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Photo taken by Colleen Miller

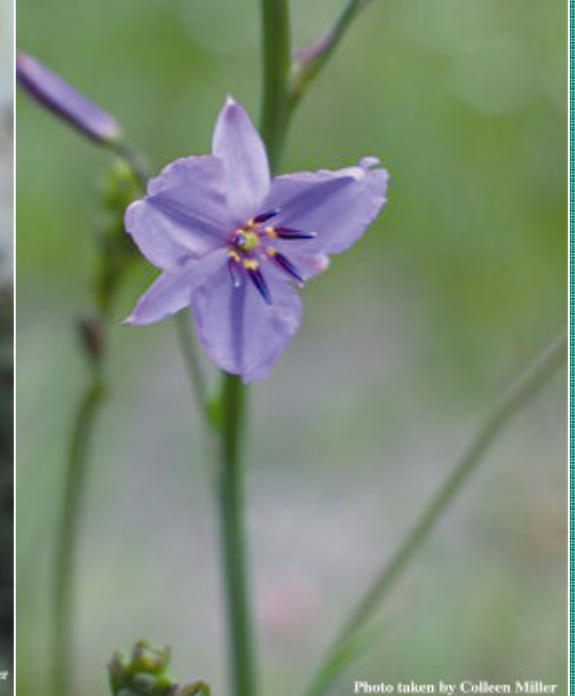


Photo taken by Colleen Miller

*Transforming our landscapes*

## *Indigenous Flora Species Selection Guide For Bairnsdale and Surrounds*



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## ACKNOWLEDGEMENTS

This species selection guide has been developed in response to demand by landholders in the East Gippsland Landcare Network for information about choosing the right species mix for revegetation projects. It provides valuable information to assist landholders re-establish the vegetation communities that have been extensively cleared in the region.

The guide was compiled by Greening Australia Project Officers Stephen Bruce and Clare McInnes. Sponsorship was from East Gippsland Landcare Network (printing cost), Norman Wettenhall Foundation (artist and editing costs) and the Department of Sustainability Bairnsdale (Map creation). Plant species lists are based on the Department of Sustainability and Environment 'EVC Benchmarks' available at [www.dse.vic.gov.au](http://www.dse.vic.gov.au).

Thank you to Bill Peel (East Gippsland Catchment Management Authority), Clare McInnes (Trust for Nature), Emma Roe (DSE), John Topp (Gippsland Indigenous Plants), and East Gippsland Landcare Network.

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Greening Australia does not guarantee that this publication is without flaw of any kind or is wholly appropriate for your particular purposes and therefore disclaims all liability for any error, loss or other consequence which may arise from you relying on any information in this publication. This booklet is intended for use as a guide only and more specific information and advice should be sourced prior to specific revegetation activities taking place. The mention of any product does not imply endorsement or otherwise of that product over other, similar products. Any instructions for herbicide use expressed in this booklet are a guide only. For specific herbicide information, contact the chemical manufacturer representative in your region and always adhere to the manufacturer's instructions.

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## LOCAL SPECIES



**Bluebells**



**Bulbine Lily**



**Common Billy Buttons**

## THE IMPORTANCE OF RE-ESTABLISHING LOCAL VEGETATION COMMUNITIES

Revegetating the local landscape has many benefits for both ecology and agricultural production, as well as for the social and recreational benefits and aesthetic values. However, the first priority and the most cost efficient method of ensuring the presence of vegetation is to protect, enhance and extend areas of remnant vegetation. Patch size is very important for the long-term viability of the plants and animals within a remnant. Where patches cannot be enlarged further, well-planned corridors connecting remnant areas may increase their viability.

Species selection is an important step in planning a revegetation project. It is important to establish a variety of species from all levels within the community (ie. canopy, understorey and groundcover species). The presence of a broad range of vegetation types (or structural diversity) provides a mix of habitats for the many different animals that live in the area, creating a more diverse ecosystem.

It is also very important to include species that are locally indigenous. These species have adapted to survive under local conditions, are less likely to become invasive and provide critical habitat for local wildlife. By planting locally indigenous species you are also maintaining the local genetic diversity. Without genetic diversity the ability of species to withstand pressures or changes is reduced. The survival of a number of the vegetation communities within the East Gippsland Catchment is currently under threat.

For example, the Gippsland Plains once consisted of approximately 1200 square kilometres of grassy woodland interspersed with 600 square kilometres of native grasslands. Over the past 150 years, the highly fertile grassy plains have been cleared for agriculture and urban development. Clearing, inappropriate grazing, weed invasion, an altered fire regime, and tree dieback have reduced the woodland and grassland communities to less than 1 per cent of the original coverage, placing them among the most threatened plant communities in Victoria.

Some local vegetation communities and many of the species within these communities are listed as protected under the *Flora and Fauna Guarantee Act 1988*. One such species is the endangered Dwarf Kerrawang (*Rulingia prostrata*) that occurs in the Damp Sands Herb-rich Woodland community.

### What are Ecological Vegetation Classes (EVCs)?

The EVC concept was developed as a regional planning tool that can be applied consistently across the State to raise the awareness of land managers and the public regarding biodiversity conservation and ecological management, and ultimately to produce better land management practice. The identification and mapping of EVCs involves the combination of floristic (ie. groups based on co-occurring plant species), life form and reproductive strategy profiles, and relates these to particular environmental site attributes, including aspect, elevation, gradient, geology, soils, landform and rainfall. EVCs are derived from a generally consistent method and provide an important state-wide level of vegetation classification.

### Pre-1750 Maps

The Pre-1750 EVC maps represent an estimate of the vegetation that was present prior to the impact of European settlement. EVCs have been mapped across the whole of Victoria, originally for forest planning and development of a Comprehensive and Adequate Reserve system. This map may be useful to help determine the EVC in an area where there isn't local remnant remaining

The scale of mapping has generally been 1:100,000 scale and therefore is not accurate if enlarged beyond this, ie. to 1:50,000 or 1: 25,000. Some of the EVC units on the maps are combinations:

**Mosaic** – a map unit of two or more EVCs that could not be separately mapped at a finer scale.

**Complex** – a map unit of two or more EVCs that cannot be distinguished on ground, due to lack of remnant vegetation or distinguishing features of the landscape.

To view the distribution of EVCs across the state and in your area see the Biodiversity Interactive Maps on the DSE website: [www.dse.vic.gov.au](http://www.dse.vic.gov.au)

## HOW TO USE THE GUIDE

The guide is divided according to the Landcare Groups in the East Gippsland Landcare Network and is designed as an easy-to-use reference tool. A list of plant species from each of the major Ecological Vegetation Classes (EVCs) that occur in the region is provided. A Pre-1750 EVC map with the individual Landcare Group boundaries is printed alongside a classification grid to help you determine the likely EVC in your area.

### How do I know what EVC I have?

To use the EVC classification grid turn to the page representing your Landcare group and:

- From the first column you need to identify the landform - is the revegetation site dryland or does it have a water association (*close to a river, creek or a wetland*)?
- From the second and third column associated with the selected Landform find the combination of topography/ aspect and soil description that best suits your revegetation site.
- In the fourth column alongside the selected description is the name of the expected EVC for that area.
- Check the Pre-1750 EVC map of your Landcare area above the classification grid and confirm that the EVC you have identified covers the location of your property.
- As a further check, turn to the page given with the EVC name to find the species list for plants that belong to that EVC. If there is any remnant vegetation on or near the site check that the species listed are present to confirm the classification. Remember that highly modified sites may not have all of the species still present

### How do I know what species to plant?

The plant species lists are not exhaustive. They are a sample of the more common plant species which are relevant to each land type and that are currently available as tubestock from local nurseries or as seed for direct

seeding from seedbanks. Your individual species list can be refined by finding a nearby patch of natural bush close to the revegetation site that is the same EVC. This will give you a more localised indication of the appropriate species for your specific site.

### How do I know how many to plant?

A plant density table is located on the page that lists the species for each EVC. This table is based on the Department of Sustainability and Environment *Revegetation Planting Standards* and describes the approximate number of plants needed per hectare at planting. It also describes the minimum number of species to select from each of the different plant layers in the EVC. This information can also be found with the Biodiversity Interactive Maps on the DSE website: [www.dse.vic.gov.au](http://www.dse.vic.gov.au) and search: '*Revegetation Planting Standards*' or '*EVC Benchmarks*'. The Revegetation Planting Standards do not include groundcover species due to the high failure rate of establishing these species. The Revegetation Planting Standards provide plant numbers for more robust groundcover species (Large Tufted Graminoids (LTG)) such as Tussock grasses (*Poa* spp.), Spiny Matt Rush (*Lomandra longifolia*), *Juncus* spp. These species in some sites have a higher success rate if weeds and browsing are not a major issue. The other groundcovers listed provide a guide to what needs to be established or what may naturally recolonise the site in the long term.

### Seeking Help

It can be difficult to identify what ecological vegetation class is best suited for your revegetation site, especially when no native vegetation remains within the area or the landscape has been substantially altered on the site. Organisations such as Greening Australia, Trust for Nature, East Gippsland Landcare Network, East Gippsland Catchment Management Authority and the Department of Sustainability and Environment are there to help and can provide you with technical advice and assistance. Refer to page 12 for contact details.

## GETTING STARTED WITH YOUR REVEGETATION PROJECT

<b>Planning:</b>	This is the most important stage as it will set up a successful project. Consider site location, purpose of revegetation, funding application, species selection, buy or grow plants, plant tubestock or direct seed, weed and pest animals control, materials needed, and labour required.
<b>Order plants or seed:</b>	Request that plants are grown from seed collected in the district. Some species may require more than 12 months notice if seed has to be sourced. When ordering seed or plants give as much notice as possible as some plants only set seed every second year – order preferably at the beginning of spring in the year before sowing or planting
<b>Collect seed:</b>	Indigenous seed matures at different times for each species so you need to be prepared to collect each species as it is ready. Check with your local seedbank for more information.
<b>Propagate plants:</b>	Sow most plant species in spring. Some plants germinate in cooler temperatures ( <i>Flax lilies, Sweet Bursaria, Tree Violet, Lomandra spp.</i> ), therefore sowing will need to occur in late autumn and plants won't be ready for planting out until the following year. Watering, fertiliser, pest and weed control. Harden plants off in open conditions before planting.
<b>Prepare revegetation site:</b>	<ul style="list-style-type: none"> <li>• If stock or other native browsers (<i>wallabies, kangaroos</i>) are present, fence site to protect seedlings.</li> <li>• If the site is steep, near streamsides, waterlogged, made of cracking clays or is small in size then dig each planting hole by hand. Deep rip site for planting if site and soils are appropriate in summer or early autumn when soil is dry for shattering.</li> <li>• Controlling pest animals is as important as weed control and may need to be started twelve months in advance. Revegetation can be a total failure if there is inadequate pest management. Contact your local supplier and pest animal officer from the Department of Primary Industry for advice (<i>See useful contacts pg 11</i>).</li> <li>• Control weeds: The site should be free of competition from weeds/grasses at planting. For large sites herbicide application is the most practical method - sites should be sprayed twice at a minimum during the active growing season of the weeds (<i>knockdown and/or residual herbicide</i>). Sites with summer active grasses (<i>couch and kikuyu</i>) will need extra spraying and need to be applied in the summer months prior to planting.</li> </ul>
<b>Plant or direct seed site:</b>	Only accept good quality seedlings and keep plants well watered until you are ready for planting. Contact Greening Australia or Landcare for more information on direct seeding.
<b>Maintain Site:</b>	Control weeds for 1 m <sup>2</sup> around seedlings for 1 - 2 years, continually check fences and tree guards; water seedlings if drought stressed and check for red legged earth mite on direct seeded sites and grasshopper and other browser damage on all sites.



## CALENDAR OF REVEGETATION ACTIVITIES

Activity	N	D	J	F	M	A	M	J	J	A	S	O
	■ Key activity						□ Minor Activity					
<b>Planning</b>	■	■	□	□	□	□	□	□	□	□	■	■
<b>Order plants from Nursery</b>	□									□	■	■
<b>Or Order seed from seedbank</b>	□	□								■	■	■
Or, if you intend to collect seed yourself:												
▪ Collect Eucalypts and other fine seeded species (eg. <i>Bottlebrushes, tea-trees, Paperbarks</i> ).	■	■	■	■	■	■	■	□	□	□	□	□
▪ Collect hard seeded species such as Wattles ( <i>Acacia spp</i> ) and Bush-peas ( <i>Pultenaea spp</i> ), Parrot Peas ( <i>Dillwynia spp</i> ) etc.	■	■	■									□
▪ Collect understorey herbs and grasses ( <i>Chocolate lilies, Bulbine Lilies, Wallaby Grass etc.</i> )	■	■	□									□
▪ Collect She-oaks ( <i>Allocasuarina spp</i> ), Hakea spp.	■	■	■	■	■	■	■	■	■	■	■	■
<b>Propagate plants</b>												
▪ Propagate plants for autumn planting	■	■	□								□	■
▪ Propagate plants for spring planting	■	■	■	□								□
<b>Tend Seedlings</b>	□	■	■	■	■	■	■	■	■	■	■	□
<b>Prepare revegetation site</b>												
▪ Fence site if required	□				□	■	■	■	■	■	□	□
▪ Deep rip site if appropriate			□	■	■	■	□					
▪ Control pest animals	■	■	■	■	■	■	■	■	■	■	■	■
▪ Control weeds	□	□	□	□	□	■	■	■	■	■	■	□
<b>Plant or direct seed site:</b>												
▪ Dry sites on hills or sites prone to dry out fast in spring						□	■	■	■	□		
▪ Waterlogged or heavy frosts sites (low lying sites)										□	■	■
<b>Maintain Site</b>	□	□	□	□	□	□	□	□	□	□	□	□

## REFERENCES

- Edwards, R. (1998) *Threatened vegetation communities: Forest Red Gum woodlands and grasslands of the Gippsland Plains*. Trust For Nature, Victoria
- Revegetation Techniques (2003) A guide for establishing native vegetation in Victoria*. Greening Australia, Heidelberg Victoria.
- Peel, B. (1999). *Rainforest and Cool Temperate Mixed Forests of Victoria*. Department of Natural Resources and Environment, Victoria

## OTHER RELEVANT READING

- Australian seeds (2006). A guide to their collection, identification, and biology*. Edited by Luke Sweedman and David Merritt. Published by CSIRO Publishing
- Bennett, A.F. (1990) *Habitat corridors: their role in wildlife management and conservation*. Department of Conservation and Environment, Melbourne.
- Brooker, M.I.H. and Kleinig (1999). *Field guide to Eucalypts*. Volume 1 South – eastern Australia. Blooming Books Hawthorn Victoria.
- Caughley, G. and Sinclair, A.R.E. (1994) *Wildlife ecology and management*. Blackwell Scientific, Cambridge
- Corrick, M. G. and Fuhrer, B. A. *Wildflowers of Victoria and adjoining areas*. Bloomings Books, Hawthorn Victoria.
- Costermans, L. (1994) *Trees of Victoria and adjoining areas*. Leon Costermans Publishing: Frankston.
- Costermans, L. (1998) *Native trees and shrubs of south-eastern Australia*. Landsdowne Publishing, Sydney
- Ecological Vegetation Classes (EVCs) Detailed EVC benchmarks and maps available at [www.dse.vic.gov.au](http://www.dse.vic.gov.au)
- Greening Australia Victoria (2002) *A landowners guide to managing private native forests in Gippsland*. Natural Heritage Trust and the Gippsland Forestcare Project, Victoria
- Greening Australia Victoria. (1998) *Seed germination data sheet series 1-9. revised version 3*. Greening Australia Victoria, Heidelberg.
- J.B., Davies, A..M., Oates and A.V. Trumbull-Ward (2002) *Ecological Vegetation Class mapping at 1:25000. Final Report*. Department of Natural Resources and Environment, Gippsland Region.

McIntyre S, McIvor JG and Heard KM (2002). *Managing and conserving grassy woodlands*. CSIRO Publishing, Melbourne

Mitchell, M. (2002) *Native grasses: an identification handbook for temperate Australia* Third edition. CSIRO Landlink Press.

Peel, B. (1999). *Rainforest and Cool Temperate Mixed Forests of Victoria*. Department of Natural Resources and Environment Victoria

Ralph, M. (1994) *Seed collection of Australian native plants for revegetation, tree planting and direct seeding*. Murray Ralph, Fitzroy

Ralph, M. (1997) *Growing Australian native plants from seed for revegetation, tree planting and direct seeding*. Murray Ralph/Bushland Horticulture, Fitzroy

Recher, H.F., Lunney, D. and Dunn, I. (1979) *Natural legacy: ecology in Australia*. Peramon Press, Rushcutters Bay

Revegetation Techniques (2003) A guide for establishing native vegetation in Victoria. Greening Australia Victoria .

Viridans Biological Database: *Wild Plants of Victoria*. Interactive Atlas and Photographic Guide to Plants of Victoria CD Rom. Viridans Pty. Ltd. Bentleigh East, Victoria.

