

Guideline

Nature Conservation (Koala) Conservation Plan 2017

Request to make, amend or revoke a koala habitat area determination

This guideline outlines how an owner of land (or a person acting on the owner's behalf with written consent) can request the chief executive of the Nature Conservation Act 1992 to make, amend or revoke a koala habitat area determination on their land under section 7C of the Nature Conservation (Koala) Conservation Plan 2017.

| | | |
|----------|---|-----------|
| 1 | Purpose | 2 |
| 2 | Background | 2 |
| 3 | Who can submit a request? | 3 |
| 4 | When can a person make a request? | 4 |
| 5 | How to submit a request? | 5 |
| 6 | What information is needed to support a request? | 6 |
| 7 | Will a fee be required to submit a request? | 8 |
| 8 | What happens after a request is submitted? | 8 |
| 9 | What if I am not satisfied with the decision? | 9 |
| | Appendix 1. Koala habitat regional ecosystems | 10 |

1 Purpose

This guideline outlines the process that landholders must follow to make a request to the chief executive of the *Nature Conservation Act 1992* to make, amend or revoke a koala habitat area determination on their land under section 7C of the Nature Conservation (Koala) Conservation Plan 2017.

2 Background

2.1 Koala habitat area determination

Under section 7B of the Nature Conservation (Koala) Conservation Plan 2017, the chief executive of the *Nature Conservation Act 1992* may determine that an area is a “koala habitat area” if satisfied the area contains koala habitat¹ and the koala habitat is essential for the conservation of a viable koala population in the wild. In considering whether to make a koala habitat area determination, the chief executive must have regard to the combination of biophysical measures and the suitability of the vegetation.

If it is determined that an area is a koala habitat area, the area must be shown as a koala habitat area on the Koala Conservation Plan Map².

The Koala Conservation Plan Map is available on the Department of Environment and Science’s website and can be viewed on [Queensland Globe](#) and [BioMaps](#). A Koala Conservation Plan Map Report can also be obtained for individual properties by completing and submitting the request form available here:

<https://environment.des.qld.gov.au/wildlife/animals/living-with/koalas/mapping/koalamaps>. This report will detail:

- whether the property is inside or outside of a koala priority area;
- the location of any koala habitat areas on the property; and
- the type of regional ecosystems that make up koala habitat area(s) on the property (i.e. koala habitat regional ecosystems).

2.2 Koala habitat area (core) and koala habitat area (locally refined)

The Koala Conservation Plan Map identifies two different categories of koala habitat area – koala habitat area (core) and koala habitat area (locally refined). While the clearing controls that apply to these areas under the *Planning Act 2016* and Nature Conservation (Koala) Conservation Plan 2017 are the same, the methodology used to determine whether an area should be a koala habitat area is different.

In determining whether an area is a koala habitat area (core), the chief executive utilises the mapping produced using the methodology described in the document *Spatial modelling in South East Queensland* available here: <https://environment.des.qld.gov.au/wildlife/animals/living-with/koalas/mapping/>. This methodology uses a spatial

¹ Koala habitat is defined in the Nature Conservation (Koala) Conservation Plan 2017 as:

- (a) an area of vegetation in which koalas live and that includes a koala habitat tree; or
- (b) an area of vegetation that consists primarily of koala habitat trees and which is reasonably suitable for sustaining koalas; or
- (c) a partially or completely cleared area used by koalas to cross from an area mentioned in (a) or (b) to another area mentioned in (a) or (b).

² The Koala Conservation Plan Map shows koala habitat areas, koala priority areas and koala districts. Each of these areas relate to specific clearing controls under the *Planning Act 2016* and the Nature Conservation (Koala) Conservation Plan 2017.

model which identifies areas that provide the best habitat for koalas based on the combination of regional ecosystems that have been determined to be suitable habitat for koalas³ (described in Appendix 1), biophysical variables with known relationships to koala habitat (i.e. landcover, soil, terrain, climate and groundwater), as well as koala occurrence records.

In determining whether an area is a koala habitat area (locally refined), the chief executive will consider areas previously mapped as koala habitat (prior to the introduction of the koala habitat area (core) mapping) and areas local governments identify as locally important koala habitat. The chief executive will also consider whether these areas contain suitable habitat for koalas⁴ (described in Appendix 1) or koala habitat trees⁵.

2.3 Requests to make, amend or revoke a koala habitat area determination

Under section 7C of the Nature Conservation (Koala) Conservation Plan 2017, an owner of land (or a person acting on the owner's behalf with written consent), may ask the chief executive to make, amend or revoke a koala habitat area determination if they believe the existing determination for all or part of their property is incorrect. This request must be in the approved form (as described in section 5) and must state the grounds for the request (as described in section 4 and 6).

- A request to **make** a koala habitat area determination would be submitted if the landholder is seeking to have an area not currently mapped as a koala habitat area to be mapped as a koala habitat area.
- A request to **amend** a koala habitat area determination would be submitted if the landholder is seeking to have the boundary of a mapped koala habitat area amended.
- A request to **revoke** a koala habitat area determination would be submitted if the landholder is seeking to have an area that is currently mapped as a koala habitat area to no longer be mapped as a koala habitat area.

When considering whether to approve or refuse a request to make, amend or revoke a koala habitat area determination, the chief executive must have regard to information that is reasonably available in relation to the combination of biophysical measures and suitability of vegetation in the area (as described in section 2.2). This includes, but is not limited to, information provided with the request, information collected from site inspections, spatial information on slope, elevation, rainfall and regional ecosystems, koala occurrence records and local and expert advice from relevant third parties.

3 Who can submit a request?

A request to make, amend or revoke a koala habitat area determination may only be made by the owner of the land, or a person acting on behalf of the owner if the landowner has provided written consent to the request being lodged. The request form that must be used includes a section for landowners to provide written consent

³ Koala habitat area (core) only includes areas mapped as remnant or high value regrowth.

⁴ Koala habitat area (locally refined) includes areas mapped as remnant and high value regrowth as well as areas that are not mapped as remnant or high value regrowth.

⁵ Koala habitat tree is defined in the Nature Conservation (Koala) Conservation Plan 2017 as:
(a) a tree of the *Corymbia*, *Melaleuca*, *Lophostemon* or *Eucalyptus* genera that is edible by koalas; or
(b) a tree of a type typically used by koalas for shelter, including, for example a tree of the *Angophora* genus.

for a person to submit a request on their behalf and to allow that person to act as the nominated contact person for the landowner.

A single application can be made for more than one land parcel and up to a maximum of six land parcels. A single application can also be made for more than one landowner, provided that all landowners have signed the consent section of the request form.

4 When can a person make a request?

An owner of land (or person acting on the owner's behalf with written consent) may request to have a koala habitat area determination made, amended or revoked if they believe the determination for all or part of their property is incorrect. However, the person submitting the request must provide relevant grounds for why it is believed the determination is incorrect.

Due to the different methodologies used to make koala habitat area (core) and koala habitat area (locally refined) determinations, the grounds that are considered reasonable will differ depending on whether the request relates to koala habitat area (core) or koala habitat area (locally refined).

4.1 Requests for koala habitat area (core)

For requests that relate to koala habitat area (core), the following grounds are considered reasonable:

Option 1 - The area is mapped as a koala habitat area (core) but clearly does not contain any native woody vegetation. For example, where the area has been legally cleared and is devoid of vegetation.

Option 2 - The type of regional ecosystem present is not a koala habitat regional ecosystem (as described in Appendix 1) but is mapped as a koala habitat regional ecosystem.

Option 3 - The type of regional ecosystem present is a koala habitat regional ecosystem (as described in Appendix 1) but is not mapped as a koala habitat regional ecosystem.

Option 4 - The koala habitat regional ecosystem boundaries that are mapped are not reflective of the true extent of koala habitat regional ecosystem(s) that are present. For example, where the koala habitat regional ecosystem that is present extends past the boundary that is currently mapped.

Option 5 - The remnant or high value regrowth status of the regional ecosystem is not reflective of the vegetation community that is present. For example, where a regional ecosystem is mapped as remnant but the condition of the regional ecosystem is not in remnant condition.

4.2 Requests for koala habitat area (locally refined)

For requests that relate to koala habitat area (locally refined), the following grounds are considered reasonable:

Option 6 - The area is mapped as a koala habitat area (locally refined) but clearly does not contain any native woody vegetation. For example, where the area has been legally cleared and is devoid of vegetation.

Option 7 - The area is mapped as a koala habitat area (locally refined) but does not contain vegetation that is suitable habitat for koalas as the vegetation that is present is not a koala habitat regional ecosystem regardless of the status (remnant, high value regrowth or otherwise) and does not contain any koala habitat trees.

4.3 Requests that cannot be made

Please note that a request to make, amend or revoke cannot be made under the following grounds:

- to dispute whether a particular regional ecosystem provides suitable habitat for koalas where the regional ecosystem has been determined to be a koala habitat regional ecosystem (as described in Appendix 1);
- to dispute the presence or absence of certain biophysical measures that have been determined to have a relationship with koala habitat;
- to dispute whether koalas are present or absent from the area; or
- to amend one koala habitat regional ecosystem to another koala habitat regional ecosystem.

The smallest koala habitat area determination that can be made, amended or revoked is 0.5 hectare due to the scale of the mapping. Cleared areas that are smaller than 0.5 hectares cannot be displayed. While these areas may be mapped as koala habitat areas, landowners may be able to maintain cleared areas under an exemption⁶.

5 How to submit a request?

To make a request to have a koala habitat area determination made, amended or revoked, the landholder (or a person acting on the landholder's behalf with written consent) must determine whether there are reasonable grounds to make the request. Grounds for which a request may be made are detailed in section 4 of this guideline.

If there are reasonable grounds to make the request, the *Request form – Request to make, amend or revoke a koala habitat area determination* (available here: <https://environment.des.qld.gov.au/wildlife/animals/living-with/koalas/mapping/koalamaps>) must be completed in its entirety. The request form requires the lot on plan description for each land parcel subject to the request⁷, signed consent from each landowner⁸, contact details for the nominated contact person, whether the request is to make, amend or revoke a koala habitat area determination, the grounds for the request and supporting information that must be submitted with the request form.

To submit the request, the completed request form and supporting information must be sent by email to or registered post to the Department of Environment and Science's Koala Assessment and Compliance Unit, using the address on the request form.

⁶ See Schedule 24 of the Planning Regulation 2017 for the definition of exempted development which applies to clearing in a koala habitat area.

⁷ To find the lot on plan description for a land parcel, access the Queensland Geocoder here: <https://www.qld.gov.au/environment/land/title/addressing/geocoder>

⁸ If the owner of a lot is a company, organisation or trust, then the CEO, directors or trustees must sign and evidence documents indicating that the person(s) signing have the right to do so.

6 What information is needed to support a request?

Certain information is required to support a request and enable it to be processed and assessed by the department. The type of information and level of detail required depends on the grounds for the request (described in section 4). At a minimum, all the information identified on the request form is required.

