public land, the Secretary has entered into agreements with the Department of Jobs Precincts and Regions, Parks Victoria, Vic Forests and Melbourne Water. The last three agencies work alongside DELWP staff to provide response to emergencies, planned burning and preparedness activities under the brand of FFM Vic.

Under section 20(b) of the Forests Act, the Secretary is also required to make provision for plans for the prevention and suppression of fires within the fire protected area. This "fire protected area" is defined as any land within:

- any State forest or national park;
- 1.5 kilometres of any reserved forest, protected forest^e national park or protected public land (unless specifically excised); and
- any protected public land (being any Crown land not within a State forest or national park land that is deemed as such pursuant to section 62(1) or (1A) of the Forests Act).

The functions of the Secretary in respect of fire related activities in State forests, national parks or on protected public land may also be exercised by DELWP's Chief Fire Officer.

8.1.1. Code of Practice for Bushfire Management on Public Land 2012

In carrying out its functions, the Secretary must have regard to the Bushfire Code, which sets out two primary objectives:

- *to minimise the impact of major bushfires on human life, communities, essential and community infrastructure, industries, the economy and the environment. Human life will be afforded priority over all other considerations; and*
- *to maintain or improve the resilience of natural ecosystems and their ability to deliver services such as biodiversity, water, carbon storage and forest products.*²⁹

The Bushfire Code identifies the mechanism for achieving these objectives, which include implementation of bushfire management strategies, planning for and undertaking bushfire management actions and monitoring, evaluating and reporting on progress towards delivering outcomes.

A Fire Management Zoning Scheme applies to public land and is used to operationalise the objectives of Strategic Bushfire Management Plans. The four zones in the Scheme are intended to provide guidance to public land managers in their fire management activities. They are:

- *Asset Protection Zone* – actions aim to provide the highest level of localised protection to human life, property and key community assets. Fuel treatment seeks to reduce radiant heat and ember formation in the event of bushfire;
- *Bushfire Moderation Zone* – actions seek to reduce the speed and intensity of bushfires and to protect nearby assets. A secondary objective is to manage for ecologically desirable fire regimes;
- *Landscape Management Zone* – planned burning may be carried out to reduce fuel loads, increase ecological resilience or to manage particular values, such as protection of water catchments or forest regeneration; and
- *Planned Burning Exclusion Zone* – planned burning is excluded, as areas are not tolerant to fire.

^d Under the Forests Act, a 'national park' is park within the meaning of the National Parks Act 1975, whether or not it is designated by name a 'national park'. This includes State parks and a range of other types of parks (such as coastal parks or wilderness parks).

^e Here, the term 'protected forest' refers to any reserved forest or any area of unoccupied Crown land proclaimed as a protected forest pursuant to the Forests Act of any other corresponding previous enactment.

The Bushfire Code also requires that strategic planning for bushfire management is undertaken through Strategic Bushfire Management Plans. These plans are intended to explain the fuel management strategy that is used to achieve the objectives of the Bushfire Code. While these strategic plans are currently confined in scope to fuel management, work is under way to expand the coverage of strategic plans to consider a wider range of risk reduction, response and recovery activities. The Fire Management Zoning Scheme assists in the prioritisation of fuel management activities on public land.

The Government's policy on bushfire risk reduction, 'Safer Together', emphasises the need for joined-up action across multiple land use categories and tenures. Joint Fuel Management is a statewide program of works to manage fuel on public and private land, including State forests.³⁰

8.1.2. Preparing to protect Victoria's biodiversity

Victoria's 20-year plan for biodiversity, *Protecting Victoria's Environment - Biodiversity 2037* (see [10.2.2](#) of this document), acknowledges that extreme events such as bushfires are likely to become more frequent with more severe impacts on biodiversity. It sets out a range of actions that the Victorian Government will undertake to minimise impacts on biodiversity from these events using two key strategies:

1. Continuing to protect remaining biodiversity by directly managing key threats such as further loss of habitat, weeds and pests, and inappropriate regimes; and
2. Enhancing biodiversity by directly managing native species through actions such as:
 - increasing habitat quality, extent and connections;
 - increasing genetic diversity within existing populations;
 - translocating species to previously unoccupied habitat more suited to climate change;
 - managing population levels to create a more appropriate balance, e.g. through reintroduction of apex predators;
 - introducing new genetic variants or species that can continue to play important ecological roles under climate change, e.g. introducing a fire-hardy species in wet forests that are now at increased risk of burning;
 - rescuing critically endangered populations as an emergency response to catastrophic events; and
 - maintaining populations of sensitive species in intensively controlled natural settings (e.g. conservation centres), and individuals, seeds or tissues in intensively controlled settings (e.g. zoos, botanic gardens, aquariums).

8.2. During bushfire

Bushfire suppression on public land is carried out in accordance with the relevant legislation including the Forests Act and the Bushfire Code using control arrangements established under the *Emergency Management Act 2013* (Vic).

Activities undertaken in response to bushfire contribute towards discharging the Secretary's obligation under the Forests Act to carry out proper and sufficient work for the suppression of bushfires in State forests, national parks and protected public land.

DELWP is the control agency for fire in state forest, national parks, and on protected public land.

Under the *Emergency Management Act 2013* (Vic), the Emergency Management Commissioner must appoint a State Response Controller to be responsible for planning for anticipated Class 1 emergencies (i.e. a major fire) and for each Class 1 emergency in any area of the State that is occurring or has occurred.

The Emergency Management Commissioner may direct the State Response Controller to exercise specified control activities; or may override or exercise specified control response activities when considered necessary if control response is not being exercised effectively.

8.3. After bushfire

8.3.1. Post-fire management of public land and its values

The Bushfire Code covers the two main bushfire recovery phases specific to bushfires on public land:

1. Emergency Stabilisation and Initial Recovery

During this phase, the Incident Controller is responsible for:

- identifying, assessing and treating emerging risks to human life, property, natural and cultural values;
- identifying risks to public land values (including natural and cultural values);
- rehabilitating damage caused by suppression works;
- beginning emergency stabilisation activities; and
- understanding loss and damage to public land.

The transition from response to emergency stabilisation and initial recovery will start as soon as practicable and after the risk to human life has been minimised.

2. Longer-term Recovery

This phase begins after the public land management entity has agreed with the Incident Controller to resume day-to-day management responsibilities. During this phase, the public land management entity works towards:

- continuing public land stabilisation activities;
- continuing risk treatment in priority order;
- managing loss and damage to public land;
- identifying, assessing and treating any further risks (including risks to natural and cultural values) not identified or mitigated in the emergency stabilisation phase;
- acting upon any opportunities that have emerged as a result of the bushfire (e.g. weed removal works); and
- undertaking works that facilitate access to public land and the recovery of natural, cultural and built assets.

The recovery phase ends when a recovery plan is implemented, identified key risks are mitigated and access to public land is restored, as appropriate. The normal public land management entity resumes responsibility for public land impacted by bushfire once the Incident Management Team has been disbanded. Business-as-usual land management responsibilities include the management of the residual risk.

8.3.2. Protection and management of Matters of National Environmental Significance during and after bushfires

Further detail on actions to discover impacts and minimise further harm to MNES after fires are provided in [10.6](#).

9. Management of sustainable timber production

Timber harvesting in Victoria's native forests and plantations is managed in accordance with the requirements of the SFT Act and other relevant legislation on both public and private land. DELWP has primary responsibility for regulating timber harvesting operations on public land; most notably VicForests' commercial operations.

The Timber Code is the primary regulatory instrument that applies to commercial timber production in native forests (both public and private) and plantations in Victoria.³¹ The Timber Code is made by the Minister for Energy, Environment and Climate Change under Part 5 of the CFL Act. It also applies to silvicultural tending, regeneration, rehabilitation and roading activities associated with commercial harvesting. Enforcing compliance with the Timber Code on public land is the responsibility of the Office of the Conservation Regulator (OCR) within DELWP. Local government is responsible for enforcing compliance with the Timber Code on private land.

In addition to the above, both the FFG Act and the Wildlife Act regulate the way in which timber harvesting in Victoria is undertaken, in that they create mechanisms that control and manage the impacts of such activities on flora and fauna.

The FFG Act, which provides for the conservation, management and control of flora and fauna and the management of potentially threatening processes through various mechanisms, including critical habitats determinations and the making of interim conservation orders that can be used to regulate species management.

The Wildlife Act also applies on all land tenures and makes it an offence to kill, take, control or harm wildlife. Enforcing compliance with the Wildlife Act and the FFG Act on all public and private land is the responsibility of the Secretary to DELWP, which may delegate that function to the relevant land manager. The Secretary to DELWP or the relevant land manager, as the case may be, can take enforcement action itself, or delegate that function to PV or the OCR (see [Chapter 13](#)).

In recognition of its responsible management practices, VicForests is certified by the international brand PEFC (Program for the Endorsement of Forest Certification) through the Australian Forestry Standard.

9.1. Public native forest – management system for timber harvesting

9.1.1. Resource Outlook

VicForests periodically prepares a Resource Outlook to provide an indication to the timber industry of how much sawlog timber is likely to be able to be commercially supplied from the State forests in eastern Victoria on a sustainable basis in the medium term. Resource Outlooks are prepared for both ash and mixed species timbers.

The Resource Outlook is shared with industry, government and other stakeholders to provide information about Victoria's State-owned timber resources. It is used by VicForests to guide the volume of timber it makes available to the market.

In addition to sawlogs, timber harvesting operations produce low quality sawlogs, pulp logs, firewood and other timber products that are also made available for sale.

9.1.2. Allocation Order for VicForests

Under the SFT Act, the Minister for Agriculture is responsible for allocating timber in State forests to VicForests for the purposes of harvesting or selling, or harvesting and selling, timber resources.³² The allocation to VicForests is made through the AO, which sets a five-year harvest area limit for eastern Victoria.

The AO is made by the Minister for Agriculture under Part 3 of the SFT Act. On the publication of an AO in the Victorian Government Gazette, property in the timber allocated by the order is vested in VicForests. VicForests may only harvest or sell vested timber resources in accordance with the AO. In accordance with the Act, the AO describes:

- the forest stands within State forest to which VicForests has access;
- the location and extent of those forest stands;
- the total area available for harvest;
- the area available for harvesting within each five-year period;

- any additional activities that VicForests is permitted to undertake; and
- the conditions VicForests must comply with in carrying out its functions under the AO.

Conditions under the AO include:

- complying with all relevant codes of practice, including but not limited to the Timber Code and the Bushfire Code; and
- complying with the Forest Management Zoning Scheme.³³

The 'five-year harvest area limits' for timber harvesting in the AO are set separately for ash forests (predominantly *Eucalyptus delegatensis*, *E. regnans* and *E. nitens*) and mixed species forests. The total area available for harvest in each forest stand and the area available for harvesting within the five-year harvest area limit are gross areas. Some timber that is vested in VicForests in certain parts of the Allocation Area are not in fact able to be harvested by VicForests by virtue of requirements imposed by the Timber Code.³⁴

The harvest area limits, together with the Forest Management Zoning Scheme, the mandatory requirements of the Timber Code, and Harvest Levels Limits (see Part 9.1.1), represent the primary controls on the quantity and spatial pattern of timber harvesting conducted within State forests on an annual basis and over an extended period.

It should be noted that VicForests has access to some smaller-scale timber resources, primarily in western Victoria, through different licensing provisions under section 52 of the Forests Act. This is managed through a Timber Utilisation Plan (TUP) prepared and released by VicForests. Further detail of the TUP is provided in part 9.1.4.

9.1.3. Timber Release Plans

After an AO is gazetted, VicForests prepares a Timber Release Plan (TRP) which shows the location of areas which may be sustainably harvested and regenerated by VicForests. Under Part 5 of the SFT Act, VicForests must prepare a TRP in respect of an area to which an AO applies for the purposes of harvesting and selling, or harvesting or selling, timber resources and to undertake management activities associated with those timber resources.

The TRP is VicForests' key planning mechanism for outlining future timber harvesting operations and associated management activities. It includes a schedule of coupes selected for timber harvesting and associated access road requirements, details of the location and approximate timing of timber harvesting in the proposed coupes, and details of the location of any associated access roads.³⁵

In preparing a TRP, VicForests is required to comply with any condition relating to consultation that is specified in the AO.

Where a TRP covers an area subject to a Land Use Activity Agreement held by Traditional Owners under the TOS Act, VicForests may have obligations to reach an agreement with the Traditional Owner Group Entity as to the publication of the notice of a TRP and the conditions to which the agreement to publish the notice is subject, including the provision of community benefits, if any.³⁶ VicForests is not entitled to publish the notice of a TRP until this has occurred, and must have regard to the nature of the activity and its impact on the rights of the Traditional Owners.

9.1.4. Timber Utilisation Plans

For timber harvesting operations outside the scope of the area to which the AO applies, VicForests prepares a TUP.^f The TUP largely applies in the west of the State. The TUP lists areas where VicForests proposes to conduct timber harvesting operations and associated management activities for a period of up to five years.³⁷

TUPs are working plans prepared by VicForests under a limited delegation from the Secretary to DELWP under section 22 of the Forests Act. VicForests issues Forest Produce Licences under section 52 of the Forests Act under a delegation from the Secretary to DELWP for timber captured by the TUP (also see 11.1.3 regarding

^f TUPs have replaced the former Wood Utilisation Plans (WUPs), which were previously prepared by DELWP for predominantly small-scale operations occurring in the west of the state. The management of small-scale commercial forestry operations was transferred to VicForests in November 2014 and the WUPs were replaced with TUPs. Further information about TUPs and VicForests community forestry operations can be found on the VicForests website.

commercial firewood). These licences are largely for small-scale harvesting operators, typically harvesting for commercial firewood.

9.1.5. Operational planning for timber harvesting

VicForests prepares a Forest Coupe Plan in accordance with the requirements of the Timber Code prior to the commencement of each timber harvesting operation in State forest.

According to the Timber Code, a Forest Coupe Plan must:

- be prepared by the managing authority prior to the commencement of a timber harvesting operation including road construction or upgrades;
- communicate the intended boundaries, activities and requirements in adequate detail to enable operators to complete work to the required standard, comply with the Timber Code and comply with the management standards and procedures for the life of the coupe, and to support the Secretary in reviewing compliance;
- be sanctioned;
- be approved and provide evidence of the approval for timber harvesting operations occurring within the SPZ or outside the area identified in an AO or licensed to the harvesting entity;
- record details of the type of timber harvesting operation; and
- document all variations to operational requirements and sanctions (such as the removal of trees from buffers for safety purposes) until the timber harvesting coupe is approved as successfully regenerated and rehabilitated.³⁸

9.1.6. VicForests Pre-Harvest Assessment

VicForests uses a risk-based approach to manage threatened flora and fauna species and communities that may be in areas planned for timber harvesting. Each area planned for harvest undergoes a pre-harvest assessment to identify and enable management of key biodiversity values. The preharvest assessment includes:

- desktop assessment (all coupes);
- coupe transect (physical verification; all coupes), and
- targeted species surveys (high-risk coupes).

VicForests uses data from a range of sources, including the DELWP Forest Protection Survey Program (FPSP, discussed further in section 14.2.1 below), to inform the assessments of biodiversity values that are part of VicForests' pre-harvest assessments.

9.1.7. Code of Practice for Timber Production 2014

The purpose of the Timber Code is to provide direction to timber harvesting managers, harvesting entities and operators to deliver sound environmental performance when planning for and conducting timber harvesting activities in a way that:

- permits an economically viable, internationally competitive, sustainable timber industry;
- is compatible with the conservation of the wide range of environmental, social and cultural values associated with forests;
- provides for the ecologically sustainable management of native forests proposed for cyclical timber harvesting operations; and
- enhances public confidence in the management of timber production in Victoria's forests and plantations.

The Timber Code addresses the legal obligations that timber harvesting managers, harvesting entities and operators must meet in addition to relevant law.

The Timber Code is based on 'Code Principles', which express the broad outcomes of intent for each aspect of sustainable forest management. The Code Principles were developed from the internationally recognised Montreal Process criteria and are consistent with the objectives of the *Sustainability Charter for Victoria's State Forests*.

The Code Principles are:

1. Biological diversity and the ecological characteristics of native flora and fauna within forests are maintained;
2. The ecologically sustainable long-term timber harvesting capacity of forests managed for timber harvesting is maintained or enhanced;
3. Forest ecosystem health and vitality is monitored and managed to reduce pest and weed impacts;
4. Soil and water assets within forests are conserved. River health is maintained or improved;
5. Cultural heritage values within forests are protected and respected; and
6. Planning is conducted in a way that meets all legal obligations and operational requirements.

The Timber Code incorporates the *Management Standards and Procedures for Timber Harvesting Operations in Victoria's State Forests 2014* (MSPs), which provides detailed operating instructions to managing authorities, harvesting entities and operators, including region specific instructions, for timber harvesting operations in Victoria's State forests.

Any person undertaking timber harvesting operations in State forests is required to comply with the Timber Code, including the MSPs. This requirement is provided for in section 46 of the SFT Act and is included in licences and authorisations issued under the CFL Act, the Forests Act and the SFT Act.

The Planning Standards are an appendix to the MSPs and provide fixed and detection-based zoning actions for the management and protection of values.

The requirement to comply with the Timber Code is provided for in section 46 of the SFT Act, is included in licences and authorisations issued under the CFL Act, the Forests Act and the SFT Act, as well as the VPP that require timber production activities (with some exceptions) to comply with the Timber Code (cl 53.11-2, 'Timber production to comply with the Code of Practice for Timber Production').

As the Timber Code is a legislative instrument under the *Subordinate Legislation Act 1994* (Vic), its making, amendment or replacement would generally require a Regulatory Impact Statement. Legislative instruments sunsets after ten years, although they may be extended for up to a year in certain limited circumstances

The management actions and procedural instructions contained in the MSPs and the Planning Standards were informed by relevant policy documents including FMPs prepared under the Forests Act and Action Statements prepared under the FFG Act. The Timber Code states that the MSPs replace any directions relating to timber harvesting operations in those documents

9.1.8. Regeneration obligations

The Timber Code specifies that as soon as it is practical following timber harvesting operations, State forest must be regenerated with local species, with the aim of achieving the same canopy floristics as was present prior to harvesting.³⁹ Under the Timber Code, VicForests must comply with mandatory actions relating to regeneration following harvesting in State forests. The regeneration is assessed and audited by DELWP. DELWP's assessment of regeneration is incorporated in its Forest Audit Program.

9.1.9. Forest Audit Program

Each year, DELWP commissions an independent environmental audit to measure compliance of commercial timber harvesting operations against the requirements set out in the Timber Code. Auditing of compliance with these obligations is conducted under section 47 of the SFT Act.