**Many of these references are available for free or on loan from DSE and/or your Landcare group.**

## USEFUL CONTACTS

### **Department of Primary Industries (DPI)**

Pest and Weed Officer  
574 Main Street (PO Box 483)  
Bairnsdale Vic 3875  
Ph. 5152 0600

### **Department Of Sustainability and Environment**

Flora and Fauna Planning Officers  
Land for Wildlife Extension Officers  
Bairnsdale: 5152 0600  
Traralgon: 5172 2111  
Website. [www.dse.vic.gov.au](http://www.dse.vic.gov.au)

### **East Gippsland Catchment Management Authority**

574 Main Street (PO Box 1012)  
Bairnsdale Vic 3875  
Ph. (03) 5152 0600

### **East Gippsland Landcare Network**

574 Main Street (PO Box 483)  
Bairnsdale, Vic 3875  
Ph. 5152 0600

### **East Gippsland Shire Council**

Environmental Planner  
Environmental Officer  
273 Main Street (PO Box 1618)  
Bairnsdale Vic 3875  
Telephone (03)5153 9500

### **EVC Benchmarks and Mapping**

Department of Sustainability and Environment  
Customer Service Centre Ph. 136186  
Email: [customer.service@dse.vic.gov.au](mailto:customer.service@dse.vic.gov.au)  
Website. [www.dse.vic.gov.au](http://www.dse.vic.gov.au)

### **Gippsland Plains Conservation Management Network.**

574 Main Street (PO Box 483)  
Bairnsdale Vic 3875  
Ph: 03 5152 0652

### **Gippsland Private Forestry**

26b Bailey Street, (PO Box 784),  
Bairnsdale Vic 3875  
Ph. (03) 5153 2947  
Email: [privateforestry@gpf.com.au](mailto:privateforestry@gpf.com.au)

### **Greening Australia**

574 Main Street (PO Box 483)  
Bairnsdale Vic 3875  
Ph. (03) 5152 3099  
Website: [www.greeningaustralia.org.au](http://www.greeningaustralia.org.au)

### **Maffra Indigenous Seedbank**

Greening Australia  
9 Sale Rd  
Maffra 3860  
Ph, (03) 5147 2688

### **Trust For Nature**

574 Main Street (PO Box 483)  
Bairnsdale Vic 3875  
Ph. 5153 0457

LOCAL SPECIES



**Kanooka**



**Lilly Pilli**



**Milkmaids**



LOCAL SPECIES

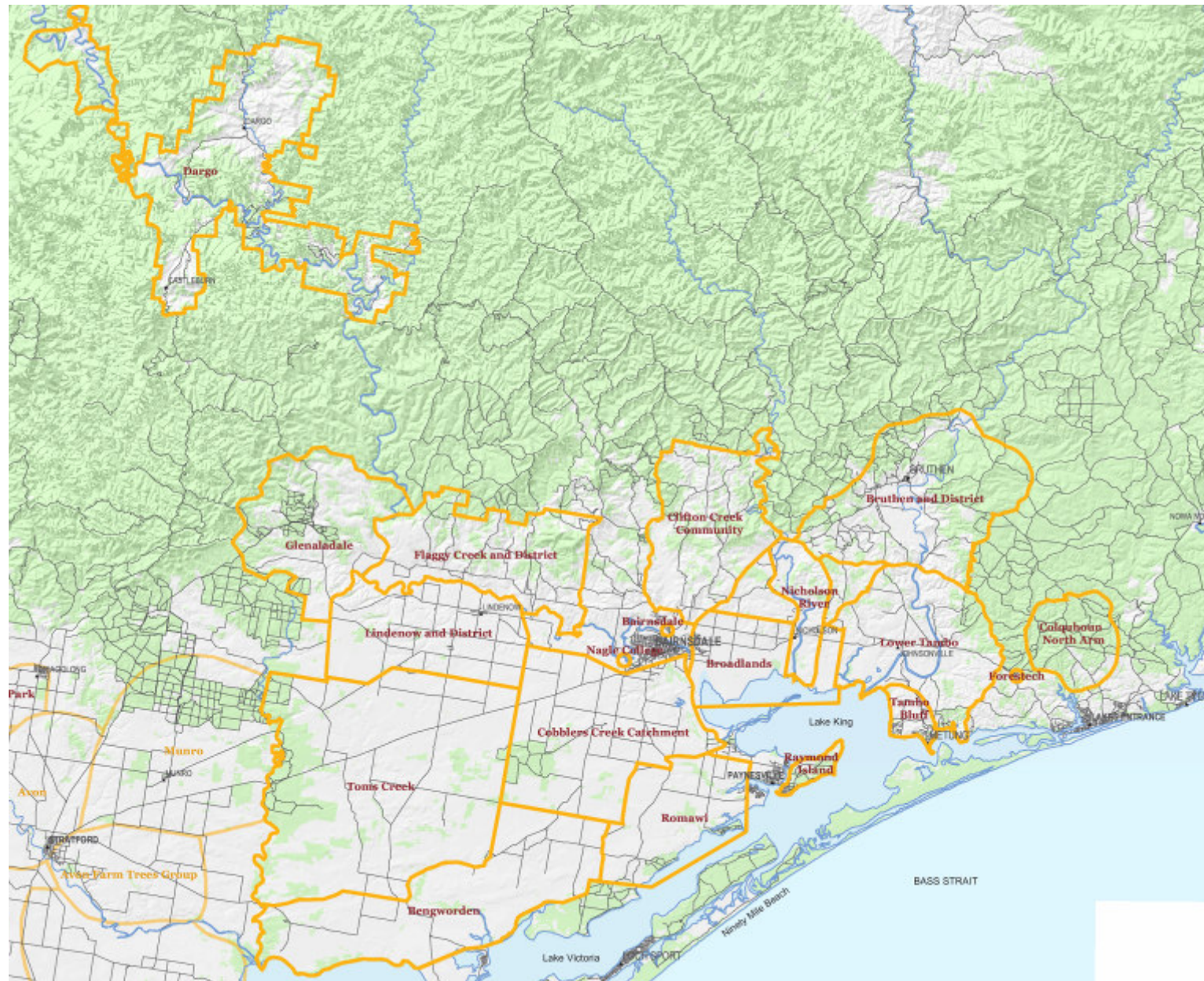


**Mock Olive**



**Small Vanilla Lily**

# LANDCARE GROUP BOUNDARIES



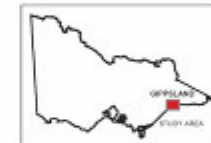
## East Gippsland Landcare Network

### Landcare Group Boundaries

- Landcare Boundaries
- Towns
- Major Rivers
- Vicmap Digital Roads
- Water Bodies



Map produced by  
 82241 Gippsland Region  
 Department of Sustainability and Environment  
 July 2004. Ref: 10700002

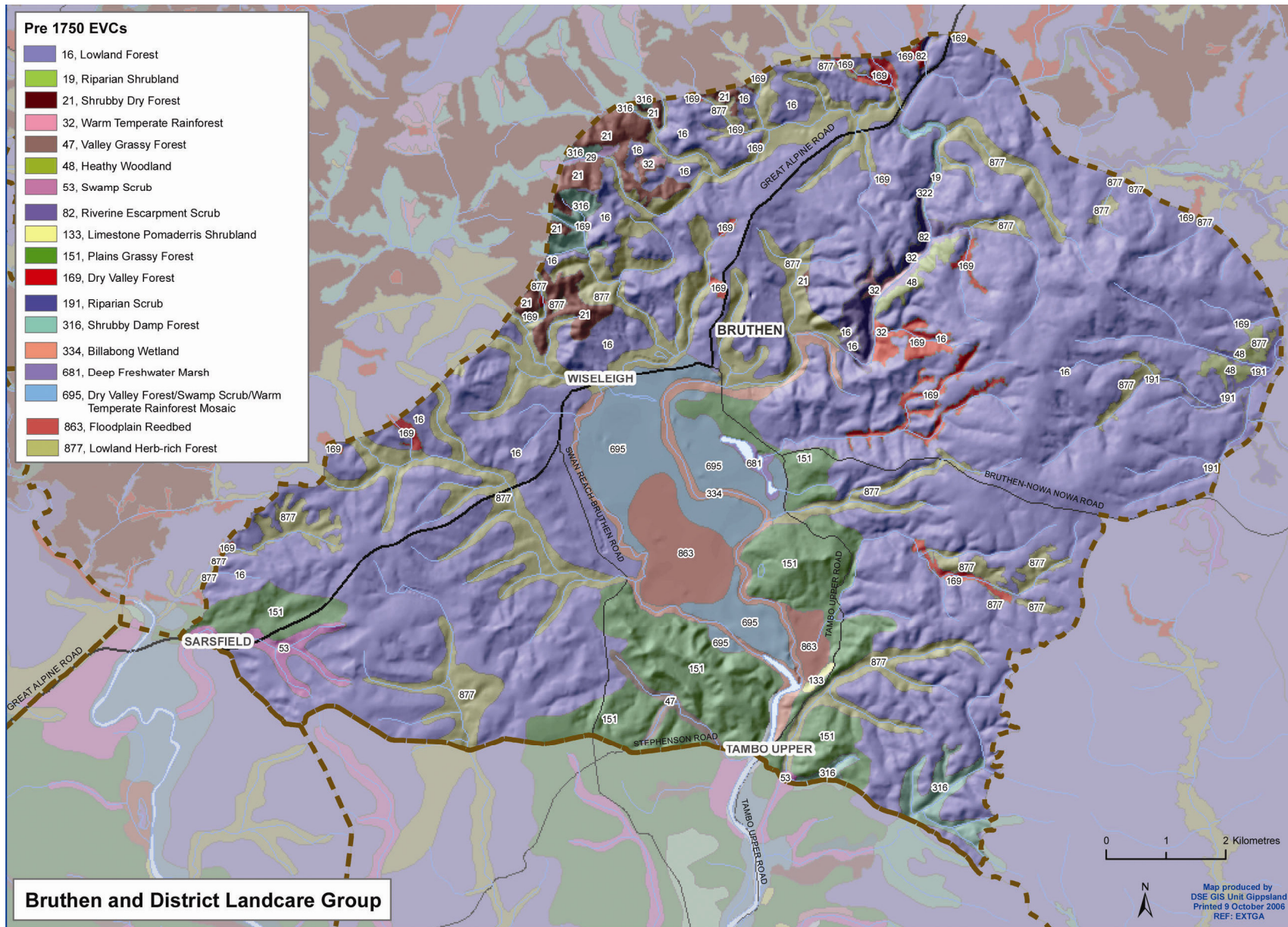


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# Bruthen Landcare Area: Pre 1750 EVC Map



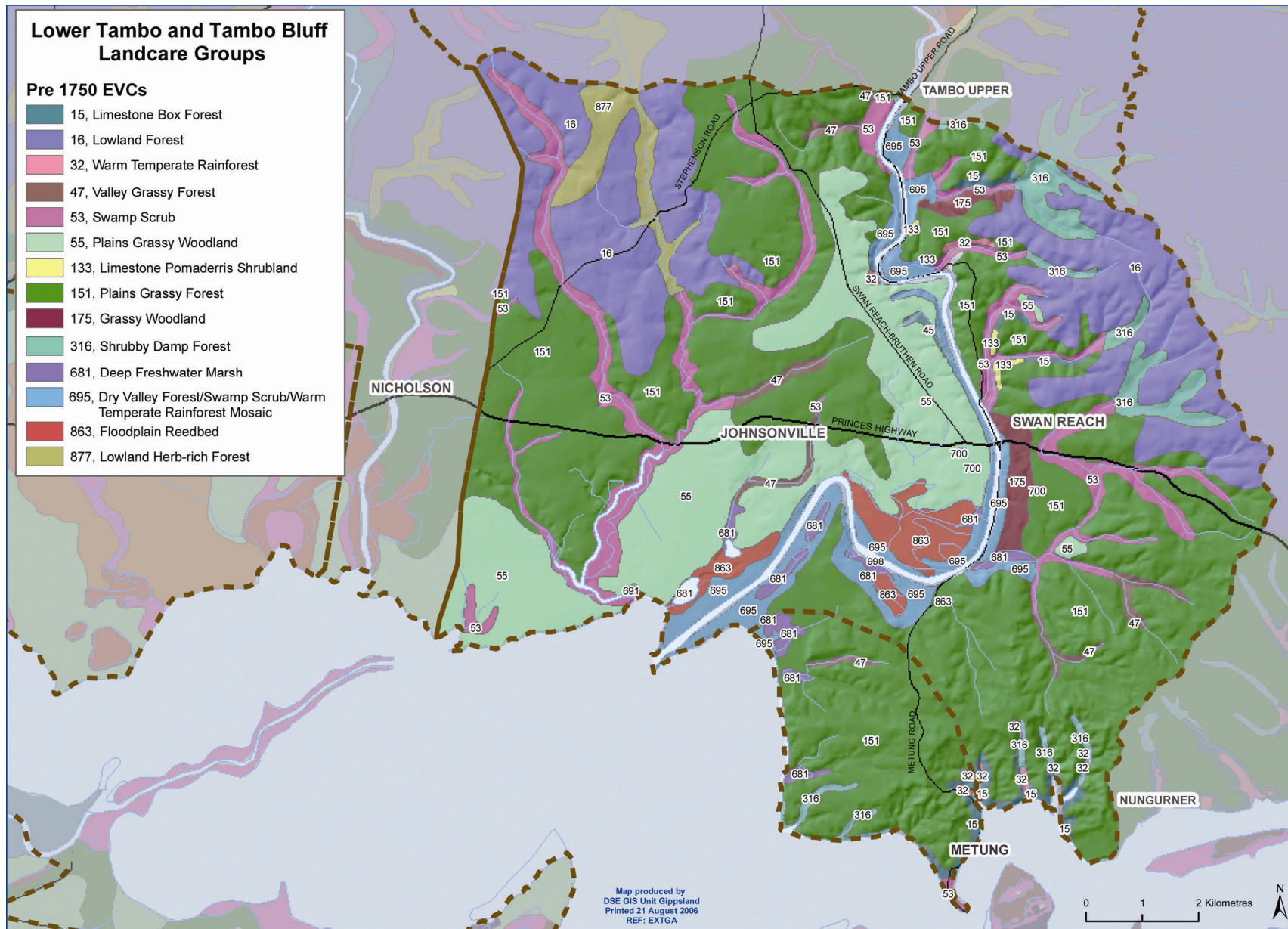
## Bruthen Landcare Area: EVC Key

LANDFORM	TOPOGRAPHY / ASPECT	SOIL DESCRIPTION	ECOLOGICAL VEGETATION CLASS (EVC)
Dryland	Drier aspects of foothills.	Sandy loam with moderate fertility.	16 Lowland Forest (East Gippsland Lowlands Bioregion) pg.48
	Along the footslopes and northern and western facing ridges on dry spurs.	Shallow, stony loams or clay loams.	21, Shrubby Dry Forest pg.52
	Undulating lower slopes and valley floors.	Well-drained, fertile, alluvial or colluvial sandy or stony clay loam.	47, Valley Grassy Forrest pg 57
	Low hills, rises and slopes.	Deep, sandy, infertile sands, greyish white to yellow brown, uniform profile and well-drained.	48, Heathy Woodland pg 58
	Northerly or western aspects on exposed cliffs or very steep slopes.	Soils are a shallow, clay loam and derived from limestone.	133, Limestone Pomaderris Shrubland pg.62
	Plains and old river terraces of low relief.	Gravelly, sandy, clay loam soil.	151, Plains Grassy Forest pg.67
	Gullies and protected slopes.	Thin or shallow (skeletal) fertile soils.	316, Shrubby Damp Forrest pg.72
	Gullies and along lower slopes close to minor drainage lines with more moisture.	Mixed deposits of rock fragments and soil materials accumulated at the bases of steep slopes through the influence of gravity (colluvial soils).	877, Lowland Herb-rich Forest pg 74
Water Association	Occurring in protected gullies and slopes on fertile alluvial flats of temporary creeks and the floodplains of permanent streams.	Deep, well-drained silt loams or sand or cobbles in small patches. Soil is damp to wet due to the closeness of the watertable.	32 & 695* Warm Temperate Rainforest ( <i>Alluvial Terraces</i> ) pg.55
	Low elevations on undulating plains with the watertable in close proximity.	Poorly-drained peat and silt soils.	53 & 695* Swamp Scrub pg.59
	Occurring along rocky cliffs and slopes associated with rivers and creeks.	Shallow, colluvial soils.	82, Riverine Escarpment Scrub pg.61
	Occurring mid-slopes along minor gullies and ephemeral streams above the Tambo River.	Clay loams and sandy clays.	169- Dry Valley Forest ( <i>Minor Gully</i> 169-02) pg.69
	River flats above the Tambo River.	Fertile, clay loams and silty clays.	169 & 695* Dry Valley Forest (River Flat 169-01) pg.68
	Poor drainage areas along creeks, small rivers.	Soils waterlogged often with a peaty surface horizon. Soil profile can also consist of sand, clay or gravel.	191, Riparian Scrub
	Permanent to semi-permanent wetlands on the Floodplains on the Tambo River.	Deep permanent water which is generally present all year or shallow seasonal water that lasts up to 8 months of the year.	334, Billabong Wetland (Aggregate) pg.73
	On river plains and lower reaches of the floodplain.	Poorly-drained alluvium soil with deposits of silt, clay and peat	863, Floodplain Reedbed pg 73

\*EVCs 259 & 695 listed on the Pre 1750 EVC map are mosaics and their distribution is mixed so mapping individual EVC's is difficult so they have been placed into a mosaic. In the field use the key for individual EVC's to determine appropriate vegetation.



## Lower Tambo & Tambo Bluff Landcare Area: Pre 1750 EVC Map



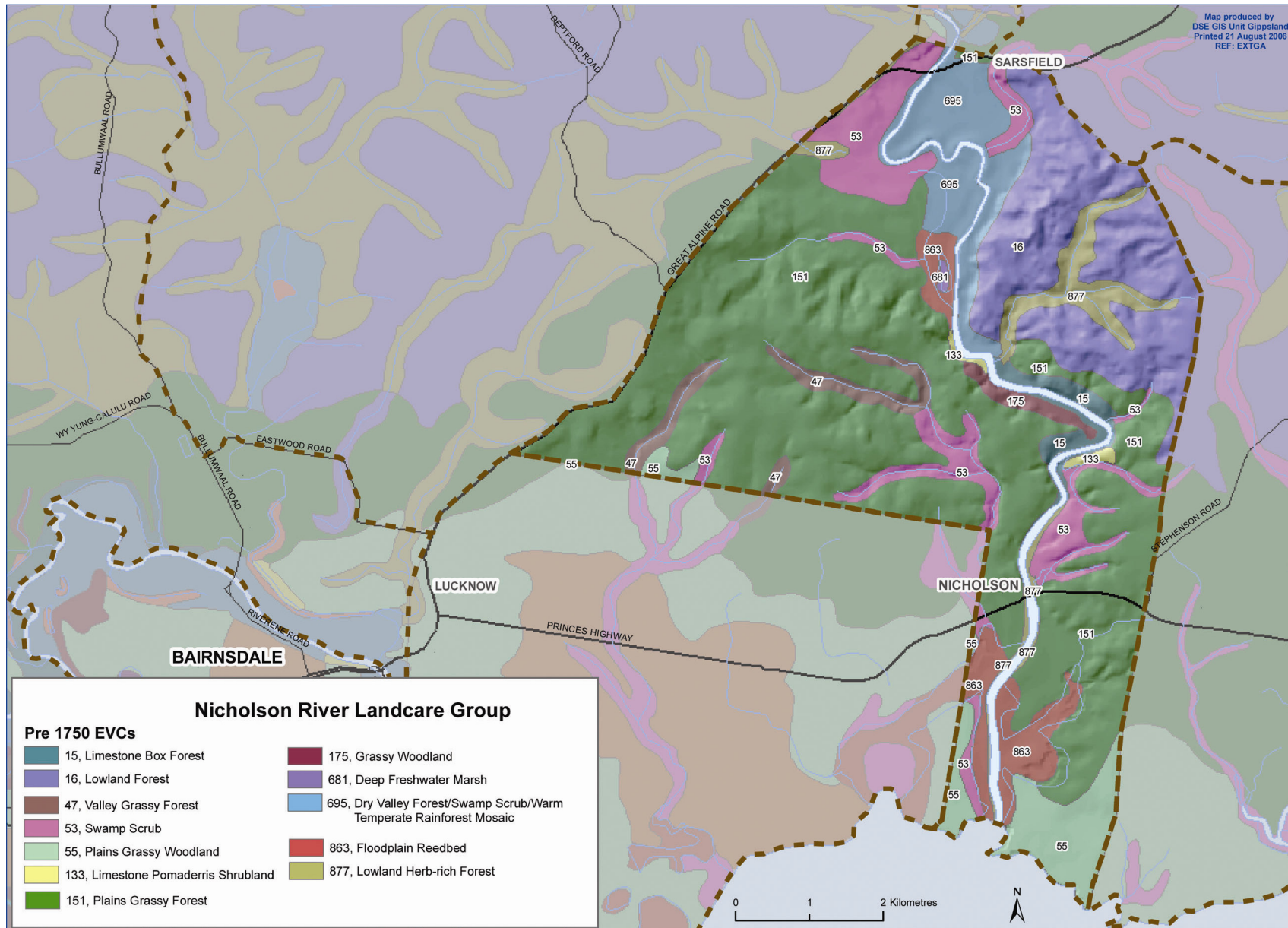


## Lower Tambo & Tambo Bluff Landcare Area: EVC key

LANDFORM	TOPOGRAPHY / ASPECT	SOIL DESCRIPTION	ECOLOGICAL VEGETATION CLASS (EVC)
Dryland	Incised valleys around coastal streams, slopes, gullies and lakes and associated flats.	Fertile, yellow-brown clay loam derived from Tertiary limestone.	15 Limestone Box Forest pg. 46
	Intermediate rainfall areas of the foothills on dry aspects and dry crests.	Variable soils ranging from clay to loam to sandy topsoil with moderate fertility.	16, Lowland Forest (East Gippsland Lowlands Bioregion) pg. 48
	Undulating lower slopes and valley floors.	Well-drained, fertile, alluvial or colluvial sandy or stony clay loam.	47, Valley Grassy Forest pg. 57
	Flats and gently undulating plains.	Generally well-drained fertile soils from heavy clays to gravelly or sandy clays.	55, Plains Grassy Woodland pg 60
	Northerly or western aspects on exposed cliffs or very steep slopes.	Soils are a shallow clay loam and derived from limestone.	133, Limestone Pomaderris Shrubland pg. 62
	Foot slopes on old river terraces of low relief.	Gravelly, sandy, clay loam soil.	151, Plains Grassy Forest pg. 67
	Gullies and protected slopes.	Skeletal fertile soils.	316, Shrubby Damp Forrest pg. 72
	Gullies and along lower slopes close to minor drainage lines with more moisture.	Mixed deposits of rock fragments and soil materials accumulated at the bases of steep slopes through the influence of gravity (colluvial soils).	877, Lowland Herb-rich Forest pg. 74
Water Association	Occurring in protected gullies and slopes on fertile alluvial flats of ephemeral (temporary) creeks and the floodplains of permanent streams.	Deep, well-drained silt loams or sand or cobbles in small patches. Soil is damp to wet due to the closeness of the watertable.	32 & 695* Warm Temperate Rainforest ( <i>Alluvial Terraces</i> ) pg. 55
	Fire protected gullies and slopes.	Well-drained, sandy, clay to clay loam (soil profile may be stony).	32 & 695* Warm Temperate Rainforest ( <i>East Gippsland Coastal 32-05</i> ) pg. 56
	Low elevations on undulating plains with the watertable in close proximity.	Poorly drained peat and silt soils.	53 & 695* Swamp Scrub pg. 59
	Lower slopes and river flats above the Tambo River.	Fertile, clay loams and silty clays.	169 & 695* Dry Valley Forest ( <i>River Flat 169-01</i> ) pg. 68
	On river plains and lower reaches of the floodplain.	Alluvium soil with deposits of silt, clay and peat.	863, Floodplain Reedbed pg 73

\*EVC 695 listed on the EVC map is a mosaic and their distribution is mixed so mapping individual EVC's is difficult so they have been placed into a mosaic. In the field use the key for individual EVC's to determine appropriate vegetation.