6.1 Requests for koala habitat area (core)

Option 1 - Where the area is mapped as a koala habitat area but does not contain any native woody vegetation, the following supporting information must be provided with the request from:

- A map or shapefile (see **Note 1**) that clearly identifies the location of the koala habitat area error; and
- Aerial or satellite imagery of the site that clearly shows that the area in question is incorrectly mapped (e.g. the area is devoid of vegetation). This imagery can be acquired from a range of sources such as Queensland Globe, Google Earth, Nearmap and Planet. The date of the imagery must also be provided

Option 2 - Where the type of regional ecosystem present is not a koala habitat regional ecosystem but is mapped as a koala habitat regional ecosystem, the following supporting information must be provided with the request form:

- A map or shapefile (see **Note 1**) that clearly delineates the proposed regional ecosystem boundaries and identifies the regional ecosystem comprised in each polygon; and
- Information to demonstrate that the vegetation's floristic and structural composition is consistent with the proposed regional ecosystem(s). Suitable information may include the results of a vegetation assessment (see **Note 2**) and photographs (see **Note 4**) of identified tree species (with corresponding GPS coordinates).

Option 3 – Where the type of regional ecosystem present is a koala habitat regional ecosystem (as described in Appendix 1) but is not mapped as a koala habitat regional ecosystem, the following supporting information must be provided with the request form:

- A map or shapefile (see **Note 1**) that clearly delineates the proposed regional ecosystem boundaries and identifies the regional ecosystem comprised in each polygon; and
- Information to demonstrate that the vegetation's floristic and structural composition is consistent with the proposed regional ecosystem(s). Suitable information may include the results of a vegetation assessment (see **Note 2**) and photographs (see **Note 4**) of identified tree species (with corresponding GPS coordinates).

Option 4 – Where the koala habitat regional ecosystem boundaries that are mapped are not reflective of the true extent of koala habitat regional ecosystem(s) that are present, the following supporting information must be provided with the request form:

- A map or shapefile (see **Note 1**) that clearly delineates the proposed regional ecosystem boundaries and identifies the regional ecosystem comprised in each polygon; and
- Information to demonstrate that the proposed regional ecosystem boundaries are accurate. Suitable information may include the results of a vegetation assessment (see **Note 2**), site photographs (see **Note 4**) and aerial or satellite imagery with the proposed regional ecosystem boundaries clearly identified.

Option 5 – Where the status of the regional ecosystem is not reflective of the vegetation community that is present, the following supporting information must be provided with the request form:

- Aerial or satellite imagery of the site that clearly identifies the location of the vegetation in question. This imagery can be acquired from a range of sources such as [Queensland Globe](#), [Google Earth](#), [Nearmap](#) and [Planet](#). The date of the imagery must also be provided; and
- Information to demonstrate that the proposed status of the regional ecosystem is accurate. Suitable information may include the results of a vegetation assessment (see **Note 2** and **Note 3**) or site photographs (see **Note 4**).

6.2 Requests for koala habitat area (locally refined)

Option 6 - Where the area is mapped as a koala habitat area but does not contain any native woody vegetation the following supporting information must be provided with the request from:

- A map or shapefile (see **Note 1**) that clearly identifies the location of the koala habitat area error; and
- Aerial or satellite imagery of the site that clearly shows that the area in question is incorrectly mapped (e.g. the area is devoid of vegetation). This imagery can be acquired from a range of sources such as Queensland Globe, Google Earth, Nearmap and Planet. The date of the imagery must also be provided

Option 7 – where the area is mapped as a koala habitat area (locally refined) but does not contain vegetation that is suitable habitat for koalas as the vegetation that is present is not a koala habitat regional ecosystem, regardless of the status (remnant, high value regrowth or otherwise), and does not contain any koala habitat trees., the following supporting information must be provided with the request form:

- A map or shapefile (see **Note 1**) that clearly identifies the areas that do not contain suitable koala habitat; and
- Information to demonstrate that the vegetation's floristic and structural composition is inconsistent with a koala habitat regional ecosystem (regardless of the status or condition of the vegetation) and does not contain koala habitat trees. Suitable information may include results of a vegetation assessment and/or photographs of identified tree species.

Note 1: A shapefile is a geospatial vector data format for geographic information system software, such as ArcGIS. The shapefile should be included in a .zip file that contains at least the .shp, .shz, .dbf, and .prj files.

Note 2: The methodology used to determine regional ecosystem classification and remnant status is described in *Methodology for surveying and mapping regional ecosystems and vegetation communities in Queensland* which is available here: <https://www.publications.qld.gov.au/dataset/redd/resource/6dee78abc12c-4692-9842-b7257c2511e4>.

Note 3: The methodology used to determine high value regrowth (category C area) status is described in *Guideline for determining category C areas* which is available here: https://www.dnrme.qld.gov.au/_data/assets/pdf_file/0004/1463431/category-c-guideline.pdf.

Note 4: On-ground photographs can only be used as supporting information where:

- they are provided electronically and the properties information includes the date the photo was created and the GPS latitude and longitude (i.e. the photographs are taken with a smart phone that has the location services turned on for the camera); and
- a scale is included in the photograph (e.g. a person); and
- the direction that the photograph was taken is noted.

7 Will a fee be required to submit a request?

There are currently no fees associated with making a koala habitat area determination request. However, a fee may be established in the future following a review of the framework to reflect the costs incurred by the department when administering and assessing requests.

8 What happens after a request is submitted?

Upon receiving your request, the department will send you an email or letter to acknowledge that the request has been received and provide you the reference number that has been assigned to your request.

The department may contact you to seek further information if mandatory information or supporting information is missing from your request or if additional information is required to assess your request. This may also require arranging a site inspection.

The department will assess the request using the evidence you have supplied as part of your request as well as any other relevant information available to the department such as information collected from site inspections, spatial information on slope, elevation, rainfall and regional ecosystems, koala occurrence records and local and expert advice from relevant third parties.

The department will aim to notify you if your request has been approved, refused or partially approved and partially refused within 90 business days of the request being received (excluding time spent awaiting further information).

If your request is approved (or partially approved), a map will be provided to you showing any part of the land the subject of the request that is a koala habitat area. This map will be taken to be the Koala Conservation Plan Map (koala habitat area) for the land the subject of the request until the Koala Conservation Plan Map for the State is updated (at least annually).

A register of approved requests will be published on the department's website that will identify the reference number of the request, the property description for the land the subject of the approval, the date of the approval and a map showing any part of the land that is a koala habitat area. Once your approved request has been incorporated into the map update, this register will no longer show this decision.

If your request is refused, you will be provided an information notice outlining the reasons for refusal and your rights to an internal review.

9 What if I am not satisfied with the decision?

If you are not satisfied with the chief executive's decision for your request, you may request an internal review of the decision. The internal review application form is available at:

<https://environment.des.qld.gov.au/assets/documents/plants-animals/wildlife-permits/ap-wl-internal-review.doc>.

This application form must be submitted within 20 business days from the day the information notice was issued.

Under the Nature Conservation (Administration) Regulation 2017, the chief executive must, within 28 days of receiving an internal review application, review and make a decision on the application, and give the applicant a notice of the review decision within 14 days after making the internal review decision.

The review notice provided by the department to the applicant must comply with the *Queensland Civil and Administrative Tribunal Act 2009*, section 157(2). This section states the information required on the review notice in order for the applicant to be informed of the decision, their right to have the decision reviewed by the Queensland Civil and Administrative Tribunal (QCAT), and how and when the person may apply for a review by QCAT.

If the applicant is not satisfied with the outcome of the internal review, you may make an application for an external review through the Queensland Civil and Administrative Tribunal (QCAT).

Approved by

Ben Klaassen

27 March 2020

Deputy Director-General,
QPWS and Partnerships
Department of Environment and Science

Enquiries:

Koala Assessment and Compliance
Department of Environment and Science
GPO Box 2454 BRISBANE QLD 4001
Phone: 13 QGOV (13 74 68)
Email: koala.assessment@des.qld.gov.au

Version history

| Version | Effective date | Comments |
|---------|------------------|---|
| 1.00 | 06 February 2020 | First version approved. |
| 1.01 | 27 March 2020 | Minor amendment to include reference to <i>Guideline for determining category C areas</i> . |

Appendix 1. Koala habitat regional ecosystems

The regional ecosystems described below are the regional ecosystems that have been determined to provide suitable habitat for koalas (referred to as koala habitat regional ecosystems). Koala habitat regional ecosystems are one of the key components of the methodologies used to make koala habitat area determinations.

| Regional ecosystem | Description (Queensland Herbarium version 11.1 April 2019) |
|--------------------|---|
| 11.3.2 | Eucalyptus populnea woodland to open woodland. E. melanophloia may be present and locally dominant. There is sometimes a distinct low tree layer dominated by species such as Geijera parviflora, Eremophila mitchellii, Acacia salicina, Acacia pendula, Lysiphillum spp., Cassia brewsteri, Callitris glaucophylla and Acacia excelsa. The ground layer is grassy dominated by a range of species depending on soil and management conditions. Species include Bothriochloa decipiens, Enteropogon acicularis, Aristida ramosa and Tripogon loliiformis. Occurs on Cainozoic alluvial plains with variable soil types including texture contrast, deep uniform clays, massive earths and sometimes cracking clays. (BVG1M: 17a) |
| 11.3.4 | Eucalyptus tereticornis woodland to open forest. Other tree species that may be present and locally dominant include E. camaldulensis, Corymbia tessellaris, E. coolabah, C. clarksoniana, E. populnea or E. brownii, E. melanophloia, E. platyphylla or Angophora floribunda. E. crebra and Lophostemon suaveolens may be locally dominant (subregion 14). A shrub layer is usually absent, and a tall grassy ground layer is often prominent, and may include any of Bothriochloa bladhii subsp. bladhii, Aristida spp., Heteropogon contortus, Dichanthium spp. and Themeda triandra. Heavily grazed areas tend to have shorter or annual grasses such as Dactyloctenium radulans or Bothriochloa spp. Occurs on Cainozoic alluvial plains and terraces. Occurs on variety of soils, including deep cracking clays, medium to fine textured soils, and deep texture-contrast soils. (BVG1M: 16c) |
| 11.3.25 | Eucalyptus camaldulensis or E. tereticornis open forest to woodland. Other tree species such as Casuarina cunninghamiana, E. coolabah, Melaleuca bracteata, Melaleuca viminalis, Livistona spp. (in north), Melaleuca spp. and Angophora floribunda are commonly present and may be locally dominant. An open to sparse, tall shrub layer is frequently present dominated by species including Acacia salicina, A. stenophylla or Lysiphillum carronii. Low shrubs are present, but rarely form a conspicuous layer. The ground layer is open to sparse and dominated by perennial grasses, sedges or forbs such as Imperata cylindrica, Bothriochloa bladhii, B. ewartiana, Chrysopogon fallax, Cyperus dactyloides, C. difformis, C. exaltatus, C. gracilis, C. iria, C. rigidellus, C. victoriensis, Dichanthium sericeum, Leptochloa digitata, Lomandra longifolia or Panicum spp. Occurs on fringing levees and banks of major rivers and drainage lines of alluvial plains throughout the region. Soils are very deep, alluvial, grey and brown cracking clays with or without some texture contrast. These are usually moderately deep to deep, soft or firm, acid, neutral or alkaline brown sands, loams or black cracking or non-cracking clays, and may be sodic at depth (Burgess 2003). (BVG1M: 16a) |
| 11.3.26 | Eucalyptus moluccana or E. woollsiana +/- E. populnea +/- E. melanophloia tall open forest to woodland +/- Allocasuarina luehmannii low tree layer and a grassy ground layer. In northern subregions, there may be shrub layer of any of Eremophila mitchellii, Flindersia dissosperma, Citrus glauca or Petalostigma pubescens, with a sparse grassy ground layer. Occurs on margins of Cainozoic alluvial plains on deep texture contrast soils. (BVG1M: 13d) |
| 11.8.2a | Eucalyptus tereticornis and E. melliodora woodland occurring on low hills. Occurs on low hills (subregion 31 and 32) formed from basalt. The soils are generally shallow (< 60 cm deep), brown to grey-brown, gradational, clay-loams and clays. Basalt stones and boulders can occur on the surface. (BVG1M: 11a) |
| 11.8.4 | Eucalyptus melanophloia and/or E. crebra +/- E. orgadophila +/- Corymbia erythrophloia grassy open woodland. Macrozamia moorei is a conspicuous element of the mid layer in the Central Highlands. Localised patches of Corymbia citriodora occur on volcanic plugs such as Minerva Hills. Generally occurs on slopes of mountains and hills formed from Cainozoic igneous rocks usually with shallow stony soils and extensive outcropping. (BVG1M: 11a) |
| 11.8.5 | Eucalyptus orgadophila grassy open woodland. Eucalyptus orgadophila predominates and forms a distinct but discontinuous canopy sometimes with other sub-dominant species such as Corymbia erythrophloia, E. melanophloia and occasionally E. crebra. Shrubs are usually scarce and scattered although a well-defined shrubby layer does develop in some areas. On the lower slopes at better sites, softwood scrub species may form tall and low shrub layers under the canopy of Eucalyptus orgadophila. The ground layer is moderately dense to dense, and dominated by species that include the grasses Aristida lazardis, A. ramosa, Bothriochloa ewartiana, Dichanthium sericeum, Chrysopogon fallax, Heteropogon contortus, Enneapogon gracilis, Themeda triandra and Tragus australianus and the herbs Brunoniella australis, Evolvulus alsinoides, Galactia tenuiflora and Indigofera linnaei. Occurs on undulating plains, rises, low hills or sometimes flat tablelands on top of mountains, formed from basalt. Generally soils are shallow to moderately shallow, often rocky or stony clays. (BVG1M: 11a) |
| 11.8.5a | Eucalyptus orgadophila woodland with a dense understorey of low trees species including Geijera parviflora, Callitris glaucophylla, Pittosporum angustifolium, Casuarina cristata, Alectryon oleifolius, Psydrax odorata and Notelaea microcarpa. (BVG1M: 11a) |
| 11.8.8 | Woodland usually dominated by either Eucalyptus albens or E. crebra. Eucalyptus tereticornis is an associated species that becomes locally dominant on creek lines. Other tree species that may be present include Callitris |

