

CONSERVATION FORESTS AND LANDS ACT 1987

VARIATION OF THE CODE OF PRACTICE FOR TIMBER PRODUCTION 2014 (No.1/2022)

I, Lily D'Ambrosio, Minister for Energy, Environment and Climate Change, vary the Code of Practice for Timber Production 2014, in accordance with Part 5 of the *Conservation, Forests and Lands Act 1987*, in the manner set out in this instrument.

Dated: 06 June 2022

Responsible Minister:

HON. LILY D'AMBROSIO MP

MINISTER FOR ENERGY, ENVIRONMENT AND CLIMATE CHANGE

Part 1—Preliminary

1 Purposes

The purpose of this instrument is to vary the *Code of Practice for Timber Production 2014*, notice of the making of which was published in *Victoria Government Gazette* S390 on 28 October 2014.

2 Commencement

- (1) This instrument (except clauses 8(2) and 12(2)) comes into operation on the date this instrument or notice of the variation effected by this instrument is published in the Government Gazette.
- (2) Clauses 8(2) and 12(2) of this instrument come into operation on 1 July 2022.

3 Principal Code

In this instrument, the *Code of Practice for Timber Production 2014* is called the Principal Code.

4 Incorporated documents

Any matter contained in the document known as the *Management Standards and Procedures for timber harvesting operations in Victoria's State forests 2021*, as incorporated into the Principal Code immediately prior to the commencement of this instrument, is no longer incorporated into the Principal Code from the commencement of this clause.

5 Construction of this instrument

In this instrument, if a clause requires more than one instance of a term or expression to be substituted with another term or expression, unless the clause otherwise requires:

- (1) It applies to each relevant instance of that term or expression in the section of the Principal Code identified in that clause, whether or not the term is bolded or capitalised; and
- (2) It applies so that the term or expression is bolded or capitalised in the same manner as the term for which it is substituted.

Part 2—Variation of the Code of Practice for Timber Production 2014

6 Style

- (1) Unless otherwise provided by this instrument, amendments to be made to the Principal Code by this instrument are intended to be made in the same style as the relevant section of the Principal Code currently appears in that Code;
- (2) Unless otherwise provided by this instrument, including by being shown in a different font than the balance of this instrument, text that is to be inserted or substituted into the Principal Code by this instrument:
 - (a) is to be in font type Arial, size 9, if it is within a Table in the Principal Code;
 - (b) is to be in font type Arial, size 10, if it is in the body of the Principal Code and is not within a Table;
 - (c) is to be in font type Arial (body), size 10, if it is in a Schedule to the Principal Code.

7 Minister's Foreword

In the third paragraph of the Minister's Foreword to the Principal Code, for "2021" **substitute** "2022".

8 Glossary

- (1) In the Glossary to the Principal Code, after "terms used in this **Code**" **omit** "and the **Management Standards and Procedures**".
- (2) In the Glossary to the Principal Code **insert** the following definitions in the appropriate alphabetical position—

"Asset Protection Zone" means the Fire Management Zone of that name, as described in the *Code of Practice for Bushfire Management on Public Land 2012*.

'APZ Land' means, in relation to an area, land designated as **Asset Protection Zone**, as shown in the Fire Management Zones layer of the Victorian Spatial Data Library, in the area.

'BMZ Land' means, in relation to an area, land designated as **Bushfire Moderation Zone**, as shown in the Fire Management Zones layer of the Victorian Spatial Data Library, in the area.

'Bushfire Moderation Zone' means the Fire Management Zone of that name, as described in the *Code of Practice for Bushfire Management on Public Land 2012*."

'fuel hazard management unit' means an area of land of that description shown in the spatial information in the Fuel Hazard Management layer in the Victorian Spatial Data Library, published by the **Secretary** or **delegate**. A **fuel hazard management unit** typically encompasses several Fire Management Zones across a broader landscape, region or district."
- (3) In the Glossary to the Principal Code, for the definition of "Management Standards and Procedures" **substitute**—

"Management Standards and Procedures" means the provisions in Schedule 1 of the **Code**.

Note: Schedule 1 forms part of the **Code**."

- (4) In the definition of "approved" in the Glossary to the Principal Code **omit** "and its incorporated document the **Management Standards and Procedures**".
- (5) In the definition of "approved road" in the Glossary to the Principal Code **omit** "and its incorporated document the **Management Standards and Procedures**".
- (6) In the definition of "approved stream crossing" in the Glossary to the Principal Code, for "cl" **substitute** "section".
- (7) In the definition of "Code" in the Glossary to the Principal Code—
 - (a) for "the" **substitute** "this instrument, entitled";
 - (b) for "(amended 2021)" **substitute** "(as amended 2022)".
- (8) In the definition of "delegate" in the Glossary to the Principal Code **omit** "and the **Management Standards and Procedures**".
- (9) In the definition of "exclusion area" in the Glossary to the Principal Code **omit** "or the **Management Standards and Procedures**".
- (10) In the definition of "habitat tree" in the Glossary to the Principal Code—
 - (a) **omit** "and **Management Standards and Procedures**";
 - (b) for "contain" **substitute** "contains".
- (11) In the definition of "landing" in the Glossary to the Principal Code for "landing establishment" **substitute** "landing establishment".
- (12) In the definition of "management area" in the Glossary to the Principal Code **omit** "or the **Management Standards and Procedures**".
- (13) In the definition of "mature" in the Glossary to the Principal Code **insert** "vii." before "**Diameters** of early **mature** trees may occur between 90 to 200 cm DBHOB, with typical heights of 50 to 100 m.".
- (14) In the definition of "protection area" in the Glossary to the Principal Code **omit** "or the **Management Standards and Procedures**".
- (15) In the definition of "regrowth" in the Glossary to the Principal Code for "Regrowth eucalypts" **substitute** "**Regrowth** eucalypts".
- (16) For the note at the foot of the definition of "responsible authority" in the Glossary to the Principal Code, for "scheme. It" **substitute** "scheme. It".

9

Chapter 1 General

- (1) In section 1.2.3 of the Principal Code, for "*Subordinate Legislation (Legislative Instruments) Regulations 2011*" **substitute** "*Subordinate Legislation (Legislative Instruments) Regulations 2021*",.

- (2) In section 1.2.4 of the Principal Code, after "from its operation." **insert**—
 "Schedule 1 to this **Code**, referred to as the **Management Standards and Procedures**, forms part of this **Code**."

The **Management Standards and Procedures** provide detailed mandatory operational instructions, including region specific instructions for **timber harvesting operations** in Victoria's **State forests**.

The **Management Standards and Procedures** are consistent with the Operational Goals and Mandatory Actions and must be complied with for **timber harvesting operations** in Victoria's **State forests**.

The **Management Standards and Procedures** are informed by relevant policy documents including policies relating to specific forest values such as threatened

species, guidelines and strategies within forest management plans made under the *Forests Act 1958* and **Action Statements** made under the *Flora and Fauna Guarantee Act 1988*. The **Management Standards and Procedures** replace any directions relating to **timber harvesting operations** contained within these documents."

- (3) After section 1.2.4 of the Principal Code, **insert**—

"1.2.4A Interpretation

All references to the **Code**, subject to any contrary intention, include references to the **Management Standards and Procedures**.

A provision in the body of the **Code** prevails over any provision in the **Management Standards and Procedures** to the extent of any inconsistency.

The provisions of the **Code** are referred to as sections. The provisions of the **Management Standards and Procedures** are referred to as clauses."

- (4) In section 1.2.6 of the Principal Code **omit** "(including the **Management Standards and Procedures**)".

- (5) In section 1.2.8 of the Principal Code for the paragraph after the heading "Incorporated Documents" **substitute**—

"Under the *Conservation, Forests and Lands Act 1987*, a Code of Practice may incorporate a document into the Code of Practice.

Historically, the **Management Standards and Procedures** was a separate document that was incorporated into the **Code** in accordance with the *Conservation, Forests and Lands Act 1987*. The **Management Standards and Procedures** are no longer an incorporated document to the **Code** and instead form part of the **Code** itself.

Transitional provisions - Management Standards and Procedures

As of the commencement of the amendments to the Code that inserted Schedule 1 to the Code:

- Any thing (including any action, process, right or obligation) commenced but not completed, lapsed or discharged under or in reliance on a provision of the *Management Standards and Procedures for timber harvesting operations in Victoria's State forests 2021* prior to the date at which the variation to the **Code** which inserted Schedule 1 takes effect, is taken to continue under or in reliance on the equivalent clause in Schedule 1. Any approval, authorisation, exemption or temporary variation granted or issued under the *Management Standards and Procedures for timber harvesting operations in Victoria's State forests 2021* which has ongoing effect immediately prior to the date at which the variation to the **Code** which inserted Schedule 1 takes effect, is taken to have been granted or issued under the equivalent clause in Schedule 1 on the same terms as it was issued or granted."

- (6) In section 1.2.11 of the Principal Code **omit** "(including the incorporated **Management Standards and Procedures**)" (wherever occurring).

- (7) In section 1.2.12 of the Principal Code—

- (a) **omit** "and the **Management Standards and Procedures**";
- (b) for "have" **substitute** "has".

- (8) In the row commencing with 'Historic places and Aboriginal cultural heritage values' in Table 1 in section 1.3 of the Principal Code, in column 2 of that row, **omit** "and the Management Standards and Procedures".
- (9) In the row commencing with 'Planning is conducted' in Table 1 in section 1.3 of the Principal Code, in column 2 of that row—
 - (a) **omit** "and the Management Standards and Procedures";
 - (b) after "**Code**" (where first occurring) **insert** ".".

10 Chapter 2 Code Application - State Forests

- (1) In section 2.2.2.10 of the Principal Code—
 - (a) **omit** "old";
 - (b) after "each **coupe**." **insert**—

"Where Chapter 4 of the **Management Standards and Procedures** contains prescriptions for a particular type of **habitat tree**, habitat patch or long-lived **understorey** species that are applicable to the **timber harvesting operations** in a **coupe** and the requirements of all applicable prescriptions in Chapter 4 have been complied with, compliance with the applicable prescriptions is taken to be compliance with this clause in respect of that **habitat tree**, habitat patch or long-lived **understorey** species."
- (2) In section 2.3.1 of the Principal Code **omit** "and the **Management Standards and Procedures**".
- (3) In section 2.3.1.1 of the Principal Code **omit** "and the **Management Standards and Procedures**".
- (4) In section 2.3.1.2 of the Principal Code—
 - (a) **omit** "or the **Management Standards and Procedures**";
 - (b) **omit** "and comply with the **Management Standards and Procedures**";
 - (c) for "regenerated" **substitute** "regenerated";
 - (d) for "rehabilitated" **substitute** "rehabilitated".
- (5) In section 2.3.1.3 of the Principal Code—
 - (a) after "roading" **omit** ",";
 - (b) after "values" **insert** ".".
- (6) In section 2.4.1.1 of the Principal Code—
 - (a) after "**operations**" **insert** "that consist of **road** planning";
 - (b) after "comply with" **insert** "applicable provisions in";
 - (c) **omit** "and relevant **road** planning measures specified within the **Management Standards and Procedures**".
- (7) In section 2.4.2.1 of the Principal Code—
 - (a) after "**operations**" **insert** "that consist of **road** design";
 - (b) **omit** "and relevant **road** design measures specified within the **Management Standards and Procedures**".
- (8) In section 2.4.3.1 of the Principal Code—

- (a) after "**operations**" insert "that consist of **road construction**";
 - (b) **omit** "and relevant **road construction** measures specified within the **Management Standards and Procedures**".
- (9) In section 2.4.4.1 of the Principal Code—
 - (a) after "**operations**" insert "that consist of **road maintenance**";
 - (b) **omit** "and relevant **road maintenance** measures specified within the **Management Standards and Procedures**".
- (10) In section 2.4.5.1 of the Principal Code, for "**Management Standards and Procedures**" **substitute** "**Code**".
- (11) In section 2.4.6.1 of the Principal Code, for "**Management Standards and Procedures**" **substitute** "**Code**".
- (12) In section 2.5.1.4 of the Principal Code **omit** "and the **Management Standards and Procedures**".
- (13) In sections 2.5.1.7 and 2.5.1.8 of the Principal Code **omit** "or the **Management Standards and Procedures**".
- (14) In section 2.5.1.9 of the Principal Code:
 - (a) for "sanctioned" **substitute** "**sanctioned**";
 - (b) for "Sanction" **substitute** "**Sanction**".
- (15) In sections 2.6.1.9 of the Principal Code for "section 2.3.1" **substitute** "section 2.2.1".

11 Chapter 4 Code Application - Plantation

In the first paragraph of Chapter 4 of the Principal Code, for "the State" **substitute** "the State".

12 Schedule 1

- (1) At the end of the Principal Code **insert** —

SCHEDULE 1 - Management Standards and Procedures

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Glossary

All **bold** terms included in Schedule 1 are defined within the **Code** Glossary.

Acronyms

ANU	The Australian National University
ASL	above sea level
B	buffer
CAR	comprehensive, adequate and representative reserve system
cm	centimetres
DBHOB	diameter at breast height (1.3m) over bark
DC	designated catchment identified in a forest management plan
EVC	ecological vegetation class
F	filter or filter strips
FMA	forest management area
FMZ	forest management zone
GMZ	general management zone
GRU	geographic representation unit
ha	hectares
HEMS	high elevation mixed species forest
km	kilometres
LFP	Long Footed Potoroo
m	metres
mm	millimetres
RFA	regional forest agreement
SAP	special area plan
SMZ	special management zone
SPZ	special protection zone
SWSCA	special water supply catchment area

1. Introduction

1.1 Scope

- 1.1.1.1 As part of the **Code**, the **Management Standards and Procedures** apply to all commercial **timber harvesting operations** conducted in Victoria's **State forests**.

1.2 Role

- 1.2.1.1 This Schedule provides standards and procedures to instruct managing authorities, harvesting entities and **operators** in interpreting the requirements set out in the main body of the **Code**.
- 1.2.1.2 These **Management Standards and Procedures** are in addition to the mandatory actions set out in the main body of the **Code**.

1.3 Application

- 1.3.1.1 Requests for exemptions or temporary variations to these **Management Standards and Procedures** will demonstrate to the satisfaction of the **Minister** or **delegate** that they are consistent with the Operational Goals and Mandatory Actions of the **Code**.

1.4 Procedure for seeking exemptions or temporary variations

- 1.4.1.1 If a provision in these **Management Standards and Procedures** provides for an exemption or temporary variation, the **managing authority** may submit an application form and any other required or supporting information to the **Minister**.
- 1.4.1.2 The **Minister** or **delegate** will consider the request, seeking additional information where required, and respond by providing a signed approval to the submitter.
- 1.4.1.3 Where the request is not **approved**, the response will include a justification of the decision.
- 1.4.1.4 The **Minister** or **delegate** will maintain a register of the outcomes for all exemption or temporary variation requests.

2. Planning and Record Keeping

2.1 FMZ and Planning Information

- 2.1.1.1 When planning **timber harvesting operations**, for information regarding the **FMZS** and locations of **Special Management Zones (SMZ)** or **Special Protection Zones (SPZ)**, the **managing authority** will refer to the **FMZ100** geospatial layer published on the Victorian Spatial Data Library.
- 2.1.1.2 Where an **SPZ**, a **protection area** or an **exclusion area** located within an **SMZ** is based on a modelled value or incorrectly mapped geographic feature and is determined not to exist in the field or is incorrectly located, the **managing authority** may notify the **Secretary** (or **delegate**) prior to commencement of the **timber harvesting operation** requesting an amendment to the boundary of the **SPZ**, **protection area** or **exclusion area**.

2.2 Communication and engagement

- 2.2.1.1 The **managing authority** must make maps and schedules of **coupes** that have been selected for **timber harvesting operations** and associated access roading available for public scrutiny prior to commencement of the operations. This information must provide:
- a) clear maps showing the location of **coupes** and major access roading (including extensions or upgrading of the permanent road network); and
 - b) approximate timing and duration of **timber harvesting operation** schedules.
- 2.2.1.2 Consult the following parties during the establishment or amendment of plans, allowing adequate time to ensure interests are considered and operational arrangements are resolved prior to commencement of operations:
- a) relevant bee keepers or bee keeping associations;
 - b) relevant **Department** regions regarding roading, burning and other relevant land management activities;
 - c) relevant water authorities when applying chemicals in a **special water supply catchment area**; and
 - d) relevant water supply authorities when **coupes** are proposed to occur within **special water supply catchment areas** in the Benalla-Mansfield **FMA** and North East **FMA**s; and
 - e) Melbourne Water regarding any **timber harvesting operations** which have potential to impact on the Water Resource Values within the Bunyip River, Tarago River, Thomson River and Yarra Tributaries **State forests**.

2.3 Traditional owner rights and interests

2.3.1.1 During planning for **timber harvesting operations**, have regard to obligations under the following:

- i. the *Native Title Act 1993*, including any **Indigenous Land Use Agreement** made under that Act;
- ii. the *Traditional Owner Settlement Act 2010*, including any **Recognition and Settlement Agreements, Land Use Activity Agreements** and **Natural Resource Agreements**;
- iii. **Aboriginal cultural rights** under the *Charter of Human Rights and Responsibilities Act 2006*.

2.4 Forest Coupe Plans

2.4.1.1 **Forest Coupe Plans** prepared for **timber harvesting operations** must:

- a) state the **net coupe area** that is planned to be harvested or tended;
- b) state the start date and season during which operations are scheduled to occur;
- c) identify the silvicultural systems or **tending** methods to be employed;
- d) identify requirements for the location*, design, construction, maintenance and use of **roads**, and closure of **temporary roads**;
- e) identify requirements for the design, siting*, construction, use, and **rehabilitation** of log **landings** and dumps and, where necessary, siting and rehabilitation measures for major **snig tracks**;
- f) describe **regeneration** procedures to be applied;
- g) identify and describe management actions for all relevant **coupe** values specified within the **Code** and the **FMZS**;
- h) describe measures employed to protect **biodiversity** such as:
 - iv. **habitat tree** retention;
 - v. provision for the continuity and replacement of old **hollow bearing trees** within the harvestable area; and
 - vi. retention of long-lived **understorey** species in appropriate numbers and configurations to allow for the **regeneration** of the vegetation types that existed within the **coupe** before the **timber harvesting operation** commenced.
- i) describe soil erosion hazard classes present within the **coupe** and measures employed to protect and rehabilitate soils and to maintain water quality and **river health**.

* The location of **temporary roads** and **coupe infrastructure** may be specified in the field and added subsequently to the commencement of operations.

2.4.1.2 **Forest Coupe Plans** must include a map which clearly and accurately identifies:

- a) the **net coupe area** that is planned to be harvested;
- b) areas within and adjacent to a **coupe** that are to be excluded from **timber harvesting operations** and associated activities, or to which special prescriptions apply (including **biodiversity** protection or habitat enhancement, water quality and aquatic habitat protection, landscape protection, **historic places** and **Aboriginal cultural heritage**); and
- c) **waterway**, historic tramway and water race crossing locations.

2.4.1.3 **Forest Coupe Plans** prepared for **road construction** or **significant road improvement operations** also identify:

- a) the class of **road** to be constructed / improved;
- b) maximum clearing width;
- c) sections of the **road** subject to narrowed or increased easements;
- d) methods and location of proposed crossings and drainage structures; and
- e) the **FMZs** impacted upon and any requirements relevant to approvals associated with roading operations within **SMZ** or **management areas** as well as **SPZ** or **protection areas**.

2.5 Coupe Size and configuration

2.5.1 Clearfall, seed tree or shelterwood 1 coupes

- 2.5.1.1 The maximum size of **clearfall**, **seed tree** or shelterwood **1 coupes** is 40 ha **net harvested area**.
- 2.5.1.2 The maximum aggregated size of **coupes** that contain **clearfall**, **seed tree** or **shelterwood 1** is 120 ha **net harvested area** within a 5 year period.

2.5.2 Shelterwood 2 coupes

- 2.5.2.1 **Shelterwood 2 coupes** may exceed 40 ha **net harvested area** if adequately stocked with eucalypts that are 5 or more years old.

2.5.3 Thinning coupes

- 2.5.3.1 The maximum size of a **thinning coupe** is 120 ha **net harvested area**.

2.5.4 Single tree selection coupes

- 2.5.4.1 Single tree selection **coupes** may be of any size.

2.5.5 Uneven-aged coupes

- 2.5.5.1 The maximum size of an **uneven-aged coupe** is 120 ha **net harvested area**.
- 2.5.5.2 No gaps or patches created by **seed tree harvesting** operations are to be more than 20 ha in area.
- 2.5.5.3 The cumulative area of gaps between 1 and 20 ha must comprise no more than 33 % of the **net harvested area**.
- 2.5.5.4 More than 66 % of the **net harvested area** must comprise areas stocked by **basal area** retention with the balance stocked with **regeneration**.

2.5.6 Salvage coupes

- 2.5.6.1 Salvage **coupes** may exceed standard area limits in accordance with the fire salvage harvesting area limits of Clause 8.1.3.1.

2.5.7 All coupe types

- 2.5.7.1 20 m is the minimum width of vegetation to be retained between **coupe** aggregates that have both been harvested within the last 5 years.
- 2.5.7.2 Adjacent partially stocked or unstocked areas may be incorporated into the **coupe** for **regeneration** provided that the **coupe** is within the **coupe** size limit.

3. Water Quality, River Health and Soil Protection

3.1 Waterway classification

3.1.1.1 Use the following categories when determining **buffer** (B) and **filter** (F) widths for **waterways** within and immediately adjacent to each **coupe**. Aids to the identification of each class of **waterway** are provided in the **Code** Glossary.

- a) **Permanent streams, pools and wetlands.**
- b) **Temporary streams.**
- c) **Drainage lines.**

3.2 Soil Erosion and Water Quality Risk Assessment

3.2.1 Statewide

3.2.1.1 Conduct field assessments to determine the soil erosion hazard and soil **permeability** classifications for an area proposed for any soil disturbing **timber harvesting operations** as follows.

3.2.1.2 Collect soil profile samples that reflect the variety of soils represented within the **coupe**.
Note: Significant changes in **forest** structure and composition often indicate a variation in soil type.

3.2.1.3 Score each soil factor using **Table 1 Soil susceptibility to breakdown** and **Table 2 Soil permeability** for each horizon within the soil profile to the anticipated depth of disturbance.

3.2.1.4 Calculate the soil susceptibility to breakdown rating for horizons A and B (and C if likely to be disturbed in operations) using **Table 1 Soil susceptibility to breakdown**.

3.2.1.5 Calculate the soil permeability rating for horizons A and B (and C if likely to be disturbed in operations) using **Table 2 Soil permeability**.

3.2.1.6 Calculate the soil erosion site factor rating for the site using **Table 3 Soil erosion site factor**. Use **Figure 1 Rainfall erosivity** contours in non-SI units for Victoria to determine the erosivity index.

3.2.1.7 Calculate the **soil erodibility** classification for horizons A and B (and C if likely to be disturbed in operations) using **Table 4 Soil erodibility classification**.

3.2.1.8 Calculate the soil erosion hazard classification for horizons A and B (and C if likely to be disturbed in operations) using **Table 5 Soil erosion hazard classification**.

3.2.1.9 Calculate the soil **permeability** classification for horizons A and B (and C if likely to be disturbed in operations) using

3.2.1.10

3.2.1.11 **Table 6 Soil permeability classification.**

- 3.2.1.12 Calculate the overall soil category for horizons A and B (and C if likely to be disturbed in operations) using
- 3.2.1.13
- 3.2.1.14 **Table 7 Overall soil category.**
- 3.2.1.15 Use the overall soil category for the horizon with the highest category to determine water quality risk as shown in **Table 8 Water quality risk.**

3.3 Waterway Protection

3.3.1 Statewide

- 3.3.1.1 Apply the appropriate protection to class of **waterway** as outlined in **Table 9 Minimum widths in metres for buffers (B) and filter (F) strips applicable to various waterway categories, in relation to water quality risk and slope.**

Notes:

- Slope is the average slope of the **coupe** area in the vicinity of the water body.
- **Buffers** and **filter strips** must be applied to each **waterway** class regardless of the origins of the channelling.
- The width of **buffer** areas and **filter strips** must be measured in the horizontal plane, from the edge of the saturated zone (at time of harvesting) or channel (whichever is greater), on each side of the **waterway**.

3.3.2 Bendigo FMA

- 3.3.2.1 **Drainage lines** are considered to be present if banks and/or eroded sections greater than 30 cm deep and greater than 10 m long exist. Distinctive **riparian vegetation** such as River Red Gum (*Eucalyptus camaldulensis*) will generally be absent. Where sections meeting these criteria occur within 50 m, the interconnecting depression is treated as part of the **drainage line**.
- 3.3.2.2 Machinery movement within 10 m of depressions occurring above **drainage lines** will be directed along the contour.

3.3.3 Mid Murray FMA

- 3.3.3.1 Exclude **timber harvesting operations** within 60 m from the high bank of the Murray River.
- 3.3.3.2 Exclude **timber harvesting operations** within 40 m from the high bank of the Gunbower Creek and the Ovens River.
- 3.3.3.3 Apply a 20 m **buffer** to main rivers, anabranches, lakes, billabongs and lagoons that maintain permanent open water at minimum river flows.
- 3.3.3.4 When water is present, a 10 m **buffer** applies to **temporary effluent** and/or **confluent streams**.
- 3.3.3.5 When water is absent, a 10 m **filter** applies to **temporary effluent** and/or **confluent streams**.
- 3.3.3.6 **Temporary effluent** and/or **confluent streams** have sharply defined channels, relatively deep flowing water and overland flow in the immediate vicinity during flood.
- 3.3.3.7 If distinctive **riparian vegetation** is present and wider than 3.3.3.1, **buffers** and **filters** are measured from the edge of the distinctive **riparian vegetation**.

3.4 Slope

3.4.1 Slope restrictions

- 3.4.1.1 Exclude **timber harvesting operations** from slopes over 30 degrees.
- 3.4.1.2 Exclude **timber harvesting operations** from slopes over 25 degrees in the East Gippsland **FMA** in areas with granite-based soils.
- 3.4.1.3 Up to 10% of the planned **net coupe area** can contain areas greater than the slope limits referred to in 3.4.1.1, 3.4.1.2, 3.5.1.1 and **Table 11 Water supply protection areas**, where the risk of mass soil movement has been managed accordingly.

3.5 Water supply protection areas

- 3.5.1.1 Apply the slope limits, seasonal closures, **buffer** and **filter strip** widths and other relevant management actions specified in **Table 11 Water supply protection areas** for **timber harvesting operations** and associated roading and **regeneration** in **water supply protection areas**.
- 3.5.1.2 Refer to **Table 11 Water supply protection areas** for actions that apply to **water supply protection area SMZs** in the Benalla-Mansfield **FMA**, the East Gippsland **FMA** and Midlands **FMA**.
- 3.5.1.3 Where any proposed **timber harvesting operations** are not in accordance with clauses 3.5.1.1 or 3.5.1.2, obtain exemption approval from the **Minister** or **delegate** in accordance with Section 1.4.
- 3.5.1.4 **Special water supply catchment areas** and **water supply protection areas** not listed in **Table 11 Water supply protection areas** do not require protection in addition to existing **Code** requirements.
- 3.5.1.5 In addition to **Table 11 Water supply protection areas**, in the Bunyip, Thomson and Tarago **special water supply catchment areas** and the Yarra Tributaries **State forests** the area harvested must not exceed the following limits measured as a 10-year rolling average:
 - a) Thomson - **Ash forests** 150 ha/year, **mixed species forests** 15ha/year;
 - b) Tarago - **Ash forests** 55 ha/year, **mixed species forests** 23ha/year;
 - c) Yarra Tributaries – **Ash forests** 52 ha/year, **mixed species forests** 15 ha/year; and
 - d) Bunyip – **Ash forests** 15 ha/year, **mixed species forests** 15 ha/year.
- 3.5.1.6 In addition to **Table 11 Water supply protection areas**, harvesting in the Learmonth Creek special water supply catchment must not be undertaken if it would cause:
 - a) harvesting of **Ash forest** in the catchment to exceed an average harvest of 7 ha per annum, which average is to be calculated progressively in each financial year (including as at 30 June in each financial year) using the area of **Ash forest** harvested in that financial year and the areas harvested in each of the preceding nine financial years; or
 - b) harvesting of **mixed species forest** in the catchment to exceed an average harvest of 3 ha per annum, which average is to be calculated progressively in each financial year (including as at 30 June in each financial year) using the area of **mixed species forest**

harvested in that financial year and the areas harvested in each of the preceding nine financial years.

- 3.5.1.7 In addition to **Table 11 Water supply protection areas**, in the Benalla-Mansfield **FMA**, the total area of **coupes** harvested using **even-aged** harvesting and **regeneration** systems, such as **clearfall** or **seed tree harvesting** operations, must not exceed 5% of the area of public land in designated catchments in any 3-year period.
- 3.5.1.8 In addition to **Table 11 Water supply protection areas**, in the Rocky and Betka River catchments in the East Gippsland **FMA**, no new **road** crossings may be built on major streams.

4. Biodiversity

4.1 Habitat Retention

4.1.1 Statewide

- 4.1.1.1 Retain **habitat trees** in accordance with the relevant **FMA** summary provided in **Table 12 Habitat tree prescriptions**.
- 4.1.1.2 Trees retained in **buffers** or **exclusion areas** that have been extended beyond minimum required widths or radius can contribute to **habitat tree** retention requirements.
- 4.1.1.3 Retain all living **large trees** and protect them from the direct effects of **timber harvesting operations** and **regeneration** burning. This includes not deliberately felling, falling into or damaging **large trees** during harvesting and **extraction**, and ensuring slash is not accumulated within 3m of the base of **large trees** immediately prior to **regeneration** burns.
- 4.1.1.4 Where possible, incorporate **large trees** in retained patches of **habitat trees** or expanded **buffers** or **exclusion areas**.
- 4.1.1.5 Include all **large trees** in a Large Tree Register.

4.1.2 Benalla/Mansfield FMA and North East FMA

- 4.1.2.1 When selecting **habitat trees**, prioritise live **hollow bearing trees** where they are present and trees of younger age classes that are likely to develop **hollows** in the longer term.
- 4.1.2.2 Where possible retain **dead** trees for **habitat trees**.
- 4.1.2.3 Retain **habitat trees** adjacent to areas of high value habitat and areas most easily protected from damage during harvesting and **regeneration** operations.
- 4.1.2.4 **Habitat trees** may be retained in groups/patches dispersed across the **coupe**.
- 4.1.2.5 **Seed trees** may be counted as **habitat trees**.

4.1.3 Bendigo FMA and Box-Ironbark forests in the Midlands FMA.

- 4.1.3.1 Permanently retain:
 - a) all trees (both standing **dead** or living) greater than 20 cm DBHOB with visible **hollows** where safe and practicable to do so. These trees may count towards retention requirements in clause (b) and (c);
 - b) at least 10 living trees per hectare between 30 cm and 39.9 cm DBHOB;
 - c) where they exist:
 - i). 2 living trees per hectare between 40 cm and 49.9 cm DBHOB inclusive; and
 - ii). 2 living trees per hectare between 50 and 59.9 cm DBHOB inclusive.
- unmerchantable** trees with healthy **crowns** should be preferentially retained;

- d) all trees greater than 60 cm DBHOB in high quality sawlog harvesting operations;
- e) all trees greater than 40 cm DBHOB in low quality sawlog and firewood harvesting operations;
- f) within **management areas** or **SMZ**, all trees greater than 40 cm DBHOB in high and low quality sawlog and firewood harvesting operations;
- g) all standing **dead** trees greater than 40 cm DBHOB;
- h) all living Yellow Box, Fryers Range Scentbark and Bealiba Ironbark trees. These trees may count towards retention requirements.

- 4.1.3.2 A whole of **coupe** approach should be adopted (numbers averaged over **coupe** area) to ensure that the best **habitat trees** are retained, including where these occur in groups.
- 4.1.3.3 Firewood harvesting within a **management area** or **SMZ** must be managed to ensure coarse woody debris levels are not reduced below pre-harvest levels.
- 4.1.3.4 All log sections larger than 40cm **diameter** with **hollows** larger than 10cm **diameter** must be retained.
- 4.1.3.5 The period between the next and subsequent sawlog harvesting operations will be at least 25 years to allow recruitment across all habitat classes. **Habitat trees** intended for permanent retention will not be permanently tagged or labelled. It is expected that these trees will be evident from their form.

4.1.4 Central Highlands FMAs

- 4.1.4.1 When selecting **habitat trees**, prioritise **hollow bearing trees** where they are present and trees most likely to develop **hollows** in the short term.
- 4.1.4.2 Scatter **habitat trees** across the **timber** harvesting **coupe** in **mixed species forest**.
- 4.1.4.3 Where possible, retain potential **hollow** bearing **ash** eucalypts in clumps to increase their protection from exposure, windthrow and fire.
- 4.1.4.4 No gap between retained vegetation is to be greater than 150m.
- 4.1.4.5 Retain **habitat trees** where they can be most easily protected from damage during **timber harvesting operations** and **site preparation** treatment.

4.1.5 East Gippsland FMA and Gippsland FMAs

- 4.1.5.1 When selecting **habitat trees**, prioritise old living trees with a range of **hollow** sizes. Where these are absent or not present in sufficient numbers, prioritise trees that are old enough to develop **hollows** during the next 50 years.
- 4.1.5.2 Stags and younger, smaller trees may be counted as **habitat trees** if trees of the type described in 4.1.5.1 are absent or not present in sufficient numbers.
- 4.1.5.3 Where possible, retain **habitat trees** in small clusters which include younger **regrowth** and **understorey**.
- 4.1.5.4 Distribute **habitat tree** clusters across the **coupe** with consideration of the proximity of other retained vegetation.

4.1.6 Horsham FMA

4.1.6.1 Retain trees that have signs that they are being actively utilised or occupied by **wildlife** as a priority over potential **habitat trees** and **dead** trees.

4.1.6.2 **Habitat trees;**

a) are large actively growing trees with a spreading form; and/or

b) have **hollows** present and forming.

4.1.6.3 Trees growing in ephemeral **wetlands** and within 20 m of the edge of the **wetland** may only be harvested using single tree selection. A 20 m **buffer** from the water line or saturated zone, wherever it occurs at the time of harvesting, also applies.