# Nicholson Landcare Area: Pre 1750 EVC Map



## Nicholson Landcare Area: EVC key

LANDFORM	TOPOGRAPHY / ASPECT	SOIL DESCRIPTION	ECOLOGICAL VEGETATION CLASS (EVC)
Dryland	Incised valleys around coastal streams, slopes, gullies and lakes and associated flats.	Fertile, yellow-brown, clay loam derived from limestone.	15 Limestone Box Forest pg. 46
	Foothills on dry aspects and dry crests.	Variable soils ranging from clay to loam to sandy topsoil with moderate fertility.	16, Lowland Forest (East Gippsland Lowlands Bioregion) pg. 48
	Undulating lower slopes and valley floors.	Well-drained, fertile, alluvial or colluvial sandy or stony clay loam.	47, Valley Grassy Forest pg. 57
	Flats and gently undulating plains.	Generally well-drained, fertile soils from heavy clays to gravelly or sandy clays.	53, Plains Grassy Woodland
	Foot slopes on old river terraces of low relief.	Gravelly, sandy, clay loam soil.	151, Plains Grassy Forest pg. 67
	Gullies and along lower slopes close to minor drainage lines with more moisture.	Mixed deposits of rock fragments and soil materials accumulated at the bases of steep slopes through the influence of gravity (colluvial soils).	877, Lowland Herb-rich Forest pg. 74
Water Association	Occurring in protected gullies and slopes on fertile alluvial flats of ephemeral (temporary) creeks and the floodplains of permanent streams.	Deep, well-drained, silt loams or sand or cobbles in small patches. Soil is damp to wet due to the closeness of the watertable.	32 and 695* Warm Temperate Rainforest ( <i>Alluvial Terraces</i> ) pg. 55
	Low elevations on undulating plains with the watertable in close proximity.	Poorly-drained peat and silt soils.	53 and 695* Swamp Scrub pg. 59
	Lower slopes and river flats above the Tambo River.	Fertile clay loams and silty clays.	169 & 695* Dry Valley Forest ( <i>River Flat 169-01</i> ) pg. 68
	On river plains and lower reaches of the floodplain.	Poorly drained alluvium soil with deposits of silt, clay and peat.	863, Floodplain Reedbed pg 73

\* EVC 695 listed on the EVC map is a mosaic and their distribution is mixed so mapping individual EVC's is difficult so they have been placed into a mosaic. In the field use the key for individual EVC's to determine appropriate vegetation.



LOCAL SPECIES



**Twining Fringe Lily**



**Wonga Vine**



**Yellow Rush Lily**

## EVC 3: DAMP SANDS HERB-RICH WOODLAND

A woodland with a grassy, heathy or bracken-dominated understorey and a ground layer rich in herbs, grasses, and orchids. Occurs on sand veneers over clay or the footslopes of dunes over clay on old coastal sand barriers that form shallow sand sheets adjacent to the northern shores of the Gippsland Lakes (*Jones Bay*) or low laying sandy levees along major rivers (*western side of Mcleods Morass*). Occasionally occurs on sand in-filled streams (*Perry River*). The soil is moderately fertile, well-drained, humus rich black to grey sands or sandy loam. The soil remains damp through the close association with the underlying water table. This vegetation is dominated by Coast Manna Gum *Eucalyptus viminalis* ssp. *pryoriana*. Occasionally it may have a significant cover of White Stringybark *Eucalyptus globoidea* or Snow Gum *Eucalyptus pauciflora* ssp. *pauciflora*. Also, Yellow Box *Eucalyptus melliodora* and Apple Box *Eucalyptus bridgesiana* occasionally occur. An example of this EVC type can be seen at Tom's Creek Reserve.

### Trees

Apple Box or But But (*Eucalyptus bridgesiana*)  
 White Stringybark (*Eucalyptus globoidea*)  
 Snow Gum or White Sallee (*Eucalyptus pauciflora* ssp. *pauciflora*)  
 Coast Manna Gum (*Eucalyptus viminalis* ssp. *pryoriana*) #

### Small trees and large shrubs > 5 m

Black Wattle (*Acacia mearnsii*)  
 Blackwood (*Acacia melanoxylon*)  
 Coast Banksia (*Banksia integrifolia*)\*  
 Saw Banksia (*Banksia serrata*)

### Medium shrubs 1 – 5 metres

Spreading Wattle (*Acacia genistifolia*)  
 Spike Wattle (*Acacia oxycedrus*)  
 Silver Banksia (*Banksia marginata*)  
 Daphne Heath (*Brachyloma daphnoides*)  
 Sweet Bursaria (*Bursaria spinosa*)  
 Crimson Bottlebrush (*Callistemon citrinus*)  
 Common Correa (*Correa reflexa*)  
 Hop Bitter-pea (*Daviesia latifolia*)  
 Gorse Bitter-pea (*Daviesia ulicifolia*)

Common Heath (*Epacris impressa*)  
 Woolly Grevillea (*Grevillea lanigera*)  
 Burgan (*Kunzea ericoides*)  
 Prickly Tea-tree (*Leptospermum continentale*)  
 Heath Tea-tree (*Leptospermum myrsinoides*)  
 Shrubby Platysace (*Platysace lanceolata*)  
 Snow Daisy-bush (*Olearia lirata*)  
 Seaberry Saltbush (*Rhagodia candolleana* ssp. *candolleana*)\*

### Small Shrubs < 1 metre

Blue Dampiera (*Dampiera stricta*)  
 Smooth Parrot-pea (*Dillwynia glaberrima*)  
 Common Beard-heath (*Leucopogon virgatus*)  
 Common Rice-flower (*Pimelea humilis*)

### Groundcovers and climbers

Honey-pots (*Acrotriche serrulata*)  
 Cranberry Heath (*Astroloma humifusum*)  
 Supple Spear-grass (*Austrostipa mollis*)  
 Creeping Bossiaea (*Bossiaea prostrata*)  
 Black-anther Flax-lily (*Dianella admixta*)  
 Flax-lily (*Dianella longifolia* var. *longifolia*)

Twinning Glycine (*Glycine clandestina*)  
 Sandhill Sword-sedge (*Lepidosperma concavum*)  
 Wattle Mat-rush (*Lomandra filiformis*)  
 Spiny-headed Mat-rush (*Lomandra longifolia*)  
 Weeping Grass (*Microlaena stipoides* var. *stipoides*)  
 Common Tussock-grass (*Poa labillardierei*)  
 Grey Tussock-grass (*Poa sieberiana*)  
 Trigger Plant (*Stylidium graminifolium*)  
 Bower Spinach (*Tetragonia implexicoma*)\*  
 Forest Wire-grass (*Tetrarrhena juncea*)  
 Kangaroo Grass (*Themeda triandra*)  
 Climbing Fringe-lily (*Thysanotus patersonii*)

How many plants per hectare for revegetation	Minimum number of species
Trees: 50	2
Small trees & large shrubs: 50	1
Medium Shrubs: 1000	5
Small Shrubs: 500	3
Groundcovers (LTG): > 1000	2

\*Species occurring close to the coast. # Dominant canopy tree



## EVC 15: LIMESTONE BOX FOREST

Occurs on fertile yellow-brown clay loams derived from limestone that outcrop around the coastal streams, gullies and lakes of East Gippsland. Consists of an open forest with a tall shrub layer understorey and a grass and herb-rich ground layer on sheltered aspects but can almost be bare on drier aspects. Species characteristic of the limestone geology which occur in this EVC include the nationally rare (R) and State rare (r) Limestone Pomaderris *Pomaderris oraria* ssp. *calcicola* and Limestone Blue Wattle *Acacia caerulescens*.

### Trees > 20 metres

Blue Box or Green Box (*Eucalyptus baueriana*)  
 Coast Grey Box (*Eucalyptus bosistoana*)  
 Southern Mahogany (*Eucalyptus botryoides*)  
 Mountain Grey Gum (*Eucalyptus cypellocarpa*)  
 River Peppermint (*Eucalyptus elata*)  
 Gippsland Blue Gum (*Eucalyptus globulus* ssp. *pseudoglobulus*)  
 Gippsland Red Gum (*Eucalyptus tereticornis* ssp. *mediana*)  
 Red Ironbark (*Eucalyptus tricarpa*)

### Small trees & large shrubs > 5 metres

Limestone Blue Wattle (*Acacia caerulescens*)  
 Black Wattle (*Acacia mearnsii*)  
 Blackwood (*Acacia melanoxylon*)  
 Drooping She-oak (*Allocasuarina verticillata*)  
 Cherry Ballart (*Exocarpos cupressiformis*)  
 Sweet Pittosporum (*Pittosporum undulatum*)  
 Muttonwood (*Rapanea howittiana*)  
 Hazel Pomaderris (*Pomaderris aspera*)

### Shrubs 1 – 5 metres

Sweet Bursaria (*Bursaria spinosa*)  
 Shiny Cassinia (*Cassinia longifolia*)  
 Prickly Currant-bush (*Coprosma quadrifida*)  
 Common Correa (*Correa reflexa*)  
 Hop Goodenia (*Goodenia ovata*)  
 Tree Violet (*Melicytus dentatus*)  
 Coast Beard-heath (*Leucopogon parviflorus*)  
 Common Boobialla (*Myoporum insulare*)

Snowy Daisy-bush (*Olearia lirata*)  
 Viscid Daisy-bush (*Olearia viscosa*)  
 Bootlace Bush (*Pimelea axiflora*)  
 Limestone Pomaderris (*Pomaderris oraria* ssp. *calcicola*)  
 Seaberry Saltbush (*Rhagodia candolleana* ssp. *candolleana*)\*

### Groundcovers and climbers

Bidgee-widgee (*Acaena novae-zelandiae*)  
 Forest Clematis (*Clematis glycinoides* var. *glycinoides*)  
 Southern Tick-trefoil (*Desmodium gunnii*)  
 Paroo Lily (*Dianella caerulea* var. *caerulea*)  
 Tasman Flax-lily (*Dianella tasmanica*)  
 Common Hedgehog-grass (*Echinopogon ovatus*)  
 Common Wheat-grass (*Elymus scaber* var. *scaber*)  
 Wombat Berry (*Eustrephus latifolius*)  
 Black-fruit Saw-sedge (*Gahnia melanocarpa*)  
 Thatch Saw-sedge (*Gahnia radula*)  
 Scrambling Lily (*Geitonoplesium cymosum*)  
 Cinquefoil Cranesbill (*Geranium potentilloides*)  
 Twining Glycine (*Glycine clandestina*)  
 Variable Sword-sedge (*Lepidosperma laterale*)  
 Spiny-headed Mat-rush (*Lomandra longifolia*)  
 Milk Vine (*Marsdenia rostrata*)  
 Weeping Grass (*Microlaena stipoides* var. *stipoides*)

Long-leaf Wallaby-grass (*Notodanthonia longifolia*)  
 Common Tussock-grass (*Poa labillardierei*)  
 Grey Tussock-grass (*Poa sieberiana*)  
 Slender Tussock-grass (*Poa tenera*)  
 White Elderberry (*Sambucus gaudichaudiana*)  
 Common Bog-sedge (*Schoenus apogon*)  
 Variable Groundsel (*Senecio pinnatifolius*)  
 Forest Nightshade (*Solanum prinophyllum*)  
 Forest Starwort (*Stellaria flaccida*)  
 Bower Spinach (*Tetragonia implexicoma*)\*  
 Kangaroo Grass (*Themeda triandra*)  
 Bearded Tylophora (*Tylophora barbata*)

How many plants per hectare for revegetation	Minimum number of species
Trees: 150	4
Small trees & large shrubs: 150	3
Medium Shrubs: 600	5
Groundcovers (LTG): 1000	2

\* Species present in sites subject to occasional salt spray in coastal areas

**EVC 16: LOWLAND FOREST: GIPPSLAND PLAINS**

Occurs on the plains and slight rises. The soil is pale bone-coloured shallow sand as sand veneers over clay. The vegetation is usually dominated by White Stringybark *Eucalyptus globoidea*, although in some areas Red Box *Eucalyptus polyanthemos* can dominate. Other eucalypts occurring occasionally include Coast Grey Box *Eucalyptus bosistoana*, Apple Box *Eucalyptus bridgesiana*, Mealy Stringy *Eucalyptus cephalocarpa*, Yellow Box *Eucalyptus melliodora* and Gippsland Red Gum *Eucalyptus tereticornis ssp. mediana*. Yertchuk *Eucalyptus consideniiana* can dominate in some areas such as Providence Ponds Flora and Fauna Reserve. Common shrubs include Spreading Wattle *Acacia genistifolia*, Black Wattle *Acacia mearnsii*, Black She-oak *Allocasuarina littoralis*, Shiny Cassinia *Cassinia longifolia* and Snow Daisy-bush *Olearia lirata*. An example of this EVC can be found near the Billabong Road House.

**Trees**

Coast Grey Box (*Eucalyptus bosistoana*)  
 Apple Box or But But (*Eucalyptus bridgesiana*)  
 Mealy Stringybark (*Eucalyptus cephalocarpa*)#  
 Yertchuk (*Eucalyptus consideniiana*)

White Stringybark (*Eucalyptus globoidea*)  
 Yellow Box (*Eucalyptus melliodora*)  
 Swamp Gum (*Eucalyptus ovata*)#  
 Red Box (*Eucalyptus polyanthemos*) Gippsland  
 Red Gum (*Eucalyptus tereticornis ssp. mediana*)

**Small trees & large shrubs > 5 m**

Lightwood (*Acacia implexa*)  
 Black Wattle (*Acacia mearnsii*)  
 Blackwood (*Acacia melanoxylon*)  
 Black She-oak (*Allocasuarina littoralis*)

**Shrubs 1 – 5 m**

Spreading Wattle (*Acacia genistifolia*)  
 Spike Wattle (*Acacia oxycedrus*)  
 Juniper Wattle (*Acacia ulicifolia*)  
 Spiny Bossiaea (*Bossiaea obcordata*)  
 Sweet Bursaria (*Bursaria spinosa*)  
 Common Correa (*Correa reflexa*)  
 Shiny Cassinia (*Cassinia longifolia*)  
 Hop Bitter-pea (*Daviesia latifolia*)  
 Common Heath (*Epacris impressa*)  
 Golden Grevillea (*Grevillea chrysophaea*)  
 Woolly Grevillea (*Grevillea lanigera*)  
 Austral Indigo (*Indigofera australis*)  
 Burgan (*Kunzea ericoides*)

Prickly Tea-tree (*Leptospermum continentale*)  
 Rough-barked Honey-myrtle (*Melaleuca parvistaminea*)#  
 Snow Daisy-bush (*Olearia lirata*)  
 Citron Pomaderris (*Pomaderris intermedia*)

**Small shrubs < 1 m**

Heath Wattle (*Acacia brownii*)  
 Grey Parrot-pea (*Dillwynia cinerascens*)  
 Smooth Parrot-pea (*Dillwynia glaberrima*)  
 Prickly Guinea flower (*Hibbertia aciculari*)  
 Grey Guinea flower (*Hibbertia obtusifolia*)  
 Common Flat-pea (*Platylobium obtusangulum*)  
 Hairy Pink Bells (*Tetratheca pilosa*)

**Groundcovers & climbers**

Pale Vanilla-lily (*Arthropodium milleflorum*)  
 Chocolate Lily (*Arthropodium strictum*)  
 Wallaby-grasses (*Austrodanthonia spp.*)  
 Spear-grasses (*Austrostipa spp.*)  
 Common Apple-berry (*Billardiera scandens*)  
 Creeping Bossiaea (*Bossiaea prostrata*)  
 Bulbine Lily (*Bulbine bulbosa*)  
 Clustered Everlasting (*Chrysocephalum semipapposum*)  
 Forest Clematis (*Clematis glycinoides*)  
 Tufted Lily (*Thelionema caespitosum*)  
 Black-anther Flax-lily (*Dianella admixta*)  
 Flax-lily (*Dianella longifolia var. longifolia*)  
 Purple Coral-pea (*Hardenbergia violacea*)  
 Button Everlasting (*Helichrysum scorpioides*)  
 Prickly Guinea Flower (*Hibbertia acicularis*)  
 Running Postman (*Kennedia prostrata*)

Variable Sword-sedge (*Lepidosperma laterale*)  
 Scaly Buttons (*Leptorhynchos squamatus*)  
 Wiry Buttons (*Leptorhynchos tenuifolius*)  
 Wattle Mat-rush (*Lomandra filiformis*)  
 Spiny-headed Mat-rush (*Lomandra longifolia*)  
 Cluster-headed Mat-rush (*Lomandra longifolia ssp. exilis*)  
 Weeping Grass (*Microlaena stipoides var. stipoides*)  
 Handsome Flat-pea (*Platylobium formosum*)  
 Tussock-grasses (*Poa spp.*)  
 Showy Everlasting (*Podolepis jaceoides*)  
 Trigger Plant (*Stylidium graminifolium*)  
 Nodding Blue Lily (*Stypandra glauca*)  
 Twining Fringe-lily (*Thysanotus patersonii*)  
 Common Fringe-lily (*Thysanotus tuberosus*)  
 Forest Wire-grass (*Tetrarrhena juncea*)  
 Yellow Rush-lily (*Tricoryne elatior*)  
 Blue Bells (*Wahlenbergia spp*)  
 Small Grass-tree (*Xanthorrhoea minor ssp. lutea*)  
 Sticky Everlasting (*Xerochrysum viscosa*)

How many plants per hectare for revegetation	Minimum number of species
Trees: 150	3
Small trees & large shrubs:100	2
Medium Shrubs: 1200	7
Small Shrubs: 1000	5
Groundcovers (LTG): 1500	2

# Poorly drained sites

## EVC 16: LOWLAND FOREST: EAST GIPPSLAND LOWLANDS BIOREGION (BRUTHEN, COLQUHOUN, FLAGGY CREEK, GLENALADALE)

The topsoil is a grey sand layer with a sub-soil consisting of clay. The soil profile is moderately well-drained. The higher rainfall and different soil types produces a different species composition compared to the Gippsland Plains Lowland Forest. The dominant eucalypts may include Silvertop Ash *Eucalyptus sieberi*, Red Box *Eucalyptus polyanthemos*, Ironbark *Eucalyptus tricarpa*, White Stringy *Eucalyptus globoidea* and Yertchuk *Eucalyptus consideriana*. An example of this EVC can be seen at the Colquhoun State Forest.