| | |
|---------|--|
| | baileyi, Angophora subvelutina, Brachychiton populneus, E. melliadora, E. orgadophila, Angophora floribunda, E. moluccana, E. microcarpa, E. biturbinata, E. melanophloia and Corymbia clarksoniana. There is often a sparse low tree layer dominated by similar species to the canopy. The shrub layer is absent or sparse and consisting of species such as Cassinia laevis, Olearia elliptica, Acacia implexa, Xanthorrhoea glauca or Jacksonia scoparia. The ground layer is usually dominated by grasses of variable composition. Common species include Themeda triandra, Bothriochloa decipiens, Dichanthium sericeum, Cymbopogon refractus, Aristida spp. Forbs or sedges such as Gahnia aspera, Asperula conferta or Desmodium varians frequently occur. Occurs on hilltops and sides formed from Cainozoic basaltic rocks. (BVG1M: 11a) |
| 11.9.9 | Eucalyptus crebra grassy woodland. Eucalyptus moluccana sometimes conspicuous on lower slopes. Occurs on Cainozoic to Proterozoic consolidated, fine-grained sediments. (BVG1M: 13c) |
| 12.2.5 | Open forest to low closed forest. Species can include Corymbia intermedia, Lophostemon confertus, Banksia integrifolia subsp. integrifolia, B. aemula, Callitris columellaris, Acacia spp., Livistona spp. and Endiandra sieberi. Melaleuca quinquenervia in swales. Understorey generally shrubby and can include vine forest species. Occurs on Quaternary coastal dunes, beach ridges and sandy banks of coastal streams. (BVG1M: 9f) |
| 12.2.6 | Eucalyptus racemosa subsp. racemosa, Corymbia intermedia, C. gummifera, Angophora leiocarpa and E. pilularis shrubby or grassy woodland to open forest. Occurs on Quaternary coastal dunes and beaches. Dunes with deeply leached soils. (BVG1M: 9g) |
| 12.2.7 | Melaleuca quinquenervia or rarely M. dealbata open forest. Other species include Eucalyptus tereticornis, Corymbia intermedia, E. bancroftii, E. latisinensis, E. robusta, Lophostemon suaveolens and Livistona decora. A shrub layer may occur with frequent species including Melastoma malabathricum subsp. malabathricum or Banksia robur. The ground layer is sparse to dense and comprised of species including the ferns Pteridium esculentum and Blechnum indicum the sedges Schoenus brevifolius, Baloskion tetraphyllum subsp. meiotachyum, Baumea rubiginosa and Gahnia sieberiana and the grass Imperata cylindrica. Occurs on Quaternary coastal dunes and seasonally waterlogged sandplains usually fringing drainage system behind beach ridge plains or on old dunes, swales and sandy coastal creek levees. (BVG1M: 22a) |
| 12.2.7a | Melaleuca quinquenervia low woodland with Gahnia sieberiana ground layer. Occurs on Quaternary coastal sand dunes fringing swamps. Palustrine wetland (e.g. vegetated swamp). (BVG1M: 22a) |
| 12.2.7c | Melaleuca quinquenervia, Eucalyptus robusta, Melicope elleryana open forest with understorey of Todea barbara. Occurs along watercourses on Quaternary coastal dunes and beaches and seasonally waterlogged sandplains. Palustrine wetland (e.g. vegetated swamp). (BVG1M: 22a) |
| 12.2.8 | Eucalyptus pilularis, E. microcorys, E. resinifera and Syncarpia hillii open forest. Occurs on parabolic high dunes. (BVG1M: 8b) |
| 12.2.10 | Mallee Eucalyptus planchoniana +/- Corymbia gummifera, E. racemosa subsp. racemosa, Banksia aemula woodland. Occurs on deeply leached Quaternary coastal dunes and sandplains. (BVG1M: 29a) |
| 12.3.2 | Eucalyptus grandis +/- E. microcorys, Lophostemon confertus tall open forest with vine forest understorey ('wet sclerophyll'). Patches of Eucalyptus pilularis sometimes present especially in vicinity of sedimentary rocks (e.g. around Palmwoods). Fringing streams and in narrow gullies in high rainfall areas. (BVG1M: 8a) |
| 12.3.3 | Eucalyptus tereticornis woodland. Eucalyptus crebra and E. moluccana are sometimes present and may be relatively abundant in places, especially on edges of plains and higher level alluvium. Other species that may be present as scattered individuals or clumps include Angophora subvelutina or A. floribunda, Corymbia clarksoniana, C. intermedia, C. tessellaris, Lophostemon suaveolens and E. melanophloia. Occurs on Quaternary alluvial plains, terraces and fans where rainfall is usually less than 1000mm/y. (BVG1M: 16c) |
| 12.3.3a | Eucalyptus crebra, C. tessellaris woodland to open forest. Other species that may be present as scattered individuals or clumps include Corymbia clarksoniana, Eucalyptus melanophloia, E. tereticornis and C. citriodora subsp. variegata. Occurs on high level alluvial plains often of Pleistocene age, terraces and fans where rainfall is usually less than 1000mm/y. Floodplain (other than floodplain wetlands). (BVG1M: 18b) |
| 12.3.3d | Eucalyptus moluccana woodland. Other frequently occurring species include Eucalyptus tereticornis, E. crebra, E. siderophloia, Corymbia citriodora subsp. variegata, Angophora leiocarpa and C. intermedia. Occurs on margins of Quaternary alluvial plains often adjacent sedimentary geologies. May also occur on stranded Pleistocene river terraces. Floodplain (other than floodplain wetlands). (BVG1M: 13d) |
| 12.3.4 | Open forest to woodland of Melaleuca quinquenervia and Eucalyptus robusta. Occurs fringing drainage lines and on floodplains in coastal areas. (BVG1M: 22a) |
| 12.3.4a | Eucalyptus bancroftii open woodland often with Melaleuca quinquenervia. Occurs on drainage lines and floodplains in coastal areas. Palustrine wetland (e.g. vegetated swamp). (BVG1M: 22a) |
| 12.3.5 | Melaleuca quinquenervia open forest to woodland. Understorey depends upon duration of water logging; sedges and ferns, especially Blechnum indicum, in wetter microhabitats and grasses and shrubs in drier microhabitats. Ground layer species include the grasses Leersia hexandra and Imperata cylindrica, the sedges/rushes, Baumea rubiginosa, Gahnia sieberiana, Lepironia articulata, Schoenus brevifolius and Schoenus scabripes and the fern Lygodium microphyllum. Other tree species that may be present as scattered individuals or clumps include Lophostemon suaveolens, Eucalyptus robusta, E. tereticornis, E. bancroftii, E. latisinensis, Corymbia intermedia, Melaleuca salicina, Livistona australis, Casuarina glauca, Endiandra sieberi. Melastoma malabathricum subsp. malabathricum, Glochidion sumatranum and Melicope elleryana are often in understorey. Occurs on Quaternary alluvium in coastal areas. (BVG1M: 22a) |
| 12.3.6 | Melaleuca quinquenervia +/- Eucalyptus tereticornis, Lophostemon suaveolens, Corymbia intermedia open forest to woodland with a grassy ground layer dominated by species such as Imperata cylindrica. Eucalyptus tereticornis may be present as an emergent layer. Eucalyptus seeana may also occur in this ecosystem to the south and east of Brisbane. Occurs on Quaternary floodplains and fringing drainage lines in coastal areas. (BVG1M: 22a) |