The findings from these audits are used to improve operational practices and inform improvements to the regulatory framework. The published audit reports, alongside formal responses to the auditor's recommendations from both VicForests and DELWP enhance the transparency of Victoria's forest management arrangements.

Surveys are completed for targeted species which include many threatened species and therefore contributes to our knowledge and protection of MNES.

9.1.10. Office of the Conservation Regulator

The OCR was established by DELWP in early 2019 following an independent review of timber harvesting regulation in Victoria's public native forests. Further details on the work of the OCR are in [Chapter 13](#).

9.1.11. Harvest Level Limits in Regional Forest Agreements

RFAs are agreements between the Commonwealth and State governments that provide for the ecologically sustainable management and use of forests in an RFA region.

The Victorian RFAs require that the volume of timber that can be harvested from native forests in an RFA region for commercial purposes in any financial year (the Harvest Level) be forecast and made publicly available. Harvest Levels are set consistent with the principles of ESFM and adapt to changes in the forest resource available, which may result from bushfire, updates to survey and modelling, new detections of listed species or communities, or other decisions.

Victoria has committed to ensuring that the volume of timber harvested from State forest in an RFA region over the period 1 July 2019 to 30 June 2030, for both ash and mixed species, not exceed:

- the cumulative Harvest Level for any five-year period; and
- more than 120 per cent of the annual Harvest Level in any given year.

This commitment will moderate the intensity of harvesting activity while providing operational flexibility for the timber industry.

As a result of the Victorian Government's decision to phase out all State forest timber harvesting by 30 June 2030, the maximum Harvest Levels will be progressively stepped down until Victoria's timber industry will complete its transition out of native forest harvesting by 2030.

9.2. Private land – plantations and native forest – management system for timber harvesting

9.2.1. Victoria Planning Provisions

The VPP, made under the PE Act, are the standard core of the local planning scheme for every local government area in the State. All planning schemes consist of standard State provisions from the VPP and specific local provisions.

Timber production, including timber harvesting, is a defined land use in the VPP and therefore in all planning schemes. Local planning schemes set out policies and requirements for the use, development and protection of land, including private forests and plantations, and are administered by local government (subject to some exceptions).

Local government is generally responsible for regulating timber harvesting and associated management activities in native forests and plantations on private land, as part of its responsibility for local planning schemes. This includes enforcing compliance with the Timber Code on private land.

9.2.2. Controls on the removal of native vegetation on private land

In Victoria, a planning permit from the local council is usually required for the removal, destruction or lopping of native vegetation on private land (clause 52.17 of the VPP). *Guidelines for the removal, destruction or lopping of native vegetation 2017* (the Guidelines), which are incorporated in the VPP, govern the assessment of permit applications and how permitted native vegetation removal is offset.

The Guidelines apply an avoid, minimise and offset approach. Assessment of the biodiversity value of native vegetation under the Guidelines includes consideration of: extent, condition, strategic biodiversity value, habitat for rare or threatened species, large trees, endangered Ecological Vegetation Classes, and sensitive wetlands and coastal areas (including those for migratory shorebirds of the East Asian-Australasian Flyway).

Before carrying out any operation involving native vegetation, the landowner must gain approval from the relevant local government authority in the form of a planning permit, which may include conditions such as the requirement to purchase registered offsets. If offsets are required, they must be obtained before the native vegetation is removed. Native vegetation offsets compensate for the impact of the vegetation removal on biodiversity. More information on offset programs is available in section 6.4 above.

Offset requirements for removing native vegetation for timber harvesting can be met through regeneration, in accordance with an approved Property Vegetation Plan (PVP) for the land. An approved PVP contains the same information as a Timber Harvesting Plan (THP) under the Timber Code. A PVP can therefore act as a THP under the Timber Code and for the purposes of Clause 52.18 of the VPP. Any native forest timber harvesting application that does not include an approved native forest timber harvesting PVP must comply fully with the Guidelines.

The VPP also includes a range of other planning tools, including zones, overlays and specific clauses, that assist in regulating activities that may otherwise undermine conservation objectives or impact environmental and heritage values.

9.2.3. Other requirements for private land owners

Private land owners also need to be cognisant of statewide strategies and legislation that may apply to native forest and plantation harvesting operations and associated management activities. For example, to minimise the risks to koalas during operations in blue-gum plantations in the Green Triangle region of Victoria, plantation operators undertaking operations that may affect koalas must apply for authorisation to disturb koalas. Under the Wildlife Act, they are required to develop Koala Management Plans that meet the minimum requirements set by DELWP to minimise risks to koalas during operations.

9.2.4. Timber Harvesting Plan

Before starting any timber harvesting operations, private native forest and plantation operators must prepare a THP under the Timber Code and submit it to the relevant local government authority. All timber harvesting, including thinning, must comply with the THP developed by the private forest or plantation owner in line with the Timber Code and approved by the local government authority.

A THP usually consists of a map identifying the area(s) to be harvested and a statement of conditions applying to the timber production activity, which is lodged with the responsible authority. The THP may cover a single coupe or an area in which several coupes are to be harvested. A THP is current for 24 months following lodgement with the relevant local council.

9.2.5. Code of Practice for Timber Production 2014 – on private land

Clause 53.11 of the VPP provides that all timber production activities (except agroforestry, windbreaks and commercial plantations of 5 ha or less) on land, other than unalienated Crown land, must comply with the Timber Code.

The Timber Code includes requirements for private native forests and plantations. It is supported by the *Management Guidelines for Private Native Forests and Plantations 2014*. The Guidelines outline possible means for achieving operational goals or mandatory actions, including reference to documents that may assist forest managers. Failure to follow the Guidelines does not in itself constitute non-compliance with the Timber Code; however, the Guidelines generally support or expand on the operational goals and mandatory actions in the Timber Code.

The Timber Code requirements for regeneration and rehabilitation that apply to public native forest also apply to private native forest. The Timber Code includes mandatory actions including compliance with management standards and procedures, prohibition on clearing for the establishment of plantations, and for regenerating forest in a way that aligns with the ecological characteristics of the coupe prior to harvesting and its surrounds. Harvested coupes must be regenerated as soon as practical and remedial action taken in the event of regeneration failure.

10. Biodiversity and providing for the protection of MNES

10.1. Matters of National Environmental Significance in Victoria

The EPBC Act defines MNES and provides for their protection. Under the EPBC Act, the Commonwealth Minister for the Environment is required to decide whether an action that will, or is likely to, have a significant impact on MNES ('a controlled action') should be approved and, if so, to what conditions that approval should be subject.

There are nine MNES protected under the EPBC Act, namely:

- world heritage properties;
- national heritage places;
- wetlands of international importance (listed under the Ramsar Convention);
- listed threatened species and ecological communities;
- migratory species protected under international agreements;
- Commonwealth marine areas;
- the Great Barrier Reef Marine Park;
- nuclear actions (including uranium mines); and
- a water resource, in relation to coal seam gas development and large coal mining development.

Of the nine MNES, Commonwealth marine areas, the Great Barrier Reef Marine Park, nuclear actions and water resources in relation to coal seam and coal mining are not relevant to Victoria's forests and associated forest management activities.

The following sections provide a brief summary of how the remaining MNES are managed within Victoria's forested regions, particularly where forestry operations are permitted.

10.2. Listed species and ecological communities

In Victoria's forests, species and communities listed under the EPBC Act are protected within Victoria's forest management system through various legislative and management mechanisms. The key mechanisms include:

- the implementation of a CAR reserve system;
- the implementation and enforcement of the FFG Act and the Wildlife Act;
- the CFL Act, including via the Timber Code and the Bushfire Code, which makes management prescriptions in areas of forestry operations;
- the implementation of ESFM practices required under Victorian law;
- Forest Management Zoning Scheme under the Forests Act, which includes SPZ that contribute informal reserves to the CAR reserve system; and
- formal reserves such as parks and conservation reserves that contribute to the CAR reserve system.

Victoria maintains a forest management system that provides for the protection of EPBC Act listed species and communities present within forests, whether or not they are specifically listed under Victorian legislation. Detailed case studies describing how EPBC Act listed species and communities are managed under Victoria's forest management system are at Appendices D–G.

10.2.1. Flora and Fauna Guarantee Act 1988 (Vic)

The key legislation in Victoria for the protection of biodiversity is the FFG Act. The purpose of the Act is to establish a legal and administrative structure to enable and promote the conservation of all Victoria's native flora and fauna, and to provide for the conservation, management or control of flora and fauna and the

management of potentially threatening processes. The FFG Act applies across all land tenures, including private land.⁹

The FFG Act aims to conserve all of Victoria's native plants and animals (including their communities) on public and on private land, to ensure that any use by humans is sustainable and that the genetic diversity of plants and animals is maintained. The FFG Act's flora and fauna conservation and management objectives include (amongst other things) to:

- guarantee that all taxa of Victoria's flora and fauna can survive, flourish and retain their potential for evolutionary development in the wild (other than the taxa listed in the Excluded List);
- conserve Victoria's communities of flora and fauna;
- manage potentially threatening processes;
- ensure that any use of flora or fauna by humans is sustainable; and
- ensure that the genetic diversity of flora and fauna is maintained.

Mechanisms in the FFG Act to achieve its objectives, include:

- the preparation of Action Statements following listing of threatened species, communities and threats to native species;
- enabling the declaration of habitat critical to the survival of native plants and animals;
- the duty of public authorities to have regard to objectives of the Act in their operations;
- requiring permits for activities that could harm threatened animals, plants and communities; and
- requiring an overarching strategy for Victoria's biodiversity.

In practice, of the 196 EPBC Act listed species that occur in Victoria's RFA regions, 153 are listed under the FFG Act and are therefore afforded additional protections under the FFG Act and by the Wildlife Act. Protections through the Wildlife Act for species listed under the FFG Act are further described below.

A further 26 EPBC Act listed species are on the Victorian Advisory List and therefore currently under review as part of the common assessment method process (see 10.2.1.4 below). When these items are assessed, eligible species will be recommended to the Minister to add to the FFG threatened list.

10.2.1.1. Protecting Victoria's Environment - Biodiversity 2037

The strategy for Victoria's biodiversity, required under the FFG, must set out how the flora and fauna conservation and management objectives are to be achieved, and include proposals for guaranteeing survival, abundance and evolutionary development in the wild of all species and communities of flora and fauna.

Protecting Victoria's Environment – Biodiversity 2037 is the Victorian Government's biodiversity strategy made under section 17 of the FFG Act. It sets out goals, targets and actions, including:

- raising the awareness of all Victorians about the importance of the State's natural environment and increase opportunities both for all Victorians to have daily connections with nature and to act to protect biodiversity;
- comprehensively engaging with Traditional Owners and Aboriginal Victorians to include Aboriginal values and traditional ecological knowledge in biodiversity planning and management;
- making substantial, multi-year investments in the highest-priority projects arising from the biodiversity response planning process;
- developing and delivering decision-support tools which focus on the most cost-effective options for action to benefit the largest number of native species under climate change scenarios; and
- expanding and improving the collection of data, including consistent reporting on management activity, monitoring of asset condition where appropriate and investigations into the effectiveness of management to inform future decision-making.

⁹ See for example, section 47, which enables the taking of protected flora from private land in certain specified circumstances.

10.2.1.2. Listing under the *Flora and Fauna Guarantee Act 1988 (Vic)*

The FFG Act provides a process for identifying and listing taxa and communities under threat. Listings are made by the Minister on the recommendation of a standing expert Scientific Advisory Committee, following a rigorous process of scientific assessment and community consultation.

In Victoria, species and communities may be nominated for listing by any person, in accordance with the criteria set out in the *Flora and Fauna Guarantee Regulations 2011*.

The process for listing species or communities under the FFG Act involves:

- nominations being assessed by the Scientific Advisory Committee constituted under the Act;
- the Committee's initial decision and rationale, which is released for public consultation;
- the Committee review of its initial decision in light of public submissions and a final recommendation to the Minister; and
- the Minister determining whether to accept the recommendation and list the species or community.

In addition to the list under section 10(1) of the FFG Act, DELWP maintains non-statutory threatened species advisory lists. Currently, these include Rare or Threatened Plants in Victoria; Threatened Vertebrate Fauna and Threatened Invertebrate Fauna.

The advisory lists consist of species that are considered likely to be threatened but have not been through the formal listing processes required under the FFG Act. The advisory lists are based on technical information and advice obtained from a range of experts, and they are reviewed periodically. The information in these lists can be used in planning processes, such as the preparation of National Park Management Plans, local government planning schemes and regional catchment strategies, and in setting priorities for actions to conserve biodiversity.

10.2.1.3. Action statements under the *Flora and Fauna Guarantee Act 1988 (Vic)*

The FFG Act provides for a variety of conservation measures, including the development of Action Statements for listed threatened species, the determination of critical habitat, the listing of potentially threatening processes, the making of interim conservation orders (including to suspend any activity in and adjacent to critical habitat), and the making of flora and fauna management plans.

Action Statements under the FFG Act outline what has been done to conserve a listed taxon or community, or to manage a potentially threatening process, and what is intended to be done, and may include information about what needs to be done. In the case of listed species, actions under Action Statements aim to secure populations and their habitats, and to manage threats, to ensure the long-term persistence of the species. The actions may be implemented by a range of organisations including government agencies, universities, environmental non-government organisations, and community groups. Actions often include research to improve understanding of the species' biology and the impacts of any threats.

Action Statements may include recommended management strategies and prescribe specific actions to manage the risks posed by a variety of activities, including timber harvesting operations. Management strategies can include fixed (landscape-scale) and detection-based (local-scale) zoning responses managed through the Forest Management Zoning Scheme, and sometimes include guidance on operational practice or prescribe recommended management actions to minimise impacts on a given value. Where these actions relate to timber harvesting operations and have been incorporated into the Timber Code, for example through a variation to the Code, compliance with these actions can be enforced against the managing authority and timber harvesting operators (section 46 SFT Act requires all timber harvesting operations to comply with the Code).

Zoning actions described within an Action Statement can be put into operation by the Secretary through working plans (FMPs) prepared under section 22 of the Forests Act. The Timber Code requires managing authorities to make an application to the Secretary to establish new zoning (either SPZs or SMZs) where values listed within the Management standards, have been identified in areas proposed for timber harvesting.

Where an Action Statement specifies actions that should be made enforceable on timber harvesting operations, such actions are normally implemented within the forest management system by an amendment to the Timber Code. In practice, this is likely to involve amendment of the MSPs (which are incorporated into the Code), which in turn flows through to changes to forest management zoning.

SPZs within the forests zoning system form part of the CAR reserve. Changes to management standards include in-field prescriptions that may act to ensure that particular species or communities are protected

throughout forests where forestry operations are occurring. Changes to the Timber Code generally require a Regulatory Impact Assessment under the *Subordinate Legislation Act 1994* (Vic).

In the same way that protections described in an Action Statement can be implemented into the Timber Code, actions prescribed in a statutory planning conservation document developed by another State or Territory or the Commonwealth can be implemented through an amendment to the Timber Code.

Additionally, section 25 of the FFG empowers the Secretary to enter into agreements with one or more public authorities to provide for the management of any taxon or community of flora or fauna or any potentially threatening process. This enables the implementation of conservation actions through agreement between the Secretary and any relevant public authority, such as VicForests.

10.2.1.4. Common Assessment Method

Over time, the *Intergovernmental Memorandum of Understanding - Agreement on a national common assessment method for listing of threatened species and communities* (CAM MOU), agreed by all States, Territories and the Commonwealth will see the harmonisation of species listings across Australia.

The CAM MOU commits the parties to collaborate with each other to carry out assessments of the extinction risk status of taxa of flora and fauna using agreed categories, criteria and methodologies.

Under the CAM MOU, Victorian assessments may be adopted by other governments and Victoria commits to enable adoption of the assessments carried out by other jurisdictions within Victoria. Over time, this process will create a single operational list of nationally threatened taxa and communities that is consistent across all State, Territory and the Commonwealth jurisdictions.

It is intended that the CAM MOU will be implemented through the FFG Act via the amendments being made to it by the *Flora and Fauna Guarantee Amendment Act 2019* (Vic) (see part 5.1.5), which is due to come into effect on or before 1 June 2020. Once in effect, the amendments will establish a regime whereby, provided the Scientific Advisory Committee under the FFG Act has had input to the assessment process, its recommendation can substitute for a preliminary recommendation under the FFG Act, allowing the Scientific Advisory Committee to proceed directly to making a final recommendation on the species' or community's listing to the Minister. The Victorian list of taxa and communities will note the category of threat and whether each item is under threat only in Victoria or nationally.

10.2.2. Wildlife Act 1975 (Vic)

The purposes of the Wildlife Act are:

- to establish procedures in order to promote the protection and conservation of wildlife;
- the prevention of taxa of wildlife from becoming extinct;
- the sustainable use of and access to wildlife; and
- to prohibit and regulate the conduct of persons engaged in activities concerning or related to wildlife.

The Wildlife Act defines threatened wildlife as including protected wildlife that is specified in any list made under section 10(1) of the FFG Act. Therefore, all species listed under section 10(1) of the FFG Act are specifically protected by the Wildlife Act.

The Wildlife Act makes it an offence hunt, take or destroy threatened wildlife, and to acquire etc. threatened wildlife (actions included in this offence are to buy, sell, acquire, receive, dispose of, keep, possess, control, breed, process, display, take samples from or experiment on threatened wildlife). Both offences carry maximum penalties of up to 240 penalty units or 24 months' imprisonment.

10.2.3. Conservation, Forests and Lands Act 1987 (Vic)

The objectives of the CFL Act are to set up a legislative framework to:

- enable the Minister to be an effective conservator of the State's lands, waters, flora and fauna; and
- make provision for the productive, educational and recreational use of the State's lands, waters, flora and fauna in ways which are environmentally sound, socially just and economically efficient.

The CFL Act establishes the Secretary to DELWP as a body corporate and gives it broad powers to make agreements and to make necessary administrative and financial decisions and to enforce relevant laws. Under the CFL Act, the Minister is empowered to make codes of practice. These currently include the Timber Code (see 10.2.3.1 below) and the Bushfire Code (see 8.1.1).

10.2.3.1. Code of Practice for Timber Production 2014

The Timber Code requires that timber harvesting operations in State forests specifically address biodiversity conservation risks and consider relevant scientific knowledge at all stages of planning and management.

The maintenance of biological diversity and the ecological characteristics of native flora and fauna within forests is one of the six key principles on which the Timber Code is based. All timber harvesting operations must be planned to meet the requirements of the Timber Code and its incorporated *Management Standards and Procedures*.

