

# Surf Coast Shire Roadside Management Prescriptions

## The Process:

During 1996 roadsides in Surf Coast Shire were assessed using the RCAC method by Peter Moulton, Mark Trengove and Geoff Clark. The report (February 1997) contains comprehensive information on the condition of roadsides in the shire at that time and species lists for each section of roadside. In late 2003, this data was entered into the RVRSA database (Remnant Vegetation Rapid Site Assessment) to enable incorporation into the FIS (Victorian Flora Information System). The data was also analysed to determine the most appropriate EVC classification for each roadside segment. This was done through a combination of comparison with the EVC 1750 mapping layer, EVC Master species lists (prepared for the CCMA Biogeographica Database), ground truthing and through the use of a number of statistical tools. A new MapInfo layer was prepared based on the original survey data and the revised EVC information.

Draft Roadside Management Prescriptions were then prepared based on the best available information on the management of each vegetation type, current management practices and the Code of Practice for roadworks developed by the Shire.

Roadside Management Prescriptions and associated documents are presented in Acrobat (pdf) format. An interactive version (RVRSA Access Database) is also provided such that RMPs can be modified or improved over time as more information becomes available or the results of implementing the RMPs necessitate a change in the management approach to ensure the objectives are best achieved.

## The objectives of the Roadside Management Prescriptions:

The RMPs adopt the maxim 'Protect, Enhance and Restore' in line with the Corangamite Native Vegetation Plan. 1/ Ensure High Conservation Value roadside sections retain this rating. 2/ Medium Conservation Value roadside sections improve in value over time through careful management to become HCV roadsides. 3/ Minimise the impact of Low Conservation Value roadside sections on higher conservation value roadsides through weed control, revegetation and revised management practices. In addition, the RMPs should ensure all Australian and Victorian rare or threatened species (AROTs, VROTs) and regionally significant species are adequately protected.

## How to use the Roadside Management Prescriptions:

- 1/ Use the Roadside Index or MapInfo Roadside Conservation layer to determine the relevant RMP (a combination of EVC number and roadside condition - Low, Medium or High).
- 2/ The chart describes the management techniques that are recommended for a roadside of that EVC and condition. Consider the additional qualifying notes given beside each technique
- 3/ Look at the calendar to determine the timing of techniques to achieve best management practice.
- 4/ Consult the Environmental Officer for any further information or interpretation.
- 5/ Incorporate activities into the works progra
- 6/ Any written observations, additional species records and site photographs can be incorporated into the database. Forward all information to the EO for inclusion.

*Note 1: In the field the CCMA EVC Key can also be used to determine the correct EVC and the RCAC Roadside Assessment Guide to determine the status of the section. In this way follow up survey can be used to find the current conservation status of segments.*



## Glossary - Explanation of Abbreviations Terms and Acronyms Used in RMPs:

<b>SRV</b>	Significant Roadside Vegetation
<b>EVC Group</b>	Similar EVCs can be grouped together. There are 21 groups comprising variously of grassland, woodland, forest, coastal, stream and wetland EVCs
<b>RMP</b>	RMP = Roadside Management Prescription. Applies to a section of roadside. A length of roadside (one side) of a particular EVC and condition (quality).
<b>EVC</b>	Ecological Vegetation Class. A group of plants that occur together in areas with similar soils, rainfall, aspect and other physical conditions. EVCs have been mapped and modeled across the region. Each EVC has a description and an identification number (1-999). For more information please consult 'Biogeographica'.
<b>RMP Number</b>	An identification number comprising of the EVC Identification number plus the condition (roadside conservation value) of the EVC (high, medium or low) e.g. 48H is Heathy Woodland of High conservation value.
<b>Conservation Status</b>	Each EVC has a conservation status based on the extent that remains. Categories are (in order of significance) Extinct, Endangered, Rare, Vulnerable, Depleted and Least Concern.
<b>HCV</b>	High Conservation Value roadside section (as determined by roadside survey using RCAC scoring method).
<b>LCV</b>	Low Conservation Value
<b>MCV</b>	Medium Conservation Value
<b>RCAC</b>	Roadside Conservation Advisory Committee
<b>AROT</b>	Australian Rare or Threatened Species
<b>VROT</b>	Victorian Rare or Threatened Species
<b>RegSig</b>	Regionally Significant Species (based on a set of 5 criteria).
<b>Exposure Regime</b>	Each EVC has been ascribed a typical exposure regime as part of the Biogeographica Database.
<b>Moisture Regime</b>	Each EVC has been ascribed a typical moisture regime.
<b>Salinity regime</b>	Each EVC has been ascribed a typical salinity regime.
<b>SLU</b>	Soil Landform Unit
<b>GMU3</b>	Geomorphic Mapping Unit
<b>CCMA</b>	Corangamite Catchment Management Authority.
<b>BBS</b>	BEN Biodiversity Services Pty Ltd
<b>Structural Weed</b>	Plants that threaten or have modified the inherent structure of the EVC (which in turn alters habitat type and/or value)

**Low Conservation Roadsides along the coast****1 Coastal Dune Scrub/Coastal Tussock Grassland Mosaic Conservation Status: LOW****EVC Notes:** Degraded sites now dominated by introduced salt-tolerant grasses and coastal weeds**SalinityRegime:** Nonsaline **EVCGroup:** 1 Coastal Scrubs Grasslands & Woodlands**MoistureRegime:** Dry - Moist **EVCType:** mosaic**ExposureRegime:** Maritime exposure (high)**Structural Weeds:** Hare's-tail Grass, Marram Grass, Coast Wattle, Coast Tea-tree, Bridal Creeper, Boneseed, Mirror Bush, Sand Rocket, Galenia**Management Outline:** Low Conservation sites require a revegetation program where they are unstable (i.e. a good cover of vegetation is not present)**Comments:**

Management Techniques:	Use:	Comments:
<b>Weed control</b>	YES	Spot spray, cut and paint or remove serious weeds or any emerging weeds (i.e. yet to establish).
<b>Revegetation</b>	YES	Revegetate any disturbed or eroding areas to protect the soil.
<b>Erosion/run-off control</b>	YES	Road grading or management should attempt to disperse rather than concentrate water (correct road camber, run-off points, table and mitre drains). Active eroding areas should be stabilised and revegetated.
<b>Removal of Exotic Vegetation</b>	YES	Remove any garden escapees or native plants outside their natural range (e.g. Coast Tea-tree may invade areas following disturbance)
<b>Seed Collection</b>	YES	Regulate to protect vegetation from over-collection
<b>Burning</b>	NO	A burn should only be considered to assist natural regeneration. Burning must protect existing trees and shrubs. Consider the impact of any proposed burn on erosion and the spread of weeds.
<b>Grazing</b>	NO	
<b>Cropping</b>	NO	
<b>Fencing</b>	NO	
<b>Signage</b>	NO	
<b>Salinity Control</b>	NO	
<b>Rare plant specific requirements</b>	NO	
<b>Graded or Ploughed Firebreaks</b>	NO	
<b>Blanket spraying</b>	NO	
<b>Slashing</b>	?	Slashing of roadsides may be considered on sections dominated by introduced grasses to reduce fire risk. No slashing where Serrated Tussock occurs after seed set (slash prior to December). Do not remove cut material from sites containing weed seed. Clean all equipment.
<b>Natural regeneration</b>	?	Coastal species may regenerate once disturbance is removed (e.g. trampling, tracks) and some weed control is carried out.

**EVC Description**

**1** Coastal Dune Scrub occurs in a mosaic with Coastal Tussock Grassland. These two EVCs also have floristic affinities.

Coastal Dune Scrub/Coastal Tussock Grassland Mosaic occurs on exposed foredunes or on more protected secondary dunes extending from west of Port Campbell to the Bellarine Peninsula. Wind-blown calcareous sands form the dune system behind the rocky headland. There are two forms of this mosaic:-

The first is predominantly treeless, with the occasional Swamp Gum or Messmate. The shrub layer may be dense or patchy and is characterized by Coast Beard-heath with Coast Daisy-bush, Seaberry Saltbush, the rare Coast Ballart, the rare Velvet Correa and the scrambling Bower Spinach. The dominant lifeforms are tussock forming graminoids and forbs. Blue Tussock-grass and Knobby Club-sedge dominate this layer, with Coast Sword-sedge and Black-anther Flax-lily. often interspersed. On the fore dune the tussock-dominated grassland is often dominated by the introduced Marram Grass which replaces the native sand-binding grass Hairy Spinifex. Forbs are common and include Yellow Wood-sorrel, Bidgee-widgee, Coast Groundsel and Ivy-leaf Violet.

The second less diverse form grows on exposed fore dunes of the Bellarine Peninsula at Breamlea Spit. Coast Tea-tree is the dominant shrub with Coast Beard-heath, Coast Wattle, Cushion Bush and Seaberry Saltbush comprising the remaining shrub layer. The dominance of Coast Tea-tree is one of the main differences between the two forms. Forbs and grasses comprise a large percentage of the ground layer and include Coast Sow-thistle, Hairy Spinifex, Sea Celery, Bidgee-widgee, and Knobby Club-sedge. Both floristic alliances are easily disturbed due to the proximity to beaches and subsequently a large proportion of species present are weeds (e.g. Marram Grass, Branched Centaury, Pimpernel, Cat's Ear, Angled Pigface, Beach Rocket )

**Potential Threatening Processes:** clearing, inappropriate fire regimes, recreation, car park and road construction and maintenance, residential development, weed invasion

**GeneralisedStatus:** D Depleted

### This Management Prescription is currently applicable to the following Surf Coast Roadside Sections:

ROAD NAME	SECTION_ NO_ AND_ SIDE:	ORIGIN:	DISTANCE FROM ORIGIN:	SECTION LENGTH:	SLU:	GMU3:	LOCALITY:	DATE SURVEYED:
BELLS BEACH	6-R	BONES ROAD	1.8	0.317	158	6.2.2	BELLBRAE	28.10.96

### Calendar of potential roadside management activities:

1L

#### Winter

Revegetation Conduct a revegetation program on eroding or priority sites with local Landcare support (Autumn-Spring)

#### Spring

Weed control Arrange spot spraying of noxious and woody weeds

Revegetation Conduct a revegetation program on eroding or priority sites with local Landcare support (Autumn-Spring)

#### Summer

Weed control Arrange spot spraying of noxious and woody weeds

Seed Collection Coordinate collection in consultation with DSE and the Ballarat Region Seed Bank

#### Autumn

Revegetation Conduct a revegetation program on eroding or priority sites with local Landcare support (Autumn-Spring)

#### General

Erosion/run-off control Ensure all drain and roadworks meet a high standard. Run training activities

Removal of Exotic Vegetation Remove inappropriate trees and shrubs when labour is available

*Note 1: Revegetation work on roadsides. The Roadside Management Prescriptions adopt the maxim: 'Protect, Enhance and Restore'. Any revegetation works, whether planting or direct seeding should use indigenous species collected from local seed. Wherever possible seed should be collected from the revegetation site or close by from the same Ecological Vegetation Class.*

**Medium Conservation Roadsides along the coast****1 Coastal Dune Scrub/Coastal Tussock Grassland Mosaic Conservation Status: MEDIUM**

**EVC Notes:** Sites with a mix of Coastal remnant vegetation and introduced grasses and other weeds

**SalinityRegime:** Nonsaline **EVCGroup:** 1 Coastal Scrubs Grasslands & Woodlands

**MoistureRegime:** Dry - Moist **EVCType:** mosaic

**ExposureRegime:** Maritime exposure (high)

**Structural Weeds:** Hare's-tail Grass, Marram Grass, Coast Wattle, Coast Tea-tree, Bridal Creeper, Boneseed, Mirror Bush, Sand Rocket, Galenia

**Management Outline:** Focus management on the removal of serious weeds (ones that threaten the structure of the community) and the fencing of areas for restoration such that the roadside can achieve a HCV rating.

**Comments:**

Management Techniques:	Use:	Comments:
<b>Weed control</b>	YES	Spot spraying or hand removal (cut & paint) of woody weeds is recommended
<b>Natural regeneration</b>	YES	Coastal species will regenerate well once disturbance is removed (e.g. trampling, tracks)
<b>Removal of Exotic Vegetation</b>	YES	Remove any garden escapees or native plants outside their natural range (e.g. Coast tea-tree may invade areas following disturbance)
<b>Seed Collection</b>	YES	Regulate to protect vegetation from over-collection
<b>Burning</b>	NO	A burn should only be considered to assist natural regeneration. Burning must protect existing trees and shrubs. Consider the impact of any proposed burn on erosion and the spread of weeds.
<b>Slashing</b>	NO	Not applicable or required
<b>Grazing</b>	NO	
<b>Cropping</b>	NO	
<b>Salinity Control</b>	NO	
<b>Erosion/run-off control</b>	NO	
<b>Rare plant specific requirements</b>	NO	
<b>Graded or Ploughed Firebreaks</b>	NO	
<b>Blanket spraying</b>	NO	
<b>Fencing</b>	?	Fence any areas subject to soil disturbance to allow revegetation/natural regeneration
<b>Signage</b>	?	Signpost any areas closed for restoration
<b>Revegetation</b>	?	Revegetate any disturbed or eroding areas to protect the soil.

**EVC Description**

**1** Coastal Dune Scrub occurs in a mosaic with Coastal Tussock Grassland. These two EVCs also have floristic affinities.

Coastal Dune Scrub/Coastal Tussock Grassland Mosaic occurs on exposed foredunes or on more protected secondary dunes extending from west of Port Campbell to the Bellarine Peninsula. Wind-blown calcareous sands form the dune system behind the rocky headland. There are two forms of this mosaic:-

The first is predominantly treeless, with the occasional Swamp Gum or Messmate. The shrub layer may be dense or patchy and is characterized by Coast Beard-heath with Coast Daisy-bush, Seaberry Saltbush, the rare Coast Ballart, the rare Velvet Correa and the scrambling Bower Spinach. The dominant lifeforms are tussock forming graminoids and forbs. Blue Tussock-grass and Knobby Club-sedge dominate this layer,

with Coast Sword-sedge and Black-anther Flax-lily. often interspersed. On the fore dune the tussock-dominated grassland is often dominated by the introduced Marram Grass which replaces the native sand-binding grass Hairy Spinifex. Forbs are common and include Yellow Wood-sorrel, Bidgee-widgee, Coast Groundsel and Ivy-leaf Violet.

The second less diverse form grows on exposed fore dunes of the Bellarine Peninsula at Breamlea Spit. Coast Tea-tree is the dominant shrub with Coast Beard-heath, Coast Wattle, Cushion Bush and Seaberry Saltbush comprising the remaining shrub layer. The dominance of Coast Tea-tree is one of the main differences between the two forms. Forbs and grasses comprise a large percentage of the ground layer and include Coast Sow-thistle, Hairy Spinifex, Sea Celery, Bidgee-widgee, and Knobby Club-sedge. Both floristic alliances are easily disturbed due to the proximity to beaches and subsequently a large proportion of species present are weeds (e.g. Marram Grass, Branched Centaury, Pimpernel, Cat's Ear, Angled Pigface, Beach Rocket )

**Potential Threatening Processes:** clearing, inappropriate fire regimes, recreation, car park and road construction and maintenance, residential development, weed invasion

**GeneralisedStatus:** D Depleted

### This Management Prescription is currently applicable to the following Surf Coast Roadside Sections:

ROAD NAME	SECTION_ NO_AND_SIDE:	ORIGIN:	DISTANCE FROM ORIGIN:	SECTION LENGTH:	SLU:	GMU3:	LOCALITY:	DATE SURVEYED:
BELLS BEACH	6-L	BONES ROAD	1.8	0.317	158	6.2.2	BELLBRAE	27.10.96

### Calendar of potential roadside management activities:

1M

#### Spring

Weed control Arrange spot spraying of noxious and woody weeds

#### Summer

Weed control Arrange spot spraying of noxious and woody weeds

Seed Collection Coordinate collection in consultation with DSE and the Ballarat Region Seed Bank

#### General

Natural regeneration Allow time and protect areas from disturbance

Removal of Exotic Vegetation Remove inappropriate trees and shrubs when labour is available

*Note 1: Revegetation work on roadsides. The Roadside Management Prescriptions adopt the maxim: 'Protect, Enhance and Restore'. Any revegetation works, whether planting or direct seeding should use indigenous species collected from local seed. Wherever possible seed should be collected from the revegetation site or close by from the same Ecological Vegetation Class.*

**High Conservation Roadsides along the coast****1 Coastal Dune Scrub/Coastal Tussock Grassland Mosaic Conservation Status: HIGH****EVC Notes:** A mosaic of Dune Scrub and Coastal Tussock Grassland**SalinityRegime:** Nonsaline **EVCGroup:** 1 Coastal Scrubs Grasslands & Woodlands**MoistureRegime:** Dry - Moist **EVCType:** mosaic**ExposureRegime:** Maritime exposure (high)**Structural Weeds:** Hare's-tail Grass, Marram Grass, Coast Wattle, Coast Tea-tree, Bridal Creeper, Boneseed, Mirror Bush, Sand Rocket, Galenia**Management Outline:** Coastal plant communities are extremely vulnerable to soil disturbance. Removal of vegetation or damage caused by vehicle and human tracks may quickly result in the destabilisation of dunes. Management of this EVC involves the limiting of disturbances through fencing, designated paths, revegetation of disturbed areas. Coastal plants are extremely hardy and excellent at binding the soil. Natural regeneration is highly likely in areas where disturbance is removed.**Comments:** There has been much attention to the condition of the coastline in Surf Coast Shire over recent years. As a consequence the general condition has improved. Fencing, boardwalks and designated paths, revegetation and the control of particular weeds have been key factors leading to the improvement in condition.

Management Techniques:	Use:	Comments:
<b>Weed control</b>	YES	Spot spray, cut and paint or remove serious weeds or any emerging weeds (i.e. yet to establish)
<b>Fencing</b>	YES	Consider fencing any fragile remnants where it becomes apparent that a lack of a physical barrier to vehicles/grazing threatens the future of the community or rare plant
<b>Signage</b>	YES	Raise awareness of coastal vegetation through interpretive signage identifying values, key species, fauna associations and threats. Promote a respect for the coastal vegetation
<b>Natural regeneration</b>	YES	Coastal species will regenerate well once disturbance is removed (e.g. trampling, tracks)
<b>Removal of Exotic Vegetation</b>	YES	Remove any garden escapees or native plants outside their natural range (e.g. Coast tea-tree may invade areas following disturbance)
<b>Rare plant specific requirements</b>	YES	Consult the species list for the roadside. Rare, threatened or endangered plants are noted with a code. Seek advice regarding management required to protect and enhance the species. (DSE)
<b>Seed Collection</b>	YES	Regulate to protect vegetation from over-collection
<b>Burning</b>	NO	Naturally this EVC would have burnt infrequently.
<b>Slashing</b>	NO	Not applicable or required
<b>Grazing</b>	NO	
<b>Cropping</b>	NO	
<b>Salinity Control</b>	NO	
<b>Erosion/run-off control</b>	NO	
<b>Graded or Ploughed Firebreaks</b>	NO	
<b>Blanket spraying</b>	NO	
<b>Revegetation</b>	?	Revegetate any disturbed or eroding areas to protect the soil.

## EVC Description

- 1 Coastal Dune Scrub occurs in a mosaic with Coastal Tussock Grassland. These two EVCs also have floristic affinities.

Coastal Dune Scrub/Coastal Tussock Grassland Mosaic occurs on exposed foredunes or on more protected secondary dunes extending from west of Port Campbell to the Bellarine Peninsula. Wind-blown calcareous sands form the dune system behind the rocky headland. There are two forms of this mosaic:-

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The second less diverse form grows on exposed fore dunes of the Bellarine Peninsula at Breamlea Spit. Coast Tea-tree is the dominant shrub with Coast Beard-heath, Coast Wattle, Cushion Bush and Seaberry Saltbush comprising the remaining shrub layer. The dominance of Coast Tea-tree is one of the main differences between the two forms. Forbs and grasses comprise a large percentage of the ground layer and include Coast Sow-thistle, Hairy Spinifex, Sea Celery, Bidgee-widgee, and Knobby Club-sedge. Both floristic alliances are easily disturbed due to the proximity to beaches and subsequently a large proportion of species present are weeds (e.g. Marram Grass, Branched Centaury, Pimpernel, Cat's Ear, Angled Pigface, Beach Rocket )

**Potential Threatening Processes:** clearing, inappropriate fire regimes, recreation, car park and road construction and maintenance, residential development, weed invasion

**GeneralisedStatus:** D Depleted

**This Management Prescription is currently applicable to the following Surf Coast Roadside Sections:**

ROAD NAME	SECTION_ NO_AND_ SIDE:	ORIGIN:	DISTANCE FROM ORIGIN:	SECTION LENGTH:	SLU:	GMU3:	LOCALITY:	DATE SURVEYED:
BELLS BEACH	4-L	BONES ROAD	1.0	0.58	158	6.2.2	BELLBRAE	28.10.96
BELLS BEACH	4-R	BONES ROAD	1.0	0.58	89	6.2.2	BELLBRAE	28.10.96

**Calendar of potential roadside management activities:**

1H



**Spring**

Weed control	Arrange spot spraying of noxious and woody weeds
Rare plant specific requirements	Monitor populations of rare species each Spring and adjust management where necessary (in consultation with DSE)

**Summer**

Weed control	Arrange spot spraying of noxious and woody weeds
Seed Collection	Coordinate collection in consultation with DSE and the Ballarat Region Seed Bank

**General**

Fencing	Arrange fencing of any areas needing a physical barrier
Signage	Erect SRV and interpretation signage on HCV roadsides
Natural regeneration	Allow time and protect areas from disturbance
Removal of Exotic Vegetation	Remove inappropriate trees and shrubs when labour is available

*Note 1: Revegetation work on roadsides. The Roadside Management Prescriptions adopt the maxim: 'Protect, Enhance and Restore'. Any revegetation works, whether planting or direct seeding should use indigenous species collected from local seed. Wherever possible seed should be collected from the revegetation site or close by from the same Ecological Vegetation Class.*

## High Conservation roadsides containing Coastal Saltmarsh

### 9 Coastal Saltmarsh

**Conservation Status: HIGH**

**EVC Notes:** Coastal Saltmarsh is restricted in the Shire, being found only on one 2.6 km stretch of Blackgate Rd.

**SalinityRegime:** Saline (marine)

**EVCGroup:** 20 Salt-tolerant and/or succulent Shrublands

**MoistureRegime:** Moist - Flooded

**EVCType:** EVC

**ExposureRegime:** Maritime exposure (high)

**Structural Weeds:** Aster-weed, Common Sow-thistle, Sea Barley-grass, Hare's-tail Grass

**Management Outline:** Restrict soil disturbance. Active management is not normally necessarily in this EVC unless threats are identified. Soil disturbance from off-road vehicles is a potential threat and may need to be addressed

**Comments:** Coastal saltmarsh is generally reasonably intact although the margins grading to other EVCs may be dominated by Phalaris and other weed species. This EVC in Surf Coast Shire contains 14 rare plants, including Spiny Pepper-cress, which has AROT and VROT listings. The majority of weed species in Coastal Saltmarsh are found on the margins, especially where ground disturbance has occurred. Spiny Pepper-cress seed can be collected in the first half of January if required for revegetation

Management Techniques:	Use:	Comments:
<b>Weed control</b>	YES	Spot spray or remove any noxious weeds or inappropriate plants
<b>Signage</b>	YES	Signage of all high conservation roadsides is recommended to raise awareness and protect values from inadvertent damage
<b>Natural regeneration</b>	YES	Coastal species will regenerate well once disturbance is removed (e.g. trampling, tracks)
<b>Erosion/run-off control</b>	YES	Road grading or management should attempt to disperse rather than concentrate water (correct road camber, run-off points, table and mitre drains). Active eroding areas should be stabilised and revegetated
<b>Removal of Exotic Vegetation</b>	YES	Remove any garden escapees or native plants outside their natural range (e.g. Coast tea-tree may invade areas following disturbance)
<b>Rare plant specific requirements</b>	YES	Consult the species list for the roadside. Rare, threatened or endangered plants are noted with a code. Seek advice regarding management required to protect and enhance the species (DSE). Spiny Peppercress occurs amongst Poa Tussocks surrounding Coastal Saltmarsh. 14 rare plant species were recorded for this EVC during the roadside assessment. Spiny Peppercress (AROT & VROT) is the most significant of these. This and other rare plants in this EVC will exist and regenerate satisfactorily in the absence of threatening processes [see Lepidium Action Statement for more details].
<b>Burning</b>	NO	Naturally this EVC would have burnt infrequently.
<b>Slashing</b>	NO	Not applicable or required
<b>Grazing</b>	NO	
<b>Cropping</b>	NO	
<b>Revegetation</b>	NO	Will normally be necessary only after major ground disturbance
<b>Salinity Control</b>	NO	
<b>Graded or Ploughed Firebreaks</b>	NO	
<b>Blanket spraying</b>	NO	
<b>Seed Collection</b>	NO	Not generally required (little demand/natural regeneration)

<b>Fencing</b>	?	Consider fencing any fragile remnants where it becomes apparent that a lack of a physical barrier to vehicles/grazing threatens the future of the community or rare plant
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### This Management Prescription is currently applicable to the following Surf Coast Roadside Sections:

ROAD NAME	SECTION_ NO_AND_SIDE:	ORIGIN:	DISTANCE FROM ORIGIN:	SECTION LENGTH:	SLU:	GMU3:	LOCALITY:	DATE SURVEYED:
<b>BLACKGATE</b>	1-L	BREAMLEA ROAD	0	0.26	171	6.2.4	BREAMLEA	11.10.96
<b>BLACKGATE</b>	1-R	BREAMLEA ROAD	0	0.26	202	6.2.5	BREAMLEA	11.10.96

### The following Surf Coast Roadside Sections contain listed plant species in this EVC:

<b><i>Atriplex paludosa ssp. paludosa</i></b>	<b>Marsh Saltbush</b>	<b>AROTS:</b>	<b>VROTS: r</b>
<b>RD_NAME:</b>		<b>SECTION_NO_AND_SIDE:</b>	
BLACKGATE		1-R	
BLACKGATE		1-L	
<b><i>Lepidium aschersonii</i></b>	<b>Spiny Peppergrass</b>	<b>AROTS: V</b>	<b>VROTS: e</b>
<b>RD_NAME:</b>		<b>SECTION_NO_AND_SIDE:</b>	
BLACKGATE		1-R	
BLACKGATE		1-L	

### Calendar of potential roadside management activities:

9H

#### Spring

Weed control	Arrange spot spraying of noxious and woody weeds
Rare plant specific requirements	Monitor populations of rare species each Spring and adjust management where necessary (in consultation with DSE)

#### Summer

Weed control	Arrange spot spraying of noxious and woody weeds
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#### General

Signage	Erect SRV and interpretation signage on HCV roadsides
Natural regeneration	Allow time and protect areas from disturbance
Erosion/run-off control	Ensure all drain and roadworks meet a high standard. Run training activities
Removal of Exotic Vegetation	Remove inappropriate trees and shrubs when labour is available

*Note 1: Revegetation work on roadsides. The Roadside Management Prescriptions adopt the maxim: 'Protect, Enhance and Restore'. Any revegetation works, whether planting or direct seeding should use indigenous species collected from local seed. Wherever possible seed should be collected from the revegetation site or close by from the same Ecological Vegetation Class.*

**Low Conservation Value Roadsides bordering Estuarine Wetlands****10 Estuarine Wetland****Conservation Status: LOW**

**EVC Notes:** Estuarine Wetlands are an endangered EVC in the Corangamite region. They are represented on two roadsides in Surf Coast Shire.

**SalinityRegime:** Brackish

**EVCGroup:** 19 Wetlands

**MoistureRegime:** Moist - Flooded

**EVCType:** EVC

**ExposureRegime:** Tidal

**Structural Weeds:** Aster-weed, Curled Dock, Hastate Orache, Water Buttons, Creeping Bent, Water Bent, Greater Bird's-foot Trefoil, Toowoomba Canary-grass

**Management Outline:** Management should focus on the protection of any existing remnants and the establishment of buffer strips and the removal of the impacts caused by soil disturbance, nutrient and weed impacts. Tall wheat grass, introduced as a salinity discharge site control measure, can be quite invasive. Particularly vulnerable are the margins of brackish wetlands.

**Comments:** Aquatic plant communities generally have a low incidence of weed invasion. There are few serious aquatic weeds in the region. However the margins of wetlands and streams are particularly vulnerable to invasion by a suite of weeds including pasture grasses. Pasture grasses are difficult to eradicate. Their control is best achieved by a change in management approach that includes limiting soil disturbance and excess nutrients. The run-off from surrounding roads and pastures is often nutrient rich. A buffer is required around water bodies to act as a filter strip (e.g. a dense stand of tall tussock-grass) to remove silt and nutrients. This area should not be grazed.

<b>Management Techniques:</b>	<b>Use:</b>	<b>Comments:</b>
<b>Weed control</b>	YES	Any woody weeds should be removed from the roadside. Herbaceous weeds vary in their degree of impact. The focus should be on new weeds, quickly removing these before seeding. Pasture weeds fall into two categories 1/ Those that are well established and now are almost an inexorable part of the EVC but do not dominate (e.g. Onion Grass, Sweet Vernal Grass, Quaking Grass) and 2/ Those that pose a serious threat to the integrity or structure of the EVC (e.g. Phalaris, Cocksfoot, Tall Wheat Grass, Serrated Tussock)
<b>Fencing</b>	YES	To restrict stock, human or vehicle access
<b>Signage</b>	YES	SRV and Interpretive signage will improve community awareness.
<b>Natural regeneration</b>	YES	Species in Wetland EVCs are adapted to fluctuations in inundation. Generally species are good colonisers in the absence of changes conditions (i.e. a natural regime)
<b>Erosion/run-off control</b>	YES	See note under 'Revegetation'
<b>Removal of Exotic Vegetation</b>	YES	Remove any garden escapees or native plants outside their natural range (e.g. Coast tea-tree may invade areas following disturbance)
<b>Burning</b>	NO	Naturally this EVC would have burnt infrequently. Burning should only be considered where it is felt this activity will reduce weed cover and promote natural regeneration. Plants present are adapted to flood disturbance rather than fire disturbance.
<b>Slashing</b>	NO	Wetland itself should not require any slashing or biomass reduction methods. Margins may require treatment
<b>Grazing</b>	NO	Stock trampling and nutrient issues
<b>Cropping</b>	NO	
<b>Salinity Control</b>	NO	Estuarine Wetlands vary in salinity level with tidal and seasonal fluctuations
<b>Rare plant specific requirements</b>	NO	No AROT/ROTs recorded for this EVC during roadside survey

<b>Graded or Ploughed Firebreaks</b>	NO	
<b>Blanket spraying</b>	NO	
<b>Seed Collection</b>	NO	Not generally required (little demand/natural regeneration)
<b>Revegetation</b>	?	The wetland itself generally will not require revegetation (relying on natural regeneration and colonization). The margins however may need to be revegetated to provide a suitable buffer strip to protect from weed invasion, nutrients and sediment

### EVC Description

**10** Estuarine Wetland is limited in occurrence within the region being confined to lower reaches of streams near the coast (OP/WP). This EVC receives saline water from tidal movements and fresh water flows from inland. The inundating waters are usually salty, sometimes brackish and occasionally fresh over the period of a year depending upon river flooding regimes. Soils are anaerobic peat-rich muds. Estuarine Wetland is dominated by the Common Reed with margin plants that exhibit a wide salinity tolerance such as Creeping Monkey-flower, \*Water Buttons, Streaked Arrow grass, Club Sedge and Shiny Swamp-mat.