### Trees

Apple-topped Box (*Eucalyptus angophoroides*)  
 Yertchuk (*Eucalyptus consideriana*)  
 Mountain Grey Gum (*Eucalyptus cypellocarpa*)  
 White Stringybark (*Eucalyptus globoidea*)  
 Red Stringybark (*Eucalyptus macrorhyncha*)  
 Yellow Stringybark (*Eucalyptus muelleriana*)  
 Red Box (*Eucalyptus polyanthemos*)  
 Silvertop Ash (*Eucalyptus sieberi*)  
 Red Ironbark (*Eucalyptus tricarpa*)

### Small trees & large shrubs > 5 m

Black Wattle (*Acacia mearnsii*)  
 Blackwood (*Acacia melanoxylon*)  
 Golden Wattle (*Acacia pycnantha*)  
 Sunshine Wattle (*Acacia terminalis*)  
 Black She-oak (*Allocasuarina littoralis*)  
 Tree Hakea (*Hakea eriantha*)  
 Cherry Ballart (*Exocarpos cupressiformis*)

### Shrubs 1 – 5

Spreading Wattle (*Acacia genistifolia*)  
 Myrtle Wattle (*Acacia myrtifolia*)  
 Juniper Wattle (*Acacia ulicifolia*)  
 Varnish Wattle (*Acacia verniciflua*)  
 Spiny Bossiaea (*Bossiaea obcordata*)  
 Sweet Bursaria (*Bursaria spinosa*)  
 Shiny Cassinia (*Cassinia longifolia*)  
 Common Correa (*Correa reflexa*)  
 Hop Bitter-pea (*Daviesia latifolia*)  
 Narrow-leaf Bitter-pea (*Daviesia leptophylla*)  
 Gorse Bitter-pea (*Daviesia ulicifolia*)  
 Sticky Hop Bush (*Dodonaea viscosa*)  
 Common Heath (*Epacris impressa*)  
 Hop Goodenia (*Goodenia ovata*)

Austral Indigo (*Indigofera australis*)  
 Prickly Tea-tree (*Leptospermum continentale*)  
 Snow Daisy-bush (*Olearia lirata*)  
 Rough-barked Honey-myrtle (*Melaleuca parvistaminea*)  
 Narrow-leaf Geebung (*Persoonia linearis*)  
 Large-leaf Bush-pea (*Pultenaea daphnoides*)  
 Rough Bush-pea (*Pultenaea scabra*)

### Small Shrubs < 1 m

Broom Spurge (*Amperea xiphoclada* var. *xiphoclada*)  
 Wiry Bauera (*Bauera rubioides*)  
 Blue Dampiera (*Dampiera stricta*)  
 Smooth Parrot-pea (*Dillwynia glaberrima*)  
 Rough Guinea Flower (*Hibbertia aspera*)  
 Tangled Guinea Flower (*Hibbertia empetrifolia*)  
 Grey Guinea Flower (*Hibbertia obtusifolia*)  
 Hairy Pink Bells (*Tetratheca pilosa*)

### Groundcovers & climbers

Wallaby-grasses (*Austrodanthonia* spp.)  
 Spear-grasses (*Austrostipa* spp.)  
 Common Apple-berry (*Billardiera scandens*)  
 Creeping Bossiaea (*Bossiaea prostrata*)  
 Blue Pin Cushion (*Brunonia australis*)  
 Bulbine Lily (*Bulbine bulbosa*)  
 Mountain Clematis (*Clematis aristata*)  
 Black-anther Flax-lily (*Dianella admixta*)  
 Paroo Lily (*Dianella caerulea*)  
 Flax-lily (*Dianella longifolia* var. *longifolia*)  
 Red-fruit Saw-sedge (*Gahnia sieberiana*)  
 Germander Raspwort (*Gonocarpus teucrioides*)  
 Silvertop Wallaby-grass (*Joycea pallida*)  
 Running Postman (*Kennedia prostrata*)  
 Variable Sword-sedge (*Lepidosperma laterale*)

Wattle Mat-rush (*Lomandra filiformis*)  
 Spiny-headed Mat-rush (*Lomandra longifolia*)  
 Cluster-headed Mat-rush (*Lomandra longifolia* ssp. *exilis*)  
 Weeping Grass (*Microlaena stipoides* var. *stipoides*)  
 Wonga Vine (*Pandorea pandorana*)  
 Leafy Purple-flag (*Patersonia glabrata*)  
 Handsome Flat-pea (*Platylobium formosum*)  
 Tussock-grasses (*Poa* spp.)  
 Hairy Fan-flower (*Scaevola ramosissima*)  
 Nodding Blue Lily (*Stypantra glauca*)  
 Forest Wire-grass (*Tetrarrhena juncea*)  
 Kangaroo Grass (*Themeda triandra*)  
 Twinning Fringe-lily (*Thysanotus patersonii*)  
 Yellow Rush-lily (*Tricoryne elatior*)  
 Blue Bells (*Wahlenbergia* spp.)  
 Ivy-leaf Violet (*Viola hederacea*)  
 Small Grass-tree (*Xanthorrhoea minor* ssp.)  
 Golden Everlasting (*Xerochrysum bracteantum*)

How many plants per hectare for revegetation	Minimum number of species
Trees: 150	3
Small trees & large shrubs: 100	2
Medium Shrubs: 1200	10
Small Shrubs: 1000	6
Groundcovers (LTG): 1000	2

## EVC 18: RIPARIAN FOREST

A tall forest dominated by eucalypts occurring on river banks and associated alluvial flats and sometimes on the heads of gullies leading into creeks and rivers. The soil is a fertile silty or sandy loam, less commonly clay loams and stays moist due to the close association with the river. Small trees and large shrubs form an open to sparse secondary tree layer with scattered dense clumps of shrubs, ferns, grasses and herbs.

### Trees

Gippsland Peppermint (*Eucalyptus croajingolensis*)

Mountain Grey-gum (*Eucalyptus cypellocarpa*)

River Peppermint (*Eucalyptus elata*)

Manna Gum (*Eucalyptus viminalis*)

Tree Violet (*Meliccytus dentatus*)

Snow Daisy Bush (*Olearia lirata*)

Tree Everlasting (*Ozothamnus ferrugineus*)

Round Leaf Mint Bush (*Prostanthera rotundifolia*)

Kangaroo Apple (*Solanum aviculare*)

### Small Trees and Large shrubs > 5 m

Silver Wattle (*Acacia dealbata*)

Black Wattle (*Acacia mearnsii*)

Blackwood (*Acacia melanoxylon*)

Blue Oliveberry (*Elaeocarpus reticulatus*)

Large Mock Olive (*Notelaea venosa*)

Victorian Christmas Bush (*Prostanthera lasianthos*)

Hazel Pomaderris (*Pomaderris aspera*)

Kanooka (*Tristaniopsis laurina*)

### Groundcovers & climbers

Common Apple-berry (*Billardiera scandens*)

Gristle Fern (*Blechnum cartilagineum*)

Common Ground-fern (*Calochlaena dubia*)

Forest Clematis (*Clematis glycinoides*)

Tasman Flax-lily (*Dianella tasmanica*)

Paroo Lily (*Dianella caerulea* var. *caerulea*)

Kidney Weed (*Dichondra repens*)

Wombat Berry (*Eustrephus latifolius*)

Tall Saw-sedge (*Gahnia clarkei*)

Austral Black-fruit Saw-sedge (*Gahnia melanocarpa*)

Germander Raspwort (*Gonocarpus teucrioides*)

Cane Holy-grass (*Hierochloa rariflora*)

Common Bottle-daisy (*Lagenophora stipitata*)

Variable Sword-sedge (*Lepidosperma laterale*)

Spiny-headed Mat-rush (*Lomandra longifolia*)

Weeping Grass (*Microlaena stipoides* var. *stipoides*)

Common Reed (*Phragmites australis*)

Common Tussock Grass (*Poa labillardierei*)

White Elderberry (*Sambucus gaudichaudiana*)

Sarsaparilla (*Smilax australis*)

Forest Wire-grass (*Tetrarrhena juncea*)

Bearded Tylophora (*Tylophora barbata*)

Ivy-leaf Violet (*Viola hederacea*)

### Shrubs 1 – 5 m

Varnish Wattle (*Acacia verniciflua*)

Prickly Moses (*Acacia verticillata*)

Sweet Bursaria (*Bursaria spinosa*)

Common Cassinia (*Cassinia aculeata*)

Shiny Cassinia (*Cassinia longifolia*)

Incense Plant (*Calomeria amaranthoides*)

Prickly Currant-bush (*Coprosma quadrifida*)

Sticky Hop Bush (*Dodonea viscosa*)

Hop Goodenia (*Goodenia ovata*)

Golden Tip (*Goodia lotifolia*)

Tree Hakea (*Hakea eriantha*)

Shrubby Velvet Bush (*Lasiopetalum macrophyllum*)

Prickly Tea-tree (*Leptospermum continentale*)

Lance Beard-heath (*Leucopogon lanceolatus* var. *lanceolatus*)

How many plants per hectare for revegetation	Minimum number of species
Trees: 150	4
Small trees & large shrubs: 150	4
Medium Shrubs: 1000	13
Groundcovers (LTG): 1000	4



## EVC 19: RIPARIAN SHRUBLAND

A medium to tall shrubland occurring along river beds of major streams. The vegetation is able to withstand frequent flooding or regenerate quickly after such disturbance and often forming dense thickets along stream banks during long periods without flooding. Sedges and rushes can dominate the understorey as well as numerous herbs and grasses including many ephemeral weed and native species which colonise on the bare sands or in crevices on bedrock exposure. Common shrubs include Shiny Cassinia *Cassinia longifolia*, Black wattle *Acacia mearnsii* and Hazel Pomaderris *Pomaderris aspera*.

### Small trees & large shrubs > 5 m

Silver Wattle (*Acacia dealbata*)  
 Large-leaf Hickory Wattle (*Acacia falciformis*)  
 Black Wattle (*Acacia mearnsii*)  
 Blackwood (*Acacia melanoxylon*)  
 Red Wattle (*Acacia silvestris*)  
 Hazel Pomaderris (*Pomaderris aspera*)  
 Victorian Christmas Bush (*Prostanthera lasianthos*)

### Shrubs 1 – 5 m

Varnish Wattle (*Acacia verniciflua*)  
 Prickly Moses (*Acacia verticillata*)  
 Wallaby Bush (*Beyeria lasiocarpa*)  
 River Bottlebrush (*Callistemon sieberi*)  
 Shiny Cassinia (*Cassinia longifolia*)  
 Sticky Hop Bush (*Dodonea viscosa*)  
 Golden-tip (*Goodia lotifolia*)  
 Burgan (*Kunzea ericoides*)  
 Shrubby Velvet Bush (*Lasiopetalum macrophyllum*)  
 Woolly Tea-tree (*Leptospermum lanigerum*)  
 River Lomatia (*Lomatia myricoides*)  
 Rough-barked Honey-myrtle (*Melaleuca parvistaminea*)  
 Snow Daisy-bush (*Olearia lirata*)  
 Tree Everlasting (*Ozothamnus ferrugineus*)  
 Long-leaf Wax-flower (*Philotheca myoporoides*)  
 Round Leaf Mint Bush (*Prostanthera rotundifolia*)

### Groundcovers and climbers

Necklace Fern (*Asplenium flabellifolium*)  
 Water-ferns (*Blechnum* spp.)  
 Small-leaved Clematis (*Clematis microphylla*)  
 Leafy Flat-sedge (*Cyperus lucidus*)  
 Kidney Weed (*Dichondra repens*)  
 Common Spike-sedge (*Eleocharis acuta*)  
 Weeping Love-grass (*Eragrostis parviflora*)  
 Hairy Pennywort (*Hydrocotyle hirta*)  
 Shining Pennywort (*Hydrocotyle sibthorpioides*)  
 Club-sedges (*Isolepis* spp.)  
 Rushes (*Juncus* spp.)  
 Common Blown-grass (*Lachnagrostis filiformis*)  
 Tall Sword-sedge (*Lepidosperma elatius*)  
 Tailed Rapier-sedge (*Lepidosperma urophorum*)  
 Wattle Mat-rush (*Lomandra filiformis*)  
 Spiny-headed Mat-rush (*Lomandra longifolia*)  
 Wonga Vine (*Pandorea pandorana*)  
 Sickie Fern (*Pellaea falcata*)  
 Tussock-grass (*Poa australis* spp. agg.)  
 Small-leaf Bramble (*Rubus parvifolius*)  
 Fireweed Groundsel (*Senecio linearifolius*)  
 River Club-sedge (*Schoenoplectus tabernaemontani*)  
 Forest Nightshade (*Solanum prinophyllum*)  
 Nodding Blue Lily (*Stypandra glauca*)  
 Trailing Speedwell (*Veronica plebeia*)  
 Golden Everlasting (*Xerochrysum bracteatum*)

How many plants per hectare for revegetation	Minimum number of species
Small trees & large shrubs: 150	3
Medium Shrubs: 1000	6
Groundcovers (LTG): >500	3



## EVC 20: HEATHY DRY FOREST

Heathy Dry Forest occurs on shallow, rocky skeletal soils on various landforms from gently undulating hills to exposed aspects on ridge tops and steep slopes at a range of elevations. The overstorey is a low, open eucalypt forest, to 20 m tall with an open crown cover. The understorey is dominated by low, sparse to dense layer shrubs including heaths and peas. The grasses, lilies, and rushes are frequently present in the ground layer, but do not provide much cover.

### Trees

Broad-leaved Peppermint (*Eucalyptus dives*)  
 Brittle Gum (*Eucalyptus mannifera* ssp. *mannifera*)  
 Red Stringybark (*Eucalyptus macrorhyncha*)

### Small Trees & large shrubs > 5 m

Silver Wattle (*Acacia dealbata*)

### Shrubs 1 – 5 m

Daphne Heath (*Brachyloma daphnoides*)  
 Shiny Cassinia (*Cassinia longifolia*)  
 Dwarf Sour-bush (*Choretrum pauciflorum*)  
 Prickly Broom-heath (*Monotoca scoparia*)

### Small Shrub < 1 m

Ploughshare Wattle (*Acacia gunnii*)  
 Platylobium formosum (*Handsome Flat-pea*)  
 Common Beard-heath (*Leucopogon virgatus*)  
 Grey Guinea-flower (*Hibbertia obtusifolia*)  
 Peach Heath (*Lissanthe strigosa* ssp. *subulata*)  
 Urn Heath (*Melichrus urceolatus*)  
 Heath Pink-bells (*Tetratheca bauerifolia*)

### Groundcovers and climbers

Honey-pots (*Acrotriche serrulata*)  
 Black-anther Flax-lily (*Dianella admixta*)  
 Common Raspwort (*Gonocarpus tetragynus*)  
 Purple Coral-pea (*Hardenbergia violacea*)  
 Silvertop Wallaby-grass (*Joycea pallida*)  
 Wattle Mat-rush (*Lomandra filiformis*)  
 Spiny-headed Mat-rush *Lomandra longifolia*  
 Poa sieberiana (*Grey Tussock-grass*)  
 Slender Fireweed (*Senecio tenuiflorus*)  
 Tall Bluebell (*Wahlenbergia stricta*)

How many plants per hectare for revegetation	Minimum number of species
Trees: 100	3
Small trees & large shrubs: 100	1
Medium Shrubs: 1200	4
Small Shrubs: 1000	5
Groundcovers (LTG): 100	1

**EVC 21: SHRUBBY DRY FOREST**

Occurs along the footslopes and northern and western facing ridges on dry spurs. It can be present on a range of rock types, on shallow, rocky sites on exposed aspects. Soil is an infertile shallow stony loam and clay loam. Characterised by an open understorey and extensive areas of litter. A range of eucalypts from drier habitats forms the overstorey. The shrub layer is low in diversity. Large-leaf Hickory Wattle *Acacia falciformis*, Sunshine Wattle *Acacia terminalis*, Gorse Bitter-pea *Daviesia ulicifolia* and Hop Bitter-pea *Daviesia latifolia* are frequent understorey shrubs. The groundcover can be very sparse.

**Trees**

- Yertchuk (*Eucalyptus consideriana*)
- Mountain Grey Gum (*Eucalyptus cypelloarpa*)
- White Stringybark (*Eucalyptus. globoidea*)
- Red Stringybark (*Eucalyptus macrorhyncha*)
- Brittle Gum (*Eucalyptus mannifera*)
- Yellow Stringybark (*Eucalyptus muelleriana*)
- Messmate Stringybark (*Eucalyptus obliqua*) #
- Narrow-leaf Peppermint (*Eucalyptus radiata*)#
- Silvertop Ash (*Eucalyptus sieberi*)

**Small Trees & large shrubs > 5 m**

- Large-leaf Hickory Wattle (*Acacia falciformis*)
- Narrow-leaf Wattle (*Acacia mucronata ssp. longifolia*)#
- Sunshine Wattle (*Acacia terminalis*)
- Black She-oak (*Allocasuarina littoralis*)
- Hazel Pomaderris (*Pomaderris aspera*)#

**Shrubs 1 – 5 m**

- Shiny Cassinia (*Cassinia longifolia*)
- Prickly Currant-bush (*Coprosma quadrifida*) #
- Hop Bitter-pea (*Daviesia latifolia*)
- Narrow-leaved Bitter-pea (*Daviesia leptophylla*)
- Gorse Bitter-pea (*Daviesia ulicifolia*)
- Common Heath (*Epacris impressa*)
- Dusty Daisy-bush (*Olearia phlogopappa*)#
- Bootlace Bush (*Pimelea axiflora*) #
- Shrubby Platysace (*Platysace lanceolata*)

**Small Shrubs < 1 m**

- Tangled Guinea Flower (*Hibbertia empetrifolia*)
- Lance Beard-heath (*Leucopogon lanceolatus*)
- Hairy Pink Bells (*Tetratheca pilosa*)#

**Groundcovers and climbers**

- Common Apple-berry (*Billardiera scandens*)
- Mountain Clematis (*Clematis aristata*)
- Black-anther Flax-lily (*Dianella admixta*)
- Paroo Lily (*Dianella caerulea var. caerulea*)
- Tasman Flax-lily (*Dianella tasmanica*)#
- Twining Glycine (*Glycine clandestina*)
- Red-anther Wallaby-grass (*Joycea pallida*)
- Variable Sword-sedge (*Lepidosperma laterale*)
- Wattle Mat-rush (*Lomandra filiformis*)
- Spiny-headed Mat-rush (*Lomandra longifolia*)
- Weeping Grass (*Microlaena stipoides var. stipoides*)
- Common Rice-flower (*Pimelea humilis*)
- Grey Tussock-grass (*Poa sieberiana*)
- Poranthera (*Poranthera microphylla*)
- Cotton Fireweed (*Senecio quadridentatus*)
- Nodding Blue Lily (*Stypandra glauca*)

How many plants per hectare for revegetation	Minimum number of species
Trees: 100	5
Small trees & large shrubs: 100	1
Medium Shrubs: 1200	6
Small Shrubs: 500	2
Groundcovers (LTG): 1000	2

# More common in the Dargo region on sites with higher rainfall

**EVC 22: GRASSY DRY FOREST**

Occurs at low elevations in rainshadow areas on a range of fertile parent rock types on north to east facing slopes. Soils are moderately fertile stony loams and clay loams. It is often found in association with Grassy Woodland (EVC 175-12) on the Wonnangatta River, occurring upslope on steeper less fertile terrain. The elevation is in the range of 150 – 500 metres. The overstorey varies from an open eucalypt forest to woodland. Grassy Dry Forest is characterised by a ground layer dominated by a high diversity of drought-tolerant grasses and herbs, often including many fern species. Yellow Box *Eucalyptus melliodora* is the dominant overstorey tree.