| | |
|----------|--|
| 12.3.7 | Narrow fringing woodland of <i>Eucalyptus tereticornis</i> , <i>Casuarina cunninghamiana</i> subsp. <i>cunninghamiana</i> +/- <i>Melaleuca viminalis</i> . Other species associated with this RE include <i>Melaleuca bracteata</i> , <i>M. trichostachya</i> , <i>M. linariifolia</i> . North of Brisbane <i>Waterhousea floribunda</i> commonly occurs and may at times dominate this RE. <i>Melaleuca fluviatilis</i> occurs in this RE in the north of the bioregion. <i>Lomandra hystrix</i> often present in stream beds. Occurs on fringing levees and banks of rivers and drainage lines of alluvial plains throughout the region. (BVG1M: 16a) |
| 12.3.7a | <i>Melaleuca bracteata</i> open forest +/- emergent <i>Eucalyptus tereticornis</i> . Occurs in drainage depressions on Quaternary alluvial plains. Riverine wetland or fringing riverine wetland. (BVG1M: 22c) |
| 12.3.7c | Billabongs and ox-bow lakes containing either permanent or periodic water bodies. Often fringed with <i>Eucalyptus tereticornis</i> Old river beds now cut off from regular flow. Palustrine wetland (e.g. vegetated swamp). (BVG1M: 34d) |
| 12.3.7d | Aquatic vegetation usually fringed with <i>Eucalyptus tereticornis</i> . Closed depressions on alluvial plains. Palustrine wetland (e.g. vegetated swamp). (BVG1M: 34d) |
| 12.3.9 | <i>Eucalyptus nobilis</i> open forest. Occurs at headwaters of streams on Quaternary alluvial plains usually forming a narrow fringing community. (BVG1M: 16c) |
| 12.3.11 | <i>Eucalyptus tereticornis</i> +/- <i>E. siderophloia</i> and <i>Corymbia intermedia</i> open forest to woodland. <i>Corymbia tessellaris</i> , <i>Lophostemon suaveolens</i> and <i>Melaleuca quinquenervia</i> frequently occur and often form a low tree layer. Other species present in scattered patches or low densities include <i>Angophora leiocarpa</i> , <i>E. exserta</i> , <i>E. grandis</i> , <i>C. trachyphloia</i> , <i>C. citriodora</i> subsp. <i>variegata</i> , <i>E. latisinensis</i> , <i>E. tindaliae</i> , <i>E. racemosa</i> and <i>Melaleuca sieberi</i> . <i>E. seeana</i> may be present south of Landsborough and <i>Livistona decora</i> may occur in scattered patches or low densities in the Glenbar SF and Wongi SF areas. Occurs on Quaternary alluvial plains and drainage lines along coastal lowlands. Rainfall usually exceeds 1000mm/y. (BVG1M: 16c) |
| 12.3.11a | Open forest of <i>Eucalyptus tereticornis</i> and/or <i>E. siderophloia</i> , <i>Lophostemon confertus</i> with vine forest understorey. Other canopy species include <i>Corymbia intermedia</i> , <i>Araucaria cunninghamii</i> and <i>Agathis robusta</i> . Frequently occurring understorey species include <i>Flindersia</i> spp., <i>Lophostemon suaveolens</i> , <i>L. confertus</i> , <i>Cupaniopsis parvifolia</i> , <i>Acronychia</i> spp., <i>Alphitonia excelsa</i> and <i>Acacia disparrima</i> subsp. <i>disparrima</i> . Occurs on sub-coastal Quaternary alluvial plains. Rainfall usually exceeds 1000mm/y. Floodplain (other than floodplain wetlands). (BVG1M: 16c) |
| 12.3.11b | <i>Eucalyptus tereticornis</i> and/or <i>E. racemosa</i> subsp. <i>racemosa</i> +/- <i>E. siderophloia</i> , <i>Lophostemon suaveolens</i> , <i>E. seeana</i> , <i>E. fibrosa</i> subsp. <i>fibrosa</i> , <i>E. propinqua</i> and <i>Angophora leiocarpa</i> open forest usually with a dense shrub layer dominated by <i>Melaleuca nodosa</i> . Occurs on Quaternary alluvium usually higher Pleistocene plains and terraces. Rainfall usually exceeds 1000mm/y. Contains palustrine wetland (e.g. in swales). (BVG1M: 16c) |
| 12.3.14 | <i>Banksia aemula</i> low woodland +/- mallee eucalypt low woodland. Associated canopy species include <i>Eucalyptus latisinensis</i> , <i>Corymbia intermedia</i> , <i>E. robusta</i> and <i>Lophostemon confertus</i> . Occurs on Quaternary alluvial plains along coastal lowlands. (BVG1M: 29a) |
| 12.3.14a | <i>Eucalyptus racemosa</i> subsp. <i>racemosa</i> woodland to open forest. Other canopy species may include <i>Corymbia intermedia</i> , <i>C. gummifera</i> , <i>Eucalyptus latisinensis</i> , <i>E. tindaliae</i> and <i>Melaleuca quinquenervia</i> . Occurs on Quaternary alluvial plains in near coastal areas. (BVG1M: 9g) |
| 12.3.18 | <i>Melaleuca irbyana</i> low open forest or thicket. Emergent <i>Eucalyptus moluccana</i> , <i>E. crebra</i> , <i>E. tereticornis</i> or <i>Corymbia citriodora</i> subsp. <i>variegata</i> may be present. Occurs on Quaternary alluvial plains where drainage of soils is impeded. (BVG1M: 21b) |
| 12.3.19 | <i>Eucalyptus moluccana</i> and/or <i>Eucalyptus tereticornis</i> and <i>E. crebra</i> open forest to woodland, with a sparse to mid-dense understorey of <i>Melaleuca irbyana</i> . Occurs on margins of Quaternary alluvial plains. (BVG1M: 13d) |
| 12.3.20 | <i>Melaleuca quinquenervia</i> , <i>Casuarina glauca</i> +/- <i>Eucalyptus tereticornis</i> , <i>E. siderophloia</i> open forest. Occurs on lowest terraces of Quaternary alluvial plains in coastal areas. (BVG1M: 22a) |
| 12.5.1 | Woodland complex generally with <i>Corymbia trachyphloia</i> , <i>C. citriodora</i> subsp. <i>variegata</i> +/- <i>Eucalyptus crebra</i> , <i>E. longirostrata</i> , <i>C. intermedia</i> , <i>E. major</i> , <i>E. fibrosa</i> subsp. <i>fibrosa</i> (can be locally common) and <i>E. acmenoides</i> . Localised occurrences of <i>Eucalyptus taurina</i> , <i>E. decorticans</i> , <i>E. dura</i> , <i>E. cloeziana</i> and <i>E. melanoleuca</i> . Understorey grassy or shrubby. Occurs on remnant Tertiary surfaces, usually with deep red soils. (BVG1M: 10b) |
| 12.5.1b | <i>Eucalyptus cloeziana</i> open forest +/- <i>E. microcorys</i> and <i>Corymbia intermedia</i> . Occurs on remnant Tertiary surfaces. Usually deep red soils. (BVG1M: 12a) |
| 12.5.1c | <i>Eucalyptus helidonica</i> open forest +/- <i>Corymbia citriodora</i> subsp. <i>variegata</i> , <i>C. trachyphloia</i> , <i>E. planchoniana</i> , <i>E. taurina</i> , <i>E. baileyana</i> , <i>Angophora woodsiana</i> , <i>Lysicarpus angustifolius</i> . Occurs on remnant Tertiary surfaces. (BVG1M: 9h) |
| 12.5.1g | <i>Eucalyptus planchoniana</i> and/or <i>E. baileyana</i> woodland to open forest +/- <i>C. trachyphloia</i> , <i>E. carnea</i> , <i>Angophora woodsiana</i> , <i>E. psammitica</i> , <i>E. crebra</i> , <i>E. racemosa</i> subsp. <i>racemosa</i> . Occurs on remnant Tertiary surfaces. (BVG1M: 9h) |
| 12.5.2a | <i>Corymbia intermedia</i> , <i>Eucalyptus tereticornis</i> woodland. Other species can include <i>Lophostemon suaveolens</i> , <i>Angophora leiocarpa</i> , <i>Eucalyptus acmenoides</i> or <i>E. portuensis</i> , <i>E. siderophloia</i> or <i>E. crebra</i> , <i>Corymbia tessellaris</i> and <i>Melaleuca quinquenervia</i> (lower slopes). <i>Eucalyptus exserta</i> is usually present in northern parts of bioregion. Occurs on complex of remnant Tertiary surfaces +/- Cainozoic and Mesozoic sediments usually in coastal areas with deep red soils. (BVG1M: 9g) |
| 12.5.2b | <i>Eucalyptus tereticornis</i> +/- <i>Corymbia intermedia</i> , <i>Lophostemon suaveolens</i> and <i>C. citriodora</i> subsp. <i>variegata</i> open forest. Other species can include <i>Angophora leiocarpa</i> , <i>Eucalyptus acmenoides</i> , <i>E. crebra</i> and <i>Corymbia tessellaris</i> . <i>Eucalyptus exserta</i> is usually present in northern parts of bioregion. Occurs on complex of remnant Tertiary surfaces +/- Cainozoic and Mesozoic sediments in sub-coastal areas. Usually deep red soils. (BVG1M: 9g) |