4.1.6.4 In areas of Red-tailed Black-Cockatoo potential habitat that is not protected by a **protection area**, **SPZ**, **management area** or **SMZ**, do not remove any **hollow bearing trees**, trees of the species Brown Stringybark or trees of the species Desert Stringybark with DBHOB > 45cm.

4.1.7 Midlands FMA, except the Box Ironbark forests

4.1.7.1 In the non **Box Ironbark forests**, the **habitat tree** numbers in **Table 12 Habitat tree prescriptions** are the maximum required.

4.1.7.2 Prioritise retention of **hollow bearing trees** or gum species as **habitat trees**.

4.1.8 Mid Murray FMA

4.1.8.1 **Habitat tree** requirements in **Table 12 Habitat tree prescriptions** are the minimum requirement.

4.1.8.2 When selecting **habitat trees**, prioritise **hollow bearing trees** where they are present and trees most likely to develop **hollows** in the short term.

4.1.8.3 In addition to **habitat tree** requirements in **Table 12 Habitat tree prescriptions**, retain all trees known to be used for nesting by significant **fauna** (e.g. Superb Parrot and Regent Parrot).

4.1.8.4 Retain all naturally fallen wood and any **dead** standing trees with **hollows**.

4.1.9 Otway FMA

4.1.9.1 **Habitat tree** numbers in **Table 12 Habitat tree prescriptions** are a minimum requirement.

4.1.9.2 Retain existing and potential **habitat trees** in regularly configured clusters or on the edges of **coupes**.

4.1.9.3 Design **coupe** boundaries and **habitat tree** clusters so there is no more than 200m between areas of retained habitat.

4.1.9.4 Where located on or adjacent to a **coupe** boundary, habitat patches are not included in the net harvest area of adjoining **coupes**.

4.1.10 Portland FMA

4.1.10.1 **Habitat trees:**

a) are living;

- b) have a DBHOB greater than 30cm;
- c) are fully **mature**;
- d) have existing **hollows** (in a minimum of 50% of trees retained for habitat); and
- e) cater for identified key species needs.

4.1.10.2 Prioritise retention of **habitat trees**:

- a) greater than 80cm **diameter**;
- b) in clusters rather than scattered throughout the **coupe**;
- c) located more than 20m of any **road**, track or **coupe** boundary likely to be used as a fire break; and
- d) located in places that extend or link **filter strips**, streams or other retained areas.

4.1.10.3 Retain all **dead** trees if they contain **hollows** and are greater than 50cm DBHOB. **Dead** trees are not counted in the minimum **habitat tree** requirements.

4.1.10.4 In areas of Red-tailed Black-Cockatoo potential habitat that is not protected by **SPZ** or **SMZ**, do not remove any **hollow bearing trees**, trees of the species Brown Stringybark or trees of the species Desert Stringybark with DBHOB > 45cm.

4.2 Fauna and Flora

4.2.1 Detection-based management

4.2.1.1 Detection based management obligations apply in any area that may be affected by current or planned **timber harvesting operations**, and in any area in which an obligation may affect the conduct of such **timber harvesting operations** (for example, if a **protection area** would include an area within which **timber harvesting operations** are proposed).

4.2.1.2 If evidence of the presence of a value listed in **Table 13 Rare or threatened fauna and invertebrate prescriptions** or **Table 14 Rare or threatened flora prescriptions** is identified, the **managing authority** must:

- a) notify the **Secretary**, providing details (including spatial information) of evidence and the value location; and
- b) unless the **Secretary** otherwise approves, take appropriate steps to **verify** evidence of the presence of the value.

Note: The **Secretary** may otherwise approve if the **Secretary** intends to take steps to **verify** the existence of the value.

4.2.1.3 If evidence of the presence of a value listed in **Table 13 Rare or threatened fauna and invertebrate prescriptions** or **Table 14 Rare or threatened flora prescriptions** is **verified**, apply and undertake any associated management action specified in the Table.

4.2.1.4 If a management action or other mandatory action includes a requirement to apply a **protection area** or a **management area**, the **managing authority** must (in addition to any other action):

- a) Provide information to the **Secretary** about the extent and boundary of the area proposed to be delineated as a **protection area** or **management area**;
- b) Follow any input or direction of the **Secretary** about the extent and boundary of the area (which must not be inconsistent with the **Code**);
- c) Delineate the boundary of the **protection area** or the **management area** in any applicable **Forest Coupe Plan** (consistently with the applicable requirement and any input or direction from the **Secretary**), including by updating the **Forest Coupe Plan** as the case requires; and
- d) Keep sufficient records of the boundaries of any part of an area for which there is not an applicable **Forest Coupe Plan** to ensure that the area is identifiable for the purpose of compliance with the **Code** and to enable that area to be delineated on any **Forest Coupe Plan** that subsequently includes that area.

4.2.1.5 In any **management area** that is required to be applied by these **Management Standards and Procedures**, the **managing authority** must (in addition to any other action):

- a) consult with the **Secretary** about proposed measures to ensure the persistence of a value across the **management area**; and
- b) ensure sufficient practical measures are undertaken to ensure the persistence of a value across the **management area**.

4.2.1.6 The **managing authority** must comply with the requirements of clause 4.2.1.2, 4.2.1.3, 4.2.1.4 and 4.2.1.5, either:

- a) prior to the commencement of **timber harvesting operations**; or
- b) if a requirement only arises after **timber harvesting operations** have commenced, as soon as possible after the requirement arises.

4.3 Vegetation communities

4.3.1 4.3.1 Box Ironbark

4.3.1.1 In the **Gippsland FMAs** exclude **selective harvesting** from **Box Ironbark forests** typically containing **Forest Red Gum** (*Eucalyptus tereticornis*), **Yellow Box** (*Eucalyptus melliodora*), **Coast Grey Box** (*Eucalyptus bosistoana*) and **Red Ironbark** (*Eucalyptus tricarpa*). Silvicultural practices that promote **regeneration** of these species is permitted.

4.3.1.2 In the **East Gippsland FMA** exclude **selective harvesting** from **Box Ironbark forests** typically containing **Red Ironbark** (*Eucalyptus tricarpa*), **Gippsland Grey Box** (*Eucalyptus bosistoana*), **Red Box** (*Eucalyptus polyanthemos*), **Blue Box** (*Eucalyptus baueriana*) and **Yellow Stringybark** (*Eucalyptus muelleriana*). The use of **seed tree harvesting** systems is permitted to restore the original species mix when combined with:

- a) cutting stumps of desired species to a maximum height of 30 cm, to encourage coppice growth;
- b) supplementary planting and sowing where necessary;
- c) removing unproductive trees of the less-preferred species to remove **overwood** competition; and
- d) **thinning** of advanced regrowth.

4.3.2 Heathland

- 4.3.2.1 Avoid **road construction** across areas of **heathland** or within 40m of **heathlands** unless no reasonable alternative exists.
- 4.3.2.2 In the **Gippsland FMAs**, exclude Wet **Heathland**, Clay **Heathland** and Riparian Scrub Mosaic **EVCs** from harvesting. Protect these **heathland EVCs** with a 40m **buffer**.
- 4.3.2.3 In the **East Gippsland FMA** and **Otway FMA** where evidence of **heathland** is found in the field and it isn't already classified as **SPZ**, apply a **protection area** prior to commencement of the **timber harvesting operation** consistent with management actions listed in **Table 15 Detection based rules for Heathland, Snow Gum, Swamp Gum and Heath vegetation communities**.
- 4.3.2.4 In the **Central Highlands** and **North East FMAs**, where evidence of **heathland** is found in the field and it isn't already classified as **SPZ**, apply a **protection area** over the identified **heathlands**, however there is no **buffer** required.

4.3.3 Montane Riparian Thicket (MRT)

- 4.3.3.1 In the Tambo **FMA** protect small **stands** of **MRT** between 0.01ha and 0.5ha and less than 10m wide with a 10m **filter strip** and **stands** of **MRT** wider than 10m with a 20m wide **filter strip**. Protect **stands** of **MRT** greater than 0.5ha with a 20m **buffer** from the edge of the Mountain Tea-tree **canopy**.
- 4.3.3.2 In all other **FMAs** apply the **heathland** prescriptions listed above in 4.3.2.
- 4.3.3.3 **MRT stands** must contain at least 40 % **canopy** cover of Mountain Tea-tree (*Leptospermum grandifolium*) and at least two key **understorey** species from the **MRT** definition in the **Glossary**. Small gaps in the Mountain Tea-tree **canopy** may occur at intervals up to 10m in length. Where **MRT stands** are separated by **canopy** gaps greater than 10m, they are to be treated as individual **stands**.

4.3.4 Old growth forest

- 4.3.4.1 Within the **Central Highland's FMAs**, apply a 100m **buffer** around all **stands** of modelled **Ash old growth forest** that are depicted in the **Department's** corporate spatial datasetMOG2009.shp, and confirmed during field assessment by the **managing authority** or the **Department** to be **Ash type forest**.

4.3.5 White Cypress Pine, Buloke, Grey Box, Yellow Box and Grey Box vegetation communities

- 4.3.5.1 In the Mid Murray **FMA**, exclude **timber harvesting operations** within any White Cypress Pine (*Callitris glaucophylla*), Buloke, Grey Box (*Eucalyptus macrocarpa*), Yellow Box (*Eucalyptus melliodora*) and Grey Box vegetation communities.

4.3.6 Snow Gum and Swamp Gum

- 4.3.6.1 For vegetation communities dominated by Snow Gum (*Eucalyptus pauciflora*) on Mt Cole and Swamp Gum (*Eucalyptus ovata*) near Enfield in the Midlands **FMA** that aren't already classified as **SPZ**, apply a **protection area** prior to commencement of the **timber harvesting**

operation consistent with management actions listed in **Table 15 Detection based rules for Heathland, Snow Gum, Swamp Gum and Heath vegetation communities.**

4.3.7 Rainforest canopy species

- 4.3.7.1 **Rainforest canopy** species are defined as shade tolerant tree and vine species which are able to regenerate below an undisturbed **canopy**, or in small **canopy** gaps resulting from locally recurring minor disturbances, such as isolated windthrow or lightning strike, which are part of the **rainforest** ecosystem. Such species are not dependent on fire for their **regeneration**.
- 4.3.7.2 In East Gippsland, Warm Temperate **Rainforest canopy** species are: Lilly Pilly (*Acmena smithii*), Kanuka (*Tristania laurina*), Sweet Pittosporum (*Pittosporum undulatum*), Blackwood (*Acacia melanoxylon*), Blue Olive-berry (*Elaeocarpus reticulatus*), Muttonwood (*Myrsine howittiana*), Jungle Grape (*Cissus hypoglauca*), Boobialla (*Myoporum insulare*) and Yellow-wood (*Acronychia ablongifolia*).
- 4.3.7.3 In East Gippsland, Cool Temperate **Rainforest canopy** species are: Southern Sassafras (*Atherosperma moschatum*), Black Olive-berry (*Elaeocarpus holopetalus*), Blackwood (*Acacia melanoxylon*), Gippsland Waratah (*Telopea oreades*), Privet Mock-olive (*Notelaea ligustrina*), Banyalla (*Pittosporum bicolor*), Goonmirk Rocks Errinundra Plum Pine (*Podocarpus sp. aff. Lawrencei*) and Errinundra Pepper (*Tasmannia xerophila subsp. robusta*).
- 4.3.7.4 In the **Central Highlands FMAs** and Central Gippsland **FMA**, Cool Temperate **Rainforest canopy** species are: Myrtle Beech (*Nothofagus cunninghamii*), Southern Sassafras (*Atherosperma moschatum*), Blackwood (*Acacia melanoxylon*), Banyalla (*Pittosporum bicolor*), Mountain Pepper (*Tasmannia lanceolata*) and Mountain Tea-tree (*Leptospermum grandifolium*).
- 4.3.7.5 In the Central Gippsland **FMA**, Warm Temperate **Rainforest canopy** species are: Sweet Pittosporum (*Pittosporum undulatum*), Muttonwood (*Myrsine howittiana*) and Blackwood (*Acacia melanoxylon*).
- 4.3.7.6 In the Otway's, Cool Temperate **Rainforest canopy** species are: Myrtle Beech (*Nothofagus cunninghamii*) and Blackwood (*Acacia melanoxylon*).
- 4.3.7.7 In all areas, **forest stands** that are dominated by single (contain over 50%), non-diverse **stands** of the following species and which contain few other **rainforest** characteristics, are not considered **rainforest**: Blackwood (*Acacia melanoxylon*), Mountain Teatree (*Leptospermum grandifolium*), Sweet Pittosporum (*Pittosporum undulatum*), Errinundra Pepper (*Tasmannia xerophila subsp. robusta*) or Mountain Pepper (*Tasmannia lanceolata*).
- 4.3.7.8 Eucalypts are not classified as broad-leaved **rainforest** species and therefore Eucalypts do not contribute to the projected foliage cover when identifying **stands** of **rainforest**.

4.3.8 Rainforest field recognition and delineation

- 4.3.8.1 **Rainforest stands** are identified in the field as **forest** of at least 0.1 hectares where the projected foliage cover of the broadleaved tree **canopy** is greater than 70 % and is contributed by 1 or more of the **canopy** tree species listed above in sections 4.3.7.2 to 4.3.7.6 and where section 4.3.7.7 is not met.
- 4.3.8.2 Projected foliage cover is the proportion of ground covered by the vertical projection of foliage and branches from **rainforest canopy** trees. Any potential contribution of **understorey** species such as tree ferns is not counted toward assessment of projected foliage cover.
- 4.3.8.3 Linear **stands** are defined as **stands** of **rainforest** which are elongated and which are between 20m and 40m wide. Linear **stands** of **rainforest** usually occur along **drainage lines**

or small streams. Linear **stands** may be “overshadowed” by eucalypts from the adjoining eucalypt **forest**.

- 4.3.8.4 The minimum area for recognition of a **rainforest stand** is 0.1 ha and the minimum narrowest width is 20m. (i.e. 20m by 50m).
- 4.3.8.5 Special care is required when assessing the boundary between identified **rainforest stands** and adjacent wet sclerophyll **forest stands** where disturbance such as fire has temporarily removed the **rainforest canopy** or has created temporary **canopy** gaps within the **stand** of **rainforest**. In cases where the **canopy** disturbance is less than ten years old and further guidance as to the boundary between identified **rainforest** and adjacent wet sclerophyll **forest stands** is required, the ‘differential species approach’ is to be used (Differential species keys for the delineation of **rainforest** boundaries can provide reference photos)
- 4.3.8.6 Where the **rainforest canopy** is absent and there is little or no evidence of the **regeneration** of a **rainforest canopy** after 10 years following disturbance the ‘differential species approach’ should not be used to identify **rainforest** and the **stand** should no longer be considered to be **rainforest**.
- 4.3.8.7 Where the ‘differential species approach’ is utilised, the **rainforest** boundary is the point where the number of **rainforest** species equals the number of eucalypt **forest** species i.e. the line along which the **floristic** signals are of equal strength. This approach would be used where the **rainforest canopy** tree cover reduces gradually from 70% projected foliage cover. (gradual transition is a transition from 70% **rainforest** species projected foliage cover to 70%non-**rainforest** species projected foliage cover over a distance greater than approximately 10 meters)

4.3.9 Rainforest protection measures

- 4.3.9.1 Protect all **rainforest stands** from **timber harvesting operations** as follows:
- a) Exclude non linear **stands** that are 0.1ha or more in size but less than 0.4ha from **timber harvesting operations**. These **stands** do not require a **buffer**.
 - b) Exclude linear **stands** that are at least 0.1ha but are less than 0.2ha from **timber harvesting operations**. These **stands** do not require a **buffer**.
 - c) Exclude linear **stands** that are at least 0.2ha but are less than 0.4ha from **timber harvesting operations**. Protect these **stands** with a 20m **buffer**.
 - d) Exclude all **rainforest stands** (including linear **stands**) equal to or exceeding 0.4ha from **timber harvesting operations**. Protect these **stands** with a 40m **buffer** except for **rainforest stands** in the **Central Highlands FMAs** and the **Gippsland FMAs** where 4.3.9.2 below must be complied with.
 - e) Distribute slash away from retained **rainforest stands** or **buffers**.
- 4.3.9.2 In areas categorised as being of National, State or Regional significance in the **Sites of Significance for Rainforest** spatial layer where evidence of **rainforest** greater in size than 0.4ha is found in the field and it isn’t already classified as **SPZ**, apply a **protection area** prior to commencement of the **timber harvesting operation** consistent with management actions listed in **Table 16 Buffer widths for Rainforest Sites of Significance by category and priority**.

4.4 Pests, weeds and diseases

4.4.1 Diseases

4.4.1.1 Minimise the risk of introduction or movement of Cinnamon Fungus (*Phytophthora cinnamomi*) and Root Rot (*Armillaria*) from a **forest disease control area** into other areas, by:

- a) washing machinery before moving from a **forest disease control area** into other areas;
- b) restricting activities where the movement of soil or gravel is likely to cross from a **forest disease control area** into other areas;
- c) minimising the relocation or movement of gravel or soil during **road** and track construction or maintenance works, or logging operations within a **forest disease control area**;
- d) restricting or controlling drainage water **run-off** from **roads** and tracks to minimise **run-off** from a **forest disease control area** into other areas;
- e) testing gravel from **forest disease control areas** and using only uncontaminated gravel in other areas; and
- f) cleaning and disinfecting vehicles, machinery, tools and equipment used within a **forest disease control area**.

4.4.1.2 Minimise the spread of Myrtle Wilt (*Chalara australis*) when operating in a **forest disease control area** by:

- a) protecting individual Myrtle Beech (*Nothofagus cunninghamii*) trees;
- b) sterilising equipment with anti-fungal agent or warm water and soap prior to moving into a new area;
- c) pruning Myrtle Beech (*Nothofagus cunninghamii*) that are subject to ongoing damage by vehicles; and
- d) immediately treating wounds on Myrtle Beech (*Nothofagus cunninghamii*) (including those left by pruning) with a commercial, waterproof wound sealant.

4.4.2 Weeds

4.4.2.1 Conduct a pre-harvest assessment to determine the type and extent of weeds on the **coupe** and on associated **coupe access roads**.

4.4.2.2 Conduct a post-harvest assessment to determine the type and extent of weeds on the **coupe** and associated **coupe access roads** in the first spring after completion of **site preparation** and establishment and during the **stocking** survey.

4.4.2.3 Where the assessments identify the **timber harvesting operation** has introduced or exacerbated weeds in a **coupe**, prepare a weed management plan and implement a weed control program.

4.4.2.4 Record any areas to be treated on a map in the **Forest Coupe Plan** and mark in the field as necessary prior to treatment.

5. Important values

5.1 Heritage, historic places and Aboriginal cultural heritage

- 5.1.1.1 During planning for **timber harvesting operations**, have regard to obligations under relevant heritage legislation including the:
- Heritage Act 2017*,
 - Aboriginal Heritage Act 2006*.
- 5.1.1.2 Ensure relevant databases are consulted prior to the commencement of **timber harvesting operations** including the:
- Victorian Heritage Register,
 - Victorian Heritage Inventory,
 - Aboriginal Cultural Heritage Register and Information System (ACHRIS) public map,
 - Forest Management Zoning Scheme**.
- 5.1.1.3 Where a **historic place** or **Aboriginal cultural heritage** is present and represented within the **Forest Management Zoning Scheme**, comply with zoning and management actions. Where a **historic place** or **Aboriginal cultural heritage** is present and not represented within the **Forest Management Zoning Scheme**, relevant heritage laws may still apply.
- 5.1.1.4 Where there is evidence of the presence of a **historic place** or **Aboriginal cultural heritage** that is not or may not be registered under relevant heritage legislation, ensure the evidence of the **historic place** or **Aboriginal cultural heritage** is reported to the **Secretary** and to any person or body responsible for the relevant legislation, and the **historic place** or **Aboriginal cultural heritage** is protected from **timber harvesting operations** (subject to obtaining any relevant permission under the applicable heritage legislation).

5.2 Landscape Sensitivity Areas

5.2.1 Central Highlands FM As

- 5.2.1.1 Retain all **mature** trees within 20m of the Monda Track.
- 5.2.1.2 Apply a 50m **buffer** either side of La La Falls walking track.
- 5.2.1.3 Apply a 50 m **buffer** either side of Island Creek walking track and a 100m **buffer** around the Ada Tree.
- 5.2.1.4 Apply an 80m **buffer** upslope and 20m **buffer** downslope of aqueducts in the Historic and Cultural Features Reserves in Rubicon State Forest.

Foreground Seen Area Management (0 – 500 m)

- 5.2.1.5 In the foreground, within 500m seen from the 'Places' listed as 'Landscape Features', 'Scenic Drives' and 'Designated Lookouts' in **Table 17 Landscape management prescriptions**,

manage **timber harvesting operations** to ensure landscape alterations are temporary, subtle and not evident to the casual observer.

- 5.2.1.6 In the foreground, within 500m seen from the 'Places' listed as 'Scenic Drives' and 'Designated Lookouts' in **Table 17 Landscape management prescriptions**, use a minimum 20m vegetation **buffer** to screen **timber harvesting operations** (except **selective harvesting operations**) and new **road** alignments from view.

Middleground seen area management (500m – 6.5km)

- 5.2.1.7 In the middleground, between 500m and 6.5km, seen from the 'Places' listed as 'Landscape Features' in **Table 17 Landscape management prescriptions**:

- (a) manage **timber harvesting operations** to ensure landscape alterations are only subtly apparent within 5 years of the operation; and
- (b) shape, position and time **timber harvesting operations** and new **roads** to minimise their visual impact.

5.2.2 East Gippsland FMA

- 5.2.2.1 Within the 'Places' listed as 'Landscape Features' described in **Table 17 Landscape management prescriptions**, limit the area of **coupes** which are highly visible from Gelantipy Road to 20ha and leave at least 3 years between harvesting of adjacent **coupes**.

Foreground seen area management (0 – 500 m)

- 5.2.2.2 In the foreground, within 500m seen from the 'Places' listed as 'Landscape Features', 'Scenic Drives' and 'Designated Lookouts' listed in **Table 17 Landscape management prescriptions**, manage **timber harvesting operations** to ensure landscape alterations are temporary, subtle and not evident to the casual observer.
- 5.2.2.3 In the foreground, within 500m seen from the 'Places' listed as 'Scenic Drives' and 'Designated Lookouts' in **Table 17 Landscape management prescriptions**, use a minimum 20m vegetation **buffer** to screen **timber harvesting operations** (except **selective harvesting operations**) and new **road** alignments from view.

Middleground seen area management (500m – 6.5km)

- 5.2.2.4 In the middle ground, between 500m and 6.5km, seen from the 'Places' listed as 'Scenic Drives' and 'Designated Lookouts' in **Table 17 Landscape management prescriptions**:
- a) manage **timber harvesting operations** to ensure landscape alterations are only subtly apparent within 2 years of the operation; and
 - b) shape, position and time **timber harvesting operations** and new **roads** to minimise their visual impact.

Background ridgeline management

- 5.2.2.5 Design **timber harvesting operations** so that **clearfall** and skyline 'notches' are not apparent from the 'Places' listed as 'Scenic Drives' and 'Designated Lookouts' listed in **Table 17 Landscape management prescriptions**.

5.2.3 Gippsland FMAs

- 5.2.3.1 Plan and implement **timber harvesting operations** in areas zoned as **SMZ** for landscape values in a manner that ensures the scenic value is maintained.

- 5.2.3.2 In the middle ground seen from the 'Places' listed as 'Landscape Features' listed in **Table 17 Landscape management prescriptions**, design **timber harvesting operations** and new **roads** to minimise their visual impact.

5.2.4 Midlands FMA

Foreground seen area management (0 – 500m)

- 5.2.4.1 In the foreground, within 500m seen from the 'Places' listed as 'Scenic Drives' and 'Designated Lookouts' listed in **Table 17 Landscape management prescriptions** manage **timber harvesting operations** to ensure landscape alterations are temporary, subtle and not evident to the casual observer.
- 5.2.4.2 In the foreground, within 500m seen from the 'Places' listed as 'Scenic Drives' and 'Designated Lookouts' in **Table 17 Landscape management prescriptions**, use a minimum 20m vegetation **buffer** to screen **timber harvesting operations** (except **selective harvesting operations**) and new **road** alignments from view.

Middleground seen area management (500m – 6.5km)

- 5.2.4.3 In the middle ground, between 500m and 6.5km, seen from the 'Places' listed as 'Scenic Drives' and 'Designated Lookouts' in **Table 17 Landscape management prescriptions**:
- a) manage **timber harvesting operations** to ensure landscape alterations are only subtly apparent within 2 years of the operation; and
 - b) shape, position and time **timber harvesting operations** and new **roads** to minimise their visual impact.

5.2.5 Mid Murray FMA

- 5.2.5.1 Within the landscape management **SMZs**, manage **timber harvesting operations** as follows:
- a) retain large old trees close to the **roads** (subject to public safety);
 - b) during peak periods of visitor use, conduct only those **timber harvesting operations** and silvicultural works (like **thinning**) which maintain visual amenity; and
 - c) ensure harvesting debris is removed from the corridor.
- 5.2.5.2 Site log **landings** and sleeper cutting ducks at least 60m from **roads** subject to landscape management **SPZs**.

5.2.6 North East FMAs

- 5.2.6.1 For Indicative National Estate natural landscapes, the following management directions apply:
- a) At Mt. Cudgewa/Rogers Creek, design **coupes** to minimise impact on view from Henlow (Tallangatta Valley);
 - b) At Lower Howqua North/Red Hill, design **coupes** to minimise impact on view from Mt. Buller;
 - c) At Mt. View (Snake-Edwards Divide), design **coupes** to minimise impact on view from Mt. Skene Road.
- 5.2.6.2 For the Indicative National Estate values at Eskdale Spur and Mt Emu, design **coupe** to minimise impact on view from Kiewa Valley Highway.
- 5.2.6.3 For the Indicative National Estate value (natural, aesthetic) along Omeo Highway and at Mt. Wills Historic Area:

- a) Plan **timber harvesting operations** between Bogong Saddle and Glen Wills on the Omeo Highway to ensure no more than 10% of the length of roadside should be less than 3 years old; and
- b) Harvesting adjacent to or immediately opposite a recently harvested **coupe** may only proceed when the **regeneration** of the initial harvested area is at least 3 years old.

5.2.6.4 Plan and implement **timber harvesting operations** and new **road construction** in existing landscape **SMZ** in a manner that ensures the scenic value is maintained.

5.2.6.5 In the middle ground seen from the 'Places' listed as 'Landscape Features' in **Table 17 Landscape management prescriptions**, design **timber harvesting operations** and new **roads** to minimise their visual impact.

5.3 Apiary

5.3.1 Bendigo FMA

5.3.1.1 When planning harvesting in patches of summer-flowering Red Ironbark **stands**, ensure that potential short-term flowering reductions resulting from harvesting are not concentrated in time or location.

5.3.2 Gippsland Forest Apiary Plan Area

5.3.2.1 Within a 1km radius of Apiary Zone 1 sites (sites of high importance to the apiary industry), manage **timber harvesting operations** to:

- a) maximise the proportion of older age **stands**;
- b) retain at least 66% of **State forest** at more than 40 years of age;
- c) retain at least 66% of Yellow Stringybark (*Eucalyptus muelleriana*) and Red Box (*Eucalyptus polyanthemus*) **stands** in **State forest** in the **mature** and/or **over-mature** age class; and
- d) retain all individual Blue Box (*Eucalyptus baueriana*) trees.

5.4 Recreation

- 5.4.1.1 For developed recreation facilities not included in the **SMZ** or **SPZ** components of the **FMZS**, exclude **timber harvesting operations** within 40m. Recreation facilities are considered to be developed if they include fixed structures, campsites, and/or signage that is maintained by the **land manager** or an authorised operator.
- 5.4.1.2 For the recreation sites listed in **Table 18 Recreation sites**, document and **manage timber harvesting operations** to maintain the value of the place.
- 5.4.1.3 Within the Australian Alps Walking Track (AAWT) **SPZ**:
 - (a) construct and maintain **roads** that cross the AAWT in a manner that considers the needs of walkers using the track; and
 - (b) consider the use of alternative **extraction** routes during harvesting operations to protect the AAWT.

5.5 Research

- 5.5.1.1 In the **Gippsland FMAs**, **Midlands FMA** and **North East FMAs** refer to **Table 19 Research sites** for prescriptions applicable to research locations and projects.
- 5.5.1.2 In Mid Murray **FMA**, exclude **timber harvesting operations** that are incompatible with the objectives for **sanctioned** research projects, until such time as the areas are no longer required.
- 5.5.1.3 In the **Central Highlands FMA**, exclude **timber harvesting operations** within 50m of registered ANU Monitoring sites at which long-term ecological monitoring is being conducted.

5.6 Fuel Hazard ratings in Fire Management Zones

- 5.6.1.1 The scheduling of **timber harvesting operations** and **planned burning** should occur to ensure that areas are **clearfall** or **seed tree** harvested less than 12 months prior to planned burning.
- 5.6.1.2 Failure to comply with clauses 5.6.1.3 through to 5.6.1.6 may result in the **Department** undertaking planned burning in the **coupe**. Where this occurs, the **managing authority** or **harvesting entity** is responsible for ensuring **regeneration** standards are met post planned burning.
- 5.6.1.3 The time frame for ensuring that the overall **fuel hazard ratings** are met commences from **coupe** completion (i.e. not temporary closure). A maximum of 2 years from **coupe** commencement is allowed if temporary clearances are applied to a **coupe**.
- 5.6.1.4 In Asset Protection Zones defined in the *Code of Practice for Bushfire Management on Public Land 2012*:
 - a) The overall **fuel hazard rating** for a harvested **coupe** must be less than or equal to moderate:
 - i. during harvesting if harvesting is conducted during the fire season; and
 - ii. within 12 months of harvesting.

- b) **Clearfall** and **seed tree harvesting** is not permitted in more than 1ha of the **gross coupe area**.
- c) In any five year period the area harvested using **thinning** or **selective harvesting** must not exceed 5 % of the **GMZ** or **SMZ** in that Asset Protection Zone measured as a rolling average from 1 July 2012.

5.6.1.5 In Bushfire Management Zones defined in the *Code of Practice for Bushfire Management on Public Land 2012*:

- a) In any five year period the area harvested using **clearfall** or **seed tree harvesting** must not exceed 1 % of the **GMZ** or **SMZ** in that Bushfire Management Zone measured as a rolling average from 1 July 2012.
- b) The overall **fuel hazard rating** for a **clearfall** or **seed tree harvested coupe** must be less than or equal to high within 12 months of harvesting.
- c) In any five year period the area harvested using **thinning** or **selective harvesting** must not exceed 4 % of the **GMZ** or **SMZ** in that Bushfire Management Zone measured as a rolling average from 1 July 2012.
- d) Thinned or selectively harvested **coupes** will be burnt by the **Department** as part of future planned burns. These burns will be conducted at least 18 months post harvest.

5.6.1.6 If any part of a **coupe** is within 1.5km of private property, and any part of that coupe is also within a Landscape Management Zone as described in the *Code of Practice for Bushfire Management on Public Land 2012*, the overall **fuel hazard rating** for that **coupe** if harvested (unless harvested using **selective harvesting** or **thinning**) must be less than or equal to high within 12 months of harvesting.

6. Roding

6.1 Road planning

- 6.1.1.1 Plan new **roads** and **significant road improvement operations** to minimise construction through **management areas**, **SMZ**, **protection areas**, **SPZ**, wet, unstable areas, and slopes greater than 30 degrees.
- 6.1.1.2 Application may be made to the **Minister** or **delegate** to obtain approvals for **road construction** (including **coupe access** and **in-coupe roads**) or **significant road improvement operations** proposed to be roading activities conducted in **protection areas** or **SPZ** in accordance with Section 1.4.
- 6.1.1.3 Seek engineering advice for **road** alignments traversing cross slopes of 30 degrees or greater or 25 degrees and greater in areas of high soil erodability.
- 6.1.1.4 Identify the intended class of a new **road** or **road** upgrade in accordance with the appropriate service function description in **Table 20 Road classification system**
- 6.1.1.5 Design new **roads** and **road** upgrades to conform to the geometric design standards in **Table 21 Guidelines to the main geometric design standards – unsealed roads** for the intended **road** class.

6.1.2 Clearing Widths

- 6.1.2.1 Minimum clearing widths for **roads** are specified in **Table 22 Minimum clearing widths (m) required for typical road construction**
- 6.1.2.2 When planning clearing widths for **road** intersections on **permanent roads** include the minimum formation width plus any additional width required for the construction of batters.
- 6.1.2.3 Where a slashed verge is necessary, plan clearing widths for **permanent roads** sufficiently wide to enable efficient control of unwanted **regrowth**.
- 6.1.2.4 Limit clearing widths to those specified in **Table 22 Minimum clearing widths (m) required for typical road construction** plus any additional width required to construct batters.

6.2 Road construction

- 6.2.1.1 Undertake **road construction** when rainfall and soil conditions minimise the risk of erosion and impact on water quality, and when soil moisture is adequate to achieve compaction and stabilisation of the sub-grade.
- 6.2.1.2 Clear **road** alignments prior to **road** formation.
- 6.2.1.3 For construction of **permanent roads**, remove all stumps, logs and other debris from within the formed width of the **road** site.
- 6.2.1.4 Where **road construction** requires the removal of topsoil in large quantities maintain the topsoil in a stockpile where practicable, clear of logging debris for use in batter stabilisation, **snig track rehabilitation** or other **coupe infrastructure** rehabilitation.
- 6.2.1.5 Create table drains by extending the **road** when it is formed, and not by subsequent excavation.
- 6.2.1.6 Limit earthworks to the least possible to achieve the **road** design specification.
- 6.2.1.7 At the completion of **permanent road construction** operations, notify the **Department** of the location of the **road** (so that the **road** may be included on the **Department** Road Register).

6.2.2 Fill Batter Construction

- 6.2.2.1 Minimise fill batters from covering the base of live **retained trees**.
- 6.2.2.2 Only use clean and weed free mulch in batter rehabilitation works.
- 6.2.2.3 Stabilise fill batters using mechanical consolidation where practical, to manage any soil movement away from the fill area.