**Trees**

- Apple Box or But But (*Eucalyptus bridgesiana*)
- Yertchuk (*Eucalyptus consideniiana*)
- Gippsland Blue Gum (*Eucalyptus globulus* ssp. *pseudoglobulus*)
- Bundy (*Eucalyptus goniocalyx*)
- Red Stringybark (*Eucalyptus macrorhyncha*)
- Brittle Gum (*Eucalyptus mannifera*)
- Yellow Box (*Eucalyptus melliodora*)
- Silver Bundy (*Eucalyptus nortonii*)
- Red Box (*Eucalyptus polyanthemus*)

**Small trees & large shrubs**

- Large-leaf Hickory Wattle (*Acacia falciformis*)
- Cherry Ballart (*Exocarpos cupressiformis*)

**Medium shrubs 1 – 5 m**

- Spreading Wattle (*Acacia genistifolia*)
- Common Cassinia (*Cassinia aculeata*)
- Shiny Cassinia (*Cassinia longifolia*)
- Common Correa (*Correa reflexa*)
- Narrow-leaf Bitter-pea (*Daviesia leptophylla*)
- Austral Indigo (*Indigofera australis*)
- Lance Beard-heath (*Leucopogon lanceolatus* var. *lanceolatus*)
- Prickly Bush-pea (*Pultenaea juniperina*)

**Small Shrubs < 1 m**

- Grey Parrot-pea (*Dillwynia cinerascens*)
- Grey Guinea-flower (*Hibbertia obtusifolia*)
- Common Rice-flower (*Pimelea humilis*)

**Groundcovers & climbers**

- Honey-pots (*Acrotriche serrulata*)
- Cranberry Heath (*Astroloma humifusum*)
- Common Apple-berry (*Billardiera scandens*)
- Mountain Clematis (*Clematis aristata*)
- Love Creeper (*Comesperma volubile*)
- Black-anther Flax-lily (*Dianella admixta*)
- Plume Grass (*Dichelachne* spp.)
- Thatch Saw-sedge (*Gahnia radula*)
- Twining Glycine (*Glycine clandestina*)
- Purple Coral-pea (*Hardenbergia violacea*)
- Common Hovea (*Hovea heterophylla*)
- Silvertop Wallaby-grass (*Joycea pallida*)
- Common Bottle-daisy (*Lagenophora stipitata*)
- Variable Sword-sedge (*Lepidosperma laterale*)
- Common Beard-heath (*Leucopogon virgatus*)
- Wattle Mat-rush (*Lomandra filiformis*)
- Spiny-headed Mat-rush (*Lomandra longifolia*)
- Weeping Grass (*Microlaena stipoides* var. *stipoides*)
- Grey Tussock-grass (*Poa sieberiana*)
- Kangaroo Grass (*Themeda triandra*)

How many plants per hectare for revegetation	Minimum number of species
Trees: 150	5
Small trees & large shrubs:100	1
Medium Shrubs:800	7
Small Shrubs: 500	3
Groundcovers (LTG): 500	2

**EVC 29: DAMP FOREST**

Grows on a wide range of geologies on well-developed generally colluvial soils with high levels of humus in the upper soil horizon. The dominant eucalypts are commonly Messmate *Eucalyptus obliqua* and Mountain Grey Gum *Eucalyptus cypellocarpa*. The ground layer includes herbs and grasses as well as a variety of moisture-dependent ferns including occasional tree ferns.

**Trees**

- Mountain Grey Gum (*Eucalyptus cypellocarpa*)
- Eurabbie (*Eucalyptus globulus* ssp. *bicostata*) #
- Yellow Stringybark (*Eucalyptus muelleriana*)
- Messmate (*Eucalyptus obliqua*)
- Silvertop Ash (*Eucalyptus sieberi*)

**Small trees & large shrubs**

- Silver Wattle (*Acacia dealbata*)
- Black She-oak (*Allocasuarina littoralis*)
- Blue Oliveberry (*Elaeocarpus reticulatus*)
- Sweet Pittosporum (*Pittosporum undulatum*)
- Hazel Pomaderris (*Pomaderris aspera*)
- Victorian Christmas Bush (*Prostanthera lasianthos*)

**Medium shrubs 1 – 5 m**

- Common Cassinia (*Cassinia aculeata*)
- Shiny Cassinia (*Cassinia longifolia*)
- Prickly Currant-bush (*Coprosma quadrifida*)
- Common Heath (*Epacris impressa*)
- Hop Goodenia (*Goodenia ovata*)
- Lance Beard-heath (*Leucopogon lanceolatus* var. *lanceolatus*)
- Snow Daisy-bush (*Olearia lirata*)
- Narrow-leaf Geebung (*Persoonia linearis*)
- Elderberry Panax (*Polyscias sambucifolia*)

**Small Shrubs < 1 m**

- Tangled Guinea Flower (*Hibbertia empetrifolia*)
- Hairy Pink-bells (*Tetralochea pilosa*)

**Goundcovers, climbers & tree ferns**

- Common Apple-berry (*Billardiera scandens*)
- Hard Water-fern (*Blechnum wattsi*)
- Mountain Clematis (*Clematis aristata*)
- Rough Tree-fern (*Cyathea australis*)
- Tasman Flax-lily (*Dianella tasmanica*)
- Soft Tree-fern (*Dicksonia antarctica*)
- Common Hedgehog-grass (*Echinopogon ovatus*)
- Cinquefoil Cranesbill (*Geranium potentilloides*)
- Shade Raspwort (*Gonocarpus humilis*)
- Tall Sword-sedge (*Lepidosperma elatius*)
- Spiny-headed Mat-rush (*Lomandra longifolia*)
- Weeping Grass (*Microlaena stipoides* var. *stipoides*)
- Wonga Vine (*Pandorea pandorana*)
- Handsome Flat-pea (*Platylobium formosum*)
- Common Tussock-grass (*Poa labillardierei*)
- Grey Tussock-grass (*Poa sieberiana*)
- Slender Tussock-grass (*Poa tenera*)
- Mother Shield-fern (*Polystichum proliferum*)
- White Elderberry (*Sambucus gaudichaudiana*)
- Fireweed Groundsel (*Senecio linearifolius*)
- Forest Wire-grass (*Tetrarrhena juncea*)
- Ivy-leaf Violet (*Viola hederacea*)

How many plants per hectare for revegetation	Minimum number of species
Trees: 200	5
Small trees & large shrubs: 200	3
Medium Shrubs: 1000	8
Small Shrubs: 500	2
Groundcovers (LTG): 500	2

#In the Dargo region

**EVC 32: WARM TEMPERATE RAINFOREST - ALLUVIAL TERRACES**

Occurring in protected gullies and slopes on fertile alluvial flats of ephemeral (temporary) creeks and the floodplains of permanent streams. On large streams (ie. Mitchell River) the community occurs some distance from the main river channel on elevated alluvial terraces, which are, flooded less severely (Peel 1999). On smaller streams where flooding is less severe, the community may occupy the whole alluvial flat. Soils are deep, well-drained silt loams. The soil profiles are usually damp to wet because of the closeness of the water table associated with the nearby stream (Peel 1999). Before European settlement this EVC would have occurred more frequently along the lower parts of the Mitchell River.

Eucalypts are uncommon in this EVC with the overstorey layer consisting of a dense cover of Lilly Pilly *Acmena smithii*, Sweet Pittosporum *Pittosporum undulatum*, Muttonwood *Rapanea howittiana*. Blackwood *Acacia melanoxylon* is also often present as an emergent species. Less abundant is Mountain Grey Gum *Eucalyptus cypellocarpa*, River Peppermint *Eucalyptus elata*, Yellowwood *Acronychia oblongifolia* and Kanooka *Tristaniopsis laurina* (Peel 1999). On the Mitchell River the only overstorey eucalypt is Coast Grey Box *Eucalyptus bosistoana* (Bill Peel pers com.).

**Trees**

- Lilly Pilly (*Acmena smithii*)
- Yellowwood (*Acronychia oblongifolia*)
- Coast Grey Box (*Eucalyptus bosistoana*)#
- Mountain Grey Gum (*Eucalyptus cypellocarpa*)
- River Peppermint (*Eucalyptus elata*)
- Muttonwood (*Rapanea howittiana*)
- Kanooka (*Tristaniopsis laurina*)

**Small trees & large shrubs > 5 m**

- Black Wattle (*Acacia mearnsii*)
- Blackwood (*Acacia melanoxylon*)
- Blue Oliveberry (*Elaeocarpus reticulatus*)
- Sweet Pittosporum (*Pittosporum undulatum*)
- Hazel Pomaderris (*Pomaderris aspera*)
- Large Mock Olive (*Notelaea venosa*)
- Victorian Christmas Bush (*Prostanthera lasianthos*)

**Shrubs 1 – 5 m**

- Three-nerved Cassinia (*Cassinia trinerva*)
- Prickly Currant-bush (*Coprosma quadrifida*)
- Hops Goodenia (*Goodenia ovata*)
- Golden-tip (*Goodia lotifolia*)
- Tree Violet (*Melicytus dentatus*)
- Musk Daisy-bush (*Olearia argophylla*)
- Snow Daisy-bush (*Olearia lirata*)
- Tree Everlasting (*Ozothamnus ferrugineus*)

- Bootlace Bush (*Pimelea axiflora*)
- Kangaroo Apple (*Solanum aviculare*)

**Groundcovers and climbers**

- Bergalia Tussock (*Carex longebrachiata*)
- Staff Climber (*Celastrus australis*)
- Forest Clematis (*Clematis glycinoides* var *glycinoides*)
- Kidney Weed (*Dichondra repens*)
- Common Hedgehog Grass (*Echinopogon ovatus*)
- Black fruit Saw-sedge (*Gahnia melanocarpa*)
- Swamp Club-sedge (*Isolepis inundata*)
- Dusky Coral Pea (*Kennedia rubicunda*)
- Variable Sword-sedge (*Lepidosperma laterale*)
- Spiny-headed Mat-rush (*Lomandra longifolia*)
- Milk Vine (*Marsdenia rostrata*)
- Weeping Grass (*Microlaena stipoides* var. *stipoides*)
- Jasmine Morinda (*Morinda jasminoides*)
- White Elderberry (*Sambucus gaudichaudiana*)
- Fireweed Groundsel (*Senecio linearifolius*)
- Austral Sarsaparilla (*Smilax australis*)
- Australian Basket-grass (*Oplismenus hirtellus*)
- Grey Tussock-grass (*Poa sieberiana*)
- Bearded Tylophora (*Tylophora barbata*)
- Ivy-leaf Violet (*Viola hederacea*)

How many plants per hectare for revegetation	Minimum number of species
Trees: 150	
Small trees & large shrubs: 200	3
Medium Shrubs: 600	7
Groundcovers (LTG): 500	2

# On the Mitchell River Coast Grey Box *Eucalyptus bosistoana* is the only eucalypt species occurring



## EVC 32-05: WARM TEMPERATE RAINFOREST - EAST GIPPSLAND COASTAL

Occurs mainly along a narrow coastal fringe from Metung east to Lake Tyers. This EVC can occur 10 km from the coast but is more commonly found within 5 km of the sea. Occurring on steep slopes in small shallow gullies and large gullies. Also occurring on the abandoned sea cliffs that bound the shores of lakes and the riverine escarpments along the lower reaches of some river valleys (Peel 1999). Generally this EVC is protected by fire by the abundance of open water surrounding it. The main surrounding EVC's are Limestone Box Forest (EVC 15) and Lowland Forest (EVC 16).

Soils are generally well-drained gradational sandy clay to clay loams and can be stony as the result of landslips dislodging and mixing soil profiles (Peel 1999). Common canopy species include Yellow Wood *Acronychia oblongifolia*, Lilly Pilly *Acmena smithii*, Blackwood *Acacia melanoxylon* (emergent), Sweet Pittosporum *Pittosporum undulatum*. Shrubs are not a common component of the vegetation class (Peel 1999). An example of this EVC can be seen on the abandoned sea-cliffs of the North Arm upstream of the Princes Highway Bridge on the western approach into Lakes Entrance (Peel 1999).

### Trees

Lilly Pilly (*Acmena smithii*)  
 Yellow Wood (*Acronychia oblongifolia*)  
 Muttonwood (*Rapanea howittiana*)

### Small Trees & large shrubs

Blackwood (*Acacia melanoxylon*)  
 Large Mock Olive (*Notelaea venosa*)  
 Sweet Pittosporum (*Pittosporum undulatum*)  
 Hazel Pomaderris (*Pomaderris aspera*)

### Shrubs 1 – 5 m

Prickly Currant-bush (*Coprosma quadrifida*)  
 Hops Goodenia (*Goodenia ovata*)  
 Austral Indigo (*Indigofera australis*)  
 Tree Violet (*Melicytus dentatus*)  
 Musk Daisy-bush (*Olearia argophylla*)  
 Snow Daisy-bush (*Olearia lirata*)  
 Viscid Daisy-bush (*Olearia viscosa*)  
 Tree Everlasting (*Ozothamnus ferrugineus*)  
 Kangaroo Apple (*Solanum aviculare*)

### Groundcovers and climbers

Necklace Fern (*Asplenium flabellifolium*)  
 Staff Climber (*Celastrus australis*)  
 Forest Clematis (*Clematis glycinoides* var. *glycinoides*)  
 Kidney Weed (*Dichondra repens*)  
 Wombat Berry (*Eustrephus latifolius*)  
 Black-fruit Saw-sedge (*Gahnia melanocarpa*)  
 Scrambling Lily (*Geitonoplesium cymosum*)  
 Northern Cranesbill (*Geranium homeanum*)  
 Spiny Matt Rush (*Lomandra longifolia*)  
 Yellow Milk-vine (*Marsdenia flavescens*)  
 Milk-vine (*Marsdenia rostrata*)  
 Weeping Grass (*Microlaena stipoides* var. *stipoides*)  
 Jasmine Morinda (*Morinda jasminoides*)  
 Basket-grass (*Oplismenus hirtellus*)  
 Wonga Vine (*Pandorea pandorana*)  
 Common Tussock Grass (*Poa labillardierei*)  
 Grey Tussock-grass (*Poa sieberiana*)

White Elderberry (*Sambucus gaudichaudiana*)  
 Austral Sarsaparilla (*Smilax australis*)  
 Forest Nightshade (*Solanum prinophyllum*)  
 Bearded Tylophora (*Tylophora barbata*)

How many plants per hectare for revegetation	Minimum number of species
Trees: 150	
Small trees & large shrubs: 200	3
Medium Shrubs: 600	7
Groundcovers (LTG): 500	2



**EVC 47: VALLEY GRASSY FOREST**

Occurs under moderate rainfall regimes of 700-800 mm per annum on fertile, well-drained, colluvial or alluvial soils on gently undulating lower slopes and valley floors. It grows as an open forest to 25 m tall and may have a variety of eucalypts, usually species which prefer more moist or more fertile conditions over a sparse shrub cover. Black Wattle *Acacia mearnsii* forms an understorey tree or tall shrub layer, and Silver Wattle *Acacia dealbata* is sometimes present. The shrub layer is species-poor and sparse, with only a few medium-height shrubs including Shiny Cassinia *Cassinia longifolia*, Austral Indigo *Indigofera australis*. In season, a rich array of herbs, lilies, grasses and sedges dominate the ground layer but at the drier end of the spectrum the ground layer may be sparse and slightly less diverse, but with the moisture-loving species still remaining.

**Trees**

- Coast Grey Box (*Eucalyptus bosistoana*)\*
- Mountain Grey Gum (*Eucalyptus cypellocarpa*)
- River Peppermint (*Eucalyptus elata*)
- White Stringybark (*Eucalyptus globoidea*)#
- Yellow Stringybark (*Eucalyptus muelleriana*)
- Red Box (*Eucalyptus polyanthemus*)#
- Manna Gum (*Eucalyptus viminalis*)

**Small Trees & large shrubs > 5 m**

- Silver Wattle (*Acacia dealbata*)
- Black Wattle (*Acacia mearnsii*)
- Blackwood (*Acacia melanoxylon*)
- Black Sheoak (*Allocasuarina littoralis*)

**Shrubs 1 – 5 m**

- Sweet Bursaria *Bursaria spinosa*
- Common Cassinia (*Cassinia aculeata*)
- Shiny Cassinia (*Cassinia longifolia*)
- Prickly Currant-bush (*Coprosma quadrifida*)\*
- Common Heath (*Epacris impressa*)
- Pale-fruit Ballart (*Exocarpos strictus*)
- Hop Goodenia *Goodenia ovata*
- Golden-tip (*Goodia lotifolia*)
- Austral Indigo (*Indigofera australis*)
- Lance Beard-heath (*Leucopogon lanceolatus* var. *lanceolatus*)

- Narrow-leaf Geebung (*Persoonia linearis*)
- Handsome Flat-pea (*Platylobium formosum*)
- Rough Bush-pea (*Pultenaea scabra*)

**Small Shrubs < 1 m**

- Tangled Guinea-flower (*Hibbertia empetrifolia*)
- Guinea Flower (*Hibbertia obtusifolia*)
- Common Rice-flower (*Pimelea humilis*)
- Blunt Bush-pea (*Pultenaea retusa*)
- Hairy Pink-bells (*Tetratheca pilosa*)

**Groundcovers & climbers**

- Bidgee-widgee (*Acaena novae-zelandiae*)
- Honey-pots (*Acrotriche serrulata*)
- Austral Bugle (*Ajuga australis*)
- Striped Wallaby-grass (*Austrodanthonia racemosa* var. *racemosa*)
- Veined Spear-grass (*Austrostipa rudis*)
- Common Apple-berry (*Billardiera scandens*)
- Short-stem Sedge (*Carex breviculmis*).
- Mountain Clematis (*Clematis aristata*)\*
- Love Creeper (*Comesperma volubile*)
- Southern Tick-trefoil (*Desmodium gunnii*)
- Paroo Lily (*Dianella caerulea* var. *caerulea*)
- Tasman Flax-lily (*Dianella tasmanica*)
- Short-hair Plume-grass (*Dichelachne micrantha*)
- Common Hedgehog-grass (*Echinopogon ovatus*)
- Common Wheat-grass (*Elymus scaber* var. *scaber*)
- Thatch Saw-sedge (*Gahnia radula*)
- Twining Glycine (*Glycine clandestina*)

- Variable Sword-sedge (*Lepidosperma laterale*)
- Wattle Mat-rush (*Lomandra filiformis*)
- Spiny-headed Mat-rush (*Lomandra longifolia*)
- Lomandra longifolia* ssp. *exilis* Cluster-headed Mat-rush

- Weeping Grass (*Microlaena stipoides* var. *stipoides*)
- Common Tussock-grass (*Poa labillardierei*)
- Grey Tussock-grass (*Poa sieberiana*)
- Fireweed Groundsel (*Senecio linearifolius*)
- Slender Fireweed (*Senecio tenuiflorus*)
- Prickly Starwort (*Stellaria pungens*)
- Hairy Speedwell (*Veronica calycina*)
- Sprawling Bluebell (*Wahlenbergia gracilis*)
- Tall Bluebell (*Wahlenbergia stricta*)
- Kangaroo Grass (*Themeda triandra*)
- Ivy-leaf Violet (*Viola hederacea*)

How many plants per hectare for revegetation	Minimum number of species
Trees: 150	2
Small trees & large shrubs: 100	3
Medium Shrubs: 800	9
Small Shrubs: 500	3
Groundcovers (LTG): 500	2

#Drier sites, \* Close to the coast

**EVC 48: HEATHY WOODLAND**

Occurs on low sand hills and their rises and slopes. Soils are infertile, deep, uniform sands, which have topsoils of light grey, loose sand, grading into bleached greyish-white to yellow-brown sand with sometimes-gravelly subsoil. Soils may also be a gravelly sand surface over a cemented yellow-brown gravelly hardpan. The vegetation is dominated by large eucalypts with a sparse groundcover layer. Bracken-dominated understoreys can develop in this EVC probably as a result of a high fire frequency or unsuitable burning regime, leading to the elimination of heathy shrubs and *Banksia serrata* from the understorey.