| | |
|----------|---|
| 12.5.2x1 | Melaleuca irbyana low open forest with emergent Eucalyptus tereticornis. Occurs on remnant Tertiary surfaces, mainly deeply weathered high level Tertiary alluvium. Palustrine wetland (e.g. vegetated swamp). (BVG1M: 21b) |
| 12.5.3 | Eucalyptus racemosa subsp. racemosa woodland with Corymbia intermedia, E. siderophloia +/- E. tindaliae, E. resinifera, E. pilularis, E. microcorys, Angophora leiocarpa. Melaleuca quinquenervia is often a prominent feature of lower slopes. Minor patches (<1ha) dominated by Corymbia citriodora subsp. variegata sometimes occur. Occurs on complex of remnant Tertiary surfaces +/- Cainozoic and Mesozoic sediments. (BVG1M: 9g) |
| 12.5.3a | Corymbia intermedia, Eucalyptus seeana +/- E. racemosa subsp. racemosa, Angophora leiocarpa, E. siderophloia, E. microcorys, C. citriodora subsp. variegata, Lophostemon suaveolens woodland. Melaleuca quinquenervia is often a prominent feature of lower slopes. Occurs on complex of remnant Tertiary surfaces +/- Cainozoic and Mesozoic sediments. (BVG1M: 9g) |
| 12.5.4 | Eucalyptus latisinensis +/- Corymbia intermedia, C. trachyphloia subsp. trachyphloia, Angophora leiocarpa, Eucalyptus exserta woodland. Other characteristic species include Eucalyptus siderophloia, Lophostemon suaveolens, Melaleuca viridiflora var. viridiflora, M. quinquenervia, M. cheelii and Grevillea banksii. Patches of Allocasuarina luehmannii or Banksia oblongifolia present locally and Xanthorrhoea johnsonii common in ground layer. Occurs on complex of remnant Tertiary surfaces and Cainozoic and Mesozoic sediments. (BVG1M: 9g) |
| 12.5.4a | Woodland of Melaleuca quinquenervia and/or M. viridiflora var. viridiflora +/- Eucalyptus latisinensis, Corymbia intermedia, Angophora leiocarpa, E. exserta, Lophostemon suaveolens and M. nodosa. Occurs on complex of remnant Tertiary surfaces and Cainozoic and Mesozoic sediments usually lower slopes. Palustrine wetland (e.g. vegetated swamp). (BVG1M: 21a) |
| 12.5.6 | Eucalyptus siderophloia, E. propinqua and/or E. pilularis open forest +/- Corymbia intermedia, E. microcorys, E. acmenoides, E. tereticornis, E. biturbinata, Lophostemon confertus with E. saligna, E. montivaga at higher altitudes. Occurs on remnant Tertiary surfaces. Usually deep red soils. (BVG1M: 9a) |
| 12.5.6a | Eucalyptus saligna subsp. saligna or E. grandis open forest, often with vine forest understorey. Occurs on remnant Tertiary surfaces. Usually deep red soils. (BVG1M: 8a) |
| 12.5.6b | Eucalyptus siderophloia, Corymbia intermedia, E. propinqua or E. major or E. longirostrata open forest +/- E. microcorys, E. acmenoides, E. tereticornis, E. biturbinata, E. pilularis, Lophostemon confertus. Occurs on remnant Tertiary surfaces. Usually deep red soils. (BVG1M: 9a) |
| 12.5.6c | 12.5.6c: Eucalyptus pilularis open forest +/- E. siderophloia, E. propinqua, Corymbia intermedia, E. microcorys, E. acmenoides, E. tereticornis, E. biturbinata, Lophostemon confertus with E. saligna, E. montivaga at higher altitudes. Occurs on remnant Tertiary surfaces. Usually deep red soils. (BVG1M: 8b) |
| 12.5.7 | Corymbia citriodora subsp. variegata +/- Eucalyptus portuensis or E. acmenoides, C. intermedia, E. fibrosa subsp. fibrosa, C. trachyphloia, E. moluccana (lower slopes), E. crebra (drier sub coastal areas) or E. siderophloia, E. exserta open forest. Occurs on complex of remnant Tertiary surfaces and Tertiary sedimentary rocks. Usually deep red soils. (BVG1M: 10b) |
| 12.5.7b | Eucalyptus moluccana +/- Corymbia citriodora subsp. variegata open forest. Other species include Eucalyptus siderophloia or E. crebra, E. tereticornis. Understorey generally sparse but can become shrubby in absence of fire. Occurs on complex of remnant Tertiary surfaces and Tertiary sedimentary rocks often on lower slopes. (BVG1M: 13d) |
| 12.5.7c | Corymbia henryi and/or Eucalyptus fibrosa subsp. fibrosa woodland +/- C. citriodora subsp. variegata, E. major, E. carnea, E. tindaliae, E. siderophloia, Angophora leiocarpa, E. helidonica, E. portuensis, E. latisinensis, C. intermedia and E. moluccana. Occurs on complex of remnant Tertiary surfaces and Tertiary sedimentary rocks. (BVG1M: 10b) |
| 12.5.10 | Eucalyptus latisinensis and/or Banksia aemula low open woodland +/- Corymbia trachyphloia subsp. trachyphloia. Diverse understorey of heath species. Occurs on complex of remnant Tertiary surfaces and Tertiary sedimentary rocks. (BVG1M: 29a) |
| 12.5.12 | Eucalyptus racemosa subsp. racemosa, E. latisinensis +/- Corymbia gummifera, C. intermedia, E. bancroftii, Melaleuca quinquenervia woodland to open woodland with prominent heathy understorey. Other canopy species occasionally present include E. robusta, Angophora leiocarpa and A. woodsiana. Occurs on remnant Tertiary surfaces +/- Cainozoic and Mesozoic sediments. (BVG1M: 9g) |
| 12.8.1 | Eucalyptus campanulata tall open forest with shrubby to grassy understorey. Other canopy species include Eucalyptus microcorys, Syncarpia glomulifera subsp. glomulifera, E. acmenoides, Corymbia intermedia, E. carnea and E. resinifera. Patches of Eucalyptus pilularis sometimes present on ridges and crests. Occurs in high rainfall areas above 580 metres altitude on Cainozoic igneous rocks especially rhyolite. (BVG1M: 8b) |
| 12.8.1a | Eucalyptus montivaga open forest +/- Corymbia intermedia, E. pilularis. Occurs on elevated Cainozoic igneous rocks. (BVG1M: 8b) |
| 12.8.8 | Eucalyptus saligna subsp. saligna or E. grandis tall open forest often with vine forest understorey ('wet sclerophyll'). Other species include Eucalyptus microcorys, E. acmenoides, Lophostemon confertus and Syncarpia glomulifera subsp. glomulifera. Occurs on Cainozoic igneous rocks and areas subject to local enrichment from Cainozoic igneous rocks. (BVG1M: 8a) |
| 12.8.8a | Eucalyptus siderophloia, E. microcorys, Corymbia intermedia +/- Eucalyptus propinqua, E. carnea open forest on Cainozoic igneous rocks. Occurs on Cainozoic igneous rocks and areas subject to local enrichment from Cainozoic igneous rocks. (BVG1M: 9a) |
| 12.8.9 | Lophostemon confertus open forest often with vine forest understorey ('wet sclerophyll'). Occurs on Cainozoic igneous rocks. Tends to occur mostly in gullies and on exposed ridges on basalt. (BVG1M: 8a) |
| 12.8.11 | Eucalyptus dunnii +/- E. saligna and E. microcorys tall open forest. Occurs on Cainozoic igneous rocks and areas subject to local enrichment from Cainozoic igneous rocks. (BVG1M: 8a) |
| 12.8.12 | Eucalyptus obliqua tall open forest. Occurs on Cainozoic igneous rocks. (BVG1M: 8b) |

| | |
|------------|---|
| 12.8.14 | Eucalyptus eugenioides, E. biturbinata, E. melliodora +/- E. tereticornis, Corymbia intermedia, E. crebra open forest. Allocasuarina torulosa is a common understorey species. Localised occurrences of Eucalyptus laevopinea, E. quadrangulata and E. banksii may occur. Occurs on Cainozoic igneous rocks, especially basalt. (BVG1M: 11a) |
| 12.8.14a | Eucalyptus moluccana open forest +/- E. tereticornis, Eucalyptus siderophloia or E. crebra. Understorey generally sparse but can become shrubby in absence of fire. Occurs on Cainozoic igneous rocks. (BVG1M: 13d) |
| 12.8.16 | Eucalyptus crebra, generally with E. melliodora and E. tereticornis +/- E. albens grassy woodland. Occurs on dry hillslopes on Cainozoic igneous rocks, especially basalt. (BVG1M: 11a) |
| 12.8.17 | Eucalyptus melanophloia +/- E. crebra, E. tereticornis, Corymbia tessellaris, C. intermedia and/or C. clarksoniana, E. melliodora, Angophora subvelutina grassy woodland. Occurs on Cainozoic igneous rocks, especially basalt. (BVG1M: 11a) |
| 12.8.20 | Low shrubby woodland to open woodland complex. Canopy trees include Eucalyptus racemosa subsp. racemosa, E. dura, Corymbia trachyphloia, E. carnea, Allocasuarina littoralis, Acacia spp. and Lophostemon confertus. Occurs on Cainozoic igneous rocks, especially rhyolite. (BVG1M: 9h) |
| 12.8.24 | Corymbia citriodora subsp. variegata, Eucalyptus crebra +/- E. moluccana open forest. Occurs on Cainozoic igneous rocks especially lower slopes of rhyolite and trachyte hills (e.g. Moogerah Peaks). (BVG1M: 10b) |
| 12.8.25 | Open forest with Eucalyptus acmenoides or E. helidonica +/- E. eugenioides, E. crebra, E. propinqua, Corymbia intermedia, E. biturbinata, E. moluccana and Lophostemon confertus. Occurs on Cainozoic igneous rocks especially trachyte hills. (BVG1M: 9g) |
| 12.9-10.1 | Tall open forest. Canopy species include Eucalyptus resinifera, E. grandis, E. robusta, Corymbia intermedia +/- E. microcorys, Melaleuca quinquenervia, Syncarpia glomulifera subsp. glomulifera and Lophostemon confertus. Occurs on Cainozoic and Mesozoic sediments. (BVG1M: 8a) |
| 12.9-10.2 | Corymbia citriodora subsp. variegata open forest or woodland usually with Eucalyptus crebra. Other species such as Eucalyptus tereticornis, E. moluccana, E. acmenoides and E. siderophloia may be present in scattered patches or in low densities. Understorey can be grassy or shrubby. Shrubby understorey of Lophostemon confertus (whipstick form) often present in northern parts of bioregion. Occurs on Cainozoic and Mesozoic sediments. (BVG1M: 10b) |
| 12.9-10.3 | Eucalyptus moluccana open forest. Other canopy species include Eucalyptus siderophloia or E. crebra, E. tereticornis and Corymbia citriodora subsp. variegata. Understorey generally sparse but can become shrubby in absence of fire. Occurs on Cainozoic and Mesozoic sediments, especially shales. Prefers lower slopes. (BVG1M: 13d) |
| 12.9-10.4 | Eucalyptus racemosa subsp. racemosa woodland to open forest. Other species can include Angophora leiocarpa, Eucalyptus seeana, E. siderophloia, Corymbia intermedia, E. tindaliae, with Lophostemon suaveolens, Melaleuca quinquenervia, E. tereticornis common on lower slopes. Occurs on Cainozoic and Mesozoic sediments +/- remnant Tertiary surfaces. (BVG1M: 9g) |
| 12.9-10.4a | Eucalyptus racemosa subsp. racemosa woodland to open woodland with a wet ground layer often dominated by Ptilothrix deusta, Lepidosperma laterale var. laterale and other sedges and grasses. Other canopy species can include Corymbia gummifera, C. intermedia, Melaleuca quinquenervia, Lophostemon suaveolens and Eucalyptus resinifera. A secondary tree layer of Melaleuca quinquenervia, Lophostemon suaveolens, Allocasuarina littoralis may also be present. Occurs on moist lower slopes and discharge areas on Cainozoic and Mesozoic sediments +/- remnant Tertiary surfaces. Palustrine wetland (e.g. vegetated swamp). (BVG1M: 9g) |
| 12.9-10.5 | Shrubby woodland complex. More widely distributed and abundant species include Corymbia trachyphloia subsp. trachyphloia, C. citriodora subsp. variegata, Eucalyptus crebra, E. fibrosa subsp. fibrosa, E. major, Angophora leiocarpa, E. helidonica. Understorey of sclerophyllous shrubs. Localised occurrences of Eucalyptus baileyana, E. pilularis, Corymbia henryi, E. dura, E. decorticans (extreme west of bioregion), E. taurina, Angophora woodsiana, Lysicarpus angustifolius and Lophostemon confertus. Tends to shrubland or monospecific woodland of species such as Eucalyptus dura on shallow lithosols. Occurs on quartzose sandstone scarps and crests. (BVG1M: 9h) |
| 12.9-10.5a | Eucalyptus helidonica, Corymbia citriodora subsp. variegata open forest +/- C. trachyphloia subsp. trachyphloia, Eucalyptus fibrosa subsp. fibrosa, E. taurina, E. dura, E. baileyana, C. gummifera, Angophora woodsiana and Lysicarpus angustifolius. Occurs on quartzose sandstone scarps and crests. (BVG1M: 9h) |
| 12.9-10.5d | Woodland of Eucalyptus eugenioides, E. biturbinata or E. longirostrata, E. crebra, E. tereticornis and Corymbia trachyphloia. Occurs on Cainozoic and Mesozoic sediments. (BVG1M: 9h) |
| 12.9-10.7 | Eucalyptus crebra +/- E. tereticornis, Corymbia tessellaris, Angophora leiocarpa, E. melanophloia woodland. Occurs on Cainozoic and Mesozoic sediments. (BVG1M: 13c) |
| 12.9-10.7a | Eucalyptus siderophloia, Corymbia intermedia +/- E. tereticornis and Lophostemon confertus open forest. Occurs on Cainozoic and Mesozoic sediments in near coastal areas. (BVG1M: 12a) |
| 12.9-10.8 | Eucalyptus melanophloia grassy woodland, usually with E. crebra, Eucalyptus tereticornis +/- Corymbia tessellaris, C. erythrophloia and Angophora spp. Occurs on Cainozoic and Mesozoic sediments. (BVG1M: 17b) |
| 12.9-10.11 | Melaleuca irbyana low open forest or thicket. Emergent Eucalyptus moluccana, E. crebra, E. tereticornis or Corymbia citriodora subsp. variegata may be present. Occurs on Mesozoic sediments where drainage of soils is impeded. (BVG1M: 21b) |
| 12.9-10.12 | Corymbia intermedia, Angophora leiocarpa, Eucalyptus seeana +/- E. siderophloia, E. tereticornis, E. racemosa subsp. racemosa, C. citriodora subsp. variegata woodland to open forest. E. seeana and Lophostemon suaveolens are often present as sub-canopy or understorey trees. Occasional Melaleuca quinquenervia on lower slopes. Does not include areas dominated by Eucalyptus racemosa subsp. racemosa. Occurs on Cainozoic and Mesozoic sediments. (BVG1M: 9g) |
| 12.9-10.14 | Eucalyptus pilularis tall open forest with shrubby understorey. Other species include Syncarpia glomulifera subsp. glomulifera, S. verecunda, Corymbia intermedia, Angophora woodsiana and Eucalyptus microcorys in coastal |