**Potential Threatening Processes:** clearing for agriculture, grazing, alteration of drainage patterns and flooding regimes, residential and commercial development

**GeneralisedStatus:** E Endangered

### This Management Prescription is currently applicable to the following Surf Coast Roadside Sections:

ROAD NAME	SECTION_ ORIGIN: NO_AND_ SIDE:	DISTANCE FROM ORIGIN:	SECTION LENGTH:	SLU: GMU3:	LOCALITY:	DATE SURVEYED:
<b>BARWON PARK</b>	2-L RAILWAY LINE (SOUT	6.5	0.1	156 6.1.5	WINCHELSEA	23.08.96

### Calendar of potential roadside management activities:

10L

#### Spring

Weed control Arrange spot spraying of noxious and woody weeds

#### Summer

Weed control Arrange spot spraying of noxious and woody weeds

#### General

Fencing Arrange fencing of any areas needing a physical barrier  
 Signage Erect SRV and interpretation signage on HCV roadsides  
 Natural regeneration Allow time and protect areas from disturbance  
 Erosion/run-off control Ensure all drain and roadworks meet a high standard. Run training activities  
 Removal of Exotic Vegetation Remove inappropriate trees and shrubs when labour is available

*Note 1: Revegetation work on roadsides. The Roadside Management Prescriptions adopt the maxim: 'Protect, Enhance and Restore'. Any revegetation works, whether planting or direct seeding should use indigenous species collected from local seed. Wherever possible seed should be collected from the revegetation site or close by from the same Ecological Vegetation Class.*

**Medium Conservation Value Roadsides bordering Estuarine Wetlands****10 Estuarine Wetland****Conservation Status: MEDIUM**

**EVC Notes:** Estuarine Wetlands are an endangered EVC in the Corangamite region. They are represented on two roadsides in Surf Coast Shire.

**SalinityRegime:** Brackish

**EVCGroup:** 19 Wetlands

**MoistureRegime:** Moist - Flooded

**EVCType:** EVC

**ExposureRegime:** Tidal

**Structural Weeds:**

**Management Outline:** Management should focus on the protection any existing remnants and the establishment of buffer strips and the removal of the impacts caused by soil disturbance, nutrient and weed impacts. Tall wheat grass, introduced as a salinity discharge site control measure, can be quite invasive. Particularly vulnerable are the margins of brackish wetlands.

**Comments:** Aquatic plant communities generally have a low incidence of weed invasion. There are few serious aquatic weeds in the region. However the margins of wetlands and streams are particularly vulnerable to invasion by a suite of weeds including pasture grasses. Pasture grasses are difficult to eradicate. Their control is best achieved by a change in management approach that includes limiting soil disturbance and excess nutrients. The run-off from surrounding roads and pastures is often nutrient rich. A buffer is required around water bodies to act as a filter strip (e.g. a dense stand of tall tussock-grass) to remove silt and nutrients. This area should not be grazed.

<b>Management Techniques:</b>	<b>Use:</b>	<b>Comments:</b>
<b>Weed control</b>	YES	Any woody weeds should be removed from the roadside. Herbaceous weeds vary in their degree of impact. The focus should be on new weeds, quickly removing these before seeding. Pasture weeds fall into two categories 1/ Those that are well established and now are almost an inexorable part of the EVC but do not dominate (e.g. Onion Grass, Sweet Vernal Grass, Quaking Grass) and 2/ Those that pose a serious threat to the integrity or structure of the EVC (e.g. Phalaris, Cocksfoot, Tall Wheat Grass, Serrated Tussock)
<b>Fencing</b>	YES	To restrict stock, human or vehicle access
<b>Signage</b>	YES	SRV and Interpretive signage will improve community awareness.
<b>Natural regeneration</b>	YES	Species in Wetland EVCs are adapted to fluctuations in inundation. Generally species are good colonisers in the absence of changes conditions (i.e. a natural regime)
<b>Erosion/run-off control</b>	YES	See note under 'Revegetation'
<b>Removal of Exotic Vegetation</b>	YES	Remove any garden escapees or native plants outside their natural range (e.g. Coast tea-tree may invade areas following disturbance)
<b>Burning</b>	NO	Naturally this EVC would have burnt infrequently. Burning should only be considered where it is felt this activity will reduce weed cover and promote natural regeneration. Plants present are adapted to flood disturbance rather than fire disturbance.
<b>Slashing</b>	NO	Wetland itself should not require any slashing or biomass reduction methods. Margins may require treatment
<b>Grazing</b>	NO	Stock trampling and nutrient issues
<b>Cropping</b>	NO	
<b>Salinity Control</b>	NO	Estuarine Wetlands vary in salinity level with tidal and seasonal fluctuations
<b>Rare plant specific requirements</b>	NO	No AROT/VROT recorded for this EVC during roadside survey
<b>Graded or Ploughed Firebreaks</b>	NO	

<b>Blanket spraying</b>	NO	
<b>Seed Collection</b>	NO	Not generally required (little demand/natural regeneration)
<b>Revegetation</b>	?	The wetland itself generally will not require revegetation (relying on natural regeneration and colonization). The margins however may need to be revegetated to provide a suitable buffer strip to protect from weed invasion, nutrients and sediment

### EVC Description

**10** Estuarine Wetland is limited in occurrence within the region being confined to lower reaches of streams near the coast (OP/WP). This EVC receives saline water from tidal movements and fresh water flows from inland. The inundating waters are usually salty, sometimes brackish and occasionally fresh over the period of a year depending upon river flooding regimes. Soils are anaerobic peat-rich muds. Estuarine Wetland is dominated by the Common Reed with margin plants that exhibit a wide salinity tolerance such as Creeping Monkey-flower, \*Water Buttons, Streaked Arrow grass, Club Sedge and Shiny Swamp-mat.

**Potential Threatening Processes:** clearing for agriculture, grazing, alteration of drainage patterns and flooding regimes, residential and commercial development

**GeneralisedStatus:** E Endangered

### This Management Prescription is currently applicable to the following Surf Coast Roadside Sections:

ROAD NAME	SECTION_ NO_AND_SIDE:	ORIGIN:	DISTANCE FROM ORIGIN:	SECTION LENGTH:	SLU:	GMU3:	LOCALITY:	DATE SURVEYED:
<b>BARWON PARK</b>	2-R	0	6.5	0.1	117	6.1.3	WINCHELSEA	23.8.96

### Calendar of potential roadside management activities:

10M

#### Spring

Weed control Arrange spot spraying of noxious and woody weeds

#### Summer

Weed control Arrange spot spraying of noxious and woody weeds

#### General

Fencing Arrange fencing of any areas needing a physical barrier

Signage Erect SRV and interpretation signage on HCV roadsides

Natural regeneration Allow time and protect areas from disturbance

Erosion/run-off control Ensure all drain and roadworks meet a high standard. Run training activities

Removal of Exotic Vegetation Remove inappropriate trees and shrubs when labour is available

Vegetation

*Note 1: Revegetation work on roadsides. The Roadside Management Prescriptions adopt the maxim: 'Protect, Enhance and Restore'. Any revegetation works, whether planting or direct seeding should use indigenous species collected from local seed. Wherever possible seed should be collected from the revegetation site or close by from the same Ecological Vegetation Class.*

**High Conservation Value Roadsides bordering Estuarine Wetlands****10 Estuarine Wetland****Conservation Status: HIGH**

**EVC Notes:** Estuarine Wetlands are an endangered EVC in the Corangamite region. They are represented on two roadsides in Surf Coast Shire.

**SalinityRegime:** Brackish

**EVCGroup:** 19 Wetlands

**MoistureRegime:** Moist - Flooded

**EVCType:** EVC

**ExposureRegime:** Tidal

**Structural Weeds:** Aster-weed, Curled Dock, Hastate Orache, Water Buttons, Creeping Bent, Water Bent, Greater Bird's-foot Trefoil, Toowoomba Canary-grass

**Management Outline:** Active management will generally not be required in this EVC unless threats are identified. Tall wheat grass, introduced as a salinity discharge site control measure, can be quite invasive. Particularly vulnerable are the margins of brackish wetlands.

**Comments:** Aquatic plant communities generally have a low incidence of weed invasion. There are few serious aquatic weeds in the region. However the margins of wetlands and streams are particularly vulnerable to invasion by a suite of weeds including pasture grasses. Pasture grasses are difficult to eradicate. Their control is best achieved by a change in management approach that includes limiting soil disturbance and excess nutrients. The run-off from surrounding roads and pastures is often nutrient rich. A buffer is required around water bodies to act as a filter strip (e.g. a dense stand of tall tussock-grass) to remove silt and nutrients. This area should not be grazed.

<b>Management Techniques:</b>	<b>Use:</b>	<b>Comments:</b>
<b>Weed control</b>	YES	Any woody weeds should be removed from the roadside. Herbaceous weeds vary in their degree of impact. The focus should be on new weeds, quickly removing these before seeding. Pasture weeds fall into two categories 1/ Those that are well established and now are almost an inexorable part of the EVC but do not dominate (e.g. Onion Grass, Sweet Vernal Grass, Quaking Grass) and 2/ Those that pose a serious threat to the integrity or structure of the EVC (e.g. Phalaris, Cocksfoot, Tall Wheat Grass, Serrated Tussock)
<b>Fencing</b>	YES	To restrict stock, human or vehicle access
<b>Signage</b>	YES	SRV and Interpretive signage will improve community awareness.
<b>Natural regeneration</b>	YES	Species in Wetland EVCs are adapted to fluctuations in inundation. Generally species are good colonisers in the absence of changes conditions (i.e. a natural regime)
<b>Erosion/run-off control</b>	YES	See note under 'Revegetation'
<b>Removal of Exotic Vegetation</b>	YES	Remove any garden escapees or native plants outside their natural range (e.g. Coast tea-tree may invade areas following disturbance)
<b>Burning</b>	NO	Naturally this EVC would have burnt infrequently. Burning should only be considered where it is felt this activity will reduce weed cover and promote natural regeneration. Plants present are adapted to flood disturbance rather than fire disturbance.
<b>Slashing</b>	NO	Wetland itself should not require any slashing or biomass reduction methods
<b>Grazing</b>	NO	Stock trampling and nutrient issues
<b>Cropping</b>	NO	
<b>Salinity Control</b>	NO	Estuarine Wetlands vary in salinity level with tidal and seasonal fluctuations
<b>Rare plant specific requirements</b>	NO	No AROT/VROTs recorded for this EVC during roadside survey
<b>Graded or Ploughed Firebreaks</b>	NO	



<b>Blanket spraying</b>	NO	
<b>Seed Collection</b>	NO	Not required (natural regeneration)
<b>Revegetation</b>	?	The wetland itself generally will not require revegetation (relying on natural regeneration and colonisation). The margins however may need to be revegetated to provide a suitable buffer strip to protect from weed invasion, nutrients and sediment

### EVC Description

**10** Estuarine Wetland is limited in occurrence within the region being confined to lower reaches of streams near the coast (OP/WP). This EVC receives saline water from tidal movements and fresh water flows from inland. The inundating waters are usually salty, sometimes brackish and occasionally fresh over the period of a year depending upon river flooding regimes. Soils are anaerobic peat-rich muds. Estuarine Wetland is dominated by the Common Reed with margin plants that exhibit a wide salinity tolerance such as Creeping Monkey-flower, \*Water Buttons, Streaked Arrow grass, Club Sedge and Shiny Swamp-mat.

**Potential Threatening Processes:** clearing for agriculture, grazing, alteration of drainage patterns and flooding regimes, residential and commercial development

**GeneralisedStatus:** E Endangered

### This Management Prescription is currently applicable to the following Surf Coast Roadside Sections:

ROAD NAME	SECTION_ NO_AND_SIDE:	ORIGIN:	DISTANCE FROM ORIGIN:	SECTION LENGTH:	SLU:	GMU3:	LOCALITY:	DATE SURVEYED:
<b>MCCALLUMS</b>	1-L	SHELFORD ROAD	0	1.15	141	6.1.4	WINCHELSEA	5.8.96
<b>MCCALLUMS</b>	1-R	SHELFORD ROAD	0	1.15	141	6.1.4	WINCHELSEA	5.8.96

### Calendar of potential roadside management activities:

10H

#### Spring

Weed control Arrange spot spraying of noxious and woody weeds

#### Summer

Weed control Arrange spot spraying of noxious and woody weeds

#### General

Fencing Arrange fencing of any areas needing a physical barrier  
 Signage Erect SRV and interpretation signage on HCV roadsides  
 Natural regeneration Allow time and protect areas from disturbance  
 Erosion/run-off control Ensure all drain and roadworks meet a high standard. Run training activities  
 Removal of Exotic Vegetation Remove inappropriate trees and shrubs when labour is available

*Note 1: Revegetation work on roadsides. The Roadside Management Prescriptions adopt the maxim: 'Protect, Enhance and Restore'. Any revegetation works, whether planting or direct seeding should use indigenous species collected from local seed. Wherever possible seed should be collected from the revegetation site or close by from the same Ecological Vegetation Class.*

**Low Conservation roadsides containing Lowland Forest****16 Lowland Forest****Conservation Status: LOW**

**EVC Notes:** Formerly Stringybark and/or Peppermint Forest with a strong shrub layer. Often on sandy soils and grading to Grassy Woodland. Now dominated by pasture grass (weeds) and woody weeds in disturbed locations.

**SalinityRegime:** Nonsaline

**EVCGroup:** 3 Lowland Forests

**MoistureRegime:** Dry - Moist

**EVCType:** EVC

**ExposureRegime:** Various aspects in hilly country or open plains

**Structural Weeds:** Ragwort, Blackberry, Serrated Tussock, Radiata Pine

**Management Outline:** Limiting any further disturbance and the control of existing woody weeds are the management priorities

**Comments:**

<b>Management Techniques:</b>	<b>Use:</b>	<b>Comments:</b>
<b>Burning</b>	YES	Not generally required as an active management approach. The desirable frequency of burning to promote regeneration is covered by the incidence of wildfire. Consider burning the groundlayer only as a trial to aid regeneration as part of a weed control/restoration program. Careful follow-up spot spraying will be necessary to control weed regrowth and germination.
<b>Weed control</b>	YES	Spot spraying or hand removal (cut & paint) of woody weeds is recommended
<b>Erosion/run-off control</b>	YES	Road grading or management should attempt to disperse rather than concentrate water (correct road camber, run-off points, table and mitre drains). Active eroding areas should be stabilised and revegetated
<b>Removal of Exotic Vegetation</b>	YES	Remove any garden escapees or native plants outside their natural range (e.g. Coast tea-tree may invade areas following disturbance)
<b>Seed Collection</b>	YES	Regulate to protect vegetation from over-collection
<b>Grazing</b>	NO	
<b>Cropping</b>	NO	
<b>Fencing</b>	NO	
<b>Signage</b>	NO	
<b>Salinity Control</b>	NO	
<b>Rare plant specific requirements</b>	NO	
<b>Graded or Ploughed Firebreaks</b>	NO	
<b>Blanket spraying</b>	NO	
<b>Slashing</b>	?	Slash areas of introduced grass or woody weed seedlings only, to restrict fire risk if required. Care should be taken not to spread seed to other sections of the road with higher conservation values. Slashing is best carried out prior to seeding of annual grasses (by December)
<b>Natural regeneration</b>	?	Encourage natural regeneration through the removal of threats such as grazing, slashing or weed competition. Shrub regeneration is a priority to replace woody weeds and improve habitat values.
<b>Revegetation</b>	?	Consider revegetation with trees and shrubs as a mechanism to cut long term management costs (i.e. remove the need for regular slashing/weed control)

## EVC Description

16 Lowland Forest occurs in the Otways (OR/OP/WP) .

OR

Within the Otways there are two forms of Lowland Forest. The first occurs on sandy loam to sandy orange clay loam soils in high rainfall areas and at moderate altitudes mostly concentrated in the vicinity of Cape Otway on duplex soils (sand/clay) and Carlisle State Park. Prior to European settlement Lowland Forest is presumed to have occurred extensively on the undulating terrain overlying the Gellibrand Marl geology. Limited examples of this remain. The characteristic feature of Lowland Forest is a diversity of species and lifeforms. The overstorey is usually dominated by Brown Stringybark but occasionally Messmate, Narrow-leaf Peppermint and the rare Bog Gum may co-occur. The understorey includes a combination of drier, ericoid species due to the sandier soils. Characteristic species are Prickly Tea-tree, Silver Banksia, Prickly Moses, Common Heath, Honey-pots, Common Correa, Broom Sedge, Large-leaf Bush-pea and Austral Grass-tree. On sites with a higher proportion of clay in the soil, species such as Narrow-leaf Wattle, Dusty Miller, Hop Goodenia, Pink-bells, Red-fruit Saw-sedge and Tall Sword-sedge occur. The ground layer consists of Spreading Rope-rush, Common Raspwort, Ivy-leaf Violet, Trailing Goodenia, Screw Fern and climbers such as Common Apple-berry and Downy Dodder-laurel. Austral Bracken and Forest Wire-grass are also quite common. Weed species are not common.

OP/WP

The second form of Lowland Forest differs in the dominance of species normally associated with Heathy Woodland (EVC 48) and the higher diversity of tussock-forming plants. This form occurs on gentle to moderate slopes of the Otway and Warrnambool Plains. Here soils are early to late Tertiary sediments of sandy loams and silty clay loams. Rainfall is lower at around 900mm per annum. The overstorey includes Narrow-leaf Peppermint, Messmate and Scentbark. The shrub layer includes Common Heath, Honey-pots, Prickly Geebung, Pink-bells and Common Aotus. The ground strata include Common Raspwort, Trailing Goodenia, Reed Bent-grass, Black-anther Flax-lily and Spreading Rope-rush. Sedges are also common and include Wattle Mat-rush, Many-flowered Mat-rush and Spiny-headed Mat-rush.

**Potential Threatening Processes:** timber harvesting, clearing, weed invasion, inappropriate fire regimes, minor forest produce, dieback

**GeneralisedStatus:** D Depleted

**This Management Prescription is currently applicable to the following Surf Coast Roadside Sections:**

ROAD NAME	SECTION_ NO_AND_SIDE	ORIGIN:	DISTANCE FROM ORIGIN:	SECTION LENGTH:	SLU:	GMU3:	LOCALITY:	DATE SURVEYED:
<b>BAMBRA-AIREYS INL</b>	5-R	WINCHELSEA-DEANS	3.5	2.135	63	3.1.2	BAMBRA	15.01.97
<b>BELLS</b>	1-L	BONES ROAD	0	1.14	79	6.2.4	BELLBRAE	28.10.96
<b>BELLS</b>	1-R	BONES ROAD	0	1.14	79	6.2.4	BELLBRAE	28.10.96
<b>BRUSHFIELDS</b>	3-L	HENDY MAIN ROAD	1.7	0.23	158	6.2.2	BELLBRAE	23.09.96
<b>BRUSHFIELDS</b>	3-R	HENDY MAIN ROAD	1.7	0.23	158	6.2.2	BELLBRAE	23.09.96
<b>BRUSHFIELDS</b>	5-R	HENDY MAIN ROAD	2.2	0.36	79	6.2.4	BELLBRAE	23.09.96
<b>BUSHS</b>	1-L	DEANS MARSH-BIRR	0	2.25	78	3.3.1	MURROON	17.01.97
<b>BUSHS</b>	1-R	DEANS MARSH-BIRR	0	2.25	78	3.3.1	MURROON	17.01.97
<b>CASBOULTS</b>	2-L	WENSLEYDALE STAT	0.8	0.34	79	6.2.4	WENSLEY DALE	17.12.96
<b>CASBOULTS</b>	3-L	WENSLEYDALE STAT	0.4	0.295	79	6.2.4	WENSLEY DALE	17.12.96
<b>CENTRE</b>	1-L	WORMBETE STATION	0	0.8	73	3.2.2	WURDALE	17.12.96
<b>CENTRE</b>	2-L	WORMBETE STATION	0.8	0.34	79	6.2.4	WENSLEY DALE	17.12.96
<b>CENTRE</b>	2-R	WORMBETE STATION	0.8	0.34	73	3.2.2	WENSLEY DALE	17.12.96
<b>DEANS MARSH-LORN</b>	1-L	BIRREGURRA ROAD	0	0.66	64	3.1.2	DEANS MARSH	17.01.97
<b>DEANS MARSH-LORN</b>	1-R	BIRREGURRA ROAD	0	0.66	73	3.2.2	DEANS MARSH	17.01.97
<b>DUNLOE</b>	1-L	ADDISCOTT ROAD	0	0.54	79	6.2.4	BELLBRAE	28.10.96

<b>DUNLOE</b>	1-R	ADDISCOTT ROAD	0	0.54	79	6.2.4	BELLBRAE	28.10.96
<b>EAGLE POINT</b>	2-L	GUNDRYS ROAD	0.3	0.51	89	6.2.2	BELLBRAE	23.09.96
<b>EAGLE POINT</b>	2-R	GUNDRYS ROAD	0.3	0.51	89	6.2.2	BELLBRAE	23.09.96
<b>FORDS OUTLET</b>	2-L	DEANS MARSH-WINC	1.7	1.496	73	3.2.2	DEANS MARSH	15.1.67
<b>FORDS OUTLET</b>	2-R	DEANS MARSH-WINC	1.7	1.496	73	3.2.2	DEANS MARSH	15.1.67
<b>KELLYS</b>	1-L	GHERANG ROAD	0	0.67	89	6.2.2	GHERANG	4.11.96
<b>KELLYS</b>	1-R	GHERANG ROAD	0	0.67	89	6.2.2	GHERANG	4.11.96
<b>KNIGHTS</b>	1-R	WORMBETE STATION	0	1.55	79	6.2.4	WENSLEY DALE	17.12.96
<b>LAKESIDE</b>	1-L	THIELMANN'S ROAD	0	1.111	89	6.2.2	GHERANG	4.11.96
<b>LAKESIDE</b>	1-R	THIELMANN'S ROAD	0	1.111	89	6.2.2	GHERANG	4.11.96
<b>PENNYROYAL SCHO</b>	1-L	PENNYROYAL-WYMB	0	0.42	73	3.2.2	PENNYROYAL	17.1.97
<b>PENNYROYAL STATI</b>	1-L	BUSHES LANE	0	1.89	73	3.2.2	PENNYROYAL	17.1.97
<b>PENNYROYAL STATI</b>	1-R	BUSHES LANE	0	1.89	73	3.2.2	PENNYROYAL	17.1.97
<b>PENNYROYAL VALLE</b>	3-L	DEANS-MARSH LORN	3.2	2.14	73	3.2.2	DEANS MARSH	17.1.97
<b>PENNYROYAL VALLE</b>	3-R	DEANS-MARSH LORN	3.2	2.14	95	3.3.3	DEANS MARSH	17.1.97
<b>PINEWOOD</b>	1-L	THIELEMANN'S ROAD	0	0.432	171	6.2.4	GHERANG	28.11.96
<b>PINEWOOD</b>	1-R	THIELEMANN'S ROAD	0	0.432	171	6.2.4	GHERANG	28.11.96
<b>PORTREATH</b>	1-L	FOREST ROAD	0	0.99	89	6.2.2	PARAPARAP	17.12.96
<b>PORTREATH</b>	4-L	FOREST RD	2.2	0.16	89	6.2.2	PARAPARAP	17.12.96
<b>PORTREATH</b>	6-R	FOREST RD	4.4	0.52	89	6.2.2	BELLBRAE	17.12.96
<b>PRICES</b>	1-L	WORMBETE STATION	0	0.77	79	6.2.4	GHERANG	4.11.96
<b>ROCHFORTS</b>	2-L	GHERANG ROAD	0.2	0.42	89	6.2.2	GHERANG	4.11.96
<b>ROCHFORTS</b>	3-L	GHERANG ROAD	0.6	0.393	89	6.2.2	GHERANG	4.11.96
<b>TANNERS</b>	3-R	FOREST ROAD	8.8	0.11	79	6.2.4	WENSLEY DALE	4.11.96
<b>TANNERS</b>	4-L	FOREST ROAD	8.9	0.378	79	6.2.4	WENSLEY DALE	4.11.96
<b>THIELEMANN'S</b>	2-L	ROCHFORTS ROAD	0.8	0.71	171	6.2.4	GHERANG	4.11.96
<b>WINCHELSEA-DEANS</b>	7-L	PRINCES HWY	17	4.7	73	3.2.2	DEANS MARSH	15.1.97
<b>WINCHELSEA-DEANS</b>	7-R	PRINCES HWY	17	4.7	73	3.2.2	DEANS MARSH	15.1.97
<b>WINCHELSEA-GHERA</b>	6-R	CAPE OTWAY ROAD	4.2	0.942	171	6.2.4	GHERANG	28.11.96
<b>WINCHELSEA-INVERL</b>	1-L	RAILWAY LINE	0	13.57	117	6.1.3	WINCHELSEA	5.8.96
<b>WINCHELSEA-INVERL</b>	1-R	RAILWAY LINE	0	13.57	119	6.1.3	WINCHELSEA	5.8.96
<b>WINCHELSEA-INVERL</b>	3-L	RAILWAY LINE	14	1.89	117	6.1.3	INVERLEIGH	5.8.96
<b>WINCHELSEA-INVERL</b>	3-R	RAILWAY LINE	14	1.89	119	6.1.3	INVERLEIGH	5.8.96
<b>WINCHELSEA-INVERL</b>	5-L	RAILWAY LINE	16	0.8	119	6.1.3	INVERLEIGH	5.8.96
<b>WINCHELSEA-INVERL</b>	5-R	RAILWAY LINE	16	0.8	119	6.1.3	INVERLEIGH	5.8.96
<b>WOODACRES</b>	1-L	GUNDRYS ROAD	0	0.31	89	6.2.2	BELLBRAE	23.9.96
<b>WOODACRES</b>	1-R	GUNDRYS ROAD	0	0.31	89	6.2.2	BELLBRAE	23.9.96
<b>WOODACRES</b>	2-L	GUNDRYS ROAD	0.3	0.43	89	6.2.2	BELLBRAE	23.9.96
<b>WORMBETE STATION</b>	10-R	WURDALE ROAD	4.4	0.09	79	6.2.4	WURDALE	28.11.96
<b>WORMBETE STATION</b>	11-R	WURDALE ROAD	4.4	0.67	79	6.2.4	WURDALE	28.11.96

Roadside Management Prescription		Surf Coast Shire						16L
<b>WORMBETE STATION</b>	12-L	WURDALE ROAD	5.1	0.72	79	6.2.4	GHERANG	28.11.96
<b>WORMBETE STATION</b>	2-L	WURDALE ROAD	1.9	0.48	79	6.2.4	WURDALE	28.11.96
<b>WORMBETE STATION</b>	2-R	WURDALE ROAD	1.9	0.48	79	6.2.4	WURDALE	28.11.96
<b>WORMBETE STATION</b>	6-R	WURDALE ROAD	3.3	0.42	79	6.2.4	WURDALE	28.11.96
<b>WORMBETE STATION</b>	7-L	WURDALE ROAD	3.7	0.16	79	6.2.4	WURDALE	28.11.96
<b>WORMBETE STATION</b>	7-R	WURDALE ROAD	3.7	0.16	79	6.2.4	WURDALE	28.11.96
<b>WORMBETE STATION</b>	8-R	WURDALE ROAD	3.8	0.08	79	6.2.4	WURDALE	28.11.96
<b>WURDALE</b>	7-L	CAPE OTWAY ROAD	3.8	2.025	95	3.3.3	WINCHELSEA S	4.12.96

**Calendar of potential roadside management activities: 16L**

**Spring**

Weed control                      Arrange spot spraying of noxious and woody weeds

**Summer**

Weed control                      Arrange spot spraying of noxious and woody weeds

Seed Collection                      Coordinate collection in consultation with DSE and the Ballarat Region Seed Bank

**Autumn**

Burning                              Arrange burning with local CFA groups

**General**

Erosion/run-off control              Ensure all drain and roadworks meet a high standard. Run training activities

Removal of Exotic Vegetation              Remove inappropriate trees and shrubs when labour is available

*Note 1: Revegetation work on roadsides. The Roadside Management Prescriptions adopt the maxim: 'Protect, Enhance and Restore'. Any revegetation works, whether planting or direct seeding should use indigenous species collected from local seed. Wherever possible seed should be collected from the revegetation site or close by from the same Ecological Vegetation Class.*

**Medium Conservation roadsides containing Lowland Forest****16 Lowland Forest****Conservation Status: MEDIUM**

**EVC Notes:** Stringybark and/or Peppermint Forest with a strong shrub layer. Often on sandy soils and grading to Grassy Woodland. Typically includes some pasture grass (weeds) and some woody weeds in disturbed locations.

**SalinityRegime:** Nonsaline

**EVCGroup:** 3 Lowland Forests

**MoistureRegime:** Dry - Moist

**EVCType:** EVC

**ExposureRegime:** Various aspects in hilly country or open plains

**Structural Weeds:** Ragwort, Blackberry, Serrated Tussock, Radiata Pine

**Management Outline:** Limit disturbance and control woody weeds to assist restoration of the roadside values (to high category). This will reduce ongoing maintenance costs and increase community benefits.

**Comments:**

<b>Management Techniques:</b>	<b>Use:</b>	<b>Comments:</b>
<b>Weed control</b>	YES	Spot spraying or hand removal (cut & paint) of woody weeds is recommended
<b>Natural regeneration</b>	YES	Encourage natural regeneration through the removal of threats such as grazing, slashing or weed competition. Shrub regeneration is a priority to replace woody weeds and improve habitat values.
<b>Revegetation</b>	YES	Consider revegetation with trees and shrubs where appropriate as a mechanism to cut long term management costs (i.e. remove the need for regular slashing/weed control). May be desirable around patches of existing regeneration
<b>Erosion/run-off control</b>	YES	Road grading or management should attempt to disperse rather than concentrate water (correct road camber, run-off points, table and mitre drains). Active eroding areas should be stabilised and revegetated
<b>Removal of Exotic Vegetation</b>	YES	Remove any garden escapees or native plants outside their natural range (e.g. Coast tea-tree may invade areas following disturbance)
<b>Seed Collection</b>	YES	Regulate to protect vegetation from over-collection
<b>Grazing</b>	NO	
<b>Cropping</b>	NO	
<b>Fencing</b>	NO	
<b>Signage</b>	NO	
<b>Salinity Control</b>	NO	
<b>Rare plant specific requirements</b>	NO	
<b>Graded or Ploughed Firebreaks</b>	NO	
<b>Blanket spraying</b>	NO	
<b>Burning</b>	?	Not generally required as an active management approach. The desirable frequency of burning to promote regeneration is covered by the incidence of wildfire. Consider burning the groundlayer only as a trial to aid regeneration as part of a weed control/restoration program. Careful follow-up spot spraying will be necessary to control weed regrowth and germination.
<b>Slashing</b>	?	Use where necessary only to reduce fuel load of exotic grasses. Avoid regenerating trees and shrubs (protect with rocks, logs, stumps, etc)

## EVC Description

16 Lowland Forest occurs in the Otways (OR/OP/WP) .

OR

Within the Otways there are two forms of Lowland Forest. The first occurs on sandy loam to sandy orange clay loam soils in high rainfall areas and at moderate altitudes mostly concentrated in the vicinity of Cape Otway on duplex soils (sand/clay) and Carlisle State Park. Prior to European settlement Lowland Forest is presumed to have occurred extensively on the undulating terrain overlying the Gellibrand Marl geology. Limited examples of this remain. The characteristic feature of Lowland Forest is a diversity of species and lifeforms. The overstorey is usually dominated by Brown Stringybark but occasionally Messmate, Narrow-leaf Peppermint and the rare Bog Gum may co-occur. The understorey includes a combination of drier, ericoid species due to the sandier soils. Characteristic species are Prickly Tea-tree, Silver Banksia, Prickly Moses, Common Heath, Honey-pots, Common Correa, Broom Sedge, Large-leaf Bush-pea and Austral Grass-tree. On sites with a higher proportion of clay in the soil, species such as Narrow-leaf Wattle, Dusty Miller, Hop Goodenia, Pink-bells, Red-fruit Saw-sedge and Tall Sword-sedge occur. The ground layer consists of Spreading Rope-rush, Common Raspwort, Ivy-leaf Violet, Trailing Goodenia, Screw Fern and climbers such as Common Apple-berry and Downy Dodder-laurel. Austral Bracken and Forest Wire-grass are also quite common. Weed species are not common.