<p><b>Trees</b>                  Saw Banksia (<i>Banksia serrata</i>)                  Apple Box or But But (<i>Eucalyptus bridgesiana</i>)                  Yertchuk (<i>Eucalyptus consideniensis</i>)                  Broad leaf Peppermint (<i>Eucalyptus dives</i>)                  Yellow Box (<i>Eucalyptus melliodora</i>)                  Coast Manna Gum (<i>Eucalyptus viminalis</i> ssp. <i>pryoriana</i>)                  Shining Peppermint (<i>Eucalyptus willisii</i>)</p> <p><b>Medium shrubs 1 – 5 m</b>                  Lightwood (<i>Acacia implexa</i>)                  Black Wattle (<i>Acacia mearnsii</i>)                  Sweet Wattle (<i>Acacia suaveolens</i>)                  Spike Wattle (<i>Acacia oxycedrus</i>)                  Black She-oak (<i>Allocasuarina littoralis</i>)                  Drooping She-oak (<i>Allocasuarina verticillata</i>)                  Common Aotus (<i>Aotus ericoides</i>)                  Silver Banksia (<i>Banksia marginata</i>)                  Common Heath (<i>Epacris impressa</i>)                  Prickly Tea-tree (<i>Leptospermum continentale</i>)                  Heath Tea-tree (<i>Leptospermum myrsinoides</i>)                  Prickly Broom-heath (<i>Monotoca scoparia</i>)                  Snow Daisy-bush (<i>Olearia lirata</i>)</p>	<p>Shrubby Platysace (<i>Platysace lanceolata</i>)                  Wedding Bush (<i>Ricinocarpos pinifolius</i>)</p> <p><b>Small Shrubs &lt; 1 m</b>                  Smooth Parrot-pea (<i>Dillwynia glaberrima</i>)                  Showy Bossiaea (<i>Bossiaea cinerea</i>)                  Common Correa (<i>Correa reflexa</i>)                  Blue Dampiera (<i>Dampiera stricta</i>)                  Common Wedge-pea (<i>Gompholobium huegelii</i>)                  Pink Beard-heath (<i>Leucopogon ericoides</i>)                  Common Flat-pea (<i>Platylobium obtusangulum</i>)                  Hairy Pink Bells (<i>Tetratheca pilosa</i>)</p> <p><b>Groundcovers and climbers</b>                  Honey-pots (<i>Acrotriche serrulata</i>)                  Pine Heath (<i>Astroloma pinifolium</i>)                  Black-anther Flax-lily (<i>Dianella admixta</i>)                  Thatch Saw-sedge (<i>Gahnia radula</i>)                  Purple Coral-pea (<i>Hardenbergia violacea</i>)                  Grey Guinea Flower (<i>Hibbertia obtusifolia</i>)                  Tassel Rope-rush (<i>Hypolaena fastigiata</i>)                  Sand-hill Sword-sedge (<i>Lepidosperma concavum</i>)                  Spiny-headed Mat-rush (<i>Lomandra longifolia</i>)                  Small Grass-tree (<i>Xanthorrhoea minor</i> ssp. <i>lutea</i>)                  Pink Zieria (<i>Zieria veronicea</i>)</p>	<table border="1"> <thead> <tr> <th>How many plants per hectare for revegetation</th> <th>Minimum number of species</th> </tr> </thead> <tbody> <tr> <td>Trees: 50</td> <td>5</td> </tr> <tr> <td>Medium Shrubs: 1200</td> <td>5</td> </tr> <tr> <td>Small Shrubs: 2000</td> <td>5</td> </tr> <tr> <td>Groundcovers (LTG): 500</td> <td>1</td> </tr> </tbody> </table>	How many plants per hectare for revegetation	Minimum number of species	Trees: 50	5	Medium Shrubs: 1200	5	Small Shrubs: 2000	5	Groundcovers (LTG): 500	1
How many plants per hectare for revegetation	Minimum number of species											
Trees: 50	5											
Medium Shrubs: 1200	5											
Small Shrubs: 2000	5											
Groundcovers (LTG): 500	1											

**EVG 53: SWAMP SCRUB**

This EVC occurs at low elevations on alluvial deposits along streams or on poorly-drained sites with higher nutrient availability. Soils vary from organic loams to fine silts and peat. Often lacks a tree overstorey and is dominated by shrubs of Swamp Paperbark *Melaleuca ericifolia* which often form a dense thicket. Where light penetrates to ground level, a moss/lichen/liverwort herbaceous ground cover is often present. When this EVC occurs close to estuaries, and soils are more saline, a succulent ground layer will be present.

<p><b>Large shrubs (canopy cover)</b>                  Woolly Tea-tree (<i>Leptospermum lanigerum</i>)<math>\Delta</math>                  Swamp Paperbark (<i>Melaleuca ericifolia</i>)*#</p> <p><b>Shrubs 1 -5 m</b>                  Prickly Currant-bush (<i>Coprosma quadrifida</i>)                  Prickly Tea-tree (<i>Leptospermum continentale</i>)                  Tree Everlasting (<i>Ozothamnus ferrugineus</i>)                  Seaberry Saltbush (<i>Rhagodia candolleana</i> ssp <i>candolleana</i>)#</p> <p><b>Groundcovers and climbers</b>                  Soft Twig-rush (<i>Baumea rubiginosa</i>)                  Large Bindweed (<i>Calystegia sepium</i>)                  Tall Sedge (<i>Carex appressa</i>)                  Glaucous Goosefoot (<i>Chenopodium glaucum</i>)#                  Australian Salt-grass (<i>Distichlis distichophylla</i>)#                  Common Spike-sedge (<i>Eleocharis acuta</i>)                  Knobby Club-sedge (<i>Ficinia nodosa</i>)#                  Thatch Saw-sedge (<i>Gahnia radula</i>)                  Pennywort (<i>Hydrocotyle</i> spp)                  Swamp Club-sedge (<i>Isolepis inundata</i>)                  Tall Rush (<i>Juncus procerus</i>)                  Common Scale-rush (<i>Lepyrodia muelleri</i>)                  Spiny-headed Mat-rush (<i>Lomandra longifolia</i>)                  Spotted Knotweed (<i>Persicaria praetermissa</i>)                  Common Reed (<i>Phragmites australis</i>)                  Common Tussock-grass (<i>Poa labillardierei</i>)#</p>	<p>Blue Tussock-grass (<i>Poa poiformis</i>)#                  Creeping Brookweed (<i>Samolus repens</i>) #                  Beaded Glasswort (<i>Sarcocornia quinqueflora</i>)#                  Swamp Starwort (<i>Stellaria angustifolia</i>)                  Marsh Flower (<i>Villarsia</i> spp.)                  Ivy-leaf Violet (<i>Viola hederacea</i>)</p>	<table border="1"> <thead> <tr> <th>How many plants per hectare for revegetation</th> <th>Minimum number of species</th> </tr> </thead> <tbody> <tr> <td>Large shrubs: 200</td> <td>1</td> </tr> <tr> <td>Medium Shrubs: 400</td> <td>2</td> </tr> <tr> <td>Groundcovers (LTG): 1000</td> <td>2</td> </tr> </tbody> </table>	How many plants per hectare for revegetation	Minimum number of species	Large shrubs: 200	1	Medium Shrubs: 400	2	Groundcovers (LTG): 1000	2
How many plants per hectare for revegetation	Minimum number of species									
Large shrubs: 200	1									
Medium Shrubs: 400	2									
Groundcovers (LTG): 1000	2									

\* Swamp Paperbark is the dominant canopy species  
 #Plants occurring in salty areas close to the coast e.g. close to Estuarine Wetlands  
 $\Delta$  Generally occurring east of Bairnsdale (Metung, Colquhoun)

## EVC 55: GIPPSLAND PLAINS GRASSY WOODLAND AND EVC 259 GIPPSLAND PLAINS GRASSY WOODLAND (GILGAI WETLAND MOSAIC)

This open, grassy eucalypt woodland is recorded on fertile soils in the low rainfall Gippsland Plains. It is dominated by Gippsland Red Gum (*Eucalyptus tereticornis* ssp. *mediana*), with other eucalypts occurring occasionally. The understorey consists of a few sparse shrubs over a species-rich grassy and herbaceous ground layer. Many orchid species occur in this EVC such as Sun Orchids *Thelymitra* spp, and *Dirus* spp. The EVC 259 is a mosaic of Plains Grassy Woodland and Gilgai Wetland. Gilgai Wetland has not been mapped separately as it occurs in micro depressions within Plains Grassy Woodland and is too small to map. Gilgai Wetland areas would hold water for short periods of time in wet years. The wetland plant species that occur in these shallow depressions would be similar to plants occurring in EVC 125 Plains Grassy Wetland.

### Trees

Apple Box or But But (*Eucalyptus bridgesiana*)  
 Yellow Box (*Eucalyptus melliodora*)  
 Swamp Gum (*Eucalyptus ovata*)\*  
 Gippsland Red Gum (*Eucalyptus tereticornis* ssp. *mediana*)

### Small trees & large shrubs

Lightwood (*Acacia implexa*)  
 Black Wattle (*Acacia mearnsii*)  
 Blackwood (*Acacia melanoxylon*)\*  
 Cherry Ballart (*Exocarpos cupressiformis*)

### Medium shrubs 1 – 5 m

Black She-oak (*Allocasuarina littoralis*)  
 Sweet Bursaria (*Bursaria spinosa*)  
 Tree Violet (*Meliccytus dentatus*)\*  
 Rough-barked Honey-myrtle (*Melaleuca parvistaminea*)\*

### Small shrubs < 1 m

Grey Parrot-pea (*Dillwynia cinerascens*)  
 Smooth Parrot-pea (*Dillwynia glaberrima*)  
 Woolly Grevillea (*Grevillea lanigera*)

### Groundcovers & climbers

Common Swamp Wallaby-grass (*Amphibromus nervosus*)#  
 Pale Vanilla-Lily (*Arthropodium milleflorum*)  
 Chocolate Lily (*Arthropodium strictum*)  
 Common Wallaby-grass (*Austrodanthonia caespitosa*)  
 Spear-grasses (*Austrostipa* spp.)

Brown-back Wallaby-grass (*Austrodanthonia duttoniana*)#  
 Stiped Wallaby-grass (*Austrodanthonia racemosa*)  
 Bulbine Lily (*Bulbine bulbosa*)  
 Milkmaids (*Burchardia umbellata*)  
 Creeping Bossiaea (*Bossiaea prostrata*)  
 Common Everlasting (*Chrysocephalum apiculatum*)  
 Clustered Everlasting (*Chrysocephalum semipapposum*)  
 Common Billy Buttons (*Craspedia variabilis*)  
 Plume Grass (*Dichelachne* spp.)  
 Flax-lily (*Dianella longifolia* var. *longifolia*)  
 Black-anther Flax-lily (*Dianella admixta*)  
 Common Spike-sedge (*Eleocharis acuta*)#  
 Small Spike-sedge (*Eleocharis pusilla*)#  
 Wheat Grass (*Elymus scaber*)  
 Thatch Saw-sedge (*Gahnia Radula*)  
 Australian Sweet-grass (*Glyceria australis*)#  
 Twining Glycine (*Glycine clandestina*) Purple Coral-pea (*Hardenbergia violacea*)  
 Running Postman (*Kennedia prostrata*)  
 Scaly Buttons (*Leptorhynchos squamatus*)  
 Wiry Buttons (*Leptorhynchos tenuifolius*)  
 Shining Buttons (*Leptorhynchos nitidulus*)  
 Wattle Mat-rush (*Lomandra filiformis*)  
 Spiny-headed Mat-rush (*Lomandra longifolia*)  
 Dwarf Mat-rush (*Lomandra nana*)  
 Weeping Grass (*Microlaena stipoides* var. *stipoides*)  
 Yam Daisy (*Microseris lanceolata*)  
 White Purslane (*Neopaxia australasica*)#  
 Wetland Wallaby-grass (*Notodanthonia semiannularis*)#

Common Rice-flower (*Pimelea humilis*)  
 Common Tussock-grass (*Poa labillardierei*) #  
 Grey Tussock-grass (*Poa sieberiana*)  
 Floating Pondweed (*Potamogeton tricarinatus*)#  
 Kangaroo Grass (*Themeda triandra*)  
 Bog Sedges (*Schoenus* spp)#  
 Twining Fringe-lily (*Thysanotus patersonii*)  
 Common Fringe-lily (*Thysanotus tuberosus*)  
 Yellow Rush-lily (*Tricoryne elatior*)  
 Running Marsh-flower (*Villarsia reniformis*)#  
 Blue Bells (*Wahlenbergia* spp)  
 Early Nancy (*Wurmbea dioica*)

How many plants per hectare for revegetation	Minimum number of species
Trees: 50	1
Small Trees and Large shrubs: 50	1
Medium Shrubs: 400	2
Small Shrubs: 100	1
Groundcovers (LTG): 500	2

\*Higher moisture areas, #Gilgai Wetland Species

**EVC 82: RIVERINE ESCARPMENT SCRUB**

This vegetation occurs on shallow colluvial soils along rocky cliffs and slopes along the Mitchell, Tambo and Nicholson and their tributaries and may extend onto alluvial terraces. Characterised by a small tree or large shrub layer to 10 m tall over a dense medium shrub layer and a ground layer, which can range from low to high diversity and consist of a variety of grasses and herbs. Ferns can often be a major component of the ground layer and emergent eucalypts may be present.

**Small Trees & large shrubs > 5 m**

- Blackwood (*Acacia melanoxylon*)
- Kurrajong (*Brachychiton undulatum*)\*
- Sweet Pittosporum (*Pittosporum undulatum*)\*
- Hazel Pomaderris (*Pomaderris aspera*)
- Kanooka (*Tristaniopsis laurina*)

**Shrubs 1 -5 m**

- Black Wattle (*Acacia mearnsii*)
- Three-nerved Cassinia (*Cassinia trinerva*)
- Prickly Currant-bush (*Coprosma quadrifida*) #
- Shrubby Velvet-bush (*Lasiopetalum macrophyllum*)
- Burgan (*Kunzea ericoides*)
- Tree Violet (*Melicytus dentatus*)
- Snowy Daisy-bush (*Olearia lirata*) #
- Dusty Daisy-bush (*Olearia phlogopappa*)
- Bootlace Bush (*Pimelea axiflora*)
- Victorian Christmas-bush (*Prostanthera lasianthos*) #

**Small Shrubs < 1 m**

- Long-flower Beard-heath (*Leucopogon juniperinus*)
- Common Bottle-daisy (*Lagenophora stipitata*)
- Grey Guinea Flower (*Hibbertia obtusifolia*)

**Groundcovers & climbers**

- Common Apple-berry (*Billardiera scandens*)
- Tall Sedge (*Carex appressa*) #
- Tassel Sedge (*Carex fascicularis*)
- Forest Clematis (*Clematis glycinoides* var. *glycinoides*)
- Reed Bent-grass (*Deyeuxia quadriseta*)
- Tasman Flax-lily (*Dianella tasmanica*) #
- Kidney Weed (*Dichondra repens*)
- Black-fruit Saw-sedge (*Gahnia melanocarpa*)
- Thatch Saw-sedge (*Gahnia radula*)
- Twining Glycine (*Glycine clandestina*)
- Variable Sword-sedge (*Lepidosperma laterale*)
- Cluster-headed Mat-rush (*Lomandra longifolia* ssp. *exilis*)
- Milk Vine (*Marsdenia rostrata*)
- Weeping Grass (*Microlaena stipoides* var. *stipoides*)
- Long-leaf Wallaby-grass (*Notodanthonia longifolia*)
- Wonga Vine (*Pandorea pandorana*)
- Broad Shield-fern (*Polystichum formosum*)
- Tussock-grass (*Poa australis* spp. *agg.*)
- Slender Tussock-grass (*Poa tenera*) #
- White Marianth (*Rhytidosporum procumbens*)
- Slender Fireweed (*Senecio tenuiflorus*)
- Nodding Blue Lily (*Stypandra glauca*)
- Forest Wire-grass (*Tetrarrhena juncea*)
- Golden Everlasting (*Xerochrysum bracteatum*) #

How many plants per hectare for revegetation	Minimum number of species
Trees: 150	4
Medium Shrubs: 800	10
Small Shrubs: `100	1
Groundcovers (LTG): 500	2



## EVC 133: LIMESTONE POMADERRIS SHRUBLAND

A shrubland to 8 metres tall occurring on exposed northerly or western aspects on exposed cliffs or steep slopes often associated with rivers or lakes. Soils are a shallow, clay loam and are derived from limestone. Large dominant shrubs include Drooping She-oak *Allocasuarina verticillata* and Silver Banksia *Banksia marginata*.

Large shrubs > 5 m	Understorey & climbers	How many plants per hectare for revegetation	Minimum number of species
Limestone Blue Wattle ( <i>Acacia caerulescens</i> ) Drooping She-oak ( <i>Allocasuarina verticillata</i> ) Silver Banksia ( <i>Banksia marginata</i> )	Crested Spear-grass ( <i>Austrostipa blackii</i> ) Knotty Spear-grass ( <i>Austrostipa nodosa</i> ) Small-leaved Clematis ( <i>Clematis microphylla</i> ) Black-anther Flax-lily ( <i>Dianella admixta</i> ) Kidney Weed ( <i>Dichondra repens</i> ) Common Wheat-grass ( <i>Elymus scaber</i> var. <i>scaber</i> ) Bedstraw ( <i>Galium migrans</i> )	Small trees & large shrubs: 200	2
<b>Shrubs 1 – 5 m</b> Sticky Hop-bush ( <i>Dodonaea viscosa</i> ) Coast Beard-heath ( <i>Leucopogon parviflorus</i> ) Boobialla ( <i>Myoporum insulare</i> ) Bootlace Bush ( <i>Pimelea axiflora</i> ) Limestone Pomaderris ( <i>Pomaderris oraria</i> ssp. <i>calcicola</i> ) Bassian Pomaderris ( <i>Pomaderris oraria</i> )	Spiny-headed Mat-rush ( <i>Lomandra longifolia</i> ) Long-leaf Wallaby-grass ( <i>Notodanthonia longifolia</i> ) Cotton Fireweed ( <i>Senecio quadridentatus</i> ) Bower Spinach ( <i>Tetragonia implexicoma</i> ) Kangaroo Grass ( <i>Themeda triandra</i> ) Sprawling Bluebell ( <i>Wahlenbergia gracilis</i> )	Medium Shrubs: 1800	6
<b>Small Shrubs &lt; 1 m</b> Cranberry Heath ( <i>Astroloma humifusum</i> ) Common Correa ( <i>Correa reflexa</i> ) Sea-berry Saltbush ( <i>Rhagodia candolleana</i> ssp. <i>candolleana</i> )		Small Shrubs: 100	2
		Groundcovers (LTG): 500	2

**EVC 135: GALLERY RAINFOREST - EPHEMERAL STREAMS**

Occurs on ephemeral creeks (stops flowing in dry periods) associated with the tributaries of the Mitchell, Tambo, and Murrindal rivers. Sites are flood-prone and protected by fire from the steep rocky slopes and rocky gorges. Soils are poorly sorted alluviums with a large proportion of sand, and various amounts of cobbles, boulders and outcropping rock (Peel 1999). Due to the rocky, inaccessible and lower fertility of this EVC it has not been cleared for agriculture or timber harvesting (Peel 1999). However, weeds still pose a threat to this ecological vegetation class.

Dominant canopy cover is Kanooka *Tristaniopsis laurina*. (25-50%). Due to the frequency of flooding there is a much smaller amount of mature woody vines. Under the canopy common shrubs include Prickly Currant-bush *Coprosma quadrifida*, River Lomatia *Lomatia myricoides*, Bootlace Bush *Pimelea axiflora* and Hazel Pomaderris *Pomaderris aspera*. In open areas with no canopy cover shrubs include White Sallow Wattle *Acacia floribunda*, Hop Goodenia *Goodenia ovata*, Snow Daisy-bush *Olearia lirata*, Victorian Christmas Bush *Prostanthera lasianthos* and Round-leaf Mint-Bush *Prostanthera rotundifolia*.