| | |
|-------------|---|
| | areas and species of RE 12.9-10.5 in drier sub coastal areas. <i>Eucalyptus pilularis</i> sometimes extends onto colluvial lower slopes. Occurs on Cainozoic and Mesozoic sediments especially sandstone. (BVG1M: 8b) |
| 12.9-10.14a | Open forest of <i>Eucalyptus grandis</i> , <i>Lophostemon confertus</i> , <i>E. microcorys</i> , <i>Syncarpia glomulifera</i> subsp. <i>glomulifera</i> +/- <i>E. pilularis</i> . Occurs on Cainozoic and Mesozoic sediments especially sandstone in wet gullies and southern slopes. (BVG1M: 8a) |
| 12.9-10.14b | <i>Eucalyptus pilularis</i> open forest. Other canopy species may include <i>Angophora woodsiana</i> , <i>Eucalyptus baileyana</i> , <i>Corymbia henryi</i> , <i>C. trachyphloia</i> , <i>E. taurina</i> , and <i>E. microcorys</i> . Occurs in dry sub coastal areas on Cainozoic and Mesozoic sediments especially quartzose sandstone. (BVG1M: 8b) |
| 12.9-10.17 | Open forest to woodland complex generally with a variety of stringybarks, grey gums, ironbarks and in some areas spotted gum. Canopy trees include <i>Eucalyptus siderophloia</i> , <i>E. propinqua</i> or <i>E. major</i> , <i>E. acmenoides</i> or <i>E. portuensis</i> , <i>E. carnea</i> and/or <i>E. microcorys</i> and/or <i>Corymbia citriodora</i> subsp. <i>variegata</i> . Other species that may be present locally include <i>Corymbia intermedia</i> , <i>C. trachyphloia</i> , <i>Eucalyptus tereticornis</i> , <i>E. biturbinata</i> , <i>E. moluccana</i> , <i>E. longirostrata</i> , <i>E. fibrosa</i> subsp. <i>fibrosa</i> and <i>Angophora leiocarpa</i> . <i>Lophostemon confertus</i> or Whipstick <i>Lophostemon confertus</i> often present in gullies and as a sub-canopy or understorey tree. Mixed understorey of grasses, shrubs and ferns. Hills and ranges of Cainozoic and Mesozoic sediments. (BVG1M: 9a) |
| 12.9-10.17a | <i>Lophostemon confertus</i> or <i>L. suaveolens</i> dominated open forest usually with emergent <i>Eucalyptus</i> and/or <i>Corymbia</i> species. Occurs in gullies and southern slopes on Cainozoic and Mesozoic sediments. (BVG1M: 28e) |
| 12.9-10.17b | <i>Corymbia citriodora</i> subsp. <i>variegata</i> mixed open forest to woodland. Other commonly occurring canopy trees include <i>Eucalyptus acmenoides</i> , <i>Angophora leiocarpa</i> , <i>E. siderophloia</i> , <i>E. carnea</i> , <i>E. longirostrata</i> and <i>C. intermedia</i> . Other species that may be present locally include <i>Eucalyptus tereticornis</i> , <i>E. crebra</i> , <i>E. fibrosa</i> subsp. <i>fibrosa</i> and <i>E. exserta</i> . <i>Lophostemon confertus</i> (tree form and whipstick form) often present in gullies and as a sub-canopy or understorey tree. Mixed understorey of grasses and shrubs. Hills and ranges of Cainozoic and Mesozoic sediments usually with > 1000mm rainfall per annum. (BVG1M: 10b) |
| 12.9-10.17c | Open forest of <i>Eucalyptus carnea</i> and/or <i>E. tindaliae</i> and/or <i>E. helidonica</i> +/- <i>Corymbia citriodora</i> subsp. <i>variegata</i> , <i>Eucalyptus crebra</i> , <i>Eucalyptus major</i> , <i>Corymbia henryi</i> , <i>Angophora woodsiana</i> , <i>C. trachyphloia</i> , <i>E. siderophloia</i> , <i>E. microcorys</i> , <i>E. resinifera</i> and <i>E. propinqua</i> . <i>Lophostemon confertus</i> often present as a sub-canopy or understorey tree. Occurs on Cainozoic and Mesozoic sediments. (BVG1M: 9g) |
| 12.9-10.17d | Open forest generally containing <i>Eucalyptus siderophloia</i> , <i>E. propinqua</i> or <i>E. major</i> , <i>Corymbia intermedia</i> . Other characteristic species include <i>Lophostemon confertus</i> , <i>Eucalyptus microcorys</i> and <i>E. acmenoides</i> or <i>E. portuensis</i> . Other species that may be present locally include <i>Corymbia trachyphloia</i> subsp. <i>trachyphloia</i> , <i>C. citriodora</i> subsp. <i>variegata</i> , <i>E. longirostrata</i> , <i>E. carnea</i> , <i>E. moluccana</i> and occasional vine forest species. Hills and ranges on Cainozoic and Mesozoic sediments. (BVG1M: 9a) |
| 12.9-10.17e | <i>Eucalyptus acmenoides</i> , <i>E. propinqua</i> , <i>Corymbia intermedia</i> +/- <i>E. microcorys</i> , <i>Lophostemon confertus</i> open forest. Mixed understorey of grasses, shrubs and ferns. Hills and ranges of Cainozoic and Mesozoic sediments. (BVG1M: 9a) |
| 12.9-10.18 | <i>Angophora leiocarpa</i> , <i>Eucalyptus crebra</i> woodland +/- <i>E. longirostrata</i> , <i>Corymbia citriodora</i> subsp. <i>variegata</i> . Other species such as <i>Eucalyptus tereticornis</i> , <i>Corymbia trachyphloia</i> subsp. <i>trachyphloia</i> and <i>C. intermedia</i> may be present in scattered patches or in low densities. Understorey can be grassy or shrubby. Occurs on Cainozoic and Mesozoic sediments. (BVG1M: 9h) |
| 12.9-10.19 | <i>Eucalyptus fibrosa</i> subsp. <i>fibrosa</i> woodland +/- <i>Corymbia citriodora</i> subsp. <i>variegata</i> , <i>E. acmenoides</i> or <i>E. portuensis</i> , <i>Angophora leiocarpa</i> , <i>E. major</i> . Understorey often sparse. Localised occurrences of <i>Eucalyptus sideroxylon</i> . Occurs on Cainozoic and Mesozoic sediments. (BVG1M: 12a) |
| 12.9-10.19a | <i>Corymbia henryi</i> and/or <i>Eucalyptus fibrosa</i> subsp. <i>fibrosa</i> open forest. Other commonly associated species include <i>Corymbia citriodora</i> subsp. <i>variegata</i> , <i>E. carnea</i> , <i>E. siderophloia</i> , <i>E. crebra</i> and <i>E. major</i> . Occurs in coastal areas on Cainozoic and Mesozoic sediments. (BVG1M: 10b) |
| 12.9-10.21 | <i>Eucalyptus acmenoides</i> or <i>E. portuensis</i> woodland usually with <i>Corymbia trachyphloia</i> subsp. <i>trachyphloia</i> +/- <i>Angophora leiocarpa</i> , <i>E. major</i> , <i>E. moluccana</i> , <i>E. exserta</i> , <i>Lophostemon confertus</i> (whipstick form). Occurs on Cainozoic and Mesozoic sediments. (BVG1M: 9h) |
| 12.9-10.26 | <i>Eucalyptus baileyana</i> and/or <i>E. planchoniana</i> woodland to open forest. Other commonly associated species include <i>Angophora woodsiana</i> , <i>E. tindaliae</i> , <i>E. carnea</i> , <i>E. resinifera</i> . <i>Eucalyptus psammitica</i> may dominate areas of this ecosystem occurring in Toohey Forest. Occurs on quartzose sandstone scarps and crests. (BVG1M: 12a) |
| 12.9-10.27 | <i>Corymbia citriodora</i> subsp. <i>variegata</i> , <i>Eucalyptus crebra</i> and/or <i>E. moluccana</i> , <i>E. tereticornis</i> open forest with a sparse to mid-dense understorey of <i>Melaleuca irbyana</i> . Occurs on lower slopes and elevated flats with impeded drainage on Mesozoic sediments. (BVG1M: 10b) |
| 12.9-10.28 | <i>Angophora leiocarpa</i> , <i>Eucalyptus interstans</i> +/- <i>Corymbia intermedia</i> , <i>E. tereticornis</i> <i>C. tessellaris</i> , <i>C. clarksoniana</i> , <i>C. gummifera</i> , <i>E. siderophloia</i> , <i>C. citriodora</i> subsp. <i>variegata</i> woodland to open forest. <i>Lophostemon suaveolens</i> is often present as a sub-canopy or understorey tree. Occasional <i>Melaleuca quinquenervia</i> on lower slopes. Occurs on Cainozoic and Mesozoic sediments. (BVG1M: 9g) |
| 12.9-10.29 | <i>Eucalyptus cloeziana</i> +/- <i>E. propinqua</i> , <i>E. acmenoides</i> , <i>E. microcorys</i> and <i>E. grandis</i> tall open forest. Occurs on Cainozoic and Mesozoic sediments. (BVG1M: 8a) |
| 12.11.2 | Tall open forest with vine forest understorey ('wet sclerophyll'). Canopy species include <i>Eucalyptus saligna</i> subsp. <i>saligna</i> or <i>E. grandis</i> , <i>E. microcorys</i> , <i>Corymbia intermedia</i> and <i>Lophostemon confertus</i> . Characteristic understorey species include <i>Ackama paniculosa</i> , <i>Pittosporum undulatum</i> , <i>Synoum glandulosum</i> subsp. <i>glandulosum</i> and <i>Cryptocarya microneura</i> . Occurs on Palaeozoic and older moderately to strongly deformed and metamorphosed sediments and interbedded volcanics. (BVG1M: 8a) |
| 12.11.3 | <i>Eucalyptus siderophloia</i> and <i>E. propinqua</i> open forest +/- <i>E. microcorys</i> , <i>Lophostemon confertus</i> , <i>Corymbia intermedia</i> , <i>E. biturbinata</i> , <i>E. acmenoides</i> , <i>E. tereticornis</i> , <i>E. moluccana</i> , <i>Angophora leiocarpa</i> , <i>Syncarpia</i> |