6.2.3 Surfacing

- 6.2.3.1 Consolidate sub-grades before placing pavement material.
- 6.2.3.2 Consolidate and level the base course material prior to placing the wearing course material.
- 6.2.3.3 On **permanent roads** use surfacing materials appropriate to passenger vehicles and **timber harvesting operations**.

6.2.4 Road Drainage

- 6.2.4.1 The maximum distance between drainage structures for **road** grade and soil erosion hazard is specified in **Table 23 Maximum distance between drainage structures**.
- 6.2.4.2 Construct cross-drains at an angle sufficient to discharge any water from the surface of the **road**.
- 6.2.4.3 On soils of high erosion hazard, use temporary sediment traps to prevent erosion during **road construction**.
- 6.2.4.4 Appropriate discharge areas for drainage include:
 - a) a strip of undisturbed vegetation at least 20 m wide;
 - b) a rock spill; or

c) some other structure that dissipates the velocity of drainage flows.

6.2.4.5 Place drainage structures at least 20 m from permanent or **temporary streams**, to allow discharge onto undisturbed vegetation and to maximise the flow distance between the drainage outlet and the **waterway**.

6.2.4.6 Where it is not practical to comply with clause 6.2.4.5, and a drainage structure must be located within 20 m of a permanent or **temporary stream**:

- a) use **crown** or cross fall techniques to drain **roads** into undisturbed vegetation; or
- b) pass drainage through an appropriate sediment control structure such as a sediment pond or silt trap before entering a permanent or **temporary stream**.

6.2.4.7 Construct table drains to:

- a) allow water to flow, without ponding;
- b) include **run-offs** of sufficient length to allow the table drain and **run-offs** to be cleaned;
- c) be supported by rock or otherwise stabilised in soils of a high erosion hazard; and
- d) have silt traps constructed at the end if discharging directly into a stream or **wetland buffer**.

6.2.5 Culverts

6.2.5.1 Culverts used in **permanent roads** are a minimum of 375 mm in **diameter**.

6.2.5.2 Culverts used in **temporary roads** are a minimum of 300mm in **diameter**.

6.2.5.3 All culverts are designed to withstand a 1 in 10 year rainfall event.

6.2.5.4 Construct culverts in catchment areas exceeding 100ha in accordance with engineering advice.

6.2.5.5 On **drainage lines**, stream and river crossings or soils of High Erosion Hazard place sandbags, **timber**, concrete, or rock at the head of the culvert and at the point of discharge to hold the culvert in place and protect it from erosion.

6.2.5.6 Include a **road** sump for all culverts on Class 5C and higher **roads**.

6.2.5.7 If constructed of concrete, have a minimum cover of 600 mm as measured from the **road** surface to the top of the pipe and a maximum cover as specified in the Installation of Steel-Reinforced Concrete Drainage Pipelines, Concrete Pipe Association of Australasia.

6.2.5.8 If constructed of a material other than concrete, have a minimum cover over the pipe as recommended in the manufacturer's specifications.

6.2.5.9 On **permanent streams**, include a fish ladder if the **diameter** of the culvert is greater than 750 mm.

6.2.5.10 Protect any fill face upstream or downstream of a culvert in a way that prevents erosion.

6.2.5.11 Ensure culverts do not project above the bed of a **waterway** in a way which may prevent the passage of aquatic **fauna**.

6.2.5.12 Where culvert construction diverts water from its natural course, return water to its natural course over a flume, rock spill, or other hard surface.

6.2.6 Bridges

- 6.2.6.1 Design bridges in accordance with the **Department's Bridge and Major Culvert Policy**.
- 6.2.6.2 Design bridges to prevent constriction of any clearly defined channel.
- 6.2.6.3 Source earth borrow from outside **waterway buffers**.
- 6.2.6.4 Ensure that excavations, sills, abutments, stringers, and girders are made or placed above the high watermark of the stream, **wetland** or **drainage line**.
- 6.2.6.5 Protect bridges from erosion by use of natural groundcover, a retaining wall, a bulkhead, or a rock surface.
- 6.2.6.6 Only construct temporary crossings to carry machinery during bridge construction if the bed of the stream, **wetland** or **drainage line** is capable of bearing the weight of that machinery without being damaged.
- 6.2.6.7 Temporary crossings to carry machinery during bridge construction:
 - a) include a corduroy crossing of logs;
 - b) are adequately drained, along with any access tracks, when construction is complete; and
 - c) are removed and rehabilitated on completion of works.

6.2.7 Fords

- 6.2.7.1 The base and entry points of fords are constructed of rock, concrete, heavy **timber** or other erosion-resistant material.
- 6.2.7.2 Fords are only as wide as the crossing place will allow.
- 6.2.7.3 Ensure fords do not project above the bed of a **waterway** in a way which may prevent the passage of aquatic **fauna**.

6.3 Road Maintenance

- 6.3.1.1 Breach at regular intervals any soil windrow erected on the outside of a **road**.
- 6.3.1.2 Maintain drainage structures to minimise the risk that accumulation of debris and **run-off** could results in damage to drainage structures.

6.4 Road Rehabilitation

- 6.4.1.1 Close **temporary roads** (including removal of all bridges, crossings and culverts on streams or **drainage lines**) as soon as possible after harvesting and/or **regeneration** is complete in all **coupes** that use the **road**.

- 6.4.1.2 Drain the approach to any bridge, culvert or log fill crossing that has been removed to restrict soil movement into a stream or **waterway**.
- 6.4.1.3 Use an effective barrier to close to all vehicles **temporary roads** that will not be used to access a **coupe** for a period of 12 months or more.

7. Timber Harvesting

7.1 Coupe Management

7.1.1 Coupe Boundary

- 7.1.1.1 The **coupe** boundary must be able to be identified in the field and must reflect the mapped **coupe** boundary on the **sanctioned Forest Coupe Plan**.
- 7.1.1.2 Where a **coupe** boundary shown in a **Forest Coupe Plan** is mapped to a geographic feature and the actual location of that geographic feature does not match the mapped location, the **coupe** boundary may be moved a maximum of 50m from the mapped boundary to align with the actual location of the intended boundary feature. If the distance exceeds 50m then the **Forest Coupe Plan** Map must be amended to reflect the actual **coupe** boundary.
- 7.1.1.3 Where the **coupe** boundary abuts non-**State forest** land tenures, the **managing authority** must consult with the adjoining **land managers** / **land owners** and agree on the location of the mapped **coupe** boundary in the field.

7.1.2 Areas where timber harvesting operations are to be excluded

- 7.1.2.1 **Timber harvesting operations** must be excluded from:
- a) **SPZ** or **protection areas**;
 - b) **exclusion areas** within **SMZ**;
 - c) **exclusion areas**; and
 - d) within 10m of vertical or near vertical sided gullies with a depth of half a metre or more that are actively eroding (or within 20m where slope exceeds 20 degrees) in the Bendigo **FMA**.
- 7.1.2.2 Where an **exclusion area** or **protection area** is based on an incorrectly mapped geographic feature or value, the **exclusion area** or **protection area** should be centred on the actual location of the feature or value in the field not the previously mapped location.
- 7.1.2.3 **Exclusion areas, protection areas** and **SPZs** must be protected from damage during rough heaping or windrowing operations.
- 7.1.2.4 Application may be made to the **Minister** or **delegate** in accordance with Section 1.4 to conduct the following **timber harvesting operations** in **Special Protection Zones** and **protection areas**:
- a) **regeneration** or **rehabilitation** works in areas of harvested **native forest**; or
 - b) use of existing **coupe infrastructure** (and necessary incidental works) in areas of harvested **native forest**.

7.1.3 Operations in buffers

- 7.1.3.1 Trees can be harvested within **buffer** areas if **sanctioned** for safety purposes.
- 7.1.3.2 Machinery is to be excluded from **buffers** except where involved in the **sanctioned** construction of a **coupe access road**, **in-coupe road**, or stream crossing; or when using an established stream crossing or **existing road** for the purpose of **road maintenance** works, **snigging**, or **haulage**.
- 7.1.3.3 Except where constructing a **sanctioned** stream crossing, minimise circumstances where fill and harvesting debris may enter **buffers**.

7.1.4 Operations in filters

- 7.1.4.1 Machinery is to be excluded from **filter strips** except where involved in the **sanctioned** construction of a **coupe access road**, **in-coupe road**, stream crossing or when using an established stream crossing or **existing road** for the purpose of **road maintenance** works, **snigging** or **haulage**.
- 7.1.4.2 Except where constructing a **sanctioned** stream crossing, minimise circumstances where fill and harvesting debris may enter **filter strips**.
- 7.1.4.3 **Filter strips** must be protected from damage during rough heaping or windrowing operations.

7.2 Coupe Infrastructure

7.2.1 Snig Track and Landing Construction

- 7.2.1.1 Crossing standards and procedures for **roads** also apply to **snig track** crossings.
- 7.2.1.2 Avoid placing bark on uncorded **snig tracks** (this does not apply to **thinning outcrows**).
- 7.2.1.3 Where **cording** is to be used, it should not be placed on **snig tracks** if machinery caused soil damage already exists.
- 7.2.1.4 Stockpile any existing topsoil during **landing** construction for later use in **rehabilitation**, this is not required if the operation uses suitable soil protection techniques (such as **cording** and **matting**).

7.2.2 Snig Track and Landing Rehabilitation

- 7.2.2.1 Following completion of the **timber harvesting operation** rehabilitate all **snig tracks** to prevent:
 - a) unacceptable movement of soil down or from the track surface; and
 - b) soil movement into streams.
- 7.2.2.2 Rehabilitate **landings** following completion of **timber harvesting operations**, and before the **coupe** is vacated, unless they are required for:
 - a) future **Shelterwood 2** operations;
 - b) harvesting of adjacent **coupes** within 3 years; or

- c) any other purpose authorised by the **Secretary** for which **native vegetation** is not compatible.

- 7.2.2.3 Identify any **landings** that do not require **rehabilitation** in the **Forest Coupe Plan**.
- 7.2.2.4 Lift and aerate corded and matted **snig tracks** to facilitate **regeneration** burning.
- 7.2.2.5 Remove **cording** and as much **matting**, bark and slash as possible from **landings** before rehabilitation works occur.
- 7.2.2.6 Rip / cultivate any **snig track**, **landing** or other area where machinery has compacted the soil. Ripping of **snig tracks** should be extended for at least 30 m from the **landing**.
- 7.2.2.7 Where removed and stockpiled, replace topsoil to a consistent depth across the **landing**.

7.2.3 Boundary Trails

- 7.2.3.1 Locate boundary trails within the gross **coupe** boundary and outside **buffers**, **filters** and **exclusion areas** except for **sanctioned** crossings identified in the **Forest Coupe Plan**.
- 7.2.3.2 Minimise debris deposited outside the **coupe** boundary when constructing boundary trails.
- 7.2.3.3 Maintain adequate drainage of boundary trails at all times until rehabilitation is complete.
- 7.2.3.4 Rehabilitate boundary trails as soon as practical after any **regeneration burns** and before commencement of any relevant closure periods.

7.2.4 Slash and bark management

- 7.2.4.1 Where **regeneration** burning is planned:
 - a) place bark piles at least 10m inside the **coupe** boundary;
 - b) place windrows at least 3m from excluded areas; and
 - c) ensure slash is not permitted to accumulate within 3m of the base of any retained **habitat tree**, **large tree** or **Shelterwood 1** tree.
- 7.2.4.2 Limit slash and bark piles to a maximum of 4 m² (ground area) and 10 m³ (total volume).

7.2.5 Campsites and facilities

- 7.2.5.1 Obtain approval from the **Minister** or **delegate** in accordance with Section 1.4 for any camp site or shower units associated with **timber harvesting operations** that are not located on a **sanctioned coupe**.
- 7.2.5.2 Situate camp sites and shower units in a location which requires no additional tree clearance.
- 7.2.5.3 In the Thomson, Tarago and Yarra Tributaries **special water supply catchment areas** serviced sanitary facilities must accompany any operation that is conducted on the land for any extended period.

7.3 Operational restrictions

7.3.1 Suspension of timber harvesting operations

7.3.1.1 Unless **cording** and **matting** has been established at a **coupe**, suspend **snigging**, **forwarding** and log loading when:

- a) soil within the **coupe** is saturated;
- b) water is flowing on or over any **snig track**; or
- c) there is a reasonable risk that effective track drainage cannot be maintained.

7.3.2 Suspension of Haulage

7.3.2.1 **Haulage** must be suspended when:

- a) snow is lying on any **road** used to access or exit the **coupe**;
- b) water is flowing down any unsealed **road** or track; or
- c) truck movement will deposit mud on a gravelled or sealed **road**.

7.3.3 Seasonal Closures

7.3.3.1 No harvesting or **stand tending** operations which involve the use of heavy machinery or which otherwise cause significant soil disturbance may take place in designated catchments in the Midlands **FMA** from 31 July to 31 October.

7.3.3.2 No **timber harvesting operations** may take place in the Woohlpooer and Cherrypool **State Forests** during the months of June, July, August and September.

7.3.3.3 Refer to Section 3.5 for season closures that apply to catchment areas within **SMZ**.

8. Fire Salvage Harvesting

8.1.1 Salvage General

- 8.1.1.1 Fire salvage prescriptions are in addition to all other prescriptions outlined in these **Management Standards and Procedures** and apply to all salvage operations within fire-affected **forest** until the beginning of the third winter following the wildfire, except where otherwise indicated.
- 8.1.1.2 **Timber harvesting operations** conducted within fire-affected **forest** after the third winter following the wildfire revert back to the non fire salvage prescriptions within these **Management Standards and Procedures**.

8.1.2 Salvage schedule priority

- 8.1.2.1 Undertake fire **salvage harvesting operations** in **State forest** areas designated as fire severity classes 1, 2 or 3 before salvage harvesting in fire severity classes 4 or 5. **Table 24 Fire severity classification** describes the Fire Severity Classification system.

8.1.3 Coupe size and aggregation

- 8.1.3.1 120 ha is the maximum **coupe** size for fire salvage operations in Alpine or Mountain **Ash** dominated **forest**. No size restrictions apply to aggregates of Alpine or Mountain **Ash** fire salvage **coupes**.

8.1.4 Habitat retention

- 8.1.4.1 Plan the **coupe** so there is no more than 200 m between areas of retained habitat. Retained habitat includes **habitat tree exclusion areas**, filters and **buffers**, **green patch exclusion areas** and any **forest** adjacent to the **coupe**.
- 8.1.4.2 Exclude machinery from a minimum of 15 % of the **gross coupe area** to facilitate the recovery of **understorey** species. All **exclusion areas**, **protection areas**, **SPZs** and stream filters that are additional to standard stream protection prescriptions within the **coupe** may count towards the 15 % of gross **coupe** area from which machinery is excluded. 20 m is the minimum width for machinery **exclusion areas** set aside exclusively for **understorey** recovery. Where present, locate in areas with evidence of tree ferns. Tree felling is permitted in these areas. **Cording** and **matting** may remain on **landings** after **salvage harvesting operations** (replaces Clause 7.2.2.5).

8.1.5 Water quality

- 8.1.5.1 Except in **restricted access** and **special water supply catchment areas** locate **landings**, where possible:
 - a) at least 40 m for slopes of 15° or less, or 60 m for slopes of greater than 15°, from any **permanent stream**, or wetland; and
 - b) at least 20 m for slopes of 15° or less, or 30 m for slopes of greater than 15°, from any **temporary stream** and any **drainage line**.

8.1.5.2 In restricted access and **special water supply catchment areas** locate **landings**, where possible:

- a) at least 60 m for slopes of 15° or less, or 80 m for slopes of greater than 15°, from any **permanent stream**, or **wetland**; or
- b) at least 40 m from any **temporary stream drainage line**.

8.1.5.3 Locate boundary tracks at least 40 m from any **permanent stream** or **wetland**.

8.1.5.4 Apply the **buffer** and **filter** prescriptions for sites with high or very high water quality risk as specified in **Table 9 Minimum widths in metres for buffers (B) and filter (F) strips applicable to various waterway categories, in relation to water quality risk and slope**.

8.1.5.5 Install drainage structures for all **coupe** and **haulage** infrastructure at an appropriate frequency to mitigate increased risks to water quality due to potential sediment loads associated with water flow in the fire affected terrain.

8.1.5.6 In **restricted access** and **special water supply catchment areas** establish a drainage structure between 20 m to 40 m upslope of where a **road** or vehicle route crosses any **waterway**.

8.1.6 Weeds and disease

8.1.6.1 Clean soil from all harvesting machinery (excluding trucks and passenger vehicles) before floating to or from a salvage **coupe**. Replaces Clause 4.4.1.1 where pre-harvest disease and weed infestations cannot be assessed due to fire effects.

8.1.7 Field determined values

8.1.7.1 Locate the boundaries of **protection areas** or **management areas** based on modelled or mapped values according to the process outlined in **Figure 2 Field process for determining protection areas and management areas based on modelled or mapped values**.

8.1.7.2 To determine the boundaries of a Leadbeater's Possum habitat Zone 1A assume all **hollow bearing trees**, even if **dead**, to be 'alive'.

8.1.8 Ash Forest Green Patch Exclusion areas

8.1.8.1 Green patches are areas of **forest** within a fire affected area that are assessed through field checking to have fire severity class of 4 or 5 (See Section 8.1.2 and **Table 24 Fire severity classification**). Areas of fire severity class 4 or 5 must be at least 40 m wide to be a green patch.

8.1.8.2 Where less than 15 % of **Ash** dominated **forest** within a **compartment** is classified as fire severity class 4 or 5 all green patches greater than 0.5 ha are to be permanently protected during salvage operations to facilitate recruitment of future **hollow bearing trees**.

8.1.8.3 Where more than 15 % and less than 40 % of **Ash** dominated **forest** within a **compartment** is classified as fire severity class 4 or 5 protect all green patches greater than 5ha during salvage operations. Following salvage harvesting, further **timber harvesting operations** within these **compartments** are to be excluded until the **forest** regenerating from the fire reaches **reproductive maturity** typically by 15 years of age.

8.1.8.4 Green patches may be harvested where, within a **compartment**, more than 40 % **Ash** dominated **forest** is classified as fire severity class 4 or 5. Limit the total area of fire severity class 4 or 5 **Ash** harvested within a salvage **coupe** to 40 ha.

8.1.9 Ash habitat tree exclusion areas

8.1.9.1 Retain an average of at least 5 **habitat trees** per hectare of **net coupe area** in **exclusion areas** of greater than 0.1 ha. Replaces **Table 12 Habitat tree prescriptions**. Prescriptions protecting trees of pre-1900 origin continue to apply for **Central Highlands FMAs**.

8.1.9.2 Situate **habitat tree exclusion areas** to maximise retention of high priority **habitat trees**. **Habitat trees** have the following order of priority:

- a) large live **hollow bearing trees**;
- b) large live trees without **hollows**;
- c) large **dead** trees;
- d) small live trees; then
- e) small **dead** trees.

Note: In the context of **salvage harvesting operations**, trees greater than 50 cm DBHOB are considered to be large. Replaces **habitat tree** selection criteria in Section 4.1, except where the Bendigo **FMA** standard applies or where all trees of a particular type (e.g. **hollow bearing / dead**) are protected.

8.1.9.3 Situate **habitat tree exclusion areas** to maximise retained **forest** connectivity within the **coupe**.

8.1.9.4 Arrange the shape and location of **habitat tree exclusion areas** to reduce ongoing operational and weather related damage to **habitat trees**.

8.1.10 Barred Galaxias buffers and filters

8.1.10.1 Apply the minimum stream **buffer** and **filter strip** widths in **Table 25 Salvage harvesting Barred Galaxia minimum buffer and filter strip widths** upstream of Barred Galaxias populations (all soils), replacing **Table 10 Minimum widths for buffer (B) and filter strips (F) applicable to waterway classes for specified aquatic and riparian habitat-dependant species**.

8.1.10.2 Retain harvesting slash in **filter strips**, and aligned parallel to the stream, to slow the flow of water and reduce the potential for sediment to enter the stream or **wetland**.

9. Forest Regeneration and Management

9.1 Regeneration

9.1.1 Stocking surveys

- 9.1.1.1 For **even-aged stands**, conduct **stocking** surveys 15-30 months after sowing/seed fall or planting.
- 9.1.1.2 Successfully stocked **even-aged** regenerating **forests** must have:
- a) at least 1 acceptable seedling in 65 % of 2.27 m radius (16 m²) plots placed on a 20 m by 80 m systematic grid or at least 1 acceptable seedling in at least 55 % of 2.27 m radius (16 m²) plots placed on a 20 m by 40 m systematic grid; and
 - b) no discrete area greater than 1 ha with less than 400 stems per hectare.
- 9.1.1.3 For **uneven-aged stands** conduct **stocking** surveys 15-36 months after completion of harvesting.
- 9.1.1.4 Successfully stocked **uneven-aged** regenerating **forests** must have in at least 70 % of plots placed on a 20 m by 80 m systematic grid or 60 % of plots placed on a 20 m by 40 m systematic grid:
- a) a total **basal area** of at least 30% of the **basal area** that the site is capable of supporting, or
 - b) at least 1 acceptable sapling (or coppice) in a 3.57 m radius (40 m²) plot or at least 1 acceptable sapling (or coppice) in a 3.57 m radius (40 m²) plot, or
 - c) at least 1 acceptable seedling in a 2.27 m radius (16 m²) plot or at least 1 acceptable seedling in a 2.27 m radius (16 m²) plot; and
 - d) no discrete area greater than 2 ha with less than 400 stems per hectare (caused by recent harvesting).
- 9.1.1.5 An acceptable seedling is defined as a species indigenous to the area in either a seedling, lignotuber, or coppice form. Seedlings, lignotubers and coppice must be over 40 cm in height for **Ash** species and over 25 cm in height for non **Ash** species. For coppice, the stem must be likely to remain attached to the stump and the base of the stem must be within 20 cm of ground level.
- 9.1.1.6 An acceptable sapling (can be in the coppice form) is defined as a species indigenous to the area that is an acceptable size (3–15 m), is not suppressed and has a vigorous, healthy **crown**.
- 9.1.1.7 For both **even-aged** and **uneven-aged silviculture**, acceptable species composition for **regeneration** includes at least 10 acceptable seedling of each eucalypt species present on the site before harvesting.
- 9.1.1.8 Where **stocking**, health or early growth is inadequate, remedial work must be conducted as soon as practicable and within 5 years of the previous **regeneration** attempt to obtain adequate **regeneration**. Further assessment must be undertaken following remedial treatment to ensure that it has been successfully regenerated.

9.1.2 Stocking Survey Exemptions

- 9.1.2.1 **Coupes** created purely for the purpose of **road construction** or **maintenance** do not require **stocking** surveys.

9.1.3 Seed

- 9.1.3.1 Prioritise seed collection from within areas available for **timber harvesting operations**.
- 9.1.3.2 Ensure large **hollow bearing trees** and **habitat trees** retained during previous **timber harvesting operations** are not felled for seed collection.
- 9.1.3.3 Collect seed from **stands** that show no evidence of hybridisation and have experienced a widespread and preferably heavy flowering in which trees with good crops are close together.
- 9.1.3.4 Collect seed only from **stands** of natural origin or artificially regenerated **stands** of satisfactory genetic status in which the full, original gene pool of the population is represented. **Stands** regenerated from **seed trees** are regarded as of natural origin for seed collection purposes.
- 9.1.3.5 Prioritise using seed collected from the **coupe**; i.e., regenerate with seed fall from **retained trees** and/or logging slash, or sow the **coupe** with seed collected from that **coupe**. Otherwise, prioritise using seed that meets the following criteria:
- a) the collection site is within 25 km of the **coupe** to be sown;
 - b) the mid-elevation of the collection site is within 350 m above to 150 m below the mid-elevation of the **coupe** to be sown;
 - c) for slopes >10 ° the collection and sowing sites have similar aspect (separate between 'drier' aspects (W, NW, N, NE) and 'moister' aspects (SW, S, SE, E); and
 - d) the collection and sowing sites are of similar soil type and parent material.
- 9.1.3.6 Where seed quantities within areas available for **timber harvesting operations** are inadequate to meet **regeneration** requirements, application may be made to the **Minister** or **delegate** to collect seed from standing trees within areas excluded from **timber harvesting operations** in accordance with Section 1.4 and Clauses 9.1.3.7 to 9.1.3.10.
- 9.1.3.7 Applications to collect seed from areas excluded from **timber harvesting operations** will demonstrate that:
- a) seed quantities from areas available for **timber harvesting operations** are inadequate to meet **regeneration** requirements;
 - b) trees will not be felled;
 - c) seed collection is on behalf of the Crown or the **Secretary**, or for **State forest regeneration** requirements;
 - d) there will be no machinery entry into **rainforest** and stream **buffers**;
 - e) **protection area** / **SPZ** values will be maintained; and
 - f) the operation will be assessed and monitored against any approval conditions.

- 9.1.3.8 Any **approved** seed collection operation in Leadbeater's Possum **SPZ** or associated **protection areas** will:
- a) maintain **canopy** connectivity, particularly along **roads**;
 - b) protect **understorey** wattle from damage; and
 - c) exclude **hollow bearing** and pre-1900 aged trees from collection activities.
- 9.1.3.9 Applications to harvest seed from standing trees in areas excluded from harvesting will include:
- a) the species to be collected;
 - b) an estimate of the extracted weight of seed to be collected; and
 - c) the **FMA** the seed will be collected from.
- 9.1.3.10 Submit applications at least 1 month prior to commencing seed collection.

9.2 Thinning

- 9.2.1.1 Unless otherwise stated, standards and procedures that apply to **timber harvesting operations** also apply to **thinning** operations.
- 9.2.1.2 In **Ash forests** retain at least 50 % of the live pre **thinning basal area** and a minimum total retained average **basal area** as outlined in **Table 26 Basal Area (BA) and stocking specifications for commercial ash thinning**.
- 9.2.1.3 In **mixed species forests** retain at least 50% of the live pre **thinning basal area** and a minimum total retained average **basal area** of:
- a) 17 m²/ha for **stands** aged 18 – 24 years;
 - b) 21 m²/ha for **stands** aged 25 – 34 years; and
 - c) 25 m²/ha for **stands** aged 35+ years.
- 9.2.1.4 In **Box Ironbark forests** retain at least 40 % of the live pre **thinning basal area** and a minimum total retained average **basal area** of 8 m²/ha (**regrowth** and **overwood**/retained habitat included).
- 9.2.1.5 In River Red Gum (*Eucalyptus camaldulensis*) **forests** retain at least 40 % of the live pre **thinning basal area** and a minimum total retained average **basal area** of 15 m²/ha in riverine and 10 m²/ha in dryland **stands** (**regrowth** and **overwood**/retained **habitat trees**).

Appendix 1: Tables and Figures

Table 1 Soil susceptibility to breakdown

				Horizon		
Soil factor	Scoring			A	B	C
Soil texture Score	SC, C, SiC 1	SiCL, CL, SCL 4	SL, L, SiL, LS, S, Si 7			
Soil aggregate stability Score	Unaffected 1	Slaking, slight dispersibility 7	Very dispersible 15			
Soil structure Score	Highly pedal 1	Peds evident 3	Apedal 5			
Soil colour Score	Black, Reddish Black, Dark Brown 1	Light Brown, Light Red 2	Pale Yellow, Grey, White 3			
Soil organic matter	High 1	Moderate 4	Low 7			
Stoniness Score	>50% 1	10-50% 2	<10% 3			
Overall score	<17	17-27	>27			
Rating	Low	Moderate	High			

Table 2 Soil permeability

				Horizon		
Soil factor	Scoring			A	B	C
Soil texture Score	SL, L, LS, S 1	SiL, Si, SiCL, CL, SCL 4	SC, C, SiC 7			
Organic matter Score	High 1	Moderate 2	Low 3			
Impeding layer depth (cm) Score	>50 1	50-25 3	<25 5			
Soil Mottling Score	Not present 1	Slight 2	Well Developed, (Pale) 3			
Stoniness Score	>50% 1	10-50% 2	10% 3			
Stand ht (m) Score	>40 1	28-40 2	<28 3			
Overall score	<11	11-18	>18			
Rating	Very high	High	Low			

Table 3 Soil erosion site factor

Site factor		Scoring			Rating
Erosivity index	<590	591-1469	>1470		
Rating	1	3	5		
Slope (degrees)	0-8	9-21	>21		
Rating	2	4	7		
Slope length / uniformity	Short uniform	Long broken	Long uniform		
Rating	1	2	3		
Revegetation capacity	Good	Moderate	Poor		
Rating	1	2	3		
Overall score	<10	10-14	>14		
Rating	Low	Moderate	High		

Notes:

- Assess soil when moderately moist.
- Stoniness refers to stones greater than 20 mm in size.
- **Stand** height refers to a **mature forest stand** height.

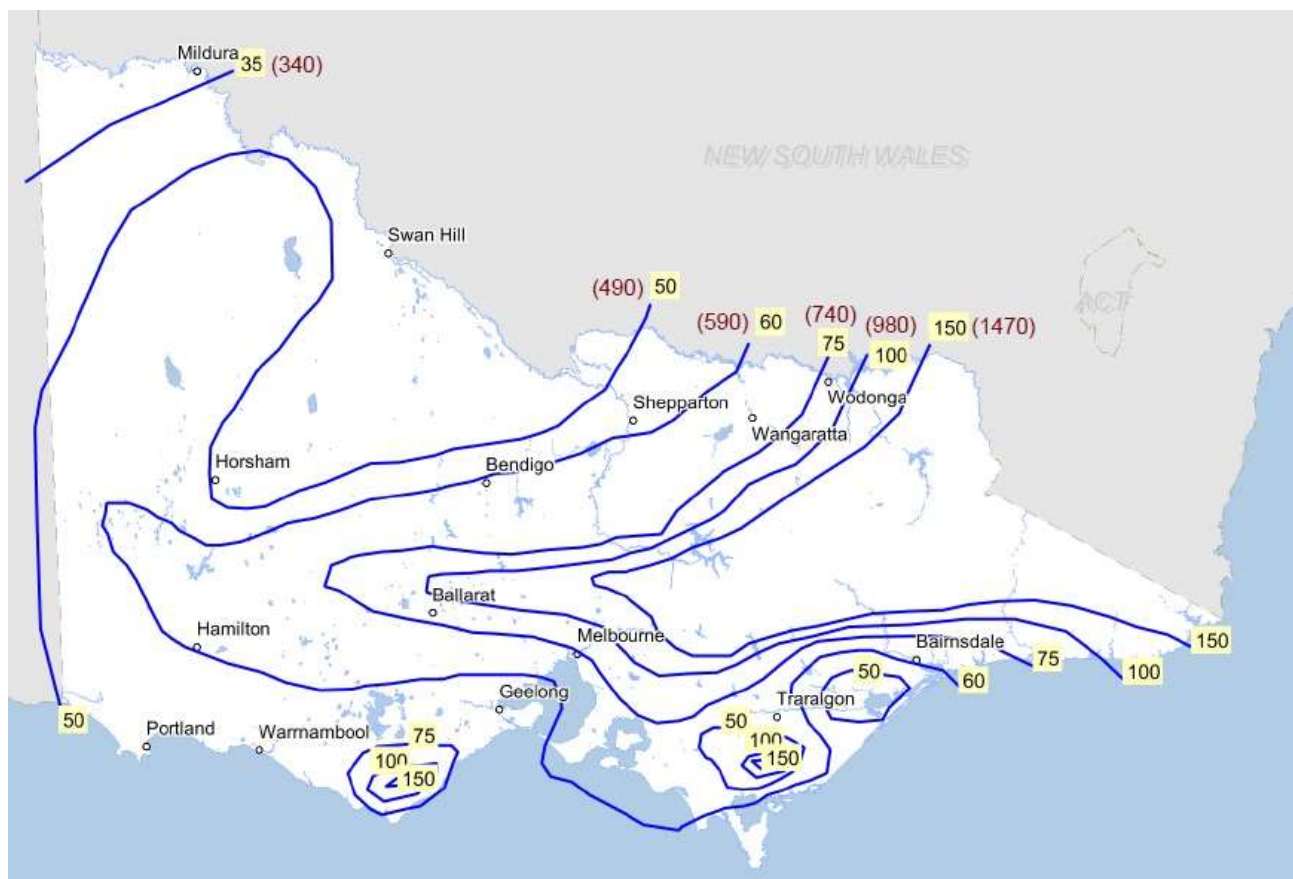


Figure 1 Rainfall erosivity

Rainfall erosivity contours in non-SI units for Victoria (Garvin et al. 1979). SI units (MJ. Mm/ha.h.year) given in parentheses.