An example of this EVC can be found immediately below Raymond Creek Falls on Raymond Creek (Melways Map 83, G5.).

<b>Trees</b>	<b>Groundcovers and climbers</b>	<b>How many plants per hectare for revegetation</b>	<b>Minimum number of species</b>
Blackwood ( <i>Acacia melanoxylon</i> ) Kanooka ( <i>Tristaniopsis laurina</i> )	Short-stem Sedge ( <i>Carex breviculmis</i> ) Bergalia Tussock ( <i>Carex longebrachiata</i> ) Mountain Clematis ( <i>Clematis aristata</i> ) Forest Clematis ( <i>Clematis glycinoides</i> var. <i>glycinoides</i> )	Trees: 150	2
<b>Small Trees &amp; large shrubs &gt; 5 m</b> White Sallow Wattle ( <i>Acacia floribunda</i> ) Black Wattle ( <i>Acacia mearnsii</i> ) Hazel Pomaderris ( <i>Pomaderris aspera</i> ) Victorian Christmas Bush ( <i>Prostanthera lasianthos</i> ) Muttonwood ( <i>Rapanea howittiana</i> )	Paroo Lily ( <i>Dianella caerulea</i> var. <i>caerulea</i> ) Tasman Flax-lily ( <i>Dianella tasmanica</i> ) Kidney Weed ( <i>Dichondra repens</i> ) Tall Saw-sedge ( <i>Gahnia clarkei</i> ) Red-fruit Saw-sedge ( <i>Gahnia sieberiana</i> ) Swamp Club-sedge ( <i>Isolepis inundata</i> ) Spiny-headed Mat-rush ( <i>Lomandra longifolia</i> )	Small trees & large shrubs: 200	4
<b>Shrubs 1 – 5 m</b> Varnish Wattle ( <i>Acacia verniciflua</i> ) Sweet Bursaria ( <i>Bursaria spinosa</i> ) Shiny Cassinia ( <i>Cassinia longifolia</i> ) Prickly Currant-bush ( <i>Coprosma quadrifida</i> ) Hop Goodenia ( <i>Goodenia ovata</i> ) Golden-tip ( <i>Goodia lotifolia</i> var. <i>pubescens</i> ) Tree Hakea ( <i>Hakea eriantha</i> ) Burgan ( <i>Kunzea ericoides</i> ) River Lomatia ( <i>Lomatia myricoides</i> ) Tree Violet ( <i>Melicytus dentatus</i> ) Musk Daisy-bush ( <i>Olearia argophylla</i> ) Snow Daisy-bush ( <i>Olearia lirata</i> ) Bootlace Bush ( <i>Pimelea axiflora</i> ) Round Leaf Mint Bush ( <i>Prostanthera rotundifolia</i> )	Weeping Grass ( <i>Microlaena stipoides</i> var. <i>stipoides</i> ) Australian Basket-grass ( <i>Oplismenus hirtellus</i> ) Grey Tussock-grass ( <i>Poa sieberiana</i> ) Austral Sarsaparilla ( <i>Smilax australis</i> ) Bearded Tylophora ( <i>Tylophora barbata</i> ) Ivy-leaf Violet ( <i>Viola hederacea</i> )	Medium Shrubs: 1400	12
		Groundcovers (LTG): 1500	4

**EVC 135: GALLERY RAINFOREST - PERENNIAL STREAMS**

Perennial Streams Gallery Rainforest grows along the flood-prone channels and banks of perennial streams and rivers. Floods have a substantial effect on the structure of this vegetation with canopy trees often deformed by their force (Peel 1999). It often occurs in close proximity to Alluvial Terraces Warm Temperate Rainforest (Peel 1999). Soils are poorly sorted alluviums that are generally coarse and derived from sandstones and granites. The soils contain a small portion of silt, large amounts of sand, and various amounts of cobbles, boulders and outcropping rock. Soil nutrient is low compared to other Victorian rainforest communities (Peel 1999).

The canopy is dominated by Kanooka *Tristaniopsis laurina*, (25-50 % of cover) and smaller amounts of Lilly Pilly *Acmena smithii* (5-25 % cover). The canopy cover is much sparser compared to other rainforest communities due to the permanently maintained gap over the stream (Peel 1999).

**Trees**

- Lilly Pilly (*Acmena smithii*)
- Mountain Grey Gum (*Eucalyptus cypellocarpa*)
- River Peppermint (*Eucalyptus elata*)
- Messmate (*Eucalyptus obliqua*)
- Kanooka (*Tristaniopsis laurina*)

- Lance Beard-heath (*Leucopogon lanceolatus* var. *lanceolatus*)
- River Lomatia (*Lomatia myricoides*)
- Musk Daisy-bush (*Olearia argophylla*)
- Snow Daisy-bush (*Olearia lirata*)
- Bootlace Bush (*Pimelea axiflora*)

**Small Trees & large shrubs > 5 m**

- Silver Wattle (*Acacia dealbata*)
- Blackwood (*Acacia melanoxylon*)
- Blanket Leaf (*Bedfordia arborescens*)
- Blue Oliveberry (*Elaeocarpus reticulatus*)
- Large Mock Olive (*Notelaea venosa*)
- Hazel Pomaderris (*Pomaderris aspera*)
- Victorian Christmas Bush (*Prostanthera lasianthos*)
- Muttonwood (*Rapanea howittiana*)

**Groundcovers & climbers**

- Mountain Clematis (*Clematis aristata*)
- Paroo Lily (*Dianella caerulea* var. *caerulea*)
- Tasman Flax-lily (*Dianella tasmanica*)
- Kidney Weed (*Dichondra repens*)
- Tall Saw-sedge (*Gahnia clarkei*)
- Red-fruit Saw-sedge (*Gahnia sieberiana*)
- Swamp Club-sedge (*Isolepis inundata*)
- Spiny-headed Mat-rush (*Lomandra longifolia*)
- Weeping Grass (*Microlaena stipoides* var. *stipoides*)
- Australian Basket-grass (*Oplismenus hirtellus*)
- Grey Tussock-grass (*Poa sieberiana*)
- Small Leaf Bramble (*Rubus parvifolius*)
- Rose Leaf Bramble (*Rubus rosifolius*)
- Austral Sarsaparilla (*Smilax australis*)
- Bearded Tylophora (*Tylophora barbata*)
- Ivy-leaf Violet (*Viola hederacea*)

**Shrubs 1 – 5 m**

- Sweet Bursaria (*Bursaria spinosa*)
- Common Cassinia (*Cassinia aculeata*)
- Shiny Cassinia (*Cassinia longifolia*)
- Prickly Currant-bush (*Coprosma quadrifida*)
- Hop Goodenia (*Goodenia ovata*)
- Golden-tip (*Goodia lotifolia* var. *pubescens*)
- Austral Mulberry (*Hedycarya angustifolia*)
- Burgan (*Kunzea ericoides*)

How many plants per hectare for revegetation	Minimum number of species
Trees: 150	2
Small trees & large shrubs: 200	4
Medium Shrubs: 1400	12
Groundcovers (LTG): 1500	4

**EVC 136: SEDGE WETLAND**

Seasonally inundated freshwater sedgeland occurring in depressions on deep peat soils. The soils surrounding the wetland are generally sandy. Sedge Wetland is typically dominated by Pithy Sword-sedge *Lepidosperma longitundinale* and often includes a number of other sedges.

**Understorey species**

Fine Twig-sedge (*Baumea arthrophylla*)

Centella (*Centella cordifolia*)

Swamp Goodenia (*Goodenia humilis*)

Floating Club-sedge (*Isolepis fluitans*)

Pale Rush (*Juncus pallidus*)

Pithy Sword-sedge (*Lepidosperma longitundinale*)

Dwarf Kerrawang (*Rulingia prostrata*)

Bog Sedge (*Schoenus* spp.)

Erect Marsh-flower (*Villarsia exaltata*)

Running Marsh-flower (*Villarsia reniformis*)

How many plants per hectare for revegetation	Minimum number of species
Groundcovers: 2000	3

**EVC 141: SANDY FLOOD SCRUB**

Sandy or gravelly creekbanks and terraces occurring along the Perry River and adjacent waterways in the Providence Ponds area (ie. Sandy Creek), it would have also occurred elsewhere on the Perry land system such as Tom’s Creek. Usually dominated by medium to large shrubs to 8 metres tall with occasional eucalypts emergent.

**Trees**

- Apple Box or But But (*Eucalyptus bridgesiana*)
- White Stringybark (*Eucalyptus globoidea*)
- Yellow Box (*Eucalyptus melliodora*)
- Snow Gum (*Eucalyptus pauciflora*)
- Gippsland Red Gum (*Eucalyptus tereticornis ssp. mediana*)

**Small trees & large shrubs (canopy cover)**

- Silver Wattle (*Acacia dealbata*)
- Black Wattle (*Acacia mearnsii*)
- Burgan (*Kunzea ericoides*)
- Blackwood (*Acacia melanoxylon*)
- Hazel Pomaderris (*Pomaderris aspera*)

**Medium Shrubs 1 – 5 m**

- Silver Banksia (*Banksia marginata*)
- Crimson Bottlebrush (*Callistemon citrinus*)
- Prickly Tea-tree (*Leptospermum continentale*)
- Tree Violet (*Melicytus dentatus*)

**Small Shrubs < 1 m**

- Prickly Broom-heath (*Monotoca scoparia*)
- Bundled Guinea Flower (*Hibbertia fasciculata var. prostrate*)

**Groundcover species**

- Tall Sedge (*Carex appressa*)
- Hairy Centrolepis (*Centrolepis strigosa ssp. strigosa*)
- Pithy Sword-sedge (*Lepidosperma longitudinale*)
- Spiny-headed Mat-rush (*Lomandra longifolia*)
- Weeping Grass (*Microlaena stipoides var. stipoides*)
- Thyme Spurge (*Phyllanthus hirtellus*)
- Common Tussock-grass (*Poa labillardierei*)

How many plants per hectare for revegetation	Minimum number of species
Trees: 50	2
Small Trees and Large Shrubs: 400	4
Medium Shrubs: 600	3
Small Shrubs: 100	1
Groundcovers (LTG): 1500	3



## EVC 151: PLAINS GRASSY FOREST

Occurs on lowland plains and old river terraces. The soil is well-drained and is made up of gravelly sandy clays. The vegetation is a tall eucalypt forest with a shrub understorey over a diverse grassy and herbaceous ground layer. Closer to the coast such as Tambo Bluff and Paynesville, Coast Grey Box *Eucalyptus bosistoana* and Gippsland Red Gum *Eucalyptus tereticornis* ssp. *mediana* can dominate the overstorey. Understorey trees and tall shrubs common in all areas are Black Wattle *Acacia mearnsii*, Lightwood *Acacia implexa*, Black She-oak *Allocasuarina littoralis* and Prickly Tea-tree *Leptospermum continentale*.

### Trees

Blue Box (*Eucalyptus baueriana*)#  
 Coast Grey Box (*Eucalyptus bosistoana*)#  
 Southern Mahogany (*Eucalyptus botryoides*)  
 Apple Box or But But (*Eucalyptus bridgesiana*)  
 Mountain Grey Gum (*Eucalyptus cypellocarpa*)  
 White Stringybark (*Eucalyptus globoidea*)  
 Red Stringybark (*Eucalyptus macrorhyncha*)  
 Yellow Box (*Eucalyptus melliodora*)  
 Yellow Stringybark (*Eucalyptus muelleriana*)  
 Red Box (*Eucalyptus polyanthemos*)  
 Gippsland Red Gum (*Eucalyptus tereticornis* ssp. *mediana*)#

### Small Trees & large shrubs > 5 m

Black Wattle (*Acacia mearnsii*)  
 Blackwood (*Acacia melanoxylon*)  
 Lightwood (*Acacia implexa*)  
 Cherry Ballart (*Exocarpos cupressiformis*)  
 Hazel Pomaderris (*Pomaderris aspera*)

### Shrubs 1 – 5 m

Golden Wattle (*Acacia pycnantha*)  
 Black She-oak (*Allocasuarina littoralis*)  
 Drooping She-oak (*Allocasuarina verticillata*)  
 Silver Banksia (*Banksia marginata*)  
 Shiny Cassinia (*Cassinia longifolia*)  
 Austral Indigo (*Indigofera australis*)  
 Burgan (*Kunzea ericoides*)  
 Prickly Tea-tree (*Leptospermum continentale*)  
 Rough-barked Honey-myrtle (*Melaleuca parvistaminea*)

Tree Violet (*Meliccytus dentatus*)  
 Showy Daisy-bush (*Olearia lirata*)  
 Bootlace Bush (*Pimelea axiflora*)

### Small Shrubs < 1 m

Honey-pots (*Acrotriche serrulata*)  
 Cranberry Heath (*Astroloma humifusum*)  
 Grey-leaf Guinea Flower (*Hibbertia obtusifolia*)  
 Common Flat-pea (*Platylobium obtusangulum*)

### Groundcovers & climbers

Wallaby-grasses (*Austrodanthonia* spp)  
 Spear-grasses (*Austrostipa* spp.)  
 Creeping Bossiaea (*Bossiaea prostrata*)  
 Bulbine Lily (*Bulbine bulbosa*)  
 Forest Clematis (*Clematis glycinoides*)  
 Reed Bent-grass (*Deyeuxia quadrisetata*)  
 Black-anther Flax-lily (*Dianella admixta*)  
 Common Hedgehog-grass (*Echinopogon ovatus*)  
 Common Heath (*Epacris impressa*)  
 Thatch Saw-sedge (*Gahnia radula*)  
 Twining Glycine (*Glycine clandestina*)  
 Purple Coral-pea (*Hardenbergia violacea*)  
 Slender Bottle-daisy (*Lagenophora gracilis*)  
 Variable Sword-sedge (*Lepidosperma laterale*)  
 Wattle Mat-rush (*Lomandra filiformis*)  
 Spiny-headed Mat-rush (*Lomandra longifolia*)  
 Weeping Grass (*Microlaena stipoides* var. *stipoides*)  
 Thyme Spurge (*Phyllanthus hirtellus*)  
 Common Rice-flower (*Pimelea humilis*)

Common Tussock-grass (*Poa labillardierei*)  
 Grey Tussock-grass (*Poa sieberiana*)  
 Sea Berry Saltbush (*Rhagodia candolleana*)\*  
 Kangaroo Grass (*Themeda triandra*)  
 Yellow Rush-lily (*Tricoryne elatior*)  
 Sprawling Bluebell (*Wahlenbergia gracilis*)

How many plants per hectare for revegetation	Minimum no of species
Trees: 155	4
Small trees & large shrubs: 150	3
Medium Shrubs: 800	6
Small Shrubs: 500	3
Groundcovers (LTG): 1000	2

#Trees occurring more frequently closer to the coast e.g. Lower Tambo and Tambo Bluff, Paynesville, Lakes Entrance

**EVC 169-01: DRY VALLEY FOREST – RIVER FLAT**

Occurring on lower slopes and river flats above major rivers such as the Dargo, Mitchell, Nicholson, Wonagatta and Tambo. Soils are fertile, silty, clays and clay loams. Occupies drier sites where water flow is temporary and drawn from the water table rather than from a stream. Natural remnants are usually weed-invaded as most of the area surrounding the river flats has been cleared for agriculture. The canopy cover is dominated by a mixture of eucalypts with a diverse understorey with plants from drier and wetter sites occurring. The overstorey is open and tall and a variety of eucalypts may be present though no single species dominates. Common species in moist sites include Narrow-leaf Peppermint *Eucalyptus radiata* and Manna Gum *Eucalyptus viminalis*. In drier sites Yellow Box *Eucalyptus melliodora*, Broad-leaved Peppermint *Eucalyptus dives*, Red Stringybark *Eucalyptus macrorhyncha*, Apple-topped Box *Eucalyptus angophoroides* and Apple Box *Eucalyptus bridgesiana* can occur. Shrubs line the stream bank and are typical of riverine environments.

**Trees**

- Kurrajong (*Brachychiton populneus* ssp. *populneus*) \*
- Apple-topped Box (*Eucalyptus angophoroides*) \*
- Blue Box or Green Box (*Eucalyptus baueriana*) #
- Apple Box or But But (*Eucalyptus bridgesiana*) \*
- Gippsland Peppermint (*Eucalyptus radiata*)
- Broad-leaved Peppermint (*Eucalyptus dives*) \*
- Red Stringybark (*Eucalyptus macrorhyncha*) \*
- Yellow Box (*Eucalyptus melliodora*) \*
- Manna Gum (*Eucalyptus viminalis*)

**Small trees and large shrubs > 5 m**

- Silver Wattle (*Acacia dealbata*)
- Black Wattle (*Acacia mearnsii*)
- Blackwood (*Acacia melanoxylon*)
- Cherry Ballart (*Exocarpos cupressiformis*)
- Hazel Pomaderris (*Pomaderris aspera*)

**Shrubs 1 – 5 m**

- Sweet Bursaria (*Bursaria spinosa*)
- Common Cassinia (*Cassinia aculeata*)
- Shiny Cassinia (*Cassinia longifolia*)
- Prickly Currant-bush (*Coprosma quadrifida*)
- Austral Indigo (*Indigofera australis*) \*
- Burgan (*Kunzea ericoides*)
- River Lomatia (*Lomatia myricoides*)
- Tree Violet (*Meliclytus dentatus*)
- Swamp Paperbark (*Melaleuca ericifolia*)

- Snowy Daisy-bush (*Olearia lirata*)
- Tree Everlasting (*Ozothamnus ferrugineus*)
- Victorian Christmas Bush (*Prostanthera lasianthos*)

**Small Shrubs < 1 m**

- Grey Guinea Flower (*Hibbertia obtusifolia*) \*
- Small-leaf Bramble (*Rubus parvifolius*)

**Groundcovers and climbers**

- Bidgee-widgee (*Acaena novae-zelandiae*)
- Stiped Wallaby-grass (*Austrodanthonia racemosa* var. *racemosa*)
- Tall Sedge (*Carex appressa*)
- Short-stem Sedge (*Carex breviculmis*)
- Mountain Clematis (*Clematis aristata*)
- Small-leaved Clematis (*Clematis microphylla*)
- Long-hair Plume-grass (*Dichelachne crinita*)
- Short-hair Plume-grass (*Dichelachne micrantha*)
- Kidney Weed (*Dichondra repens*)
- Common Hedgehog-grass (*Echinopogon ovatus*)
- Common Wheat-grass (*Elymus scaber* var. *scaber*)
- Wombat Berry (*Eustrephus latifolius*)
- Thatch Saw-sedge (*Gahnia radula*)
- Cinquefoil Geranium (*Geranium potentilloides*)
- Twining Glycine (*Glycine clandestina*)
- Wattle Mat-rush (*Lomandra filiformis*)
- Spiny-headed Mat-rush (*Lomandra longifolia*)

- Weeping Grass (*Microlaena stipoides* var. *stipoides*)
- Wonga Vine (*Pandorea pandorana*)
- Tussock-grasses (*Poa* spp)
- Austral Sarsaparilla (*Smilax australis*)

How many plants per hectare for revegetation	Minimum number of species
Trees: 100	2
Small trees & large shrubs: 150	2
Medium Shrubs: 1200	4
Small Shrubs: 100	1
Groundcovers (LTG): 500	1

\* Plants occurring on drier sites, #Common east of Bairnsdale

**EVC 169-02: DRY VALLEY FOREST – MINOR GULLY**

Occurs on clay loams and sandy clay soils on mid-slopes (100 – 700 metre elevation range) and gullies above major rivers. The tree layer consists of species normally found in both wet and dry situations. Mountain Grey Gum *Eucalyptus cypellocarpa*, Apple-top Box *Eucalyptus angophoroides*, White Stringybark *Eucalyptus globoidea*, Broad-leaved Stringybark *Eucalyptus dives* and Red Box *Eucalyptus polyanthemos* form a tall, open overstorey. The shrub layer, like the overstorey is a mixture of plants from drier and wetter sites. Shiny Cassinia *Cassinia longifolia*, Burgan *Kunzea ericoides*, Hazel Pomaderris *Pomaderris aspera*, Snow Daisy-bush *Olearia lirata* and Common Cassinia *Cassinia aculeata* are the most common species. The ground layer is distinctive with a diversity of microhabitats within a site due to the temporary nature of the water flows. Climbers are also an important component of this EVC. The Mountain Clematis *Clematis aristata* and Common Apple-berry *Billardiera scandens* are commonly present.