OP/WP

The second form of Lowland Forest differs in the dominance of species normally associated with Heathy Woodland (EVC 48) and the higher diversity of tussock-forming plants. This form occurs on gentle to moderate slopes of the Otway and Warrnambool Plains. Here soils are early to late Tertiary sediments of sandy loams and silty clay loams. Rainfall is lower at around 900mm per annum. The overstorey includes Narrow-leaf Peppermint, Messmate and Scentbark. The shrub layer includes Common Heath, Honey-pots, Prickly Geebung, Pink-bells and Common Aotus. The ground strata include Common Raspwort, Trailing Goodenia, Reed Bent-grass, Black-anther Flax-lily and Spreading Rope-rush. Sedges are also common and include Wattle Mat-rush, Many-flowered Mat-rush and Spiny-headed Mat-rush.

**Potential Threatening Processes:** timber harvesting, clearing, weed invasion, inappropriate fire regimes, minor forest produce, dieback

**GeneralisedStatus:** D Depleted

**This Management Prescription is currently applicable to the following Surf Coast Roadside Sections:**

ROAD NAME	SECTION_ NO_AND_SIDE:	ORIGIN:	DISTANCE FROM ORIGIN:	SECTION LENGTH:	SLU:	GMU3:	LOCALITY:	DATE SURVEYED:
ADDISCOTT	1-R	ANGELSEA ROAD	0	0.07	79	6.2.4	BELLBRAE	25.10.96
BAMBRA CEMETERY	1-L	WINCHELSEA-DEANS	0	0.37	63	3.1.2	DEANS MARSH	26.8.96
BAMBRA CEMETERY	1-R	WINCHELSEA-DEANS	0	0.37	73	3.2.2	DEANS MARSH	26.8.96
BAMBRA SCHOOL	1-L	WINCHELSEA-DEANS	0	0.96	73	3.2.2	DEANS MARSH	4.12.96
BAMBRA SCHOOL	1-R	WINCHELSEA-DEANS	0	0.96	73	3.2.2	DEANS MARSH	4.12.96
BAMBRA-BOONAH	1-L	WINCHELSEA-DEANS	0	3.36	73	3.2.2	BOONAH	15.1.97
BAMBRA-BOONAH	1-R	WINCHELSEA-DEANS	0	3.36	63	3.1.2	BOONAH	15.1.97
BAMBRA-BOONAH	2-L	WINCHELSEA-DEANS	3.4	0.73	63	3.1.2	BOONAH	15.1.97
BAMBRA-BOONAH	2-R	WINCHELSEA-DEANS	3.4	0.73	73	3.2.2	BOONAH	15.1.97
BELLS	2-L	BONES ROAD	1.1	0.795	79	6.2.4	BELLBRAE	28.10.96
BELLS	2-R	BONES ROAD	1.1	0.795	79	6.2.4	BELLBRAE	28.10.96
BONES	2-L	ADDISCOTT ROAD	1.8	0.14	79	6.2.4	JAN JUC	28.10.96
BONES	2-R	ADDISCOTT ROAD	1.8	0.14	79	6.2.4	JAN JUC	28.10.96
BRUSHFIELDS	4-L	HENDY MAIN ROAD	1.9	0.27	79	6.2.4	BELLBRAE	23.9.96
BRUSHFIELDS	4-R	HENDY MAIN ROAD	1.9	0.27	79	6.2.4	BELLBRAE	23.9.96
BRUSHFIELDS	5-L	HENDY MAIN ROAD	2.2	0.36	171	6.2.4	BELLBRAE	23.9.96

<b>BRUSHFIELDS</b>	6-L	HENDY MAIN ROAD	2.5	0.45	158	6.2.2	BELLBRAE	23.9.96
<b>BRUSHFIELDS</b>	6-R	HENDY MAIN ROAD	2.5	0.45	79	6.2.4	BELLBRAE	23.9.96
<b>BRUSHFIELDS NORT</b>	1-R	LOUTITT BAY ROAD	0	0.515	190	6.2.4	BELLBRAE	6.12.96
<b>CASBOULTS</b>	2-R	WENSLEYDALE STAT	0.08	0.295	79	6.2.4	WENSLEY DALE	17.12.96
<b>CASBOULTS</b>	3-R	WENSLEYDALE STAT	0.4	0.34	79	6.2.4	WENSLEY DALE	17.12.96
<b>CASBOULTS</b>	4-L	WENSLEYDALE STAT	0.7	0.755	79	6.2.4	WENSLEY DALE	17.12.96
<b>CENTRE</b>	1-R	WORMBETE STATION	0	0.8	79	6.2.4	WENSLEY DALE	17.12.96
<b>CENTRE</b>	3-L	WORMBETE STATION	1.1	0.24	79	3.3.1	WENSLEY DALE	17.12.96
<b>CENTRE</b>	3-R	WORMBETE STATION	1.1	0.24	73	3.2.2	WENSLEY DALE	17.12.96
<b>CENTRE</b>	6-L	WORMBETE STATION	1.6	0.27	73	3.2.2	WENSLEY DALE	17.12.96
<b>CENTRE</b>	6-R	WORMBETE STATION	1.6	0.27	79	6.2.4	WENSLEY DALE	17.12.96
<b>CHARAS</b>	1-L	NORTONS ROAD	0	0.865	171	6.2.4	BELLBRAE	23.9.96
<b>CHARAS</b>	1-R	NORTONS ROAD	0	0.865	171	6.2.4	BELLBRAE	23.9.96
<b>CLARKES</b>	2-L	ROAD FORMATION	0.6	0.24	79	3.3.1	WENSLEY DALE	17.12.96
<b>CLARKES</b>	4-L	ROAD FORMATION	1.1	0.387	79	3.3.1	WENSLEY DALE	17.12.96
<b>CLARKES</b>	4-R	ROAD FORMATION	1.1	0.387	79	3.3.1	WENSLEY DALE	17.12.96
<b>CLARKES NORTH</b>	1-R	WENSLEYDALE STAT	0	0.39	79	6.2.4	WENSLEY DALE	13.12.96
<b>EAGLE POINT</b>	1-L	GUNDRYS ROAD	0	0.28	89	6.2.2	BELLBRAE	23.9.96
<b>EAGLE POINT</b>	1-R	GUNDRYS ROAD	0	0.28	89	6.2.2	BELLBRAE	23.9.96
<b>EAGLE POINT</b>	3-L	GUNDRYS ROAD	0.8	0.3	89	6.2.2	BELLBRAE	23.9.96
<b>EAGLE POINT</b>	3-R	GUNDRYS ROAD	0.8	0.3	89	6.2.2	BELLBRAE	23.9.96
<b>ELKINGTON</b>	2-L	GREAT OCEAN ROAD	1.2	0.07	79	6.2.4	BELLBRAE	7.10.96
<b>ELKINGTON</b>	2-R	GREAT OCEAN ROAD	1.2	0.07	79	6.2.4	BELLBRAE	7.10.96
<b>GUYE</b>	2-L	DANGERS ROAD	0.6	0.253	79	6.2.4	GHERANG	28.11.96
<b>GUYE</b>	2-R	DANGERS ROAD	0.6	0.253	79	6.2.4	GHERANG	28.11.96
<b>HOLLOWAYS</b>	1-L	CLARKS ROAD	0	0.408	79	3.3.1	WENSLEY DALE	17.12.96
<b>HOLLOWAYS</b>	1-R	CLARKS ROAD	0	0.408	79	3.3.1	WENSLEY DALE	17.12.96
<b>JAROSITE</b>	1-R	GREAT OCEAN ROAD	0	0.26	79	6.2.4	BELLBRAE	28.10.96
<b>MINTER</b>	1-L	ELKINGTON	0	0.85	79	6.2.4	BELLBRAE	23.9.96
<b>MINTER</b>	5-R	ELKINGTON	1.5	0.875	89	6.2.2	BELLBRAE	23.9.96
<b>NOBLES (SEC)</b>	1-L	NOBLES ROAD	0	0.875	171	6.2.4	GHERANG	11.11.96
<b>NOELS</b>	1-L	PRICES ROAD	0	0.712	79	6.2.4	GHERANG	4.11.96
<b>NOELS</b>	1-R	PRICES ROAD	0	0.712	79	6.2.4	GHERANG	4.11.96
<b>NORTONS</b>	1-L	FOREST ROAD	0	0.15	79	6.2.4	PARAPARAP	23.9.96
<b>NORTONS</b>	1-R	FOREST ROAD	0	0.15	79	6.2.4	PARAPARAP	23.9.96
<b>PORTREATH</b>	4-R	FOREST ROAD	2.2	0.16	79	6.2.4	PARAPARAP	17.12.96
<b>PORTREATH</b>	6-L	FOREST ROAD	4.4	0.52	89	6.2.2	BELLBRAE	17.12.96
<b>PRICES</b>	2-L	WORMBETE STATION	0.8	0.663	79	6.2.4	GHERANG	4.11.96
<b>ROCHFORTS</b>	2-R	GHERANG ROAD	0.2	0.42	89	6.2.2	GHERANG	4.11.96
<b>ROCHFORTS</b>	3-R	GHERANG ROAD	0.6	0.393	89	6.2.2	GHERANG	4.11.96



<b>SPLATTS OUTLET</b>	1-L	PARKERS ROAD	0	0.574	73	3.2.2	DEANS MARSH	17.1.97
<b>SPLATTS OUTLET</b>	1-R	PARKERS ROAD	0	0.574	73	3.2.2	DEANS MARSH	17.1.97
<b>TANNERS</b>	4-R	FOREST ROAD	8.9	0.378	171	6.2.4	WENSLEY DALE	4.11.96
<b>THIELEMANN'S</b>	2-R	ROCHFORTS ROAD	0.8	0.71	89	6.2.2	GHERANG	4.11.96
<b>WENSLEYDALE STATI</b>	10-L	CAPE OTWAY ROAD	5.7	0.273	171	6.2.4	WENSLEY DALE	17.12.96
<b>WENSLEYDALE STATI</b>	10-R	CAPE OTWAY ROAD	5.7	0.273	79	6.2.4	WENSLEY DALE	17.12.96
<b>WENSLEYDALE STATI</b>	4-L	CAPE OTWAY ROAD	2.2	0.66	79	6.2.4	WURDALE	17.12.96
<b>WENSLEYDALE STATI</b>	7-R	CAPE OTWAY ROAD	3.5	0.33	79	6.2.4	WENSLEY DALE	17.12.96
<b>WENSLEYDALE STATI</b>	8-R	CAPE OTWAY ROAD	3.8	0.74	79	6.2.4	WENSLEY DALE	17.12.96
<b>WESTS</b>	5-L	CENTRE ROAD	0.8	0.41	79	3.3.1	WENSLEY DALE	17.12.96
<b>WINCHELSEA-DEANS</b>	2-L	PRINCES HWY	11	1.07	73	3.2.2	WINCHELSEA S	15.1.97
<b>WINCHELSEA-DEANS</b>	2-R	PRINCES HWY	11	1.07	73	3.2.2	WINCHELSEA S	15.1.97
<b>WINCHELSEA-DEANS</b>	5-L	PRINCES HWY	14	1.69	73	3.2.2	BAMBRA	15.1.97
<b>WINCHELSEA-DEANS</b>	5-R	PRINCES HWY	14	1.69	78	3.3.1	BAMBRA	15.1.97
<b>WINCHELSEA-DEANS</b>	6-L	PRINCES HWY	16	1.13	73	3.2.2	BAMBRA	15.1.97
<b>WINCHELSEA-DEANS</b>	6-R	PRINCES HWY	16	1.13	73	3.2.2	BAMBRA	15.1.97
<b>WOODACRES</b>	2-R	GUNDRYS ROAD	0.3	0.43	89	6.2.2	BELLBRAE	23.9.96
<b>WORMBETE STATION</b>	11-L	WURDALE ROAD	4.4	0.67	79	6.2.4	WURDALE	28.11.96
<b>WORMBETE STATION</b>	13-R	WURDALE ROAD	5.8	0.26	79	6.2.4	GHERANG	28.11.96
<b>WORMBETE STATION</b>	1-L	WURDALE ROAD	0	1.86	79	6.2.4	WURDALE	28.11.96
<b>WORMBETE STATION</b>	1-R	WURDALE ROAD	0	1.86	89	6.2.2	WURDALE	28.11.96
<b>WORMBETE STATION</b>	4-L	WURDALE ROAD	3	0.24	79	6.2.4	WURDALE	28.11.96
<b>WORMBETE STATION</b>	4-R	WURDALE ROAD	3	0.24	79	6.2.4	WURDALE	28.11.96
<b>WORMBETE STATION</b>	9-L	WURDALE ROAD	3.9	0.43	79	6.2.4	WURDALE	28.11.96

**Winter**

Revegetation Conduct a revegetation program on eroding or priority sites with local Landcare support (Autumn-Spring)

**Spring**

Weed control Arrange spot spraying of noxious and woody weeds

Revegetation Conduct a revegetation program on eroding or priority sites with local Landcare support (Autumn-Spring)

**Summer**

Weed control Arrange spot spraying of noxious and woody weeds

Seed Collection Coordinate collection in consultation with DSE and the Ballarat Region Seed Bank

**Autumn**

Revegetation Conduct a revegetation program on eroding or priority sites with local Landcare support (Autumn-Spring)

**General**

Natural regeneration Allow time and protect areas from disturbance

Erosion/run-off control Ensure all drain and roadworks meet a high standard. Run training activities

Removal of Exotic Remove inappropriate trees and shrubs when labour is available

Vegetation

*Note 1: Revegetation work on roadsides. The Roadside Management Prescriptions adopt the maxim: 'Protect, Enhance and Restore'. Any revegetation works, whether planting or direct seeding should use indigenous species collected from local seed. Wherever possible seed should be collected from the revegetation site or close by from the same Ecological Vegetation Class.*

## High Conservation roadsides containing Lowland Forest

## 16 Lowland Forest

Conservation Status: HIGH

**EVC Notes:** Stringybark and/or Peppermint Forest with a strong shrub layer. Often on sandy soils and grading to Grassy Woodland. Typically includes some pasture grass (weeds) and some woody weeds in disturbed locations. Heaths and sedges are common in this EVC. High quality examples are found on 42 Surf Coast roads. Weeds are not common in this EVC. Seven VROT/AROT plants are known: Rosy Baeckea, Brooker's Gum, Southern Blue Gum, Grampians Peppermint, Yarra Gum, Angelsea Grevillea and Rayless Daisy-bush.

**SalinityRegime:** Nonsaline

**EVCGroup:** 3 Lowland Forests

**MoistureRegime:** Dry - Moist

**EVCType:** EVC

**ExposureRegime:** Various aspects in hilly country or open plains

**Structural Weeds:** Ragwort, Blackberry, Serrated Tussock, Radiata Pine

**Management Outline:** Limiting disturbance and the control of existing woody weeds are the management priorities. High quality roadsides of this EVC need little management. Burning may assist some of the rare plants

## Comments:

Management Techniques:	Use:	Comments:
Weed control	YES	Spot spraying or hand removal (cut & paint) of woody weeds is recommended
Signage	YES	Signage of all high conservation roadsides is recommended to raise awareness and protect values from inadvertent damage
Natural regeneration	YES	Normally occurs adequately on high-quality roadsides in the absence of threats
Erosion/run-off control	YES	Road grading or management should attempt to disperse rather than concentrate water (correct road camber, run-off points, table and mitre drains). Active eroding areas should be stabilised and revegetated. Use local species able to accept the altered moisture availability in/near drains (e.g. wetter grasses and sedges)
Removal of Exotic Vegetation	YES	Remove any garden escapees or native plants outside their natural range (e.g. Coast tea-tree may invade areas following disturbance)
Rare plant specific requirements	YES	Consult the species list for the roadside. Rare, threatened or endangered plants are noted with a code. Seek advice regarding management required to protect and enhance the species (DSE).. Consult the species list for the roadside. The Grevillea, Daisy-bush and Baeckea respond positively to fire. Regeneration of the three eucalypts may also be assisted by fire. The Grevillea and Daisy-bush also respond positively to soil disturbance in open sites.
Seed Collection	YES	Regulate to protect vegetation from over-collection. Seed of the Grevillea, Baeckea and Daisy-bush is available for a short period only. The eucalypts' seed can be collected in most months of the year
Slashing	NO	Not applicable or required
Grazing	NO	
Cropping	NO	
Revegetation	NO	Not normally required on high-quality roadsides
Salinity Control	NO	
Graded or Ploughed Firebreaks	NO	
Blanket spraying	NO	

<b>Burning</b>	?	Not generally required as an active management approach. The desirable frequency of burning to promote regeneration is covered by the incidence of wildfire. Consider burning the groundlayer only as a trial to aid regeneration as part of a weed control/restoration program. Careful follow-up spot spraying will be necessary to control weed regrowth and germination.
<b>Fencing</b>	?	Fence any areas that are degrading due to unrestricted human or vehicle access

### EVC Description

16 Lowland Forest occurs in the Otways (OR/OP/WP) .

OR

Within the Otways there are two forms of Lowland Forest. The first occurs on sandy loam to sandy orange clay loam soils in high rainfall areas and at moderate altitudes mostly concentrated in the vicinity of Cape Otway on duplex soils (sand/clay) and Carlisle State Park. Prior to European settlement Lowland Forest is presumed to have occurred extensively on the undulating terrain overlying the Gellibrand Marl geology. Limited examples of this remain. The characteristic feature of Lowland Forest is a diversity of species and lifeforms. The overstorey is usually dominated by Brown Stringybark but occasionally Messmate, Narrow-leaf Peppermint and the rare Bog Gum may co-occur. The understorey includes a combination of drier, ericoid species due to the sandier soils. Characteristic species are Prickly Tea-tree, Silver Banksia, Prickly Moses, Common Heath, Honey-pots, Common Correa, Broom Sedge, Large-leaf Bush-pea and Austral Grass-tree. On sites with a higher proportion of clay in the soil, species such as Narrow-leaf Wattle, Dusty Miller, Hop Goodenia, Pink-bells, Red-fruit Saw-sedge and Tall Sword-sedge occur. The ground layer consists of Spreading Rope-rush, Common Raspwort, Ivy-leaf Violet, Trailing Goodenia, Screw Fern and climbers such as Common Apple-berry and Downy Dodder-laurel. Austral Bracken and Forest Wire-grass are also quite common. Weed species are not common.

OP/WP

The second form of Lowland Forest differs in the dominance of species normally associated with Heathy Woodland (EVC 48) and the higher diversity of tussock-forming plants. This form occurs on gentle to moderate slopes of the Otway and Warrnambool Plains. Here soils are early to late Tertiary sediments of sandy loams and silty clay loams. Rainfall is lower at around 900mm per annum. The overstorey includes Narrow-leaf Peppermint, Messmate and Scentbark. The shrub layer includes Common Heath, Honey-pots, Prickly Geebung, Pink-bells and Common Aotus. The ground strata include Common Raspwort, Trailing Goodenia, Reed Bent-grass, Black-anther Flax-lily and Spreading Rope-rush. Sedges are also common and include Wattle Mat-rush, Many-flowered Mat-rush and Spiny-headed Mat-rush.

**Potential Threatening Processes:** timber harvesting, clearing, weed invasion, inappropriate fire regimes, minor forest produce, dieback

**GeneralisedStatus:** D Depleted

### This Management Prescription is currently applicable to the following Surf Coast Roadside Sections:

ROAD NAME	SECTION_ NO_AND_ SIDE:	ORIGIN:	DISTANCE FROM ORIGIN:	SECTION LENGTH:	SLU:	GMU3:	LOCALITY:	DATE SURVEYED:
<b>ADDISCOTT</b>	1-L	ANGELSEA ROAD	0	0.07	79	6.2.4	BELLBRAE	25.10.96
<b>ADDISCOTT</b>	2-L	ANGELSEA ROAD	0.07	2.105	79	6.2.4	BELLBRAE	25.10.96
<b>ADDISCOTT</b>	2-R	ANGELSEA ROAD	0.07	2.105	79	6.2.4	BELLBRAE	25.10.96
<b>BAMBRA-AIREYS INL</b>	5-L	WINCH-DEANS MARS	3.5	0.5	63	3.1.2	BAMBRA	15.1.97
<b>BONES</b>	1-L	ADDISCOTT ROAD	0	1.79	79	6.2.4	BELLBRAE	28.10.96
<b>BONES</b>	1-R	ADDISCOTT ROAD	0	1.79	158	6.2.2	BELLBRAE	28.10.96
<b>BRICKMAKERS</b>	2-L	CAPE OTWAY ROAD	2.4	3.13	171	6.2.4	BAMBRA	4.12.96
<b>BRICKMAKERS</b>	2-R	CAPE OTWAY ROAD	2.4	3.13	73	3.2.2	BAMBRA	4.12.96
<b>BRUSHFIELDS</b>	2-L	HENDY MAIN ROAD	0.8	0.82	79	6.2.4	BELLBRAE	23.9.96

<b>BRUSHFIELDS</b>	2-R	HENDY MAIN ROAD	0.8	0.82	79	6.2.4	BELLBRAE	23.9.96
<b>BRUSHFIELDS NORT</b>	1-L	LOUTITT BAY ROAD	0	0.515	190	6.2.4	BELLBRAE	6.12.96
<b>CASBOULTS</b>	1-L	WENSLEYDALE STAT	0	0.075	79	6.2.4	WENSLEY DALE	17.12.96
<b>CASBOULTS</b>	1-R	WENSLEYDALE STAT	0	0.075	79	6.2.4	WENSLEY DALE	17.12.96
<b>CASBOULTS</b>	4-R	WENSLEYDALE STAT	0.7	0.755	79	6.2.4	WENSLEY DALE	17.12.96
<b>CLARKES</b>	1-L	ROAD FORMATION	0	0.55	79	3.3.1	WENSLEY DALE	17.12.96
<b>CLARKES</b>	1-R	ROAD FORMATION	0	0.55	79	3.3.1	WENSLEY DALE	17.12.96
<b>CLARKES</b>	2-R	ROAD FORMATION	0.6	0.24	79	3.3.1	WENSLEY DALE	17.12.96
<b>CLARKES</b>	3-L	ROAD FORMATION	0.8	0.26	79	3.3.1	WENSLEY DALE	17.12.96
<b>CLARKES</b>	3-R	ROAD FORMATION	0.8	0.26	79	3.3.1	WENSLEY DALE	17.12.96
<b>CLARKES NORTH</b>	1-L	WENSLEYDALE STAT	0	0.39	79	6.2.4	WENSLEY DALE	13.2.97
<b>COALMINE</b>	3-L	WINCHELSEA-DEANS	1.3	0.73	73	3.2.2	WINCHELSEA S	4.12.96
<b>COALMINE</b>	3-R	WINCHELSEA-DEANS	1.3	0.73	73	3.2.2	WINCHELSEA S	4.12.96
<b>DANGERS</b>	1-L	TANNERS ROAD	0	0.34	79	6.2.4	GHERANG	11.11.96
<b>DANGERS</b>	1-R	TANNERS ROAD	0	0.34	171	6.2.4	GHERANG	11.11.96
<b>DANGERS</b>	2-L	TANNERS ROAD	0.3	0	171	6.2.4	GHERANG	11.11.96
<b>DANGERS</b>	2-R	TANNERS ROAD	0.3	0	171	6.2.4	GHERANG	11.11.96
<b>DEANS MARSH-LORN</b>	2-L	BIRREGURRA-DEANS	0.7	5.41	64	3.1.2	DEANS MARSH	28.1.97
<b>DEANS MARSH-LORN</b>	2-R	BIRREGURRA-DEANS	0.7	5.41	64	3.1.2	DEANS MARSH	28.1.97
<b>DUNCE</b>	1-L	PENNYROYAL VALLE	0	2.351	63	3.1.2	DEANS MARSH	17.1.97
<b>DUNCE</b>	1-R	PENNYROYAL VALLE	0	2.351	63	3.1.2	DEANS MARSH	17.1.97
<b>ELKINGTON</b>	3-L	GREAT OCEAN ROAD	1.2	0	79	6.2.4	BELLBRAE	0
<b>ELKINGTON</b>	3-R	GREAT OCEAN ROAD	1.2	0	79	6.2.4	BELLBRAE	0
<b>FLAXBOURNES</b>	2-L	FOREST ROAD	1.2	5.595	171	6.2.4	PARAPARAP	17.12.96
<b>FLAXBOURNES</b>	2-R	FOREST ROAD	1.2	5.595	79	6.2.4	PARAPARAP	17.12.96
<b>FORDS OUTLET</b>	1-L	WINCHELSEA-DEANS	0	1.67	73	3.2.2	DEANS MARSH	15.1.97
<b>FORDS OUTLET</b>	1-R	WINCHELSEA-DEANS	0	1.67	73	3.2.2	DEANS MARSH	15.1.97
<b>FOREST</b>	3-L	GREAT OCEAN ROAD	10	0.13	171	6.2.4	PARAPARAP	2.9.96
<b>FOREST</b>	3-R	GREAT OCEAN ROAD	10	0.13	171	6.2.4	PARAPARAP	2.9.96
<b>GUNDRYS</b>	1-L	FOREST ROAD	0	3.29	89	6.2.2	BELLBRAE	7.10.96
<b>GUNDRYS</b>	1-R	FOREST ROAD	0	3.29	89	6.2.2	BELLBRAE	7.10.96
<b>GUNDRYS</b>	2-L	FOREST ROAD	3.3	1.25	89	6.2.2	BELLBRAE	7.10.96
<b>GUNDRYS</b>	2-R	FOREST ROAD	3.3	1.25	89	6.2.2	BELLBRAE	7.10.96
<b>GUNDRYS</b>	3-L	FOREST ROAD	4.5	0.45	89	6.2.2	BELLBRAE	7.10.96
<b>GUNDRYS</b>	3-R	FOREST ROAD	4.5	0.45	89	6.2.2	BELLBRAE	7.10.96
<b>GUNDRYS</b>	4-L	FOREST ROAD	5	1.608	89	6.2.2	BELLBRAE	7.10.96
<b>GUNDRYS</b>	4-R	FOREST ROAD	5	1.608	89	6.2.2	BELLBRAE	7.10.96
<b>JAROSITE</b>	1-L	ANGELSEA ROAD	0	0.26	79	6.2.4	BELLS BEACH	28.10.96
<b>KNIGHTS</b>	1-L	WORMBETE STATION	0	1.55	79	6.2.4	WENSLEY DALE	17.12.96
<b>KURZMANS</b>	1-L	ANGELSEA ROAD	0	1.009	79	6.2.4	BELLBRAE	18.12.96

<b>KURZMANS</b>	1-R	ANGELSEA ROAD	0	1.009	79	6.2.4	BELLBRAE	18.12.96
<b>LOUTTIT BAY</b>	2-L	HENDY MAIN ROAD	0.5	1.49	171	6.2.4	BELLBRAE	6.12.96
<b>LOUTTIT BAY</b>	2-R	HENDY MAIN ROAD	0.5	1.49	171	6.2.4	BELLBRAE	6.12.96
<b>LOUTTIT BAY</b>	3-L	HENDY MAIN ROAD	2	1.54	190	6.2.4	BELLBRAE	6.12.96
<b>LOUTTIT BAY</b>	3-R	HENDY MAIN ROAD	2	1.54	190	6.2.4	BELLBRAE	6.12.96
<b>MINTER</b>	1-R	ANGELSEA ROAD	0	0.85	89	6.2.2	BELLBRAE	23.9.96
<b>MINTER</b>	3-L	ANGELSEA ROAD	0.9	0.31	89	6.2.2	BELLBRAE	23.9.96
<b>MINTER</b>	3-R	ANGELSEA ROAD	0.9	0.31	79	6.2.4	BELLBRAE	23.9.96
<b>MINTER</b>	5-L	ANGELSEA ROAD	1.5	0.875	89	6.2.2	BELLBRAE	23.9.96
<b>NOBLES (PRIM)</b>	5-L	LARCOMBS ROAD	4.6	1.478	171	6.2.4	GHERANG	11.11.96
<b>NOBLES (PRIM)</b>	5-R	LARCOMBS ROAD	4.6	1.478	171	6.2.4	GHERANG	11.11.96
<b>NOBLES (SEC)</b>	1-R	NOBLES ROAD	0	0.875	171	6.2.4	GHERANG	11.11.96
<b>NORTONS</b>	3-L	FOREST ROAD	0.5	1.52	79	6.2.4	PARAPARAP	23.9.96
<b>NORTONS</b>	3-R	FOREST ROAD	0.5	1.52	79	6.2.4	PARAPARAP	23.9.96
<b>NORTONS</b>	4-L	FOREST ROAD	2.0	6.252	79	6.2.4	BELLBRAE	23.9.96
<b>NORTONS</b>	4-R	FOREST ROAD	2.0	6.252	79	6.2.4	BELLBRAE	23.9.96
<b>PARKERS</b>	1-L	BAMBRA CEMETERY	0	1.63	73	3.2.2	DEANS MARSH	17.1.97
<b>PARKERS</b>	1-R	BAMBRA CEMETERY	0	1.63	73	3.2.2	DEANS MARSH	17.1.97
<b>PARKERS</b>	2-L	BAMBRA CEMETERY	1.6	1.62	63	3.1.2	DEANS MARSH	17.1.97
<b>PARKERS</b>	2-R	BAMBRA CEMETERY	1.6	1.62	63	3.1.2	DEANS MARSH	17.1.97
<b>PENNYROYAL SCHO</b>	1-R	PENNYROYAL-WYMB	0	0.42	73	3.2.2	PENNYROYAL	17.1.97
<b>PENNYROYAL STATI</b>	2-L	BUSHES LANE	1.9	2.146	73	3.2.2	DEANS MARSH	17.1.97
<b>PENNYROYAL STATI</b>	2-R	BUSHES LANE	1.9	2.146	73	3.2.2	DEANS MARSH	17.1.97
<b>PENNYROYAL VALLE</b>	2-L	DEANS MARSH-LORN	0.8	2.37	73	3.2.2	DEANS MARSH	17.1.97
<b>PENNYROYAL VALLE</b>	2-R	DEANS MARSH-LORN	0.8	2.37	95	3.3.3	DEANS MARSH	17.1.97
<b>PENNYROYAL-WYMB</b>	1-L	PENNYROYAL-WYMB	0	3.14	73	3.2.2	PENNYROYAL	17.1.97
<b>PENNYROYAL-WYMB</b>	1-R	PENNYROYAL-WYMB	0	3.14	73	3.2.2	PENNYROYAL	17.1.97
<b>PENNYROYAL-WYMB</b>	2-L	PENNYROYAL-WYMB	3.1	1.415	73	3.2.2	PENNYROYAL	17.1.97
<b>PENNYROYAL-WYMB</b>	2-R	PENNYROYAL-WYMB	3.1	1.415	73	3.2.2	PENNYROYAL	17.1.97
<b>PORTREATH</b>	1-R	FOREST ROAD	0	0.99	79	6.2.4	PARAPARAP	17.12.96
<b>PRICES</b>	1-R	WORMBETE STATION	0	0.77	79	6.2.4	GHERANG	4.11.96
<b>PRICES</b>	2-R	WORMBETE STATION	0.8	0.663	79	6.2.4	GHERANG	4.11.96
<b>SWAYNES</b>	1-L	BAMBRA CEMETERY	0	0.67	73	3.2.2	DEANS MARSH	15.1.97
<b>SWAYNES</b>	1-R	BAMBRA CEMETERY	0	0.67	73	3.2.2	DEANS MARSH	15.1.97
<b>TANNERS</b>	1-L	FOREST ROAD	0	1.3	171	6.2.4	GHERANG	4.11.96
<b>TANNERS</b>	1-R	FOREST ROAD	0	1.3	79	6.2.4	GHERANG	4.11.96
<b>TANNERS</b>	2-L	FOREST ROAD	1.3	7.52	79	6.2.4	WENSLEY DALE	4.11.96
<b>TANNERS</b>	2-R	FOREST ROAD	1.3	7.52	79	6.2.4	WENSLEY DALE	4.11.96
<b>TANNERS</b>	3-L	FOREST ROAD	8.8	0.11	79	6.2.4	WENSLEY DALE	4.11.96
<b>THIELEMANN</b>	3-L	ROCHFORTS ROAD	1.5	1.967	89	6.2.2	GHERANG	4.11.96