Table 4 Soil erodibility classification

Table 1 rating							
Table 2 rating	Low	Moderate	High	Horizon	A	B	C
Very High	VERY LOW	LOW	MEDIUM	Table 1			
High	LOW	MEDIUM	HIGH	Table2			
Low	MEDIUM	HIGH	VERY HIGH	Classification			

Table 5 Soil erosion hazard classification

Table 4 classification									
Table 3 rating	Very low	Low	Medium	High	Very high	Horizon	A	B	C
Low	LOW	LOW	LOW	MEDIUM	HIGH	Table 4			
Moderate	LOW	LOW	MEDIUM	HIGH	VERY HIGH	Table 3			
High	LOW	MEDIUM	HIGH	VERY HIGH	VERY HIGH	Classification			

Table 6 Soil permeability classification

	Soils with HIGH permeability	Soils with LOW permeability	Horizon	A	B	C
Table 2 score	0 - 18	19+	Table 2			
			Classification			

Table 7 Overall soil category

Soil Permeability Classification (Table 6)	Soil Erosion Classification (Table 5)			
	Low	Medium	High	Very High
Low	M	M	H	VH
High	L	L	M	M

Table 8 Water quality risk

Overall Soil Category	Water Quality Risk
L	Low water quality risk
M	Moderate water quality risk
H	High water quality risk
VH	Very High water quality risk

Table 9 Minimum widths in metres for buffers (B) and filter (F) strips applicable to various waterway categories, in relation to water quality risk and slope

	Sites with low or moderate water quality risk	Sites with high or very high water quality risk	
Waterway Class	Slope 0 - 30 °	Slope 0 - 20 °	Slope 21 - 30 °
1. Pools, permanent streams and wetlands	20 m B	30 m B	40 m B
2. Temporary streams	10 m F	10 m B + 10 m F	20 m B
3. Drainage lines	10 m F	10 m F	15 m F

Table 10 Minimum widths for buffer (B) and filter strips (F) applicable to waterway classes for specified aquatic and riparian habitat-dependant species

	Sites with low or moderate water quality risk	Sites with high or very high water quality risk	
Waterway Class	Slope 0-30°	Slope 0-20°	Slope 21° - 30°
1. Pools, permanent streams and wetlands	30 m B	40 m B	50 m B
2. Temporary streams	20 m B + 10 m F	20 m B + 20 m F	30 m B + 20 m F
3. Drainage lines	10 m F	10 m F	15 m F

Table 11 Water supply protection areas

Catchment	Status	Slope Limit	Seasonal Closure	Stream Buffers	Filter Strips	Additional Management Actions or Comments
Benalla – Mansfield FMA						
Lake Eildon	SWSCA	30°	1 June - 31 Oct	20 m	10 m	
Upper Goulburn	SWSCA	30°	1 June - 31 Oct	20 m	10 m	
Lake Nillahcootie	SWSCA	30°	1 June - 31 Oct	20 m	10 m	
Ryans Creek	SWSCA; DC					Max 40 ha max coupe size
	Category 1:	-	-	-	-	Category 1: No harvesting
	Category 2:	< 12 °	1 May - 31 Oct	20 m	10 m	Category 2: No clearfall
	Category 3:	30 °	1 May - 31 Oct	20 m	10 m	Category 3: NA
Central FMA						
Sunday Creek (Broadford-Kilmore)	SWSCA	30°		20 m	10 m	
Kilmore	SWSCA	30°		20, 40, 60 m	10 m	Buffers in accordance with former <i>Notice of Determination of Land Use, Plan No. 1633</i> .
Upper Goulburn	SWSCA	30°		20 m	10 m	
Dandenong FMA²						
Bunyip River	SWSCA	25 °	1 May – 30 Nov	20 m	10 m	60 m buffer upstream of weir.

Britannia Creek	SWSCA	30°	1 July – 30 Sept	20 m	10 m	
Tomahawk Creek (Gembrook)	SWSCA	30°	1 July – 30 Sept	20 m	10 m	
McCrae's Creek	SWSCA	30°	1 July – 30 Sept	20 m	10 m	60 m buffer upstream of weir.
Micks Creek	SWSCA					Harvesting excluded.
Healesville	SWSCA					Harvesting excluded.
Armstrong Creek East	Restricted					Harvesting excluded.
Learmonth Creek		25°	1 May – 30 Nov	40 m ¹	10 m	Max 7 ha Ash and 3ha mixed species .
McMahons Creek	Restricted	25°	1 May – 30 Nov	40 m ¹	10 m	A maximum of 30 % of each of these catchments is to be harvested over a 10 year period. There is to be harvesting in only 1 of the 4 restricted access catchments in any 1 year.
Starvation Creek	Restricted	25°	1 May – 30 Nov	40 m ¹	10 m	
Cement Creek	Restricted	25°	1 May – 30 Nov	40 m ¹	10 m	
Armstrong Creek West	Restricted	25°	1 May – 30 Nov	40 m ¹	10 m	
East Gippsland FMA						
Orbost (Rocky River)	SWSCA			100m 40m 30m 100m		40 ha maximum annual area harvested. Buffer applies to main river Buffer applies to major tributaries Buffer applies to other watercourses Buffer applies to off-take weir.
Betka River	SWSCA			150m 20m		120 ha (1% of catchment) max annual area harvested On main river On major tributaries and streams
Gippsland FMAs ²						
Thomson River	SWSCA	30°	1 May – 30 Nov	40 m ¹	10 m	Subject to additional regulations under the <i>Forests Act 1958</i> which includes limitations on access, camping, hunting with hounds and horse riding. Average 150 ha Ash and 15ha mixed species on rolling average, or total of 165 ha on rolling average.
Tyers River	SWSCA	30°	1 June – 31 Oct	20 m	10 m	Applies above 650 m ASL. Harvesting restrictions on land above 1220 m. Buffer within 200 m of Moondarra Reservoir foreshore. Buffer of 40 m on Jacobs Creek up to the Walhalla Road.
Tanjil River	SWSCA	30°	1 June – 31 Oct	20 m	10 m	Closure applies north of Icy Creek – Mt Baw Baw Road.
Tarago River	SWSCA	30°	1 May – 31 Oct	20 m	10 m	Average 55 ha Ash and 23 ha mixed species on rolling average.
Bunyip River	SWSCA	25°	1 June – 30 Nov	20 m	10 m	
Deep Creek and Loch River (Noojee)	SWSCA	30°	1 July – 30 Sept	20 m	10 m	
Drouin	SWSCA	30°	1 July – 30 Sept	20 m	10 m	
Glenmaggie	SWSCA		1 June – 31 Oct	40 m		Buffer applies to Macalister below Caledonia
				40 m		Buffer applies to Wellington below Carey
				40 m		Buffer applies to Barkley below Mt Skene Creek
				40 m		Buffer applies to Glenmaggie Creek below east and west branches
Mirboo North	SWSCA			Buffer of 100 m around the off-take weir		

Buffer from the banks of streams, watercourses and spring areas. 40 m **buffer** on the Little Morwell River and 20 m for other water courses.

Tarra River	SWSCA		1 June – 31 Oct	
North East FMA				
Lake Hume (Victorian section)	SWSCA		1 July – 30 Sept	
Mount Tabor Creek	DC		1 July – 30 Sept	40 ha maximum annual area harvested.
Black Dog Creek	DC		1 July – 30 Sept	30 ha maximum coupe size.
Bakers Gully (Bright)	SWSCA; DC		1 July – 30 Sept	20 ha maximum coupe size.
West Kiewa River	DC		1 July – 30 Sept	40 ha maximum coupe size.
Musk Gully Creek	DC		1 July – 30 Sept	35 ha maximum coupe size.
Diddah Diddah Creek (Springhurst)	SWSCA; DC		1 July – 30 Sept	20 ha maximum coupe size.
Midlands FMA				
Blackwood	DC		1 June – 31 Oct	35 ha maximum coupe size.
Bullarto	DC		1 June – 31 Oct	20 ha maximum coupe size.
Colbrook	DC		1 June – 31 Oct	5 ha maximum coupe size.
Collier Gap	DC		1 June – 31 Oct	2 ha maximum coupe size.
Djerriwarrh	SWSC & SAP; DC		1 June – 30 Sep	15 ha maximum coupe size.
Korweingu-boora	DC		1 June – 31 Oct	15 ha maximum coupe size.
Hickmans Creek (Elmhurst)	DC		1 June – 31 Oct	40 ha maximum coupe size.
Lal Lal Lake Environs	SWSC & SAP; DC		1 June – 31 Oct	5 ha maximum coupe size.
Long Gully	DC		1 June – 31 Oct	15 ha maximum coupe size.
Lake Merrimu	SWSC & SAP; DC		1 June – 30 Sep	40 ha maximum coupe size. Buffers apply to all waterways
Moorabool	DC		1 June – 30 Sep	10 ha maximum coupe size.
Mount Cole	DC		1 June – 31 Oct	20 ha maximum coupe size.
Musical Gully	SWSC; DC		1 June – 30 Sep	2 ha maximum coupe size.
Pykes Creek	SWSC; DC		1 June – 30 Sep	40 ha maximum coupe size.
Rosslynne	SWSC & SAP; DC		1 June – 30 Sep	40 ha maximum coupe size.
Shepherds Creek	DC		1 June – 31 Oct	40 ha maximum coupe size.
Sugarloaf	DC		1 June – 30 Sep	20 ha maximum coupe size.
Troy	SWSC; DC		1 June – 30 Sep	2 ha maximum coupe size.
White Swan	DC		1 June – 31 Oct	20 ha maximum coupe size.
Wombat	DC		1 June – 31 Oct	20 ha maximum coupe size.
Otway FMA³				
Lorne – St Georges River		25°	1 May – 30 Nov	Max harvest 2.5 % per year and 15 % per decade of total forested area of each catchment.
Barham River	SWSCA	25°	1 May – 30 Nov	
Upper Barwon	SWSCA	25°	1 June – 31 Oct	Max harvest 5 % per year and 25 % per decade of total forested area of each catchment.
Gellibrand River	SWSCA	25°	1 June – 31 Oct	
Painkalac Creek (Aireys Inlet)	SWSCA	25°	1 June – 30 Sept	
Pennyroyal Creek	SWSCA	25°	1 June – 30 Sept	

Matthews Creek	SWSCA	25°	1 June – 30 Sept	
Gosling Creek	SWSCA	25°	1 June – 30 Sept	
Tambo FMA				
Lake Hume (Victorian section)	SWSCA		30 June – 1 Oct	In accordance with former Plan No. S-1275B.
Mitchell River	SWSCA		30 June – 1 Oct	Seasonal closure applies above 900 m.
Nicholson River	SWSCA	30°		200 m buffer around the Nicholson Reservoir and Water supply off-take on the Nicholson River. 40 m buffer around Nicholson and Barmouth Rivers. 20 m buffer from banks of permanent streams & drainage lines

Notes:

- Restricted – restricted access catchments managed by agreement between Melbourne Water and the **Department**.
- ¹ Major streams only.
- ² In addition to the above prescriptions for the **Gippsland FMAs** and the Dandenong **FMA**, refer to clauses 3.5.1.5 and 3.5.1.6 of these **Management Standards and Procedures**.
- ³ Within the Otway **FMA**, 20° and 15° slope limits will be applied in **special water supply catchment areas** in areas of Land Degradation Hazard Class 4 and 5 respectively.

Table 12 Habitat tree prescriptions

Locality	Forest Type	Habitat Tree Retention Rates	Comment
Central Highlands FMAs	Ash/HEMS	All live ash eucalypts originating before 1900. At least 40 trees per 10 ha for the length of the rotation in ash forests originating since 1900	Retain at least 1 potential hollow bearing tree where gaps between retained trees are greater than 150 meters, Retained trees should be a mixture of hollow bearing trees where present and other trees most likely to develop hollows in the short term.
	Mixed Species	40+ trees per 10 ha	
East Gippsland FMA	All	4 – 5 trees per ha	Count seed trees towards habitat tree numbers.
Gippsland FMAs	All	4 – 5 tree per ha	Count seed trees towards habitat tree numbers
Horsham FMA	All	10 trees per 10 ha 5 potential habitat trees per 10 ha 5 dead trees with hollows per 10 ha	Any additional trees above the 10 trees per 10 ha should be retained in place of potential habitat and dead trees.
Midlands FMA	All except Box Ironbark	3 trees per ha	Refer to Bendigo for Box ironbark prescriptions.
Mid Murray FMA	All	20 trees per 10 ha (≥50 cm but ≤100 cm DBHOB) Retain all trees (>100 cm DBHOB)	
North East FMAs	Ash/HEMS	4 – 5 trees per ha	
	Mixed species	4 – 5 trees per ha	Count seed trees towards habitat tree numbers.
Otway FMA	All	5 trees per ha (net coupe area) / 10 trees per ha (gross coupe area)	
Portland FMA	All	Retain habitat trees to a basal area of 2 – 4m ² /ha	Group selection.

Table 12 Notes:

- In all cases except the Otway **FMA**, **habitat tree** retention rates apply relative to the **net harvested area** retained within the **net coupe area**.
- The **net coupe area** is the **gross coupe area**, less areas required to be excluded from timber harvesting in accordance with the **Code**.
- Areas excluded from timber harvesting, including **buffers**, should be identified prior to the commencement of **timber harvesting operations**, roading and **regeneration**.
- Areas excluded from timber harvesting or retained areas may not be readily identifiable prior to **timber harvesting operations** but must be documented after **timber harvesting operations** have been completed (e.g. small rocky areas, small areas of steep slope or inaccessible areas), these areas may be counted as retained habitat within the **net coupe area**.
- The minimum number of trees required to be retained as habitat relative to the area harvested (**net harvested area**) is a product of the specified rate and the **net harvested area**. E.g., 20 ha **net harvested area** × 4 - 5 trees per ha = 80 - 100 trees to be retained as habitat.
- This total number of trees retained as habitat can be dispersed across the **coupe** or retained in clumps, prioritising the types and arrangement of trees as relevant to section 4.1 of the MSP.

Table 13 Rare or threatened fauna and invertebrate prescriptions

Species Name	Value	Applicable FMAs	Management Actions
Alpine She-oak Skink <i>Cyclodomorphus praealtus</i>	Individual (site occupied by at least 1 observed individual)	North East FMAs	Develop management actions to protect Alpine She-oak Skink habitat at sites occupied by at least 1 observed individual. Document and provide to the Secretary a proposed plan for the value management area .
	Individual (site occupied by at least 1 observed individual)	Gippsland FMAs	Apply a protection area of approximately 50 ha over each site occupied by at least 1 observed individual.
Alpine Tree Frog <i>Litoria verreauxii alpina</i>	Population	North East FMAs	Apply a management area over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations . Document and provide to the Secretary a proposed plan for the value management area .
Alpine Water Skink <i>Eulamprus kosiuskoi</i>	Population	Gippsland FMAs North East FMAs	Apply a management area over populations. (management area conditions - Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations).
Apostlebird <i>Struthidea cinerea</i>	Population	North East FMAs	Apply a management area over sites of resident populations. (management area conditions - Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations).
Australasian Darter <i>Anhinga novaehollandiae</i>	Roosting and breeding site	Mid-Murray FMA	Exclude activities likely to disturb breeding activity within 250 m region around current roosting and breeding sites of colonially-nesting waterbirds during the breeding season
Australian Grayling <i>Prototroctes maraena</i>	Population	Portland-Horsham FMA East Gippsland FMA	Apply a protection area extending 100 m from each bank for 1 km upstream and 1 km downstream of populations. Avoid constructing new roads in the protection area . Note: The Secretary intends to review this strategy when 50 significant fish sites have been located.
Australian Hobby <i>Falco longipennis</i>	Nest tree	Otways FMA	Apply a protection area of 100 m radius around nest trees.
Australian White Ibis	Roosting and breeding site	Mid-Murray FMA	Exclude activities likely to disturb breeding activity within 250 m region around current roosting and

Species Name	Value	Applicable FMAs	Management Actions
<i>Threskiornis molucca</i>			breeding sites of colonially-nesting waterbirds during the breeding season
Bandy Bandy <i>Vermicella annulata</i>	Individual (site occupied by at least 1 observed individual)	North East FMAs	<p>Apply a protection area of approximately 50 ha over each site, where practicable incorporating the detection site.</p> <p>Note: The Secretary intends to review the strategy when 20 SPZ are established.</p>
	Individual (site occupied by at least 1 observed individual)	Mid-Murray FMA	<p>Apply a management area of approximately 50 ha over sites, where practicable incorporating the detection site.</p> <p>Conduct a site inspection and detailed planning in consultation with DELWP to ensure the species is adequately protected during timber harvesting operations.</p>
Barking Owl <i>Ninox connivens</i>	Roosting and nesting tree	Statewide	<p>Apply a protection area of 3 ha and apply a management area of 250-300 m radius (or equivalent linear area) around each nesting and roosting site utilised recently and frequently and located outside a Barking Owl Management area.</p> <p>(A management area is not required where existing zoning or public land tenure provides equivalent or greater protection of the roosting or nesting site).</p>
			<p>Document and provide to the Secretary a proposed plan for the value management area prior to harvesting commencement. The plan will protect hollow bearing trees for owls and prey species along with younger trees that may provide hollows in future. These areas will be managed to maintain habitat capable of supporting adequate populations of birds and arboreal prey mammals to support breeding owls. Exclude timber harvesting operations in the management area or SMZs around nest trees during the breeding season (1 July - 31 December).</p>
Barred Galaxias <i>Galaxias fuscus</i>	SMZ for Barred Galaxias or waterways containing new population	Central Highlands FMAs Gippsland FMAs North East FMAs	<p>Apply minimum stream buffer and filter strip widths (specified in Table 10) 1km upstream of new Barred Galaxias populations or in management areas / SMZ for Barred Galaxias.</p> <p>Minimise stream crossings over waterways in catchments containing Barred Galaxias.</p>

Species Name	Value	Applicable FMAs	Management Actions
Black Falcon <i>Falco subniger</i>	Nesting tree	Portland-Horsham FMA	<p>Apply a management area of 250 m radius over each nesting site. Within 250 m of nesting site, avoid timber harvesting, road construction and burning during breeding season.</p> <p>Apply a protection area with a 100 m radius around nest trees</p>
Blue Mountains Tree Frog <i>Litoria citropa</i>	Population of more than 50 individuals	East Gippsland FMA	<p>Apply a protection area extending 100 m from each bank for 500 m upstream and 500 m downstream for sites of more than 50 individuals.</p> <p>Note: The Secretary intends to review this strategy when 20 sites are established.</p>
Brush-tailed Phascogale <i>Phascogale tapoatafa</i>	Individual (site occupied by at least 1 observed individual) in areas where species is not understood to occur	Statewide	<p>Within FMAs where the species is not understood to occur, notify the Secretary and determine whether the value occurs in a Brush-tailed Phascogale Management area (BPMA) or whether a new BPMA may be required. If a new BPMA is required, apply a management area that protects and maintains the Brush- tailed Phascogale population and their habitat, retaining large trees and naturally fallen timber.</p> <p>Note: The Secretary intends to review and change sites only if new sites are of a higher quality or are better able to be protected than existing sites.</p>
Bush Stone-curlew <i>Burhinus grallarius</i>	Nesting site	Portland-Horsham FMA	<p>Apply a management area of 250 m radius over each nesting site.</p> <p>Within the management area, avoid any burning during breeding season. At all other times retain any logs and other fallen timber in the area.</p>
Carpet Python <i>Morelia spilota metcalfei</i>	Population	Mid Murray FMA	Protect populations from disturbance where practicable during the hibernating (1 April to 30 September) and breeding (1 November to 28 February) periods respectively.
	Population	North East FMAs	<p>Apply a management area of 250 m radius over populations.</p> <p>Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations.</p>

Species Name	Value	Applicable FMAs	Management Actions
Common Bent-wing Bat <i>Miniopterus schreibersii oceanensis</i>	Colony	Central Highlands FMAs North East FMAs	Apply a 100 m buffer around colonies.
	Roosting and over-wintering site	Midlands FMA	Apply a management area of 100 m radius over roosting and over-wintering sites. Within 100 m of roosting and over-wintering sites, exclude timber harvesting operations, road construction and other activities likely to disturb over-wintering bats between 1 May to 31 October.
	Breeding and roosting cave, tree, mine or over-wintering site	Gippsland FMAs East Gippsland FMA	Apply a protection area of 100 m radius over breeding and roosting caves, trees and mines and over-wintering sites.
Common Brush-tailed Possum <i>Trichosurus vulpecula</i>	Relative abundance (More than 10 per Spotlight Kilometre)	East Gippsland FMA	Apply a protection area of approximately 100 ha of suitable habitat where records report a relative abundance of more than 10 individuals per spotlight kilometre (equivalent to more than 2 individuals per hectare or more than 15 individuals per hour of spotlighting), or where substantial populations are located in isolated or unusual habitat. Note: Assumed rate of spotlighting per kilometre is 100 mins per 1km and visible range either side of transect for this species is 25m, equating to assumed minimum survey area of 5 hectares.
Common Dunnart <i>Sminthopsis murina murina</i>	Population	Central Highlands FMAs Midlands FMA Portland-Horsham FMA	Apply a protection area of approximately 20 ha of suitable habitat over sites. Note: The Secretary intends to review this strategy when 50 sites have been established in State forest .
Cox's Gudgeon <i>Gobiomorphus coxii</i>	Population	East Gippsland FMA	Apply a protection area extending 100 m from each bank for 1 km upstream and 1 km downstream of populations. Avoid constructing new roads in the protection area . Note: The Secretary intends to review this strategy when 50 significant fish sites have been located.
Diamond Python <i>Morelia spilota spilota</i>	Population	East Gippsland FMA	Apply a protection area of 100 ha of suitable habitat for each locality of this species. Note: The Secretary intends to review this strategy when 50 sites have been located.
Dwarf Galaxias <i>Galaxiella pusilla</i>	Population	Portland-Horsham FMA	Minimise stream crossings over permanent and temporary streams and drainage lines in catchments containing populations of Dwarf Galaxias.

Species Name	Value	Applicable FMAs	Management Actions
Eastern Broad-nosed Bat <i>Scotorepens orion</i>	Population	East Gippsland FMA	Apply a protection area of approximately 100 ha of older forest over sites where more than 10 individuals have been captured in one trapping session.
	Or Relative abundance per Spotlight Kilometre		Note: The Secretary intends to review this strategy when 20 sites are established.
Eastern Great Egret <i>Ardea modesta</i>	Current roosting and breeding site	Portland-Horsham FMA	Exclude activities likely to disturb breeding activity within 250 m region around current roosting and breeding sites of colonially-nesting waterbirds during the breeding season.
Eastern Horseshoe Bat <i>Rhinolophus megaphyllus megaphyllus</i>	Colony	Central Highlands FMAs	Apply a 100 m buffer around colonies.
	Breeding or roosting cave, mine, tree, or over-wintering site	Gippsland FMAs East Gippsland FMA	Apply a protection area of 100 m radius over breeding and roosting caves, trees and mines and over-wintering sites.
Eastern Pygmy-possum <i>Cercartetus nanus</i>	Relative abundance (More than 5 per pitfall trap)	East Gippsland FMA	Where records report more than 5 individuals per standard pitfall line over 5 days, or where substantial populations are in isolated or unusual habitat, apply a protection area of approximately 100 ha of suitable habitat.
Eltham Copper Butterfly <i>Paralucia pyrodiscus lucida</i>	Population	Portland-Horsham FMA	Apply a management area over populations.
	Host plant <i>Bursaria spinosa</i>		Protect the host plant <i>Bursaria spinosa</i> (Sweet <i>Bursaria</i>) within 250 m of any records of this species.
Four-toed Skink <i>Hemiergis peronii</i>	Population	Midlands FMA	Apply a management area over populations.
			Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Freshwater Herring <i>Potamalosa richmondia</i>	Population	East Gippsland FMA	Apply a protection area extending 100 m from each bank for 1 km upstream and 1 km downstream of populations.
			Avoid constructing new roads in the protection area . Note: The Secretary intends to review this strategy when 50 significant fish sites have been located.

Species Name	Value	Applicable FMAs	Management Actions
Giant Burrowing Frog <i>Heleioporus australiacus</i>	Population	Gippsland FMAs East Gippsland FMA	<p>Where records of Giant Burrowing Frog are located on first-order streams or sites away from streams, apply a protection area of 50 ha (preferably the entire sub catchment unit).</p> <p>Where records of Giant Burrowing Frog are located on second or higher order streams, apply a protection area of 100 m width each side of the stream for 1km upstream and downstream of the detection site.</p> <p>Note: For the purposes of this prescription, a first order stream is the headwaters of a catchment and is the smallest stream mapped on the 1:100 000 Natmap series. Second order streams are the next level of stream further down the catchment. For first order streams the size of each catchment will vary, however target size is approximately 50 ha.</p> <p>For off stream records where evidence of this value is found in the field, apply a protection area of 50ha over the record or equivalent area of suitable habitat nearby.</p> <p>Avoid new roading in the protection area.</p> <p>Note: The Secretary intends to review this strategy when 50 sites are located in Victoria.</p>
Giant Gippsland Earthworm <i>Megascolides australis</i>	Population	Gippsland FMAs	<p>Apply a management area over populations.</p> <p>Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations.</p>
Glenelg Freshwater Mussel <i>Hyridella glenelgensis</i>	Population	Portland-Horsham FMA	<p>Apply a protection area extending 100 m from each bank for 1 km upstream and 1 km downstream of populations.</p> <p>Disturbance that could impact on water quality must be avoided within the protection area.</p>
Glossy Black-Cockatoo <i>Calyptrorhynchus lathami lathami</i>	Nesting site	Gippsland FMAs East Gippsland FMA	<p>Apply a management area of 250 m radius over each nesting site.</p> <p>Within 250 m of nest tree, exclude timber harvesting operations, road construction and burning during the breeding season (December to May). Search the surrounding forest for other active nest sites (the species is known to nest in clusters). Apply a protection area with a 100 m radius around nest trees.</p> <p>Where Black She-oak stands are identified during timber harvesting operations (including post harvesting burning) new roading activities will be conducted in a manner that avoids damage to the stand.</p>

Species Name	Value	Applicable FMAs	Management Actions
			The definition of a Black She-oak stand is a group or groups of trees with a basal area equal to or greater than 10 m2 in an area of 0.25 hectares.
Golden Sun Moth <i>Synemon plana</i>	Population	Portland-Horsham FMA	Apply a management area over populations. Detailed planning is required to ensure population is protected from timber harvesting.
Great Cormorant <i>Phalacrocorax carbo</i>	Population	Mid-Murray FMA	Exclude activities likely to disturb breeding activity within 250 m region around current roosting and breeding sites of colonially-nesting waterbirds during the breeding season.
Greater Glider <i>Petauroides volans</i>	Relative abundance (More than 10 per Spotlight Kilometre)	East Gippsland FMA	Apply a protection area of approximately 100 ha of suitable habitat where records report a relative abundance of more than 10 individuals per spotlight kilometre (equivalent to more than 2 individuals per hectare or more than 15 individuals per hour of spotlighting), or where substantial populations are located in isolated or unusual habitat. Note: Assumed rate of spotlighting per kilometre is 100mins per 1km and visible range either side of transect for this species is 25m, equating to assumed minimum survey area of 5 hectares.
Grey Goshawk <i>Accipiter novaehollandiae</i>	Nest tree used within the last 5 years	Central Highlands FMAs North East FMAs	Apply a 100 m buffer around nest trees used within the last 5 years. Exclude timber harvesting operations within 250 m of nest trees during breeding season.
	Nest tree	Otways FMA	Buffer nest trees by 100 m and avoid burning at all times.
	Nesting sites	Midlands FMA Gippsland FMAs Portland-Horsham FMA Bendigo FMA East Gippsland FMA	Apply a management area of 250 m radius over nesting sites. Within 250m of nesting site, avoid timber harvesting, road construction and burning activities during breeding season. Breeding season is 1 July to 30 November. Apply a protection area of 100m radius around nest trees. Note: The Secretary intends to review this strategy when 10 sites have been established in State forest .
Grey-crowned Babbler <i>Pomatostomus temporalis</i>	Active colony	Mid-Murray FMA	Apply a buffer of 200 m radius around active colonies utilising River Red Gum (<i>Eucalyptus camaldulensis</i>) forest on the western edge of Guttram State forest and the southern edge of Benwell State Forest . Note: The Secretary intends to review this prescription when stand type and structural habitat requirements are understood. Establish a buffer of 100 m radius around active colonies elsewhere.

Species Name	Value	Applicable FMAs	Management Actions
Grey-headed Flying-fox <i>Pteropus poliocephalus</i>	Roost site that has a pattern of regular seasonal use	Gippsland FMAs	Apply a protection area of 100 m radius for a roost site that has a pattern of regular seasonal use.
	Active colony		Schedule timber harvesting operations and burning to minimise disturbance to active colonies if found in State forest .
	Active colony	Portland-Horsham FMA	Schedule timber harvesting operations to minimise disturbance to active colonies if found in State forest .
Hooded Scaly-foot <i>Pygopus schraderi</i>	Population	Mid-Murray FMA	<p>Apply a management area of approximately 50 ha over populations, where practicable incorporating the detection site.</p> <p>Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations.</p>
Plumed Egret <i>Ardea intermedia plumifera</i>	Current roosting and breeding site	Portland-Horsham FMA	Exclude activities likely to disturb breeding activity within a 250 m radius of current roosting and breeding sites of colonially-nesting waterbirds during the breeding season.
	Current roosting and breeding site	Mid-Murray FMA	Exclude activities likely to disturb breeding activity within a 250 m radius of current roosting and breeding sites of colonially-nesting waterbirds during the breeding season
King Quail <i>Synoicus chinensis</i>	Wet heath	Portland-Horsham FMA	Protect wet heaths within 20ha radius of records of this species. Harvesting should be minimised close to wet heaths and drainage patterns must not be altered.
Koala <i>Phascolarctos cinereus</i>	Resident population or substantial population located in isolated or unusual habitat	East Gippsland FMA	Apply a protection area of approximately 100 ha of suitable habitat over resident populations or substantial populations located in isolated or unusual habitat.
Lace Monitor <i>Varanus varius</i>	Population	Portland-Horsham FMA	<p>Apply a management area over populations.</p> <p>Detailed planning is required to ensure population is protected from timber harvesting.</p>
Large Brown Tree Frog <i>Litoria littlejohni</i>	Detection (adult, sub-adult, tadpole or egg cluster)	East Gippsland FMA	Apply a protection area of 28 ha that includes the detection site.

Species Name	Value	Applicable FMAs	Management Actions
Leadbeater's Possum habitat/colony <i>Gymnobelideus leadbeateri</i>	Leadbeater's Possum colony	Central Highlands FMAs	Colony Apply a protection area of 200 m radius centred on each Leadbeater's Possum colony.
	OR		OR
	Zone 1A habitat		Zone 1A Habitat Apply a protection area over areas of Zone 1A habitat where there are more than 10 hollow bearing trees per 3 ha in patches greater than 3 ha. (Ensure Zone 1A habitat is not salvage logged).
	OR		Zone 1B Habitat Apply a protection area over Zone 1B habitat where there are more than 12 hollow bearing trees per 3 ha in patches greater than 10 ha and wattle density exceeds 5 m ² /ha. This prescription applies until either of the two Zone 1B attributes:
	Zone 1B habitat		1. the presence of dead mature or senescent living trees; or 2. wattle understorey no longer exists.
Little Black Cormorant <i>Phalacrocorax sulcirostris</i>	Current roosting and breeding site	Mid-Murray FMA	Exclude activities likely to disturb breeding activity within 250 m radius of current roosting and breeding sites of colonially-nesting waterbirds during the breeding season.
Little Egret <i>Egretta garzetta</i>	Current roosting and breeding site	Portland-Horsham FMA	Exclude activities likely to disturb breeding activity within 250 m radius of current roosting and breeding sites of colonially-nesting waterbirds during the breeding season.
		Mid-Murray FMA	
Little Falcon <i>Falco longipennis</i>	Nesting site	East Gippsland FMA	Apply a management area of 250 m radius over each nesting site.
			Within 250 m of nesting site, avoid timber harvesting, road construction and burning during breeding season. Apply a protection area of 100 m radius around nest trees.
Little Pied Cormorant <i>Microcarbo melanoleucos</i>	Current roosting and breeding site	Mid-Murray FMA	Exclude activities likely to disturb breeding activity within 250 m radius of current roosting and breeding sites of colonially-nesting waterbirds during the breeding season.

Species Name	Value	Applicable FMAs	Management Actions
Long-footed Potoroo <i>Potorous longipes</i>	Detection site	North East FMAs East Gippsland FMA	<p>Apply a management area of approximately 150 ha for each Long-footed Potoroo detection site that is outside the Core Protected Area (i.e. within SPZ and conservation reserves).</p> <p>Notes: As far as possible, management area boundaries will follow recognisable landscape features such as ridges, spurs and watercourses. Within each management area, at least one third (50 ha) will be protected from timber harvesting and new roading. This will be known as Long-footed Potoroo Retained Habitat. The LFP Retained Habitat will include the best LFP habitat in the SMZ, which will generally be in gullies and on lower, sheltered slopes. The LFP Retained Habitat may include areas otherwise unavailable for timber harvesting due to restrictions under the Code. The management area will also have a general restriction of one third of the total area that can be harvested in any three year period. If more than one coupe is to be harvested in a management area in the same year, the coupes must be separated by at least the equivalent of another coupe width. The management area, with the LFP Retained Habitat clearly delineated, will be shown as part of the Forest Management Zoning Scheme. If the 150 ha area includes any part of an existing conservation reserve or SPZ, these areas will retain their existing reservation or zoning status but will be considered for inclusion as part of the area of retained habitat. In such cases, the final area applied as a management area or SMZ may be correspondingly smaller.</p>
Long-nosed Potoroo <i>Potorous tridactylus trisulcatus</i>	Gully line and patches of dense vegetation	Portland-Horsham FMA	Protect gully lines and patches of dense vegetation in areas where this species is known to occur and that are currently not protected through SPZ or SMZ .
Mallacoota Burrowing Crayfish <i>Engaeus mallacoota</i>	Known site	East Gippsland FMA	Apply a 100 m buffer from each bank for 1 km upstream and 1 km downstream of known Mallacoota Burrowing Crayfish sites. Avoid road construction and stream crossings within these stream buffers .
Malleefowl <i>Leipoa ocellata</i>	Active nesting mound	Portland-Horsham FMA	Apply a protection area of 3 ha and a management area of 250-300 m radius over each active nesting mound.