The Timber Code operational goals in the maintenance of biological diversity are that:

- forest health is monitored and maintained by employing appropriate preventative, protective and remedial measures;
- chemicals are only used where appropriate to the site conditions and are conducted with due care for the maintenance of forest health, water quality, biodiversity and soil values;
- harvested State forest is managed to ensure that the forest is regenerated and the biodiversity of the native forest is perpetuated; and
- the natural floristic composition and representative gene pools are maintained when regenerating native forests by protecting long-lived understorey species and using appropriate seed sources and mixes of dominant species.

The Timber Code mandates the use of the best current scientific knowledge and, in the absence of scientific certainty, the application of the precautionary principle to the conservation of biodiversity values. It requires that the application of the precautionary principle be consistent with relevant monitoring and research that has improved the understanding of the effects of forest management on forest ecology and conservation values.

The Timber Code makes series of actions mandatory, in order to achieve each operational goal. Timber harvesting managers, harvesting entities and operators must undertake all relevant mandatory actions to meet the objectives of the Code. Failure to undertake a relevant Mandatory Action would result in non-compliance with this Code.

Mandatory prescriptions for biodiversity maintenance include:

- during planning:
 - identify biodiversity values listed in the Management Standards and Procedures prior to roading, harvesting, tending and regeneration; and
 - address risks to these values through management actions consistent with the *Management Standards and Procedures*, such as appropriate location of coupe infrastructure, buffers, exclusion areas, modified harvest timing, modified silvicultural techniques or retention of specific structural attributes;
- planning and management of timber harvesting operations must comply with relevant biodiversity conservation measures specified within the Management Standards and Procedures incorporated within the Timber Code;
- protect areas excluded from harvesting from the impacts of timber harvesting operations;
- ensure chemical use is appropriate to the circumstances and provides for the maintenance of biodiversity;
- do not harvest rainforest communities;
- to perpetuate the biodiversity of harvested native forests:
 - long-term (strategic) forest management planning must incorporate wildlife corridors, comprising appropriate widths of retained forest, to facilitate animal movement between patches of forest of varying ages and stages of development, and contribute to a linked system of reserves.
 - modify coupe size and rotation periods to maintain a diversity of forest structures throughout the landscape.
 - retain and protect habitat trees or habitat patches and long-lived understorey species to provide for the continuity and replacement of old hollow-bearing trees and existing vegetation types within each coupe.

- use silvicultural systems that suit the ecological requirements of the forest type; and
- regenerate harvested areas using seed from overstorey species with provenances native to the area; and
- to maintain forest health:
 - implement appropriate vehicle and equipment hygiene precautions when moving from areas of known pest plant, pest animal and pathogen infestations;
 - implement appropriate control actions where timber harvesting operations have introduced or exacerbated a pathogen or weed;
 - report the suspected introduction of new or unknown exotic agents to DEPI's Biosecurity section; and
 - where Myrtle Wilt (*Chalara australis*), Cinnamon Fungus (*Phytophthora cinnamomi*) or Root Rot (*Armillaria*) is known to exist, apply appropriate measures to minimise the spread of these pathogens.

10.2.4. Forest management zoning scheme

For the purposes of RFAs, the CAR reserve system is the primary tenure-based mechanism to protect biodiversity (see [Chapter 6](#) above) in forests.

Formal reserves within the CAR reserve system include all parks under the NP Act, and conservation reserves, such as those that reserved under the CLR Act.

The informal reserve system includes SPZs within State forests. SPZs are managed for particular conservation values, forming a network designed to complement the formal conservation reserve system.

Timber harvesting operations are excluded from SPZs. SMZs are managed to conserve specific features, while catering for timber harvesting operations under special conditions specified in SMZ plans and the Planning Standards. While GMZs are managed for a range of uses and values, timber harvesting operations have a high priority. Further information on the Forests Management Zoning Scheme is at [6.2](#) of this document.

Within State forests, biodiversity is managed through the designation of SPZ for the informal reserves that contribute to the CAR system, the application of SMZ and management prescriptions that prevent or modify timber harvesting operations to minimise the impact on biodiversity values throughout the forest. These management prescriptions are reflected in the Timber Code and, more specifically the MSPs and the Planning Standards (see [9.1.1](#) above).

10.2.5. Sustainable Forests Timber Act 2004 (Vic)

The SFT Act sets the framework for the sustainable management of timber in State forests, including its harvesting and sale.

The SFT Act requires that in undertaking sustainable forest management, regard is to be had to the principles of ecologically sustainable development set out in section 5. The principles include the precautionary principle:

“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.”

Under section 6 of the SFTA, the Minister must determine criteria and indicators for sustainable forest management and under section 7 the criteria and indicators must be published. Under section 8 of the SFTA, the Secretary must report to the Minister on the status, performance or achievement in relation to the indicators determined by the Minister under section 6.

The current criteria and indicators for reporting under section 6 cover, among other things, biodiversity – ecosystem diversity, species diversity and genetic diversity, and maintenance of ecosystem health and vitality. This is the basis of Victoria's State of the Forests report, which must be published at least every five years.

Part 3 of the SFT Act empowers the Minister to vest the timber resources of State Forests in VicForests, by Order in Council under sections 17(1) and 20 (the Allocation Order or AO).

The AO:

- allocates specified timber in State forests to VicForests for the purposes of harvesting and selling, or harvesting or selling, timber resources;
- permits VicForests to undertake associated management activities in relation to that allocated timber; and
- specifies the conditions and limitations that apply under the AO.

Conditions and limitations in the current AO, made in 2019, require that VicForests comply with all relevant laws including, but not limited to, the SFTA, the Forests Act, the CFL Act, the FFG Act, the Road Management Act 2004 (Vic) and the TOS Act. The AO also specifies that VicForests must also comply with all relevant Codes of Practice made under the CFL Act (including all matters applied, adopted or incorporated into such Codes under the CFL Act), which includes the Timber Code, the Management Standards and the Bushfire Code, and with the Forest Management Zoning Scheme (FMZS) established under section 22 of the Forests Act.

10.3. Migratory Species

Victoria's forest management system provides for the protection of migratory species through the same mechanisms that the system provides for the protection of listed species and communities (see part [10.2](#)).

Migratory species are those species of migratory fauna included in the list maintained by the Commonwealth pursuant to section 209 of the EPBC Act, which gives effect to the Commonwealth's obligations under several international agreements, including:

- the Japan-Australia Migratory Bird Agreement;
- the China-Australia Migratory Bird Agreement;
- the Republic of Korea-Australia Migratory Bird Agreement;
- the Convention on the Conservation of Migratory Species of Wild Animals (Bonn Convention); and
- the Partnership for the Conservation of Migratory Waterbirds and Sustainable Use of their Habitats in the East Asian-Australasian Flyway.

Migratory species are afforded further indirect protections under Victoria's forest management system through the protection of Ramsar Wetlands (see part [10.4](#)), as they provide habitats for migratory species that visit Ramsar Wetlands during annual migrations.

10.4. Ramsar Wetlands

Ramsar sites are wetlands included in the List of Wetlands of International Importance kept under the Ramsar Convention, to which Australia is a signatory. They are recognised as being of international importance because the wetland is a representative, rare or unique wetland type, or is of international importance for conserving biological diversity (for example water birds and indigenous fish). The Convention commits its member countries to promote the conservation of their Wetlands of International Importance (Ramsar sites) and to plan for the wise use of all of the wetlands in their territories. Under the Convention, signatories must manage listed Ramsar sites to maintain or improve ecological character.

Most land in Victoria's Ramsar sites is covered by Victorian legislation relating to the use and management of the land for conservation, as well as other legislation relating to utilisation purposes such as water storage, disposal of saline drainage water, duck hunting or forestry.

Additionally, the *Ministerial Guidelines for Assessment of Environmental Effects under the Environmental Effects Act 1978* (Vic) (ESS Act) provides that if there is potential for a project to cause long-term changes to the ecological character of a wetland listed under the Ramsar Convention the project should be referred to the relevant Minister to consider whether an Environmental Effects Statement is required. Under the ESS Act, a person or body required to make a decision in respect of works that could have a significant effect on the environment (such as, a significant impact on the ecological character of a Ramsar site), may seek the advice of the Minister as to whether an Environmental Effects Statement should be prepared for the works. The Minister may also direct a decision-maker to refer a project if they consider it could have a significant effect on the environment. Where a project is referred to the Minister for advice (whether voluntarily or under a direction) a decision-maker cannot make a decision about the project until the Minister makes a decision about whether an Environmental Effects Statement is required.

If activities lead to a change in ecological character of a Ramsar site, Victoria is required to notify the Commonwealth Government. The Commonwealth government is responsible for notifying the Ramsar Convention of changes in ecological character which would then be followed by preparation of a response strategy (Article 3.2, *National Guidance on Notifying change in Ecological Character of Australia's Ramsar Wetlands*). In order to fulfil this obligation, Victoria monitors the ecological character of Ramsar sites. Victoria's monitoring informs understanding of whether the ecological character of Ramsar sites is likely to change, is changing or has changed.

Victorian agencies have agreed Ramsar roles and responsibilities, which include a statewide coordinator (DELWP), land manager (PV for most sites) and site coordinator (Catchment Management Authorities (CMAs) and Melbourne Water).

Wetlands (including Ramsar sites) are integrated into Victoria's waterway management framework, along with rivers, streams and estuaries, and management is empowered through waterway management functions under the *Water Act 1989* (Vic). The statewide *Victorian Waterway Management Strategy* was released in 2013 and includes policies and actions to manage wetlands, including Ramsar sites. Regional waterway strategies were developed by CMAs in 2014. They set out how waterways will be managed over an eight-year period, and prioritise actions using a risk-based approach. Ramsar site management planning is contained within these Regional Waterway Strategies for seven sites, while the remaining five have standalone management plans.

Victoria's Ramsar management plans are informed by Ramsar Information Sheets and Ecological Character Descriptions produced by the Commonwealth. Ramsar Information Sheets provide essential data on each designated Wetland of International Importance, baseline data for measuring changes in the ecological character of wetlands listed under the Ramsar Convention, and material for publications which inform the public about Ramsar sites. Ecological Character Descriptions describe the ecological character of a wetland at the time of its listing as a Wetland of International Importance. While Ramsar Information Sheets and Ecological Character Descriptions do not form part of Victoria's FMS, they inform the management of Ramsar sites within Victoria.

Management and investment decisions pertaining to Ramsar sites are made so that the values that are at most risk are prioritised for funding. Ramsar site management plans need to be consistent with the Australian Ramsar Management Principles set out in the *Environment Protection and Biodiversity Conversation Regulations 2000* (Cth).

Ramsar sites are also subject to protections under the EPBC Act, however, the exemption from Part 3 of the EPBC Act that applies to RFA forestry operations does not extend to Ramsar sites.

Threatened species and communities listed under the EPBC Act and FFG Act are managed at Ramsar sites in line with the relevant legislation (see parts [5.1.5](#) and [10.2](#)).

10.5. World Heritage properties and National Heritage places

World Heritage properties are protected for their natural and cultural heritage values. All properties listed on the list kept under Article 11 of the *Convention for the Protection of the World Cultural and Natural Heritage* done at Paris on 23 November 1972 are protected under the EPBC Act by virtue of having been included on this list.

National heritage places are those listed on the list kept by the Commonwealth Minister for Environment under section 324C of the EPBC Act and are sites that are recognised for their national heritage values.

Within Victoria's RFA regions, there is one World Heritage listed place (Budj Bim Cultural Landscape in the West RFA region) and 13 National Heritage places (see [Appendix B](#) for a list of National Heritage Places). There are no World Heritage or National Heritage places in RFA regions within areas where forestry operations are permitted.

10.5.1. World Heritage properties

In Victoria, World Heritage properties are protected under part 9 of the *Heritage Act 2017* (Vic) (Heritage Act).

Under the provisions of the Heritage Act, the Heritage Council must prepare a World Heritage Strategy Plan for the declared World Heritage Environs Area surrounding the World Heritage place, for the approval of the Minister for Planning. Following the approval of the World Heritage Strategy Plan, the Minister must amend the relevant Planning Scheme under the PE Act, to identify the World Heritage Environs Area and to give effect to the approved World Heritage Strategy Plan for the Area. This may include other amendments to the Planning Scheme to make it consistent with the approved World Heritage Strategy Plan.

The Minister must also appoint a Steering Committee to develop a World Heritage Management Plan for the World Heritage place itself. Among other things, the World Heritage Management Plan must:

- state the world heritage values of the listed place;
- set out policies designed to ensure that the world heritage values of the listed place are identified, conserved, protected, presented, transmitted to future generations and, if appropriate, rehabilitated; and
- set out mechanisms designed to deal with the impacts of actions that individually or cumulatively degrade, or threaten to degrade, the world heritage values of the listed place.

The owners and occupiers of World Heritage places must comply with the approved World Heritage Management Plan for the place. Substantial penalties apply for non-compliance.

World Heritage sites are also subject to protections under the EPBC Act, however, the exemption from Part 3 of the EPBC Act that applies to RFA forestry operations does not extend to World Heritage sites.

10.5.2. National Heritage places

A place has a National Heritage value if the place meets one of the criteria (the National Heritage criteria) prescribed by regulations under the EPBC Act. The National Heritage value of the place is the place's heritage value that causes the place to meet the criterion. National heritage values may relate to natural, Indigenous cultural or post-settlement cultural and historic values, or combinations of these.

In Victoria's forests, the Timber Code requires that long-term forest management planning must identify and mitigate impacts on all cultural heritage values. In addition, throughout the State places of:

- Indigenous heritage are protected under the *Aboriginal Heritage Act 2006* (Vic) (AH Act) by listing in the Aboriginal Heritage Register;
- post-settlement cultural and historic heritage are protected under the Heritage Act by listing in the Victorian Heritage Register; and
- natural heritage value are protected in parks and reserves under the NP Act, the CLR Act or the Forests Act.

Places may meet criteria for protection in one, two or three categories.

Places that have been assessed for significance and approved for inclusion on the Victorian Heritage Register by the Heritage Council, or on the Aboriginal Heritage Register by the Registrar, are afforded protection in Planning Schemes under the PE Act or, on public land, in park management plans.

Places listed within Planning Schemes are subject to a permit approval process before any activities being taken that might affect their heritage values. In addition, they may have management plans with specific actions for managing their natural and cultural heritage values.

Of the 13 National Heritage places in Victorian RFA regions (see [Appendix B](#)), six are within areas protected in conservation reserves under the NP Act or the CLR Act and four of those sites are also protected through the Aboriginal Heritage Register or as Indigenous Protected Areas. A further site (Mount William Stone Hatchet Quarry) is also listed on the Aboriginal Heritage Register

Of the remaining seven, five are within urban or peri-urban areas, four of which are afforded protections through their listing in the Victorian Heritage Register. The remaining National Heritage place, the Yea Floral Fossil site, is in the roadside cutting of a rural road and not in an area where forestry operations take place.

10.6. Providing for the protection of Matters of National Environmental Significance following bushfires

This section sets out how Victoria's forest management system responds to protect these MNES in forests following a bushfire.

[Part 10.2](#) describes legislative, regulatory and policy instruments that contribute to protecting listed threatened species and ecological communities and migratory species following a bushfire. [Parts 10.5.1](#) and [10.5.2](#) describe how World Heritage properties and National Heritage places are protected.

The 2012 update to the *2009 Bushfire Recovery Program Public Land report*⁴⁰ (particularly [Chapters 4 and 5](#)) provides an example of how MNES have been protected following past bushfires. Actions included:

- provision of food and shelter, monitoring and genetic sampling to ensure survival of threatened animal species' populations;
- surveying, monitoring and management of threatened plant species' populations;
- strategic weed and pest control activities to maximise the ability for native vegetation to re-establish and minimise impacts on native animals from predators; and
- protection of historic sites from further damage.

Following preliminary assessment of biodiversity impacts from bushfires, government may develop an initial plan for actions to manage those impacts, which may include:

- extraction of individual animals to avoid further deaths or environmental degradation;
- pest, weed and herbivore control; and
- assessment of the status of critical species to inform future management actions.

10.6.1. Flora and Fauna Guarantee Act 1988 (Vic)

The FFG Act is the key piece of Victorian legislation for the conservation of threatened species and communities, and for the management of potentially threatening processes. Protections under the FFG Act can also apply to migratory species if they are listed as threatened.

Amendments to the FFG Act (which are due to come into effect on or before 1 June 2020) will require any Minister and any public authority to consider potential impacts on biodiversity when making decisions and policies under any Act. Along with a clearer articulation of sustainability principles (including the precautionary principle) the amended FFG will provide an imperative and mechanisms to ensure that protection of biodiversity is prioritised following a bushfire.

Other parts of the FFG Act that contribute to protecting MNES following a bushfire are set out in the below table.

Table 2: Elements of FFG Act that provide for the protection of MNES following a bushfire

Section	Part of FFG Act	How it can provide for the protection of MNES following a bushfire
7(2)	Requirement to consult with the Secretary	A public authority may be required to consult with the Secretary if action by that authority is likely to threaten the survival of a listed taxon or a community of flora or fauna or a critical habitat.
7(3)	Incentives for flora and fauna conservation	The Secretary may give grants and other incentives to encourage conservation of flora and fauna and other management objectives – this may be used to specifically support conservation of MNES following a bushfire.
25	Public Authority Management Agreement	The Secretary may enter into an agreement with a public authority at any time to manage any taxon or community of flora or fauna, or a potentially threatening process. This provision may be used to enter into an agreement with VicForests (or another relevant public body) to ensure biodiversity, including threatened species and communities and migratory species, is protected following a bushfire.
26	Interim Conservation Orders ^h	The Minister may issue an interim conservation order to conserve the critical habitat of any listed species on Crown or private land.

The components of the FFG Act that routinely provide for the protection of MNES (as described above in [10.2.2](#)) may also be used to provide for the protection of MNES following a bushfire. For example, Action Statements may be amended to provide greater protections for listed species, or a new species may be listed should it be determined that a species is in a state of demonstrable decline (including as a result of a bushfire).

^h From 1 June 2020 Interim Conservation Orders will be known as Habitat Conservation Orders.

10.6.2. Sustainable Forests (Timber) Act 2014 (Vic)

The SFT Act provides the ability for the Minister for Agriculture to vary the AO, which sets out the timber in State forests that may be harvested. The Minister may vary an AO in the event of a significant variation (e.g. due to a bushfire) in timber resources in State forests.

The SFT Act also requires compliance with any relevant Timber Code relating to timber harvesting.

10.6.2.1. Code of Practice for Timber Production 2014

Elements of the Timber Code that may help to protect listed threatened species and ecological communities and migratory species include:

- Precautionary principle

The Timber Code includes a mandatory action to apply the precautionary principle to biodiversity values. The precautionary principle is defined as follows:

“When contemplating decisions that will affect the environment, careful evaluation of management options be undertaken to wherever practical avoid serious or irreversible damage to the environment; and to properly assess the risk-weighted consequences of various options. When dealing with 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.”