THIELEMANN'S	3-R	ROCHFORTS ROAD	1.5	1.967	171	6.2.4	GHERANG	4.11.96
VICKERYS	2-L	HENDY MAIN ROAD	0.8	3.61	171	6.2.4	BELLBRAE	23.9.96
VICKERYS	2-R	HENDY MAIN ROAD	0.8	3.61	79	6.2.4	BELLBRAE	23.9.96
WENSLEYDALE STATI	4-R	CAPE OTWAY ROAD	2.2	0.66	79	6.2.4	WURDALE	13.9.96
WENSLEYDALE STATI	6-L	CAPE OTWAY ROAD	3.2	0.27	171	6.2.4	WENSLEY DALE	13.9.96
WENSLEYDALE STATI	6-R	CAPE OTWAY ROAD	3.2	0.27	79	6.2.4	WENSLEY DALE	13.9.96
WENSLEYDALE STATI	7-L	CAPE OTWAY ROAD	3.5	0.33	79	6.2.4	WENSLEY DALE	13.9.96
WENSLEYDALE STATI	8-L	CAPE OTWAY ROAD	3.8	0.74	79	6.2.4	WENSLEY DALE	13.9.96
WENSLEYDALE STATI	9-L	CAPE OTWAY ROAD	4.5	1.2	79	6.2.4	WENSLEY DALE	13.9.96
WENSLEYDALE STATI	9-R	CAPE OTWAY ROAD	4.5	1.2	89	6.2.2	WENSLEY DALE	13.9.96
WESTS	4-L	CENTRE ROAD	0.6	0.21	79	3.3.1	WENSLEY DALE	17.12.96
WESTS	4-R	CENTRE ROAD	0.6	0.21	73	3.2.2	WENSLEY DALE	17.12.96
WESTS	5-R	CENTRE ROAD	0.8	0	73	3.2.2	WENSLEY DALE	17.12.96
WINCHELSEA-DEANS	3-L	PRINCES HWY	12	1.59	117	6.1.3	BAMBRA	15.1.97
WINCHELSEA-DEANS	3-R	PRINCES HWY	12	1.59	117	6.1.3	BAMBRA	15.1.97
WINCHELSEA-DEANS	4-L	PRINCES HWY	13	1.05	73	3.2.2	BAMBRA	15.1.97
WINCHELSEA-DEANS	4-R	PRINCES HWY	13	1.05	78	3.3.1	BAMBRA	15.1.97
WINCHELSEA-GHERA	5-L	CAPE OTWAY ROAD	3.0	1.15	89	6.2.2	GHERANG	28.11.96
WINCHELSEA-GHERA	5-R	CAPE OTWAY ROAD	3.0	1.15	89	6.2.2	GHERANG	28.11.96
WINCHELSEA-GHERA	6-L	CAPE OTWAY ROAD	4.2	0.942	79	6.2.4	GHERANG	28.11.96
WINCHELSEA-INVERL	2-L	RAILWAY LINE	14	0.14	174	6.2.4	INVERLEIGH	5.8.96
WINCHELSEA-INVERL	2-R	RAILWAY LINE	14	0.14	174	6.2.4	INVERLEIGH	5.8.96
WORMBETE STATION	10-L	WURDALE ROAD	4.4	0.09	79	6.2.4	WURDALE	28.11.96
WORMBETE STATION	12-R	WURDALE ROAD	5.1	0.72	89	6.2.2	GHERANG	28.11.96
WORMBETE STATION	13-L	WURDALE ROAD	5.8	0.26	89	6.2.2	GHERANG	28.11.96
WORMBETE STATION	3-L	WURDALE ROAD	2.3	0.62	79	6.2.4	WURDALE	28.11.96
WORMBETE STATION	3-R	WURDALE ROAD	2.3	0.62	79	6.2.4	WURDALE	28.11.96
WORMBETE STATION	5-L	WURDALE ROAD	3.2	0.06	79	6.2.4	WURDALE	28.11.96
WORMBETE STATION	5-R	WURDALE ROAD	3.2	0.06	79	6.2.4	WURDALE	28.11.96
WORMBETE STATION	6-L	WURDALE ROAD	3.3	0.42	79	6.2.4	WURDALE	28.11.96
WORMBETE STATION	8-L	WURDALE ROAD	3.8	0.08	89	6.2.2	WURDALE	28.11.96
WORMBETE STATION	9-R	WURDALE ROAD	3.9	0.43	79	6.2.4	WURDALE	28.11.96
WURDALE	3-L	CAPE OTWAY ROAD	1.4	1.34	73	3.2.2	WURDALE	4.12.96
WURDALE	3-R	CAPE OTWAY ROAD	1.4	1.34	73	3.2.2	WURDALE	4.12.96
WURDALE	6-L	CAPE OTWAY ROAD	3.5	0.32	171	6.2.4	WINCHELSEA S	4.12.96
WURDALE	6-R	CAPE OTWAY ROAD	3.5	0.32	171	6.2.4	WINCHELSEA S	4.12.96
WURDALE	7-R	CAPE OTWAY ROAD	3.8	2.025	95	3.3.3	WINCHELSEA S	4.12.96

**The following Surf Coast Roadside Sections contain listed plant species in this EVC:**

*Baeckea ramosissima* ssp. *prostrata* Rosy Baeckea

AROTS: VROTS: r

RD\_NAME:

SECTION\_NO\_AND\_SIDE:

GUNDRYS

4-R

PORTREATH		1-R
GUNDRYS		4-L
<b><i>Eucalyptus brookeriana</i></b>	<b>Brooker's Gum</b>	<b>AROTS: VROTS: r</b>
<b>RD_NAME:</b>		<b>SECTION_NO_AND_SIDE:</b>
WURDALE		3-R
PENNYROYAL-WYMBOOLIEL		1-L
WURDALE		6-R
PENNYROYAL STATION		2-L
WURDALE		3-L
PENNYROYAL SCHOOLS		1-R
WURDALE		6-L
PENNYROYAL-WYMBOOLIEL		2-R
PENNYROYAL-WYMBOOLIEL		2-L
PENNYROYAL STATION		2-R
PENNYROYAL-WYMBOOLIEL		1-R
PENNYROYAL VALLEY		2-R
PENNYROYAL VALLEY		2-L
<b><i>Eucalyptus globulus ssp. globulus</i></b>	<b>Southern Blue-gum</b>	<b>AROTS: VROTS: r</b>
<b>RD_NAME:</b>		<b>SECTION_NO_AND_SIDE:</b>
BAMBRA-AIREYS INLET		5-L
DUNCE		1-L
DUNCE		1-R
PARKERS		2-L
PARKERS		2-R
DEANS MARSH-LORNE		2-L
DEANS MARSH-LORNE		2-R
<b><i>Eucalyptus willisii ssp. falciformis</i></b>	<b>Grampians Peppermint</b>	<b>AROTS: VROTS: r</b>
<b>RD_NAME:</b>		<b>SECTION_NO_AND_SIDE:</b>
TANNERS		3-L
NOBLES (SEC)		1-R
TANNERS		2-R
NOBLES (PRIM)		5-L
TANNERS		2-L
NOBLES (PRIM)		5-R
<b><i>Eucalyptus yarraensis</i></b>	<b>Yarra Gum</b>	<b>AROTS: VROTS: k</b>
<b>RD_NAME:</b>		<b>SECTION_NO_AND_SIDE:</b>
BAMBRA-AIREYS INLET		5-L
FORDS OUTLET		1-R
FORDS OUTLET		1-L
SWAYNES		1-L
SWAYNES		1-R
WINCHELSEA-DEANS MARSH		4-L
WORMBETE STATION		10-L
WURDALE		7-R
WORMBETE STATION		9-R
WORMBETE STATION		8-L
WORMBETE STATION		3-L
WORMBETE STATION		3-R
PENNYROYAL STATION		2-R
PENNYROYAL STATION		2-L



WINCHELSEA-DEANS MARSH		4-R
PARKERS		1-L
PENNYROYAL VALLEY		2-L
PENNYROYAL VALLEY		2-R
PARKERS		1-R
BRICKMAKERS		2-R
BRICKMAKERS		2-L
WENSLEYDALE STATION		4-R
PENNYROYAL-WYMBOOLIEL		2-L
PENNYROYAL-WYMBOOLIEL		2-R
FLAXBOURNES		2-R
COALMINE		3-R
WURDALE		6-R
WURDALE		3-R
WURDALE		3-L
COALMINE		3-L
FLAXBOURNES		2-L
DANGERS		2-R
DANGERS		2-L
WURDALE		6-L
<b><i>Grevillea infecunda</i></b>	<b>Anglesea Grevillea</b>	<b>AROTS: V VROTS: v</b>
<b>RD_NAME:</b>		<b>SECTION_NO_AND_SIDE:</b>
TANNERS		2-R
TANNERS		3-L
TANNERS		2-L
<b><i>Olearia tubuliflora</i></b>	<b>Rayless Daisy-bush</b>	<b>AROTS: VROTS: r</b>
<b>RD_NAME:</b>		<b>SECTION_NO_AND_SIDE:</b>
TANNERS		1-L
TANNERS		1-R

## Calendar of potential roadside management activities:

16H

## Spring

Weed control	Arrange spot spraying of noxious and woody weeds
Rare plant specific requirements	Monitor populations of rare species each Spring and adjust management where necessary (in consultation with DSE)

## Summer

Weed control	Arrange spot spraying of noxious and woody weeds
Seed Collection	Coordinate collection in consultation with DSE and the Ballarat Region Seed Bank

## General

Signage	Erect SRV and interpretation signage on HCV roadsides
Natural regeneration	Allow time and protect areas from disturbance
Erosion/run-off control	Ensure all drain and roadworks meet a high standard. Run training activities
Removal of Exotic Vegetation	Remove inappropriate trees and shrubs when labour is available

*Note 1: Revegetation work on roadsides. The Roadside Management Prescriptions adopt the maxim: 'Protect, Enhance and Restore'. Any revegetation works, whether planting or direct seeding should use indigenous species collected from local seed. Wherever possible seed should be collected from the revegetation site or close by from the same Ecological Vegetation Class.*

## High Conservation Roadsides containing Shrubby Dry Forest

### 21 Shrubby Dry Forest

**Conservation Status: HIGH**

**EVC Notes:** Intact roadsides in the drier parts of the Otway Range on skeletal soils. Low forest with dense shrub growth and a varying density of ground layer species. In Surf Coast Shire, Shrubby Dry Forest is represented only on Jarosite Road, where it is of high quality. No AROT or VROT species are known on this road.

**SalinityRegime:** Nonsaline

**EVCGroup:** 6 Dry Forests

**MoistureRegime:** Dry - Moist

**EVCType:** EVC

**ExposureRegime:** Various aspects in hilly country or open plains

**Structural Weeds:** Spear Thistle

**Management Outline:** No active management should be required in the absence of major soil disturbance. High quality roadsides require monitoring more than maintenance. However, weed populations need to be reduced, and soil disturbance needs to be prevented.

**Comments:** There are few major threat weeds in this EVC

Management Techniques:	Use:	Comments:
<b>Weed control</b>	YES	Spot spraying or hand removal (cut & paint) of woody weeds is recommended
<b>Signage</b>	YES	Signage of all high conservation roadsides is recommended to raise awareness and protect values from inadvertent damage
<b>Natural regeneration</b>	YES	
<b>Erosion/run-off control</b>	YES	Road grading or management should attempt to disperse rather than concentrate water (correct road camber, run-off points, table and mitre drains). Active eroding areas should be stabilised and revegetated
<b>Removal of Exotic Vegetation</b>	YES	Remove any garden escapees or native plants outside their natural range (e.g. Coast tea-tree may invade areas following disturbance)
<b>Rare plant specific requirements</b>	YES	Consult the species list for the roadside. Rare, threatened or endangered plants are noted with a code. Seek advice regarding management required to protect and enhance the species (DSE).
<b>Seed Collection</b>	YES	Regulate to protect vegetation from over-collection
<b>Burning</b>	NO	Burning is likely to be catered for through the incidence of wildfire. This EVC responds positively to a burn approximately every 20-50 years
<b>Slashing</b>	NO	Not applicable or required
<b>Grazing</b>	NO	
<b>Cropping</b>	NO	
<b>Fencing</b>	NO	
<b>Revegetation</b>	NO	This EVC generally regenerates satisfactorily without assistance
<b>Salinity Control</b>	NO	
<b>Graded or Ploughed Firebreaks</b>	NO	
<b>Blanket spraying</b>	NO	

### EVC Description

**21** Shrubby Dry Forest is a low, open forest with a diverse though sometimes sparse shrub layer and sparse and species-poor ground layer. Recorded for the CVU, OP and OR Bioregions. Four floristic communities of Shrubby Dry Forest are currently recognised in the region.

Otways Shrubby Dry Forest has a limited distribution centred near the boundary of the lower Cretaceous and late Tertiary sediments near Aireys Inlet. The most well developed examples occur on exposed western and northern aspects on moderate slopes. The soils are orange-brown silty loams to silty clay loams. The average annual rainfall is 650-800mm and altitude is approximately 10-200 m asl. The overstorey is an open forest dominated by Messmate, Blue Gum, Scentbark and Red Ironbark. The shrub stratum is diverse and dense and includes Large-leaf Bush-pea, Common Heath, Prickly Moses, Narrow-leaf Wattle and Nettle Daisy-bush. The ground stratum may vary in density and includes a number of grasses, the more common being Grey-tussock Grass, Silver-top Wallaby-grass and Short-hair Plume-grass. Sedges are strongly represented by Wattle Mat-rush, Many-flowered Mat-rush, Spiny-headed Mat-rush and Thatch Saw-sedge. Other common species include Trailing Goodenia, Honey-pots and Love Creeper.

**Potential Threatening Processes:** inappropriate fire regimes, minor forest produce, weed invasion, pest animals

**Generalised Status:** LC Least Concern

**This Management Prescription is currently applicable to the following Surf Coast Roadside Sections:**

ROAD NAME	SECTION_ NO_AND_SIDE:	ORIGIN:	DISTANCE FROM ORIGIN:	SECTION LENGTH:	SLU:	GMU3:	LOCALITY:	DATE SURVEYED:
JAROSITE	5-L	ANGELSEA ROAD	1.5	0.94	79	6.2.4	BELLBRAE	28.10.96
JAROSITE	5-R	ANGELSEA ROAD	1.5	0.94	79	6.2.4	BELLBRAE	28.10.96

**Calendar of potential roadside management activities:**

21H

**Spring**

Weed control	Arrange spot spraying of noxious and woody weeds
Rare plant specific requirements	Monitor populations of rare species each Spring and adjust management where necessary (in consultation with DSE)

**Summer**

Weed control	Arrange spot spraying of noxious and woody weeds
Seed Collection	Coordinate collection in consultation with DSE and the Ballarat Region Seed Bank

**General**

Signage	Erect SRV and interpretation signage on HCV roadsides
Natural regeneration	Allow time and protect areas from disturbance
Erosion/run-off control	Ensure all drain and roadworks meet a high standard. Run training activities
Removal of Exotic Vegetation	Remove inappropriate trees and shrubs when labour is available

*Note 1: Revegetation work on roadsides. The Roadside Management Prescriptions adopt the maxim: 'Protect, Enhance and Restore'. Any revegetation works, whether planting or direct seeding should use indigenous species collected from local seed. Wherever possible seed should be collected from the revegetation site or close by from the same Ecological Vegetation Class.*

## High Conservation Value Roadsides containing Wet Forest

### 30 Wet Forest

**Conservation Status: HIGH**

**EVC Notes:** Otway Forest Roadsides. Trees in this EVC are very tall. There is a rather open shrub layer of several species. Forest Wire-grass and ferns often dominate the ground layer. Weed species are relatively few. Wet Forest is found on Surf Coast roadsides only on Allenvale Road. No AROTS/VROTS are known.

**SalinityRegime:** Nonsaline

**EVCGroup:** 7 Wet or Damp Forests

**MoistureRegime:** Moist

**EVCType:** EVC

**ExposureRegime:** Highly Sheltered

**Structural Weeds:** Blackberry, Ragwort, Oxeye Daisy, Tutsan, Spear Thistle, Creeping Buttercup

**Management Outline:** No active management should be required in the absence of major soil disturbance. Wet Forest on Allenvale Road is of high quality and requires no major maintenance. Invasion of weeds, especially woody weeds and garden escapes, plus soil disturbance, are the major management issues.

**Comments:** Highly fertile and well-watered soils are vulnerable to weed invasion (Blackberry, Ragwort) following disturbance

Management Techniques:	Use:	Comments:
<b>Weed control</b>	YES	Spot spray, cut and paint or remove serious weeds or any emerging weeds (i.e. yet to establish). Concentrate especially on woody weeds and garden escapes
<b>Signage</b>	YES	Signage of all high conservation roadsides is recommended to raise awareness and protect values from inadvertent damage
<b>Natural regeneration</b>	YES	Occurs satisfactorily in the absence of threats
<b>Erosion/run-off control</b>	YES	Road grading or management should attempt to disperse rather than concentrate water (correct road camber, run-off points, table and mitre drains). Active eroding areas should be stabilised and revegetated
<b>Removal of Exotic Vegetation</b>	YES	Remove any garden escapees or native plants outside their natural range (e.g. Weed Wattles).
<b>Rare plant specific requirements</b>	YES	Consult the species list for the roadside. Rare, threatened or endangered plants are noted with a code. Seek advice regarding management required to protect and enhance the species (DSE).
<b>Seed Collection</b>	YES	Regulate to protect vegetation from over-collection
<b>Burning</b>	NO	Naturally this EVC would have burnt infrequently.
<b>Slashing</b>	NO	Not applicable or required
<b>Grazing</b>	NO	
<b>Cropping</b>	NO	
<b>Fencing</b>	NO	
<b>Revegetation</b>	NO	
<b>Salinity Control</b>	NO	
<b>Graded or Ploughed Firebreaks</b>	NO	
<b>Blanket spraying</b>	NO	

### EVC Description

**30** There are two forms of Wet Forest in the Otway Ranges (OR). The first is distributed along the Otway Range from the northern section of the Otway National Park and north of the Great Ocean Road to the Beech Forest Water Catchment. It has an extremely high annual rainfall or 1550mm and occurs in gullies or on protected south and south east-facing slopes of the Otway Range. In addition, it may extend out of more

sheltered situations and on to ridges due to the protected nature of the topography and high rainfall and low cloud cover. Geology is mostly non-marine, early cretaceous sediments and soils are fertile loams, where slumping and erosion is common. The overstorey is a tall forest dominated by pure stands of Mountain Ash on wetter sites and mixed stands of Mountain Ash with Mountain Grey Gum and Messmate, the latter more frequent at lower altitudes. Blackwood forms a tall secondary tree layer. The shrub layer is well established and is dominated by mesic shrubs including Musk Daisy-bush, Prickly Currant-bush, Austral Mulberry and Blanket-leaf. Sclerophyllous, non-ericoid species, such as Bootlace Bush, Hazel Pomaderris, Banyalla, Satinwood and Privet Mock-olive are also common. There is an abundance and diversity of ferns in all strata as ground ferns, tree ferns or epiphytes. Epiphytic ferns, fern allies and filmy ferns include the vulnerable Beech Finger-fern, Kangaroo Fern, Common Finger-fern, Gypsy Fern, Austral Filmy Fern, Leathery Shield-fern. Ground ferns include Mother Shield-fern, Hard Water-fern and Bat's Wing Fern. Soft Tree-fern is nearly always present, with the rare Slender Tree-fern and Rough Tree-fern sometimes co-occurring. The ground stratum is usually sparse with a high cover of leaf litter. Common forbs include the vulnerable Tall Astelia, Forest Starwort, Tall Sword-sedge and Shade Nettle.

The second form of Wet Forest is more wide spread and is located in the northern section of Otway National Park both south and north of the Great Ocean Road. This form occurs on more exposed northerly slopes and ridges at lower altitudes, averaging 330m asl and average annual rainfall is 1450mm. Geology is of cretaceous sediments and soils are moderate to high in fertility and less moist than the previous form of this EVC. The overstorey is dominated by Mountain Ash over 40m tall. On drier sites this co-dominates with Messmate, Mountain Grey Gum and Victorian Blue Gum. Blackwood often forms a tall secondary tree layer. The understorey is more open and species-rich in shrubs than the previous form and includes Musk Daisy-bush, Snow Daisy-bush, Hazel Pomaderris, Prickly Currant-bush, Satinwood, Privet Mock-olive, Austral Mulberry and Victorian Christmas-bush. Ferns are neither common or abundant. Those that are present include Soft Tree-fern, Kangaroo Fern, Austral Bracken, Hard Water-fern, Bat's Wing Fern and Mother Shield-fern. Other species in the ground stratum are more common and include Forest Starwort, Hop Goodenia, Tall Sword-sedge and Mountain Clematis. Forest Wire-grass has a high cover and often dominates in response to disturbance.

**Potential Threatening Processes:** timber harvesting, inappropriate fire regimes, indirect impacts of road construction and maintenance, weed invasion, illegal collecting/harvesting

**GeneralisedStatus:** LC Least Concern

**This Management Prescription is currently applicable to the following Surf Coast Roadside Sections:**

ROAD NAME	SECTION_ NO_AND_ SIDE:	ORIGIN:	DISTANCE FROM ORIGIN:	SECTION LENGTH:	SLU:	GMU3:	LOCALITY:	DATE SURVEYED:
ALLENVALE	4-L	GEORGE STREET	3.1	0.42	64	3.1.2	LORNE	28.1.97
ALLENVALE	4-R	GEORGE STREET	3.1	0.42	64	3.1.2	LORNE	28.1.97

**Calendar of potential roadside management activities:**

**30H**

**Spring**

Weed control	Arrange spot spraying of noxious and woody weeds
Rare plant specific requirements	Monitor populations of rare species each Spring and adjust management where necessary (in consultation with DSE)

**Summer**

Weed control	Arrange spot spraying of noxious and woody weeds
Seed Collection	Coordinate collection in consultation with DSE and the Ballarat Region Seed Bank

**General**

Signage	Erect SRV and interpretation signage on HCV roadsides
Natural regeneration	Allow time and protect areas from disturbance
Erosion/run-off control	Ensure all drain and roadworks meet a high standard. Run training activities
Removal of Exotic Vegetation	Remove inappropriate trees and shrubs when labour is available

*Note 1: Revegetation work on roadsides. The Roadside Management Prescriptions adopt the maxim: 'Protect, Enhance and Restore'. Any revegetation works, whether planting or direct seeding should use indigenous species collected from local seed. Wherever possible seed should be collected from the revegetation site or close by from the same Ecological Vegetation Class.*

**Low Conservation Roadsides containing Shrubby Foothill Forest****45 Shrubby Foothill Forest****Conservation Status: LOW****EVC Notes:** More exposed sites in the Otway Forest. A diverse shrub layer now replaced with weeds**SalinityRegime:** Nonsaline**EVCGroup:** 6 Dry Forests**MoistureRegime:** Dry - Moist**EVCType:** EVC**ExposureRegime:** Various aspects in hilly country or open plains**Structural Weeds:** Ragwort, Blackberry, Tutsan, Oxeye Daisy, Spear Thistle, Sweet Pittosporum**Management Outline:** Focus management on the control of woody weeds.**Comments:**

<b>Management Techniques:</b>	<b>Use:</b>	<b>Comments:</b>
<b>Slashing</b>	YES	Slash areas of introduced grass or woody weed seedlings only, to restrict fire risk if required. Care should be taken not to spread seed to other sections of the road with higher conservation values. Slashing is best carried out prior to seeding of annual grasses (by December)
<b>Weed control</b>	YES	Important around remnant plants
<b>Natural regeneration</b>	YES	Encourage natural regeneration through the removal of threats such as grazing, slashing or weed competition around any remnants
<b>Revegetation</b>	YES	Consider revegetation with trees and shrubs as a mechanism to cut long term management costs (i.e. remove the need for regular slashing/weed control)
<b>Erosion/run-off control</b>	YES	Road grading or management should attempt to disperse rather than concentrate water (correct road camber, run-off points, table and mitre drains). Active eroding areas should be stabilised and revegetated
<b>Removal of Exotic Vegetation</b>	YES	Remove any garden escapees or native plants outside their natural range (e.g. Weed Wattles).
<b>Seed Collection</b>	YES	Regulate to protect vegetation from over-collection
<b>Burning</b>	NO	A burn may assist natural regeneration. Burning must protect existing trees. The area should not be burnt again until seedlings are well established (20 year plus cycle). It is imperative that any burning does not damage seedlings (wet down prior to burning). Consider the impact of any proposed burn on the spread of weeds.
<b>Grazing</b>	NO	
<b>Cropping</b>	NO	
<b>Fencing</b>	NO	
<b>Signage</b>	NO	
<b>Salinity Control</b>	NO	
<b>Rare plant specific requirements</b>	NO	
<b>Graded or Ploughed Firebreaks</b>	NO	
<b>Blanket spraying</b>	NO	

**EVC Description**

**45** Shrubby Foothill Forest occurs widely in the Otways (OR/OP/WP), on exposed aspects and slight to moderate slopes. It has been identified both close to and remote from the coast, with an average annual rainfall greater than 1100mm. The soils are clay loams over medium to heavy clays. Closer to the coast the clay loams become more shallow over rock. Average altitude is 180m asl. The overstorey is a medium



forest dominated by Messmate to 30m tall. Mountain Grey Gum is also common. Occasional other species include Scentbark, Brown Stringybark, the rare Brooker's Gum, Blue Gum, Swamp Gum, Narrow-leaf Peppermint, Mountain Ash and Manna Gum. There is no understorey tree layer. A diverse shrub layer characterizes this EVC. The most common species include Hop Goodenia, Prickly Moses, Snow Daisy-bush, Prickly Currant-bush, Narrow-leaf Wattle, Privet Mock-olive, Tree everlasting, Prickly Tea-tree, Hazel Pomaderris and Large-leaf Bush-pea. The ground stratum lacks diversity and is often dominated by Austral Bracken and Forest Wire-grass (especially in response to disturbance). Other species include Tall Sword-sedge, the rare Cluster-headed Mat-rush, the vulnerable Swamp Flax-lily and Ivy-leaf Violet. Mountain Clematis is the only climber.

**Potential Threatening Processes:** minor forest produce, timber harvesting, inappropriate fire regimes, weed invasion

**GeneralisedStatus:** LC Least Concern

**This Management Prescription is currently applicable to the following Surf Coast Roadside Sections:**

ROAD NAME	SECTION_ NO_AND_SIDE	ORIGIN:	DISTANCE FROM ORIGIN:	SECTION LENGTH:	SLU:	GMU3:	LOCALITY:	DATE SURVEYED:
ALLENVALE	2-R	GEORGE STREET	0.1	0.12	64	3.1.2	LORNE	28/01/97
DEANS MARSH-LORN	9-L	BIRREGURRA ROAD	21	1.33	64	3.1.2	LORNE	17.01.97
DEANS MARSH-LORN	9-R	CAPE OTWAY ROAD	1.3	1.33	63	3.1.2	LORNE	17.01.97

**Calendar of potential roadside management activities:**

45L

**Winter**

Revegetation Conduct a revegetation program on eroding or priority sites with local Landcare support (Autumn-Spring)

**Spring**

Slashing Slashing program for designated areas (fuel reduction)

Weed control Arrange spot spraying of noxious and woody weeds

Revegetation Conduct a revegetation program on eroding or priority sites with local Landcare support (Autumn-Spring)

**Summer**

Weed control Arrange spot spraying of noxious and woody weeds

Seed Collection Coordinate collection in consultation with DSE and the Ballarat Region Seed Bank

**Autumn**

Revegetation Conduct a revegetation program on eroding or priority sites with local Landcare support (Autumn-Spring)

**General**

Natural regeneration Allow time and protect areas from disturbance

Erosion/run-off control Ensure all drain and roadworks meet a high standard. Run training activities

Removal of Exotic Vegetation Remove inappropriate trees and shrubs when labour is available

*Note 1: Revegetation work on roadsides. The Roadside Management Prescriptions adopt the maxim: 'Protect, Enhance and Restore'. Any revegetation works, whether planting or direct seeding should use indigenous species collected from local seed. Wherever possible seed should be collected from the revegetation site or close by from the same Ecological Vegetation Class.*

**Medium Conservation Roadsides containing Shrubby Foothill Forest****45 Shrubby Foothill Forest****Conservation Status: MEDIUM****EVC Notes:** More exposed sites in the Otway Forest. A diverse shrub layer now partly replaced by weeds.**SalinityRegime:** Nonsaline**EVCGroup:** 6 Dry Forests**MoistureRegime:** Dry - Moist**EVCType:** EVC**ExposureRegime:** Various aspects in hilly country or open plains**Structural Weeds:** Ragwort, Blackberry, Tutsan, Oxeye Daisy, Spear Thistle, Sweet Pittosporum**Management Outline:** Focus management on the control of woody weeds.**Comments:**

<b>Management Techniques:</b>	<b>Use:</b>	<b>Comments:</b>
<b>Weed control</b>	YES	Spot spray, cut and paint or remove serious weeds or any emerging weeds (i.e. yet to establish)
<b>Natural regeneration</b>	YES	Encourage natural regeneration through the removal of threats such as grazing, slashing or weed competition around any remnants
<b>Revegetation</b>	YES	Consider revegetation with trees and shrubs where appropriate as a mechanism to cut long term management costs (i.e. remove the need for regular slashing/weed control). May be useful around existing better-quality areas
<b>Erosion/run-off control</b>	YES	Road grading or management should attempt to disperse rather than concentrate water (correct road camber, run-off points, table and mitre drains). Active eroding areas should be stabilised and revegetated
<b>Removal of Exotic Vegetation</b>	YES	Remove any garden escapees or native plants outside their natural range (e.g. Weed Wattles).
<b>Seed Collection</b>	YES	Regulate to protect vegetation from over-collection
<b>Burning</b>	NO	A burn may assist natural regeneration. Burning must protect existing trees. The area should not be burnt again until seedlings are well established (20 year plus cycle). It is imperative that any burning does not damage seedlings (wet down prior to burning). Consider the impact of any proposed burn on the spread of weeds.
<b>Grazing</b>	NO	
<b>Cropping</b>	NO	
<b>Fencing</b>	NO	
<b>Signage</b>	NO	May be advantageous for <i>E. brookeriana</i> in Allenvale Rd and <i>E globulus</i> in Bambra Cemetery Rd
<b>Salinity Control</b>	NO	
<b>Rare plant specific requirements</b>	NO	
<b>Graded or Ploughed Firebreaks</b>	NO	
<b>Blanket spraying</b>	NO	
<b>Slashing</b>	?	May be necessary to reduce fuel load. Avoid tree and shrub regeneration (rocks, logs and stumps can protect these)

**EVC Description**

**45** Shrubby Foothill Forest occurs widely in the Otways (OR/OP/WP), on exposed aspects and slight to moderate slopes. It has been identified both close to and remote from the coast, with an average annual rainfall greater than 1100mm. The soils are clay loams over medium to heavy clays. Closer to the coast the clay loams become more shallow over rock. Average altitude is 180m asl. The overstorey is a medium

forest dominated by Messmate to 30m tall. Mountain Grey Gum is also common. Occasional other species include Scentbark, Brown Stringybark, the rare Brooker's Gum, Blue Gum, Swamp Gum, Narrow-leaf Peppermint, Mountain Ash and Manna Gum. There is no understorey tree layer. A diverse shrub layer characterizes this EVC. The most common species include Hop Goodenia, Prickly Moses, Snow Daisy-bush, Prickly Currant-bush, Narrow-leaf Wattle, Privet Mock-olive, Tree everlasting, Prickly Tea-tree, Hazel Pomaderris and Large-leaf Bush-pea. The ground stratum lacks diversity and is often dominated by Austral Bracken and Forest Wire-grass (especially in response to disturbance). Other species include Tall Sword-sedge, the rare Cluster-headed Mat-rush, the vulnerable Swamp Flax-lily and Ivy-leaf Violet. Mountain Clematis is the only climber.