Species Name	Value	Applicable FMAs	Management Actions
Masked Owl <i>Tyto novaehollandiae</i>	Nesting and roosting site utilised recently and frequently	Central Highlands FMAs Midlands FMA	Apply a management area of 250 m radius over each nesting and roosting site utilised recently and frequently and located outside a Masked Owl Management Area, unless already protected.
	or Old hollow-bearing tree		Within 250 m of the nesting or roosting site, protect habitat elements such as old hollow bearing trees that may be used by Masked Owls and their prey. Exclude timber harvesting operations, road construction and other activities likely to disturb breeding activity during the breeding season. Buffer nest trees by 100 m.
	Nesting and roosting site utilised recently and frequently	Gippsland FMAs North East FMAs Portland-Horsham FMA East Gippsland FMA	Apply a protection area of 3 ha and a management area of 250-300 m radius (or equivalent linear area) over each nesting and roosting site utilised recently and frequently and located outside a Masked Owl Management area, unless already protected.
	or Habitat element		(In these cases, habitat for foraging is already provided in areas excluded from timber harvesting by general prescription including wildlife corridors , steep areas and unmerchantable areas and areas protected for other management purposes). Within 250-300 m of nesting or roosting site, protect habitat elements such as old hollow bearing trees that may be used by Masked Owls and their prey. Exclude timber harvesting operations, road construction and burning during the breeding season.
	Nesting and roosting site utilised recently and frequently	Otways FMA	Apply a protection area of 3 ha over each nesting and roosting site utilised recently and frequently and located outside a Masked Owl Management Area, unless already protected.
	or		(In these cases, habitat for foraging is already provided in areas excluded from timber harvesting operations by general prescription including wildlife corridors , steep areas and unmerchantable areas and areas protected for other management purposes).
	Habitat element		Within 250-300 m of nesting or roosting site, protect habitat elements such as old hollow bearing trees that may be used by Masked Owls and their prey.
Mount Stirling stonefly <i>Thaumatoperla flaveola</i>	Permanent stream	Gippsland FMAs	In known Mount Stirling stonefly habitat apply: -50 m buffers to permanent streams on the boundary of the logging coupe . -30 m buffers to permanent streams within the boundary of a logging coupe . Where the permanent stream commences within the coupe , apply the buffer for a distance of 30 m above the head of the permanent stream . -15 m filter strips to drainage lines . Where the drainage line commences within the coupe , apply

Species Name	Value	Applicable FMAs	Management Actions
			the filter strip for a distance of 15 m above the head of the drainage line .
Mountain Dragon <i>Rankinia diemensis</i>	Population	Midlands FMA	<p>Apply a management area over populations.</p> <p>Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations.</p>
	Permanent or temporary stream, or drainage line within a catchment containing Mountain Galaxias	Gippsland FMAs	Minimise stream crossings over permanent and temporary streams and drainage lines in catchments containing populations of Mountain Galaxias.
Mountain Galaxias <i>Galaxias olidus</i>	Population	North East FMAs	<p>Apply minimum stream buffer and filter strip widths specified in Table 10 for 1 km upstream of Mountain Galaxias populations or SMZ for Mountain Galaxias.</p> <p>Minimise stream crossings over waterways in catchments containing Mountain Galaxias.</p>
	Population	East Gippsland FMA	<p>Apply a protection area extending 100 m from each bank for 1 km upstream and 1 km downstream of populations.</p> <p>Avoid constructing new roads in the protection area.</p> <p>Note: The Secretary intends to review this strategy when 50 significant fish sites have been located.</p>
Mountain Pygmy-possum <i>Burramys parvus</i>	Population	North East FMAs	<p>Apply a management area over populations.</p> <p>Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations.</p>
Nankeen Night Heron <i>Nycticorax caledonicus</i>	Current roosting and breeding site	Mid-Murray FMA	Exclude activities likely to disturb breeding activity within 250 m radius of current roosting and breeding sites of colonially-nesting waterbirds during the breeding season.
Narracan Burrowing Crayfish <i>Engaeus phyllocercus</i>	Narracan Burrowing Crayfish site	Gippsland FMAs	Avoid road construction and stream crossings within stream buffers for 1 km upstream of Narracan Burrowing Crayfish sites. Design snig tracks to minimise alteration to drainage patterns in coupes adjacent Narracan Burrowing Crayfish sites on floodplain or seep zones. Avoid burning during late spring and early summer. Conduct burns when the

Species Name	Value	Applicable FMAs	Management Actions
			moisture differential between Narracan Burrowing Crayfish habitat and the coupe is adequate to prevent the habitat from burning.
Native fish	Major, permanent or temporary streams of the Aire River, Carlisle River and Gellibrand River	Otways FMA	For timber harvesting coupes adjacent Aire River, Carlisle River and Gellibrand River apply: - 100 m buffers to sections considered major streams; - 50 m buffers to sections considered permanent streams; and - 10 m buffers to sections considered temporary streams or greater if required to mitigate water quality risk.
New Holland Mouse <i>Pseudomys novaehollandiae</i>	Preferred habitat	Gippsland FMAs	Apply a protection area of 100 ha of preferred habitat including the detection site wherever possible.
Orbost Spiny Crayfish <i>Euastacus diversus</i>	Detection site	East Gippsland FMA	Apply a protection area extending 100m from each bank for 1 km upstream and 1 km downstream of detection sites. Avoid constructing new roads and stream crossings within the protection area . Manage nearby regeneration burns to ensure the protection area is not burnt. Note: The Secretary intends to review this strategy when 20 sites are established.
Otway Stonefly <i>Eusthenia nothofagi</i>	critical habitat	Otways FMA	In timber harvesting coupes within critical habitat of Otway Stonefly apply: - 100 m buffers to sections of the Aire River, Carlisle River, Gellibrand River considered major streams; - 50 m buffers to permanent streams; and - 10 m buffers to temporary streams or greater if required to mitigate water quality risk
Pale Sun Moth <i>Synemon selene</i>	Population	Portland-Horsham FMA	Apply a management area over populations. Detailed planning is required to ensure population is protected from timber harvesting.
Peregrine Falcon <i>Falco peregrinus</i>	Nesting site	East Gippsland FMA	Apply a management area of 250 m radius over each nesting site. Within 250 m of the nesting site, avoid timber harvesting, road construction and burning during breeding season. Apply a protection area of 100m radius around nesting site.
	Nest tree	Otways FMA	Buffer nest trees by 100 m, and avoid burning at all times.

Species Name	Value	Applicable FMAs	Management Actions
Powerful Owl <i>Ninox strenua</i>	Nesting and roosting site	Central Highlands FMAs Midlands FMA Gippsland FMAs North East FMAs Portland-Horsham FMA Bendigo FMA East Gippsland FMA Mid-Murray FMA	<p>Apply a protection area of 3 ha and a management area of 250-300 m radius (or equivalent linear area) around each nesting and roosting site, unless already protected.</p> <p>Outside of Powerful Owl Management Areas, habitat for foraging is provided in areas excluded from timber harvesting by general prescription including wildlife corridors, steep areas and unmerchantable areas and areas protected for other management purposes. Avoid burning operations within 250 m of known nest sites during the breeding season (1 May to 30 November).</p> <p>Within 250-300 m of nesting or roosting site, exclude timber harvesting operations, road construction and burning during the breeding season.</p> <p>Note: The Secretary intends to review zoning associated with individual nesting and roosting sites within the Central Highlands FMAs every 5 years. This review should prioritise the retention of zones for nesting and roosting sites utilised frequently within the previous 5 years.</p>
	Nesting and roosting site	Otways FMA	Apply a protection area of 3 ha over each nesting and roosting site, unless already protected.
Regent Honeyeater <i>Anthochaera phrygia</i>	Detections outside of known sites	Midlands FMA	If Regent Honeyeaters are present in an area not listed as a regularly used site, exclude the area from timber harvesting operations until its significance for Regent Honeyeaters can be assessed by the Recovery Team and appropriate prescriptions devised.
	Regularly used sites (Regent Honeyeater)	Bendigo FMA Mid Murray FMA North East FMAs Portland-Horsham FMA	Apply a protection area extending 100 m from regularly used sites (Regent Honeyeater) . Surround the protection area with a management area of 150 m.
Rich reptile and amphibian sites	Site that is particularly rich in reptiles or amphibians	East Gippsland FMA	Apply a protection area of at least 10 ha at sites as being particularly rich in reptiles or amphibians
Royal Spoonbill <i>Platalea regia</i>	Current roosting and breeding site	Mid-Murray FMA	Exclude activities likely to disturb breeding activity within 250 m radius of current roosting and breeding sites of colonially-nesting waterbirds during the breeding season.

Species Name	Value	Applicable FMAs	Management Actions
Samphire Skink <i>Morethia adelaidensis</i>	Population	Midlands FMA Portland Horsham FMA	Apply a management area over populations.
			Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
			Detailed planning is required to ensure population is protected from timber harvesting.
Significant fish site	Site supporting 3 or more threatened fish species, or site supporting 6 or more native freshwater fish species	East Gippsland FMA	Apply a protection area extending 100 m from each bank for 1 km upstream and 1 km downstream of sites supporting 3 or more threatened fish species, or sites supporting 6 or more native freshwater fish species.
			Avoid constructing new roads in the protection area . Note: The Secretary intends to review this strategy when 50 significant fish sites have been located.
Small Brown Azure Butterfly <i>Ogyris otares</i>	Host plant Berry broombush (<i>Choretrum glomeratum</i>)	Portland-Horsham FMA	Protect the host plant Berry broombush (<i>Choretrum glomeratum</i>) within 250m of any records of this species.
Smoky Mouse <i>Pseudomys fumeus</i>	Record	Central Highlands FMAs Gippsland FMAs North East FMAs Portland-Horsham FMA	Apply a management area of approximately 100 ha over records incorporating the detection site wherever possible.
			Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations or road construction commencement, incorporating any relevant information from studies of the species. Note: The Secretary intends to review this strategy when 10 Smoky Mouse SMZ are established or in light of further research regarding the conservation status of the species and its response to disturbance.
Sooty Owl <i>Tyto tenebricosa</i>	Nesting and roosting site utilised recently and frequently and located outside a Sooty Owl Management area , unless already protected	Central Highlands FMAs	Apply a management area of 250 m radius over each nesting and roosting site utilised recently and frequently and located outside a Sooty Owl Management area , unless already protected. In these cases, habitat for foraging is already provided in areas excluded from timber harvesting by general prescription including wildlife corridors , steep areas and unmerchantable areas and areas protected for other management purposes. Within 250 m of nesting or roosting site, exclude timber harvesting operations , road construction and other activities likely to disturb breeding activity during the breeding season. Buffer nest trees by 100 m.

Species Name	Value	Applicable FMAs	Management Actions
	Nesting and roosting site utilised recently and frequently and located outside a Sooty Owl Management area , unless already protected	Gippsland FMAs North East FMAs East Gippsland FMA	<p>Apply a protection area of 3 ha and a management area of 250-300 m radius (or equivalent linear area) over each nesting and roosting site utilised recently and frequently and located outside a Sooty Owl Management area, unless already protected. In these cases, habitat for foraging is already provided in areas excluded from timber harvesting by general prescription including wildlife corridors, steep areas and unmerchantable areas and areas protected for other management purposes.</p> <p>Within 250-300 m of nesting or roosting site, exclude timber harvesting operations, road construction and burning during the breeding season.</p>
South Gippsland Spiny Crayfish <i>Euastacus neodiversus</i>	Site	Gippsland FMAs	Develop management actions to protect South Gippsland Crayfish habitat at sites in State forest .
Southern Barred Frog <i>Mixophyes balbus</i>	Record	East Gippsland FMA	<p>Where records of Southern Barred Frog are located on first-order streams or sites away from streams, protect approximately 50 ha (preferably the entire sub catchment unit) with a protection area. Where records of Southern Barred Frog are located on second or higher order streams, apply a protection area of 100 m width each side of the stream for 1 km upstream and downstream of the detection site.</p> <p>Avoid constructing new roads in the protection area.</p> <p>Note: The Secretary intends to review this strategy when an Action Statement is prepared.</p>
Southern Bent-wing Bat <i>Miniopterus schreibersii</i>	Breeding and roosting cave, mine, or other over-wintering site	North East FMAs	Apply a protection area of 100 m radius over breeding and roosting caves and mines, and over-wintering sites.
Southern Brown Bandicoot <i>Isodon obesulus obesulus</i>	Gully line and patches of dense vegetation	Portland-Horsham FMA	Protect gully lines and patches of dense vegetation in areas where this species is known to occur and that are currently not protected through SPZ or SMZ .
South-eastern Long-eared Bat <i>Nyctophilus corbeni</i>	Colony	Portland-Horsham FMA	Apply a 100 m buffer around colonies.
Southern Myotis <i>Myotis macropus</i>	Breeding and roosting site	Central Highlands FMAs	Apply and maintain a 100 m buffer around colonies.
	Breeding and roosting site	North East FMAs	Apply a protection area of 300 m radius over breeding and roosting sites.

Species Name	Value	Applicable FMAs	Management Actions
Spot-tailed Quoll <i>Dasyurus maculatus maculatus</i>	Breeding and roosting site	Gippsland FMAs	Note: The Secretary intends to review this strategy when 20 sites are established or when significant information has been obtained from further research.
			Apply a protection area of 100 m radius over breeding and roosting caves, trees and mines and over-wintering sites. Note: The Secretary intends to review this strategy when 20 sites are established or when significant information has been obtained from further research.
		Mid-Murray FMA	Apply a management area of 200 m radius over breeding and roosting populations. Within 200 m of breeding or roosting site, exclude all potentially disturbing activities during breeding season. Breeding season is 1 October to 31 March. Apply a 100m Buffer around breeding and roosting trees.
	Records or Preferred habitat feature or Detection site outside the SPZ within the SMZ , unless there are compelling reasons for excluding them	East Gippsland	Apply a protection area of 100 m radius over breeding and roosting caves, trees and mines and over-wintering sites
			Apply a protection area of 500 ha and a management area of 1000 ha for all Quoll records in State forest throughout Victoria, up to a target of 50 sites. Note: The location of the protection area and management area will be based on protecting preferred habitat features for Quolls. Protect den and latrine sites by a protection area of at least a 200 m radius. The protection area may include other detection sites, based on habitat quality and the proximity of existing protected habitat. Include detection sites outside the protection area within the management area , unless there are compelling reasons for excluding them (e.g. a record in a clearly unsuitable location for habitat protection, proximity of existing protected habitat etc.). Prioritise site protection for Quolls according to habitat quality, current reservation status of the site, linkage to other reserves and the presence of complementary values. Records within 2 km of each other are generally regarded as the same animal unless proved otherwise. Exclude the use of threatening poisons within 1 km of a record less than 5 years old. Note: The Secretary intends to periodically review the selection of Quoll records afforded SPZ and SMZ protection, to ensure that once targets are reached and as new records accrue or other information becomes available, the network of protected habitat in the FMA is

Species Name	Value	Applicable FMAs	Management Actions
			optimal for Quoll conservation. Substitution of protected Quoll sites must consider the extent and quality of habitat and the currency, reliability and type of record.
			<p>Apply a protection area of approximately 500 ha for each record. Include areas of undisturbed mature forest, riparian areas and rocky outcrops in the protection area where possible. In addition, apply a management area of approximately 1000 ha, contiguous to the protection area or SPZ. Protect den and latrine sites by at least a 200 m radius protection area where they are not otherwise protected.</p> <p>Note: The objectives of the management area will be to maintain habitat for both arboreal and non-arboreal Spot-tailed Quoll prey, while providing continuing opportunities for timber harvesting. Harvesting within the management area or SMZ may comprise selective harvesting operations over the entire area, or carefully sited and scheduled seed tree or clearfall harvesting, ensuring, in either case that important prey habitat components such as hollow bearing trees are retained. Where clearfall or seed tree harvesting systems are proposed, harvesting operations may through time extend over the entire management area or SMZ. However, harvesting must be scheduled to ensure at least 500 ha of suitable prey habitat is available at any point in time (in addition to the protection area or SPZ). The adoption of harvesting strategies for management areas and SMZs should have regard to the assessed significance of the zone as Spot-tailed Quoll habitat, existing patterns of public land use and forest zoning, the silvicultural characteristics of forest types in the zone, the proportion of the zone which is unproductive for sawlog harvesting and the timber resource values of the productive areas.</p> <p>Note: The Secretary intends to review the selection of Quoll records afforded SPZ and SMZ protection when 10 zones have been established in State forest or when significant information has been obtained from further research. the purpose of the review is to ensure that once targets are reached and as new records accrue or other information becomes available, the network of protected habitat in the FMA is optimal for Quoll conservation. Substitution of protected Quoll sites must consider the extent and quality of habitat and the currency, reliability and type of record.</p>
	Records		
	or		
	Preferred habitat feature	Gippsland FMAs North East FMAs	
	or		
	Den and latrine site		

Species Name	Value	Applicable FMAs	Management Actions
	Records		Apply a protection area of 500 ha and a management area of 1000 ha for all Quoll records in State forest , up to a target of 10 sites. The location of the protection area and management area will be based on protecting preferred habitat features for Quolls. Protect den and latrine sites by a protection area of at least a 200 m radius.
	Preferred habitat feature	Portland-Horsham FMA	Note: The protection area may include other detection sites, based on habitat quality and the proximity of existing protected habitat. Include detection sites outside the protection area within the management area , unless there are compelling reasons for excluding them (e.g. a record in a clearly unsuitable location for habitat protection, proximity of existing protected habitat etc.). Prioritise site protection for Quolls according to habitat quality, current reservation status of the site, linkage to other reserves and the presence of complementary values. Records within 2 km of each other are generally regarded as the same animal unless proved otherwise. Exclude the use of poisons such as 1080 within 2 km of Quoll records.
	Den and latrine site		
	Preferred habitat feature		Apply a protection area of 500 ha and a management area of 1000 ha for all Quoll records in State forest up to a target number of sites (to be determined). The location of the protection area and management area will be based on protecting preferred habitat features for Quolls. The protection area will include known den and latrine sites (protected by at least a 200 m radius), and may include other detection sites, based on habitat quality and the proximity of existing protected habitat.
	or		
	Detection site	East Gippsland FMA	Note: Detection sites not included in the protection area will generally be included within the management area , unless there are compelling reasons for excluding them (e.g. a record in a clearly unsuitable location for habitat protection, proximity of existing protected habitat etc.). Site protection for Quolls will be prioritised according to habitat quality, current reservation status of the site, linkage to other reserves and the presence of complementary values. Records within 2 km of each other will be generally regarded as the same animal unless proved otherwise.
			Note: The Secretary intends to periodically review the selection of Quoll records afforded SPZ and SMZ protection, to ensure that once targets are reached and as new records accrue or other information becomes available, the network of protected habitat in the FMA is optimal for Quoll conservation. Substitution of protected Quoll sites must consider the extent and quality of habitat and the currency, reliability and type of record. The Secretary may develop guidelines for the substitution of protected Quoll sites.

Species Name	Value	Applicable FMAs	Management Actions
			<p>Apply a protection area of 500 ha and a management area of 1000 ha for all Quoll records in State forest throughout Victoria, up to a target of 10 sites.</p> <p>Note: The location of the protection area and management area will be based on protecting preferred habitat features for Quolls. Protect den and latrine sites with a protection area of at least a 200 m radius. The protection area may include other detection sites, based on habitat quality and the proximity of existing protected habitat. Include detection sites outside the protection area within the management area, unless there are compelling reasons for excluding them (e.g. a record in a clearly unsuitable location for habitat protection, proximity of existing protected habitat etc.). Prioritise site protection for Quolls according to habitat quality, current reservation status of the site, linkage to other reserves and the presence of complementary values. Records within 2 km of each other are generally regarded as the same animal unless proved otherwise. Exclude the use of poisons such as 1080 within 2 km of Quoll records.</p> <p>Note: The Secretary intends to periodically review the selection of Quoll records afforded SPZ and SMZ protection, to ensure that once targets are reached and as new records accrue or other information becomes available, the network of protected habitat in the FMA is optimal for Quoll conservation. Substitution of protected Quoll sites must consider the extent and quality of habitat and the currency, reliability and type of record.</p>
	Preferred habitat feature or Detection site	Midlands FMA	
			<p>Apply a protection area of approximately 500 ha for each record. The location of the protection area will be based on protecting preferred habitat features for Quolls. The protection area will include known den and latrine sites (protected by at least a 200 m radius), and may include other detection sites, based on habitat quality and the proximity of existing protected habitat.</p> <p>Note: Site protection for Quolls will be prioritised according to habitat quality, current reservation status of the site, linkage to other reserves and the presence of complementary values. Records within 2 km of each other will be generally regarded as the same animal unless proved otherwise.</p> <p>Note: The Secretary intends to periodically review the selection of Quoll records afforded SPZ and SMZ protection, to ensure that once targets are reached and as new records accrue or other information becomes available, the network of protected habitat in the FMA is optimal for Quoll conservation. Substitution of protected Quoll sites must consider the extent and quality of habitat and the currency, reliability and type of record.</p>
	Preferred habitat feature or Detection site	Otways FMA	

Species Name	Value	Applicable FMAs	Management Actions
Spotted Galaxis <i>Galaxius truttaceus</i>	Population	Midlands FMA	<p>Apply a management area for populations.</p>
			<p>Until the species critical habitat is known, apply a protection area of 300 m radius over locations where frogs have been recorded and where suitable habitat has been mapped (collectively referred to as 'stream habitat'). Also exclude new road construction and other potentially threatening activities (such as prescribed fire) from this area.</p> <p>For at least 1km upstream from and potential Spotted Tree Frog locations:</p> <ul style="list-style-type: none"> - apply buffer and filter widths set out in Appendix 1 Table 10 to timber harvesting operations; and - do not construct new roads or stream crossings. <p>In the catchment upstream of a Spotted Tree Frog management zone:</p> <ul style="list-style-type: none"> - ensure any new road (and the fill slope toe of any new road) is located at least 50 m from any stream, unless site specific sediment management operations are put in place to prevent sediments entering perennial and ephemeral streams in the management zone
Spotted Tree Frog <i>Litoria spenceri</i>	Locations where frogs have been recorded and where suitable habitat has been mapped	Central Highlands FMAs	<ul style="list-style-type: none"> - minimise construction of new roads and stream crossings, and ensure any constructed comply with the following prescriptions extracted from <i>O'Shaughnessy and Associates (1997)</i>: <ul style="list-style-type: none"> • Ensure that creek culverts and bridges are built to be effective with 1:50 year flows. • Construct rock armoured overflow sections to allow overtopping without road washouts. • Install culverts of a minimum dimension of 375 mm along roads. • Install diversion culverts of a minimum dimension of 500 mm either side of stream crossings and construct crossings to ensure that road drainage at the crossing does not directly enter the stream. • Ensure that all culvert outlets have structures in place to spread and disperse culvert discharge using materials such as rocks, devices constructed from durable timber and logs.

Species Name	Value	Applicable FMAs	Management Actions
			<ul style="list-style-type: none"> • Use excavators to prepare stream crossings for culvert placement. Ensure that material is pulled back on either side and not across the crossing. • Ensure that fill placement is accurate following culvert installation. • Use techniques to ensure silt runoff from surface flows, embankments and fills into drainage lines and or creeks is minimised. • When removing stream crossings associated with temporary roads: (a) extensively drain the road formation using substantial banks: and (b) remove the road bench where it connects to the permanent road network. - schedule timber harvesting operations, roading and burning to minimise the area disturbed at any one time
			<p>Until the species critical habitat is known, apply a protection area of 300 m radius over all frog sites and mapped habitat areas. Apply a management area of a further 700m either side of the protection area and 1 km upstream or to the ridge top (if the stream is less than 1 km long) along all streams that flow into the frog habitat. Exclude timber harvesting operations, new road construction and other potentially threatening activities (such as prescribed fire) from the protection area.</p> <p>Within the management area or SMZ:</p> <ul style="list-style-type: none"> - do not construct new stream crossings - ensure any new road (and the fill slope toe of any new road) is located at least 50 m from any stream, unless site specific sediment management operations are put in place to prevent sediments entering perennial and ephemeral streams in the management zone - apply buffer and filter widths set out in Table 10. - give particular attention to suspension of logging and snig track drainage during wet weather - excavate 50 cm deep pits below the original track surface and immediately upslope of bars constructed to drain snig tracks and other tracks - ensure landings are constructed, or are drained to dispose of discharge at least 50 m from the upslope edge of buffers and filters.
Locations where frogs have been recorded and where suitable habitat has been mapped		Gippsland FMAs North East FMAs	

Species Name	Value	Applicable FMAs	Management Actions
Square-tailed Kite <i>Lophoictinia isura</i>	Nest tree used within the last 5 years	Central Highlands FMAs North East FMAs Portland-Horsham FMA	Apply a 100 m buffer around nest trees used within the last 5 years. Exclude timber harvesting operations within 250 m of nest trees during breeding season.
	Nesting site	Midlands FMA Gippsland FMAs Bendigo FMA East Gippsland FMA	<p>Apply a management area of 250 m radius over nesting sites.</p> <p>Within 250 m of nesting sites, avoid timber harvesting, road construction and burning during breeding season. Apply a protection area of 100m radius around nesting sites.</p> <p>Note: Within the Midlands FMA, the Secretary intends to review this strategy when 10 sites have been established in State forest.</p>
Squirrel Glider <i>Petaurus norfolcensis</i>	Population		Apply a management area of approximately 500 ha of suitable habitat over populations.
	Key habitat element such as nesting hollows, large trees and suitable understorey species	North East FMAs Portland-Horsham FMA Midlands FMA	<p>Within the management area or SMZ, implement prescriptions that address maintenance of key habitat elements such as nesting hollows, large trees and suitable understorey species (in particular Silver Wattle <i>Acacia dealbata</i>). Exclude timber harvesting operations from a core area of approximately 100 ha.</p> <p>Note: The Secretary intends to review this strategy when 10 sites have been established in State forest.</p>
	Population	Bendigo FMA	<p>Apply a management area over populations.</p> <p>Within the management area or SMZ, implement prescriptions that address maintenance of key habitat elements such as nesting hollows, large trees and suitable understorey species.</p>
Strzelecki Burrowing Crayfish <i>Engaeus rostrigaleatus</i>	Sites	Gippsland FMAs	Develop management actions to protect Strzelecki Burrowing Crayfish habitat at sites in State forest .
Superb Parrot <i>Polytelis swainsonii</i>	Nest tree	Mid-Murray FMA	Apply a management area of 250 m radius over nest trees.
			<p>Within 250m of the nest tree, exclude all potentially disturbing activities during breeding season. Breeding season is 1 September to 31 December. Apply a protection area of 100m radius around nest trees.</p> <p>Note: The Secretary intends to review this strategy statewide every 10 years from 2003, or if the total area</p>

Species Name	Value	Applicable FMAs	Management Actions
			of buffer zones in Victorian State forests exceeds 200 ha, whichever occurs first.
Swamp Skink <i>Lissolepis coventryi</i>	Records	Portland-Horsham FMA	Minimise disturbance to damp areas and gully lines. Maintain dense vegetation within 250 m of records of this species.
Swift Parrot <i>Lathamus discolor</i>	Vicinity of Swift Parrot flocks	Midlands FMA Portland-Horsham FMA	Avoid disturbance of Swift Parrot flocks by postponing timber harvesting operations that may affect them in their vicinity.
	Resident population	North East FMAs	Apply a management area for resident populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations or prescribed burning activities.
Trout Cod <i>Maccullochella macquariensis</i>	Viable Trout Cod population	North East FMAs Mid-Murray FMA	Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately managed and protected when timber harvesting operations are planned in rivers and catchments upstream of viable Trout Cod populations.
Turquoise Parrot <i>Neophema pulchella</i>	Stump identified as nest site	North East FMAs	Protect stumps identified as nest sites from timber harvesting operations .
Variegated Pygmy Perch <i>Nannoperca variegata</i>	Population	Portland-Horsham FMA	Apply a protection area extending 40 m from each bank for 40 m upstream and 40 m downstream of populations. Disturbance that could impact on water quality must be avoided within a protection area .
Warragul Burrowing Crayfish <i>Engaeus sternalis</i>	Population	Gippsland FMAs	Apply a management area over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Wedge-tailed Eagle <i>Aquila audax</i>	Nesting site	Midlands FMA	Apply a management area of 250 m radius over nesting sites. Within the management area or SMZ , avoid timber harvesting , road construction and burning activities during breeding season. Breeding season is 1 July to 30 November. Within 100m of nest trees, exclude

Species Name	Value	Applicable FMAs	Management Actions
White-bellied Sea-eagle <i>Haliaeetus leucogaster</i>			timber harvesting operations, road construction and burning at all times. Note: The Secretary intends to review this strategy when 10 sites have been established in State forest .
	Nesting site	Gippsland FMAs	Apply a management area of 500 m radius over nesting sites. Within 500m of nesting sites, avoid timber harvesting, road construction and burning during breeding season. Apply a protection area of 100m radius around nesting sites.
	Resident population	North East FMAs	Apply a management area over resident populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
	Nesting site	Portland-Horsham FMA East Gippsland FMA	Apply a management area of 250 m radius over each nesting site. Within 250m of nesting site, avoid timber harvesting, road construction and burning during breeding season. Apply a protection area of 100m radius around nesting sites.
	Nesting population	Mid-Murray FMA	Apply a management area of 250 m radius over nesting populations. Within 20m of nesting population, avoid timber harvesting, road construction and burning during breeding season. Breeding season is 1 May to 31 December. Apply a protection area of 100 m radius around nesting sites.
White-footed Dunnart <i>Sminthopsis leucopus</i>	Site	Portland-Horsham FMA	Apply a protection area of approximately 20 ha of suitable habitat over sites.
Woodland Blind Snake <i>Anilius proximus</i>	Site	North East FMAs	Apply a protection area of approximately 50 ha over each site, where practicable incorporating the detection site. Note: The Secretary intends to review the strategy when 20 SPZ are established.
	Population	Mid-Murray FMA	Apply a management area of approximately 50 ha over populations, where practicable incorporating the detection site. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species

Species Name	Value	Applicable FMAs	Management Actions
Yellow-bellied Glider <i>Petaurus australis</i>			is adequately protected during timber harvesting operations .
	Population	Midlands FMA	Apply a management area over populations.
	Den tree and associated flight paths, and feed trees	Portland-Horsham FMA	Retain all Yellow-Bellied Glider den trees and associated flight paths, and feed trees. (Yellow-Bellied Glider feed trees are recognised by “V – notch” incisions into the sapwood and are found in a range of species including <i>Eucalyptus viminalis</i> , <i>E. ovata</i> , <i>E. baxteri</i> , <i>E. obliqua</i> and <i>E. willisii</i> .)
	Relative abundance (More than 5 per Spotlight Kilometre)	East Gippsland FMA Otways FMA	Apply a protection area of approximately 100 ha of suitable habitat where records report a relative abundance of more than 5 individuals per spotlight kilometer (equivalent to more than 0.2 individuals per hectare or more than 7 individuals per hour of spotlighting), or where substantial populations are located in isolated or unusual habitat. Note: Assumed rate of spotlighting per kilometer is 10mins per 100m and visible range either side of transect is 150m, equating to assumed minimum survey area of 30 hectares.
Yellow-bellied Sheathtail Bat <i>Saccolaimus flaviventris</i>	Roost site with patterns of regular seasonal use	Gippsland FMAs	Apply a protection area of 100 m radius over roost sites with patterns of regular seasonal use. Establish a further management area of 100 m radius around the protection area for sites of active colonies.
	Sites of active colonies		Schedule timber harvesting, roading and fuel reduction burning operations within the management area to minimise disturbance to colonies.
	Older forest over sites where more than 10 individuals are captured in one trapping session	East Gippsland FMA	Apply a protection area of approximately 100 ha of older forest over sites where more than 10 individuals are captured in one trapping session. Note: The Secretary intends to review this strategy when 20 sites are established.

Table 14 Rare or threatened flora prescriptions

Species Name	Value	Applicable FMAs	Management Actions
Alpine Bush-pea <i>Pultenaea fasciculata</i>	Population	Gippsland FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Alpine Buttons <i>Leptorhynchos squamatus subsp. Alpinus</i>	Population	Gippsland FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Alpine Colobanth <i>Colobanthus affinis</i>	Population	North East FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Alpine Crane's-bill <i>Geranium brevicaule</i>	Population	North East FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Alpine Fen-sedge <i>Carex hypandra</i>	Population	North East FMAs	Apply a protection area of 200 m radius over each population.
Alpine Finger-fern <i>Notogrammitis crassior</i>	Population	North East FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Alpine Groundsel <i>Senecio pectitus var. major</i>	Population	North East FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Alpine Marianth <i>Rhytidosporum inconspicuum</i>	Population	Gippsland FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .

Species Name	Value	Applicable FMAs	Management Actions
Alpine Pennywort <i>Schizeilema fragoseum</i>	Population	North East FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Alpine Phebalium <i>Phebalium squamulosum subsp. alpinum</i>	Population	North East FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Alpine Rush <i>Juncus brevibracteus</i>	Population	North East FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Alpine Stackhousia <i>Stackhousia pulviris</i>	Population	North East FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Alpine Wattle <i>Acacia alpina</i>	Population	Gippsland FMAs North East FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Anglesea Grevillea <i>Grevillea infecunda</i>	Population	Otways FMA	Manage occurrences in consultation with the Department unless already protected. Implement hygiene precautions to control the potential introduction and / or spread of <i>Phytophthora cinnamomic</i> .
Aniseed Boronia <i>Boronia galbraithiae</i>	Population	Gippsland FMAs	Apply a protection area over each population.
Antelope Greenhood <i>Pterostylis laxa</i>	Population	North East FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .

Species Name	Value	Applicable FMAs	Management Actions
Archer's Sedge <i>Carex archeri</i>	Population	North East FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Ausfeld's Wattle <i>Acacia ausfeldii</i>	Population	Bendigo FMA	Minimise disturbance from road management activities.
Austral Crane's-bill <i>Geranium solanderi</i> var. <i>solanderi</i> s.s.	Population	East Gippsland FMA	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Austral Moonwort <i>Botrychium australe</i>	Population	North East FMAs East Gippsland FMA	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Austral Toad-flax <i>Thesium australe</i>	Population	Gippsland FMAs North East FMAs	Apply a protection area over each population.
	Population	East Gippsland FMA	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Austral Trefoil <i>Lotus australis</i> var. <i>australis</i>	Population	Gippsland FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Australian Anchor Plant <i>Discaria pubescens</i>	Population	North East FMA East Gippsland FMA	Apply a management area of 200m over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
	Population	Gippsland	Apply a protection area over each population.