- Consideration of expert advice

Similarly, the Timber Code includes a mandatory action that the advice of relevant experts and relevant research in conservation biology and flora and fauna management be considered when planning and conducting timber harvesting operations. This may include advice and research on the impacts of bushfires.

10.6.3. Biosecurity legislation

Two key pieces of biosecurity legislation, the *Catchment and Land Protection Act 1994* (Vic) (CALP Act) and the *Plant Biosecurity Act 2010* (Vic). Provisions under these two Acts assist in mitigating the risk that MNES will be impacted—while particularly vulnerable following a bushfire—by invasive plants or animals.

The CALP Act aims to protect primary production, Crown land, the environment and community health from the effects of noxious weeds and pest animals. It enables the relevant Secretary to serve a Land Management Notice to a landholder or lessee/licensee if measures need to be taken to eradicate or prevent the growth or spread of noxious weeds (see Part 5 of the Act). The notice may prohibit or regulate land use or land management practices or require specific action to be taken. An interim Land Management Notice may be served if there is an immediate and serious threat of land degradation – e.g. due to bushfire impacts.

Under the CALP Act, the Secretary is also responsible for taking all reasonable steps to control restricted pest animals on any land in the State and eradicate State prohibited weeds from all land in the State (including Crown land).

The *Plant Biosecurity Act 2010* is primarily intended to prevent the entry of, manage and control, the spread of, plant pests and diseases within Victoria, particularly with respect to pests and diseases that threaten agricultural industries.

10.6.4. Victorian Emergency Animal Welfare Plan

The *Victorian Emergency Animal Welfare Plan* (the Plan) acknowledges that DELWP is the primary agency responsible for responding to wildlife welfare caused by a defined emergency (including fire). This is consistent with DELWP's responsibilities under the Wildlife Act and the FFG Act, and the roles and responsibilities of agencies (as defined in Part 7 of the *Emergency Management Manual Victoria*).

The Plan states that DELWP is to have in place a Principal Officer Wildlife Emergencies who is responsible for ensuring effective emergency wildlife welfare response, relief and recovery activities. This includes:

- actively monitoring potential risks to wildlife welfare as a result of current and predicted conditions;
- ensuring wildlife welfare services during an emergency are effectively planned and delivered including through providing oversight, liaison with appropriate agencies, and ensuring adequate resourcing and management structures; and

- ensuring that welfare of wildlife is appropriately considered during emergency response and relief operations.

10.6.5. World Heritage and National Heritage places

National Heritage places in parks and conservation reserves are protected in line with priorities for protection of environmental values on public land. While there may be specific needs for built heritage, post bushfire management is carried out in line with the Bushfire Code (see [8.3.1](#) of this document).

Under the Heritage Act (Part 9) the Minister must appoint a Steering Committee to develop a World Heritage Management Plan for the World Heritage place (see [10.5.1](#) above).

Among other things, the World Heritage Management Plan must set out how the World Heritage Place will be managed, including mechanisms for mitigating the impacts of actions that could potentially degrade the world heritage values of the place. This includes preventing damage from bushfires to the World Heritage values of the place and ensuring that the place is rehabilitated if it is affected by bushfire. A World Heritage Management Plan must be consistent with Australia's World Heritage obligations.

11. Management of ecosystem services

Ecosystem services are the contributions ecosystems make to human well-being. They are typically classified as provisioning, regulating or cultural services (see Table 3). Victoria’s forests provide a broad range of ecosystem services that benefit Victoria’s economy and community wellbeing

Table 3: Ecosystem services from forests in Victoria

Provisioning	Regulating	Cultural
Water provision	Water flow regulation	Recreation and tourism
Biomass for timber	Soil retention	Social and community connection
Biomass for firewood	Carbon sequestration and storage	Cultural heritage connection
Honey	Pollination	Amenity
Fodder	Habitat for species	Education and research
	Air filtration	
	Pest and disease control	

Source: *Ecosystem services from forests in Victoria – Assessment of Regional Forest Agreement regions*, DELWP unpublished.

Some ecosystem services – such as clean water and recreation opportunities and benefits – have tangible market values, while others – such as carbon sequestration and carbon storage for climate regulation – represent non-market values at present. ESFM maintains ecosystem services.

This chapter discusses some of the key ecosystem services provided by Victoria’s State forests.

11.1. Water supply

State forests are catchments for several water supplies across the State. Water catchments comprise over 56,300 ha of State forest – approximately 36 per cent of the total catchment area for Melbourne Water. These are managed by DELWP. Catchment areas within national parks (approximately 58 per cent of Melbourne Water’s total catchment area) are jointly managed by Melbourne Water and PV.⁴¹

An overview of Melbourne’s water supply catchments is shown in Figure 9 below.

Melbourne’s water catchments cover 157,000 hectares across the State and public access to these areas is tightly restricted to protect water quality.

VicForests is permitted to harvest timber in a very small percentage of catchment areas under strict environmental guidelines to reduce any risk to water quality and supply. The Timber Code includes mandatory actions with which timber harvesting operations must comply, including slope restrictions and the use of buffers. The MSPs also place restrictions on the annual harvest limit (measured as a rolling average) in special water supply catchments and the Yarra Tributaries State forests.

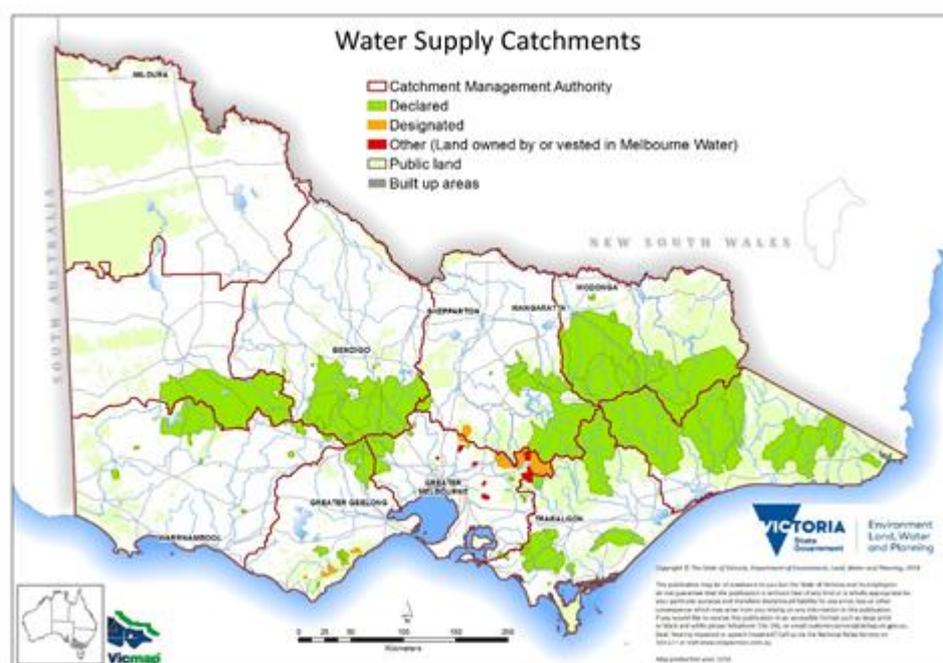


Figure 9: Victoria's water supply catchments, 2018

Source: DELWP data, 2019

11.2. Honey production

The *Land Act 1958* (Vic) empowers the issue of licences for honey production, including within State forests.⁴² FMPs address local beekeeping issues and provide strategies for the management of beekeeping within State forest.

DELWP is responsible for the administration of apiary sites on public land consistent with the public land apiculture (beekeeping) policy. The 2013 *Apiculture (Beekeeping) on Public Land Policy* and the 2013 *Apiculture (Beekeeping) on Public Land Standard Operating Procedure* both aim to encourage beekeeping on public land.⁴³

Apiaries are not permitted within specified distances from the boundaries of wilderness parks or zones, or reference areas.

As of 2017–18, there were 3,757 active licences for beekeeping on public land in Victoria.⁴⁴

11.3. Domestic firewood

Most domestic firewood collection occurs in Victoria's State forests under the *Forests Act* within designated areas selected by DELWP to manage natural values. This also includes nominated forest parks (currently Cobboboonee and Otway).

A very small proportion of domestic firewood collection is permitted in relevant parks or reserves where a government-approved recommendation from the Victorian Environmental Assessment Council (VEAC) (or its predecessors) applies, such as the Shepparton Regional Park managed by PV (administered under the CLR Act).

Firewood collection is not permitted in national parks or other areas under the NP Act or in most other parks and conservation reserves. A small amount of domestic firewood may be sourced from appropriate SPZs when it is suitable by-product from hazard tree removal, fire response or fuel management operations (providing that the firewood production does not compromise the SPZ value).

11.4. Commercial firewood

Commercial firewood supply from public forests is managed by VicForests, which issues Forest Produce Licences under delegation to commercial firewood operators. VicForests manages the allocation of Forest Produce Licences with references to inventory assessments and Resource Outlooks that inform estimates of firewood material that may arise from timber harvesting and forest management practices. Operators must

satisfy application and operational conditions, including demonstrable conformance to regulatory controls including the Timber Code.

11.5. Earth resources

Earth resources in Victoria's forested areas include:

- metallic and non-metallic minerals (for example, gold, gypsum and coal);
- extractive industries (the extraction of stone, which includes sandstone, gravel, clay and soil); and
- petroleum (oil and gas).

These exploration and extraction activities are principally governed by the *Mineral Resources (Sustainable Development) Act 1990* (Vic) and the *Petroleum Act 1998* (Vic).

The legislation provides that new exploration and mining licences may not be issued for land that is a Reference Area under the *Reference Areas Act 1978* (Vic) or for land that is a national parkⁱ, wilderness park or State park under the NP Act. Where a licence predates the declaration of the national, wilderness or State park, it remains in force. An existing exploration licence may still be converted to a mining licence even after a park is established, but this requires the consent of the relevant Minister.

Other legislation imposes conditions designed to protect environmental and cultural values including, but not limited to, the following requirements:

- preparation of an Environmental Effects Statement under the *Environment Effects Act 1978* (Vic);
- preparation of a rehabilitation plan under the *Mineral Resources (Sustainable) Development Act 1990* (Vic);
- preparation of a Cultural Heritage Management Plan under the AH Act;
- compliance with the TOS Act;
- compliance with the *Guidelines for the Removal, Destruction or Lopping of Native Vegetation*, enforced under the provisions of the *Planning and Environment Act 1987* (Vic) as a document incorporated into the Victorian Planning Provisions; and
- compliance with relevant regulations, such as the *Mineral Resources (Sustainable Development) (Mineral Industries) Regulations 2019* (Vic).

11.6. Recreation and tourism

State forests are zoned for managing multiple uses and objectives.

Permitted recreation activities differ between management zones and are guided by the specific management objectives within each. Most recreational activities are allowed in GMZ. Recreation activities within SMZ and SPZ areas of State forests are sometimes restricted to low impact activities to protect natural and cultural values.⁴⁵

ⁱ The exception is the Greater Bendigo National Park, for which new exploration licences may be issued. This is because the Greater Bendigo National Park is defined to only 100 metres below the surface, such that mining operations can occur under the Park, and some mining infrastructure can be built within the Park.

12. Management of cultural heritage on public land

All cultural heritage values are protected on public land under both State and Commonwealth legislation. At a Commonwealth level, cultural heritage is protected under the EPBC Act as World Heritage, Commonwealth Heritage or National heritage.

In Victoria, the Heritage Act establishes the Victorian Heritage Register, which records places and objects of State-level cultural heritage significance, registered objects, places in the State included in the World Heritage list, and other places and objects.

The AH Act establishes the Victorian Aboriginal Heritage Register, which is intended to be a central repository to store information about Aboriginal cultural heritage places and objects within Victoria, including burial places and secret and sacred objects. It is accessed via the Aboriginal Cultural Heritage Register and Information System (ACHRIS) which contains sensitive information. Access to ACHRIS is restricted to people or organisations that need detailed information on cultural heritage places and objects to protect and manage them. This includes Registered Aboriginal Parties (RAPs), and persons engaged as heritage advisors.

Provision for the protection of Aboriginal cultural heritage is one component of the Victorian Government's commitment to strengthening cultural, economic, political and social outcomes for Aboriginal Victorians.

12.1. Management of Aboriginal cultural heritage sites

The AH Act introduced a system of RAPs, which has formalised a primary role and decision-making function for RAPs to act as a primary source of advice on the management and protection of Aboriginal cultural heritage. RAPs are also responsible for evaluating and approving Cultural Heritage Management Plans, Cultural Heritage Permits and entering into agreements, as well as certain enforcement and compliance functions.

The rights of Aboriginal people to protect and maintain places and sites of cultural importance are also recognised in determinations made under the NT Act and in agreements made under the TOS Act. Victoria has agreed to Federal Court consent determinations and entered into formal agreements with Victorian Traditional Owner groups under this legislation, which has recognised the existence of native title rights and interests, and powers for the management of their traditional lands.

Some agreements with Traditional Owner groups include joint management arrangements under the CFL Act and cooperative management arrangements. These increase the involvement of and recognition of rights of Traditional Owners to protect and manage cultural heritage in specific areas of public land comprising primarily forest.

RAP responsibilities for managing cultural heritage apply across all land use categories, for the area over which the RAP has been appointed. RAPs have the primary responsibility under the AH Act to provide advice and knowledge on matters relating to Aboriginal places, or Aboriginal objects, in their registered area. Where cultural heritage places occur on public land, these places may be jointly managed between the relevant RAP or (local Aboriginal communities) and DELWP or PV, including through applicable joint management plans.

Under the AH Act, it is an offence to unlawfully harm Aboriginal cultural heritage.

12.1.1. Aboriginal Heritage Regulations 2018 (Vic)

These regulations specify the circumstances in which a Cultural Heritage Management Plan is required for an activity or class of activity on State forest (or other land). They prescribe standards for the preparation of a Cultural Heritage Management Plan, including the carrying out of assessments, and prescribe the form for the preparation of preliminary Aboriginal heritage tests.

12.2. Management of other cultural heritage sites

Other heritage sites in Victorian public forests are protected under the Heritage Act.^j

Archaeological sites over 75 years old and meeting threshold criteria are also protected by inclusion in the Victorian Heritage Inventory. Part 6 of the Heritage Act protects two types of sites: archaeological sites and approved sites of archaeological value.

^j This replaced the *Heritage Act 1995* (Vic) in November 2017.

The Executive Director of Heritage Victoria has the function of recording known archaeological sites and approved sites of archaeological value on the Inventory. Archaeological sites are protected under the Act even if they are not included in the Inventory (section 123): that is, it is an offence to do certain things in relation to archaeological sites, whether in the Inventory or not, without a consent issued by the Executive Director of Heritage Victoria. In relation to approved sites of archaeological value, the Act only protects 'approved' sites of archaeological value and makes it an offence to do certain things in relation to approved sites of archaeological value on the Inventory.

Places of cultural heritage significance to the State that meet certain criteria can be included on the Victorian Heritage Register by the Heritage Council of Victoria. Registered heritage places cannot be disturbed without a permit.

12.3. Management of cultural heritage under the *Code of Practice for Timber Production 2014* and Forest Management Plans

The Timber Code includes the principle that cultural heritage values within forests must be protected and respected, where 'cultural heritage' means anything with aesthetic, archaeological, architectural, cultural, historical, scientific or social heritage both Aboriginal and non-Aboriginal.

This underpins the operational goal within the Timber Code that: 'Timber harvesting operations are conducted in a manner appropriate to the site, and manages impacts on soil, water and other values including biodiversity and cultural heritage,' that applies to timber harvesting in State forests, private forests and plantations.⁴⁶ The Timber Code also specifies mandatory actions that relate to the protection of cultural heritage values.

FMPs provide for the protection of known cultural heritage sites, places and values, including Aboriginal and historic places. In many forest management areas, there are specific management actions used to protect cultural heritage sites from potential damage.

13. Regulation and compliance

In broad terms, the Secretary to DELWP is responsible for the regulation of compliance and enforcement in relation to activities on public land, including State forest.

In addition to the regulatory tools for sustainable timber production described above ([Chapter 9](#)), the Secretary to DELWP is responsible for managing access to and use of State forest.

13.1. Enforcing compliance with legislation

13.1.1. Office of the Conservation Regulator

The OCR was established by DELWP in early 2019, following the 2018 Independent Review of Timber Harvesting Regulation in Victoria's public native forests. It exercises regulatory powers under certain acts on behalf of the Secretary to DELWP.

The OCR seeks to ensure that DELWP is effective in protecting natural and heritage values and that the community has equitable and safe access to public land and its natural resources.

In the first phase of its establishment, the OCR's regulatory responsibilities cover timber harvesting, biodiversity protection, fire prevention and land use. It is intended that the scope of its responsibilities will be extended over time.

The OCR uses a range of tools including information, education, inspections, patrols, monitoring and enforcement to improve compliance. The OCR seeks to identify risks and take regulatory action to prevent harm wherever possible. Statements of Regulatory Intent are being developed for key areas of regulatory responsibility. The OCR has identified unauthorised timber harvesting in native forests as a key regulatory risk for focus in 2019-20. The OCR's *Statement of Intent on Regulating Timber Harvesting in State Forest Under the Allocation Order*⁴⁷ (OCR Statement of Intent) outlines the role of the OCR in relation to State forest timber harvesting and describes what the community and industry can expect from OCR as a regulator. Specifically, it describes how the OCR intends to use the regulatory tools that are available to it under the law.

The OCR Statement of Intent outlines the range of laws and regulations that govern timber harvesting activities in State forests, which include the:

- SFT Act;
- Forests Act;
- CFL Act;
- FFG Act; and
- Wildlife Act.

It also states that the main regulatory instrument used by the OCR to regulate timber harvesting is the Timber Code including the incorporated MSPs.

The regulatory approach taken by OCR as outlined in the OCR Statement of Intent includes:

- **set standards** by providing clarity on regulatory obligations for VicForests' timber harvesting activities;
- **inform and educate** VicForests and other stakeholders about the law and the rules that must be obeyed to comply with the law;
- **support compliance** by assisting VicForests, its employees and contractors to understand how to comply with their obligations under the regulatory framework. The OCR also encourages and accepts self-reporting by VicForests;
- **monitor compliance** with the law including using community intelligence, spot checks and audits of VicForests in the planning and harvesting cycle;
- **enforce the law** by objectively and assertively requiring remedy for non-compliance with the regulatory framework, and where appropriate applying sanctions to deter future non-compliance; and
- **collaborate** by working with VicForests and the community to improve practices and influence future standards of practice.