**Trees**

- Apple-topped Box (*Eucalyptus angophoroides*)
- Apple Box or But But (*Eucalyptus bridgesiana*)
- Mountain Grey Gum (*Eucalyptus cypellocarpa*)\*
- Broad-leaved Peppermint (*Eucalyptus dives*)
- White Stringybark (*Eucalyptus globoidea*)
- Red Stringybark (*Eucalyptus macrorhyncha*)
- Yellow Box (*Eucalyptus melliodora*)
- Red Box (*Eucalyptus polyanthemos* ssp. *vestita*)
- Manna Gum (*Eucalyptus viminalis*)\*

**Small Trees & large shrubs > 5 m**

- Silver Wattle (*Acacia dealbata*)
- Black Wattle (*Acacia mearnsii*)
- Blackwood (*Acacia melanoxylon*)\*

**Shrubs 1 – 5 m**

- Tall Baeckea (*Baeckea virgata*)
- Sweet Bursaria (*Bursaria spinosa*)
- Shiny Cassinia (*Cassinia longifolia*)
- Common Cassinia (*C. aculeata*)
- Prickly Currant-bush (*Coprosma quadrifida*)\*
- Hop Goodenia (*Goodenia ovata*)\*
- Tree Hakea (*Hakea eriantha*)
- Tree Violet (*Melicytus dentatus*)\*
- Burgan (*Kunzea ericoides*)

- Snow Daisy-bush (*Olearia lirata lasianthos*)\*
- Bootlace Bush (*Pimelea axiflora*)
- Victorian Christmas Bush (*Prostanthera*)
- Hazel Pomaderris (*Pomaderris aspera*)
- Stinkwood (*Zieria arborescens*)

**Small Shrubs < 1 m**

- Common Correa (*Correa reflexa*)
- Grey Guinea Flower (*Hibbertia obtusifolia*)
- Forest Wire-grass (*Tetrarrhena juncea*)

**Groundcovers and climbers**

- Stiped Wallaby-grass (*Austrodanthonia racemosa* var. *racemosa*)
- Slender Wallaby-grass (*Austrodanthonia penicillata*)
- Common Apple-berry (*Billardiera scandens*)
- Mountain Clematis (*Clematis aristata*)
- Small-leaved Clematis (*C. microphylla*)
- Love Creeper (*Comesperma volubile*)
- Tasman Flax-lily (*Dianella tasmanica*)
- Common Hedgehog-grass (*Echinopogon ovatus*)
- Thatch Saw-sedge (*Gahnia radula*)
- Twining Glycine (*Glycine clandestina*)
- Variable Sword Sedge (*Lepidosperma laterale*)
- Spiny-headed Mat-rush (*Lomandra longifolia*)
- Milk Vine (*Marsdenia rostrate*)

- Weeping Grass (*Microlaena stipoides* var. *stipoides*)
- Long-leaf Wallaby-grass (*Notodanthonia longifolia*)
- Wonga Vine (*Pandorea pandorana*)
- Tussock-grasses (*Poa* spp)
- Fireweed Groundsel (*Senecio linearifolius*)
- Blue Nodding Lily (*Stypandra glauca*)
- Kangaroo Grass (*Themeda australis*)
- Ivy-leaf Violet (*Viola hederacea*)
- Small Grass-tree (*Xanthorrhoea minor* ssp. *lutea*)

How many plants per hectare for revegetation	Minimum number of species
Trees: 100	2
Small trees & large shrubs: 150	2
Medium Shrubs: 1200	4
Small Shrubs: 100	1
Groundcovers (LTG): 500	1

\* Moist sites

## EVC 175: GRASSY WOODLAND - DARGO

Lower slopes on rolling hill in the Dargo Valley. Soils are well-drained sandy-gravelly loams. Elevation is in the range of 200 – 400 metres. It is an open woodland with the overstorey dominated by Yellow Box *Eucalyptus melliodora*, Apple Box *Eucalyptus bridgesiana*, Candlebark *Eucalyptus rubida* and occasionally Snow Gum *Eucalyptus pauciflora*. Grasses and forbs form a dense ground layer.

### Trees

Apple Box or But But (*Eucalyptus bridgesiana*)  
 Red Stringybark (*Eucalyptus macrorhyncha*)  
 Yellow Box (*Eucalyptus melliodora*)  
 Snow Gum (*Eucalyptus pauciflora*)\*  
 Red Box (*Eucalyptus polyanthemos*)  
 Candlebark (*Eucalyptus rubida*)

### Small trees & large shrubs > 5 m

Large-leaf Hickory Wattle (*Acacia falciformis*)  
 Lightwood (*Acacia implexa*)  
 Black Wattle (*Acacia mearnsii*)  
 Blackwood (*Acacia melanoxylon*)  
 Cherry Ballart (*Exocarpos cupressiformis*)

### Shrubs 1 – 5 m

Hedge Wattle (*Acacia paradoxa*)  
 Sweet Bursaria (*Bursaria spinosa*)  
 Shiny Cassinia (*Cassinia longifolia*)  
 Bitter Cryptandra (*Cryptandra amara*)  
 Sticky Hop-bush (*Dodonea viscosa*)  
 Austral Indigo (*Indigofera australis*)  
 Burgan (*Kunzea ericoides*)  
 Tree Violet (*Melicytus dentatus*)  
 Narrow-leaf Pomaderris (*Pomaderris angustifolia*)

### Groundcovers & climbers

Bristly Wallaby-grass (*Austrodanthonia setacea* var. *setacea*)  
 Rough Spear-grass (*Austrostipa scabra*)  
 Clustered Everlasting (*Chrysocephalum semipapposum*)  
 Small-leaved Clematis (*Clematis microphylla* var. *microphylla*)  
 Austral Bear's-ears (*Cymbonotus preissianus*)  
 Nodding Saltbush (*Einadia nutans* ssp. *nutans*)  
 Common Wheat-grass (*Elymus scaber* var. *scaber*)  
 Twining Glycine (*Glycine clandestina*)  
 Clover Glycine (*Glycine latrobeana*)  
 Weeping Grass (*Microlaena stipoides* var. *stipoides*)  
 Grey Tussock-grass (*Poa sieberiana*)  
 Kangaroo Grass (*Themeda triandra*)  
 Yellow Rush-lily (*Tricoryne elatior*) L  
 Sprawling Bluebell (*Wahlenbergia gracilis*)

How many plants per hectare for revegetation	Minimum number of species
Trees: 50	4
Small trees & large shrubs: 100	3
Medium Shrubs: 600	3
Groundcovers (LTG): 500	1



**EVG 177: VALLEY SLOPES DRY FOREST**

This EVC occurs on steep, eroding slopes in dry country above major rivers such as the Mitchell, Dargo and Wonnangatta. Elevation is between 100 – 500 metres and the annual rainfall approximately 700 – 1000 mm a year. Soils are skeletal though fertile and well-drained, with occasional rock outcropping which continuously erodes and falls into the river where it undercuts steep slopes. The dominant eucalypts are Yellow Box *Eucalyptus melliodora*, Red Box *Eucalyptus polyanthemos* and River Peppermint *Eucalyptus elata*. Lightwood *Acacia implexa* is lightly scattered as a small tree to large shrub and Black Wattle *Acacia mearnsii* may form an open forest. This EVC carries a mixture of wet and dry species due to the closeness of the river and therefore the understorey consists of a mix of species common to both drier and wetter sites that do not usually occur together.

**Trees**

- River Peppermint (*Eucalyptus elata*)
- Yellow Box (*Eucalyptus melliodora*)
- Red Box (*Eucalyptus polyanthemos*)

**Small Trees & large shrubs**

- Lightwood (*Acacia implexa*)
- Black Wattle (*Acacia mearnsii*)
- Cherry Ballart (*Exocarpos cupressiformis*)

**Shrubs 1 – 5 m**

- Hairy Bursaria (*Bursaria lasiophylla*)
- Sweet Bursaria (*Bursaria spinosa*)
- Shiny Cassinia (*Cassinia longifolia*)
- Three-nerved Cassinia (*Cassinia trinerva*)
- Prickly Currant-bush (*Coprosma quadrifida*)
- Austral Indigo (*Indigofera australis*)
- Tree Violet (*Melicytus dentatus*)
- Rock Wax-flower (*Philothea trachyphylla*)
- Shrubby Spurge (*Phyllanthus gunnii*)

**Small Shrubs < 1 m**

- Saloop Saltbush (*Einadia hastate*)

**Groundcovers and climbers**

- Necklace Fern (*Asplenium flabellifolium*)
- Rock Fern (*Cheilanthes austrotenuifolia*)
- Skeleton Vine (*Clematis microphylla* var. *leptophylla*)
- Southern Tick-trefoil (*Desmodium gunnii*)
- Kidney Weed (*Dichondra repens*)
- Common Hedgehog-grass (*Echinopogon ovatus*)
- Twining Glycine (*Glycine clandestina*)
- Variable Sword-sedge (*Lepidosperma laterale*)
- Spiny-headed Mat-rush (*Lomandra longifolia*)
- Milk Vine (*Marsdenia rostrata*)
- Weeping Grass (*Microlaena stipoides* var. *stipoides*)
- Long-leaf Wallaby-grass (*Notodanthonia longifolia*)
- Wonga Vine (*Pandorea pandorana*)
- Cockspur Flower (*Plectranthus parviflorus*)
- Mother Shield-fern (*Polystichum proliferum*)
- Grey Tussock-grass (*Poa sieberiana* var. *sieberiana*)
- Forest Starwort (*Stellaria flaccida*)
- Prickly Starwort (*Stellaria pungens*)

How many plants per hectare for revegetation	Minimum number of species
Trees: 100	3
Small trees & large shrubs: 150	2
Medium Shrubs: 800	5
Groundcovers (LTG): 500	1

**EVC 316: SHRUBBY DAMP FOREST**

Grows in gullies and on protected slopes on skeletal but fertile soils. The overstorey is dominated by White Stringybark *Eucalyptus globoidea* and Mountain Grey Gum *E. cypellocarpa*. Dense medium to large shrubs characteristic of both drier and damper environments dominate the vegetation. The ground layer has a sparse cover of grasses and herbs, and commonly includes Austral Bracken.

**Trees**

- Mountain Grey-gum (*Eucalyptus cypellocarpa*)
- White Stringybark (*Eucalyptus globoidea*)\*
- Messmate Stringybark (*Eucalyptus obliqua*)
- Red Box (*Eucalyptus polyanthemos*)\*
- Silvertop Ash (*Eucalyptus sieberi*)
- Gippsland Peppermint (*Eucalyptus croajingolensis*)
- Broad-leaved Peppermint (*Eucalyptus dives*)
- Narrow-leaved Peppermint (*Eucalyptus radiata*)
- Red Stringybark (*Eucalyptus macrorhyncha*)

**Small Trees & large shrubs > 5 m**

- Blanket-leaf (*Bedfordia arborescen*)
- Silver Wattle (*Acacia dealbata*)
- Pale Hickory Wattle (*Acacia. falciformis*)
- Cherry Ballart (*Exocarpos cupressiformis*\*)
- Hazel Pomaderris (*Pomaderris aspera*)

**Shrubs 1 – 5 m**

- Shiny Cassinia (*Cassinia longifolia*)
- Prickly Currant-bush (*Coprosma quadrifida*)
- Gorse Bitter-pea (*Daviesia ulicifolia*)\*
- Common Heath (*Epacris impressa*)\*
- Hop Goodenia (*Goodenia ovata*)
- Musk Daisy-bush (*Olearia argophylla*)
- Snowy Daisy-bush (*Olearia lirata*)
- Bootlace Bush (*Pimelea axiflora*)

**Small Shrubs < 1 m**

- Grey Guinea-flower (*Hibbertia obtusifolia*)\*
- Common Bottle-daisy (*Lagenophora stipitata*)
- Forest Wire-grass (*Tetrarrhena juncea*)

**Groundcovers and climbers**

- Common Apple-berry (*Billardiera scandens*)
- Common Ground-fern (*Calochlaena dubia*)
- Coarse Dodder-laurel (*Cassytha melantha*)
- Mountain Clematis (*Clematis aristata*)
- Love Creeper (*Comesperma volubile*)
- Reed Bent-grass (*Deyeuxia quadriseta*)
- Tasman Flax-lily (*Dianella tasmanica*)
- Thatch Saw-sedge (*Gahnia radula*)
- Common Raspwort (*Gonocarpus tetragynus*)
- Purple Coral-pea (*Hardenbergia violacea*)
- Variable Sword-sedge (*Lepidosperma laterale*)
- Wattle Mat-rush (*Lomandra filiformis*)
- Spiny-headed Mat-rush (*Lomandra longifolia*)
- Weeping Grass (*Microlaena stipoides* var. *stipoides*)
- Tussock Grass (*Poa australis* spp. *agg*)
- Mother Shield-fern (*Polystichum proliferum*)
- Small Poranthera (*Poranthera microphylla*)
- Fireweed Groundsel (*Senecio linearifolius*)
- Grass Trigger-plant (*Stylidium graminifolium*)
- Nodding Blue-lily (*Stypantra glauca*)
- Cotton Fireweed (*Senecio quadridentatus*)
- Ivy-leaf Violet (*Viola hederacea*)

How many plants per hectare for revegetation	Minimum number of species
Trees: 200	2
Small trees & large shrubs: 200	3
Medium Shrubs: 1200	8
Small Shrubs: 500	2
Groundcovers (LTG): 1000	2

\*Dry Sites

### EVC 334: BILLABONG WETLAND AGGREGATE

Billabong wetland is made up of many EVC's associated with lagoons/billabongs on flood-plains. A permanent to semi-permanent wetlands, dominated by sedges and/or aquatic herbs. Occurs on major rivers such as the Mitchell and Tambo on the floodplains and may be deep, permanent water or shallow, seasonal water. Identifiable components of Billabong Wetland Aggregate include Aquatic Herbland EVC 653, Aquatic Sedgeland EVC 308, Tall Marsh EVC 821, Dwarf Floating Aquatic Herbland EVC 949 and Floodway Pond Herbland EVC 810. For more details on these EVCs go to [www.dse.vic.gov.au](http://www.dse.vic.gov.au) search benchmarks.

#### Wetland plants

Pacific Azolla (*Azolla filiculoides*)  
 Salt Club-sedge (*Bolboschoenus caldwellii*)  
 Red Common Duckweed (*Lemna disperma*)  
 Creeping Monkey-flower (*Mimulus repens*)  
 Water-milfoil (*Myriophyllum verrucosum*)  
 Common Reed (*Phragmites australis*)  
 Fennel Pondweed (*Potamogeton pectinatus*)  
 Broad-leaf Cumbungi (*Typha orientalis*)  
 Water Ribbons (*Triglochin procerum*)  
 Tiny Duckweed (*Wolffia australiana*)

### EVC 863: FLOODPLAIN REEDBED

Occurs on swamps on river plains, often at the lower reaches of the floodplain. Soils are alluvium with floodplain and low level terrace deposits consisting of silt, clay and peat. The vegetation is open grassland to 2 – 3 metres tall, dominated by Common Reed *Phragmites australis*. Small aquatic and semi-aquatic species occur amongst the reeds. Swamp Paperbark *Melauca ericfolia* often occurs around the margins of these reed beds.

#### Shrubs and reeds on the margins

Swamp Paperbark (*Melauca ericfolia*)  
 Common Reed (*Phragmites australis*)  
 Kangaroo Apple (*Solanum aviculare*)

#### Understorey wetland plants

Large Bindweed (*Calystegia sepium*)  
 Australian Gipsywort (*Lycopus australis*)  
 Creeping Monkey-flower (*Mimulus repens*)  
 Upright Water-milfoil (*Myriophyllum crispatum*)  
 Water Ribbons (*Triglochin procerum*)  
 Scrub Nettle (*Urtica incisa*)

**EVC 877: LOWLAND HERB-RICH FOREST**

Generally occurs in gullies and along lower slopes close to minor drainage lines. Soils are moderately-fertile, colluvial loams. Open Eucalypt forest to 20 m tall and a shrub layer which is variable in density and low in diversity. The ground layer is dominated by a dense cover of grasses and a high diversity of rushes, sedges, lilies and herbs.

**Trees**

- Apple-topped Box (*Eucalyptus angophoroides*)
- Mountain Grey Gum (*Eucalyptus cypellocarpa*)
- White Stringybark (*Eucalyptus globoidea*)
- Red Box (*Eucalyptus polyanthemus*)
- Red Stringybark (*Eucalyptus macrorhyncha*)

**Small Trees & large shrubs > 5 m**

- Black Wattle (*Acacia mearnsii*)
- Blackwood (*Acacia melanoxylon*)

**Shrubs 1 – 5 m**

- Wallaby-bush (*Beyeria lasiocarpa*)
- Common Cassinia (*Cassinia aculeata*)
- Shiny Cassinia (*Cassinia longifolia*)
- Austral Indigo (*Indigofera australis*)
- Burgan (*Kunzea ericoides*)
- Rough-barked Honey-myrtle (*Melaleuca parvistaminea*\*)
- Snowy Daisy-bush (*Olearia lirata*)
- Sandfly Zieria (*Zieria smithii*)

**Small Shrubs < 1 m**

- Common Rice-flower (*Pimelea humilis*)
- Common Bottle-daisy (*Lagenophora stipitata*)
- Grey Guinea Flower (*Hibbertia obtusifolia*)

**Groundcovers & climbers**

- Wallaby-grasses (*Austrodanthonia* spp.)
- Spear-grasses (*Austrostipa* spp.)
- Common Apple-berry (*Billardiera scandens*)
- Creeping Bossiaea (*Bossiaea prostrata*)
- Paroo Lily (*Dianella caerulea* var. *caerulea*)
- Short-stem Sedge (*Carex breviculmis*)
- Love Creeper (*Comesperma volubile*)
- Thatch Saw-sedge (*Gahnia radula*)
- Variable Glycine (*Glycine tabacina*)
- Button Everlasting (*Helichrysum scorpioides*)
- Common Hovea (*Hovea linearis*)
- Silvertop Wallaby-grass (*Joycea pallida*)
- Wattle Mat-rush (*Lomandra filiformis*)
- Spiny-headed Mat-rush (*Lomandra longifolia*)
- Weeping Grass (*Microlaena stipoides* var. *stipoides*)
- Grey Tussock-grass (*Poa sieberiana*)
- Small Poranthera (*Poranthera microphylla*)
- Slender Fireweed (*Senecio tenuiflorus*)
- Nodding Blue-lily (*Stypandra glauca*)
- Ivy-leaf Violet (*Viola hederacea*)
- Showy Violet (*Viola betonicifolia*)
- Trailing Speedwell (*Veronica plebeian*)
- Yellow Rush-lily (*Tricoryne elatior*)
- Tall Bluebell (*Wahlenbergia stricta*)

How many plants per hectare for revegetation	Minimum number of species
Trees: 150	3
Small trees & large shrubs: 100	3
Medium Shrubs: 800	4
Small Shrubs: 100	1
Groundcovers (LTG): 1500	1