Species Name	Value	Applicable FMAs	Management Actions
Bantam Bush-pea <i>Pultenaea parrisiae</i>	Population	East Gippsland FMA	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Basalt Peppercress <i>Lepidium hyssopifolium</i> s.s.	Population	Midlands FMA	Apply a protection area over each population. Conduct pre-harvest surveys for the species in the vicinity of Bolworrah and Trentham.
Bassian Pomaderris <i>Pomaderris oraria</i> subsp. <i>oraria</i>	Population	Gippsland FMAs	Apply a protection area of 200 m radius over each population.
Baw Baw Sally <i>Eucalyptus pauciflora</i> subsp. <i>acerina</i>	Population	Gippsland FMAs	Apply a protection area of 200 m radius over each population.
Bead Glasswort <i>Tecticornia flabelliformis</i>	Occurrence	Portland-Horsham FMA	Manage occurrences in consultation with the Department unless already protected.
Beechworth Silver Stringybark <i>Eucalyptus cinerea</i> subsp. <i>Victoriensis</i>	Population	North East FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Ben Major Grevillea <i>Grevillea floripendula</i>	Population	Midlands FMA	Avoid disturbance to populations within the management area, SMZ and GMZ .
Bent-leaf Wattle <i>Acacia flexifolia</i>	Population	North East FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Betka Bottlebrush <i>Callistemon</i> <i>kenmorrissonii</i>	Population	East Gippsland FMA	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Binung <i>Christella dentata</i>	Population	East Gippsland FMA	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is

Species Name	Value	Applicable FMAs	Management Actions
			adequately protected during timber harvesting operations .
Birch Pomaderris <i>Pomaderris betuli</i> subsp. <i>Betulina</i>	Population	Gippsland FMAs	Apply a protection area of 200 m radius over each population.
Black Oliveberry <i>Elaeocarpus holopetalus</i>	Population	Portland-Horsham FMA	Manage populations in consultation with the Department unless already protected.
Black Stem <i>Adiantum formosum</i>	Population	East Gippsland FMA	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Blackfellow's Hemp <i>Androcalva rossii</i>	Population	East Gippsland FMA	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Blotched Hyacinth-orchid <i>Dipodium variegatum</i>	Population	Gippsland FMAs	Apply a protection area of 200 m radius over each population.
Blue-leaf Tussock-grass <i>Poa sieberiana</i> var. <i>cyanophylla</i>	Population	North East FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Blue-tongue Greenhood <i>Pterostylis oreophila</i>	Population	Gippsland FMAs North East FMAs	Apply a protection area of 200 m radius over each population.
Blunt Sandalwood <i>Santalum obtusifolium</i>	Population	East Gippsland FMA	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Blunt-leaf Pomaderris <i>Pomaderris helianthemifolia</i>	Population	Gippsland FMAs North East FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is

Species Name	Value	Applicable FMAs	Management Actions
			adequately protected during timber harvesting operations .
Bog Saw-sedge <i>Gahnia subaequiglumis</i>	Population	East Gippsland FMA	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Bogong Daisy-bush <i>Olearia frostii</i>	Population	North East FMAs	Apply a protection area of 200 m radius over each population.
Bonnet Orchid <i>Cryptostylis erecta</i>	Population	East Gippsland FMA	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Branching Raspwort <i>Gonocarpus micranthus</i> <i>subsp. ramosissimus</i>	Population	North East FMAs	Protect populations from disturbance where possible.
Bristly Greenhood <i>Pterostylis setifera</i>	Population	Bendigo FMA	Apply a management area over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Bristly Helmet-orchid <i>Corybas hispidus</i>	Population	Gippsland FMAs North East FMAs	Apply a protection area of 200 m radius over each population.
Brittle Bladder-fern <i>Cystopteris tasmanica</i>	Population	North East FMAs	Apply a protection area of 200 m radius over each population.
Broad-leaf Hop-bush <i>Dodonaea rhombifolia</i>	Population	North East FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Broad-lip Diuris <i>Diuris X palachila</i>	Population	Bendigo FMA	Apply a management area over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .

Species Name	Value	Applicable FMAs	Management Actions
Broad-lip Leek-orchid <i>Prasophyllum patens</i> s.l.	Population	North East FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Brooker's Gum <i>Eucalyptus brookeriana</i>	Occurrence	Otways FMA	Manage occurrences in consultation with the Department unless already protected. Where possible, reseed or replant all logging coupes that contained <i>E. brookeriana</i> with seed collected from the coupe to ensure re-establishment of this species on the site in a similar proportion to that found prior to harvesting as shown on the coupe plan.
Broom Bitter-pea <i>Daviesia genistifolia</i> s.s.	Population	Midlands FMA	Avoid disturbance to populations within the management area, SMZ and GMZ .
Buff Hazelwood <i>Symplocos thwaitesii</i>	Population	East Gippsland FMA	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Buffalo Sallee <i>Eucalyptus mitchelliana</i>	Population	North East FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Buloke Mistletoe <i>Amyema linophylla</i> subsp. <i>orientale</i>	Population	Mid-Murray FMA	Apply a management area of 100 m radius over populations that are not already protected. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Buloke <i>Allocasuarina luehmannii</i>	Population	Bendigo FMA	Minimise disturbance from road management activities.
Button Rush <i>Lipocarpha microcephala</i>	Population	Mid-Murray FMA	Apply a management area of 100 m radius over populations that are not already protected. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .

Species Name	Value	Applicable FMAs	Management Actions
	Population	North East FMAs	Apply a management area of 200 m radius over populations that are not already protected. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Buxton Gum <i>Eucalyptus crenulata</i>	Population	Central Highlands FMAs	Protect populations from disturbance where possible.
Cabbage Fan-palm <i>Livistona australis</i>	Population	East Gippsland FMA	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Candy Spider-orchid <i>Caladenia versicolor</i>	Population	Portland-Horsham FMA	Manage occurrences in consultation with the Department unless already protected.
Cane Spear-grass <i>Austrostipa breviglumis</i>	Population	Midlands FMA	Avoid disturbance to populations within the management area, SMZ and GMZ .
	Population	Bendigo FMA	Minimise disturbance from road management activities.
Castlemaine Spider-orchid <i>Caladenia clavescens</i>	Population	Bendigo FMA	Apply a management area over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Catkin Wattle <i>Acacia dallachiana</i>	Population	North East FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Chinese Lespedeza <i>Lespedeza juncea</i> <i>subsp. sericea</i>	Population	North East FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Cliff Cudweed <i>Euchiton umbricola</i>	Population	Gippsland FMAs	Apply a protection area of 200 m radius over each population.

Species Name	Value	Applicable FMAs	Management Actions
Clover Glycine <i>Glycine latrobeana</i>	Population	North East FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
	Population	Midlands FMA	Apply a protection area over each population based on field inspection. Review this strategy when 10 sites and 1000 individuals are protected in State forest . Note: The Secretary intends to review this strategy when 10 sites and 1000 individuals are protected in State forest
	Population	Gippsland FMAs North East FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
	Population	Portland-Horsham FMA Bendigo FMA	Apply a management area over populations based on field inspection. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Coast Bitter-bush <i>Adriana quadripartita</i> (pubescent form)	Population	Gippsland FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Coast Dandelion <i>Taraxacum cygnorum</i>	Population	Portland-Horsham FMA	Manage occurrences in consultation with the Department unless already protected.
Coast Grey-box <i>Eucalyptus bosistoana</i>	Coast Grey Box stand	Gippsland FMAs	Exclude timber harvesting operations from Coast Grey Box stands , except for when it is undertaken to facilitate propagation or regeneration of this species.
Coast Ixodia <i>Ixodia achillaeoides</i> subsp. <i>arenicola</i>	Occurrence	Portland-Horsham FMA	Manage occurrences in consultation with the Department unless already protected.
Coastal Greenhood <i>Pterostylis alveata</i>	Population	East Gippsland FMA	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is

Species Name	Value	Applicable FMAs	Management Actions
			adequately protected during timber harvesting operations .
Cobberas Grevillea <i>Grevillea brevifolia</i>	Population	Gippsland FMAs North East FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Cobra Greenhood <i>Pterostylis grandiflora</i>	Population	Gippsland FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Colourful Spider-orchid <i>Caladenia colorata</i>	Population	Portland-Horsham FMA	Manage occurrences in consultation with the Department unless already protected.
	Population	Gippsland FMAs	Apply a protection area of 200 m radius over each population.
Colquhoun Grevillea <i>Grevillea celata</i>	Population	East Gippsland FMA	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Comb Wheat-grass <i>Australopyrum retrofractum</i>	Population	North East FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Common Joyweed <i>Alternanthera nodiflora</i>	Population	Mid-Murray FMA	Avoid disturbance to populations.
Common Spider-orchid <i>Caladenia patersonii</i> s.l.	Population	Midlands FMA	Avoid disturbance to populations within the management area, SMZ and GMZ .
Common Spleenwort <i>Asplenium trichomanes</i>	Population	Gippsland FMAs North East FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .

Species Name	Value	Applicable FMAs	Management Actions
Concave Pomaderris <i>Pomaderris subplicata</i>	Population	Gippsland FMAs North East FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Convex Pomaderris <i>Pomaderris subcapitata</i>	Population	Gippsland FMAs North East FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Creeping Grevillea <i>Grevillea repens</i>	Population	Central Highlands FMAs	Consult with a botanist to determine if management actions are required to protect occurrences in the vicinity of prescribed burning activities.
	Population	Midlands FMA	Avoid disturbance to populations within the management area, SMZ and GMZ .
Crested Hair-grass <i>Koeleria macrantha</i>	Population	Gippsland FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Crested Water-milfoil <i>Myriophyllum lophatum</i>	Population	North East FMAs	Protect populations from disturbance where possible.
Crimson Grevillea <i>Grevillea polybractea</i>	Population	North East FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Crimson Spider Orchid <i>Caladenia concolor</i>	Population	Central Highlands FMAs	Protect populations from disturbance where possible. Consult with a botanist to determine if management actions are required to protect occurrences in the vicinity of prescribed burning activities.
	Population	North East FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .

Species Name	Value	Applicable FMAs	Management Actions
Cryptic Heath <i>Epacris celata</i>	Population	North East FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Cupped Bush-pea <i>Pultenaea vrolandii</i>	Population	North East FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Curly Sedge <i>Carex tasmanica</i>	Occurrence	Portland-Horsham FMA	Manage occurrences in consultation with the Department unless already protected.
Currawang <i>Acacia doratoxylon</i>	Population	North East FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Dark Wire-grass <i>Aristida calycina</i> var. <i>calycina</i>	Population	Gippsland FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Deane's wattle <i>Acacia deanei</i> subsp. <i>deanei</i>	Population	North East FMAs	Apply a protection area of 200 m radius over each population.
	Population	Gippsland FMAs	Apply a protection area of 200 m radius over each population.
Delicate Bush-pea <i>Pultenaea tenella</i>	Population	North East FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Delicate Cranesbill <i>Geranium</i> sp. 6	Population	North East FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .

Species Name	Value	Applicable FMAs	Management Actions
Delicate Love-grass <i>Eragrostis tenellula</i>	Population	Mid-Murray FMA	Apply a management area of 100 m radius over populations that are not already protected. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Delicate New Holland Daisy <i>Vittadinia tenuissima</i>	Population	Gippsland FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Dense Leek-orchid <i>Prasophyllum spicatum</i>	Population	Portland-Horsham FMA	Manage occurrences in consultation with the Department unless already protected.
Dense Mint-bush <i>Prostanthera decussata</i>	Population	Gippsland FMAs North East FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Dergholm Guinea-flower <i>Hibbertia humifusa</i> <i>subsp. debilis</i>	Population	Portland-Horsham FMA	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Devious Bent-grass <i>Deyeuxia decipiens</i>	Population	East Gippsland FMA	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Dookie Daisy <i>Brachyscome gracilis</i> <i>subsp. gracilis</i>	Population	North East FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Downy Star-Bush <i>Asterolasia phebaloides</i>	Population	Portland-Horsham FMA	Manage occurrences in consultation with the Department unless already protected.
Dusky Bush-pea <i>Pultenaea polifolia</i>	Population	North East FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is

Species Name	Value	Applicable FMAs	Management Actions
			adequately protected during timber harvesting operations .
Dwarf Buttercup <i>Ranunculus millanii</i>	Population	North East FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Dwarf Milkwort <i>Polygala japonica</i>	Population	Gippsland FMAs North East FMAs East Gippsland FMA	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Dwarf Swainson-pea <i>Swainsona phacoides</i>	Population	Mid-Murray FMA	Apply a management area of 100 m radius over populations that are not already protected. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Eastern Bitter-bush <i>Adriana tomentosa</i> var. <i>tomentosa</i> (glabrous and pubescent form)	Population	Gippsland FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Eastern Pomaderris <i>Pomaderris discolor</i>	Population	Gippsland FMAs	Apply a protection area of 200 m radius over each population.
	Population	Gippsland FMAs	Apply a protection area of 200 m radius over each population.
Eichler's Buttercup <i>Ranunculus eichlerianus</i>	Population	North East FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Elegant Spider-orchid <i>Caladenia formosa</i>	Population	Portland-Horsham FMA	Manage occurrences in consultation with the Department unless already protected.
Elusive Cress <i>Irenepharsus magicus</i>	Population	Gippsland FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is

Species Name	Value	Applicable FMAs	Management Actions
			adequately protected during timber harvesting operations .
Emerald-lip Greenhood <i>Pterostylis smaragdina</i>	Population	Bendigo FMA	Apply a management area over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Enfield Grevillea <i>Grevillea bedgoodiana</i>	Population	Midlands FMA	Avoid disturbance to populations within the management area, SMZ and GMZ .
Erect Midge-orchid <i>Corunastylis arrecta</i>	Population	Gippsland FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Errinundra Pepper <i>Tasmannia xerophila</i> <i>subsp. robusta</i>	Population	Gippsland FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Fairy Bluebell <i>Wahlenbergia densifolia</i>	Population	Gippsland FMAs	Apply a protection area over populations.
	Site	Central Highlands FMAs	Apply a 20 m buffer around sites. On advice from the Department , buffers may not be required if locally abundant in nearby parks and reserves or SPZ .
Fairy Lanterns <i>Thismia rodwayi</i>	Population	East Gippsland FMA	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Fairy Orchid <i>Caladenia alata</i>	Population	Gippsland FMAs	Apply a protection area of 200 m radius over each population.
Ferny Small-flower Buttercup <i>Ranunculus pumilio</i> var. <i>politus</i>	Population	North East FMAs	Protect populations from disturbance where possible.
Filmy Maidenhair <i>Adiantum diaphanum</i>	Population	Gippsland FMAs	Apply a protection area over each population.

Species Name	Value	Applicable FMAs	Management Actions
Fine Bent-grass <i>Deyeuxia boormanii</i>	Population	East Gippsland FMA	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Fir Clubmoss <i>Huperzia australiana</i>	Population	North East FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Fisch's Greenhood <i>Pterostylis fischii</i>	Population	Gippsland FMAs North East FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Flat-leaf Bush-pea <i>Pultenaea platyphylla</i>	Population	North East FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Floating Bur-reed <i>Sparganium subglobosum</i>	Population	North East FMAs	Protect populations from disturbance where possible.
Floodplain Rustyhood <i>Pterostylis cheraphila</i>	Population	Portland-Horsham FMA	Manage occurrences in consultation with the Department unless already protected.
Fog Club-sedge <i>Isolepis montivaga</i>	Population	North East FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Forde Poa <i>Poa fordeana</i>	Population	Mid-Murray FMA	Avoid disturbance to populations.
Forest Weft-moss <i>Thuidium laeviusculum</i> s.s.	Population	East Gippsland FMA	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .

Species Name	Value	Applicable FMAs	Management Actions
Forrester's Bottlebrush <i>Callistemon forresterae</i>	Population	East Gippsland FMA	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Fragrant Leek-orchid <i>Prasophyllum suaveolens</i>	Population	Portland-Horsham FMA	Manage occurrences in consultation with the Department unless already protected.
Fragrant Saltbush <i>Rhagodia parabolica</i>	Population	Midlands FMA	Avoid disturbance to populations within the management area, SMZ and GMZ .
Fringed Rice-flower <i>Pimelea ligustrina subsp. ciliata</i>	Population	North East FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Genoa River Correa <i>Correa lawrencea var. genoensis</i>	Population	East Gippsland FMA	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
	Population	Gippsland FMAs	Apply a protection area of 200 m radius over each population.
Gippsland Hemp Bush <i>Gynatrix macrophylla</i>	Population	North East FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Gippsland Lakes Peppermint <i>Eucalyptus arenicola</i>	Population	Gippsland FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Glandular Early Nancy <i>Wurmbea biglandulosa subsp. biglandulosa</i>	Population	North East FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .

Species Name	Value	Applicable FMAs	Management Actions
Globe-hood Sun-orchid <i>Thelymitra X chasmogama</i>	Population	Gippsland FMAs	Apply a protection area of 200 m radius over each population.
Golden Cowslips <i>Diuris behrii</i>	Population	Bendigo FMA	Apply a management area over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Golden Grevillea <i>Grevillea chrysophaea</i>	Population	Gippsland FMAs	Apply a protection area of 200 m radius over each population.
Golden Moths <i>Diuris lanceolata s.l.</i>	Population	Gippsland FMAs	Apply a protection area over each population.
Golden Pomaderris <i>Pomaderris aurea</i>	Population	Gippsland FMAs	Apply a protection area of 200 m radius over each population.
	Population	North East FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Goldfield Boronia <i>Boronia anemonifolia</i> <i>subsp. Aurifodina</i>	Population	Bendigo FMA	Minimise disturbance from road management activities.
Gorae Leek-orchid <i>Prasophyllum diversiflorum</i>	Population	Portland-Horsham FMA	Manage occurrences in consultation with the Department unless already protected.
Graceful Sun-orchid <i>Thelymitra simulata</i>	Population	North East FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Grampians Bitter-pea <i>Daviesia laevis</i>	Population	Portland-Horsham FMA	Manage occurrences in consultation with the Department unless already protected.
Grampians Pincushion-lily <i>Borya mirabilis</i>	Population	Portland-Horsham FMA	Manage occurrences in consultation with the Department unless already protected.

Species Name	Value	Applicable FMAs	Management Actions
Grampians Rice-flower <i>Pimelea pagophila</i>	Population	Portland-Horsham FMA	Manage occurrences in consultation with the Department unless already protected.
Grampians Zieria <i>Zieria oreocena</i>	Population	Otways FMA	Manage occurrences in consultation with the Department unless already protected.
Granite Greenhood <i>Pterostylis tunstallii</i>	Population	East Gippsland FMA	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Green Leek-orchid <i>Prasophyllum lindleyanum</i>	Population	East Gippsland FMA	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Green Wattle <i>Acacia irrorata subsp. irrorata</i>	Population	East Gippsland FMA	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Greenish-flower Vanilla-lily <i>Arthropodium sp. 2 (greenish flowers)</i>	Population	North East FMAs	Protect populations from disturbance where possible.
Green-striped Greenhood <i>Pterostylis chlorogramma</i>	Population	Gippsland FMAs Portland-Horsham FMA	Apply a protection area over each population.
Green-Top Sedge <i>Carex chlorantha</i>	Population	Gippsland FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Grey Beard-heath <i>Leucopogon attenuatus</i>	Population	Gippsland FMAs North East FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .

Species Name	Value	Applicable FMAs	Management Actions
Grey Rice-flower <i>Pimelea treyvaudii</i>	Population	North East FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Grey Scentbark <i>Eucalyptus ignorabilis</i> s.s.	Population	Gippsland FMAs	Apply a protection area of 200 m radius around each population.
Gully Grevillea <i>Grevillea barklyana</i>	Mature individual	Central Highlands FMAs	Protect mature individuals from disturbance where possible.
Gunn's Alpine Buttercup <i>Ranunculus gunnianus</i>	Population	North East FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Hairy Eyebright <i>Euphrasia lasianthera</i>	Population	North East FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Hairy Hop-bush <i>Dodonaea boroniifolia</i>	Population	North East FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Hairy-pod Wattle <i>Acacia glandulicarpa</i>	Occurrence	Portland-Horsham FMA	Manage occurrences in consultation with the Department unless already protected.
Hard-head Bush-pea <i>Pultenaea capitellata</i>	Population	Gippsland FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Heath Platysace <i>Platysace ericoides</i>	Population	Gippsland FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .

Species Name	Value	Applicable FMAs	Management Actions
Highland Bush-pea <i>Pultenaea williamsonii</i>	Population	North East FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Honey Hood-orchid <i>Caladenia hildae</i>	Population	Gippsland FMAs	Apply a protection area of 200 m radius over each population.
Jerry-jerry <i>Ammannia multiflora</i>	Population	North East FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Jumping-jack Wattle <i>Acacia enterocarpa</i>	Population	Portland-Horsham FMA	Manage occurrences in consultation with the Department unless already protected.
Kerrawang <i>Commersonia dasyphylla</i>	Population	North East FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
King Greenhood <i>Pterostylis baptistii</i>	Population	East Gippsland FMA	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Kydra Dampiera <i>Dampiera fusca</i>	Population	East Gippsland FMA	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Lady's Mantle <i>Alchemilla xanthochlora</i>	Population	North East FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .

Species Name	Value	Applicable FMAs	Management Actions
	Population	Gippsland FMAs North East FMAs	Apply a protection area of 200 m radius over each population.
Lanky Buttons <i>Leptorhynchus elongatus</i>	Population	East Gippsland FMA	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Large Rustyhood <i>Pterostylis maxima</i>	Population	Bendigo FMA	Apply a management area over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Large Tick-trefoil <i>Desmodium brachypodium</i>	Population	East Gippsland FMA	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Large Velvet Wallaby-grass <i>Rytidosperma pilosum</i> <i>var. paleaceum</i>	Population	North East FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Large-leaf Ray-flower <i>Cyphanthera anthocercidea</i>	Population	Gippsland FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Leafless Pink-bells <i>Tetradlea subaphylla</i>	Population	Gippsland FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Leafless Tongue-orchid <i>Cryptostylis hunteriana</i>	Population	East Gippsland FMA	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Leafy Greenhood <i>Pterostylis cucullata</i>	Population	Gippsland FMAs	Apply a protection area over each population.

Species Name	Value	Applicable FMAs	Management Actions
	Population	North East FMAs Portland-Horsham FMA East Gippsland FMA	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the population is adequately protected during timber harvesting operations .
Leafy Templetonia <i>Templetonia stenophylla</i>	Population	Midlands FMA	Avoid disturbance to populations within the management area, SMZ and GMZ .
Leafy Wallaby-grass <i>Rytidosperma bipartitum</i> s.s.	Population	Bendigo FMA	Minimise disturbance from road management activities.
	Population	Gippsland FMAs	Apply a protection area over each population.
Lilac Berry <i>Trochocarpa clarkei</i>	Population	North East FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Lilac Bitter-cress <i>Cardamine lilacina</i> s.s.	Population	North East FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Limestone Blue Wattle <i>Acacia caerulescens</i>	Population	Gippsland FMAs East Gippsland FMA	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Limestone Pomaderris <i>Pomaderris oraria</i> subsp. <i>calvicola</i>	Population	Gippsland FMAs	Apply a protection area of 200 m radius over each population.
Limestone Spider-orchid <i>Caladenia calvicola</i>	Population	Portland-Horsham FMA	Manage occurrences in consultation with the Department unless already protected.
Little Kooka Wattle <i>Acacia nanopravissima</i> ms.	Population	East Gippsland FMA	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .

Species Name	Value	Applicable FMAs	Management Actions
Long Rope-rush <i>Calorophus elongatus</i>	Population	East Gippsland FMA	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Long-flower Beard-heath <i>Leucopogon juniperinus</i>	Population	Gippsland FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
	Population	North East FMAs	Protect populations from disturbance where possible.
Long-tail Greenhood <i>Pterostylis woollsii</i>	Population	Bendigo FMA	Apply a management area over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Long-tongue Summer Greenhood <i>Pterostylis aestivalis</i>	Population	Gippsland FMAs North East FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Low Bush-pea <i>Pultenaea subspicata</i>	Population	East Gippsland FMA	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Lowan Phebalium <i>Phebalium lowanense</i>	Population	Portland-Horsham FMA	Manage occurrences in consultation with the Department unless already protected.
Lowly Greenhood <i>Pterostylis despectans</i>	Population	Bendigo FMA	Apply a management area over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations . Within the management area , timber harvesting activities are limited to thinning operations conducted in accordance with plans developed for the specific purpose of aiding the survival of Lowly Greenhood.

Species Name	Value	Applicable FMAs	Management Actions
Maiden's Wattle <i>Acacia maidenii</i>	Population	East Gippsland FMA	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
	Population	Gippsland FMAs	Apply a protection area of 200 m radius over each population.
Mallee Ash <i>Eucalyptus kybeanensis</i>	Population	North East FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
	Population	Portland-Horsham FMA Otways FMA	Manage occurrences in consultation with the Department unless already protected.
Maroon Leek-orchid <i>Prasophyllum frenchii</i>	Population	East Gippsland FMA	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Marsh Daisy <i>Brachyscome radicans</i>	Population	Gippsland FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Marsh Greenhood <i>Pterostylis uliginosa</i>	Population	Gippsland FMAs	Apply a protection area of 200 m radius over each population.
	Population	Gippsland FMAs	Apply a protection area of 200 m radius over each population.
Marsh Leek-orchid <i>Prasophyllum niphopedium</i>	Population	East Gippsland FMA	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Marsh Sun-orchid <i>Thelymitra longiloba</i>	Population	East Gippsland FMA	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is

Species Name	Value	Applicable FMAs	Management Actions
			adequately protected during timber harvesting operations .
Mat Cudweed <i>Euchiton traversii</i>	Population	Gippsland FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Matted Flax-lily <i>Dianella amoena</i>	Occurrence	Portland-Horsham FMA	Manage occurrences in consultation with the Department unless already protected.
Matted Parrot-pea <i>Dillwynia prostrata</i>	Population	East Gippsland FMA	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
McIvor Spider-orchid <i>Caladenia audasii</i>	Population	Portland-Horsham FMA	Manage occurrences in consultation with the Department unless already protected.
Mellblom's Spider-orchid <i>Caladenia hastata</i>	Population	Portland-Horsham FMA	Manage occurrences in consultation with the Department unless already protected.
	Population	Gippsland FMAs	Apply a protection area over each population.
Metallic Sun Orchid <i>Thelymitra epipactoides</i>	Occurrence	Portland-Horsham FMA Otways FMA	Manage occurrences in consultation with the Department unless already protected.
Monkey Mint-bush <i>Prostanthera walteri</i>	Population	Gippsland FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Mossy Knawel <i>Scleranthus singuliflorus</i>	Population	Gippsland FMAs North East FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .

Species Name	Value	Applicable FMAs	Management Actions
Mount Cole Grevillea <i>Grevillea montis-cole</i>	Population	Midlands FMA	Avoid disturbance to populations within the management area, SMZ and GMZ.
Mountain Aciphyll <i>Aciphylla simplicifolia</i>	Population	Gippsland FMAs	Apply a protection area of 200 m radius over each population.
Mountain Dandelion <i>Taraxacum aristum</i>	Population	Gippsland FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations.
Mountain Kangaroo Apple <i>Solanum linearifolium</i>	Population	Gippsland FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations.
Mountain Leafless Bossiaea <i>Bossiaea bracteosa</i>	Population	Gippsland FMAs	Apply a protection area of 200 m radius over each population.
	Population	North East FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations.
Mountain Leek-orchid <i>Prasophyllum aff. montanum B</i>	Population	Gippsland FMAs	Apply a protection area of 200 m radius over each population.
Mountain Mat-rush <i>Lomandra oreophila</i>	Population	North East FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations.
Mountain Swainson-pea <i>Swainsona recta</i>	Population	North East FMAs	Apply a protection area of 200 m radius over each population.
Mountain Wheat-grass <i>Australopyrum velutinum</i>	Population	Gippsland FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is

Species Name	Value	Applicable FMAs	Management Actions
			adequately protected during timber harvesting operations .
Mueller Daisy <i>Brachyscome muelleroides</i>	Population	Mid-Murray FMA	Apply a management area of 100 m radius over populations that are not already protected. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Mueller's Bent <i>Agrostis muelleriana</i>	Population	North East FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Mugga <i>Eucalyptus sideroxylon subsp. sideroxylon</i>	Population	North East FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
	Population	Gippsland FMAs	Apply a protection area of 200 m radius over each population.
Naked Sun-orchid <i>Thelymitra circumsepta</i>	Population	East Gippsland FMA	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Narrow Goodenia <i>Goodenia macbarronii</i>	Population	North East FMAs	Apply a protection area over each population.
Narrow-leaf Star-hair <i>Astrotricha linearis</i>	Population	North East FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Native Quince <i>Alectryon subcinereus</i>	Population	East Gippsland FMA	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .

Species Name	Value	Applicable FMAs	Management Actions
Native wintercress <i>Barbarea grayi</i>	Population	Gippsland FMAs	Apply a protection area of 200 m radius over each population.
	Population	North East FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Netted Daisy-bush <i>Olearia speciosa</i>	Population	Gippsland FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Omeo Gum <i>Eucalyptus neglecta</i>	Population	Gippsland FMAs	Apply a protection area of 200 m radius over each population.
	Population	North East FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Orange-blossom Orchid <i>Sarcophilus falcatus</i>	Population	East Gippsland FMA	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Orange-tip Finger-orchid <i>Caladenia aurantiaca</i>	Population	Gippsland FMAs	Apply a protection area of 200 m radius over each population.
Ornate Pink-fingers <i>Caladenia ornata</i>	Population	Portland-Horsham FMA	Manage occurrences in consultation with the Department unless already protected.
Outcrop Guinea-flower <i>Hibbertia hermanniifolia</i> <i>subsp. recondita</i>	Population	Gippsland FMAs	Apply a protection area of 200 m radius over each population.
Oval-leaf Grevillea <i>Grevillea miqueliana</i> <i>subsp. Miquelia</i>	Population	Gippsland FMAs	Apply a protection area of 200 m radius over each population.

Species Name	Value	Applicable FMAs	Management Actions
Oval-leaf Pseudanthus <i>Pseudanthus ovalifolius</i>	Population	Gippsland FMAs	Apply a management area of 200 m radius over populations.
Ovens Everlasting <i>Ozothamnus stirlingii</i>	Population	Gippsland FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Pale Flax-lily <i>Dianella longifolia</i> var. <i>longifolia</i> s.l.	Population	Bendigo FMA	Minimise disturbance from road management activities.
Pink Mountain-correa <i>Correa lawrenceana</i> var. <i>cordifolia</i>	Population	East Gippsland FMA	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Pinkwood <i>Beyeria lanceolata</i>	Population	Gippsland FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Pinnate Goodenia <i>Goodenia macmillanii</i>	Population	Gippsland FMAs	Apply a protection area of 200 m radius over each population.
Plains Joyweed <i>Alternanthera</i> sp. 1 (Plains)	Population	Bendigo FMA	Minimise disturbance from road management activities.
Pomonal Leek-orchid <i>Prasophyllum subbisectum</i>	Occurrence	Portland-Horsham FMA	Manage occurrences in consultation with the Department unless already protected.
Poverty Wattle <i>Acacia dawsonii</i>	Population	Gippsland FMAs North East FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Prawn Greenhood <i>Pterostylis pedoglossa</i>	Population	East Gippsland FMA	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .

Species Name	Value	Applicable FMAs	Management Actions
Prickly Tree-fern <i>Cyathea leichhardtiana</i>	Population	Gippsland FMAs East Gippsland FMA	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Privet Pomaderris <i>Pomaderris ligustrina</i> <i>subsp. ligustrina</i>	Population	Gippsland FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Prostrate Cone-bush <i>Isopogon prostratus</i>	Population	Gippsland FMAs	Apply a protection area over each population based on field inspection.
Purple Blown-grass <i>Lachnagrostis punicea</i> <i>subsp. punicea</i>	Population	Bendigo FMA	Minimise disturbance from road management activities.
Purple Diuris <i>Diuris punctata</i> var. <i>punctata</i>	Population	Midlands FMA Gippsland FMAs	Apply a protection area over each population based on field inspection. Note: Within the Midlands FMA , the Secretary intends to review this strategy when 10 sites and 1000 individuals are protected.
	Population	North East FMAs East Gippsland FMA	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Purple Eyebright <i>Euphrasia collina</i> subsp. <i>muelleri</i>	Population	Gippsland FMAs North East FMAs Portland-Horsham FMA	Apply a protection area of 200 m radius over each population.
	Population	Otways FMA	Manage occurrences in consultation with the Department unless already protected.
Ridged Water-milfoil <i>Myriophyllum porcatum</i>	Population	Portland-Horsham FMA	Manage occurrences in consultation with the Department unless already protected.
Rigid Spider-orchid <i>Caladenia tensa</i>	Population	Portland-Horsham FMA	Manage occurrences in consultation with the Department unless already protected.

Species Name	Value	Applicable FMAs	Management Actions
River Leafless Bossiaea <i>Bossiaea riparia</i>	Population	North East FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
River Swamp Wallaby-grass <i>Amphibromus fluitans</i>	Population	Mid-Murray FMA	Apply a management area of 100 m radius over populations that are not already protected. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Rock daisy <i>Brachyscome petrophila</i>	Population	Gippsland FMAs	Apply a protection area of 200 m radius over each population.
	Population	Gippsland FMAs	Apply a protection area of 200 m radius over each population.
Rock Grevillea <i>Grevillea willisii</i>	Population	North East FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Rock Orchid <i>Thelychiton speciosus</i>	Population	East Gippsland FMA	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Rock Tussock-grass <i>Poa petrophila</i>	Population	North East FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
	Population	Gippsland FMAs North East FMAs	Apply a protection area over each population.
Rough Eyebright <i>Euphrasia scabra</i>	Population	East Gippsland FMA	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .

Species Name	Value	Applicable FMAs	Management Actions
Rough-grain Love-grass <i>Eragrostis trachycarpa</i>	Population	Gippsland FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Royal Grevillea <i>Grevillea victoriae</i> s.s.	Population	North East FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Rusty Velvet-bush <i>Lasiopetalum ferrugineum</i> var. <i>ferrugineum</i>	Population	East Gippsland FMA	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Sand Rush <i>Juncus psammophilus</i>	Population	North East FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
	Population	Bendigo FMA	Minimise disturbance from road management activities.
Sandfly Zieria <i>Zieria smithii</i> subsp. <i>smithii</i>	Population	Gippsland FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Sandpaper Fig <i>Ficus coronata</i>	Population	East Gippsland FMA	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Scaly Greenhood <i>Pterostylis hamata</i>	Population	North East FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Scented Bush-pea <i>Pultenaea graveolens</i>	Population	Midlands FMA	Avoid disturbance to populations within the management area, SMZ and GMZ .