The OCR has a range of tools to ensure compliance of timber harvesting in State forests. This includes:

- requiring precautionary consideration and management approaches when the precautionary principle of the Code has been engaged;
- giving direction on how timber harvesting operations should be conducted;
- suspending timber harvesting when there has been a failure to comply with a (statutory) direction and it is believed that continuation of the timber harvesting operation would cause imminent damage to the environment or a serious risk to the safety of any person;
- entering into agreements with VicForests to provide for management of any taxon or community of flora or fauna or potentially threatening process;
- seeking an injunction under the CFL Act where it believes there is a continuing contravention of a relevant law or authority;
- requiring VicForests to consult with OCR regarding actions that are likely to threaten the survival of a listed taxon of community or flora or fauna or a critical habitat under the FFG Act; and
- seeking information from VicForests to support the conduct of audits.

When an investigation reveals non-compliance with the regulatory framework by VicForests the OCR will seek to impose sanctions that are appropriate. Considerations for determining the appropriate enforcement action include:

- level of impact on protected environmental, social, and cultural values;
- seriousness of the offence taking into account the level of non-compliance; and
- history of similar offences and previous compliance interventions having failed to achieve the desired regulatory outcome.

OCR has the following regulatory tools that provide a sanction:

- notice of breach;
- warning letters;
- enforceable undertakings for offences under section 45 of the SFT Act; and
- prosecution.

13.1.2. Other enforcement

A variety of other organisations and bodies have enforcement and compliance functions relating to the implementation of the forest management system, including the Secretaries to DELWP, the Department of Jobs, Precincts and Regions (DJPR) and the Department of Premier and Cabinet, PV, Heritage Victoria and relevant responsible authorities under the PE Act (often the municipal councils).

Authorised Officers appointed under the CFL Act may be authorised for enforcement action under several Acts, including the Wildlife Act, the CFL Act, the FFG Act, the *Environment Protection Act 1970* (Vic), and the *Water Act 1989* (Vic).

PV enforces compliance with the NP Act and the CLR Act in parks and conservation reserves.

DELWP broadly exercises an enforcement function on behalf of the Secretary for the balance of legislation involving public land, Crown resources and biodiversity not covered by the OCR, listed in [Appendix A](#).

Heritage protections are enforced by the relevant authorities under both the PE Act and the Heritage Act.

13.2. Key regulations in forests

Key legislation governing activities in State forests, national parks, conservation reserves and other public land has been outlined in [Chapters 5, 7, 9](#) and [Appendix A](#). Key pieces of subordinate legislation are described under each principal Act.

14. Monitoring and reporting

Monitoring and reporting mechanisms are in place to ensure the forest management system is adaptive and to facilitate continuous development. These mechanisms also provide a basis for ongoing consultation with stakeholders on forest and fire management decisions.

14.1. Public reporting

Under the SFT Act, the Minister must determine criteria and indicators for sustainable forest management, and must also determine the reporting requirements, including the frequency at which reports are to be made, which cannot be at a period less frequent than every five years.⁴⁸

The current criteria and indicators determined by the Minister are set out in the *Criteria and Indicators for Sustainable Forest Management in Victoria – Guidance Document*, against which Victoria reports every five years through the Victorian State of the Forests Report.

DELWP and PV continually monitor the state of Victoria's forests against the indicators described in the Guidance Document through the Victorian Forest Monitoring Program (VFMP) (see 14.2.1). This enables detection of changes to the forest that may require changed management regimes that are, in turn, incorporated into the forest management system in order to provide for ESFM in an adaptive and responsive manner.

In future, Victoria's sustainability indicators will also incorporate consideration of matters of Traditional Owner significance.

14.1.1. State of the Forests Report

Victoria's State of the Forests Report is based on regular monitoring data and compiled every five years by the Commissioner for Environmental Sustainability. Its publication fulfils the Secretary to DELWP's reporting obligations under the SFT Act.⁴⁹ The most recent State of the Forests Report was published in 2018.

This monitoring enables the State to report on its progress towards achieving the objectives set out in the Sustainability Charter (being the relevant environmental, economic and social objectives) and to improve openness, accountability and community engagement in forest management.⁵⁰

14.1.2. Other reporting

In addition to the State of the Forests Report, the State continually reports on the state of its forests through a variety of the other relevant Victorian public reports, including:

- Victoria's State of the Environment report – produced by the Commissioner for Environmental Sustainability;
- Victoria's State of the Parks report – produced by PV. This assesses and reports on the state of formal CAR reserves that are parks and conservation reserves managed by PV; and
- Annual reports from government agencies including DELWP, PV and VicForests.

14.2. Monitoring and decision-support tools

14.2.1. Forest Protection Survey Program

The FPSP⁵¹ is designed to detect high-conservation-value species, including threatened species, and other forest values including those with prescriptions, in coupes planned to be harvested in State forests in Gippsland, East Gippsland, the Central Highlands and North East regions (approximately corresponding to the four RFA regions in eastern Victoria). It has been in operation since 1 July 2018.

The FPSP involves targeted surveys of flora and fauna species, and other values, that may occur in coupes being planned for harvest. It aims to survey 80 per cent of coupes planned for harvest. Values identified through the program inform the decision making for required planned management actions and or changes to zoning as required by the Timber Code. Data from the FPSP is considered as part of VicForests' pre-harvest assessments (see section 9.1.6).

14.2.2. Victorian Forest Monitoring Program

The VFMP is a statewide forest monitoring information system that has been developed to assess and monitor the state and condition of Victoria's public forests estate, and to help observe ecosystem response to forest

disturbance through time.⁵² It does not capture all biodiversity values, but provides baseline data for long-term trend detection and prediction of type and severity of future changes, so that management options can be developed and evaluated in time to be effective.

In 2016, the VFMP included a network of around 804 permanent ground-monitoring plots in Victoria's State forests, parks and conservation reserves (see Figure 10). The VFMP network uses sophisticated remote-sensing technology, combined with high-resolution aerial photography and satellite imagery, to improve reporting accuracy, scope and scale.

VFMP datasets provide the basic attributes (such as forest structure, species diversity, canopy condition and soil characteristics) used to inform management practices and to show changes in the extent, state and overall condition of public forests. The VFMP does not currently provide data of sufficient resolution to indicate the abundance, population trajectories or conditions of specific species or communities.

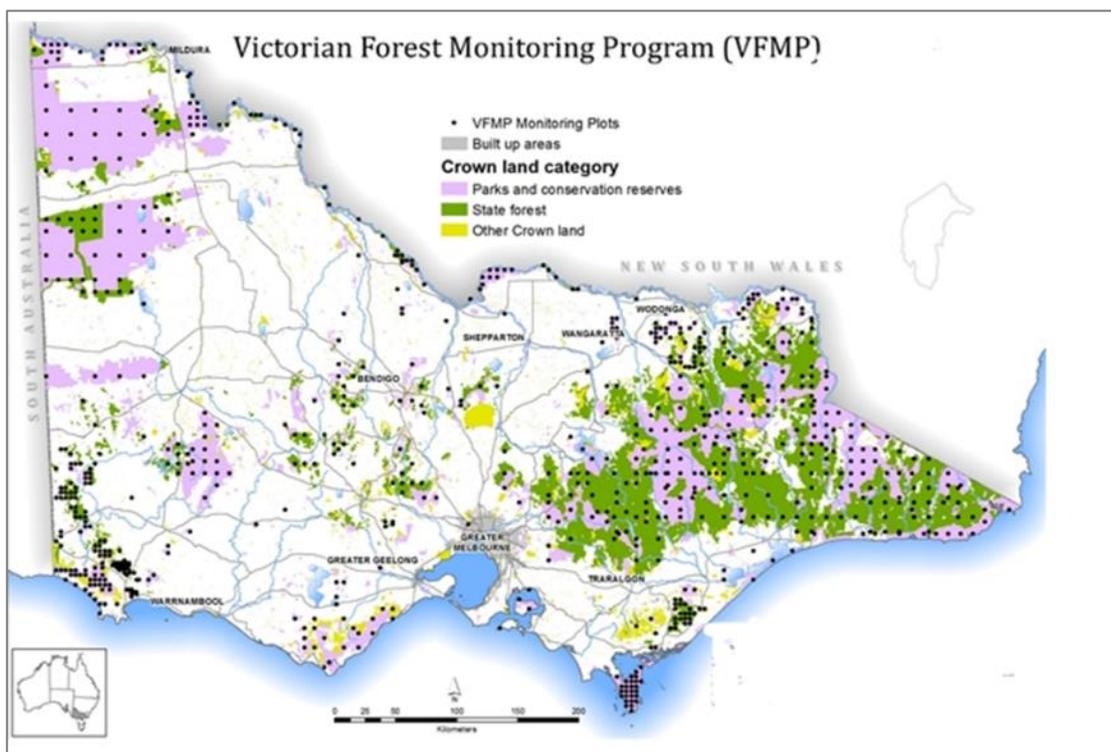


Figure 10: Overview map of the VFMP monitoring plots

Source: Suitor et al., 'Monitoring and reporting on sustainable forest management in Victoria, Australia'

The VFMP is a strategic forest inventory that is optimised in its design to achieve both accuracy and efficiency. Its relatively low sample intensity, compared to other strategic forest inventories, is supported by a unique application of remote-sensing analysis, which integrates a sample of very high-resolution aerial imagery with the comparatively lower resolution, but freely available LandSat satellite archive at statewide scale. Its stratification scheme allows the examination of management across land use categories.

The VFMP provides a platform to meet statutory reporting obligations, support forest policy and management decisions, and assess Victoria's performance towards sustainable forest management. The detailed information gathered through the VFMP helps improve Victoria's evidence-based decision-making and policy development across a range of issues, including fire and flood impacts, habitat protection, carbon accounting, biomass, forest productivity, forest health and biodiversity.

14.2.3. Biodiversity monitoring and decision support tools

Protecting Victoria's Environment – Biodiversity 2037 focuses on developing monitoring, evaluation, reporting as well as knowledge and decision support tools. Key elements of this are the *Victorian Biodiversity Atlas* (VBA) and *NatureKit* (which replaces the Biodiversity Interactive Map).

The VBA is a foundation dataset of species observations that feeds into some of the many biodiversity tools used by DELWP. It shows where wildlife is now and how this has changed over time. It is used in conservation status assessments, habitat distribution models (HDMs) that feed into strategic management prospects and native vegetation removal regulations and into public land management, research activities and State of the Environment reporting.

NatureKit is DELWP's biodiversity web mapping and reporting tool. Information available includes biodiversity values, flora and fauna distribution, native vegetation, disturbance and land administration and classification.

15. Reforms to the Forest Management System

The Victorian Government is undertaking reforms to strengthen Victoria's forest management system and support better management of Victoria's forests. These reforms will:

- reflect previous recommendations made to government;
- reflect advances in understanding of forest values;
- further strengthen environmental protections and consideration of multiple values and uses of our forests; and
- be consistent with Victoria's model for statewide integrated forest and fire regional delivery.

Victoria's reform program is ongoing, and many of the reforms proposed and discussed in this chapter are yet to be implemented into Victoria's forest management system. This chapter provides a forward look at some of the key aspects of Victoria's reform program.

15.1. Legislative and regulatory reform

15.1.1. Increasing environmental protections

A comprehensive review of the FFG Act was conducted between 2014 and 2017. This involved extensive consultation across government, environmental stakeholders and the community at large and resulted in the passing of the *Flora and Fauna Guarantee Amendment Act 2019* (Vic), which is due to come into effect on or before 1 June 2020.

The Forests Legislation Amendment (Compliance and Enforcement) Bill 2019 (currently being debated in the Victorian Parliament as at February 2020) proposes amendments to strengthen and modernise timber harvesting regulation by amending the SFT Act, Forests Act and CFL Act in order to strengthen the tools and powers that facilitate the regulation of timber harvesting. If passed, the amendments proposed to the various acts would improve the regulation of timber harvesting and firewood collection, two key uses of Victoria's State forests, to ensure that Victoria's forests can be maintained and improved into the future.

15.1.2. Strengthening DELWP's regulatory operating model

In 2018, DELWP commissioned an independent review of timber harvesting regulation in Victoria. The review panel made 14 recommendations⁵³, of which all were accepted by Government.⁵⁴

The review found that DELWP would benefit from establishing a single, identifiable 'regulator' within the department. Consequently, the OCR was established. In addition to the responsibilities outlined in [Chapter 13](#), it will oversee the implementation of further recommendations from the review including:

- development of a Regulatory Strategy, including a Regulatory Capability Assessment and development of a Compliance and Enforcement Policy;
- development of Statements of Regulatory Intent for areas in which DELWP has direct responsibility for environmental regulation;
- establishment of an Independent Regulatory Assurance Panel; and
- improvement and development of regulatory tools, as well as creating further powers and protections to assist Authorised Officers in conducting their duties.

15.1.3. Strengthening the timber harvesting regulatory system

Victoria intends that a comprehensive review of the Timber Code, a key regulatory tool, will be undertaken by the end of 2023. The purpose of the review is to identify any areas for improvement in order to ensure that it and its incorporated documents are clear, accurate, enforceable and contemporary.

In line with relevant legislative requirements, any amendment to the Timber Code proposed as a result of the review would involve consultation with the public, and the findings of the review would be made publicly available.

15.2. Forest management strategies and plans

15.2.1. Vision and strategies for the future management of our forests

The Victorian Government has committed to developing a vision for Victoria's forests, a State Forest Management Strategy and the PV Land Management Strategy, to complement and update current management strategies. In addition, the Victorian Government is supporting the development of a cultural landscapes strategy by Traditional Owners that will inform these strategies.

The vision for Victoria's forests will draw on what Victorians value about forests, and will provide a clear, shared direction for future management of public native forests, across parks, reserves and State forests. The strategies will guide and inform future planning and decision-making to achieve this vision across these different land tenures.

The strategies and vision will acknowledge the importance of continuous implementation and improvement to Victoria's forest management system and adaptive forest management.

15.2.2. Integrated Forest and Fire Management Planning

DELWP is in the process of reviewing Victoria's FMPs to align with best practice approaches in forest management and align with integrated forest and fire regional delivery. It is intended that the FMPs will be updated following the completion of this review:

- to reflect changes to underpinning legislation and policy, contemporary values and community expectations;
- outline the activities that will be undertaken to achieve the outcomes set through the strategies; and
- to facilitate the realisation of the vision for forest management in Victoria.

Through the RFAs, Victoria has renewed its commitment to review and update any FMP that applies, either in part or wholly, to land within the RFA regions by December 2023 and at least every 10 years thereafter for so long as the RFA remains in effect.

15.2.3. Modernisation of the RFAs

RFAs are agreements between the Commonwealth Government and states that establish the framework for the management of forests in an RFA region. They are a key outcome of the NFPS through which the Commonwealth, State and Territory governments committed to the sustainable management of all Australian forests, whether the forest is on public or private land, or reserved or available for timber production.

Victorian RFAs are required to:

- provide for a CAR reserve system;
- provide for the ecologically sustainable management and use of forested areas in each RFA region; and
- be expressed to provide for the long-term stability of forests and forest industries.

The Victorian Government has made a number of commitments to strengthen its forest management system in the modernised RFAs including:

- using its best endeavours to develop of Action Statements for threatened species and communities within 24 months of listing;
- reviewing relevant provisions of the FFG Act, SFT Act, Forests Act, and their subordinate instruments, including the Timber Code, to identify what, if any, measures or improvements could be made to strengthen protections for Listed Species and Communities within Victoria's Forests by December 2022;
- reviewing sustainability indicators by 2023;
- reviewing and updating forest management plans by December 2023;
- undertaking a comprehensive review of the Timber Code by December 2023;
- reviewing and, as necessary, adjusting the Harvest Level (being the volume of Timber Resources that can be harvested from Native Forests in the RFA Region in any financial year, consistent with ESFM, until Native Forest harvesting ceases on 30 June 2030) at least once every five years; and

- working with Traditional Owners to agree Traditional Owner Knowledge priorities for the management of Native Forests on Public Land by 2025. Biodiversity conservation reform.

In line with *Protecting our Environment - Biodiversity 2037*, the Government is also modernising environmental protections within Victoria's forests to be more adaptive and to better reflect contemporary science.

15.3. Increasing the efficiency of public land management

DELWP is seeking to improve the efficiency of public land management through the simplification and consolidation of land management functions and tools under multiple Acts. This is part of the implementation of the *Victorian Government Response to the Victorian Environmental Assessment Council's Statewide Assessment of Public Land Final Report*.⁵⁵

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34 <http://www.gazette.vic.gov.au/gazette/Gazettes2019/GG2019S153.pdf> (accessed May 2019)
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- 35 VicForests 2019, *VicForests' 2019 Timber Release Plan*, [www://vicforests.com.au/static/uploads/files/vicforests-trp-including-approved-changes-april-2019](http://www.vicforests.com.au/static/uploads/files/vicforests-trp-including-approved-changes-april-2019) (accessed May 2019).
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- 48 *Sustainable Forests (Timber) Act 2004*, section 6.
- 49 *Sustainable Forests (Timber) Act 2004*, section 8.
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Appendix A Legislation, policies and strategies relevant to forest management in Victoria

Table 4: Commonwealth legislation and policies relevant to Victoria's forest management system ^k

Commonwealth legislation / instrument	Primary agency	Key roles relevant to forest management in Victoria
<i>Environment Protection and Biodiversity Conservation Act 1999</i>	Department of Agriculture, Water and the Environment	<ul style="list-style-type: none"> Provides a legal framework to protect and manage MNES, such as listed threatened and migratory species and, ecological communities, internationally important wetlands (Ramsar) and World and National heritage sites – defined in the EPBC Act as MNES.
<i>Export Control Act 1982</i>	The Department of Agriculture, Water and the Environment	<ul style="list-style-type: none"> Establishes a framework under which goods for export are regulated, including wood and wood products.
<i>Illegal Logging Prohibition Act 2012</i>	The Department of Agriculture, Water and the Environment	<ul style="list-style-type: none"> Promotes the importation of legally logged timber by requiring importers and processors to verify the legal status of acquired resources.
<i>Native Title Act 1993</i>	The Department of the Prime Minister and Cabinet The Attorney General's Department	<ul style="list-style-type: none"> Provides for the recognition and protection of native title to recognise the traditional rights and interests to land and waters of Aboriginal and Torres Strait Islander people.
<i>Regional Forest Agreements Act 2002</i>	The Department of Agriculture, Water and the Environment	<ul style="list-style-type: none"> Gives effect to certain Commonwealth obligations under RFAs. Gives effect to some components of the National Forestry Policy.
<i>Competition and Consumer Act 2010</i>	The Department of the Treasury	<ul style="list-style-type: none"> The <i>Competition and Consumer Act 2010</i> covers most areas of the market: the relationships between suppliers, wholesalers, retailers, and consumers. Its purpose is to enhance the welfare of Australians by promoting fair trading and competition, and through the provision of consumer protections.