**Potential Threatening Processes:** minor forest produce, timber harvesting, inappropriate fire regimes, weed invasion

**GeneralisedStatus:** LC Least Concern

**This Management Prescription is currently applicable to the following Surf Coast Roadside Sections:**

ROAD NAME	SECTION_ NO_AND_SIDE	ORIGIN:	DISTANCE FROM ORIGIN:	SECTION LENGTH:	SLU:	GMU3:	LOCALITY:	DATE SURVEYED:
ALLENVALE	1-L	GEORGE STREET	0	0.12	64	3.1.2	LORNE	28.1.97
ALLENVALE	1-R	GEORGE STREET	0	0.12	64	3.1.2	LORNE	28.1.97
BAMBRA CEMETERY	2-L	WINCHELSEA-DEANS	0.4	4.62	73	3.2.2	DEANS MARSH	26.8.96
BAMBRA CEMETERY	2-R	WINCHELSEA-DEANS	0.4	4.62	63	3.1.2	DEANS MARSH	26.8.96
ERSKINE FALLS	1-L	POLWARTH ROAD	0	0.47	64	3.1.2	LORNE	27.1.97
ERSKINE FALLS	1-R	POLWARTH ROAD	0	0.47	61	3.1.2	LORNE	27.1.97

**Calendar of potential roadside management activities:**

45M

**Winter**

Revegetation Conduct a revegetation program on eroding or priority sites with local Landcare support (Autumn-Spring)

**Spring**

Weed control Arrange spot spraying of noxious and woody weeds  
 Revegetation Conduct a revegetation program on eroding or priority sites with local Landcare support (Autumn-Spring)

**Summer**

Weed control Arrange spot spraying of noxious and woody weeds  
 Seed Collection Coordinate collection in consultation with DSE and the Ballarat Region Seed Bank

**Autumn**

Revegetation Conduct a revegetation program on eroding or priority sites with local Landcare support (Autumn-Spring)

**General**

Natural regeneration Allow time and protect areas from disturbance  
 Erosion/run-off control Ensure all drain and roadworks meet a high standard. Run training activities  
 Removal of Exotic Vegetation Remove inappropriate trees and shrubs when labour is available

*Note 1: Revegetation work on roadsides. The Roadside Management Prescriptions adopt the maxim: 'Protect, Enhance and Restore'. Any revegetation works, whether planting or direct seeding should use indigenous species collected from local seed. Wherever possible seed should be collected from the revegetation site or close by from the same Ecological Vegetation Class.*

**High Conservation Roadsides containing Shrubby Foothill Forest****45 Shrubby Foothill Forest****Conservation Status: HIGH****EVC Notes:** More exposed sites in the Otway Forest. A diverse shrub layer is characteristic of this EVC.**SalinityRegime:** Nonsaline **EVCGroup:** 6 Dry Forests**MoistureRegime:** Dry - Moist **EVCType:** EVC**ExposureRegime:** Various aspects in hilly country or open plains**Structural Weeds:** Ragwort, Blackberry, Tutsan, Oxeye Daisy, Spear Thistle, Sweet Pittosporum**Management Outline:** Little active management is required in the absence of major disturbance. Major issues are potential woody weed and exotic grass invasion, and impacts of soil disturbance.**Comments:** This EVC has no understorey tree layer, but its shrub layer is dense. Six Surf Coast roadsides are classified as having high quality Shrubby Foothill Forest. Four VROT species are known from these (Wiry Bossiaea, Dwarf Silver Wattle, Southern Bluegum, Yarra Gum).

Management Techniques:	Use:	Comments:
<b>Weed control</b>	YES	Spot spray or remove any noxious weeds or inappropriate plants
<b>Signage</b>	YES	Signage of all high conservation roadsides is recommended to raise awareness and protect values from inadvertent damage
<b>Natural regeneration</b>	YES	
<b>Erosion/run-off control</b>	YES	Road grading or management should attempt to disperse rather than concentrate water (correct road camber, run-off points, table and mitre drains). Active eroding areas should be stabilised and revegetated. Re-routing or closing of illegal vehicle tracks may be necessary.
<b>Removal of Exotic Vegetation</b>	YES	Remove any garden escapees or native plants outside their natural range (e.g. Weed Wattles).
<b>Rare plant specific requirements</b>	YES	Consult the species list for the roadside. Rare, threatened or endangered plants are noted with a code. Seek advice regarding management required to protect and enhance the species (DSE). Dwarf Silver Wattle regenerates well after fire and Wiry Bossiaea would probably do the same. Southern Blue Gum and Yarra Gum normally regenerate satisfactorily in the absence of inhibiting factors.
<b>Seed Collection</b>	YES	Regulate to protect vegetation from over-collection. The two eucalypts' seed is available for most of the year. Dwarf Silver Wattle and Wiry Bossiaea seed is available for only a few weeks in January.
<b>Burning</b>	NO	Burning is likely to be catered for through the incidence of wildfire. A 50 year plus cycle should be sufficient to maintain diversity.
<b>Slashing</b>	NO	Not applicable or required
<b>Grazing</b>	NO	
<b>Cropping</b>	NO	
<b>Fencing</b>	NO	
<b>Revegetation</b>	NO	Usually satisfactory in high-quality areas
<b>Salinity Control</b>	NO	
<b>Graded or Ploughed Firebreaks</b>	NO	
<b>Blanket spraying</b>	NO	

## EVC Description

**45** Shrubby Foothill Forest occurs widely in the Otways (OR/OP/WP), on exposed aspects and slight to moderate slopes. It has been identified both close to and remote from the coast, with an average annual rainfall greater than 1100mm. The soils are clay loams over medium to heavy clays. Closer to the coast the clay loams become more shallow over rock. Average altitude is 180m asl. The overstorey is a medium forest dominated by Messmate to 30m tall. Mountain Grey Gum is also common. Occasional other species include Scentbark, Brown Stringybark, the rare Brooker's Gum, Blue Gum, Swamp Gum, Narrow-leaf Peppermint, Mountain Ash and Manna Gum. There is no understorey tree layer. A diverse shrub layer characterizes this EVC. The most common species include Hop Goodenia, Prickly Moses, Snow Daisy-bush, Prickly Currant-bush, Narrow-leaf Wattle, Privet Mock-olive, Tree everlasting, Prickly Tea-tree, Hazel Pomaderris and Large-leaf Bush-pea. The ground stratum lacks diversity and is often dominated by Austral Bracken and Forest Wire-grass (especially in response to disturbance). Other species include Tall Sword-sedge, the rare Cluster-headed Mat-rush, the vulnerable Swamp Flax-lily and Ivy-leaf Violet. Mountain Clematis is the only climber.

**Potential Threatening Processes:** minor forest produce, timber harvesting, inappropriate fire regimes, weed invasion

**GeneralisedStatus:** LC Least Concern

**This Management Prescription is currently applicable to the following Surf Coast Roadside Sections:**

ROAD NAME	SECTION_ NO_AND_SIDE:	ORIGIN:	DISTANCE FROM ORIGIN:	SECTION LENGTH:	SLU:	GMU3:	LOCALITY:	DATE SURVEYED:
ALLENVALE	2-L	GEORGE STREET	0.1	0.12	64	3.1.2	LORNE	28.1.97
ALLENVALE	3-L	GEORGE STREET	0.2	2.81	64	3.1.2	LORNE	28.1.97
ALLENVALE	3-R	GEORGE STREET	0.2	2.81	64	3.1.2	LORNE	28.1.97
BAMBRA CEMETERY	3-L	WINCH-DEANS MARS	5	1.243	78	3.3.1	BOONAH	26.8.96
BAMBRA CEMETERY	3-R	WINCH-DEANS MARS	5	1.243	78	3.3.1	DEANS MARSH	26.8.96
BAMBRA-BOONAH	3-L	WINCH-DEANS MARS	4.1	6.046	63	3.1.2	BOONAH	15.1.97
BAMBRA-BOONAH	3-R	WINCH-DEANS MARS	4.1	6.046	63	3.1.2	BOONAH	15.1.97
DEANS MARSH-LORN	3-L	BIRREGURRA-DEANS	6.1	4.46	64	3.1.2	BENWERRIN	28.1.97
DEANS MARSH-LORN	3-R	BIRREGURRA-DEANS	6.1	4.46	61	3.1.2	BENWERRIN	28.1.97
DEANS MARSH-LORN	4-L	BIRREGURRA-DEANS	11	0	64	3.1.2	BENWERRIN	28.1.97
DEANS MARSH-LORN	4-R	BIRREGURRA-DEANS	11	0	64	3.1.2	BENWERRIN	28.1.97
DEANS MARSH-LORN	6-L	BIRREGURRA-DEANS	15	0.72	61	3.1.2	LORNE	28.1.97
DEANS MARSH-LORN	6-R	BIRREGURRA-DEANS	15	0.72	61	3.1.2	LORNE	28.1.97
DEANS MARSH-LORN	7-L	BIRREGURRA-DEANS	16	0.72	73	3.2.2	LORNE	28.1.97
DEANS MARSH-LORN	7-R	BIRREGURRA-DEANS	16	0.72	61	3.1.2	LORNE	28.1.97
DEANS MARSH-LORN	8-L	BIRREGURRA-DEANS	17	3.87	73	3.2.2	LORNE	28.1.97
DEANS MARSH-LORN	8-R	BIRREGURRA-DEANS	17	3.87	73	3.2.2	LORNE	28.1.97
ERSKINE FALLS	2-L	POLWARTH ROAD	0.5	3.62	61	3.1.2	LORNE	27.1.97
ERSKINE FALLS	2-R	POLWARTH ROAD	0.5	3.62	64	3.1.2	LORNE	27.1.97

**The following Surf Coast Roadside Sections contain listed plant species in this EVC:**

<i>Acacia nano-dealbata</i>	Dwarf Silver Wattle	AROTS:	VROTS: r
RD_NAME:		SECTION_NO_AND_SIDE:	
DEANS MARSH-LORNE		6-R	
DEANS MARSH-LORNE		7-R	
DEANS MARSH-LORNE		6-L	

DEANS MARSH-LORNE		7-L	
<b><i>Bossiaea cordigera</i></b>	<b>Wiry Bossiaea</b>	<b>AROTS:</b>	<b>VROTS: r</b>
<b>RD_NAME:</b>		<b>SECTION_NO_AND_SIDE:</b>	
DEANS MARSH-LORNE		3-R	
DEANS MARSH-LORNE		3-L	
<b><i>Eucalyptus brookeriana</i></b>	<b>Brooker's Gum</b>	<b>AROTS:</b>	<b>VROTS: r</b>
<b>RD_NAME:</b>		<b>SECTION_NO_AND_SIDE:</b>	
ALLENVALE		3-R	
ALLENVALE		3-L	
<b><i>Eucalyptus globulus ssp. globulus</i></b>	<b>Southern Blue-gum</b>	<b>AROTS:</b>	<b>VROTS: r</b>
<b>RD_NAME:</b>		<b>SECTION_NO_AND_SIDE:</b>	
DEANS MARSH-LORNE		4-R	
BAMBRA CEMETERY		3-R	
BAMBRA CEMETERY		3-L	
BAMBRA-BOONAH		3-R	
BAMBRA-BOONAH		3-L	
DEANS MARSH-LORNE		3-L	
DEANS MARSH-LORNE		4-L	
DEANS MARSH-LORNE		6-L	
ERSKINE FALLS		2-R	
DEANS MARSH-LORNE		3-R	
DEANS MARSH-LORNE		7-R	
DEANS MARSH-LORNE		6-R	
DEANS MARSH-LORNE		7-L	
ERSKINE FALLS		2-L	
<b><i>Eucalyptus yarraensis</i></b>	<b>Yarra Gum</b>	<b>AROTS:</b>	<b>VROTS: k</b>
<b>RD_NAME:</b>		<b>SECTION_NO_AND_SIDE:</b>	
BAMBRA-BOONAH		3-L	
BAMBRA-BOONAH		3-R	

## Calendar of potential roadside management activities:

45H

## Spring

Weed control	Arrange spot spraying of noxious and woody weeds
Rare plant specific requirements	Monitor populations of rare species each Spring and adjust management where necessary (in consultation with DSE)

## Summer

Weed control	Arrange spot spraying of noxious and woody weeds
Seed Collection	Coordinate collection in consultation with DSE and the Ballarat Region Seed Bank

## General

Signage	Erect SRV and interpretation signage on HCV roadsides
Natural regeneration	Allow time and protect areas from disturbance
Erosion/run-off control	Ensure all drain and roadworks meet a high standard. Run training activities
Removal of Exotic Vegetation	Remove inappropriate trees and shrubs when labour is available

*Note 1: Revegetation work on roadsides. The Roadside Management Prescriptions adopt the maxim: 'Protect, Enhance and Restore'. Any revegetation works, whether planting or direct seeding should use indigenous species collected from local seed. Wherever possible seed should be collected from the revegetation site or close by from the same Ecological Vegetation Class.*

## Low Conservation Value roadsides containing Heathy Woodland

### 48 Heathy Woodland

Conservation Status: **LOW**

**EVC Notes:** Formerly a low Stringybark woodland with a diverse understorey, now largely replaced by weeds and pasture grasses.

**SalinityRegime:** Nonsaline

**EVCGroup:** 2 Heathy Woodlands

**MoistureRegime:** Dry - Moist

**EVCType:** EVC

**ExposureRegime:** Various aspects in hilly country or open plains

**Structural Weeds:** Radiata Pine, Coast Wattle, Boneseed

**Management Outline:** Focus on weeds that adversely affect the structure of the community

**Comments:**

Management Techniques:	Use:	Comments:
<b>Weed control</b>	YES	Any woody weeds should be removed from the roadside. Herbaceous weeds vary in their degree of impact. The focus should be on new weeds, quickly removing these before seeding. Pasture weeds fall into two categories 1/ Those that are well established and now are almost an inexorable part of the EVC but do not dominate (e.g. Onion Grass, Sweet Vernal Grass, Quaking Grass) and 2/ Those that pose a serious threat to the integrity or structure of the EVC (e.g. Phalaris, Cocksfoot, Tall Wheat Grass, Serrated Tussock)
<b>Natural regeneration</b>	YES	Encourage natural regeneration through the removal of threats such as grazing, slashing or weed competition around any remnants.
<b>Revegetation</b>	YES	Consider revegetation with trees and shrubs as a mechanism to cut long term management costs (i.e. remove the need for regular slashing/weed control). Concentrate on adding to (any) existing patches of remnant vegetation.
<b>Erosion/run-off control</b>	YES	Road grading or management should attempt to disperse rather than concentrate water (correct road camber, run-off points, table and mitre drains). Active eroding areas should be stabilised and revegetated
<b>Removal of Exotic Vegetation</b>	YES	Remove any garden escapees or native plants outside their natural range (e.g. Coast tea-tree may invade areas following disturbance)
<b>Seed Collection</b>	YES	Regulate to protect vegetation from over-collection
<b>Grazing</b>	NO	
<b>Cropping</b>	NO	
<b>Fencing</b>	NO	
<b>Signage</b>	NO	
<b>Salinity Control</b>	NO	
<b>Rare plant specific requirements</b>	NO	
<b>Graded or Ploughed Firebreaks</b>	NO	
<b>Blanket spraying</b>	NO	
<b>Burning</b>	?	Burning can be considered to encourage natural regeneration or in sections dominated by native grass. Protect seedlings, trees and shrubs by damping down



<b>Slashing</b>	?	Slash areas of introduced grass or woody weed seedlings only, to restrict fire risk if required. Care should be taken not to spread seed to other sections of the road with higher conservation values. Slashing is best carried out prior to seeding of annual grasses (by December)
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### EVC Description

**48** Heathy Woodland is recorded in all five bioregions.

Two forms of Heathy Woodland have been identified within the Otways (OR/OP/WP).

The first is the most widespread, occurring from sites near Port Campbell and Lower Gellibrand along the tertiary sand belt and in the Eastern View to Anglesea area. The overstorey is dominated by Brown Stringybark, Narrow-leaf Peppermint, Messmate and Shining Peppermint. The shrub stratum is diverse and includes Prickly Tea-tree, Common Heath, Narrow-leaf Wattle, Prickly Geebung, Common Beard-heath, Silver Banksia, Pink Bells, Smooth Parrot-pea, Western Furze Hakea, Common Aotus and Slender Rice-flower. Species in the ground stratum include Austral Grass-tree, Tassel Rope-rush, Spreading Rope-rush, Spiny-headed Mat-rush and Swamp Selaginella.

The second form of Heathy Woodland in the Otways study area occurs on late Tertiary sediments between Eastern View and Point Addis of Anglesea. Average annual rainfall is 550-700mm. Distinguishing features of this form of Heathy Woodland are its relatively high species richness and the frequency of tussock forming species compared with the previous form. Common overstorey species are Messmate, Brown Stringybark and Scentbark. The diverse shrub layer includes Silver Banksia, Common Flat-pea, Common Heath, Honey-pots, Prickly Tea-tree, Heath Tea-tree, Erect Guinea Flower, Prickly Geebung, Pink-bells, Common Beard-heath, Dwarf Wedge-pea, Myrtle Wattle, Common Rice-flower, Smooth Parrot-pea and Leafless Globe-pea. Common species in the ground stratum include Thatch Saw-sedge, Bent Goodenia, Wattle Mat-rush, Blue Squill, Wire Rapier-sedge, Variable Stinkweed, Heath Xanthosia, Screw fern, Button Everlasting and Hidden Violet. Other common species include Austral Grass-tree, Tassel Rope-rush, Common Rapier-sedge, Tall Sundew and Milkmaids.

**Potential Threatening Processes:** inappropriate fire regimes, clearing for agriculture and pine plantations

**GeneralisedStatus:** D Depleted

### This Management Prescription is currently applicable to the following Surf Coast Roadside Sections:

ROAD NAME	SECTION_ NO_ AND_ SIDE:	ORIGIN:	DISTANCE FROM ORIGIN:	SECTION LENGTH:	SLU:	GMU3:	LOCALITY:	DATE SURVEYED:
<b>BAMBRA-AIREYS INL</b>	3-L	WINCHELSEA-DEANS	2.3	0.68	73	3.2.2	BAMBRA	15.01.97
<b>BAMBRA-AIREYS INL</b>	7-R	WINCHELSEA-DEANS	4.5	2.135	63	3.1.2	BAMBRA	15.01.97
<b>COALMINE</b>	4-L	WINCHELSEA-DEANS	2	0.34	73	3.2.2	WINCHELSEA S	04.12.96
<b>COALMINE</b>	4-R	WINCHELSEA-DEANS	2	0.34	73	3.2.2	WINCHELSEA S	04.12.96
<b>COALMINE</b>	5-L	WINCHELSEA-DEANS	2.3	0.721	73	3.2.2	WINCHELSEA S	04.12.96
<b>COALMINE</b>	5-R	WINCHELSEA-DEANS	2.3	0.721	73	3.2.2	WINCHELSEA S	04.12.96

### Calendar of potential roadside management activities:

48L

**Winter**

Revegetation Conduct a revegetation program on eroding or priority sites with local Landcare support (Autumn-Spring)

**Spring**

Weed control Arrange spot spraying of noxious and woody weeds

Revegetation Conduct a revegetation program on eroding or priority sites with local Landcare support (Autumn-Spring)

**Summer**

Weed control Arrange spot spraying of noxious and woody weeds

Seed Collection Coordinate collection in consultation with DSE and the Ballarat Region Seed Bank

**Autumn**

Revegetation Conduct a revegetation program on eroding or priority sites with local Landcare support (Autumn-Spring)

**General**

Natural regeneration Allow time and protect areas from disturbance

Erosion/run-off control Ensure all drain and roadworks meet a high standard. Run training activities

Removal of Exotic Remove inappropriate trees and shrubs when labour is available

Vegetation

*Note 1: Revegetation work on roadsides. The Roadside Management Prescriptions adopt the maxim: 'Protect, Enhance and Restore'. Any revegetation works, whether planting or direct seeding should use indigenous species collected from local seed. Wherever possible seed should be collected from the revegetation site or close by from the same Ecological Vegetation Class.*

**Medium Conservation Value roadsides containing Heathy Woodland****48 Heathy Woodland****Conservation Status: MEDIUM**

**EVC Notes:** Formerly a low Stringybark woodland with a diverse understorey, now partly replaced by weeds and pasture grasses.

**SalinityRegime:** Nonsaline

**EVCGroup:** 2 Heathy Woodlands

**MoistureRegime:** Dry - Moist

**EVCType:** EVC

**ExposureRegime:** Various aspects in hilly country or open plains

**Structural Weeds:** Radiata Pine, Coast Wattle, Boneseed

**Management Outline:** Focus on weeds that adversely affect the structure of the community

**Comments:**

<b>Management Techniques:</b>	<b>Use:</b>	<b>Comments:</b>
<b>Weed control</b>	YES	Any woody weeds should be removed from the roadside. Herbaceous weeds vary in their degree of impact. The focus should be on new weeds, quickly removing these before seeding. Pasture weeds fall into two categories 1/ Those that are well established and now are almost an inexorable part of the EVC but do not dominate (e.g. Onion Grass, Sweet Vernal Grass, Quaking Grass) and 2/ Those that pose a serious threat to the integrity or structure of the EVC (e.g. Phalaris, Cocksfoot, Tall Wheat Grass, Serrated Tussock)
<b>Natural regeneration</b>	YES	Encourage natural regeneration through the removal of threats such as grazing, slashing or weed competition. Shrub regeneration is a priority to replace woody weeds and improve habitat values.
<b>Revegetation</b>	YES	Consider revegetation with trees and shrubs as a mechanism to cut long term management costs (i.e. remove the need for regular slashing/weed control). Concentrate on adding to existing patches of remnant vegetation. Rocks, logs and stumps can be used to protect from mowing.
<b>Erosion/run-off control</b>	YES	Road grading or management should attempt to disperse rather than concentrate water (correct road camber, run-off points, table and mitre drains). Active eroding areas should be stabilised and revegetated
<b>Removal of Exotic Vegetation</b>	YES	Remove any garden escapees or native plants outside their natural range (e.g. Coast tea-tree may invade areas following disturbance)
<b>Seed Collection</b>	YES	Regulate to protect vegetation from over-collection
<b>Burning</b>	NO	Burning is likely to be catered for through the incidence of wildfire. A 20-50 year plus cycle should be sufficient to maintain diversity. Burning can be considered to encourage natural regeneration or in sections dominated by native grass. Protect seedlings, trees and shrubs by damping down
<b>Slashing</b>	NO	Consider slashing only to areas of introduced grass or woody weed seedlings to restrict fire risk. Care should be taken not to spread seed to other sections of the road with higher conservation values. Slashing is best carried out prior to seeding of annual grasses (by December)
<b>Grazing</b>	NO	
<b>Cropping</b>	NO	
<b>Fencing</b>	NO	
<b>Signage</b>	NO	
<b>Salinity Control</b>	NO	

Rare plant specific requirements	NO
Graded or Ploughed Firebreaks	NO
Blanket spraying	NO

### EVC Description

**48** Heathy Woodland is recorded in all five bioregions.

Two forms of Heathy Woodland have been identified within the Otways (OR/OP/WP).

The first is the most widespread, occurring from sites near Port Campbell and Lower Gellibrand along the tertiary sand belt and in the Eastern View to Anglesea area. The overstorey is dominated by Brown Stringybark, Narrow-leaf Peppermint, Messmate and Shining Peppermint. The shrub stratum is diverse and includes Prickly Tea-tree, Common Heath, Narrow-leaf Wattle, Prickly Geebung, Common Beard-heath, Silver Banksia, Pink Bells, Smooth Parrot-pea, Western Furze Hakea, Common Aotus and Slender Rice-flower. Species in the ground stratum include Austral Grass-tree, Tassel Rope-rush, Spreading Rope-rush, Spiny-headed Mat-rush and Swamp Selaginella.

The second form of Heathy Woodland in the Otways study area occurs on late Tertiary sediments between Eastern View and Point Addis of Anglesea. Average annual rainfall is 550-700mm. Distinguishing features of this form of Heathy Woodland are its relatively high species richness and the frequency of tussock forming species compared with the previous form. Common overstorey species are Messmate, Brown Stringybark and Scentbark. The diverse shrub layer includes Silver Banksia, Common Flat-pea, Common Heath, Honey-pots, Prickly Tea-tree, Heath Tea-tree, Erect Guinea Flower, Prickly Geebung, Pink-bells, Common Beard-heath, Dwarf Wedge-pea, Myrtle Wattle, Common Rice-flower, Smooth Parrot-pea and Leafless Globe-pea. Common species in the ground stratum include Thatch Saw-sedge, Bent Goodenia, Wattle Mat-rush, Blue Squill, Wire Rapier-sedge, Variable Stinkweed, Heath Xanthosia, Screw fern, Button Everlasting and Hidden Violet. Other common species include Austral Grass-tree, Tassel Rope-rush, Common Rapier-sedge, Tall Sundew and Milkmaids.

**Potential Threatening Processes:** inappropriate fire regimes, clearing for agriculture and pine plantations

**GeneralisedStatus:** D Depleted

### This Management Prescription is currently applicable to the following Surf Coast Roadside Sections:

ROAD NAME	SECTION_ ORIGIN: NO_AND_ SIDE:	DISTANCE FROM ORIGIN:	SECTION SLU: LENGTH:	GMU3:	LOCALITY:	DATE SURVEYED:
<b>BAMBRA-AIREYS INL</b>	1-L	WINCHELSEA-DEANS	0 1.3	63 3.1.2	BAMBRA	15.1.97
<b>BAMBRA-AIREYS INL</b>	1-R	WINCHELSEA-DEANS	0 1.3	73 3.2.2	BAMBRA	15.1.97
<b>BAMBRA-AIREYS INL</b>	2-L	WINCHELSEA-DEANS	1.3 1.02	63 3.1.2	DEANS MARSH	15.1.97
<b>BAMBRA-AIREYS INL</b>	2-R	WINCHELSEA-DEANS	1.3 1.02	73 3.2.2	DEANS MARSH	15.1.97
<b>BAMBRA-AIREYS INL</b>	4-L	WINCHELSEA-DEANS	3 0.54	63 3.1.2	BAMBRA	15.1.97
<b>BAMBRA-AIREYS INL</b>	4-R	WINCHELSEA-DEANS	3 0.54	73 3.2.2	BAMBRA	15.1.97
<b>COALMINE</b>	2-L	WINCHELSEA-DEANS	0.5 0.72	73 3.2.2	WINCHELSEA S	13.2.97
<b>COALMINE</b>	2-R	WINCHELSEA-DEANS	0.5 0.72	73 3.2.2	WINCHELSEA S	13.2.97
<b>FOREST</b>	2-L	GREAT OCEAN ROAD	9.1 1.23	171 6.2.4	PARAPARAP	2.9.96
<b>FOREST</b>	2-R	GREAT OCEAN ROAD	9.1 1.23	79 6.2.4	PARAPARAP	2.9.96
<b>JAROSITE</b>	2-L	GREAT OCEAN ROAD	0.3 0.34	89 6.2.2	BELLBRAE	28.10.96
<b>JAROSITE</b>	2-R	GREAT OCEAN ROAD	0.3 0.34	79 6.2.4	BELLBRAE	28.10.96
<b>JAROSITE</b>	3-L	GREAT OCEAN ROAD	0.6 0.19	79 6.2.4	BELLBRAE	28.10.96
<b>JAROSITE</b>	3-R	GREAT OCEAN ROAD	0.6 0.19	79 6.2.4	BELLBRAE	28.10.96
<b>MINTER</b>	2-L	ELKINGTON	0.9 0.08	89 6.2.2	BELLBRAE	23.9.96
<b>MINTER</b>	2-R	ELKINGTON	0.9 0.08	79 6.2.4	BELLBRAE	23.9.96
<b>MINTER</b>	4-L	ELKINGTON	1.2 0.26	89 6.2.2	BELLBRAE	23.9.96

MINTER	4-R	ELKINGTON	1.2	0.26	79	6.2.4	BELLBRAE	23.9.96
NOBLES (PRIM)	4-L	LARCOMBES ROAD	3.4	1.14	171	6.2.4	GHERANG	11.11.96
NOBLES (PRIM)	4-R	LARCOMBES ROAD	3.4	1.14	171	6.2.4	GHERANG	11.11.96
PEREGRINE	1-L	ADDISCOTT ROAD	0	0.215	79	6.2.4	BELLS BEACH	28.10.96
PEREGRINE	1-R	ADDISCOTT ROAD	0	0.215	79	6.2.4	BELLS BEACH	28.10.96

## Calendar of potential roadside management activities:

48M

## Winter

Revegetation Conduct a revegetation program on eroding or priority sites with local Landcare support (Autumn-Spring)

## Spring

Weed control Arrange spot spraying of noxious and woody weeds

Revegetation Conduct a revegetation program on eroding or priority sites with local Landcare support (Autumn-Spring)

## Summer

Weed control Arrange spot spraying of noxious and woody weeds

Seed Collection Coordinate collection in consultation with DSE and the Ballarat Region Seed Bank

## Autumn

Revegetation Conduct a revegetation program on eroding or priority sites with local Landcare support (Autumn-Spring)

## General

Natural regeneration Allow time and protect areas from disturbance

Erosion/run-off control Ensure all drain and roadworks meet a high standard. Run training activities

Removal of Exotic Remove inappropriate trees and shrubs when labour is available

Vegetation

*Note 1: Revegetation work on roadsides. The Roadside Management Prescriptions adopt the maxim: 'Protect, Enhance and Restore'. Any revegetation works, whether planting or direct seeding should use indigenous species collected from local seed. Wherever possible seed should be collected from the revegetation site or close by from the same Ecological Vegetation Class.*

**High Conservation Value roadsides containing Heathy Woodland****48 Heathy Woodland****Conservation Status: HIGH****EVC Notes:** A low Stringybark woodland with a diverse understorey**SalinityRegime:** Nonsaline**EVCGroup:** 2 Heathy Woodlands**MoistureRegime:** Dry - Moist**EVCType:** EVC**ExposureRegime:** Various aspects in hilly country or open plains**Structural Weeds:** Radiata Pine, Coast Wattle, Boneseed**Management Outline:** Sections should require little active management in the absence of major soil disturbance.**Comments:** Heathy Woodland occurs mostly in the Anglesea and Torquay area. High quality examples are found on seven Surf Coast roads. Shrub species are numerous. Three VROT plants are listed from this EVC on Surf Coast roads Velvet Daisy-bush, Paper Flower, Southern Bluegum).