Species Name	Value	Applicable FMAs	Management Actions
Scented Daisy-bush <i>Olearia tenuifolia</i>	Population	Gippsland FMAs	Apply a protection area of 200 m radius over each population.
Selma Saddle Grevillea <i>Grevillea miqueliana</i> <i>subsp. cincta</i>	Population	Gippsland FMAs	Apply a protection area of 200 m radius over each population.
Shingle Fireweed <i>Senecio diaschides</i>	Population	Gippsland FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Shining Anchor Plant <i>Discaria nitida</i>	Population	Gippsland FMAs	Apply a protection area over each population.
Shiny Leionema <i>Leionema lamprophyllum</i>	Population	Gippsland FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Short Spider-orchid <i>Caladenia brachyscapa</i>	Population	Portland-Horsham FMA	Manage occurrences in consultation with the Department unless already protected.
Short Water-starwort <i>Callitriche brachycarpa</i>	Population	Otways FMA	Manage occurrences in consultation with the Department unless already protected.
Short-awned Wheat-grass <i>Anthosachne kingiana</i> <i>subsp. multiflora</i>	Population	Gippsland FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
	Population	Mid-Murray FMA	Avoid disturbance to populations.
Short-bristle Wallaby-grass <i>Rytidosperma setaceum</i> <i>var. brevisetum</i>	Population	Bendigo FMA	Minimise disturbance from road management activities.
Showy Willow-herb <i>Epilobium pallidiflorum</i>	Occurrences	Otways FMA	Manage occurrences in consultation with the Department unless already protected.

Species Name	Value	Applicable FMAs	Management Actions
Sickle-leaf Rush <i>Juncus falcatus</i> subsp. <i>falcatus</i>	Population	North East FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Sikh's Whiskers <i>Pterostylis boormanii</i>	Population	Bendigo FMA	Apply a management area over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Silky Glycine <i>Glycine canescens</i>	Population	Bendigo FMA	Minimise disturbance from road management activities.
Silver Stringybark <i>Eucalyptus alligatrix</i> subsp. <i>alligatrix</i>	Population	North East FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Silver Tea-tree <i>Leptospermum multicaule</i>	Population	North East FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Skeleton Vine <i>Clematis leptophylla</i>	Population	Gippsland FMAs	Apply a protection area of 200 m radius over each population.
Slender Bitter-cress <i>Cardamine tenuifolia</i>	Population	North East FMAs	Protect populations from disturbance where possible.
Slender Club-sedge <i>Isolepis congrua</i>	Population	North East FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Slender Darling-pea <i>Swainsona murrayana</i>	Population	Portland-Horsham FMA	Manage occurrences in consultation with the Department unless already protected.
Slender Gingidia <i>Gingidia harveyana</i>	Population	East Gippsland FMA	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is

Species Name	Value	Applicable FMAs	Management Actions
			adequately protected during timber harvesting operations .
Slender Leek-orchid <i>Prasophyllum parviflorum</i>	Population	East Gippsland FMA	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Slender Love-grass <i>Eragrostis exigua</i>	Population	North East FMAs	Apply a protection area of 200 m radius over each population.
Slender Mud-grass <i>Pseudoraphis paradoxa</i>	Population	East Gippsland FMA	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Slender Parrot-pea <i>Almaleea capitata</i>	Population	Gippsland FMAs North East FMAs East Gippsland FMA	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Slender Pomaderris <i>Pomaderris phyllicifolia</i>	Population	Gippsland FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Slender Ruddyhood <i>Pterostylis aciculiformis</i>	Population	North East FMAs	Protect populations from disturbance where possible.
Slender Saw-sedge <i>Gahnia microstachya</i>	Population	Gippsland FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Slender Sword-sedge <i>Lepidosperma gunnii</i>	Population	North East FMAs	Protect populations from disturbance where possible.

Species Name	Value	Applicable FMAs	Management Actions
Slender Tick-trefoil <i>Desmodium varians</i>	Population	Gippsland FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
	Population	North East FMAs	Protect populations from disturbance where possible.
	Population	Bendigo FMA	Minimise disturbance from road management activities.
	Population	Mid-Murray FMA	Avoid disturbance to populations.
Slender Tree-fern <i>Cyathea cunninghamii</i>	Population	Gippsland FMAs East Gippsland FMA	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
	Population	Otways FMA	Manage occurrences in consultation with the Department unless already protected.
Slender Violet-bush <i>Hybanthus monopetalus</i>	Population	Gippsland FMAs North East FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Small Chocolate-lily <i>Arthropodium</i> sp. 3 (<i>aff. strictum</i>)	Population	North East FMAs	Protect populations from disturbance where possible.
Small Milkwort <i>Comesperma polygaloides</i>	Site	Bendigo FMA	Prevent use of machinery or vehicles on sites when soils are wet or such use will damage the underground parts of the plants.
Small Scurf-pea <i>Cullen parvum</i>	Population	Mid-Murray FMA	Apply a management area of 100 m radius over populations that are not already protected. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Small-leaf Bush-pea <i>Pultenaea foliolosa</i>	Population	Gippsland FMAs North East FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .

Species Name	Value	Applicable FMAs	Management Actions
Smooth Wallaby-grass <i>Rytidosperma laeve</i>	Population	Mid-Murray FMA	Avoid disturbance to populations.
	Population	Gippsland FMAs	Apply a protection area of 200 m radius over each population.
Snow Aciphyll <i>Aciphylla glacialis</i>	Population	North East FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Snow Beard-heath <i>Acrothamnus montanus</i>	Population	North East FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Snow Coprosma <i>Coprosma nivalis</i>	Population	Gippsland FMAs	Apply a protection area of 200 m radius over each population.
Snow Fescue <i>Hookerchloa eriopoda</i>	Population	Gippsland FMAs	Apply a protection area of 200 m radius over each population.
Snow Pennywort <i>Diplaspis nivis</i>	Population	North East FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Snow Wallaby-grass <i>Rytidosperma nivicola</i>	Population	North East FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Snowdrop Wood-sorrel <i>Oxalis magellanica</i>	Population	North East FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Snowy River Wattle <i>Acacia boormanii</i>	Population	North East FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is

Species Name	Value	Applicable FMAs	Management Actions
			adequately protected during timber harvesting operations .
Soft Ledge Grass <i>Poa hothamensis</i> var. <i>Parviflora</i>	Population	Gippsland FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Southern Pipewort <i>Eriocaulon australasicum</i>	Occurrence	Portland-Horsham FMA	Manage occurrences in consultation with the Department unless already protected.
Spicy Everlasting <i>Ozothamnus argophyllus</i>	Population	Gippsland FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Spinning Gum <i>Eucalyptus perriniana</i>	Population	Gippsland FMAs North East FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Spiral Sun-orchid <i>Thelymitra matthewsii</i>	Population	Gippsland FMAs Portland-Horsham FMA East Gippsland FMA	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Sprawling Cassia <i>Senna aciphylla</i>	Population	Gippsland FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Spreading Clubmoss <i>Lycopodium scariosum</i>	Population	North East FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Spreading Eutaxia <i>Eutaxia microphylla</i> var. <i>diffusa</i>	Population	Midlands FMA	Avoid disturbance to populations within the management area, SMZ and GMZ .

Species Name	Value	Applicable FMAs	Management Actions
Spreading Knawel <i>Scleranthus fasciculatus</i>	Population	Gippsland FMAs North East FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Squat Picris <i>Picris squarrosa</i>	Population	Midlands FMA	Avoid disturbance to populations within the management area, SMZ and GMZ .
Stalked Adder's-tongue <i>Ophioglossum reticulatum</i>	Population	North East FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Stalked Brooklime <i>Gratiola pedunculata</i>	Population	Gippsland FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Stalked Guinea-flower <i>Hibbertia pedunculata</i> <i>s.l.</i>	Population	Gippsland FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Star Cucumber <i>Sicyos australis</i>	Population	East Gippsland FMA	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Sticky Wattle <i>Acacia howittii</i>	Population	Gippsland FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Stiff Groundsel <i>Senecio behrianus</i>	Occurrence	Portland-Horsham FMA	Manage occurrences in consultation with the Department unless already protected.
Stony Bush-pea <i>Pultenaea lapidosa</i>	Population	Gippsland FMAs	Apply a protection area of 200 m radius over each population.

Species Name	Value	Applicable FMAs	Management Actions
	Population	North East FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Strawberry Buttercup <i>Ranunculus collinus</i>	Population	Gippsland FMAs	Apply a protection area of 200 m radius over each population.
Striped Pink-fingers <i>Caladenia carnea</i> var. <i>subulata</i>	Population	Portland- Horsham FMA	Manage occurrences in consultation with the Department unless already protected.
Striped Pomaderris <i>Pomaderris pilifera</i> subsp. <i>pilifera</i>	Population	Gippsland FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Strzelecki Gum <i>Eucalyptus strzeleckii</i>	Population	Gippsland FMAs	Apply a protection area over each population.
Sturdy Leek-orchid <i>Prasophyllum</i> aff. <i>validum</i> B	Population	Bendigo FMA	Apply a management area over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Subalpine Baeckea <i>Baeckea latifolia</i>	Population	Gippsland FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Summer Fringe-sedge <i>Fimbristylis aestivalis</i>	Population	Mid-Murray FMA	Avoid disturbance to populations.
Summer Leek-orchid <i>Prasophyllum uvidulum</i>	Population	North East FMAs	Apply a protection area of 200 m radius over each population.
Swamp Bush-pea <i>Pultenaea weindorferi</i>	Population	Midlands FMA	Avoid disturbance to populations within the management area, SMZ and GMZ .
Swamp Everlasting <i>Xerochrysum palustre</i>	Occurrence	Portland- Horsham FMA	Manage occurrences in consultation with the Department unless already protected.

Species Name	Value	Applicable FMAs	Management Actions
Swamp Fern <i>Thelypteris confluens</i>	Population	North East FMAs	Apply a protection area of 200 m radius over each population.
Swamp Fireweed <i>Senecio psilocarpus</i>	Occurrence	Portland-Horsham FMA	Manage occurrences in consultation with the Department unless already protected.
Swamp Greenhood <i>Pterostylis tenuissima</i>	Occurrence	Portland-Horsham FMA	Manage occurrences in consultation with the Department unless already protected.
Tailed Eyebright <i>Euphrasia caudata</i>	Population	Gippsland FMAs North East FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Tall Acrotriche <i>Acrotriche leucocarpa</i>	Population	Gippsland FMAs	Apply a protection area of 200 m radius over each population.
Tall Astelia <i>Astelia australiana</i>	Tall Astelia colony	Central Highlands FMAs	Apply a 100 m buffer around each Tall Astelia colony. Discovery of a previously unknown colony during harvesting operations will not necessarily cause harvesting to cease, but every reasonable effort will be made to protect it. Where Tall Astelia occurs within Cool Temperate Rainforest or Riparian Thicket EVCs , apply a 100 m buffer around the EVC . Buffer widths may be smaller in cases where existing roads or ridgelines occur within the 100 m. Upstream of Tall Astelia colonies, apply a minimum vegetated buffer of 40 m between the valley floor, or 'wetted zone' and adjacent logging coupes . Where there is no discernible valley floor extend the buffer zone 40 m from the creek itself. Apply a 40 m buffer around isolated plants growing on road batters. No roads or snig tracks may be constructed through Tall Astelia colonies. Avoid constructing roads or snig tracks through Tall Astelia buffers . Any roads or snig tracks that do cross Tall Astelia buffers must be located as far upstream from the Tall Astelia colony as possible, and sedimentation of the Tall Astelia colony must be prevented. Where Tall Astelia occurs on seepage zones immediately below a coupe , snig tracks must be designed to minimise alteration to the sites normal drainage patterns.

Species Name	Value	Applicable FMAs	Management Actions
	Tall Astelia colony	Otways FMA	Apply a 100 m buffer around each Tall Astelia colony. Discovery of a previously unknown colony during harvesting operations will not necessarily cause harvesting to cease, but every reasonable effort will be made to protect it.
Tall Vanilla-lily <i>Arthropodium sp. 1</i> (<i>robust glaucous</i>)	Population	Gippsland FMAs	Apply a protection area of 200 m radius over each population.
Tangled Pseudanthus <i>Pseudanthus orbicularis</i>	Population	Gippsland FMAs	Apply a protection area of 200 m radius over each population.
Tasmanian Bladderwort <i>Utricularia monanthos</i>	Population	Gippsland FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Tasmanian Wax-flower <i>Philotheca virgata</i>	Population	East Gippsland FMA	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Tawny Spider-orchid <i>Caladenia fulva</i>	Population	Portland-Horsham FMA	Manage occurrences in consultation with the Department unless already protected.
Thick Bent-grass <i>Deyeuxia crassiuscula</i>	Population	North East FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Thick Eyebright <i>Euprasia crassiuscula</i>	Population	Gippsland FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Thick-lip Spider-orchid <i>Caladenia tessellata</i>	Population	East Gippsland FMA	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .

Species Name	Value	Applicable FMAs	Management Actions
Tick Indigo <i>Indigofera adesmiifolia</i>	Population	North East FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Tight Bedstraw <i>Galium curvihirtum</i>	Population	Gippsland FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Tingaringy Gum <i>Eucalyptus glaucescens</i>	Population	North East FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Tiny Arrowgrass <i>Triglochin minutissima</i>	Population	Gippsland FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Tiny Bent <i>Agrostis australiensis</i>	Population	North East FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Tiny Daisy <i>Brachyscome ptychocarpa</i>	Population	North East FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Tiny Midge-orchid <i>Corunastylis nuda</i>	Population	North East FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Tiny Spyridium <i>Spyridium cinereum</i>	Population	East Gippsland FMA	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .

Species Name	Value	Applicable FMAs	Management Actions
Toothed leionema <i>Leionema bilobum</i> <i>subsp. serrulatum</i>	Population	Gippsland FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Trailing Hop-bush <i>Dodonaea procumbens</i>	Population	Portland-Horsham FMA Bendigo FMA	Apply a management area over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Tree Geebung <i>Persoonia arborea</i>	Individual tree	Central Highlands FMAs	Protect individual trees with a DBHOB of at least 10 cm from disturbance where reasonably practicable.
Tufted Club-sedge <i>Isolepis wakefieldiana</i>	Occurrence	Otways FMA	Manage occurrences in consultation with the Department unless already protected.
Tullach Ard Grevillea <i>Grevillea polychroma</i>	Population	Gippsland FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Turnip Copperburr <i>Sclerolaena napiformis</i>	Occurrence	Portland-Horsham FMA	Manage occurrences in consultation with the Department unless already protected.
Tussock Sedge <i>Carex iynx</i>	Population	Gippsland FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Tussock Sedge <i>Carex iynx</i>	Population	North East FMAs	Protect populations from disturbance where possible.
Tussock Woodrush <i>Luzula alpestris</i>	Population	North East FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Two-colour Panic <i>Panicum simile</i>	Population	East Gippsland FMA	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .

Species Name	Value	Applicable FMAs	Management Actions
Umbrella Grass <i>Digitaria divaricatissima</i> <i>var. divaricatissima</i>	Population	North East FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Upright Panic <i>Entolasia stricta</i>	Population	Gippsland FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Upright Pomaderris <i>Pomaderris virgata</i>	Population	East Gippsland FMA	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Veined Beard-heath <i>Leucopogon neurophyllus</i>	Population	Midlands FMA	Apply a protection area over each population.
Velvet Apple-berry <i>Billardiera scandens</i> s.s.	Population	Gippsland FMAs North East FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Velvety Geebung <i>Persoonia subvelutina</i>	Population	Gippsland FMAs North East FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Victorian Flat-pea <i>Platylobium alternifolium</i>	Population	Midlands FMA	Avoid disturbance to populations within the management area, SMZ and GMZ .
Wallaby-bush <i>Beyeria lasiocarpa</i>	Population	Gippsland FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Warby Range Swamp-gum <i>Eucalyptus cadens</i>	Population	North East FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the population is

Species Name	Value	Applicable FMAs	Management Actions
			adequately protected during timber harvesting operations .
Wedge Diuris <i>Diuris dendrobioides</i>	Population	North East FMAs	Apply a protection area of 200 m radius over each population.
Wedge Guinea-flower <i>Hibbertia diffusa</i>	Population	Gippsland FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Wedge Oschatzia <i>Oschatzia cuneifolia</i>	Population	North East FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Western Water-starwort <i>Callitriche cyclocarpa</i>	Occurrence	Portland-Horsham FMA	Manage occurrences in consultation with the Department unless already protected.
Wetland Blown-grass <i>Lachnagrostis palustris</i>	Population	North East FMAs	Protect populations from disturbance where possible.
	Population	North East FMAs	Protect populations from disturbance where possible.
White Billy-buttons <i>Craspedia alba</i>	Population	East Gippsland FMA	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Whiteroot <i>Lobelia purpurascens</i>	Occurrence	Otways FMA	Manage occurrences in consultation with the Department unless already protected.
Wild Sorghum <i>Sorghum leiocladum</i>	Population	Gippsland FMAs East Gippsland FMA	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .

Species Name	Value	Applicable FMAs	Management Actions
Wimmera Spider-orchid <i>Caladenia lowanensis</i>	Occurrence	Portland-Horsham FMA	Manage occurrences in consultation with the Department unless already protected.
Winged Everlasting <i>Ammobium alatum</i>	Population	Gippsland FMAs	Apply a protection area of 200 m radius over each population.
	Occurrence	Portland-Horsham FMA	Manage occurrences in consultation with the Department unless already protected.
Winged Peppercress <i>Lepidium monolocoides</i>	Population	Mid-Murray FMA	Apply a management area of 100 m radius over populations that are not already protected. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Winged Water-starwort <i>Callitriche umbonata</i>	Population	North East FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Wiry Wallaby-grass <i>Plinthanthesis paradoxa</i>	Population	East Gippsland FMA	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Wombargo Wattle <i>Acacia tabula</i>	Population	East Gippsland FMA	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
			Manage occurrences in consultation with the Department unless already protected.
Woodland Leek-orchid <i>Prasophyllum aff. validum B</i>	Occurrence	Portland-Horsham FMA	

Species Name	Value	Applicable FMAs	Management Actions
	Population	Mid-Murray FMA	Avoid disturbance to populations.
Woolly Buttons <i>Leiocarpa panaetioides</i>	Population	North East FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Woolly-bear Wattle <i>Acacia lucasii</i>	Population	Gippsland FMAs	Apply a protection area of 200 m radius over each population.
Woolly-head Pomaderris <i>Pomaderris eriocephala</i>	Population	Gippsland FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Woolly Wattle <i>Acacia lanigera</i> var. <i>lanigera</i>	Population	North East FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Wrinkled Buttons <i>Leiocarpa gatesii</i>	Occurrence	Otways FMA	Manage occurrences in consultation with the Department unless already protected.
Wrinkled Cassinia <i>Cassinia rugata</i>	Occurrence	Portland-Horsham FMA	Manage occurrences in consultation with the Department unless already protected.
Wrinkle-nut Lignum <i>Muehlenbeckia rhyticarya</i>	Population	Gippsland FMAs	Apply a protection area of 200 m radius over each population.
Yarra Gum <i>Eucalyptus yarraensis</i>	Individual tree	Midlands FMA	Retain all individual Yarra Gum trees.
Yellow Elderberry <i>Sambucus australasica</i>	Population	East Gippsland FMA	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Yellow Flat-sedge <i>Cyperus flavidus</i>	Population	North East FMAs	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is

Species Name	Value	Applicable FMAs	Management Actions
			adequately protected during timber harvesting operations .
	Population	North East FMAs	Apply a protection area over each population.
Yellow Hyacinth-orchid <i>Dipodium hamiltonianum</i>	Population	East Gippsland FMA	Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations .
Yellow-lip Spider-orchid <i>Caladenia xanthochila</i>	Occurrence	Portland-Horsham FMA	Manage occurrences in consultation with the Department unless already protected.

Table 15 Detection based rules for Heathland, Snow Gum, Swamp Gum and Heath vegetation communities

FMA	Common name	Scientific name	Management actions
East Gippsland	Heathland (all heathland EVCs and other treeless vegetation)		Apply a protection area over full extent of heathland and other treeless vegetation communities.
Midlands	Snow Gum	<i>Eucalyptus pauciflora</i>	Apply a protection area over full extent of vegetation communities dominated by Snow Gum on Mt Cole.
Midlands	Swamp Gum	<i>Eucalyptus ovata</i>	Apply a protection area over full extent of vegetation communities dominated by Swamp Gum near Enfield.
Otway	Heathy Woodland, Wet Heath and Coastal Complex		Apply a protection area over all examples of these vegetation communities.

Table 16 Buffer widths for Rainforest Sites of Significance by category and priority

Site of Significance category	Priority			
	1	2	3	4
National	Extend to nearest watershed boundary	100 m	60 m	60 m
State	60 m	60 m	40 m	40 m
Regional	40 m	40 m	40 m	40 m

Table 17 Landscape management prescriptions

Applicable FMAs	Type	Place
Central Highlands FMAs	Designated Lookout	Environs of the Mount Toorongo lookout: Prominent views of Mt. Toorongo.
Central Highlands FMAs	Designated Lookout	Morris Lookout: Lookout
Central Highlands FMAs	Designated Lookout	Natural environs of the Mounts Despair and Disappointment lookouts: Mt Disappointment summit.
Central Highlands FMAs	Designated Lookout	Prominent views from Neerim: Tarago River SMZ and North Hells Gate lookout.
Central Highlands FMAs	Designated Lookout	Seven Acre Rock: Prominent views of Blue Range.
Central Highlands FMAs	Designated Lookout	Spion Kopje Lookout: 50 m either side of the walking track and lookout.
Central Highlands FMAs	Landscape Feature	Alpine Walking Track: 50 m either side of Alpine Walking Track.
Central Highlands FMAs	Landscape Feature	Caringal Scout Camp:
Central Highlands FMAs	Landscape Feature	Dom Dom Saddle: SMZ representing prominent views of this place.
Central Highlands FMAs	Landscape Feature	Enoch's Point township
Central Highlands FMAs	Landscape Feature	Forested escarpments (Black Range and Blue Range) as viewed from the Maroondah and Goulburn Valley Highways: SMZ representing prominent views of Black Range and Blue Range.
Central Highlands FMAs	Landscape Feature	Labertouche Caves:
Central Highlands FMAs	Landscape Feature	Landscape values of the land bordering the Corranderrk and O'Shannassy aqueducts: Prominent views of Mt. Toole-be-wong .
Central Highlands FMAs	Landscape Feature	Little Yarra Valley: Prominent views of Britannia Range.
Central Highlands FMAs	Landscape Feature	Matlock Mining Area township
Central Highlands FMAs	Landscape Feature	Mt St Leonard: SMZ representing prominent views of this place.
Central Highlands FMAs	Landscape Feature	Murchison Fall and Strath Falls and their environs:
Central Highlands FMAs	Landscape Feature	Natural environs of Mount Beenak: Prominent views from Little Yarra Road.
Central Highlands FMAs	Landscape Feature	Opposite Rawson Caravan park: 50 m wide area opposite Rawson Caravan park.
Central Highlands FMAs	Landscape Feature	South Hells Gate: Prominent views from Neerim.

Applicable FMAs	Type	Place
Central Highlands FMAs	Landscape Feature	Sylvia Creek falls and its environs
Central Highlands FMAs	Landscape Feature	Views from Mt Donna Buang and from the Warburton Highway: 100 m along the Warburton Highway. Including prominent views from Mt Donna Buang and in particular of Mt Little Joe and Mt Tugwell.
Central Highlands FMAs	Landscape Feature	Warburton–Woods Point Road / Reefton Spur Road and Upper Yarra Reservoir Rd: 50 m either side of Warburton–Woods Point Road / Reefton Spur Road and Upper Yarra Reservoir Rd. Include prominent views of Cement Creek, Armstrong Creek.
Central Highlands FMAs	Scenic Drive	Acheron Way: 50 m either side of Acheron Way.
Central Highlands FMAs	Scenic Drive	Baw Baw Road: 50 m either side of Baw Baw Road.
Central Highlands FMAs	Scenic Drive	Eildon Road: 50 m either side of Eildon Road.
Central Highlands FMAs	Scenic Drive	Forested escarpments of the Mounts Tallarook and Disappointment forest as viewed from the Hume Highway: Prominent views of Mt Disappointment.
Central Highlands FMAs	Scenic Drive	Landscape of Pauls Range: 50 m either side of Chum Creek Road.
Central Highlands FMAs	Scenic Drive	Maroondah Highway: 100 m either side of Maroondah highway, prominent views.
Central Highlands FMAs	Scenic Drive	Marysville - Buxton Road: 50 m either side of Marysville - Buxton Road, and prominent views of Mt. Strickland, Triangle Block and Mt. Margaret.
Central Highlands FMAs	Scenic Drive	Melba Highway: 100 m either side of Melba Highway.
Central Highlands FMAs	Scenic Drive	Moe - Walhalla Road: 50 m either side of Moe - Walhalla Road.
Central Highlands FMAs	Scenic Drive	Murrindindi Road from Murrindindi to Murrindindi Cascades: 50 m either side of Murrindindi Road from Murrindindi to Murrindindi Cascades.
Central Highlands FMAs	Scenic Drive	Myers Creek Road: 50 m either side of Myers Creek Road.
Central Highlands FMAs	Scenic Drive	Myers Creek Scenic Reserve: 50 m either side of Myers Creek Road.
Central Highlands FMAs	Scenic Drive	Natural environs of Lady Talbot Drive, Marysville: 50 m either side of Lady Talbot Drive.
Central Highlands FMAs	Scenic Drive	Powelltown - Noojee Road: 50 m either side of Powelltown - Noojee Road.
Central Highlands FMAs	Scenic Drive	Powelltown - Noojee Road: 50 m either side of Powelltown - Noojee Road.
Central Highlands FMAs	Scenic Drive	Steavenson Falls Road: 50 m either side of Steavenson Falls Road.
Central Highlands FMAs	Scenic Drive	Thomson Valley - Mt St Gwinear Rd: 50 m either side of Thomson Valley - Mt St Gwinear Rd.
Central Highlands FMAs	Scenic Drive	Thomson Valley Road from Erica to the Thomson Reservoir : 50 m either side of Thomson Valley Road from Erica to the Thomson Reservoir. Include prominent views of Mt. Erica and Erica surrounds.

Applicable FMAs	Type	Place
Central Highlands FMAs	Scenic Drive	Whittlesea - Yea Road: 50 m either side of Whittlesea - Yea Road.
East Gippsland	Designated Lookout	Delegate Hill
East Gippsland	Designated Lookout	Genoa Peak
East Gippsland	Designated Lookout	Gunmark lookout
East Gippsland	Designated Lookout	Maramingo Hill
East Gippsland	Designated Lookout	Mount Bemm
East Gippsland	Designated Lookout	Mount Bowen
East Gippsland	Designated Lookout	Mount Buck
East Gippsland	Designated Lookout	Mount Denmark
East Gippsland	Designated Lookout	Mount Ellery
East Gippsland	Designated Lookout	Mount Kaye
East Gippsland	Designated Lookout	Mount McLeod
East Gippsland	Designated Lookout	Mount Nowa Nowa
East Gippsland	Designated Lookout	Mount Raymond
East Gippsland	Designated Lookout	Mount Seldom Seen
East Gippsland	Designated Lookout	Mount Stewart
East Gippsland	Designated Lookout	Mount Tingaringy
East Gippsland	Designated Lookout	Mount Tower
East Gippsland	Landscape Feature	Buchan: Black Satin Creek, Site # 810/07
East Gippsland	Landscape Feature	Buchan: Wattle Gully, Site # 812/09
East Gippsland	Landscape Feature	Buchan: W-Tree Creek headwaters, Site # 813/06
East Gippsland	Scenic Drive	Betka Forest Drive: Mallacoota and Croajingalong access; native forest management.
East Gippsland	Scenic Drive	Big River Road (part): Mount Ellery access.
East Gippsland	Scenic Drive	Bonang - Bendoc Road and Playgrounds Track: Day trips around Bendoc, Gold Mining, park access.
East Gippsland	Scenic Drive	Bonang Road (Orbost - NSW border): Mt Buck/Cooney Ridge; Mt Watt; Mt Rich; views from Goongerah to Postmans Spur and BA ridge (Mt Ellery in background); Mt Little Bill; Brown Mountain; views from Bonang area to Mt Koolabra and Cottonwood Range; enclosed forest canopy and high quality roadside scenery along Pinch Swamp Ck.
East Gippsland	Scenic Drive	Buchan Road (Bruthen - Buchan): Views west from Red Knob area; Pretty Sally; vegetation between roadside and SEC easement provides variety and reduces impact of easement; Fluke Knob; Spencer Knob; Lookout Rocks; Tara Range.
East Gippsland	Scenic Drive	Buchan—Jindabyne Road: National Estate (Road built in Great Depression). Mt Dawson; views from W-Tree to Dawson range (including Half Moon Gully, Mt Elephant, Lookout Top, Gum Top and Wagtail Ridge) and Mt Murrindal; Mt Statham; Mt Seldom Seen .

Applicable FMAs	Type	Place
East Gippsland	Scenic Drive	Cabbage Tree - Cape Conran Road, Marlo - Cabbage Tree Road and Palms Track: National Estate(Baldwin - Spencer journey); access to Cabbage Palms Flora Reserve.
East Gippsland	Scenic Drive	Cann Valley Highway: Extensive views west across flats to forested range including Mt Noorinbee, High Peak, Cann Mountain, Morgan Hill and Bennet Knob, Mt Petterson.
East Gippsland	Scenic Drive	Clarkeville Road: Errinundra National Park access.
East Gippsland	Scenic Drive	Coast Range Road (part): Part of tall forest experience in Errinundra National Park; nocturnal birds and arboreal mammals.
East Gippsland	Scenic Drive	Colquhoun Forest Drive: Koalas; historic features associated with the Orbost - Bairnsdale railway.
East Gippsland	Scenic Drive	Combienbar and Errinundra Rds: National Estate (Baldwin-Spencer journey); Errinundra National Park access; (through to Gap Rd) hills around Club Terrace; Pyramid Hill; Shining Gums and Cool Temperate Rainforest around Kanuka Creek; Tommy Roundhead Hill.
East Gippsland	Scenic Drive	Deddick River Road (part) 36-mile Road: Snowy River National Park access.
East Gippsland	Scenic Drive	Dellicknora / Cameron Roads: Tingaringy National Park access.
East Gippsland	Scenic Drive	Gap Road: National Estate (Baldwin-Spencer journey); high-quality foreground scenery.
East Gippsland	Scenic Drive	Greens Road: Access to Errinundra National Park and St Patricks Falls; native forest management.
East Gippsland	Scenic Drive	Gunmark Road: Major access to Errinundra National Park; extensive views across Delegate River headwaters; buffers required where road forms border between the Park and State forest.
East Gippsland	Scenic Drive	Harris Creek/ 2-mile Road: Mount Nowa Nowa access.
East Gippsland	Scenic Drive	Hensleigh Creek Road (part): Errinundra National Park access; nocturnal birds and arboreal mammals.
East Gippsland	Scenic Drive	Jones Creek Road: Coopracambra National Park access.
East Gippsland	Scenic Drive	Lake Tyers House Road: National Estate (Old Coach Road); Lake Tyers State Park access.
East Gippsland	Scenic Drive	Mallacoota and Betka Roads: Access to Mallacoota, beaches and Croajingolong National Park.
East Gippsland	Scenic Drive	Murrungowar Forest Drive (Princes Hwy - Murrungowar Rd - Glen Arte Rd - Bendoc Ridge Rd - Princes Hwy): Jungle Hill; Glen Arte Flora Reserve; regrowth thinning; side trips to Cabbage Tree Falls and St Patricks Falls; historic features around Murrungowar and Glen Arte.
East Gippsland	Scenic Drive	Nowa Nowa—Buchan Road: "The Gorge"; Mount Nowa Nowa; scenic alternative route to Buchan.
East Gippsland	Scenic Drive	Nunnett and Timbarra Roads: Alpine National Park access.
East Gippsland	Scenic Drive	Orbost-Buchan Road: National Estate (aesthetic quality).
East Gippsland	Scenic Drive	Princes Highway (Lakes Entrance—Orbost): Enclosed forest canopy between Nowa Nowa and Lakes Entrance; stream crossings at Hospital Ck, Hartland River and Simpson's Ck.
East Gippsland	Scenic Drive	Princes Highway (Orbost- NSW border): Stream crossings at Brodribb River (rainforest) and Jungle Ck; forested hills seen from Cabbage Tree Ck; thinning operations between Cabbage Tree and Bemm River; enclosed forest canopy between Bemm River and Lind National Park; Mt Bemm; Donalds Knob; hills to south of Tonghi Creek; views north up the Cann Valley; views north-west from Mt Drummer.
East Gippsland	Scenic Drive	Seldom Seen Tower Road : Access to Mount Seldom Seen.
East Gippsland	Scenic Drive	Sydenham Inlet Road: Wide clearing maintained as strategic fire-break; view from township and inlet north to hills above township.
East Gippsland	Scenic Drive	Tamboon and Point Hicks Roads: Croajingolong National Park access; middle ground views near Furnell Landing.
East Gippsland	Scenic Drive	Tulloch Ard Road: Snowy River National Park access.