^k This list is not exhaustive.

Commonwealth legislation / instrument	Primary agency	Key roles relevant to forest management in Victoria
<i>Australia's Strategy for Nature 2018-2030: Australia's biodiversity conservation strategy and action inventory</i>	Department of Agriculture, Water and the Environment	<ul style="list-style-type: none"> • Provides the guiding framework for governments to conserve national biodiversity to 2030. • Provides an overview of the state of Australia's biodiversity and outlines collective priorities for conservation.
<i>Growing a Better Australia: A Billion Trees for Jobs and Growth</i> (2018) [the national forest industries plan]	Department of Agriculture, Water and the Environment	<ul style="list-style-type: none"> • Encourages new plantations including farm forestry. • Supports the further development of strategic forestry hubs. • Reduces barriers to forestry expansion. • Supports improved use of renewable resources. • Supports initiatives to increase community understanding of forest industries.
<i>The National Indigenous Forest Strategy</i> (2005)	Department of Agriculture, Water and the Environment	<ul style="list-style-type: none"> • Promotes the opportunity to increase Aboriginal and Torres Strait Islander participation in the forest-growing, timber-processing and non-timber forest products sectors. • Provides a link to key government policy areas and industry strategies, thereby providing a structure for Indigenous people to assist with the development of Australia's forest and timber industry.

Table 5: Key State legislation and regulations relevant to Victoria's forest management system¹

State legislation / instrument	Primary agencies	Key roles relevant to forest management in Victoria
<i>Aboriginal Heritage Act 2006</i>	Aboriginal Victoria, Victorian Aboriginal Heritage Council	<ul style="list-style-type: none"> • Provides for the protection and recognition of Aboriginal cultural heritage, Aboriginal intangible heritage. It recognises Aboriginal people as the primary guardians for their cultural heritage. • The Act establishes the Victorian Aboriginal Heritage Council, RAPs as well as the Victorian Aboriginal Heritage Register which records information about known Aboriginal cultural heritage. • The Act also provides for the assessment and management of activities that have the potential to harm Aboriginal cultural heritage through the use of Cultural Heritage Management Plans, Cultural Heritage Permits and creates penalties for unlawfully causing harm to Aboriginal cultural heritage. <p>–</p>

¹ This list is not exhaustive.

State legislation / instrument	Primary agencies	Key roles relevant to forest management in Victoria
<i>Aboriginal Heritage Regulations 2018</i>	Aboriginal Victoria, Victorian Aboriginal Heritage Council	<ul style="list-style-type: none"> Under the regulations, Cultural Heritage Management Plans are required for high-impact activities and activities carried out in areas of cultural heritage sensitivity. The regulations prescribe standards and processes for the conduct of assessments of any Aboriginal cultural heritage in an area and the preparation of Cultural Heritage Management Plans.
<i>Catchment and Land Protection Act 1994</i>	DELWP	<ul style="list-style-type: none"> The main article of legislation governing the management of noxious weeds and pest animals in Victoria. Enables catchments to be declared as special water supply catchment areas, and enables special area plans to set out how land management issues must be addressed within these 'declared' catchments. Declared catchments cover both public and private land and include forested and non-forested landscapes.
<i>Climate Change Act 2017</i>		<ul style="list-style-type: none"> provides a legislative foundation to manage climate change risks, and drive a transition to net zero greenhouse gas emissions by 2050 and a climate resilient community and economy. establishes a long-term emissions reduction target of net zero by 2050 and requires five yearly interim targets, to keep Victoria on track to meet this long-term target. introduces a new set of policy objectives and an updated set of guiding principles to embed climate change in government decision making, including forest management.
<i>Conservation, Forests and Land Act 1987</i>	DELWP	<ul style="list-style-type: none"> Provides an overarching framework for the conservation and productive use of the State's lands, waters flora and fauna. Creates the body corporate, Secretary to DELWP, and provides for the establishment of TOLMBs and the development of joint management plans. Provides power for making codes of practice.
<i>Crown Land (Reserves) Act 1978</i>	PV, Melbourne Water, DELWP	<ul style="list-style-type: none"> Provides for the reservation of Crown lands for certain purposes and for the management of such reserved lands.
<i>Crown Land (Reserves) (Domestic Firewood) Regulations 2012</i>	PV	<ul style="list-style-type: none"> Apply to firewood collection in a firewood collection area during a firewood collection season in certain regional parks under the CLR Act
<i>Flora and Fauna Guarantee Act 1988</i>	DELWP	<ul style="list-style-type: none"> Provides the legal and administrative structure to enable and promote the conservation of native flora and fauna. Provides for a choice of procedures which can be used for the conservation, management or control of flora and fauna and the management of potentially threatening processes. Makes provision for the development of Action Statements for threatened species, the determination of critical habitat, the making of interim conservation orders, and the making of flora and fauna management plans, as well as other conservation measures.
<i>Flora and Fauna Guarantee Regulations 2011</i>	DELWP	<ul style="list-style-type: none"> Specify the criteria for determining eligibility for listing, the prescribed information which the FFG Act requires to be provided with a nomination, and the forms that are used for notices, applications and certificates under the FFG Act.

State legislation / instrument	Primary agencies	Key roles relevant to forest management in Victoria
<i>Forests (Wood Pulp Agreement) Act 1996</i>	DJPR	<ul style="list-style-type: none"> • Ratified an agreement between the Minister administering the Forests Act and AMCOR Limited (now known as Australian Paper) with respect to the supply of pulpwood for the manufacture of wood pulp and for other purposes.
<i>Forests Act 1958</i>	DELWP	<ul style="list-style-type: none"> • Provides for the management of State forests, including the following: <ul style="list-style-type: none"> – Prevention of and protection from fire – development of working plans (e.g. FMPs) – leases and licences relating in reserved forest – licences to cut, dig or take away forest produce.
<i>Forests (Domestic Firewood) Regulations 2012</i>	DELWP	<ul style="list-style-type: none"> • Regulate or prohibit certain conduct in a firewood collection area during a firewood collection season in State forest, and to prescribe offences and a nomination form for the purposes of the <i>Forests Act 1958</i>.
<i>Forests (Fire Protection) Regulations 2014</i>	DELWP	<ul style="list-style-type: none"> • Provide for the restriction of activities that can cause bushfires – for example, the lighting of fires (including campfires) in the open air and the use of engines (including chainsaws and generators) in the fire protected area during the prohibited period.
<i>Forests (Licences and Permits) Regulations 2009</i>	DELWP	<ul style="list-style-type: none"> • Prescribe certain acts which may not be undertaken within a reserved forest without a licence, permit or authority, how applications for licences and permits are made under the Forests Act, and the terms and conditions of those licences and permits
<i>Forests (Recreation) Regulations 2010</i>	DELWP, PV	<ul style="list-style-type: none"> • Provide for the regulation of camping, recreation grounds and roads in State forests and provide for the management and care of specified forest reserves by: <ul style="list-style-type: none"> - restricting or prohibiting access to specified areas by persons and vehicles; - setting aside areas for specific purposes in particular for prohibiting or regulating particular activities; - prescribing fees for entry or use of land activities in a forest reserve; and - prescribing offences.
<i>Heritage Act 2017</i>	DELWP, Heritage Council of Victoria	<ul style="list-style-type: none"> • Provides for the protection and conservation of the cultural heritage of the State, including significant places and objects such as extensive land areas, buildings, gardens and trees, and archaeological sites/remains assessed as being of significance at a state level (Victorian Heritage Register), and archaeological sites and approved sites of archaeological value listed on the Victorian Heritage Inventory.
<i>Heritage Regulations 2017</i>	DELWP, Heritage Council of Victoria	<ul style="list-style-type: none"> • Set fees for certain activities, penalties and infringement offences; require details and results of all historical archaeological surveys to be provided to the Executive Director; and prescribe certain documents and forms for activities established by the <i>Heritage Act 2017</i>.

State legislation / instrument	Primary agencies	Key roles relevant to forest management in Victoria
<i>Land Act 1958</i>	DELWP	<ul style="list-style-type: none"> • Consolidates the law relating to the sale and occupation of unreserved Crown land. Land governed under this Act may be sold, leased or licensed under the Act subject to the approval of the Minister. • Establishes responsibility for unreserved Crown land (now managed by DELWP for the Minister for Energy, Environment and Climate Change), although other Ministers and their respective portfolios also have responsibilities under the Act. • Under the Act, the Minister for Energy, Environment and Climate Change has the power to purchase land for and on behalf of the Crown.
<i>National Parks Act 1975</i>	PV	<ul style="list-style-type: none"> • Establishes the statutory basis for the protection, use and management of a system of more than 100 national and other parks in Victoria (comprising both forests and non-forest vegetation). • Provides for national parks, state parks, marine national parks and marine sanctuaries to preserve and protect the natural environment including wilderness areas and remote and natural areas in those parks, and to protect and preserve indigenous flora and fauna and features of scenic or archaeological, ecological, geological, historic or other scientific interest. • Requires PV to prepare a plan of management for each national and state park.
<i>National Parks Regulations 2013</i>	PV	<ul style="list-style-type: none"> • Provide for the management and control of parks to promote the preservation and protection of parks, flora, fauna and indigenous fish; the protection of designated water supply catchment areas and other water supply catchment areas; and the safety, enjoyment, recreation and education of visitors to parks.
<i>Parks Victoria Act 2018</i> (replaces the <i>Parks Victoria Act 1998</i>)	PV	<ul style="list-style-type: none"> • Establishes PV as a statutory authority. • Requires PV to develop a land management strategy setting out the long-term directions, strategies and priorities for the protection, management and use of the land it manages. • Provides a power for PV to develop management plans for land it manages.
<i>Planning and Environment Act 1997</i>	DELWP, local government	<ul style="list-style-type: none"> • Establishes a framework for planning the use, development and protection of land in Victoria in the present and long-term interests of all Victorians • Sets out requirements for a set of standard provisions (VPP) to be created. These provisions form a template for all planning schemes. Timber production is a defined land use in the VPPs and all planning schemes. The VPP underpins regulation of private native forests and plantations.
<i>Sustainable Forests (Timber) Act 2004</i>	DELWP	<ul style="list-style-type: none"> • Provides a framework for sustainable forest management and sustainable timber harvesting in Victoria's State forests. • Provides for the Minister for Energy, Environment and Climate Change to determine sustainability criteria and indicators and reporting requirements for sustainable forest management and for the Minister to develop a Sustainability Charter • Requires the Secretary to report to the Minister on the status, performance or achievement in relation to the indicators determined by the Minister; that is, Victoria's State of the Forests report, based on the National Principles of Ecologically Sustainable Development and the Montreal Process criteria and indicators for Conservation and Management of Temperate and Boreal Forests.

State legislation / instrument	Primary agencies	Key roles relevant to forest management in Victoria
	DJPR, VicForests	<ul style="list-style-type: none"> • Provides for the granting of long-term access to timber resources in State forests. • Allows the Minister for Agriculture to make an AO, vesting property in the timber allocated by the order in VicForests • Requires VicForests to prepare a TRP and to report regularly against the Sustainability Charter. • Establishes the requirement for VicForests to operate in accordance with the AO, TRP and Timber Code
<i>Sustainable Forests (Timber Harvesting) Regulations 2006</i>	DELWP, DJPR	<ul style="list-style-type: none"> • Prescribe classes of timber harvesting operator's licences, activities for which a timber harvesting operator's licence is required; licence application fees; and issuing and suspension of licences.
<i>Traditional Owner Settlement Act 2010</i>	DELWP, TOLMBs	<ul style="list-style-type: none"> • Establishes a framework that allows the Victorian Government to recognise Traditional Owners and certain rights in public land, including the granting of Aboriginal title and joint management arrangements. It also includes procedural rights over certain activities on public land (Land Use Activity Agreement) and the right to take and use natural resources on public land in the agreement area (Natural Resource Agreement). • Provides an alternative system for resolving native title claims in Victoria as an alternative to pursuing native title claims under the <i>Native Title Act 1993</i> (Cth). • Provides that a Traditional Owner group may need to approve a TRP where the Plan covers an area subject to a Land Use Activity Agreement. • Traditional Owner groups can enter into an RSA that can include: <ul style="list-style-type: none"> - arrangements for the joint management of certain public land by the Traditional Owner group together with the State (still as national park or other forms of public park); - providing a simplified regime to guide consultation and negotiation with Traditional Owners for activities that have a substantial impact on Traditional Owner rights within the agreement area; and - providing for the access to, and sustainable use of, natural resources and Traditional Owner participation.
<i>Victorian Plantations Corporation Act 1993</i>	VPC Board, HVP Plantations	<ul style="list-style-type: none"> • Legislated the transfer of government-owned softwood and hardwood plantations to the Victorian Plantations Corporation (VPC) upon its establishment in 1993 under the <i>State Owned Enterprises Act 1992</i>, conferred additional functions and powers on the VPC and makes further provision for the management of plantations.
<i>Victorian Plantations Corporation Regulations 2018</i>	Department of Treasury and Finance	<ul style="list-style-type: none"> • Prescribe documents to be registered in the register of plantation licences under the <i>Victorian Plantations Corporation Act 1993</i> and the recoding of information in that register.
<i>Water Act 1989</i>	DELWP, Melbourne Water, CMAs	<ul style="list-style-type: none"> • Principal framework for managing Victoria's water resources, including forested catchments. • Purpose is to promote equitable and efficient use of water resources, ensure water resources are conserved and properly managed for all Victorians, and increase community involvement in conserving and managing water resources.
<i>Wildlife Act 1975</i>	DELWP, PV	<ul style="list-style-type: none"> • Applies to all Victorian lands and waters and covers all wildlife, defined to include all native vertebrate animals, all kinds of deer, non-indigenous quail, pheasants, and partridges, and all terrestrial invertebrate animals listed under the FFG Act but excludes fish within the meaning of the <i>Fisheries Act 1995</i>.

State legislation / instrument	Primary agencies	Key roles relevant to forest management in Victoria
<i>Wildlife Regulations 2013</i>	DELWP and DJPR	<ul style="list-style-type: none"> • Establishes procedures in order to promote the protection and conservation of wildlife, the prevention of taxa of wildlife from becoming extinct and the sustainable use of an access to wildlife. • Provides for the management of state wildlife reserves and nature reserves, including state game reserves. • Regulates conduct concerning or related to wildlife and creates offences relating to the hunting, taking or destroying of wildlife.
<i>Wildlife (Game) Regulations 2012</i>	DELWP, PV, Game Management Authority	<ul style="list-style-type: none"> • Provide for the management and conservation of wildlife and wildlife habitat, as well as the humane use of and access to wildlife. • Make provision in relation to administration of the licensing system established by the Wildlife Act, including prescribing fees, offences, royalties and various other matters for the purposes of the Act. • Provide for effective management of game species and game hunting in Victoria across public and private land, including the regulation of hunting areas; the procedure for granting and administering game licences; procedures for opening and closing hunting seasons; bag limits; acceptable methods of hunting; and requirements for providing for the identification, possession and use of game.

Appendix B National Heritage Places

Table 6: Victorian National Heritage List places in RFA regions

Name	Type	RFA region ^a	Listing date	Protection in Victoria
Australian Alps National Parks and Reserves	Natural	CH, EG, G, NE	07/11/2008	NP Act
Bonegilla Migrant Camp – Block 19	Historic	NE	07/12/2007	Victorian Heritage Register listed
Budj Bim National Heritage Landscape – Mt Eccles Lake Condah Area	Indigenous	W	20/07/2004	Heritage Act, Aboriginal Heritage Register listed and NP Act
Budj Bim National Heritage Landscape – Tyrendarra Area	Indigenous	W	20/07/2004	Indigenous Protected Area and NP Act
Coranderrk	Indigenous	CH	07/06/2011	Victorian Heritage Register, Aboriginal Heritage Register listed and CLR Act
Eureka Stockade Gardens	Historic	W	08/12/2004	Victorian Heritage Register listed
Floral Fossil Site – Yea	Natural	CH, NE	11/01/2007	
Glenrowan Heritage Precinct	Historic	NE	05/07/2005	Victorian Heritage Register listed
Grampians National Park (Gariwerd)	Natural	W	15/12/2006	NP Act
Great Ocean Road and Scenic Environs	Historic	W	07/04/2011	NP Act and Victorian Heritage Register listed
Mount William Stone Hatchet Quarry	Indigenous	W	25/02/2008	Aboriginal Heritage Register listed
Murtoa No 1 Grain Store	Historic	W	01/10/2014	Victorian Heritage Register listed
Point Cook Air Base	Historic	W	31/10/2007	

^a RFA regions: CH – Central Highlands, EG – East Gippsland, G – Gippsland, NE – North East, W – West.

Victoria's (non-Indigenous) heritage assets are listed in the Victorian Heritage Register^m and Heritage Inventory database.

^m See <https://heritagecouncil.vic.gov.au/heritage-protection/levels-of-protection/>

Appendix C Overview of statistics relating to key forested areasⁿ

Table 7: Area of forest by land tenure category in Victoria

Land tenure category	Forested '000 ha	Non-forested '000 ha	Totals	
			'000 ha	Per cent forested
State forest	2,997	206	3,202	93 per cent
Parks and reserves	2,999	676	3,675*	81 per cent
Other public land	430	565	994	43 per cent
Private / plantation	1,450	13,421	14,871	9 per cent
Total	7,876	14,867	22,742	34 per cent

Source: DELWP spatial data from the Public Land Management spatial layer, 2018

*Terrestrial parks and reserves only.

Table 8: Proportion of State forest by Forest Management Zone

Forest management zone	Area '000 ha	Proportion of all State forest per cent
GMZ	2,112	69.66
SMZ	159	5.24
SPZ	761	25.10
Total	3,032	100.00

Source: Commissioner for Environmental Sustainability, State of the Forests 2018 Report. Note that this data was obtained from the Forest Management Zone layer in 2016.

ⁿ Due to rounding, numbers presented throughout this document may not add to precisely the totals provided and percentages may not precisely reflect the absolute figures.

Appendix D Management of Commonwealth-listed ecological communities within the Victorian Forest Management System

A case study on Alpine Sphagnum Bogs and Associated Fens

Community description

Alpine Sphagnum Bogs and Associated Fens (or wetlands) are unique ecosystems scattered across the High Country in Victoria. They contribute to plant and animal diversity and provide significant benefits to the environment: storing carbon and filtering out sediments, nutrients and pathogens from water. In addition, bogs add organic carbon to water which underpins the food chain in mountain streams. They are underlain by peat soils that can be metres deep, preserving material such as pollen or charcoal. This archive can be used to estimate trends in vegetation, climate and fire regime going back tens of thousands of years.¹

Alpine Sphagnum Bog and Associated Fens is a rare vegetation community, listed as Threatened under the FFG Act^o, and Endangered under the EPBC Act. It contains many endemic and threatened plants and animals, with some themselves listed under the FFG Act or EPBC Act, including Bogong Eyebright (*Euphrasia eichleri*), Alpine Water Skink (*Eulamprus kosciuskoi*) and Baw Baw Frog (*Philoria frosti*).