<b>Management Techniques:</b>	<b>Use:</b>	<b>Comments:</b>
<b>Weed control</b>	YES	Spot spray, cut and paint or remove serious weeds or any emerging weeds (i.e. yet to establish)
<b>Signage</b>	YES	Signage of all high conservation roadsides is recommended to raise awareness and protect values from inadvertent damage
<b>Natural regeneration</b>	YES	Occurs satisfactorily in absence of threats such as weeds and soil disturbance
<b>Erosion/run-off control</b>	YES	Road grading or management should attempt to disperse rather than concentrate water (correct road camber, run-off points, table and mitre drains). Active eroding areas should be stabilised and revegetated
<b>Removal of Exotic Vegetation</b>	YES	Remove any garden escapees or native plants outside their natural range (e.g. Coast tea-tree may invade areas following disturbance)
<b>Rare plant specific requirements</b>	YES	Consult the species list for the roadside. Rare, threatened or endangered plants are noted with a code. Seek advice regarding management required to protect and enhance the species (DSE). Southern Blue Gum normally regenerates satisfactorily on its own; Velvet Daisy-bush and Paper Flower do so less readily (the Daisy-bush may prefer disturbed soils).
<b>Seed Collection</b>	YES	Regulate to protect vegetation from over-collection. Southern Blue Gum seed is available over a long period of the year, but Velvet Daisy-bush and Paper Flower have shorter availability periods. The Daisy-bush and the Paper Flower are collectible in January
<b>Burning</b>	NO	Burning is likely to be catered for through the incidence of wildfire. A 20-50 year cycle should be sufficient to maintain diversity.
<b>Slashing</b>	NO	Not applicable or required
<b>Grazing</b>	NO	
<b>Cropping</b>	NO	
<b>Revegetation</b>	NO	Not normally necessary in this EVC
<b>Salinity Control</b>	NO	
<b>Graded or Ploughed Firebreaks</b>	NO	
<b>Blanket spraying</b>	NO	
<b>Fencing</b>	?	Consider fencing any fragile remnants where it becomes apparent that a lack of a physical barrier to vehicles/grazing threatens the future of the community or rare plant.

## EVC Description

48 Heathy Woodland is recorded in all five bioregions.

Two forms of Heathy Woodland have been identified within the Otways (OR/OP/WP).

The first is the most widespread, occurring from sites near Port Campbell and Lower Gellibrand along the tertiary sand belt and in the Eastern View to Anglesea area. The overstorey is dominated by Brown Stringybark, Narrow-leaf Peppermint, Messmate and Shining Peppermint. The shrub stratum is diverse and includes Prickly Tea-tree, Common Heath, Narrow-leaf Wattle, Prickly Geebung, Common Beard-heath, Silver Banksia, Pink Bells, Smooth Parrot-pea, Western Furze Hakea, Common Aotus and Slender Rice-flower. Species in the ground stratum include Austral Grass-tree, Tassel Rope-rush, Spreading Rope-rush, Spiny-headed Mat-rush and Swamp Selaginella.

The second form of Heathy Woodland in the Otways study area occurs on late Tertiary sediments between Eastern View and Point Addis of Anglesea. Average annual rainfall is 550-700mm. Distinguishing features of this form of Heathy Woodland are its relatively high species richness and the frequency of tussock forming species compared with the previous form. Common overstorey species are Messmate, Brown Stringybark and Scentbark. The diverse shrub layer includes Silver Banksia, Common Flat-pea, Common Heath, Honey-pots, Prickly Tea-tree, Heath Tea-tree, Erect Guinea Flower, Prickly Geebung, Pink-bells, Common Beard-heath, Dwarf Wedge-pea, Myrtle Wattle, Common Rice-flower, Smooth Parrot-pea and Leafless Globe-pea. Common species in the ground stratum include Thatch Saw-sedge, Bent Goodenia, Wattle Mat-rush, Blue Squill, Wire Rapier-sedge, Variable Stinkweed, Heath Xanthosia, Screw fern, Button Everlasting and Hidden Violet. Other common species include Austral Grass-tree, Tassel Rope-rush, Common Rapier-sedge, Tall Sundew and Milkmaids.

**Potential Threatening Processes:** inappropriate fire regimes, clearing for agriculture and pine plantations

**Generalised Status:** D Depleted

**This Management Prescription is currently applicable to the following Surf Coast Roadside Sections:**

ROAD NAME	SECTION_ NO_AND_SIDE:	ORIGIN:	DISTANCE FROM ORIGIN:	SECTION LENGTH:	SLU:	GMU3:	LOCALITY:	DATE SURVEYED:
BAMBRA-AIREYS INL	3-R	WINCH-DEANS MARS	2.3	0.68	63	3.1.2	BAMBRA	15.1.97
BAMBRA-AIREYS INL	7-L	WINCH-DEANS MARS	4.5	2.135	73	3.2.2	BAMBRA	15.1.97
ELKINGTON	1-L	GREAT OCEAN ROAD	0	0	79	6.2.4	BELLBRAE	0
ELKINGTON	1-R	GREAT OCEAN ROAD	0	0	79	6.2.4	BELLBRAE	0
FLAXBOURNES	1-L	FOREST ROAD	0	1.2	171	6.2.4	PARAPARAP	17.12.96
FLAXBOURNES	1-R	FOREST ROAD	0	1.2	79	6.2.4	PARAPARAP	17.12.96
FOREST	1-L	GREAT OCEAN ROAD	0	9.11	171	6.2.4	PARAPARAP	2.9.96
FOREST	1-R	GREAT OCEAN ROAD	0	9.11	171	6.2.4	PARAPARAP	2.9.96
JAROSITE	4-L	ANGELSEA ROAD	0.8	0.66	89	6.2.2	BELLBRAE	28.10.96
JAROSITE	4-R	ANGELSEA ROAD	0.8	0.66	79	6.2.4	BELLBRAE	28.10.96
POINT ADDIS	1-L	GREAT OCEAN ROAD	0	2.56	89	6.2.2	BELLS BEACH	23.1.97
POINT ADDIS	1-R	GREAT OCEAN ROAD	0	2.56	89	6.2.2	BELLS BEACH	23.1.97

**The following Surf Coast Roadside Sections contain listed plant species in this EVC:**

<i>Eucalyptus globulus ssp. globulus</i>	Southern Blue-gum	AROTS:	VROTS: r
RD_NAME:		SECTION_NO_AND_SIDE:	
BAMBRA-AIREYS INLET		7-L	
BAMBRA-AIREYS INLET		3-R	
<i>Olearia pannosa ssp. cardiophylla</i>	Velvet Daisy-bush	AROTS:	VROTS: v
RD_NAME:		SECTION_NO_AND_SIDE:	
POINT ADDIS		1-L	
POINT ADDIS		1-R	

<i>Thomasia petalocalyx</i>	Paper Flower	AROTS:	VROTS: r
<b>RD_NAME:</b>		<b>SECTION_NO_AND_SIDE:</b>	
JAROSITE		4-L	
JAROSITE		4-R	
POINT ADDIS		1-L	
POINT ADDIS		1-R	

## Calendar of potential roadside management activities:

48H

## Spring

Weed control	Arrange spot spraying of noxious and woody weeds
Rare plant specific requirements	Monitor populations of rare species each Spring and adjust management where necessary (in consultation with DSE)

## Summer

Weed control	Arrange spot spraying of noxious and woody weeds
Seed Collection	Coordinate collection in consultation with DSE and the Ballarat Region Seed Bank

## General

Signage	Erect SRV and interpretation signage on HCV roadsides
Natural regeneration	Allow time and protect areas from disturbance
Erosion/run-off control	Ensure all drain and roadworks meet a high standard. Run training activities
Removal of Exotic Vegetation	Remove inappropriate trees and shrubs when labour is available

*Note 1: Revegetation work on roadsides. The Roadside Management Prescriptions adopt the maxim: 'Protect, Enhance and Restore'. Any revegetation works, whether planting or direct seeding should use indigenous species collected from local seed. Wherever possible seed should be collected from the revegetation site or close by from the same Ecological Vegetation Class.*



**Low Conservation roadsides containing Swamp Scrub****53 Swamp Scrub****Conservation Status: LOW****EVC Notes:** Woolly Tea-tree dominated swampy sites**SalinityRegime:** Nonsaline**EVCGroup:** 8 Riparian Scrubs or Swampy Shrubs & Woo**MoistureRegime:** Moist - Waterlogged**EVCType:** EVC**ExposureRegime:** Open (plains & foothills)**Structural Weeds:** Ragwort, Blackberry, Spear Thistle, Toowoomba Canary-grass, Cocksfoot, Wild Teasel**Management Outline:** Restrict future disturbance and focus on the control of structural weed species.**Comments:** No trees are present in this EVC, but thickets of tall tea-tree, reeds and sedges are common. Swamp Scrub is found on two Surf Coast roads and on these there are no rare plants known. No high-quality examples of this EVC are found in Surf Coast Shire.

<b>Management Techniques:</b>	<b>Use:</b>	<b>Comments:</b>
<b>Weed control</b>	YES	Any woody weeds should be removed from the roadside. Herbaceous weeds vary in their degree of impact. The focus should be on new weeds, quickly removing these before seeding. Pasture weeds fall into two categories 1/ Those that are well established and now are almost an inexorable part of the EVC but do not dominate (e.g. Onion Grass, Sweet Vernal Grass, Quaking Grass) and 2/ Those that pose a serious threat to the integrity or structure of the EVC (e.g. Phalaris, Cocksfoot, Tall Wheat Grass, Serrated Tussock)
<b>Natural regeneration</b>	YES	Encourage natural regeneration through the removal of threats such as grazing, slashing or weed competition around any remnants
<b>Revegetation</b>	YES	Consider replanting local shrubs where they have been lost.
<b>Erosion/run-off control</b>	YES	Road grading or management should attempt to disperse rather than concentrate water (correct road camber, run-off points, table and mitre drains). Active eroding areas should be stabilised and revegetated
<b>Removal of Exotic Vegetation</b>	YES	Remove any garden escapees or native plants outside their natural range (e.g. Coast tea-tree may invade areas following disturbance)
<b>Seed Collection</b>	YES	Regulate to protect vegetation from over-collection. Seed of Tea-trees and Melaleucas is easily collected and could be scattered over bare patches and edges of scrub
<b>Burning</b>	NO	Naturally this EVC would have burnt infrequently.
<b>Grazing</b>	NO	Grazing will prevent regeneration of Woolly Tea-tree and other key species
<b>Cropping</b>	NO	
<b>Signage</b>	NO	
<b>Salinity Control</b>	NO	
<b>Rare plant specific requirements</b>	NO	
<b>Graded or Ploughed Firebreaks</b>	NO	
<b>Blanket spraying</b>	NO	
<b>Slashing</b>	?	Slash areas of introduced grass or woody weed seedlings only, to restrict fire risk if required. Care should be taken not to spread seed to other sections of the road with higher conservation values. Slashing is best carried out prior to seeding of annual grasses (by December)

<b>Fencing</b>	?	Fence any areas that are degrading due to unrestricted human or vehicle access
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**EVC Description**

**53** Swamp Scrub occurs close to the coast in VP/OP/WP and has affinities with Shallow Freshwater Marsh (EVC200). Both occupy similar swamp habitats, however Swamp Scrub occurs on slight rises where the soil is deeper and better drained. This EVC lacks an overstorey and is dominated by tall Woolly Tea-tree which forms dense impenetrable thickets, out-competing other species. Coast Saw-sedge and Common Reed are also common.

**Potential Threatening Processes:** clearing for agriculture, grazing, weed invasion, fragmentation, inappropriate fire regimes, hydrological alteration

**GeneralisedStatus:** E Endangered

**This Management Prescription is currently applicable to the following Surf Coast Roadside Sections:**

ROAD NAME	SECTION_	ORIGIN:	DISTANCE	SECTION	SLU:	GMU3:	LOCALITY:	DATE
	NO_AND_		FROM	LENGTH:				SURVEYED:
	SIDE:		ORIGIN:					
<b>THIELEMANN</b>	1-R	ROCHFORTS ROAD	0	0.79	89	6.2.2	GHERANG	4.11.96

**Calendar of potential roadside management activities:****53L****Winter**

Revegetation Conduct a revegetation program on eroding or priority sites with local Landcare support (Autumn-Spring)

**Spring**

Weed control Arrange spot spraying of noxious and woody weeds  
Revegetation Conduct a revegetation program on eroding or priority sites with local Landcare support (Autumn-Spring)

**Summer**

Weed control Arrange spot spraying of noxious and woody weeds  
Seed Collection Coordinate collection in consultation with DSE and the Ballarat Region Seed Bank

**Autumn**

Revegetation Conduct a revegetation program on eroding or priority sites with local Landcare support (Autumn-Spring)

**General**

Natural regeneration Allow time and protect areas from disturbance  
Erosion/run-off control Ensure all drain and roadworks meet a high standard. Run training activities  
Removal of Exotic Remove inappropriate trees and shrubs when labour is available  
Vegetation

*Note 1: Revegetation work on roadsides. The Roadside Management Prescriptions adopt the maxim: 'Protect, Enhance and Restore'. Any revegetation works, whether planting or direct seeding should use indigenous species collected from local seed. Wherever possible seed should be collected from the revegetation site or close by from the same Ecological Vegetation Class.*

**Medium Conservation roadsides containing Swamp Scrub****53 Swamp Scrub****Conservation Status: MEDIUM****EVC Notes:** Woolly Tea-tree dominated swampy sites**SalinityRegime:** Nonsaline**EVCGroup:** 8 Riparian Scrubs or Swampy Shrubs & Woo**MoistureRegime:** Moist - Waterlogged**EVCType:** EVC**ExposureRegime:** Open (plains & foothills)**Structural Weeds:** Ragwort, Blackberry, Spear Thistle, Toowoomba Canary-grass, Cocksfoot, Wild Teasel**Management Outline:** Restrict future disturbance and focus on the control of weed species affecting the structure of the community. This EVC requires little active management apart from prevention of encroachment by vehicles and aggressive weeds. Roadside examples are open to both these threats because of their narrowness.**Comments:** No trees are present in this EVC, but thickets of tall tea-tree, reeds and sedges are common. Swamp Scrub is found on two Surf Coast roads and on these there are no rare plants known. There are no sites recorded along roadsides with HCV, further emphasising the need for careful management of MCV sites to improve their security and conservation status.

<b>Management Techniques:</b>	<b>Use:</b>	<b>Comments:</b>
<b>Weed control</b>	YES	Any woody weeds should be removed from the roadside. Herbaceous weeds vary in their degree of impact. The focus should be on new weeds, quickly removing these before seeding. Pasture weeds fall into two categories 1/ Those that are well established and now are almost an inexorable part of the EVC but do not dominate (e.g. Onion Grass, Sweet Vernal Grass, Quaking Grass) and 2/ Those that pose a serious threat to the integrity or structure of the EVC (e.g. Phalaris, Cocksfoot, Tall Wheat Grass, Serrated Tussock)
<b>Natural regeneration</b>	YES	Encourage natural regeneration through the removal of threats such as grazing, slashing or weed competition around any remnants
<b>Revegetation</b>	YES	Consider replanting local shrubs where they have been lost.
<b>Erosion/run-off control</b>	YES	Road grading or management should attempt to disperse rather than concentrate water (correct road camber, run-off points, table and mitre drains). Active eroding areas should be stabilised and revegetated
<b>Removal of Exotic Vegetation</b>	YES	Remove any garden escapees or native plants outside their natural range (e.g. Coast tea-tree may invade areas following disturbance)
<b>Burning</b>	NO	This EVC would have naturally burnt infrequently.
<b>Grazing</b>	NO	
<b>Cropping</b>	NO	
<b>Fencing</b>	NO	
<b>Signage</b>	NO	
<b>Salinity Control</b>	NO	
<b>Rare plant specific requirements</b>	NO	
<b>Graded or Ploughed Firebreaks</b>	NO	
<b>Blanket spraying</b>	NO	
<b>Seed Collection</b>	NO	Not required (natural regeneration). Seed of Tea-trees and Melaleucas is easily collected and could be scattered over bare patches and edges of scrub

<b>Slashing</b>	?	Slash areas of introduced grass or woody weed seedlings only, to restrict fire risk if required. Care should be taken not to spread seed to other sections of the road with higher conservation values. Slashing is best carried out prior to seeding of annual grasses (by December)
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**EVC Description**

**53** Swamp Scrub occurs close to the coast in VP/OP/WP and has affinities with Shallow Freshwater Marsh (EVC200). Both occupy similar swamp habitats, however Swamp Scrub occurs on slight rises where the soil is deeper and better drained. This EVC lacks an overstorey and is dominated by tall Woolly Tea-tree which forms dense impenetrable thickets, out-competing other species. Coast Saw-sedge and Common Reed are also common.

**Potential Threatening Processes:** clearing for agriculture, grazing, weed invasion, fragmentation, inappropriate fire regimes, hydrological alteration

**GeneralisedStatus:** E Endangered

**This Management Prescription is currently applicable to the following Surf Coast Roadside Sections:**

ROAD NAME	SECTION_ ORIGIN: NO_AND_ SIDE:	DISTANCE FROM ORIGIN:	SECTION SLU: LENGTH:	GMU3:	LOCALITY:	DATE SURVEYED:
<b>THIELEMANN'S</b>	1-L ROCHFORTS ROAD	0	0.79	89 6.2.2	GHERANG	4.11.96
<b>WILLOWITE</b>	7-L MOUNT DUNEED RO	6.1	0.08	79 6.2.4	BELLBRAE	13.9.96
<b>WILLOWITE</b>	7-R MOUNT DUNEED RO	6.1	0.08	133 6.1.4	BELLBRAE	13.9.96

**Calendar of potential roadside management activities:****53M****Winter**

Revegetation Conduct a revegetation program on eroding or priority sites with local Landcare support (Autumn-Spring)

**Spring**

Weed control Arrange spot spraying of noxious and woody weeds  
Revegetation Conduct a revegetation program on eroding or priority sites with local Landcare support (Autumn-Spring)

**Summer**

Weed control Arrange spot spraying of noxious and woody weeds

**Autumn**

Revegetation Conduct a revegetation program on eroding or priority sites with local Landcare support (Autumn-Spring)

**General**

Natural regeneration Allow time and protect areas from disturbance  
Erosion/run-off control Ensure all drain and roadworks meet a high standard. Run training activities  
Removal of Exotic Vegetation Remove inappropriate trees and shrubs when labour is available

*Note 1: Revegetation work on roadsides. The Roadside Management Prescriptions adopt the maxim: 'Protect, Enhance and Restore'. Any revegetation works, whether planting or direct seeding should use indigenous species collected from local seed. Wherever possible seed should be collected from the revegetation site or close by from the same Ecological Vegetation Class.*

**Low Conservation Value roadsides on the basalt plain containing Grassy Woodlands****55 Plains Grassy Woodland****Conservation Status: LOW****EVC Notes:** Grassy Woodland sites with a modified groundlayer.**SalinityRegime:** Nonsaline**EVCGroup:** 14 Plains Grassy Woodlands or Forests**MoistureRegime:** Dry - Waterlogged**EVCType:** EVC**ExposureRegime:** Open (plains & foothills)**Structural Weeds:** Serrated Tussock, Gorse, Blackberry, Sweet Briar, Radiata Pine, Toowoomba Canary-grass, Spear Thistle, Hawthorn, Cocksfoot, Sweet Vernal-grass, African Box-thorn, St John's Wort, Crow Garlic, Annual Veldt-grass**Management Outline:** Focus on the control of declared weeds.**Comments:** Grassy woodland usually dominated by Kangaroo Grass (*Themeda triandra*) with Wallaby or Spear grasses in drier sections and Tall Tussock Grass (*Poa labillardieri*) in wetter sections with a Manna Gum/Swamp Gum or Redgum overstorey. This EVC is highly variable in tree density.

<b>Management Techniques:</b>	<b>Use:</b>	<b>Comments:</b>
<b>Weed control</b>	YES	Any woody weeds should be removed from the roadside. Herbaceous weeds vary in their degree of impact. The focus should be on new weeds, quickly removing these before seeding. Pasture weeds fall into two categories 1/ Those that are well established and now are almost an inexorable part of the EVC but do not dominate (e.g. Onion Grass, Sweet Vernal Grass, Quaking Grass) and 2/ Those that pose a serious threat to the integrity or structure of the EVC (e.g. Phalaris, Cocksfoot, Tall Wheat Grass, Serrated Tussock)
<b>Natural regeneration</b>	YES	Encourage natural regeneration through the removal of threats such as grazing, slashing or weed competition around any remnants
<b>Revegetation</b>	YES	Consider revegetation of sites with suitable trees, shrubs and ground covers to reduce long term management. Native grasses can be used to replace Serrated Tussock.
<b>Erosion/run-off control</b>	YES	Road grading or management should attempt to disperse rather than concentrate water (correct road camber, run-off points, table and mitre drains). Active eroding areas should be stabilised and revegetated
<b>Removal of Exotic Vegetation</b>	YES	Remove planted trees and shrubs where these species are actively spreading.
<b>Seed Collection</b>	YES	Regulate to protect vegetation from over-collection
<b>Signage</b>	NO	
<b>Salinity Control</b>	NO	
<b>Rare plant specific requirements</b>	NO	
<b>Graded or Ploughed Firebreaks</b>	NO	
<b>Blanket spraying</b>	NO	
<b>Burning</b>	?	A burn may assist natural regeneration. Burning must protect existing trees. The area should not be burnt again until seedlings are well established (20 year plus cycle). It is imperative that any burning does not damage seedlings (wet down prior to burning). Consider the impact of any proposed burn on the spread of weeds such as Serrated Tussock or Gorse

<b>Slashing</b>	?	Slash areas of introduced grass or woody weed seedlings only, to restrict fire risk if required. Care should be taken not to spread seed to other sections of the road with higher conservation values. Slashing is best carried out prior to seeding of annual grasses (by December)
<b>Grazing</b>	?	Grazing can be considered on totally degraded or modified sites without native remnants as a mechanism to control grass growth (fire risk). Control of noxious weeds must be a condition of any grazing licence
<b>Cropping</b>	?	Should be considered for roadsides completely dominated by Phalaris or woody weeds (completely devoid of remnants) as a means of reducing management costs or problems. Licence to adjoining owner
<b>Fencing</b>	?	To allow grazing

### EVC Description

**55** Plains Grassy Woodland was once widespread in the vicinity of the volcanic plains (VP/CVU/OP), in some areas growing in association with Plains Grassland. Due to a long history of grazing and clearing for agriculture the majority of this EVC has disappeared and that which is left is often severely degraded. There is great variation within remnants and it is likely that several different floristic communities exist. However, due to the paucity of sampling of intact remnants, distinctions at the floristic community level have not been made. All sites are virtually flat, altitudes range from 350 to 380m asl except in the Bannockburn and Inverleigh areas which are 90 to 100m asl and annual rainfall is approximately 650mm. Soils are generally fertile, most sites occurring on Tertiary sands and clays.

Tree density within the areas mapped varies from almost forest to very open woodland. Dominance within the overstorey varies with soil moisture which is related to the proportions of sand and clay within the soil. Fire and management history may also influence overstorey structure and species composition. Dominant species within this EVC may include Yellow Gum, Swamp Gum, Yellow Box or Manna Gum with Silver Banksia (tree form), Black She-oak, Blackwood and Black Wattle. There is no shrub layer apart from localised thickets of Hedge Wattle in the Bannockburn and Inverleigh areas. The ground layer is very species rich with a mixture of low ericoid shrubs, such as Peach Heath, Cranberry Heath and Honey-pots, and a diversity of lilies, forbs and grasses. Common species include Yellow Rush-lily, Milkmaids, Running Postman, Common Rice-flower, Creeping Bossiaea, Wiry Buttons, Scaly Buttons, Kidney-weed, Sundew, Spear-grasses, Wallaby-grasses, Reed Bent-grass, Weeping Grass and Kangaroo Grass (the latter often dominating). In some areas there are dense patches of Black-anther Flax-lily and Variable Sword-sedge.

**Potential Threatening Processes:** clearing for agriculture, fragmentation, grazing, weed invasion, road construction and maintenance, minor forest produce, timber harvesting, inappropriate fire regimes, dieback

**GeneralisedStatus:** E Endangered

### This Management Prescription is currently applicable to the following Surf Coast Roadside Sections:

ROAD NAME	SECTION_ NO_AND_ SIDE:	ORIGIN:	DISTANCE FROM ORIGIN:	SECTION LENGTH:	SLU:	GMU3:	LOCALITY:	DATE SURVEYED:
<b>ARMYTAGE</b>	1-L	PRINCES HWY	0	8.3	117	6.1.3	WINCHELSEA	30.07.96
<b>ARMYTAGE</b>	1-R	PRINCES HWY	0	8.3	117	6.1.3	WINCHELSEA	30.07.96
<b>ATKINS</b>	1-L	Mc CONACHT STREE	0	6.265	133	6.1.4	WINCHELSEA	05.09.96
<b>ATKINS</b>	1-R	Mc CONACHT STREE	0	6.265	119	6.1.3	BUCKLEY	05.09.96
<b>BARRABOOL</b>	5-L	MERRAWARP ROAD	15	0.325	190	6.2.4	BUCKLEY	08.08.96
<b>BARRABOOL</b>	5-R	MERRAWARP ROAD	15	0.325	190	6.2.4	BUCKLEY	08.08.96
<b>BARWON LEIGH LAN</b>	1-L	INVERLEIGH-WINCHE	0	0.28	119	6.1.3	INVERLEIGH	null
<b>BARWON LEIGH LAN</b>	1-R	INVERLEIGH-WINCHE	0	0.28	155	6.1.5	INVERLEIGH	null

BARWON LEIGH LAN	2-L	WINCHELSEA-INVER	0.3	0.9	155	6.1.5	INVERLEIGH	05.08.96
BARWON PARK	3-L	RAILWAY LINE (SOUT	6.6	10.3	156	6.1.5	WINCHELSEA	23.08.96
BARWON PARK	3-R	RAILWAY LINE (SOUT	6.6	10.3	117	6.1.3	WINCHELSEA	23.08.96
BATSONS	1-L	CAPE OTWAY ROAD	0	1.81	152	6.1.5	MODEWARRE	05.09.96
BATSONS	1-R	CAPE OTWAY ROAD	0	1.81	152	6.1.5	MODEWARRE	05.09.96
BLUESTONE SCHOOL	1-L	LOWER DUNEEED RO	0	1.73	133	6.1.4	CONNEWARRE	15.11.96
BLUESTONE SCHOOL	1-R	LOWER DUNEEED RO	0	1.73	133	6.1.4	CONNEWARRE	15.11.96
BUCKLEY NORTH	1-L	PRINCES HWY	0	2.4	190	6.2.4	BUCKLEY	23.07.96
BUCKLEY SCHOOL	1-L	PRINCES HWY	0	0.72	190	6.2.4	BUCKLEY	30.8.96
BUCKLEY SOUTH	1-L	PRINCES HWY	0	1.33	133	6.1.4	BUCKLEY	23.07.96
BUCKLEY SOUTH	1-R	PRINCES HWY	0	1.33	133	6.1.4	BUCKLEY	23.07.96
BUCKLEY SOUTH	3-L	PRINCES HWY	1.7	1.01	190	6.2.4	BUCKLEY	30.8.96
BUCKLEY SOUTH	3-R	PRINCES HWY	1.7	1.01	190	6.2.4	BUCKLEY	23.07.96
BUCKLEY SOUTH	4-R	PRINCES HWY	2.7	0.85	190	6.2.4	BUCKLEY	23.07.96
BUCKLEY SOUTH	5-L	PRINCES HWY	3.5	3.67	190	6.2.4	BUCKLEY	23.07.96
BUCKLEY SOUTH	5-R	PRINCES HWY	3.5	3.67	190	6.2.4	BUCKLEY	23.07.96
CALLEMONDAH	1-L	GNARWARRE ROAD	0	0.87	190	6.2.4	GNARWARRE	04.12.96
CALLEMONDAH	1-R	GNARWARRE ROAD	0	0.87	190	6.2.4	GNARWARRE	23.08.96
CAPE OTWAY	3-L	PRINCESS HWY	3.6	0.59	171	6.2.4	MORIAN	04.12.96
CAPE OTWAY	3-R	PRINCESS HWY	3.6	0.59	171	6.2.4	MORIAN	04.12.96
CAPE OTWAY	4-R	PRINCESS HWY	4.2	0.33	133	6.1.4	MORIAN	04.12.96
CAPE OTWAY	5-L	PRINCESS HWY	4.5	1.97	171	6.2.4	MORIAN	04.12.96
CAPE OTWAY	5-R	PRINCESS HWY	4.5	1.97	171	6.2.4	MORIAN	04.12.96
CAPE OTWAY	6-L	PRINCESS HWY	6.5	0.42	171	6.2.4	MODEWARRE	04.12.96
CAPE OTWAY	7-L	PRINCESS HWY	6.9	4.09	133	6.1.4	MODEWARRE	04.12.96
CAPE OTWAY	7-R	PRINCESS HWY	6.9	4.09	171	6.2.4	MODEWARRE	04.12.96
CHURCH	1-L	CAPE OTWAY ROAD	0	2.138	134	6.1.4	MODEWARRE	11.11.96
CHURCH	1-R	CAPE OTWAY ROAD	0	2.138	134	6.1.4	MODEWARRE	11.11.96
CONSIDINES	1-L	PRINCES HWY	0	1.75	133	6.1.4	BUCKLEY	13.09.96
CONSIDINES	2-L	PRINCES HWY	1.8	2.34	152	6.1.5	MODEWARRE	13.09.96
CONSIDINES	2-R	PRINCES HWY	1.8	2.34	133	6.1.4	MODEWARRE	13.09.96
CONSIDINES	3-L	PRINCES HWY	4.1	0.683	133	6.1.4	MODEWARRE	13.09.96
CONSIDINES	3-R	PRINCES HWY	4.1	0.683	133	6.1.4	MODEWARRE	13.09.96
CRESSY	2-L	RAILWAY LINE (P.HW	1	0.8	117	6.1.3	WINCHELSEA	30.07.96
CRESSY	2-R	RAILWAY LINE (P.HW	1	0.8	118	6.1.3	WINCHELSEA	30.07.96
CRESSY	4-R	RAILWAY LINE (P.HW	2.5	1.78	117	6.1.3	WINCHELSEA	30.07.96
CRESSY	6-R	RAILWAY LINE (P.HW	6.6	3.13	118	6.1.3	WINCHELSEA	30.07.96
CRESSY	9-R	RAILWAY LINE (P.HW	12	1.76	117	6.1.3	OMBERSLEY	30.07.96
DANS	2-R	BLUESTONE SCHOOL	1.3	0.77	133	6.1.4	CONNEWARRE	18.10.96
DANS	4-R	BLUESTONE SCHOOL	2.5	0.18	133	6.1.4	CONNEWARRE	18.10.96