| | |
|-----------|---|
| | verecunda with vine forest species and <i>E. grandis</i> or <i>E. saligna</i> in gullies. <i>Eucalyptus pilularis</i> and <i>E. tindaliae</i> sometimes present e.g. mid D'Aguilar Range, Conondale Range. Occurs predominantly on hills and ranges of Palaeozoic and older moderately to strongly deformed and metamorphosed sediments and interbedded volcanics. (BVG1M: 9a) |
| 12.11.3a | <i>Lophostemon confertus</i> +/- <i>Eucalyptus microcorys</i> , <i>E. carnea</i> , <i>E. propinqua</i> , <i>E. major</i> , <i>E. siderophloia</i> woodland. Occurs in gullies and exposed ridges of Palaeozoic and older moderately to strongly deformed and metamorphosed sediments and interbedded volcanics. (BVG1M: 9a) |
| 12.11.3b | <i>Eucalyptus pilularis</i> tall open forest. Other frequently occurring species include <i>Eucalyptus microcorys</i> , <i>E. saligna</i> , <i>E. siderophloia</i> , <i>E. carnea</i> , <i>Corymbia intermedia</i> and <i>E. propinqua</i> . Occurs on higher altitude (>300m) subcoastal hills and ranges of Palaeozoic and older moderately to strongly deformed and metamorphosed sediments and interbedded volcanics. (BVG1M: 8b) |
| 12.11.5 | <i>Corymbia citriodora</i> subsp. <i>variegata</i> open forest to woodland, usually including <i>Eucalyptus siderophloia</i> / <i>E. crebra</i> (sub coastal ranges), <i>E. propinqua</i> and <i>E. acmenoides</i> or <i>E. carnea</i> . Other species that may be present and abundant locally include <i>Corymbia intermedia</i> , <i>C. trachyphloia</i> subsp. <i>trachyphloia</i> , <i>Eucalyptus tereticornis</i> , <i>E. microcorys</i> , <i>E. portuensis</i> , <i>E. helidonica</i> , <i>E. major</i> , <i>E. longirostrata</i> , <i>E. biturbinata</i> , <i>E. moluccana</i> and <i>Angophora leiocarpa</i> . <i>Lophostemon confertus</i> often present in gullies and as a sub-canopy or understorey tree. Mixed understorey of grasses, shrubs and ferns. Occurs on hills and ranges of Palaeozoic and older moderately to strongly deformed and metamorphosed sediments and interbedded volcanics. (BVG1M: 10b) |
| 12.11.6 | Open forest to woodland of <i>Corymbia citriodora</i> subsp. <i>variegata</i> generally with <i>Eucalyptus crebra</i> . Other species such as <i>Eucalyptus exserta</i> , <i>E. tereticornis</i> , <i>E. moluccana</i> , <i>E. melanophloia</i> , <i>E. acmenoides</i> , <i>Corymbia tessellaris</i> and <i>Angophora leiocarpa</i> may be present in scattered patches or in low densities. Understorey grassy or shrubby. Occurs on Palaeozoic and older moderately to strongly deformed and metamorphosed sediments and interbedded volcanics. Drier habitats than RE 12.11.5. (BVG1M: 10b) |
| 12.11.7 | <i>Eucalyptus crebra</i> woodland. Other species such as <i>Corymbia clarksoniana</i> may be present in low densities or in patches. Occurs on Palaeozoic and older moderately to strongly deformed and metamorphosed sediments and interbedded volcanics. (BVG1M: 13c) |
| 12.11.8 | <i>Eucalyptus melanophloia</i> usually with <i>E. crebra</i> grassy woodland. Other species such as <i>Corymbia erythrophloia</i> , <i>C. tessellaris</i> , <i>C. clarksoniana</i> may be present in low densities or in patches. Restricted occurrence of <i>Callitris glaucophylla</i> south of Gayndah. Occurs on Palaeozoic and older moderately to strongly deformed and metamorphosed sediments and interbedded volcanics. (BVG1M: 17b) |
| 12.11.9 | Open forest to woodland with <i>Eucalyptus tereticornis</i> . Includes both <i>E. tereticornis</i> subsp. <i>tereticornis</i> and <i>E. tereticornis</i> subsp. <i>basaltica</i> . Other canopy species include <i>Eucalyptus biturbinata</i> , <i>E. melliodora</i> , <i>Corymbia intermedia</i> , <i>E. longirostrata</i> , <i>E. eugenioides</i> , <i>Allocasuarina torulosa</i> , <i>E. moluccana</i> , <i>E. saligna</i> , <i>E. siderophloia</i> and <i>Angophora subvelutina</i> . Occurs on ridges and upper slopes especially at higher altitudes on Palaeozoic and older moderately to strongly deformed and metamorphosed sediments and interbedded volcanics. These occurrences are often associated with small areas of intermediate and basic volcanic rocks. Minor occurrences on low coastal ridges and upper slopes. (BVG1M: 9g) |
| 12.11.9x1 | <i>Eucalyptus montivaga</i> open forest. Other canopy species can include <i>Corymbia trachyphloia</i> , <i>E. acmenoides</i> , <i>Syncarpia glomulifera</i> subsp. <i>glomulifera</i> and <i>C. intermedia</i> . Occurs on Palaeozoic and older moderately to strongly deformed and metamorphosed sediments and interbedded volcanics. Altitude >500m. (BVG1M: 8b) |
| 12.11.14 | <i>Eucalyptus crebra</i> , <i>E. tereticornis</i> , <i>Corymbia intermedia</i> grassy woodland. Other species including <i>Eucalyptus melanophloia</i> , <i>Corymbia clarksoniana</i> , <i>C. erythrophloia</i> , <i>C. tessellaris</i> , <i>E. siderophloia</i> , <i>Angophora</i> spp. May be present in low densities or in patches. Mid-layer generally sparse but can include low trees such as <i>Vachellia bidwillii</i> , <i>Capparis</i> spp., <i>Dodonaea triquetra</i> , <i>Alphitonia excelsa</i> and <i>Xanthorrhoea</i> spp. Occurs on mid and lower slopes on Palaeozoic and older moderately to strongly deformed and metamorphosed sediments and interbedded volcanics. (BVG1M: 13c) |
| 12.11.15 | <i>Eucalyptus tereticornis</i> , <i>Corymbia intermedia</i> open woodland +/- <i>E. acmenoides</i> , <i>Allocasuarina torulosa</i> , <i>E. siderophloia</i> , <i>E. crebra</i> , <i>Angophora subvelutina</i> , <i>E. tindaliae</i> and <i>Banksia integrifolia</i> . <i>Xanthorrhoea johnsonii</i> prominent in understorey. Patches of <i>Leptospermum</i> spp. Shrubland occur in places. Occurs on serpentinite. (BVG1M: 9h) |
| 12.11.16 | <i>Eucalyptus cloeziana</i> +/- <i>E. propinqua</i> , <i>E. acmenoides</i> , <i>E. microcorys</i> and <i>E. grandis</i> open forest. Understorey is generally shrubby +/- vine forest species. Occurs on Palaeozoic and older moderately to strongly deformed and metamorphosed sediments and interbedded volcanics, especially phyllite of the Kin Beds. (BVG1M: 8b) |
| 12.11.17 | <i>Eucalyptus acmenoides</i> or <i>E. portuensis</i> , <i>Corymbia trachyphloia</i> open forest to woodland +/- <i>E. crebra</i> , <i>Angophora leiocarpa</i> , <i>E. exserta</i> , <i>C. intermedia</i> , <i>Lophostemon confertus</i> (whipstick form). Occurs on Palaeozoic and older moderately to strongly deformed and metamorphosed sediments and interbedded volcanics. (BVG1M: 9h) |
| 12.11.18 | <i>Eucalyptus moluccana</i> woodland +/- <i>Corymbia citriodora</i> subsp. <i>variegata</i> , <i>E. tereticornis</i> , <i>E. siderophloia</i> or <i>E. crebra</i> , <i>E. longirostrata</i> , <i>C. intermedia</i> , <i>E. carnea</i> . Occurs on Palaeozoic and older moderately to strongly deformed and metamorphosed sediments and interbedded volcanics. Occurs as scattered occurrences in a range of topographic positions from ridgetops to lower slopes. (BVG1M: 13d) |
| 12.11.18a | <i>Eucalyptus moluccana</i> , <i>Eucalyptus tereticornis</i> and <i>Lophostemon confertus</i> open forest. Occurs on Palaeozoic and older moderately to strongly deformed and metamorphosed sediments and interbedded volcanics. (BVG1M: 13d) |
| 12.11.22 | <i>Angophora leiocarpa</i> , <i>Eucalyptus crebra</i> +/- <i>Corymbia intermedia</i> , <i>E. longirostrata</i> , <i>E. major</i> , <i>E. portuensis</i> , <i>C. citriodora</i> subsp. <i>variegata</i> woodland to open forest. Occurs on Palaeozoic and older moderately to strongly deformed and metamorphosed sediments and interbedded volcanics. (BVG1M: 9h) |
| 12.11.23 | <i>Eucalyptus pilularis</i> open forest. Other canopy species include <i>E. microcorys</i> , <i>Corymbia intermedia</i> , <i>Angophora woodsiana</i> , <i>E. tindaliae</i> and <i>E. carnea</i> . <i>E. racemosa</i> subsp. <i>racemosa</i> and <i>Corymbia trachyphloia</i> are prominent in |