Population trends

The extent of nearly all Alpine Bogs in Victoria have been mapped over the past decade by the Arthur Rylah Institute for Environmental Research (ARI; part of DELWP). The current estimate of area occupied by Alpine Sphagnum bog in Victoria is now 4,372 ha, which is mostly in national parks or reserves, and some in State forests, Alpine resorts and private land² (see Table 9). The largest extents are found within the North East, West Gippsland and East Gippsland CMA areas, especially in higher-altitude regions such as the Bogong High Plains. Condition assessments conducted to date indicate that many bogs, with the exception of those on the long-unburnt, long-ungrazed Baw Baw Plateau, are in a medium to poor condition due to long-term disturbance by cattle and feral horses, and, to a lesser extent, deer.³ Livestock grazing and changed fire regimes may have resulted in an estimated 50 per cent reduction in the area of Alpine Bogs since European settlement.⁴

Table 9: Area of Alpine Sphagnum bogs in Victoria by land use category

Land use category	Area (ha)	per cent of total
Parks and reserves	3443	78.8
State forest	739	16.9
Alpine resorts	74	1.7
Freehold	116	2.6
Totals	4372	100

^o Two components of the ecological community have been listed as threatened under the FFG Act. These are the 'Alpine Bog Community' and the 'Fen (Bog Pool) Community' (FFG 1988 – Threatened List April 2018). The 'Psychrophila introloba Herbland Community' (formerly *Caltha introloba*), also listed under the FFG Act, may also be found within or abutting Sphagnum bogs, particularly around areas of late-lying snow.

Key outcomes for ecological community protection and specific actions being implemented

The *National Recovery Plan for the Alpine Sphagnum Bogs and Associated Fens* is a statutory document made under the EPBC Act that guides the research and proposes management actions to stop the decline and support the recovery of the ecological community. In Victoria, Action statement No.266, *Soil erosion and vegetation damage and disturbance in the alpine regions of Victoria caused by cattle grazing* made under the FFG Act guides management of this community. A number of threatened plant and animal species associated with this community also have Action Statements or Recovery Plans made under the relevant governing legislation that guide management relevant to this community.

The key objective outlined in the *National Recovery Plan for the Alpine Sphagnum Bogs and Associated Fens* 2015 is to maintain or extend the current known extent (area) and maintain or improve the condition of the Alpine Sphagnum Bogs and Associated Fens ecological community over the life of the recovery plan.

The Action Statement includes objectives and actions contributing to the protection of this community in Victoria including the improvement of knowledge, remedial action in areas damaged by cattle grazing. Specific actions taken in Victoria, including regulatory protections created in the forest management system, and cattle grazing practices, are detailed below.

CAR reserve system

Of this ecological community, 78.8 per cent occurs in national parks and 16.9 per cent in State forest. This ensures the ecological community occurs in areas primarily managed for conservation by PV, and is therefore protected under the PV Act, and accounted for in management plans and operations.

Regulatory protections in the Forest Management System

The FFG Act is the key piece of Victorian legislation for the conservation of Victoria's native flora, including threatened species and communities, and for the management of potentially threatening processes.

There are two ecological communities that form part of this broader ecological community that are listed as Threatened under the FFG Act, namely, the "Alpine Bog Community" and "Fen (Bog Pool) Community". The protected flora controls, set out in Division 2 of Part 5 of the FFG Act, apply in relation to these two ecological communities.

Under the FFG Act, it is an offence to take, trade in, keep, move or process protected flora without a permit unless authorised by an Order of the Governor in Council published in the Government Gazette or otherwise exempt (section 47). The *Flora and Fauna Guarantee (Forest Produce Harvesting) Order No-2 2004* authorises the taking of protected flora in State forests or on Crown land where that taking is a result of or incidental to forest produce (including timber) harvesting operations or associated roadworks authorised under the Forests Act or timber harvesting operations authorised under the SFT Act.⁵

This authority applies only where certain terms and conditions are fulfilled, including:

- the person is:
 - undertaking authorised timber harvesting operations conducted in accordance with the relevant AO; or-
 - harvesting timber or other forest produce in accordance with a licence or permit under the Forests Act and in accordance with the relevant FMP or Wood Utilisation Plan.

Alpine Sphagnum Bogs and Associated Fens is a non-forest ecological community and not subject to timber harvesting. Given that their geographic range is more than 1000 m above sea level, few areas of timber harvesting occur near known locations of this ecological community. Where timber harvesting may occur near it, the community is protected through prescriptions in the Timber Code related to streams and wetlands, as well as specific detection-based prescriptions for species associated with this ecological community, including:

- establish buffers and filter widths for waterways within and immediately adjacent to each coupe for permanent streams, pools and wetlands, temporary streams and wetlands – widths applied are determined by site slope and a water quality risk assessment;⁶
- in the East Gippsland Forest Management Area - establish a SPZ over all heathland and other treeless vegetation communities;⁷ and
- maintain detection-based prescriptions for threatened species associated with this community, including:

- Baw Baw Frog (maintain a SPZ over the potential habitat envelope of the Baw Baw Frog); and
- Blue-Tongued Orchid (*Pterostylis oreophila*) (establish a SPZ of 200 m radius over each verified population).

As just 2.6 per cent of Alpine Sphagnum bogs are located on private land, and largely contained within Snow Gum (*Eucalyptus pauciflora*) forest (typically a non-merchantable timber type), these bogs are not likely to be impacted by timber harvesting operations on private land (both legal and illegal). In Victoria, a permit is usually required to remove, destroy or lop native vegetation. These requirements are known as the native vegetation removal guidelines and are primarily implemented through local council planning schemes.

Biodiversity and waterway values are identified as part of the forest coupe planning process and detection-based prescriptions, stream buffers and management of other values where relevant are documented in a Forest Coupe Plan.

Active management

Apart from climate change and the associated increase in frequency and intensity of fire, introduced animals including cattle, deer and horses present the biggest immediate threat to Alpine Sphagnum Bogs and Associated Fens. A range of pest animal control programs to manage feral horses, pigs and deer are being implemented across the range of this community to limit disturbance to Alpine Bog sites. As nearly 80 per cent of Sphagnum Bogs occur on PV-managed land, PV conducts pest management programs including a Feral Horse Strategic Action Plan. This plan is currently being implemented and has a target to capture approximately 400 feral horses each year during the program's duration.⁸

Cattle grazing has been excluded from national parks in the high country since 2005 to help abate the threat from domestic cattle to sensitive Alpine Bogs and Fens, although some grazing licences are still active in higher-altitude State forest. Other pest programs targeting deer occur in some areas of the range of this community, along with monitoring. Fencing at a number of important locations has been implemented to protect bogs from these threats which has seen positive results. As noted in the National Recovery Plan, feral pigs are having a significant impact on bogs in both the Australian Capital Territory and New South Wales but are less problematic in Victoria. Anecdotal evidence suggests some level of impact in eastern Victoria as populations of this species increase, but not to the same degree as horses and cattle. The extent to which this species is using Alpine bogs is unclear. PV and Moogji Aboriginal Council are currently delivering a three-year (to 2021) project to control pigs in the Eastern Forests borderlands to protect a range of environmental, cultural and social assets.

East Gippsland, West Gippsland and North East CMAs and PV have been delivering a Cross Regional Victorian Alpine Peatland Protection Project since 2013. This has involved weed control, baseline monitoring, fencing and community engagement.^p

Weed Control, in particular willow removal, has been implemented in a number of areas. This has been particularly important post fires (e.g. 2003 and 2007), when large numbers were able to establish.

Extent to which measures have contributed to species protection

Alpine Bogs require long-term monitoring to assess change as the rates of decline and improvement slow.

A recent study of a sample of bogs in the Cobungra State Forest showed that only four of 32 bogs assessed were in good condition (as assessed by the Investment Framework for Environmental Resources criteria), and these were all bogs protected from disturbance to some extent by denser forest around the margins.⁹ Seventeen bogs (53 per cent) were in a medium condition, while 11 bogs (34 per cent) were considered to be in poor condition, with extensive trampling and pugging, creation of tracks, damage to stream banks and drainage lines, interference with bog rehabilitation, areas of short-grazed turf and pasture weeds. These outcomes suggest that ongoing management of the threat of cattle and horses is required to arrest the long-term decline of Alpine Bogs.

^p This program was recently funded for a further five years as part of the National Landcare Partnerships Tranche 2; Australian Government, National Land Care Program Phase 2, <http://www.nrm.gov.au/national-landcare-program> (accessed May 2019)

The Alpine Peatland Protection Program has delivered extensive management in weed control, rehabilitation and animal control that is showing positive results. Since 2013, 940 ha have been treated for Willows and Soft Rush in the Alpine and Mount Buffalo National Parks, more than 10,000 native plants and shrubs have been planted on previously weedy and degraded ground, and early outcomes from deer control suggest this has had an impact on deer abundance.¹⁰

The peatland species *Sphagnum cristatum* and *Psychrophila introloba* have been shown to increase significantly in cover in ungrazed (that is, fenced) research plots but are dislodged in grazed plots.¹¹ Fencing of some sites has shown positive results; however, it is acknowledged that this is a small-scale intervention with limited application across the range of Alpine Bogs.

Monitoring and adaptive management

The ARI has conducted extensive mapping of the location of bogs, which informs forest and fire planning and operations (decisions around planned burns, bushfire management (where possible), roading and timber harvesting activity) and enables adaptive management of this community. For example, during the 2018 Tamboritha–Dingo Hill fire, PV was able to access mapping to ensure that damage to bogs during fire suppression activities was kept to a minimum. Bulldozers and fire retardants were kept away from bogs, and helicopters dropped water to protect the internationally significant Caledonia Fen, which has a pollen record going back 140,000 years. Mapping has also informed decisions to close tracks in some areas where bogs are closely adjacent, thereby reducing damage to the bog from vehicles.

PV, with assistance from ARI and Ecology Australia, is managing an Alpine Peatland Monitoring Strategy to assess long-term changes at 62 Alpine Bog sites across the state. These will be monitored and reported on over the years to identify the impacts of regional threats and the outcomes of management actions and inform the application of future management strategies.

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Appendix E Mitigating the impacts of forest practices on the Long-footed Potoroo

A case study example of the Victorian Forest Management System

Species description

The Long-footed Potoroo (*Potorous longipes*) is a forest-dwelling rat-kangaroo which inhabits forest with a dense understorey in East Gippsland, south-eastern New South Wales and north-eastern Victoria. It feeds almost exclusively on the sporocarps of hypogeous fungi, and thus depends on habitat with a year-round supply of sporocarps.

Long-footed Potoroos have a relatively restricted distribution, which means they are vulnerable to stochastic processes, such as bushfire, as well as climate change. Wild Dogs and Red Foxes are known predators of the species, placing pressure on recruitment and successful dispersal.¹

The Long-footed Potoroo is listed as Endangered under the EPBC Act and is listed as Threatened under the Victorian FFG Act.

The 2017 VEAC *Conservation Values of State Forests Assessment* report¹ identified the species as 'forest dependent' and negatively impacted by timber harvesting, among other threats.²

Population trends

Within Victoria, the known distribution of the Long-footed Potoroo has increased since its discovery in 1980, although it is still very restricted in range.³ Previously known only from East Gippsland, a sub-population in north-eastern Victoria near Mt Buffalo was discovered in 1995.⁴

The size of the Long-footed Potoroo population is difficult to estimate with any accuracy. An estimate based on studies of population density suggests the total population could be no more than about 10,000, distributed across three disjunct geographic areas (two in Victoria and one in New South Wales), with the largest of the sub-populations in East Gippsland comprising perhaps two-thirds of the total (as at 2009).⁵

Given its size and ground-dwelling nature, it is most likely that the Long-footed Potoroo has declined in abundance over the long term since the introduction of exotic predators.

At some sites in East Gippsland, Long-footed Potoroo detection has increased as a result of large-scale predator control interventions.

Key outcomes for the species protection and specific actions being implemented

The statutory conservation planning document for the Long-footed Potoroo in Victoria is *Action Statement No.58, Long-footed Potoroo (Potorous longipes)* made under the FFG Act. It sets out what has been, and what is intended to be, done to conserve and manage the species. It sets out a range of high-level objectives, outcomes, species protections and actions to ensure that the species can survive, flourish and retain its potential for evolutionary development in the wild.⁶ These include actions specifically related to mitigating the threat of timber harvesting as well as actions to address broader threats and ensure species persistence. These are detailed below.

CAR reserve system

Of the total 330,000 ha of modelled potential habitat for Long-footed Potoroo, 41 per cent is located in national parks, conservation reserves or SPZs.⁷ Long-footed Potoroo habitat overlaps with areas of timber harvesting in East Gippsland and the North East Forest Management Areas. To manage this, the implementation of the

¹ This report discusses 79 threatened species identified as 'forest-dependent' by a group of expert biologists convened by DELWP.

CAR reserve system across the Long-footed Potoroo range in these areas seeks to protect core habitat for the Long-footed Potoroo.

Regulatory protections in the Forest Management System

The FFG Act is the key piece of Victorian legislation for the conservation of threatened species and communities and for the management of potentially threatening processes. The Act's objectives aim to conserve all of Victoria's native plants and animals. The Wildlife Act is a key piece of Victorian legislation for the protection and sustainable use of wildlife. Under this Act, it is an offence to hunt, take or destroy threatened wildlife, such as the Long-footed Potoroo, without authorisation. The FFG Act does not provide for direct offences regarding fauna under the FFG Act; these offences are dealt with under the Wildlife Act. *Action Statement No.58, Long-footed Potoroo (Potorous longipes)* established under the FFG Act was first prepared for the Long-footed Potoroo in 1994 and was subsequently updated in 2009. The Action Statement specifies a set of recommended actions, including timber harvesting prescriptions, to arrest the decline in this species.

Within State forest GMZs where native timber harvesting occurs, risks to Long-footed Potoroo populations are managed via application of a detection-based prescription outlined in the Management Standards and Procedures: establish an SMZ of approximately 150 ha for each Long-footed Potoroo detection that is outside the Core Protected Area (i.e. within existing SPZs and reserves). This prescription is based on the Action Statement for the Long-footed Potoroo (1994) that was incorporated into the Management Standards and Procedures in 2014, along with all Action Statement prescriptions as they relate to timber harvesting. These prescriptions are enforceable. As far as possible, SMZ boundaries will follow recognisable landscape features such as ridges, spurs and watercourses. Within each SMZ, at least one-third (50 ha) are protected from timber harvesting and new roadings. This is known as Long-footed Potoroo Retained Habitat as described in the Action Statement and [Appendix 5](#) of the Management Standards and Procedures. The Long-footed Potoroo Retained Habitat includes the best Long-footed Potoroo habitat in the SMZs, which are generally in gullies or on lower, sheltered slopes. The Long-footed Potoroo Retained Habitat may include areas otherwise unavailable for timber harvesting due to restrictions under the code (e.g. buffers on waterways).

The primary mechanisms that result in detections and the application of this prescription are the DELWP FPSP (previously Pre-Harvest Survey Program), VicForests pre-harvest survey programs and DELWP targeted monitoring for threatened fauna such as the Southern Ark project and citizen science surveillance programs. If a new detection occurs, reports are verified by DELWP officers centrally and biodiversity officers regionally. Once a detection is confirmed, these records are stored in the VBA and amendments to the Forest Management Zoning Scheme (located in DELWP's corporate GIS library) are progressed periodically to ensure SMZs are reflected in the Zoning Scheme.

As part of VicForests' pre-harvest planning process, the VBA and Forest Management Zoning Scheme is reviewed by VicForests to check for species records at the planned harvest site.

Active management

The Red Fox is listed as a key threat to Long-footed Potoroos. The Victorian Government invests in integrated, landscape-scale fox control year round on public land in East Gippsland via the Southern Ark project. The Southern Ark project aims to facilitate the recovery of native animals such as the Long-footed Potoroo and improve the stewardship of public land in the project area. The Southern Ark project:

...was the first large-scale attempt to control foxes in natural ecosystems in eastern Australia. This program relies on the establishment and maintenance of approximately 3500 permanent bait stations across 1 million hectares of public land (State forest and National Parks and Reserves). This area of land represents 5 per cent of the state of Victoria.⁸

The program was established in 2004 and a key component has been monitoring response of native species such as Long-footed Potoroos during that time. DELWP estimates that Red Fox control delivered through the Southern Ark project has resulted in a 104 per cent increase in statewide Suitable Habitat for the Long-footed Potoroo.⁹

In the North East, the Barry Mountains Fox Control project, led by PV in partnership with DELWP, delivers over 48,000 ha of fox control in the project area. The project began in 2004 after the 2003 bushfires that impacted significantly on Long-footed Potoroo habitat in the Alpine National Park and Buffalo River State Forest.

The entire distribution of the Long-footed Potoroo is in forest that is vulnerable to periodic bushfires.¹⁰ Planned fuel reduction burning also occurs within its range. To manage impacts of bushfire on the Long-footed Potoroo, DELWP takes steps to actively suppress bushfire in, or likely to affect, known Long-footed Potoroo habitat as soon as feasible. Rehabilitation of fire line work is done following any suppression activities. Given the species preference for wetter gullies, many known Long-footed Potoroo sites are not subject to planned burning activities; however, avoiding planned burning in all Long-footed Potoroo habitat is not feasible. Where planned burning occurs, it is generally of low intensity. Predator control via the Southern Ark project described above ensures predators are managed pre- and post-fire to assist in recovery.

Extent to which measures have contributed to species protection

Monitoring undertaken as part of the Southern Ark project suggests that Long-footed Potoroos are increasing in detections as a result of landscape-scale predator control, including in areas previously thought marginal for habitation. This includes recently burnt sites in East Gippsland, where ground-dwelling mammals are using severely burnt habitat within 2.5 years of bushfire.¹¹ In 2016–17, the most significant result was the detection of Long-footed Potoroos at over 200 new sites, making it one of the most detected mammals during the monitoring program.

As highlighted above, at least one-third of each established SMZ is protected from timber harvesting and new roadings.

As part of the FPSP, a target of 80 per cent of coupes are surveyed prior to timber harvesting. This has resulted in 131 detections of the species since the program commenced in July 2018 and subsequent application of the prescription in these areas.¹² Each detected warranting application of the prescription has designated 150 ha of potential habitat to be managed under special conditions, including designation of at least 50 ha of permanently retained habitat.