<b>DICKINS</b>	7-R	SURFCOAST HWY	5.3	1	133	6.1.4	FRESHWATER	6.12.96
<b>DICKSONS</b>	1-L	BARWON TERRACE	0	2.1	117	6.1.3	WINCHELSEA	05.09.96
<b>DICKSONS</b>	1-R	BARWON TERRACE	0	2.1	117	6.1.3	WINCHELSEA	05.09.96
<b>DOROQ</b>	1-R	BARWON PARK-SHEL	0	0.17	156	6.1.5	WINCHELSEA	05.08.96
<b>DOROQ</b>	2-L	BARWON PARK-SHEL	0.2	1.684	156	6.1.5	WINCHELSEA	05.08.96
<b>DOROQ</b>	2-R	BARWON PARK-SHEL	0.2	1.684	156	6.1.5	WINCHELSEA	05.08.96
<b>GEORGES EAST</b>	1-L	MERRAWARP ROAD	0	0.78	70	3.2.2	BARRABOOL	17.08.96
<b>GEORGES EAST</b>	1-R	MERRAWARP ROAD	0	0.78	70	3.2.2	BARRABOOL	17.08.96
<b>GRAHAMS</b>	1-L	DANS ROAD	0	0.81	133	6.1.4	CONNEWARRE	13.9.96
<b>GRAHAMS</b>	1-R	DANS ROAD	0	0.81	133	6.1.4	CONNEWARRE	13.9.96
<b>HEIDI</b>	1-L	HENDY MAIN ROAD	0	1.14	134	6.1.4	MORIAC	23.7.96
<b>HEIDI</b>	1-R	HENDY MAIN ROAD	0	1.14	134	6.1.4	MORIAC	23.7.96
<b>INGLEBY</b>	2-R	PRINCESS HWY	4	0.32	117	6.1.3	WINCHELSEA	23.8.96
<b>INGLEBY</b>	3-L	PRINCESS HWY	4.3	6.77	117	6.1.3	WINCHELSEA	23.8.96
<b>INGLEBY</b>	3-R	PRINCESS HWY	4.3	6.77	117	6.1.3	WINCHELSEA	23.8.96
<b>KAHLS</b>	1-R	VOLUMNS ROAD	0	1.62	155	6.1.5	GNARWARRE	17.8.96
<b>KILDEAN</b>	3-L	CAPE OTWAY ROAD	2.3	1.85	171	6.2.4	WINCHELSEA	23.8.96
<b>KILDEAN</b>	3-R	CAPE OTWAY ROAD	2.3	1.85	180	6.2.4	WINCHELSEA	23.8.96
<b>LEWIS</b>	1-L	BUCKLEY ROAD SOU	0	0.8	190	6.2.4	BUCKLEY	5.9.96
<b>LEWIS</b>	1-R	BUCKLEY ROAD SOU	0	0.8	190	6.2.4	BUCKLEY	5.9.96
<b>LLOYDS</b>	1-L	WINCHELSEA-DEANS	0	1.235	117	6.1.3	WINCHELSEA	17.8.96
<b>LLOYDS</b>	1-R	WINCHELSEA-DEANS	0	1.235	117	6.1.3	WINCHELSEA	17.8.96
<b>LOWNDES</b>	1-L	CAPE OTWAY ROAD	0	0.12	133	6.1.4	MODEWARRE	13.9.96
<b>LOWNDES</b>	1-R	CAPE OTWAY ROAD	0	0.12	133	6.1.4	MODEWARRE	13.9.96
<b>MARSHMANN</b>	1-L	SWABYS LANE	0	0.13	133	6.1.4	WURDIBOLUC	23.7.96
<b>MARSHMANN</b>	1-R	SWABYS LANE	0	0.13	133	6.1.4	WURDIBOLUC	23.7.96
<b>MARSHMANN</b>	3-L	SWABYS LANE	0.6	0.23	133	6.1.4	WURDIBOLUC	23.7.96
<b>MARSHMANN</b>	3-R	SWABYS LANE	0.6	0.23	133	6.1.4	WURDIBOLUC	23.7.96
<b>MATHISONS</b>	3-L	CAPE OTWAY ROAD	1.1	3.33	171	6.2.4	WURDIBOLUC	5.9.96
<b>MATHISONS</b>	3-R	CAPE OTWAT ROAD	1.1	3.33	171	6.2.4	WURDIBOLUC	5.9.96
<b>MCCANNS</b>	2-L	SURFCOATS HWY	1.2	0.44	133	6.1.4	MOUNT DUNEE	18.10.96
<b>MCCANNS</b>	2-R	SURFCOATS HWY	1.2	0.44	133	6.1.4	MOUNT DUNEE	18.10.96
<b>MCCONACHYS</b>	1-L	LEIGH'S LANE	0	0.93	117	6.1.3	WINCHELSEA	30.7.96
<b>MCCONACHYS</b>	1-R	LEIGH'S LANE	0	0.93	117	6.1.3	WINCHELSEA	30.7.96
<b>MCINTYRES</b>	1-L	DOROQ ROAD	0	0.88	117	6.1.3	WINCHELSEA	5.8.96
<b>MCINTYRES</b>	1-R	DOROQ ROAD	0	0.88	118	6.1.3	WINCHELSEA	5.8.96
<b>MCINTYRES</b>	2-R	DOROQ ROAD	0.9	0.17	118	6.1.3	WINCHELSEA	5.8.96
<b>MCINTYRES</b>	3-L	DOROQ ROAD	1.1	3.97	156	6.1.5	WINCHELSEA	5.8.96
<b>MCINTYRES</b>	3-R	DOROQ ROAD	1.1	3.97	156	6.1.5	WINCHELSEA	5.8.96
<b>MCINTYRES</b>	4-R	DOROQ ROAD	5.0	0.18	118	6.1.3	WINCHELSEA	5.8.96



MCINTYRES	5-L	DOROQ ROAD	5.2	0.42	117	6.1.3	WINCHELSEA	5.8.96
MCINTYRES	5-R	DOROQ ROAD	5.2	0.42	117	6.1.3	WINCHELSEA	5.8.96
MENZELS	1-R	SEIFFERTS ROAD	0	0.15	117	6.1.3	WINCHELSEA	22.1.96
MENZELS	2-L	SEIFFERTS ROAD	0.2	0.15	117	6.1.3	WINCHELSEA	22.1.96
MENZELS	2-R	SEIFFERTS ROAD	0.2	0.15	117	6.1.3	WINCHELSEA	22.1.96
MIRNEE SCHOOL	1-L	CRESSY ROAD	0	2.58	117	6.1.3	WINCHELSEA	30.7.96
MIRNEE SCHOOL	1-R	CRESSY ROAD	0	2.58	117	6.1.3	WINCHELSEA	30.7.96
MIRNEE SCHOOL	2-L	CRESSY ROAD	2.6	0.55	117	6.1.3	WINCHELSEA	30.7.96
MIRNEE SCHOOL	2-R	CRESSY ROAD	2.6	0.55	117	6.1.3	WINCHELSEA	30.7.96
MIRNEE SCHOOL	3-L	CRESSY ROAD	3.1	0.25	117	6.1.3	WINCHELSEA	30.7.96
MIRNEE SCHOOL	3-R	CRESSY ROAD	3.1	0.25	117	6.1.3	WINCHELSEA	30.7.96
MONAHANS	1-L	BARRABOOL ROAD	0	2.9	190	6.2.4	GNARWARRE	17.8.96
MONAHANS	1-R	BARRABOOL ROAD	0	2.9	190	6.2.4	GNARWARRE	17.8.96
MT DUNED	7-L	CAPE OTWAY ROAD	3.2	2.13	171	6.2.4	FRESHWATER	15.11.96
MT DUNED	7-R	CAPE OTWAY ROAD	3.2	2.13	171	6.2.4	FRESHWATER	15.11.96
MT DUNED	8-R	CAPE OTWAY ROAD	5.4	1.29	171	6.2.4	FRESHWATER	15.11.96
MT POLLOCK	2-L	GNARWARRE ROAD	6.4	0.38	133	6.1.4	BUCKLEY	6.9.96
MT POLLOCK	2-R	GNARWARRE ROAD	6.4	0.38	190	6.2.4	BUCKLEY	6.9.96
MT POLLOCK	4-L	GNARWARRE ROAD	7.3	2.539	119	6.1.3	BUCKLEY	6.9.96
MT POLLOCK	4-R	GNARWARRE ROAD	7.3	2.539	190	6.2.4	BUCKLEY	6.9.96
MURREGURK	1-L	PRINCES HWY	0	0.772	133	6.1.4	BUCKLEY	23.8.96
MURREGURK	1-R	PRINCES HWY	0	0.772	133	6.1.4	BUCKLEY	23.8.96
NOBLES	1-L	POLLOCKS FORD RO	0	0.21	119	6.1.3	GNARWARRE	17.8.96
NOBLES	2-L	POLLOCKS FORD RO	0.2	1.7	119	6.1.3	GNARWARRE	17.8.96
ONDIT	2-L	PRINCES HWY	0.6	0.45	117	6.1.3	WINCHELSEA	30.7.96
ONDIT	2-R	PRINCES HWY	0.6	0.45	117	6.1.3	WINCHELSEA	30.7.96
ONDIT	3-L	PRINCES HWY	1.1	3.06	117	6.1.3	WINCHELSEA	30.7.96
ONDIT	3-R	PRINCES HWY	1.1	3.06	117	6.1.3	WINCHELSEA	30.7.96
ONDIT	5-L	PRINCES HWY	4.2	3.05	117	6.1.3	WINCHELSEA	30.7.96
ONDIT	5-R	PRINCES HWY	4.2	3.05	117	6.1.3	WINCHELSEA	30.7.96
PEELS	2-L	INVERLEIGH-WINCHE	0.09	8.92	119	6.1.3	WINCHELSEA	5.8.96
POLLOCKS FORD	2-L	BARRABOOL ROAD	0.6	0.36	190	6.2.4	GNARWARRE	17.8.96
PRICES LANE	2-L	CRESSY ROAD	0.2	1.94	118	6.1.3	WINCHELSEA	30.7.96
PRICES LANE	2-R	CRESSY ROAD	0.2	1.94	117	6.1.3	WINCHELSEA	30.7.96
PRICES LANE	3-L	CRESSY ROAD	2.2	1.86	117	6.1.3	WINCHELSEA	30.7.96
PRICES LANE	3-R	CRESSY ROAD	2.2	1.86	117	6.1.3	WINCHELSEA	30.7.96
PRICES LANE	4-L	CRESSY ROAD	4.0	2.16	118	6.1.3	WINCHELSEA	30.7.96
PRICES LANE	4-R	CRESSY ROAD	4.0	2.16	118	6.1.3	WINCHELSEA	30.7.96
SHELFORD	6-L	CRESSY ROAD	5.7	4.37	141	6.1.4	WINCHELSEA	5.8.96
SHELFORD	6-R	CRESSY ROAD	5.7	4.37	117	6.1.3	WINCHELSEA	5.8.96

<b>SHELFORD</b>	7-L	CRESSY ROAD	10	0.92	117	6.1.3	WINCHELSEA	5.8.96
<b>SHELFORD</b>	7-R	CRESSY ROAD	10	0.092	118	6.1.3	WINCHELSEA	5.8.96
<b>STEPHENSONS</b>	1-L	MATHISONS ROAD	0	2.203	117	6.1.3	WURDIBOLUC	5.9.96
<b>STEPHENSONS</b>	1-R	MATHISONS ROAD	0	2.203	117	6.1.3	WURDIBOLUC	5.9.96
<b>SWABYS</b>	1-L	BUCKLEY ROAD SOU	0	1.14	133	6.1.4	WURDIBOLUC	23.7.96
<b>SWABYS</b>	1-R	BUCKLEY ROAD SOU	0	1.14	133	6.1.4	WURDIBOLUC	23.7.96
<b>TAYLORS</b>	1-L	CAPE OTWAY RD	0	2.5	133	6.1.4	MODEWARRE	13.9.96
<b>TAYLORS</b>	1-R	CAPE OTWAY RD	0	2.5	133	6.1.4	MODEWARRE	13.9.96
<b>VOLUMNS</b>	1-L	NOBLE RD	0	1.7	119	6.1.3	GNARWARRE	17.8.96
<b>VOLUMNS</b>	1-R	NOBLES ROAD	0	1.7	119	6.1.3	GNARWARRE	17.8.96
<b>VOLUMNS</b>	2-R	NOBLE RD	1.7	0.2	119	6.1.3	GNARWARRE	17.8.96
<b>VOLUMNS</b>	3-L	NOBLE RD	1.9	0.5	119	6.1.3	GNARWARRE	17.8.96
<b>VOLUMNS</b>	3-R	NOBLE RD	1.9	0.5	119	6.1.3	GNARWARRE	17.8.96
<b>WAINEWRIGHTS</b>	2-R	BUCKLEY SCHOOL R	1.9	1.365	133	6.1.4	BUCKLEY	5.9.96
<b>WALTONS</b>	1-L	PRINCES HWY	0	1.95	133	6.1.4	BUCKLEY	13.9.96
<b>WALTONS</b>	1-R	PRINCES HWY	0	1.95	133	6.1.4	BUCKLEY	13.9.96
<b>WINCHELSEA-DEANS</b>	1-L	PRINCES HWY	0	10.76	73	3.2.2	WINCHELSEA	15.1.97
<b>WINCHELSEA-DEANS</b>	1-R	PRINCES HWY	0	10.76	73	3.2.2	WINCHELSEA	15.1.97
<b>WINKLERS</b>	1-L	LOWER DUNEEED RO	0	0.75	133	6.1.4	CONNEWARRE	17.10.96
<b>WINKLERS</b>	1-R	LOWER DUNEEED RO	0	0.75	133	6.1.4	CONNEWARRE	17.10.96

## Calendar of potential roadside management activities:

55L

## Winter

Revegetation Conduct a revegetation program on eroding or priority sites with local Landcare support (Autumn-Spring)

## Spring

Weed control Arrange spot spraying of noxious and woody weeds

Revegetation Conduct a revegetation program on eroding or priority sites with local Landcare support (Autumn-Spring)

## Summer

Weed control Arrange spot spraying of noxious and woody weeds

Seed Collection Coordinate collection in consultation with DSE and the Ballarat Region Seed Bank

## Autumn

Revegetation Conduct a revegetation program on eroding or priority sites with local Landcare support (Autumn-Spring)

## General

Natural regeneration Allow time and protect areas from disturbance

Erosion/run-off control Ensure all drain and roadworks meet a high standard. Run training activities

Removal of Exotic Vegetation Remove inappropriate trees and shrubs when labour is available

*Note 1: Revegetation work on roadsides. The Roadside Management Prescriptions adopt the maxim: 'Protect, Enhance and Restore'. Any revegetation works, whether planting or direct seeding should use indigenous species collected from local seed. Wherever possible seed should be collected from the revegetation site or close by from the same Ecological Vegetation Class.*

**Medium Conservation Value roadsides on the basalt plain containing Grassy Woodlands****55 Plains Grassy Woodland****Conservation Status: MEDIUM****EVC Notes:** Grassy Woodland sites with a partly modified groundlayer or overstorey.**SalinityRegime:** Nonsaline**EVCGroup:** 14 Plains Grassy Woodlands or Forests**MoistureRegime:** Dry - Waterlogged**EVCType:** EVC**ExposureRegime:** Open (plains & foothills)**Structural Weeds:** Serrated Tussock, Gorse, Blackberry, Sweet Briar, Radiata Pine, Toowoomba Canary-grass, Spear Thistle, Hawthorn, Cocksfoot, Sweet Vernal-grass, African Box-thorn, St John's Wort, Crow Garlic, Annual Veldt-grass**Management Outline:** Focus on the control of weeds adversely affecting the structure of the community.**Comments:** Grassy woodland usually dominated by Kangaroo Grass (*Themeda triandra*) with Wallaby or Spear grasses in drier sections and Tall Tussock Grass (*Poa labillardieri*) in wetter sections with a Manna Gum/Swamp Gum or Redgum overstorey highly variable in density.

<b>Management Techniques:</b>	<b>Use:</b>	<b>Comments:</b>
<b>Burning</b>	YES	Autumn burning will remove fine fuel and lower fire risk and allow Summer growing native grasses to flower and seed. Reducing biomass in this manner will keep Themeda grasslands healthy. Woodland sections should be burnt carefully to avoid tree/shrub seedlings
<b>Weed control</b>	YES	Any woody weeds should be removed from the roadside. Herbaceous weeds vary in their degree of impact. The focus should be on new weeds, quickly removing these before seeding. Pasture weeds fall into two categories 1/ Those that are well established and now are almost an inexorable part of the EVC but do not dominate (e.g. Onion Grass, Sweet Vernal Grass, Quaking Grass) and 2/ Those that pose a serious threat to the integrity or structure of the EVC (e.g. Phalaris, Cocksfoot, Tall Wheat Grass, Serrated Tussock)
<b>Natural regeneration</b>	YES	Encourage natural regeneration of trees and shrubs by avoiding slashing in the vicinity of existing plants
<b>Revegetation</b>	YES	Consider replanting local trees and shrubs where they have been lost.
<b>Erosion/run-off control</b>	YES	Road grading or management should attempt to disperse rather than concentrate water (correct road camber, run-off points, table and mitre drains). Active eroding areas should be stabilised and revegetated
<b>Removal of Exotic Vegetation</b>	YES	Remove planted trees and shrubs where these species are actively spreading.
<b>Seed Collection</b>	YES	Regulate to protect vegetation from over-collection
<b>Grazing</b>	NO	
<b>Cropping</b>	NO	
<b>Fencing</b>	NO	
<b>Salinity Control</b>	NO	
<b>Rare plant specific requirements</b>	NO	
<b>Graded or Ploughed Firebreaks</b>	NO	
<b>Blanket spraying</b>	NO	

<b>Slashing</b>	?	Consider slashing on medium value roadsides only and limit to areas of introduced grass or woody weed seedlings to restrict fire risk. Care should be taken not to spread seed to other sections of the road with higher conservation values. Slashing is best carried out prior to seeding of annual grasses (by December)
<b>Signage</b>	?	SRV sign may be desirable at McDonald's Rd for Pale Swamp Everlasting.

### EVC Description

**55** Plains Grassy Woodland was once widespread in the vicinity of the volcanic plains (VP/CVU/OP), in some areas growing in association with Plains Grassland. Due to a long history of grazing and clearing for agriculture the majority of this EVC has disappeared and that which is left is often severely degraded. There is great variation within remnants and it is likely that several different floristic communities exist. However, due to the paucity of sampling of intact remnants, distinctions at the floristic community level have not been made. All sites are virtually flat, altitudes range from 350 to 380m asl except in the Bannockburn and Inverleigh areas which are 90 to 100m asl and annual rainfall is approximately 650mm. Soils are generally fertile, most sites occurring on Tertiary sands and clays.

Tree density within the areas mapped varies from almost forest to very open woodland. Dominance within the overstorey varies with soil moisture which is related to the proportions of sand and clay within the soil. Fire and management history may also influence overstorey structure and species composition. Dominant species within this EVC may include Yellow Gum, Swamp Gum, Yellow Box or Manna Gum with Silver Banksia (tree form), Black She-oak, Blackwood and Black Wattle. There is no shrub layer apart from localised thickets of Hedge Wattle in the Bannockburn and Inverleigh areas. The ground layer is very species rich with a mixture of low ericoid shrubs, such as Peach Heath, Cranberry Heath and Honey-pots, and a diversity of lilies, forbs and grasses. Common species include Yellow Rush-lily, Milkmaids, Running Postman, Common Rice-flower, Creeping Bossiaea, Wiry Buttons, Scaly Buttons, Kidney-weed, Sundew, Spear-grasses, Wallaby-grasses, Reed Bent-grass, Weeping Grass and Kangaroo Grass (the latter often dominating). In some areas there are dense patches of Black-anther Flax-lily and Variable Sword-sedge.

**Potential Threatening Processes:** clearing for agriculture, fragmentation, grazing, weed invasion, road construction and maintenance, minor forest produce, timber harvesting, inappropriate fire regimes, dieback

**GeneralisedStatus:** E Endangered

### This Management Prescription is currently applicable to the following Surf Coast Roadside Sections:

ROAD NAME	SECTION_ ORIGIN: NO_AND_ SIDE:	DISTANCE FROM ORIGIN:	SECTION LENGTH:	SLU:	GMU3:	LOCALITY:	DATE SURVEYED:
<b>BARWON LEIGH LAN</b>	2-R	WINCHELSEA-INVER	0.3	0.9	119	6.1.3	INVERLEIGH 5.8.96
<b>BOGANS</b>	1-L	LOWER DUNEED RO	0	1.62	171	6.2.4	FRESHWATER 6.12.96
<b>BOGANS</b>	1-R	LOWER DUNEED RO	0	1.62	171	6.2.4	FRESHWATER 6.12.96
<b>BUCKLEY NORTH</b>	1-R	PRINCES HWY	0	2.4	190	6.2.4	BUCKLEY 30.8.96
<b>BUCKLEY SCHOOL</b>	2-L	PRINCES HWY	0.7	4.48	133	6.1.4	BUCKLEY 30.8.96
<b>BUCKLEY SCHOOL</b>	2-R	PRINCES HWY	0.7	4.48	190	6.2.4	BUCKLEY 30.8.96
<b>BUCKLEY SOUTH</b>	4-L	PRINCES HWY	2.7	0.85	190	6.2.4	BUCKLEY 30.8.96
<b>CAPE OTWAY</b>	2-L	PRINCES HWY	3.1	0.42	133	6.1.4	MORIAC 4.12.96
<b>CAPE OTWAY</b>	2-R	PRINCES HWY	3.1	0.42	133	6.1.4	MORIAC 4.12.96
<b>CAPE OTWAY</b>	4-L	PRINCES HWY	4.2	0.33	171	6.2.4	MORIAC 4.12.96
<b>CAPE OTWAY</b>	6-R	PRINCES HWY	6.5	0.42	133	6.1.4	MODEWARRE 4.12.96
<b>CHARLEMONT</b>	1-L	LOWER DUNEED RO	0	1.63	133	6.1.4	CONNEWARRE 17.10.96
<b>CHARLEMONT</b>	1-R	LOWER DUNEED RO	0	1.63	133	6.1.4	CONNEWARRE 17.10.96

DANS	2-L	BLUESTONE SCHOOL	1.3	0.77	133	6.1.4	CONNEWARRE	18.10.96
DANS	4-L	BLUESTONE SCHOOL	2.5	0.18	133	6.1.4	CONNEWARRE	18.10.96
DANS	6-L	BLUESTONE SCHOOL	2.7	0.656	133	6.1.4	CONNEWARRE	18.10.96
DANS	6-R	BLUESTONE SCHOOL	2.7	0.656	133	6.1.4	CONNEWARRE	18.10.96
DICKINS	8-L	SURFCOAST HWY	6.3	1.3	133	6.1.4	FRESHWATER	6.12.96
DICKINS	8-R	SURFCOAST HWY	6.3	1.3	79	6.2.4	FRESHWATER	6.12.96
DOROQ	1-L	SHELFORD ROAD	0	0.17	156	6.1.5	WINCHELSEA	5.8.96
DUFFIELDS	1-R	GROSSMANS ROAD	0	2.035	158	6.2.2	JAN JUC	18.12.96
GHAZEEPORE	2-L	MT DUNEEED ROAD	0	2.07	171	6.2.4	FRESHWATER	15.11.96
GHAZEEPORE	2-R	MT DUNEEED ROAD	0	2.07	171	6.2.4	FRESHWATER	15.11.96
GNARWARRE	2-L	BARRABOOL ROAD	0.3	4.67	190	6.2.4	GNARWARRE	23.8.96
GNARWARRE	2-R	BARRABOOL ROAD	0.3	4.67	190	6.2.4	GNARWARRE	23.8.96
GNARWARRE	3-L	BARRABOOL ROAD	5	3.18	119	6.1.3	GNARWARRE	23.8.96
GNARWARRE	3-R	BARRABOOL ROAD	5	3.18	190	6.2.4	GNARWARRE	23.8.96
HENDY MAIN	6-L	BARRABOOL ROAD	22	0.8	190	6.2.4	BELLBRAE	17.8.96
HENDY MAIN	6-R	BARRABOOL ROAD	22	0.8	171	6.2.4	BELLBRAE	17.8.96
INGLEBY	2-L	PRINCES HWY	4	0.32	117	6.1.3	WINCHELSEA	23.8.96
KAHLS	1-L	VOLUMNS ROAD	0	1.62	155	6.1.5	GNARWARRE	17.8.96
LOWNDES	2-L	CAPE OTWAY ROAD	0.1	0.09	133	6.1.4	MODEWARRE	13.9.96
LOWNDES	2-R	CAPE OTWAY ROAD	0.1	0.09	133	6.1.4	MODEWARRE	13.9.96
MARSHMANN	2-L	SWABYS LANE	0.1	0.43	133	6.1.4	WURDIBOLUC	23.7.96
MARSHMANN	2-R	SWABYS LANE	0.1	0.43	133	6.1.4	WURDIBOLUC	23.7.96
MARSHMANS OUTLE	1-L	CAPE OTWAY ROAD	0	0.755	133	6.1.4	WURDIBOLUC	5.9.96
MARSHMANS OUTLE	1-R	CAPE OTWAY ROAD	0	0.755	133	6.1.4	WURDIBOLUC	5.9.96
MAWSONS	1-L	ATKINS ROAD	0	0.308	133	6.1.4	WINCHELSEA	5.9.96
MAWSONS	1-R	ATKINS ROAD	0	0.308	133	6.1.4	WINCHELSEA	5.9.96
MCDONALDS	1-L	PRINCES HWY	1.3	0.475	117	6.1.3	WINCHELSEA	23.8.96
MCDONALDS	1-R	PRINCES HWY	1.3	0.475	117	6.1.3	WINCHELSEA	23.8.96
MCINTYRES	2-L	DOROQ ROAD	0.9	0.17	118	6.1.3	WINCHELSEA	5.8.96
MT DUNEEED	8-L	CAPE OTWAY ROAD	5.4	1.29	171	6.2.4	FRESHWATER	15.11.96
MT POLLOCK	1-L	GNARWARRE ROAD	0	6.38	156	6.1.5	BUCKLEY	23.8.96
MT POLLOCK	1-R	GNARWARRE ROAD	0	6.38	156	6.1.5	BUCKLEY	23.8.96
MT POLLOCK	3-L	GNARWARRE	6.8	0.51	133	6.1.4	MT POLLOCK	6.9.96
MT POLLOCK	3-R	GNARWARRE ROAD	6.8	0.51	119	6.1.3	MT POLLOCK	6.9.96
NOBLES	2-R	POLLOCKS FORD RO	0.2	0.21	119	6.1.3	GNARWARRE	17.8.96
ONDIT	4-L	PRINCES HWY	4.1	0.07	117	6.1.3	WINCHELSEA	30.7.96
ONDIT	4-R	PRINCES HWY	4.1	0.07	117	6.1.3	WINCHELSEA	30.7.96
PEELS	2-R	WINCHELSEA-INVER	0.09	8.92	119	6.1.3	INVERLEIGH	5.8.96
PRICES LANE	1-L	CRESSY ROAD	0	0.24	117	6.1.3	OMBERSLEY	30.7.96
SHELFORD	4-L	CRESSY ROAD	2.5	2.97	118	6.1.3	WINCHELSEA	5.8.96

Roadside Management Prescription		Surf Coast Shire						55M
<b>SHELFORD</b>	4-R	CRESSY ROAD	2.5	2.97	141	6.1.4	WINCHELSEA	5.8.96
<b>SWABYS</b>	2-L	BUCKLEY ROAD SOU	1.1	0.98	133	6.1.4	WURDIBOLUC	23.7.96
<b>SWABYS</b>	2-R	BUCKLEY ROAD SOU	1.1	0.98	133	6.1.4	WURDIBOLUC	23.7.96
<b>VOLUMNS</b>	2-L	NOBLE ROAD	1.7	0.2	119	6.1.3	GNARWARRE	17.8.96
<b>WAINWRIGHTS</b>	2-L	BUCKLEY SCHOOL R	1.9	1.365	119	6.1.3	BUCKLEY	5.9.96

**Calendar of potential roadside management activities: 55M**

**Winter**

Revegetation Conduct a revegetation program on eroding or priority sites with local Landcare support (Autumn-Spring)

**Spring**

Weed control Arrange spot spraying of noxious and woody weeds  
 Revegetation Conduct a revegetation program on eroding or priority sites with local Landcare support (Autumn-Spring)

**Summer**

Weed control Arrange spot spraying of noxious and woody weeds  
 Seed Collection Coordinate collection in consultation with DSE and the Ballarat Region Seed Bank

**Autumn**

Burning Arrange burning with local CFA groups  
 Revegetation Conduct a revegetation program on eroding or priority sites with local Landcare support (Autumn-Spring)

**General**

Natural regeneration Allow time and protect areas from disturbance  
 Erosion/run-off control Ensure all drain and roadworks meet a high standard. Run training activities  
 Removal of Exotic Vegetation Remove inappropriate trees and shrubs when labour is available

*Note 1: Revegetation work on roadsides. The Roadside Management Prescriptions adopt the maxim: 'Protect, Enhance and Restore'. Any revegetation works, whether planting or direct seeding should use indigenous species collected from local seed. Wherever possible seed should be collected from the revegetation site or close by from the same Ecological Vegetation Class.*

**High Conservation Value roadsides on the Basalt plain containing Grassy Woodlands****55 Plains Grassy Woodland****Conservation Status: HIGH**

**EVC Notes:** Grassy woodland usually dominated by Kangaroo Grass (*Themeda triandra*) with Wallaby or Spear grasses in drier sections and Tall Tussock Grass (*Poa labillardieri*) in wetter sections with a Manna Gum/Swamp Gum or Redgum overstorey highly variable in density.

**SalinityRegime:** Nonsaline**EVCGroup:** 14 Plains Grassy Woodlands or Forests**MoistureRegime:** Dry - Waterlogged**EVCType:** EVC**ExposureRegime:** Open (plains & foothills)

**Structural Weeds:** Serrated Tussock, Gorse, Blackberry, Sweet Briar, Radiata Pine, Toowoomba Canary-grass, Spear Thistle, Hawthorn, Cocksfoot, Sweet Vernal-grass, African Box-thorn, St John's Wort, Crow Garlic, Annual Veldt-grass

**Management Outline:** Some biomass reduction may be required every few years on more fertile, sparsely treed sites. Autumn burning is the recommended method along with careful spot spraying of serious weeds. Focus on retention of rare plant species (especially the two VROTs) and to prevent further deterioration of high-integrity sites. Burning is a more appropriate method of fuel reduction than slashing

**Comments:** These are the most threatened and depleted ecosystems in Australia. Remnants survive primarily on roadsides. Correct management is vital to protect these ecosystems from further decline. Plains Grassy Woodland was one of the more widespread EVCs in the Shire. Shrubs are scarce, but there are many ground-layer species. High-quality examples of this EVC occur on 13 Surf Coast roads. Two VROT plants occur: Pale Swamp Everlasting and Spiny Rice-flower.

<b>Management Techniques:</b>	<b>Use:</b>	<b>Comments:</b>
<b>Burning</b>	YES	Autumn burning will remove fine fuel and lower fire risk and allow Summer growing native grasses to flower and seed. Reducing biomass in this manner will keep <i>Themeda</i> grasslands healthy. Woodland sections should be burnt carefully to avoid tree/shrub seedlings. Indigenous vegetation in this EVC responds positively to infrequent autumn burns (every ten years).
<b>Weed control</b>	YES	Any woody weeds should be removed from the roadside. Herbaceous weeds vary in their degree of impact. The focus should be on new weeds, quickly removing these before seeding. Pasture weeds fall into two categories 1/ Those that are well established and now are almost an inexorable part of the EVC but do not dominate (e.g. Onion Grass, Sweet Vernal Grass, Quaking Grass) and 2/ Those that pose a serious threat to the integrity or structure of the EVC (e.g. Phalaris, Cocksfoot, Tall Wheat Grass, Serrated Tussock)
<b>Signage</b>	YES	Signage of all high conservation roadsides is recommended to raise awareness and protect values from inadvertent damage
<b>Natural regeneration</b>	YES	Usually occurs satisfactorily in absence of threats such as weed encroachment and soil disturbance
<b>Erosion/run-off control</b>	YES	Road grading or management should attempt to disperse rather than concentrate water (correct road camber, run-off points, table and mitre drains). Active eroding areas should be stabilised and revegetated
<b>Removal of Exotic Vegetation</b>	YES	Remove planted trees and shrubs where these species are actively spreading.

<b>Rare plant specific requirements</b>	YES	Consult the species list for the roadside. Rare, threatened or endangered plants are noted with a code. Seek advice regarding management required to protect and enhance the species (DSE). Work to reduce competition from exotic species (exclude aggressive species from within 2m if possible)
<b>Seed Collection</b>	YES	Regulate to protect vegetation from over-collection. Both Spiny Rice-flower and Pale Swamp Everlasting produce their seed in summer. Collection and growing of the Everlasting seed is relatively simple, but the Rice-flower is more difficult.
<b>Grazing</b>	NO	
<b>Cropping</b>	NO	
<b>Revegetation</b>	NO	
<b>Salinity Control</b>	NO	
<b>Graded or Ploughed Firebreaks</b>	NO	
<b>Blanket spraying</b>	NO	
<b>Slashing</b>	?	Only where biomass reduction is required to maintain grassland species diversity and vigour and burning is not possible. One annual cut if necessary (preferably before December or in Autumn) to reduce fire risk and allow native species to flower and set seed. Avoid areas with tree and shrub regeneration.
<b>Fencing</b>	?	Consider fencing any fragile remnants where it becomes apparent that a lack of a physical barrier to vehicles/grazing threatens the future of the community or rare plant

### EVC Description

**55** Plains Grassy Woodland was once widespread in the vicinity of the volcanic plains (VP/CVU/OP), in some areas growing in association with Plains Grassland. Due to a long history of grazing and clearing for agriculture the majority of this EVC has disappeared and that which is left is often severely degraded. There is great variation within remnants and it is likely that several different floristic communities exist. However, due to the paucity of sampling of intact remnants, distinctions at the floristic community level have not been made. All sites are virtually flat, altitudes range from 350 to 380m asl except in the Bannockburn and Inverleigh areas which are 90 to 100m asl and annual rainfall is approximately 650mm. Soils are generally fertile, most sites occurring on Tertiary sands and clays.