| | |
|----------|--|
| | the Venman area whilst <i>C. gummifera</i> and <i>E. resinifera</i> are prominent in the Nerang area. Occurs on low coastal Palaeozoic and older moderately to strongly deformed and metamorphosed sediments and interbedded volcanics (Neranleigh-Fernvale beds). (BVG1M: 8b) |
| 12.11.24 | <i>Eucalyptus carnea</i> , <i>E. tindaliae</i> , <i>Corymbia intermedia</i> woodland +/- <i>E. crebra</i> or <i>E. siderophloia</i> , <i>Eucalyptus resinifera</i> , <i>Eucalyptus major</i> , <i>E. helidonica</i> , <i>Angophora woodsiana</i> , <i>C. trachyphloia</i> , <i>E. microcorys</i> , <i>Corymbia citriodora</i> subsp. <i>variegata</i> , <i>C. henryi</i> . Occurs on Palaeozoic and older moderately to strongly deformed and metamorphosed sediments and interbedded volcanics usually at altitudes <300 metres. (BVG1M: 9g) |
| 12.11.25 | <i>Corymbia henryi</i> and/or <i>Eucalyptus fibrosa</i> subsp. <i>fibrosa</i> woodland. Other frequently occurring canopy species may include <i>Eucalyptus crebra</i> , <i>E. carnea</i> , <i>E. tindaliae</i> , <i>E. siderophloia</i> , <i>C. citriodora</i> subsp. <i>variegata</i> , <i>Angophora leiocarpa</i> , <i>E. acmenoides</i> , <i>E. helidonica</i> , <i>E. propinqua</i> , <i>C. intermedia</i> and <i>E. seeana</i> . Rarely includes patches of <i>E. dura</i> . Usually occurs on low hills, hills and footslopes of mountains in near coastal areas on Palaeozoic and older moderately to strongly deformed and metamorphosed sediments and interbedded volcanics. (BVG1M: 10b) |
| 12.11.26 | <i>Eucalyptus baileyana</i> and/or <i>E. planchoniana</i> woodland to open forest. Frequently associated canopy species include <i>E. tindaliae</i> and <i>Angophora woodsiana</i> . Other associated canopy species include <i>Corymbia intermedia</i> , <i>C. trachyphloia</i> , <i>E. carnea</i> , <i>E. helidonica</i> and <i>E. resinifera</i> . Occurs on Palaeozoic and older moderately to strongly deformed and metamorphosed sediments and interbedded volcanics typically on ridges and crests. (BVG1M: 9h) |
| 12.11.27 | <i>Eucalyptus racemosa</i> subsp. <i>racemosa</i> and/or <i>E. seeana</i> and <i>Corymbia intermedia</i> woodland. Other characteristic species include <i>E. siderophloia</i> , <i>Angophora leiocarpa</i> , <i>C. trachyphloia</i> subsp. <i>trachyphloia</i> and rarely <i>E. pilularis</i> . <i>Melaleuca quinquenervia</i> may be present and at times becomes locally co-dominant. Occurs on Palaeozoic and older moderately to strongly deformed and metamorphosed sediments and interbedded volcanics, typically at low altitude (<60 metres) in near coastal situations. (BVG1M: 9g) |
| 12.11.28 | <i>Eucalyptus helidonica</i> , <i>Angophora woodsiana</i> , <i>Corymbia gummifera</i> woodland with a heathy shrub layer dominated by <i>Leptospermum trinervium</i> , <i>Xanthorrhoea johnsonii</i> and <i>Banksia spinulosa</i> var. <i>collina</i> . Other commonly occurring canopy species include <i>Eucalyptus tindaliae</i> , <i>E. carnea</i> , <i>E. resinifera</i> , <i>Corymbia intermedia</i> , <i>C. trachyphloia</i> subsp. <i>trachyphloia</i> and <i>Lophostemon confertus</i> . Occurs on crests and upper slopes of hills comprised of Palaeozoic and older moderately to strongly deformed and metamorphosed sediments and interbedded volcanics. (BVG1M: 9h) |
| 12.12.2 | <i>Eucalyptus pilularis</i> tall open forest with shrubby understorey. Other canopy species include <i>Syncarpia verecunda</i> , <i>Angophora woodsiana</i> , <i>Eucalyptus microcorys</i> , <i>E. resinifera</i> , <i>E. tindaliae</i> , <i>E. propinqua</i> and <i>E. saligna</i> . Occurs on Mesozoic to Proterozoic igneous rocks. (BVG1M: 8b) |
| 12.12.2a | <i>Eucalyptus grandis</i> , <i>E. tereticornis</i> open forest. Occurs in gullies on Mesozoic to Proterozoic igneous rocks. (BVG1M: 8a) |
| 12.12.2b | <i>Eucalyptus saligna</i> subsp. <i>saligna</i> open forest. Occurs on high altitude Mesozoic to Proterozoic igneous rocks. (BVG1M: 8a) |
| 12.12.3 | Open forest complex in which spotted gum is a relatively common species. Canopy trees include <i>Corymbia citriodora</i> subsp. <i>variegata</i> , <i>Eucalyptus crebra</i> (drier sub coastal ranges) or <i>Eucalyptus siderophloia</i> , <i>E. major</i> and/or <i>E. longirostrata</i> , <i>E. acmenoides</i> or <i>E. portuensis</i> , <i>E. eugenioides</i> . Hills and ranges. Other species that may be present locally include <i>Corymbia intermedia</i> , <i>C. trachyphloia</i> , <i>Eucalyptus tereticornis</i> , <i>E. propinqua</i> , <i>E. moluccana</i> , <i>E. decolor</i> , <i>E. melliodora</i> , <i>E. carnea</i> , <i>E. fibrosa</i> subsp. <i>fibrosa</i> and <i>Angophora leiocarpa</i> . <i>Lophostemon confertus</i> (tree form and whipstick form) often present in gullies or as a sub-canopy or canopy tree especially on granite. Mixed understorey of grasses, shrubs and ferns. Occurs on Mesozoic to Proterozoic igneous rocks. (BVG1M: 10b) |
| 12.12.3a | <i>Lophostemon confertus</i> open forest. Occurs in moister gullies on Mesozoic to Proterozoic igneous rocks. (BVG1M: 8a) |
| 12.12.5 | Open forest to woodland of <i>Corymbia citriodora</i> subsp. <i>variegata</i> , usually with <i>Eucalyptus crebra</i> . Other species such as <i>Eucalyptus exserta</i> , <i>E. moluccana</i> present in scattered patches or in low densities. Understorey generally grassy. Occurs on hills and ranges on Mesozoic to Proterozoic igneous rocks. (BVG1M: 10b) |
| 12.12.6 | <i>Eucalyptus montivaga</i> open forest to woodland. Other canopy species can include <i>Eucalyptus acmenoides</i> , <i>Corymbia trachyphloia</i> , <i>C. gummifera</i> , <i>Syncarpia glomulifera</i> subsp. <i>glomulifera</i> and <i>C. intermedia</i> . Occurs on Mesozoic to Proterozoic igneous rocks. Altitude >500 m. (BVG1M: 8b) |
| 12.12.7 | <i>Eucalyptus crebra</i> grassy woodland. Other species such as <i>Corymbia erythrophloia</i> , <i>Eucalyptus exserta</i> , <i>E. tereticornis</i> , <i>C. tessellaris</i> , <i>C. citriodora</i> subsp. <i>variegata</i> may be present in low densities or in patches. Mid-layer generally sparse but can include low trees such as <i>Vachellia bidwillii</i> , <i>Alphitonia excelsa</i> , <i>Allocaeusuarina luehmanni</i> and <i>Petalostigma pubescens</i> . Small areas of <i>Callitris glaucophylla</i> occur in central western parts of bioregion. Occurs on Mesozoic to Proterozoic igneous rocks. (BVG1M: 13c) |
| 12.12.8 | <i>Eucalyptus melanophloia</i> , usually with <i>E. crebra</i> +/- <i>Corymbia erythrophloia</i> grassy woodland. Other species such as <i>Eucalyptus exserta</i> , <i>E. tereticornis</i> , <i>C. tessellaris</i> , <i>C. citriodora</i> subsp. <i>variegata</i> may be present in low densities or in patches. Occurs on Mesozoic to Proterozoic igneous rocks. (BVG1M: 17b) |
| 12.12.9 | <i>Eucalyptus dura</i> woodland (open woodland in rocky areas) +/- <i>Corymbia trachyphloia</i> subsp. <i>trachyphloia</i> , <i>E. acmenoides</i> or <i>E. portuensis</i> , <i>Acacia blakei</i> subsp. <i>blakei</i> , <i>Allocaeusuarina littoralis</i> , <i>C. intermedia</i> . <i>Eucalyptus montivaga</i> may also be present at higher altitudes. <i>Lophostemon confertus</i> (whipstick form) often present in shrub layer. Usually occurs on Mesozoic to Proterozoic igneous rocks. (BVG1M: 12a) |
| 12.12.11 | <i>Eucalyptus portuensis</i> or <i>E. acmenoides</i> , <i>Corymbia trachyphloia</i> subsp. <i>trachyphloia</i> woodland +/- <i>E. crebra</i> , <i>C. intermedia</i> , <i>E. exserta</i> and <i>Angophora leiocarpa</i> . Whipstick <i>Lophostemon confertus</i> often present in understorey and in gullies. Occurs on hillsides on Mesozoic to Proterozoic igneous rocks. (BVG1M: 9h) |
| 12.12.12 | <i>Eucalyptus tereticornis</i> , <i>Corymbia intermedia</i> , <i>E. crebra</i> open forest to woodland. Other species present can include <i>Eucalyptus melanophloia</i> , <i>Corymbia tessellaris</i> , <i>Angophora subvelutina</i> , <i>A. leiocarpa</i> , <i>C. clarksoniana</i> |

| | |
|-----------|---|
| | (central and northern parts) and <i>E. siderophloia</i> with <i>Melaleuca quinquenervia</i> , <i>Lophostemon suaveolens</i> near drainage lines in moister areas. Occurs on Mesozoic to Proterozoic igneous rocks usually on lower slopes, especially granite lowlands and basins. (BVG1M: 9g) |
| 12.12.14 | Woodland to open forest characterised by <i>Eucalyptus racemosa</i> subsp. <i>racemosa</i> , <i>Angophora woodsiana</i> , <i>Corymbia gummifera</i> , <i>Syncarpia</i> spp., <i>Eucalyptus helidonica</i> or <i>E. acmenoides</i> and <i>Lophostemon confertus</i> . Other canopy species include <i>Corymbia trachyphloia</i> subsp. <i>trachyphloia</i> , <i>E. carnea</i> , <i>E. tindaliae</i> , <i>E. exserta</i> , <i>E. resinifera</i> and <i>E. microcorys</i> . Usually occurs on rocky near coastal areas on Mesozoic to Proterozoic igneous rocks. (BVG1M: 9g) |
| 12.12.15 | <i>Corymbia intermedia</i> +/- <i>Eucalyptus propinqua</i> , <i>E. siderophloia</i> , <i>E. microcorys</i> , <i>Lophostemon confertus</i> . Other canopy species include <i>E. acmenoides</i> , <i>E. moluccana</i> , <i>Angophora subvelutina</i> and occasional vine forest species. Patches of <i>Eucalyptus pilularis</i> sometimes present. Occurs on Mesozoic to Proterozoic igneous rocks. (BVG1M: 9a) |
| 12.12.15a | <i>Eucalyptus grandis</i> and/or <i>E. saligna</i> tall open forest +/- vine forest understorey. Other canopy species include <i>E. microcorys</i> , <i>E. acmenoides</i> , <i>Lophostemon confertus</i> , <i>E. siderophloia</i> , <i>E. propinqua</i> , <i>Corymbia intermedia</i> . Occurs in wet gullies on Mesozoic to Proterozoic igneous rocks. (BVG1M: 8a) |
| 12.12.15b | <i>Lophostemon confertus</i> open forest +/- <i>Eucalyptus microcorys</i> , <i>E. siderophloia</i> , <i>E. carnea</i> , <i>E. propinqua</i> and vine forest species often present in understorey. Occurs in gullies and exposed ridges on Mesozoic to Proterozoic igneous rocks often amongst vine forest. (BVG1M: 8a) |
| 12.12.23 | Woodland to open forest generally with <i>Eucalyptus tereticornis</i> subsp. <i>tereticornis</i> or <i>E. tereticornis</i> subsp. <i>basaltica</i> +/- <i>E. eugenioides</i> . Other species present vary from place to place but commonly include <i>E. crebra</i> , <i>Corymbia intermedia</i> , <i>E. acmenoides</i> , <i>E. biturbinata</i> , <i>E. longirostrata</i> , <i>E. melliodora</i> , <i>C. trachyphloia</i> , <i>C. citriodora</i> subsp. <i>Variegata</i> , <i>Lophostemon confertus</i> (tree form and whipstick form), <i>Angophora subvelutina</i> and <i>Allocasuarina torulosa</i> . Occurs at higher altitudes on crests, upper slopes and elevated valleys and plains on Mesozoic to Proterozoic igneous rocks. (BVG1M: 9g) |
| 12.12.24 | <i>Angophora leiocarpa</i> , <i>Eucalyptus crebra</i> +/- <i>Corymbia intermedia</i> , <i>E. longirostrata</i> , <i>E. major</i> , <i>E. tereticornis</i> , <i>E. acmenoides</i> or <i>E. portuensis</i> , <i>C. citriodora</i> subsp. <i>variegata</i> woodland to open forest. Occurs on Mesozoic to Proterozoic igneous rocks including granite. (BVG1M: 9h) |
| 12.12.25 | <i>Eucalyptus fibrosa</i> subsp. <i>fibrosa</i> woodland +/- <i>Corymbia citriodora</i> subsp. <i>Variegata</i> , <i>Angophora leiocarpa</i> , <i>E. acmenoides</i> , <i>E. decorticans</i> , <i>C. trachyphloia</i> and <i>C. watsoniana</i> in central western part of bioregion. Occurs on Mesozoic to Proterozoic igneous rocks. (BVG1M: 9h) |
| 12.12.28 | <i>Eucalyptus moluccana</i> +/- <i>E. crebra</i> , <i>Corymbia citriodora</i> subsp. <i>variegata</i> woodland to open forest. Occurs on broad ridges and lower slopes on Mesozoic to Proterozoic igneous rocks. (BVG1M: 13d) |