Applicable FMAs	Type	Place
East Gippsland	Scenic Drive	Wallagaraugh Road: Croajingolong National Park access.
East Gippsland	Scenic Drive	Wallagaraugh Road: Croajingolong National Park access.
East Gippsland	Scenic Drive	Wangarabell Road: Access to Maramingo Hill; Genoa river access.
East Gippsland	Scenic Drive	West Wingan Road: Croajingolong National Park access.
East Gippsland	Scenic Drive	Yalmy/Rising Sun/Pinnak Roads: Major access road to Snowy River National Park; forest vistas into catchments of Cavender Ck, Serpentine Ck, Yalmy River and Stony Ck.
Gippsland FMAs	Designated Lookout	Bindi Lookout
Gippsland FMAs	Designated Lookout	Elphick Lookout: Lookout
Gippsland FMAs	Designated Lookout	Pendergast Lookout: Lookout
Gippsland FMAs	Designated Lookout	Stutterin' Fred's Lookout: Lookout
Gippsland FMAs	Landscape Feature	Blue Pool: Either side of the Freestone Creek.
Gippsland FMAs	Landscape Feature	Buenba Flat
Gippsland FMAs	Landscape Feature	Great Alpine Road: Prominent views.
Gippsland FMAs	Landscape Feature	Haunted Stream Valley/Stirling Ghost Town: 300 m either side of the river
Gippsland FMAs	Landscape Feature	Haunted Stream Valley: 300 m either side of the river.
Gippsland FMAs	Landscape Feature	Nicholson River: 100 m downstream of Marthavale, including up to track on west side of river and 50 m west side of Nicholson track.
Gippsland FMAs	Landscape Feature	The Brothers
Gippsland FMAs	Scenic Drive	Boola Road: 20 m either side of the road.
Gippsland FMAs	Scenic Drive	Bruthen – Buchan Road: 50 m either side of the road.
Gippsland FMAs	Scenic Drive	Dargo High Plains Road: 100 m either side of the road.
Gippsland FMAs	Scenic Drive	Deptford Road: 50 m either side of the road.
Gippsland FMAs	Scenic Drive	Fairy Dell: 50 m either side of the associated forest drive.
Gippsland FMAs	Scenic Drive	Great Alpine Road (part): Prominent views.
Gippsland FMAs	Scenic Drive	Heyfield – Licola Road
Gippsland FMAs	Scenic Drive	Hyland Highway: 50 m either side of the road.
Gippsland FMAs	Scenic Drive	South Gippsland Highway: Prominent views .
Gippsland FMAs	Scenic Drive	Strzelecki Highway: 50 m either side of the road.
Mid Murray	Landscape Feature	River Track: 20 m adjacent to the whole length of the road.
Mid Murray	Scenic Drive	Iron Punt Track: 20 m adjacent to the whole length of the road.
Mid Murray	Scenic Drive	Lock Road: 20 m adjacent to the whole length of the road.
Mid Murray	Scenic Drive	Nursery Track: 20 m adjacent to the whole length of the road.
Mid Murray	Scenic Drive	Rifle Butts Track to Five Sleepers Track to Thompson Track: 20 m adjacent to the whole length of the road.

Applicable FMAs	Type	Place
Mid Murray	Scenic Drive	Stanton Break: 20 m adjacent to the whole length of the road.
Midlands	Designated Lookout	Ben Nevis Picnic Area
Midlands	Designated Lookout	Black Hill Lookout
Midlands	Designated Lookout	Daylesford Botanical Gardens Lookout
Midlands	Designated Lookout	Jackson Lookout (Hepburn)
Midlands	Designated Lookout	Lookout Hill Picnic Area
Midlands	Designated Lookout	Mount Buangor Picnic Area
Midlands	Designated Lookout	Sovereign Hill Lookout
Midlands	Scenic Drive	Ararat - St Arnaud Road (Crowlands - Landsborough)
Midlands	Scenic Drive	Bacchus Marsh - Gisborne Road
Midlands	Scenic Drive	Ballan - Daylesford Road
Midlands	Scenic Drive	Ballan Daylesford Road
Midlands	Scenic Drive	Ballarat - Buninyong Road (Sovereign Hill - Buninyong)
Midlands	Scenic Drive	Beaufort - Lexton Road
Midlands	Scenic Drive	Bungaree Creswick Road
Midlands	Scenic Drive	Clunes Creswick Road
Midlands	Scenic Drive	Creswick Dean Road
Midlands	Scenic Drive	Daylesford - Ballarat Road
Midlands	Scenic Drive	Daylesford - Malmesbury Road
Midlands	Scenic Drive	Daylesford - Trentham Road
Midlands	Scenic Drive	Gisborne - Melton Road (Pyrites forest)
Midlands	Scenic Drive	Glenelg Highway (Linton - Smythesdale)
Midlands	Scenic Drive	Greendale - Myrniong Road
Midlands	Scenic Drive	Greendale - Trentham Road
Midlands	Scenic Drive	Kyneton - Trentham Road
Midlands	Scenic Drive	Lal Lal Falls Road
Midlands	Scenic Drive	Lerderderg River (Heritage River Section)
Midlands	Scenic Drive	Midland Highway (Ballarat - Springmount)
Midlands	Scenic Drive	Midland Highway (Kennedys Gully - Spingmount)
Midlands	Scenic Drive	Midlands Highway (Clarendon - Meredith)
Midlands	Scenic Drive	Mount Cole Main Road

Applicable FMAs	Type	Place
Midlands	Scenic Drive	Myrniong Trentham Road
Midlands	Scenic Drive	Navigators Road
Midlands	Scenic Drive	Pyrenees Highway (Avoca - St Arnaud - Ararat Road)
Midlands	Scenic Drive	Sebastopol - Smythesdale Road (Smythesdale - Ross Creek)
Midlands	Scenic Drive	Springs Road
Midlands	Scenic Drive	Sunraysia Highway (Avoca - Tanwood)
Midlands	Scenic Drive	Western Freeway (Bacchus Marsh - Bungaree)
Midlands	Scenic Drive	Western Highway (Mt. Langi Ghiran - Beaufort)
Midlands	Scenic Drive	White Swan Road
North East FMAs	Designated Lookout	Mt Murrumbidgee and Mt Big Ben
North East FMAs	Landscape Feature	15 Mile Creek: Visual corridor and natural water feature. 50 m either side of creek.
North East FMAs	Landscape Feature	Beechworth Forest Drive: Scenic corridor for tourist roads. 50 m each side of road.
North East FMAs	Landscape Feature	Big Hill/The Springs Saddle/Bald Hill/Bogong Jack Saddle: Mountain views from Mt Beauty township and Mt Fainter North. Scenic corridor for tourist roads.
North East FMAs	Landscape Feature	Bindaree Falls: 100 m radius over the falls.
North East FMAs	Landscape Feature	Buckland Valley: Dingo Ck to Buckland River East Branch, 50 m each side of stream.
North East FMAs	Landscape Feature	Carters Road Picnic Area: High scenic values in recreation area. 50 m radius over the picnic area.
North East FMAs	Landscape Feature	Clear Creek (Tributary of Buckland River): 50 m each side of stream.
North East FMAs	Landscape Feature	Conic Range (partly State forest)
North East FMAs	Landscape Feature	Craig Hut: 200 m radius over the hut.
North East FMAs	Landscape Feature	Dandongadale River: Visual corridor and natural water feature. 50 m each side of river.
North East FMAs	Landscape Feature	Granite Peak: RNE Natural site. Mountain Views from Omeo Hwy. State forest above 1100 m elevation.
North East FMAs	Landscape Feature	Harkers Creek (Mitta Mitta): 50 m each side of stream
North East FMAs	Landscape Feature	Harrietville Valley (vicinity of Harrietville) and Ovens River, West Branch: 20 m each side of the Great Alpine Road.
North East FMAs	Landscape Feature	Holland Creek (part): Visual corridor and natural water feature. 50 m either side of creek.
North East FMAs	Landscape Feature	Lightning Ridge (Strathbogie Ranges): Mountain views from Lake Nillahcootie and Midland Highway.
North East FMAs	Landscape Feature	Mitta Mitta Valley (downstream of Mitta Mitta): NTA(V) classified, Visual corridor and natural water feature. 50 m each side of road.
North East FMAs	Landscape Feature	Moonee Range (Strathbogie Ranges): Mountain view from Midland Highway
North East FMAs	Landscape Feature	Mt Pinnibar
North East FMAs	Landscape Feature	Myrtle (Barwidgee) Creek Valley (vicinity of Myrtleford): 50 m on State forest side of Stanley to Barwidgee Road.
North East FMAs	Landscape Feature	Pheasant Creek (Tributary of Buckland River): Visual corridor and natural water feature. 50 m each side of road.
North East FMAs	Landscape Feature	Plain Creek Tramway (Sawmill Settlement): Historic site of local significance. 20 m buffer around the historic trestle bridge.

Applicable FMAs	Type	Place
North East FMAs	Landscape Feature	Sandy Creek Waterfall (Strathbogie Ranges): 100 m radius over the falls.
North East FMAs	Landscape Feature	Snowy Creek Waterfall: 100 m radius over the falls.
North East FMAs	Landscape Feature	The Pinnacles & Mt Jack including Barwidgee Creek: Headwaters of Barwidgee Creek.
North East FMAs	Landscape Feature	Trappers Creek (near Mountain Creek): Visual corridor and natural water feature. 50 m each side of road.
North East FMAs	Landscape Feature	Upper Delatite valley (vicinity of Mirimbah): 200 m each side of river.
North East FMAs	Landscape Feature	Upper Nariel valley above Crawford Crossing: Visual corridor and natural water feature. 50 m each side of stream (where in State forest).
North East FMAs	Landscape Feature	West Kiewa valley: Viewed from Mt Feathertop, indicative aesthetic National Estate.
North East FMAs	Landscape Feature	Wongungarra & Humffray Rivers & Teatree Range except ridge: Indicative Natural Landscape (National Estate). Located in National Park, and Mt Sarah Scenic Reserve.
North East FMAs	Landscape Feature	Yackandandah Creek (from Nine Mile Creek to State forest boundary): Visual corridor and natural water feature. 50 m either side of creek.
North East FMAs	Landscape Feature	Yarrabulla Creek: Visual corridor and natural water feature. 50 m each side of stream. Partly within Remote & Natural Area.
North East FMAs	Landscape Feature	Yarrabulla Creek: Visual corridor and natural water feature. 50 m each side of stream. Partly within Remote & Natural Area.
North East FMAs	Scenic Drive	Nariel-Benambra Road: Scenic corridor for tourist road. 50 m each side of road.

Table 18 Recreation sites

FMA	Locality	Place	Extent of SMZ
Gippsland FMAs	Heyfield	12 Mile Creek	50 m radius over the site.
Gippsland FMAs	Heyfield	Gows Hotel	50 m radius over the site.
Gippsland FMAs	Heyfield	Kinleys Yards	50 m radius over the site.
Gippsland FMAs	Heyfield	Noon Road	50 m radius over the site.
Gippsland FMAs	Swifts Creek	Washington Winch	200 m radius over the site.
North East FMAs	Beechworth	Beechworth Forest Drive (Includes Clarkes Corner, Murmungee Lookout and Bates Dam en route)	Forest drive and environs.
North East FMAs	Myrtleford	Dandongadale River	50 m radius over the site.

Table 19 Research sites

FMA	Locality	Research project	Management Actions
Gippsland FMAs	Harraps Highway	Regrowth of Phytophthora cinnamomi dieback	Limit activities to those that are compatible with the experiment objectives.
Gippsland FMAs	Old Rosedale Road	Planting on dieback affected sites	Limit activities to those that are compatible with the experiment objectives.
Gippsland FMAs		Boola Silvertop thinning trials	Limit activities to those that are compatible with the experiment objectives.
Gippsland FMAs		Mullungdung Phytophthora cinnamomi progeny trial EUC475	Limit activities to those that are compatible with the experiment objectives.

FMA	Locality	Research project	Management Actions
Gippsland FMAs	Bentley's Plain Road	E. delegatensis provenance trial	Limit activities to those that are compatible with the experiment objectives.
Gippsland FMAs	Engineers Road, Barmouth Spur Track, Clarks Track, Angora Range Road	Gippsland mixed species growth study	Limit activities to those that are compatible with the experiment objectives.
Midlands	Wombat and Mt Cole SF	Armillaria research	Exclude timber harvesting operations and other management activities which will affect research objectives until 2020.
Midlands	Wombat SF	Fire effects study area	Exclude timber harvesting operations and other management activities until such time as the areas are no longer required.
Midlands	Wombat SF	Regrowth thinning and fertiliser trials	Restrict timber harvesting operations and other management operations to those that are compatible with the objectives of the research until 2020.
Midlands		Forest growth plots	Exclude timber harvesting operations and other management activities until such time as the areas are no longer required.
Midlands		Continuous Forest Inventory plots	Protect unharvested plots and a 50m buffer until 2020. Review the need for further protection at this time.
North East FMAs	Clear Hills	1957 Alpine Ash thinning trials	Limit activities to those that are compatible with the experiment objectives.
North East FMAs	Flagstaff	KTRI Paterson's Curse Crown Boring Weevil research site	Limit activities to those that are compatible with the experiment objectives.
North East FMAs	Highett Ridge Eildon Mount Elliot	KTRI St John's Wort Mite research sites	Limit activities to those that are compatible with the experiment objectives.
North East FMAs	Lords Creek Mt Wills Creek / Snowy Creek Lightning Creek Track Bullhead Callaghan Creek Long Spur	KTRI Blackberry Rust Fungus research sites	Limit activities to those that are compatible with the experiment objectives.
North East FMAs	Mt Pinnibar	1928 Alpine Ash thinning trial	Limit activities to those that are compatible with the experiment objectives.
North East FMAs	Myrtleford	Cropper Creek hydrologic research project	Limit activities to those that are compatible with the experiment objectives.
North East FMAs	Old Tolmie Road, Toombullup	CFTT Tree Breeding Research provenance trials for E. delegatensis (EUC 411 1979), E. globulus (EUC413 1981) and E. nitens (EUC 426 1990)	Limit activities to those that are compatible with the experiment objectives.
North East FMAs	Riley Creek	Long-footed Potoroo research trapping grid	Manage in accordance with Long-footed Potoroo prescriptions.

Table 20 Road classification system

Road Class ¹	Type	Service Function Description	Road Type Description
5A	Primary Road >100 ADT ²	<ul style="list-style-type: none"> Provides primarily for the main traffic movements into and through a region. This includes access to high use visitor sites and forest areas Caters generally for higher travel speed, all vehicle types including large vehicles (i.e. buses and trucks). 	<ul style="list-style-type: none"> All weather road predominantly 2-lane and mainly sealed. A high quality³ of service road Design speed standard of 80 – 50 km/h according to terrain Minimum carriageway width is 7 m
5B	Secondary Road 100 – 30 ADT	<ul style="list-style-type: none"> Provides access to moderate use visitor sites and forest areas Serves the purpose of collecting and distributing traffic from local areas, moderate use visitor sites and forest areas to or from primary or minor roads Caters for moderate travel speed a full range of vehicles including large vehicles 	<ul style="list-style-type: none"> All weather 2 lane road formed and gravelled or single lane sealed road with gravel shoulders A good quality of service road Design speed standards of at 70 – 30 km/h according to terrain
5C	Minor Road 50 – 20 ADT	<ul style="list-style-type: none"> Provides a link to low and moderate use visitor sites and forest areas, and forms a feeder link to a logging coupe access track/road or fire track Purpose is to link areas, which are traffic generators to secondary or primary roads Caters for lower travel speed and full range of vehicles 	<ul style="list-style-type: none"> Generally all-weather single lane 2-way unsealed formed road usually lightly gravelled A fair quality of service road Design speed standards of 60 – 20 km/h according to terrain
5D	Access Track/Road <20 ADT	<ul style="list-style-type: none"> Provides access to low use visitor sites and forest areas Can be short term, temporary or feeder roads to access individual timber harvesting coupes Provides for fire protection and management access (sometimes exclusively for management vehicles only) Caters for low travel speed and a range of vehicles in dry weather May be seasonally closed 	<ul style="list-style-type: none"> Substantially a single lane 2-way generally dry-weather, formed (natural materials) track/road A low quality of service track/road Design speeds of 40 - <20 km/h according to terrain May be restricted to 4 wheel-drive vehicles
5E	Rough Track <10 ADT	<ul style="list-style-type: none"> Provides primarily for 4 wheel-drive vehicles Mainly used for fire protection purposes, management access and limited recreational activities Caters for very low travel speed May be seasonally closed May be restricted to management vehicles only 	<ul style="list-style-type: none"> Predominantly a single lane 2-way earth tracks (unformed) at or near the natural surface level A very low quality of service track Predominantly not conforming to any geometric design standards

Notes: ¹ The prefix 5 is related to the Austroads National Functional Road Classification categories.

² Average Daily Traffic (ADT) represents the average daily traffic over the peak season.

³ Quality of service is defined in terms of the level of convenience, (geometric standards), comfort (ride qualities) and safety (travel consistency) provided

Table 21 Guidelines to the main geometric design standards – unsealed roads

Main Geometric Characteristic	5B Secondary			5C Minor			5D Access			5E Tracks			Comments	
	Flat	Rolling	M'tain	Flat	Rolling	M'tain	Flat	Rolling	M'tain	Flat	Rolling	M'tain		
Speed value km/hr	70	50	30	60	40	20	40	30	<20	N/A	N/A	N/A	Based on 85th percentile speed	
Cross section elements														
Number of traffic lanes	2	2	2	1	1	1	1	1	1	1	1	1	5B – two lane unsealed	
Minimum cross fall/camber %														
Sealed road	3	3	3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
Unsealed road	5	5	5	5	5	5	5	5	5	4	4	4	Min of 4% to drain rain fall off tracks	
Max superelevation % (2)														
Sealed road	6-8	6-10	12	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Actual value based on curve radius adopted	
Unsealed road	6	8	10	6	8	10	6	8	10	N/A	N/A	N/A		
Min traffic lane width m (3)	3	3	3	3	3	3	3	3	3	3	3	3	Unsealed values	
Min shoulder widths m	0.5	0.5	0.5	1.5	1	0.5	1	0.5	0.5	0	0	0	Unsealed values	
Min carriageway width (lanes + shoulders) m	7	7	7	6	5	4	5	4	4	3	3	3	Unsealed values	
Min formation width (including verges	9	9	9	8	7	6	7	6	6	3	3	3	Unsealed values	
Horizontal Geometry														
Min radius curve m (5)														
Sealed road	110	45	15	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		

Main Geometric Characteristic	5B Secondary			5C Minor			5D Access			5E Tracks			Comments
	Flat	Rolling	M'tain	Flat	Rolling	M'tain	Flat	Rolling	M'tain	Flat	Rolling	M'tain	
Unsealed road	250	100	35	170	60	15	70	35	15	N/A	N/A	N/A	
Min stopping sight distance m (6)													
Sealed road	90	50	25	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	At tight curves check for lateral obstructions to provide the stopping sight distance required.
Unsealed road	120	70	30	90	50	30	50	30	20	N/A	N/A	N/A	
Min meeting sight distance m (7)													
Sealed road	170	100	45	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	For high volume roads may need to check for overtaking provisions
Unsealed road	230	130	60	180	100	60	100	60	40	N/A	N/A	N/A	
Vertical Geometry													
Max vertical grade % (8)	6	8	12	6	8	12	6	8	15	N/A	N/A	N/A	For tracks avoid steep grades to reduce soil erosion
Min crest vertical curve K values (9)	28	9	5	9	4	2	4	2	1	N/A	N/A	N/A	Unsealed values
Min sag vertical curve K values (10)	8	4	3	6	3	2	3	2	1	N/A	N/A	N/A	Unsealed values

- (1) A simple classification of 'flat', 'rolling' and 'mountainous' terrain descriptions has been adopted as a basis for specifying appropriate geometric standards. The definition of each can be described in general terms as follows:
- Flat terrain – Roads generally follow the ground contours. Typical gradients being up to 1:20 or 5 % (<3 degrees).
 - Rolling terrain – Roads can have substantial cuts and fills. Typical gradients being up to 1:20 to 1:8 or 5 – 12.5 % (3-7 degrees)
 - Mountainous terrain – Roads in rugged hilly or mountainous ground with substantial restrictions to both horizontal and vertical alignments. Typical gradients being > 1:8 or > 12.5 % (7 degrees).
- (2) The maximum superelevation value will need to take into account the use of the road by high loaded heavy vehicles, speed and curve radii.

- (3) In cases where there is a high percentage of heavy vehicles (>20%) minimum lane widths can be increased by 0.5 m.
- (4) Allows for 1m verge/table drain width. This must be reviewed based on actual locations where for drainage reasons greater widths may be required.
- (5) This is based on Austroads (1989) and Giummarra G. (2001). Lower values of surface coefficients on unsealed roads result in radii being greater. Values rounded up. For minimum radius curves widening on the inside of a curve may be necessary to accommodate longer vehicles.
- (6) Based on reaction time of 2 seconds and surface coefficients relating to sealed and unsealed surfaces and values round up. Values based on flat grades and allowances will need to be made for up and down grades.
- (7) This is a requirement for single lane two-way roads. Values rounded up.
- (8) In some cases higher grades of up to 20% can be allowed for short sections (about 150 m). Keep grades on unsealed roads lower due to ravelling and scouring of surface.
- (9) Calculation of these values if to be based on information contained in Austroads (1989) for sealed roads and Giummarra G. (2000) for unsealed roads. The length of the vertical curve (L) is based on the product of K multiplied by the algebraic difference in grades percentage A. (i.e. $L = K \times A$).
- (10) Sag values are based on comfort control criteria.

Table 22 Minimum clearing widths (m) required for typical road construction

Side Slope		Road Class			
Degrees	%	5B	5C	5D	5E
0-7.5	0-13	13	7	6	4
7.5-15	13-27	17	11	10	7
15-22.5	27-41	23	17	16	10
22.5-30	41-58	30	24	23	14

Notes:

- Refer to **Table 20 Road classification system** above for road class definitions.
- The recommended clearing width is a horizontal distance.
- **Table 22 Minimum clearing widths (m) required for typical road construction** above assumes that debris disposal is complete before construction commences.
- Extra clearing width may be required if debris disposal is concurrent with **road construction**.
- Clearing widths do not include slashed verges except within engineering or **road** safety priority areas where extra cleared widths are shown to be required.
- The recommended clearing width for **temporary road** is 6m.
- Additional widening is often required at curves.

Table 23 Maximum distance between drainage structures

Soil Erosion Hazard	ROAD GRADE							
	1:50	1:25	1:15	1:12	1:10	1:8	1:7	1:5
	1°	2°	3.5°	4.5°	6°	7°	8°	11°
	2%	4%	6%	8%	10%	12%	15%	20%
Low	250	170	130	115	100	90	60	30
Moderate	200	150	120	105	90	80	50	NP ¹
High	160	130	110	95	80	65	NP ¹	NP ¹

Notes:

- Drainage structures include culverts, roll-overs, and inverts or cross drains.
- ¹ Road Grade Not Permitted.

Table 24 Fire severity classification

Severity class	Severity type	Description
1	crown burn	<i>90 – 100 % of eucalypt and non-eucalypt crowns are burnt.</i> an intense burn with widespread crown removal.
2	crown scorch	<i>60 – 100 % of eucalypt and non-eucalypt crowns are scorched some crowns are burnt.</i> an intense understorey fire with complete crown scorch of most eucalypt and non-eucalypts.
3	moderate crown scorch	<i>30 – 65 % of eucalypt and non-eucalypt crowns are scorched.</i> a variable intensity of fire ranging from a warm ground burn with no crown scorch to an intense understorey fire with complete crown scorch of most eucalypt and non-eucalypts.
4	light crown scorch	<i>1 – 35 % of eucalypt and non-eucalypt crowns are scorched.</i> a light ground burn with isolated patches of intense understorey fire and some crown scorch.
5	no crown scorch	< 1 % of eucalypt and non-eucalypt crowns are scorched, understorey may be burnt or unburnt.

Figure 2 Field process for determining protection areas and management areas based on modelled or mapped values

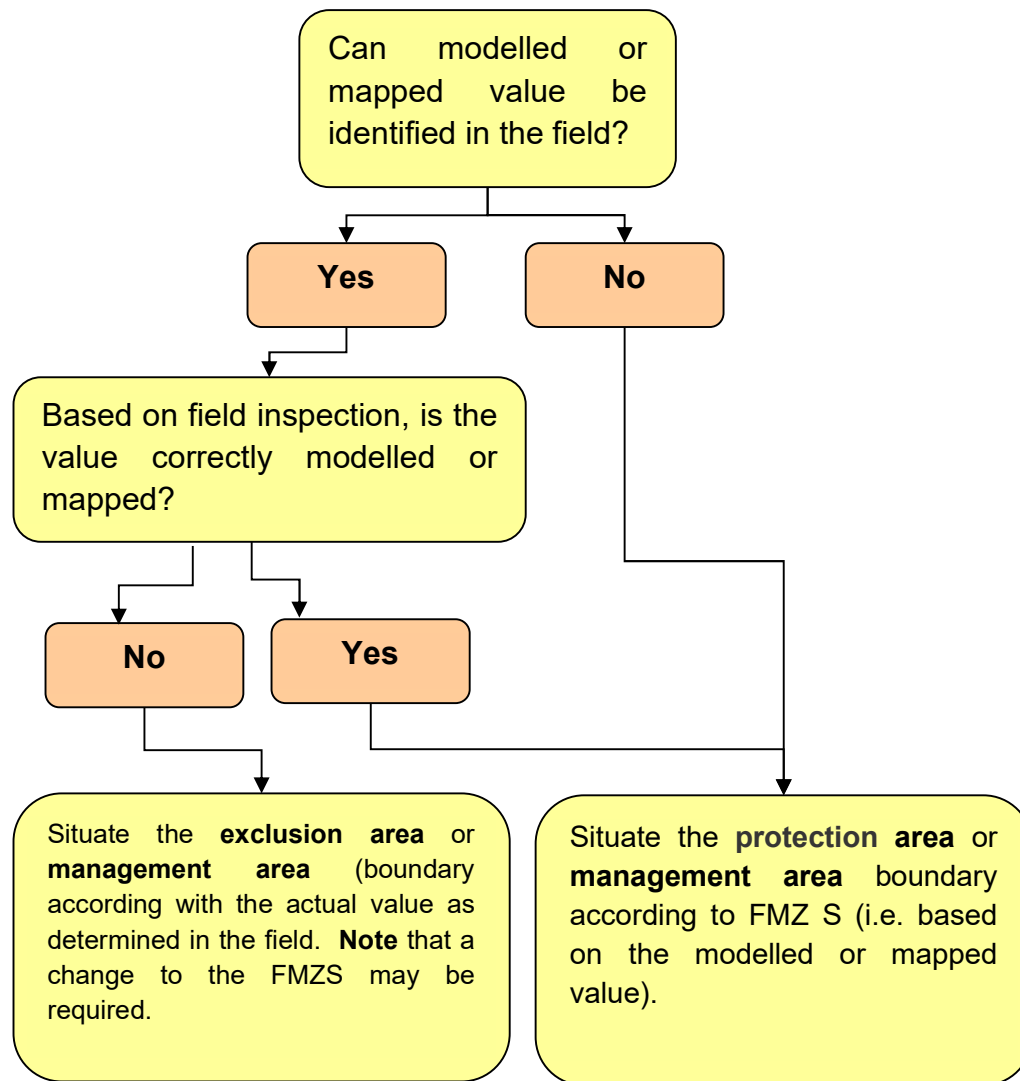


Table 25 Salvage harvesting Barred Galaxia minimum buffer and filter strip widths

Stream Class	Slope 0-20°	Slope 21-30°
Permanent	40 m B + 10 m F	50 m B + 10 m F
Temporary	20 m B + 20 m F	30 m B+ 20 m F
Drainage Lines	10 m F	15 m F
Wetlands	40 m B	50 m B

Note: Slope is the average slope of the **coupe** and potential **buffer** area situated within 100 m of the **waterway** or to the top of the drainage basin (whichever is closest).

Table 26 Basal Area (BA) and stocking specifications for commercial ash thinning

Stand age (yrs.)	Minimum retained BA (m ² /ha)	Stocking range (stems/ha)	Average square spacing (m)
14-20	17	300-400	5.3
21-30	20	230-320	6.0
31-35	23	170-250	6.9
36-40	28	120-190	8.0
41+	32	80-140	9.5

(2) For clauses 5.6.1.4 and 5.6.1.5 in Schedule 1 to the Principal Code **substitute—**

"5.6.1.4

The following requirements apply to **APZ Land**:

- (a) The **overall fuel hazard rating** for a harvested **coupe** must be less than or equal to moderate:
 - i. during harvesting if harvesting is conducted during the fire season; and
 - ii. within 12 months of harvesting.
- (b) **Clearfall** and **seed tree** harvesting is not permitted in more than 1 ha of the **gross coupe area**.
- (c) Harvesting using **thinning** or **selective harvesting** must not be undertaken if it would cause the rolling five year average APZ harvest percentage within a **fuel hazard management unit** to exceed 5 per cent.
- (d) For the purposes of paragraph (c), the rolling five year average APZ harvest percentage is to be determined in the 2022/23 financial year and each subsequent financial year, for each **fuel hazard management unit**, using the following method:

- i. Calculate the annual APZ harvest percentage in a **fuel hazard management unit** for the financial year using the following formula:

$$A = (H/Z) \times 100$$

Where –

A is the annual APZ harvest percentage;

H is the total combined area, measured in hectares, of **APZ Land** in the **fuel hazard management unit** that was zoned either **GMZ** or **SMZ** as of 30 June of the preceding financial year, which has been harvested using **thinning** or **selective harvesting** in the financial year;

Z is the total combined area, measured in hectares, of **APZ Land** in the **fuel hazard management unit** that was zoned either **GMZ** or **SMZ**, as at 30 June of the preceding financial year.

- ii. Add the annual APZ harvest percentage for the financial year to the final annual APZ harvest percentage of each of the immediately preceding four financial years, and divide that total by 5.

Note: the annual APZ harvest percentage formula applies continuously throughout a financial year (including to be calculated at the conclusion of the financial year, taking into account harvesting up to and including 30 June of that year, which will be the final annual APZ harvest percentage for that year).

- (e) For the purposes of paragraph (d)(ii), the final annual APZ harvest percentage for the 2018/19, 2019/20, 2020/21 and 2021/22 financial years must be calculated:
 - i. as soon as practicable after 1 July 2022 (and in any event no later than 1 September 2022);
 - ii. using the method specified in paragraph (d) (as modified by paragraphs (iii) and (iv) below);
 - iii. on the assumption that **fuel hazard management units** were in place and had the same boundaries as each **fuel hazard management unit** has as at 1 July 2022.
 - iv. on the assumption that, within a **fuel hazard management unit**, the boundaries of the **Asset Protection Zones**, **GMZ** and **SMZ** were the same as those that exist as at 1 July 2022.

5.6.1.5

The following requirements apply to **BMZ Land**:

- (a) The **overall fuel hazard** rating for a **clearfall** or **seed tree harvested coupe** must be returned to a rating of less than or equal to high within 12 months of harvesting.
- (b) Harvesting using **clearfell** or **seed tree harvesting** must not be undertaken if it would cause the rolling five year average BMZ clearfell harvest percentage within a **fuel hazard management unit** to exceed 1 per cent.
- (c) For the purposes of paragraph (c), the rolling five year average BMZ clearfell harvest percentage is to be determined in the 2022/23 financial year and each subsequent financial year, for each **fuel hazard management unit**, using the following method:
 - i. Calculate the annual BMZ clearfell harvest percentage in a **fuel hazard management unit** for the financial year using the following formula:

$$BC = (H/Z) \times 100$$

Where –

BC is the annual BMZ clearfell harvest percentage;

H is the total combined area, measured in hectares, of **BMZ Land** in the **fuel hazard management unit** that was zoned either **GMZ** or **SMZ** as of 30 June of the preceding financial year, which has been harvested using clearfell or seed tree harvesting in the financial year;

Z is the total combined area, measured in hectares, of **BMZ Land** in the **fuel hazard management unit** that was zoned either **GMZ** or **SMZ**, as at 30 June of the preceding financial year.
 - ii. Add the annual BMZ clearfell harvest percentage for the financial year to the final annual BMZ clearfell harvest percentage of each of the immediately preceding four financial years, and divide that total by 5.

Note: the annual BMZ clearfell harvest percentage formula applies continuously throughout a financial year (including to be calculated at the conclusion of the financial year, taking into account harvesting up to and including 30 June of that year, which will be the final annual BMZ clearfell harvest percentage for that year).
- (d) For the purposes of paragraph (c)(ii), the final annual BMZ clearfell harvest percentage for the 2018/19, 2019/20, 2020/21 and 2021/22 financial years must be calculated:
 - i. as soon as practicable after 1 July 2022 (and in any event no later than 1 September 2022);
 - ii. using the method specified in paragraph (c) (as modified by paragraphs (iii) and (iv) below);
 - iii. on the assumption that **fuel hazard management units** were in place and had the same boundaries as each **fuel hazard management unit** has as at 1 July 2022;
 - iv. on the assumption that, within a **fuel hazard management unit**, the boundaries of the Bushfire Moderation Zones, **GMZ** and **SMZ** were the same as those that exist as at 1 July 2022.
- (e) Harvesting using **thinning** or **selective harvesting** must not be undertaken if it would cause the rolling five year average BMZ thinning harvest percentage within a **fuel hazard management unit** to exceed 4 per cent.
- (f) For the purposes of paragraph (e), the rolling five year average BMZ thinning harvest percentage is to be determined in the 2022/23 financial year and each

subsequent financial year, for each **fuel hazard management unit**, using the following method:

- i. Calculate the annual BMZ thinning harvest percentage in a **fuel hazard management unit** for the financial year using the following formula:

$$BT = (H/Z) \times 100$$

Where –

BT is the annual BMZ thinning harvest percentage;

H is the total combined area, measured in hectares, of **BMZ Land** in the **fuel hazard management unit** that was zoned either **GMZ** or **SMZ** as of 30 June of the preceding financial year, which has been harvested using **thinning** or **selective harvesting** in the financial year;

Z is the total combined area, measured in hectares, of **BMZ Land** in the **fuel hazard management unit** that was zoned either **GMZ** or **SMZ**, as at 30 June of the preceding financial year.

- ii. Add the annual BMZ thinning harvest percentage for the financial year to the final annual BMZ thinning harvest percentage of each of the immediately preceding four financial years, and divide that total by 5.

Note: the annual BMZ thinning harvest percentage formula applies continuously throughout a financial year (including to be calculated at the conclusion of the financial year, taking into account harvesting up to and including 30 June of that year, which will be the final annual BMZ thinning harvest percentage for that year).

- (g) For the purposes of paragraph (f)(ii), the final annual BMZ thinning harvest percentage for the 2018/19, 2019/20, 2020/21 and 2021/22 financial years must be calculated:
 - i. as soon as practicable after 1 July 2022 (and in any event no later than 1 September 2022);
 - ii. using the method specified in paragraph (f) (as modified by paragraphs (iii) and (iv) below);
 - iii. on the assumption that **fuel hazard management units** were in place and that had the same boundaries as each **fuel hazard management unit** has as at 1 July 2022;
 - iv. on the assumption that, within a **fuel hazard management unit**, the boundaries of the Bushfire Moderation Zone, **GMZ** and **SMZ** were the same as those that exist as at 1 July 2022.
- (h) **Thinned** or **selectively harvested coupes** may be burnt by the Department as part of future planned burns. These burns will be conducted at least 18 months post harvest."