Monitoring and adaptive management

As described above, ongoing monitoring is occurring via 720 camera trap sites across the Southern Ark project area to monitor the effectiveness of predator control and subsequent ground-dwelling mammal populations. The data collected as part of this monitoring feeds into the VBA and subsequently into HDMs (described below) to inform land-use planning.

New field studies are being conducted via the landscape scale survey project (a component of Victoria's RFA modernisation program). This project will update current knowledge of the distribution of high-priority forest-dependent threatened species. HDMs for these species will be improved using new field data collected through these surveys, the FPSP and recently collected data available from the VBA. The new information collected during the landscape scale surveys will also feed into population viability analysis modelling, which relates the current and future location and extent of habitats suitable for threatened species with the viability of populations under various disturbance and climate scenarios. The development of a series of revised HDMs that reflect the distribution of suitable habitat for high-priority forest-dependent species will help inform land-use planning, conservation reserve management, invasive species management, and more.

Detection-based prescriptions are the main adaptive management tool for this species within timber harvesting areas. As highlighted above, the FPSP has detected this species 131 times since the program commenced in 2018 and subsequently prescriptions have been applied in these areas.¹³

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- 12 DELWP n.d., *Forest Protection Survey Program: Survey Results* [dataset], <https://www.forestsandreserves.vic.gov.au/forest-management/forest-protection-survey-program/forest-protection-survey-program> (accessed 6 March 2018).
- 13 *ibid.*

Appendix F Mitigating the impacts of forest practices on the Leadbeater's Possum

A case study example of the Victorian forest management system

Species description

The Leadbeater's Possum (*Gymnobelideus leadbeateri*) is a small arboreal marsupial endemic to eastern Victoria. Considered extinct until 1961, the species is now found in two sub-populations: a core location in the Central Highlands to the north-east of Melbourne, and an outlier in lowland floodplain forest east of Melbourne. During the day, possums den in communal nests in hollows in dead or living trees. A monogamous breeding pair and one or more generations of offspring den together. Feeding occurs at night with the diet comprising trunk and branch exudates (80 per cent) and insects (20 per cent). Habitat loss, primarily through bushfires and, to a lesser extent, timber harvesting is considered to be the main driver for the decline in the conservation status of Leadbeater's Possum.¹

The Leadbeater's Possum is listed as 'Critically Endangered' under the EPBC Act and 'Threatened' under the FFG Act. The Leadbeater's Possum was listed as 'Critically Endangered' in 2015 based on current and projected population decline and reduction in habitat quality. A 2019 reassessment retained its Critically Endangered status under the EPBC Act.

Population trends

It is difficult to determine the total population size of Leadbeater's Possum across its habitats, primarily owing to uncertainty about the number of occupied sites in montane ash forest. However, estimates based on surveys throughout the range of the species in the Central Highlands suggest there may have been between 1,578 and 4,384 colonies in 2014 (based on the number of adult breeding females). These estimates factored in variability in recording rate, ability to detect the species where it occurs, and the area able to be effectively sampled during the surveys. Assuming colony sizes are currently typically two to three individuals, this would equate to approximately 3,945 to 10,960 individuals (using 2.5 individuals as an average).²

In recent years, innovative survey techniques and technology have been used to locate an increasing number of Leadbeater's Possum colonies. 340 new colonies were identified between March 2014 and January 2017 due to greater sampling effort, using new technology.³

Key outcomes for the species protection and specific actions being implemented

The statutory conservation planning document for the Leadbeater's Possum in Victoria is *Action Statement No. 62, Leadbeater's Possum (Gymnobelideus leadbeateri) (2014)* made under the FFG Act. It sets out what has been, and what is intended to be, done to conserve and manage the species

The independent Leadbeater's Possum Advisory Group (LPAG), established in June 2013, also produced a set of recommendations to support the recovery of the species while maintaining a sustainable timber industry. The LPAG was co-convened by Zoos Victoria and the Victorian Association of Forest Industries, with representation from PV, VicForests, and the Leadbeater's Possum Recovery Team. The Victorian Government continues to implement LPAG's recommendations and undertake additional measures to identify and protect Leadbeater's Possum colonies.

These documents set out a range of high-level objectives, outcomes, species protections and actions to ensure that the species can survive, flourish and retain its potential for evolutionary development in the wild. Specific actions being undertaken in Victoria include the following.

CAR reserve system

Of the total 198,491 ha of modelled potential habitat for Leadbeater's Possum, 28 per cent is found within national parks and conservation reserves and an additional 19 per cent is within SPZs or SMZs.⁴ These protected areas form the largest, most connected protected area to conserve the Leadbeater's Possum.

The Leadbeater's Possum reserve system was established in 2008, protecting 30,500 ha of high-quality Leadbeater's Possum habitat. A total of 127 patches, greater than 50 ha in size, and containing (at that time) predominantly old-growth ash forest were selected for inclusion.⁵

Regulatory protections in the Forest Management System

The FFG Act is the key piece of Victorian legislation for the conservation of threatened species and communities and for the management of potentially threatening processes. The Act's objectives aim to conserve all of Victoria's native plants and animals. Under the FFG Act, an Action Statement was first prepared for Leadbeater's Possum in 1995 and was subsequently updated in 2014. The Action Statement specifies a set of actions, including timber harvesting prescriptions, to arrest the decline in this species.

The Wildlife Act is a key piece of Victorian legislation for the protection and sustainable use of wildlife. Under this Act, it is an offence to hunt, take or destroy threatened wildlife, such as the Leadbeater's Possum, without authorisation.

The native timber industry operates in approximately one-third of the Leadbeater's Possum range in the Central Highlands State forests. Within State forests, the protection of the Leadbeater's Possum is supported through a range of mechanisms under the Timber Code, and the Forest Management Zoning Scheme. They include:

- the establishment of an SPZs of 200 m radius centred on each verified Leadbeater's Possum colony;
- exclusion of timber harvesting in State forest from within 100 m of modelled old-growth ash forest in the Leadbeater's Possum range;
- amendment of the definition of Zone 1A habitat to more than 10 live mature or senescent hollow-bearing ash trees per 3 ha in patches greater than 3 ha. The revised definition reduces the requirement from 12 to 10 trees, meaning that more instances of this density are likely to be identified and protected from timber harvesting. In Zone 1A habitat, hollow-bearing trees are defined as live mature or senescent trees of Mountain Ash, Alpine Ash or Shining Gum;
- protection of at least 30 per cent of ash forest within each Leadbeater's Management Unit to allow these areas to mature into future old-growth forest; and
- SPZs targeting other species, and fixed zoning requirements such as streamside buffers, that while not purely established for the Leadbeater's Possum may also provide significant habitat protection.

Other relevant measures include existing protections of pre-1900 trees and the recently announced protection of trees that are larger than 2.5 Diameter at Breast Height.

The primary mechanisms that result in detections and hence protected areas being declared are the DELWP FPSP (previously Pre-Harvest Survey Program), VicForests' pre-harvest survey programs, DELWP targeted monitoring for threatened fauna, and citizen science programs.

Active management

The LPAG recommended further research and investigation into providing an increase in potential den sites through the provision of nest boxes and accelerating hollow development. Artificial nest boxes have been provided in a targeted manner at key locations to support existing populations by extending 'Project Possum'.⁶ VicForests and ARI have delivered a trial project of creating artificial hollows in high-priority areas; this has seen successful occupancy by Leadbeater's Possums or contained evidence of nests at different stages of development after only a few months.⁷

Fire is an integral component of ash forests and has an important influence on the occurrence, extent and viability of the Leadbeater's Possum and its habitat.⁸ There have been significant bushfires across the possum's range in the last century. To mitigate the impacts of bushfire on Leadbeater's Possum, a range of active management measures are taken including:

- supplementary feeding post bushfire;

- provision of nest boxes and/or artificial hollows to increase den availability; and
- limiting the impact of strategic fuel breaks on high-quality habitat.

Extent to which measures have contributed to species protection

A review of the effectiveness and impact of establishing timber harvesting exclusion zones (THEZs) around Leadbeater's Possum colonies was undertaken in 2017. THEZs are created as SPZs through the Forest Management Zoning Scheme. The review found that these 200 m exclusion zones were contributing significantly to the conservation of Leadbeater's Possum and that the risk of its extinction within the Leadbeater's Possum reserve system has been reduced by approximately 34 per cent as a result of the action.⁹ The application of the 200 m THEZ has resulted in immediate protection for 553 additional colonies, as at October 2018.¹⁰

The new and previously known colonies located in State forest protected by the 200 m radius THEZ have created an additional 5,713.5 ha that are reserved to protect Leadbeater's Possum.

Leadbeater's Possum remains at a high risk of extinction until 2050–70, due to ongoing habitat loss (especially loss of hollow-bearing trees) and the likelihood of future bushfires.¹¹

Monitoring and adaptive management

Ongoing monitoring and detection of the Leadbeater's Possum are undertaken as part of DELWP's FPSP, landscape scale survey program, targeted PV surveys, and research by Zoos Victoria and citizen science groups.

DELWP supports citizen science groups and individuals to conduct surveys for new Leadbeater's Possum colonies by providing them with survey equipment and survey standards. Work undertaken by these groups has resulted in a number of verified communities being identified, including a further 70 records from the community between July and September 2016.¹²

DELWP undertakes regular updates of the forest management zoning layer, FMZ 100, to ensure all recorded Leadbeater's Possum colonies and their associated THEZs and high-quality habitat, whether formally reserved or not, are mapped, consolidated and published as datasets in DELWP's Corporate Spatial Data Library. This information is accessible to VicForests to assist in forest planning and DELWP's fire operations and planning divisions to assist with fire operations planning, suppression and management.

The Leadbeater's Possum Interactive Map is being regularly updated by DELWP to ensure the public has access to the most up-to-date spatial information. The map provides a visual representation of confirmed colonies and the surrounding THEZs, areas where there is a modelled high probability of occupancy by Leadbeater's Possum, areas where DELWP has undertaken targeted surveys, and the VicForests TRP.¹³

New field studies are being conducted via the landscape scale survey project. This project will update current knowledge of the distribution of high-priority forest-dependent threatened species, such as Leadbeater's Possum. HDMs for these species will be improved using new field data collected through these surveys, the FPSP and recently collected data available from the VBA. The new information collected during the landscape scale surveys will also feed into population viability analysis modelling, which relates the current and future location and extent of habitats suitable for threatened species with the viability of populations under various disturbance and climate scenarios. The development of a series of revised HDMs that reflect the distribution of suitable habitat for high-priority forest-dependent species will help inform land-use planning, conservation reserve management, invasive species management, and more.

Ongoing research and monitoring as part of the LPAG process and subsequent review of the THEZ includes¹⁴:

- continuing the 200 m THEZ prescription around verified Leadbeater's Possum colonies;
- reviewing how the exclusion zones are applied to reduce unnecessary indirect impacts on the timber industry while ensuring adequate protection for Leadbeater's Possum;
- undertaking further field studies to improve knowledge of Leadbeater's Possum;
- further developing species models as the basis for improved forest planning and conservation management;
- reviewing THEZs and other existing SPZs in the Central Highlands to optimise for timber availability, protection for Leadbeater's Possum, other threatened species and other forest values; and
- transitioning to landscape-scale planning for threatened species management.

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 - 11 DELWP n.d., *Leadbeater's Possum*, <https://www.wildlife.vic.gov.au/our-wildlife/leadbeaters-possum>, (accessed March 2019).
 - 12 Ibid.
 - 13 DELWP, *Leadbeater Possum Interactive Map*, http://lbp.cerdi.edu.au/possum_map.php, (accessed March 2019).
 - 14 DELWP, *Leadbeater's Possum*, <https://www.wildlife.vic.gov.au/our-wildlife/leadbeaters-possum> (accessed March 2019).

Appendix G Mitigating the impacts of forest practices on the Blue-tongued Orchid

A case study example of the Victorian Forest Management System

Species description

Blue-tongued Orchid (*Pterostylis oreophila*), Family Orchidaceae, also known as the Blue-tongued or Kiandra Greenhood, is a terrestrial orchid growing to 200 mm tall, with dark green, fleshy, flat leaves. Basal leaves are stalked, while the other leaves are stalkless and are scattered up the stem. The flower stem is smooth. The solitary flowers are erect and light green and white, 25–30 x 12–16 mm in size. The recurved labellum is a distinctive bluish or blue–green (aqua) colour.¹

The species is restricted to growing beside small montane and subalpine streams under tall dense thickets of Mountain Tea Tree (*Leptospermum grandiflorum*), in black oozing mud or less commonly in peaty soils and sphagnum mounds.² This type of habitat occurs throughout much of the upper areas of Kosciuszko National Park and the Alpine National Park in Victoria.³

The distribution of this species overlaps with the Alpine Sphagnum Bogs and Associated Fens threatened ecological community listed under the EPBC Act.

The Blue-tongued Orchid is listed as critically endangered under the EPBC Act. This is because the number of mature individuals is very low, and the species' distribution is restricted and precarious due to fragmentation and ongoing threats.⁴

The Blue-tongued Orchid is on the Victorian Advisory List as endangered but not listed as threatened under the Victorian FFG Act. It is also listed as Critically Endangered under New South Wales and Australian Capital Territory environment legislation, both of which have conservation programs in place for it. While not listed as threatened under the FFG Act, all species of the Orchidaceae family are protected flora under Division 2 of Part 5 of the FFG Act. Under the FFG Act, it is an offence to take, trade in, keep, move or process protected flora without a permit, or unless authorised by Order of the Governor in Council published in the Government Gazette (GIC Order).

Population trends

The total estimated population of the Blue-tongued Orchid is 120 to 360 mature individuals in Victoria. There are 10 known locations in the VBA, all within the East Gippsland and Gippsland RFA regions and mostly in subalpine areas.

The main identified threats to the Blue-tongued Orchid include grazing and trampling by cattle and feral horses at some sites; altered hydrology due to the impacts of grazing, and adjacent land uses such as logging; soil disturbance by rooting by feral pigs; horse trail riding; weed invasion by Blackberry (*Rubus fruticosus*) and inappropriate land management including unsuitable fire regimes.⁵ Given the current threats impacting on the species, and decline in quantity and quality of habitat, it is likely that the number of plants will decline in the future.

Key outcomes for the species protection and specific actions being implemented

All orchids on public land are protected under the FFG Act and section 47 makes it an offence to take, move, keep, trade in or process protected flora without a licence or permit.

The Blue-tongued orchid is not listed under the Victorian FFG Act, but is on the advisory list so its status is currently being re-assessed. From 1 June 2020, under the CAM agreement process, the Blue-tongued Orchid could be listed under the FFG Act as a nationally threatened species.

Given the overlap of range of the Blue-tongued Orchid with the extent of the Alpine Sphagnum Bogs and Associated Fens EPBC Act-listed threatened ecological community, outcomes sought under the National Recovery Plan for that community are relevant to the specific actions being implemented for the Blue-tongued Orchid. The FFG listed threatening process 'Soil erosion and vegetation damage in the alpine regions caused

by cattle grazing' and associated Action Statement No. 266 (2015) are also relevant to this species given its known range and threats.

These documents set out a range of high-level objectives, outcomes, species protections and actions to ensure that the species can survive, flourish and retain its potential for evolutionary development in the wild.

CAR reserve system

The known locations of this species in Victoria are all within the Alpine National Park, Snowy River National Park or SPZs. Of the 39,747 ha of modelled potential habitat, 65 per cent is within parks and reserves, and 4 per cent is within SPZs⁶.

Regulatory protections in the Forest Management System

Within State forests where native timber harvesting occurs, impacts from timber harvesting on Blue-tongued Orchids are managed through the application of detection-based prescriptions contained within the MSPs incorporated in the Timber Code. These include:

- the establishment of a THEZ equivalent to a SPZ of 200 m radius over each verified population; and
- the establishment of timber harvesting exclusion buffers and filters applied to waterways within and immediately adjacent to each coupe for permanent streams, pools and wetlands; and temporary streams and wetlands. Widths applied are determined by site slope and a water quality risk assessment.

Biodiversity and waterway values are identified as part of the forest coupe planning process and detection-based prescriptions, stream buffers and management of other values where relevant are documented in a Forest Coupe Plan.

Active management

Given the overlap of range and similar threats operating, management actions outlined in [Appendix D](#), 'Management of Commonwealth-listed ecological communities within the Victorian Forest Management System' are relevant to this species. This includes control and management of invasive herbivories (horses, deer), inappropriate fire regimes and weed invasion.

Extent to which measures have contributed to the species protection

Information about this species and its trajectory is limited given its rarity. All known locations of the species are located within areas managed for conservation (national parks and SPZs). As highlighted above, delivery of specific management relevant to the Alpine Bog community is expected to deliver benefits for this species; however, given the current threats impacting on the species, and the low population, it is likely that the number of plants will decline in the future. There is no specific program of measures targeting the Blue-tongued Orchid, therefore it is difficult to accurately predict outcomes for this species.

Since 2013, one SPZ has been created in East Gippsland as a result of a detection of this species in planned timber harvesting coupes.

Monitoring and adaptive management

There is no monitoring program specifically targeted at this species. Community citizen science groups are active in the Gippsland and East Gippsland region and contribute to species records in the VBA; this information is subsequently used in HDMs to inform land-use planning.

Ad hoc flora monitoring undertaken by DELWP in alpine regions can result in the identification of new observations, and all species records are subsequently entered into the VBA. The VBA is a layer in DELWP's corporate library and is accessed as part of value checking and planning processes for a range of land management operations, including fire planning and operations, roading and track maintenance and timber harvesting operations.

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- 1 Approved Conservation Advice *Pterostylis Oreophila*, Approved 2012 (Commonwealth Department of
Environment and Energy, section 266B of the *Environment Protection and Biodiversity Conservation Act 1999*),
2 <http://www.environment.gov.au/biodiversity/threatened/species/pubs/22903-conservation-advice.pdf>
3 Jones DL, 2006, *A Complete Guide to Native Orchids of Australia Including the Island Territories*, 2nd ed,
Frenchs Forest, NSW; London: New Holland. In Approved Conservation Advice for *Pterostylis Oreophila*,
4 Approved 2012 (Commonwealth Department of Environment and Energy, s. 266B of the *Environment Protection
and Biodiversity Conservation Act 1999*).
- 5 M.Clements 2011, in Approved Conservation Advice, Approved 2012 (Commonwealth Department of
Environment and Energy, s266B of the *Environment Protection and Biodiversity Conservation Act 1999*).
6 Ibid.
- 7 Approved Conservation Advice, Approved 2012 (Commonwealth Department of Environment and Energy, s266B
of the *Environment Protection and Biodiversity Conservation Act 1999*)
8 <http://www.environment.nsw.gov.au/determinations/PterostylisOreophilaEndSpListing.ht> (accessed May 2019).
9 DELWP data, 2019 (Unpublished)