Tree density within the areas mapped varies from almost forest to very open woodland. Dominance within the overstorey varies with soil moisture which is related to the proportions of sand and clay within the soil. Fire and management history may also influence overstorey structure and species composition. Dominant species within this EVC may include Yellow Gum, Swamp Gum, Yellow Box or Manna Gum with Silver Banksia (tree form), Black She-oak, Blackwood and Black Wattle. There is no shrub layer apart from localised thickets of Hedge Wattle in the Bannockburn and Inverleigh areas. The ground layer is very species rich with a mixture of low ericoid shrubs, such as Peach Heath, Cranberry Heath and Honey-pots, and a diversity of lilies, forbs and grasses. Common species include Yellow Rush-lily, Milkmaids, Running Postman, Common Rice-flower, Creeping Bossiaea, Wiry Buttons, Scaly Buttons, Kidney-weed, Sundew, Spear-grasses, Wallaby-grasses, Reed Bent-grass, Weeping Grass and Kangaroo Grass (the latter often dominating). In some areas there are dense patches of Black-anther Flax-lily and Variable Sword-sedge.

**Potential Threatening Processes:** clearing for agriculture, fragmentation, grazing, weed invasion, road construction and maintenance, minor forest produce, timber harvesting, inappropriate fire regimes, dieback

**Generalised Status:** E Endangered

### This Management Prescription is currently applicable to the following Surf Coast Roadside Sections:

ROAD NAME	SECTION_	ORIGIN:	DISTANCE	SECTION SLU:	GMU3:	LOCALITY:	DATE
	NO_AND_		FROM	LENGTH:			SURVEYED:
	SIDE:		ORIGIN:				
BLACKS	1.1	SHELFORD ROAD	0	0.75	117	613	WINCHELSEA 28.10.06



**Roadside Management Prescription** **Surf Coast Shire** **55H**

<b>BLACKS</b>	1-L	SHELFORD ROAD	0	0.75	117	6.1.3	WINCHELSEA	28.10.96
<b>BLACKS</b>	1-R	SHELFORD ROAD	0	0.75	117	6.1.3	WINCHELSEA	5.8.96
<b>BUCKLEY SCHOOL</b>	1-R	PRINCES HWY	0	0.72	133	6.1.4	BUCKLEY	30.8.96
<b>CONSIDINES</b>	1-R	PRINCES HWY	0	1.75	152	6.1.5	BUCKLEY	13.9.96
<b>CRESSY</b>	4-L	RAILWAY LINE	2.5	1.78	117	6.1.3	WINCHELSEA	30.7.96
<b>CRESSY</b>	6-L	RAILWAY LINE	6.6	3.13	117	6.1.3	WINCHELSEA	30.7.96
<b>CRESSY</b>	9-L	RAILWAY LINE	12	1.76	117	6.1.3	OMBERSLEY	30.7.96
<b>DICKINS</b>	7-L	SURFCOAST HWY	5.3	1	133	6.1.4	FRESHWATER	6.12.96
<b>MCINTYRES</b>	4-L	DOROQ ROAD	5.0	0.18	117	6.1.3	WINCHELSEA	5.8.96
<b>MENZELS</b>	1-L	ONDIT ROAD	0	0.15	117	6.1.3	WINCHELSEA	22.1.96
<b>NOBLES</b>	1-R	POLLOCKS FORD RO	0	0.21	119	6.1.3	GNARWARRE	17.8.96
<b>POLLOCKS FORD</b>	2-R	BARRABOOL ROAD	0.6	0.36	190	6.2.4	GNARWARRE	17.8.96
<b>PRICES LANE</b>	1-R	CRESSY ROAD	0	0.24	118	6.1.3	OMBERSLEY	30.7.96
<b>SWABYS</b>	4-L	BUCKLEY ROAD SOU	2.9	2.55	133	6.1.4	WURDIBOLUC	23.7.96
<b>SWABYS</b>	4-R	BUCKLEY ROAD SOU	2.9	2.55	133	6.1.4	WURDIBOLUC	23.7.96
<b>WAINEWRIGHTS</b>	1-L	BUCKLEY SCHOOL R	0	1.86	133	6.1.4	BUCKLEY	5.9.96
<b>WAINEWRIGHTS</b>	1-R	BUCKLEY SCHOOL R	0	1.86	119	6.1.3	BUCKLEY	5.9.96
<b>WILLIAMS</b>	2-L	DICKENS ROAD	0.3	1.46	115	6.1.3	MOUNT DUNEE	15.11.96
<b>WILLIAMS</b>	2-R	DICKENS ROAD	0.3	1.46	133	6.1.4	MOUNT DUNEE	15.11.96

**The following Surf Coast Roadside Sections contain listed plant species in this EVC:**

<b><i>Helichrysum aff. rutidolepis</i> (Lowlan Pale Swamp Everlasting</b>	<b>AROTS:</b>	<b>VROTS: v</b>
<b>RD_NAME:</b>	<b>SECTION_NO_AND_SIDE:</b>	
WILLIAMS	2-L	
WILLIAMS	2-R	
<b><i>Pimelea spinescens</i> Spiny Rice-flower</b>	<b>AROTS:</b>	<b>VROTS: e</b>
<b>RD_NAME:</b>	<b>SECTION_NO_AND_SIDE:</b>	
MCINTYRES	4-L	
CRESSY	6-L	
CRESSY	4-L	

**Calendar of potential roadside management activities:** **55H**

**Spring**

Weed control	Arrange spot spraying of noxious and woody weeds
Rare plant specific requirements	Monitor populations of rare species each Spring and adjust management where necessary (in consultation with DSE)

**Summer**

Weed control	Arrange spot spraying of noxious and woody weeds
Seed Collection	Coordinate collection in consultation with DSE and the Ballarat Region Seed Bank

**Autumn**

Burning	Arrange burning with local CFA groups
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**General**

Signage	Erect SRV and interpretation signage on HCV roadsides
Natural regeneration	Allow time and protect areas from disturbance
Erosion/run-off control	Ensure all drain and roadworks meet a high standard. Run training activities
Removal of Exotic Vegetation	Remove inappropriate trees and shrubs when labour is available

*Note 1: Revegetation work on roadsides. The Roadside Management Prescriptions adopt the maxim: 'Protect, Enhance and Restore'. Any revegetation works, whether planting or direct seeding should use indigenous species collected from local seed. Wherever possible seed should be collected from the revegetation site or close by from the same Ecological Vegetation Class.*

**Medium Conservation Value roadsides containing Floodplain Riparian Woodland****56 Floodplain Riparian Woodland****Conservation Status: MEDIUM**

**EVC Notes:** Redgum Woodland occurs along the lower reaches of rivers (e.g. Barwon River). Examples in Surf Coast can be found at Bellbrae and Winchelsea.

**SalinityRegime:** Nonsaline

**EVCGroup:** 15 Riverine Grassy Woodlands or Forests

**MoistureRegime:** Moist - Flooded

**EVCType:** EVC

**ExposureRegime:** Sheltered

**Structural Weeds:** Gorse, Serrated Tussock, Ragwort, Blackberry, African Box-thorn, Sweet Briar, Bathurst Burr, Clustered Dock, Common Sow-thistle, Water Couch, Hastate Orache, Spear Thistle, Hawthorn, Wild Teasel, Aster-weed, Cocksfoot, Curled Dock,

**Management Outline:** Focus on the control of any declared weeds and the more invasive weeds affecting the structure of the community. Weeds (woody and smaller species) are common on these roadsides. Efforts should be made to preserve sites of the best floristic integrity from weed invasion.

**Comments:** Fertile well watered sites close to streams are subject to regular flood disturbance and are hence very weedy. Few intact remnants of Floodplain Riparian Woodland remain in Surf Coast Shire. The best examples are classified as of Medium value; they occur on Kildean Road and Yandina Road. No VROT/AROT plants are listed.

Management Techniques:	Use:	Comments:
<b>Weed control</b>	YES	Any woody weeds should be removed from the roadside. Herbaceous weeds vary in their degree of impact. The focus should be on new weeds, quickly removing these before seeding. Pasture weeds fall into two categories 1/ Those that are well established and now are almost an inexorable part of the EVC but do not dominate (e.g. Onion Grass, Sweet Vernal Grass, Quaking Grass) and 2/ Those that pose a serious threat to the integrity or structure of the EVC (e.g. Phalaris, Cocksfoot, Tall Wheat Grass, Serrated Tussock)
<b>Natural regeneration</b>	YES	Encourage natural regeneration of trees and shrubs by avoiding slashing in the vicinity of existing plants
<b>Revegetation</b>	YES	Consider revegetation with trees and shrubs as a mechanism to cut long term management costs (i.e. remove the need for regular slashing/weed control). Plant around better quality existing remnants.
<b>Erosion/run-off control</b>	YES	Road grading or management should attempt to disperse rather than concentrate water (correct road camber, run-off points, table and mitre drains). Active eroding areas should be stabilised and revegetated
<b>Removal of Exotic Vegetation</b>	YES	Remove any garden escapees or native plants outside their natural range (e.g. Weed Wattles).
<b>Seed Collection</b>	YES	Regulate to protect vegetation from over-collection
<b>Burning</b>	NO	This EVC would have burnt infrequently naturally. An occasional burn could assist regeneration but may cause other problems such as bank erosion and weediness. Native species are adapted to regular flood disturbance.
<b>Grazing</b>	NO	
<b>Cropping</b>	NO	
<b>Fencing</b>	NO	
<b>Signage</b>	NO	
<b>Salinity Control</b>	NO	

Rare plant specific requirements	NO	
Graded or Ploughed Firebreaks	NO	
Blanket spraying	NO	
Slashing	?	Consider slashing on medium value roadsides only and limit to areas of introduced grass or woody weed seedlings to restrict fire risk. Care should be taken not to spread seed to other sections of the road with higher conservation values. Slashing is best carried out prior to seeding of annual grasses (by December). Stumps, logs and rocks can be used to protect regenerating trees and shrubs

### EVC Description

- 56** Floodplain Riparian Woodland occurs along major slow-moving rivers and creeks where they meander across the plains (VP/CVU). Floodplain Riparian Woodland is found along the Barwon River and the lower reaches of the Leigh, Moorabool and Werribee Rivers and the Sutherland and Thompson Creeks. Existing remnants are at least partly degraded. It covers the lowest, most frequently flooded terraces and generally encompasses a network of former channels and intermittent and permanent wetlands. Species composition and positioning within the EVC depends on the frequency of flooding and length of inundation of each area. Due to high levels of disturbance (natural and man-made), soil fertility, abundance of water and general accessibility and proximity to arable lands, few intact remnants of Floodplain Riparian Woodland remain and where they do occur, weeds are a dominant feature.
- The overstorey is a tall woodland dominated by Red Gum with occasional Manna Gum and Swamp Gum. The shrub stratum is patchy and includes Silver Wattle, Black Wattle, Tree Violet, River Bottlebrush, and Woolly Tea-tree. The ground layer is dominated by Common Tussock-grass on the drier elevated areas, with Common Reed, Tall Sedge, Rushes, Spike Sedges and Water-ribbons on inundated soils beside rivers. Herbs range from dryland herbs on the banks to aquatics in the river and wetland areas.

**Potential Threatening Processes:** clearing for agriculture, fragmentation, minor forest produce, alteration of drainage patterns and flooding regimes, grazing, weed invasion, dieback

**GeneralisedStatus:** E Endangered

### This Management Prescription is currently applicable to the following Surf Coast Roadside Sections:

ROAD NAME	SECTION_ NO_AND_SIDE:	ORIGIN:	DISTANCE FROM ORIGIN:	SECTION LENGTH:	SLU:	GMU3:	LOCALITY:	DATE SURVEYED:
KILDEAN	2-L	CAPE OTWAY ROAD	1.3	0.95	171	6.2.4	WINCHELSEA	23.8.96
KILDEAN	2-R	CAPE OTWAY ROAD	1.3	0.95	117	6.1.3	WINCHELSEA	23.8.96
YANDINA	1-L	ANGELSEA ROAD	0	0.48	190	6.2.4	BELLBRAE	6.12.96
YANDINA	1-R	ANGELSEA ROAD	0	0.48	190	6.2.4	BELLBRAE	6.12.96

### Calendar of potential roadside management activities:

56M

**Winter**

Revegetation Conduct a revegetation program on eroding or priority sites with local Landcare support (Autumn-Spring)

**Spring**

Weed control Arrange spot spraying of noxious and woody weeds

Revegetation Conduct a revegetation program on eroding or priority sites with local Landcare support (Autumn-Spring)

**Summer**

Weed control Arrange spot spraying of noxious and woody weeds

Seed Collection Coordinate collection in consultation with DSE and the Ballarat Region Seed Bank

**Autumn**

Revegetation Conduct a revegetation program on eroding or priority sites with local Landcare support (Autumn-Spring)

**General**

Natural regeneration Allow time and protect areas from disturbance

Erosion/run-off control Ensure all drain and roadworks meet a high standard. Run training activities

Removal of Exotic Remove inappropriate trees and shrubs when labour is available

Vegetation

*Note 1: Revegetation work on roadsides. The Roadside Management Prescriptions adopt the maxim: 'Protect, Enhance and Restore'. Any revegetation works, whether planting or direct seeding should use indigenous species collected from local seed. Wherever possible seed should be collected from the revegetation site or close by from the same Ecological Vegetation Class.*

## Low Conservation Roadsides containing Swampy Riparian Woodland

### 83 Swampy Riparian Woodland

Conservation Status: **LOW**

**EVC Notes:** Open woodland along streams.

**SalinityRegime:** Nonsaline

**EVCGroup:** 8 Riparian Scrubs or Swampy Shrubs & Woo

**MoistureRegime:** Waterlogged - Flooded

**EVCType:** EVC

**ExposureRegime:** Sheltered

**Structural Weeds:** Gorse, Blackberry, Hawthorn, Spear Thistle, Curled Dock, Cocksfoot, Sweet Briar, Clustered Dock, Blackberry, Creeping Buttercup, Toowoomba Canary-grass, Drain Flat-sedge, Common Vetch, Flaxleaf Fleabane

**Management Outline:** Focus management on control of invasive weeds and any erosion problems. Numerous exotic plant species occur in this EVC, but most are small species which are difficult to eradicate. Minimisation of soil disturbance can reduce the spread of these weeds.

**Comments:** Sections are very weedy due to high moisture and nutrient availability and regular (flood) disturbance.

Management Techniques:	Use:	Comments:
<b>Weed control</b>	YES	Any woody weeds should be removed from the roadside. Herbaceous weeds vary in their degree of impact. The focus should be on new weeds, quickly removing these before seeding. Pasture weeds fall into two categories 1/ Those that are well established and now are almost an inexorable part of the EVC but do not dominate (e.g. Onion Grass, Sweet Vernal Grass, Quaking Grass) and 2/ Those that pose a serious threat to the integrity or structure of the EVC (e.g. Phalaris, Cocksfoot, Tall Wheat Grass, Serrated Tussock)
<b>Grazing</b>	YES	Appropriate in heavily-degraded sections.
<b>Revegetation</b>	YES	Consider revegetation with trees and shrubs as a mechanism to cut long term management costs (i.e. remove the need for regular slashing/weed control)
<b>Erosion/run-off control</b>	YES	Road grading or management should attempt to disperse rather than concentrate water (correct road camber, run-off points, table and mitre drains). Active eroding areas should be stabilised and revegetated
<b>Removal of Exotic Vegetation</b>	YES	Remove planted trees and shrubs where these species are actively spreading.
<b>Seed Collection</b>	YES	Regulate to protect vegetation from over-collection
<b>Burning</b>	NO	This EVC would have burnt infrequently naturally. An occasional burn could assist regeneration but may cause other problems such as bank erosion and weediness. Native species are adapted to regular flood disturbance.
<b>Cropping</b>	NO	
<b>Fencing</b>	NO	
<b>Signage</b>	NO	
<b>Salinity Control</b>	NO	
<b>Rare plant specific requirements</b>	NO	
<b>Graded or Ploughed Firebreaks</b>	NO	
<b>Blanket spraying</b>	NO	

<b>Slashing</b>	?	Slash areas of introduced grass or woody weed seedlings only, to restrict fire risk if required. Care should be taken not to spread seed to other sections of the road with higher conservation values. Slashing is best carried out prior to seeding of annual grasses (by December)
<b>Natural regeneration</b>	?	Encourage natural regeneration through the removal of threats such as grazing, slashing or weed competition around any remnants

**EVC Description**

**83** Swampy Riparian Woodland occurs on recent alluvial flats (CVU/VP/OP). The area is flooded regularly and is nearly always wet even when the river is not flowing. Swampy Riparian Woodland consists of a very open to virtually absent canopy of Swamp Gum and Manna Gum. The shrub layer is also very sparse with scattered Blackwood, Silver Wattle, Hazel Pomaderris, Prickly Currant-bush and the occasional Rough Tree-fern and Soft Tree-fern. The ground layer is dense, dominated by Fishbone Water-fern. Other common species include Mother Shield-fern, Leafy Flat-sedge, Tall Sedge and Hard Water-fern. Patches between the ferns support herbs such as Bidgee-widgee, Kidney-weed, Hairy Pennywort and Austral Brooklime.

**Potential Threatening Processes:** clearing for agriculture, grazing, weed invasion, alteration of drainage patterns and flooding regimes, indirect impacts of road construction and maintenance, habitat loss, fragmentation

**GeneralisedStatus:** E Endangered

**This Management Prescription is currently applicable to the following Surf Coast Roadside Sections:**

ROAD NAME	SECTION_ ORIGIN: NO_AND_ SIDE:	DISTANCE FROM ORIGIN:	SECTION SLU: LENGTH:	GMU3:	LOCALITY:	DATE SURVEYED:
<b>DANGERS</b>	3-L TANNERS ROAD	3.6	0.05	171 6.2.4	GHERANG	11.11.96
<b>DANGERS</b>	3-R TANNERS ROAD	3.6	0.05	171 6.2.4	GHERANG	11.11.96

**Calendar of potential roadside management activities:**

83L

**Winter**

Revegetation Conduct a revegetation program on eroding or priority sites with local Landcare support (Autumn-Spring)

**Spring**

Weed control Arrange spot spraying of noxious and woody weeds  
 Grazing Arrange crash grazing to control pasture grass growth (fuel reduction)  
 Revegetation Conduct a revegetation program on eroding or priority sites with local Landcare support (Autumn-Spring)

**Summer**

Weed control Arrange spot spraying of noxious and woody weeds  
 Seed Collection Coordinate collection in consultation with DSE and the Ballarat Region Seed Bank

**Autumn**

Grazing Arrange crash grazing to control pasture grass growth (fuel reduction)  
 Revegetation Conduct a revegetation program on eroding or priority sites with local Landcare support (Autumn-Spring)

**General**

Erosion/run-off control Ensure all drain and roadworks meet a high standard. Run training activities  
 Removal of Exotic Vegetation Remove inappropriate trees and shrubs when labour is available

*Note 1: Revegetation work on roadsides. The Roadside Management Prescriptions adopt the maxim: 'Protect, Enhance and Restore'. Any revegetation works, whether planting or direct seeding should use indigenous species collected from local seed. Wherever possible seed should be collected from the revegetation site or close by from the same Ecological Vegetation Class.*

**Medium Conservation Roadsides containing Swampy Riparian Woodland****83 Swampy Riparian Woodland****Conservation Status: MEDIUM****EVC Notes:** Open woodland along streams.**SalinityRegime:** Nonsaline**EVCGroup:** 8 Riparian Scrubs or Swampy Shrubs & Woo**MoistureRegime:** Waterlogged - Flooded**EVCType:** EVC**ExposureRegime:** Sheltered**Structural Weeds:** Gorse, Blackberry, Hawthorn, Spear Thistle, Curled Dock, Cocksfoot, Sweet Briar, Clustered Dock, Blackberry, Creeping Buttercup, Toowoomba Canary-grass, Drain Flat-sedge, Common Vetch, Flax-leaf Fleabane**Management Outline:** Focus management on control of invasive weeds and any erosion problems. Numerous exotic plant species occur in this EVC, but most are small species which are difficult to eradicate. Minimisation of soil disturbance can reduce the spread of these weeds.**Comments:** Sections are very weedy due to high moisture and nutrient availability and regular (flood) disturbance. This EVC has a dense ground layer of ferns and sedges, but few trees and shrubs. It occurs on two Surf Coast roads. Best examples (Medium classification) are in Willowite Road. One rare species is known.

<b>Management Techniques:</b>	<b>Use:</b>	<b>Comments:</b>
<b>Weed control</b>	YES	Any woody weeds should be removed from the roadside. Herbaceous weeds vary in their degree of impact. The focus should be on new weeds, quickly removing these before seeding. Pasture weeds fall into two categories 1/ Those that are well established and now are almost an inexorable part of the EVC but do not dominate (e.g. Onion Grass, Sweet Vernal Grass, Quaking Grass) and 2/ Those that pose a serious threat to the integrity or structure of the EVC (e.g. Phalaris, Cocksfoot, Tall Wheat Grass, Serrated Tussock). Spot spray where necessary to enhance indigenous populations and to prevent invasion by "new" species.
<b>Natural regeneration</b>	YES	Encourage natural regeneration through the removal of threats such as grazing, slashing or weed competition around any remnants. Grazing and slashing at appropriate times can enhance growth of native species
<b>Revegetation</b>	YES	Consider revegetation with trees and shrubs as a mechanism to cut long term management costs (i.e. remove the need for regular slashing/weed control)
<b>Erosion/run-off control</b>	YES	Road grading or management should attempt to disperse rather than concentrate water (correct road camber, run-off points, table and mitre drains). Active eroding areas should be stabilised and revegetated
<b>Removal of Exotic Vegetation</b>	YES	Remove planted trees and shrubs where these species are actively spreading. Garden escapees, plants outside their natural range and woody weeds need attention
<b>Seed Collection</b>	YES	Regulate to protect vegetation from over-collection
<b>Burning</b>	NO	This EVC would have burnt infrequently naturally. An occasional burn could assist regeneration but may cause other problems such as bank erosion and weediness. Native species are adapted to regular flood disturbance.
<b>Grazing</b>	NO	
<b>Cropping</b>	NO	
<b>Fencing</b>	NO	
<b>Signage</b>	NO	



Salinity Control	NO	
Rare plant specific requirements	NO	
Graded or Ploughed Firebreaks	NO	
Blanket spraying	NO	
Slashing	?	Slash areas of introduced grass or woody weed seedlings only, to restrict fire risk if required. Care should be taken not to spread seed to other sections of the road with higher conservation values. Slashing is best carried out prior to seeding of annual grasses (by December). Avoid areas of higher quality remnant vegetation. Protect these with rocks, stumps, logs, etc. to prevent mowing

### EVC Description

**83** Swampy Riparian Woodland occurs on recent alluvial flats (CVU/VP/OP). The area is flooded regularly and is nearly always wet even when the river is not flowing. Swampy Riparian Woodland consists of a very open to virtually absent canopy of Swamp Gum and Manna Gum. The shrub layer is also very sparse with scattered Blackwood, Silver Wattle, Hazel Pomaderris, Prickly Currant-bush and the occasional Rough Tree-fern and Soft Tree-fern. The ground layer is dense, dominated by Fishbone Water-fern. Other common species include Mother Shield-fern, Leafy Flat-sedge, Tall Sedge and Hard Water-fern. Patches between the ferns support herbs such as Bidgee-widgee, Kidney-weed, Hairy Pennywort and Austral Brooklime.

**Potential Threatening Processes:** clearing for agriculture, grazing, weed invasion, alteration of drainage patterns and flooding regimes, indirect impacts of road construction and maintenance, habitat loss, fragmentation

**GeneralisedStatus:** E Endangered

### This Management Prescription is currently applicable to the following Surf Coast Roadside Sections:

ROAD NAME	SECTION_ NO_AND_SIDE:	ORIGIN:	DISTANCE FROM ORIGIN:	SECTION LENGTH:	SLU:	GMU3:	LOCALITY:	DATE SURVEYED:
WILLOWITE	4-L	MOUNT DUNEED RO	2.8	0.34	190	6.2.4	BELLBRAE	13.9.96
WILLOWITE	4-R	MOUNT DUNEED RO	2.8	0.34	171	6.2.4	BELLBRAE	13.9.96

### Calendar of potential roadside management activities:

83M

#### Winter

Revegetation Conduct a revegetation program on eroding or priority sites with local Landcare support (Autumn-Spring)

#### Spring

Weed control Arrange spot spraying of noxious and woody weeds

Revegetation Conduct a revegetation program on eroding or priority sites with local Landcare support (Autumn-Spring)

#### Summer

Weed control Arrange spot spraying of noxious and woody weeds

Seed Collection Coordinate collection in consultation with DSE and the Ballarat Region Seed Bank

#### Autumn

Revegetation Conduct a revegetation program on eroding or priority sites with local Landcare support (Autumn-Spring)

#### General

Natural regeneration Allow time and protect areas from disturbance

Erosion/run-off control Ensure all drain and roadworks meet a high standard. Run training activities

Removal of Exotic Vegetation Remove inappropriate trees and shrubs when labour is available

*Note 1: Revegetation work on roadsides. The Roadside Management Prescriptions adopt the maxim: 'Protect, Enhance and Restore'. Any revegetation works, whether planting or direct seeding should use indigenous species collected from local seed. Wherever possible seed should be collected from the revegetation site or close by from the same Ecological Vegetation Class.*

**Low Conservation Value Roadsides bordering Plains Grassy Wetlands****125 Plains Grassy Wetland****Conservation Status: LOW**

**EVC Notes:** Plains Grassy Wetlands are generally degraded in the Corangamite region due to the impacts of grazing, drainage and weed invasion.

**SalinityRegime:** Nonsaline**EVCGroup:** 19 Wetlands**MoistureRegime:** Dry - Flooded**EVCType:** EVC**ExposureRegime:** Open (plains & foothills)

**Structural Weeds:** Toowoomba Canary-grass, Yorkshire Fog, Hairy Hawkbit, Spear Thistle, Curled Dock, Water Couch

**Management Outline:**

**Comments:** Despite the low quality, these sites are a priority for improved management due to their rarity.

<b>Management Techniques:</b>	<b>Use:</b>	<b>Comments:</b>
<b>Weed control</b>	YES	Any woody weeds should be removed from the roadside. Herbaceous weeds vary in their degree of impact. The focus should be on new weeds, quickly removing these before seeding. Pasture weeds fall into two categories 1/ Those that are well established and now are almost an inexorable part of the EVC but do not dominate (e.g. Onion Grass, Sweet Vernal Grass, Quaking Grass) and 2/ Those that pose a serious threat to the integrity or structure of the EVC (e.g. Phalaris, Cocksfoot, Tall Wheat Grass, Serrated Tussock)
<b>Fencing</b>	YES	To restrict stock, human or vehicle access
<b>Natural regeneration</b>	YES	Species in Wetland EVCs are adapted to fluctuations in inundation. Generally species are good colonisers in the absence of changes conditions (i.e. a natural regime)
<b>Erosion/run-off control</b>	YES	See note under 'Revegetation'
<b>Removal of Exotic Vegetation</b>	YES	Remove any garden escapees or native plants outside their natural range (e.g. Melaleucas).
<b>Burning</b>	NO	Naturally this EVC would have burnt infrequently. Burning should only be considered where it is felt this activity will reduce weed cover and promote natural regeneration. Plants present are adapted to flood disturbance rather than fire disturbance.
<b>Grazing</b>	NO	Stock trampling and nutrient issues. A short term alternative to slashing. Will not assist in improving the quality of the site.
<b>Cropping</b>	NO	
<b>Signage</b>	NO	
<b>Salinity Control</b>	NO	
<b>Rare plant specific requirements</b>	NO	No AROT/VROTs recorded for this EVC during roadside survey
<b>Graded or Ploughed Firebreaks</b>	NO	
<b>Blanket spraying</b>	NO	
<b>Seed Collection</b>	NO	Not generally required (natural regeneration)
<b>Slashing</b>	?	If required to reduce fire risk
<b>Revegetation</b>	?	The wetland itself generally will not require revegetation (relying on natural regeneration and colonization). The margins however may need to be revegetated to provide a suitable buffer strip to protect from weed invasion, nutrients and sediment

## EVC Description

**125** Plains Grassy Wetland occurs in very shallow depressions on the Volcanic Plain (VP). Some of the areas are meanders of prior streams, others are discrete depressions. The unifying feature is the heavy clay soil which holds moisture as distinct from the more free-draining soils of the adjacent terrestrial vegetation. Inundation is periodic over the winter months alternating with dry periods during the summer months. Few examples remain and much of the diversity has been lost. Species richness and dominance will also naturally vary between sites. This EVC is a (usually) treeless shallow seasonal wetland. River Red Gum may occur on the perimeter or, less frequently, be scattered throughout. Structure is generally a grassland, grading into sedgeland or herbland. Species present include a range of herbs and grasses which tolerate the seasonally inundated conditions. Aquatic species may be recorded during periods of inundation. Grasses present include Veined Swamp Wallaby-grass, Australian Sweet Grass and Brown-back Wallaby-grass. These may be flanked by tall Tussock-grass. Herbs include Drumsticks, Swamp Daisy, Hairy Willow-herb, Rough Raspwort, Common Sneezeweed, Small Loosestrife, Buttercups, Poison Lobelia, Sprawling Bluebell, and Prickfoot. Aquatic species typical of inundated sites include Running Marsh-flower, Australian Lilaepsis, Floating Pond-weed, Common Nardoo, Water Plantain, Pacific Azolla, Common Spike-sedge, Swamp Lily, Upright Milfoil, Tiny Milfoil and Amphibious Milfoil. Rushes and sedges include: Hollow Rush, Toad Rush, Yellow Rush, Joint-leaf Rush. Rush Sedge may dominate wetter areas. Common weeds include Spear Thistle, Fog Grass, Onion Grass, Hairy Hawkbit, and Cats Ear. The most serious weed is Phalaris. Significant species include Stiff Groundsel (endangered in Victoria and Australia), Barren Cane Grass (vulnerable in Australia), Water Starwort (vulnerable in Victoria and Australia).

**Potential Threatening Processes:** agriculture, drainage and other hydrological alteration, grazing, weed invasion, fire breaks

**GeneralisedStatus:** E Endangered

**This Management Prescription is currently applicable to the following Surf Coast Roadside Sections:**

ROAD NAME	SECTION_	ORIGIN:	DISTANCE	SECTION	SLU:	GMU3:	LOCALITY:	DATE
	NO_AND_		FROM	LENGTH:				SURVEYED:
	SIDE:		ORIGIN:					
DANS	3-L	BLUESTONE SCHOOL	2.1	0.36	133	6.1.4	CONNEWARRE	18.10.96

**Calendar of potential roadside management activities:**

125L

**Spring**

Weed control Arrange spot spraying of noxious and woody weeds

**Summer**

Weed control Arrange spot spraying of noxious and woody weeds

**General**

Fencing Arrange fencing of any areas needing a physical barrier

Natural regeneration Allow time and protect areas from disturbance

Erosion/run-off control Ensure all drain and roadworks meet a high standard. Run training activities

Removal of Exotic Remove inappropriate trees and shrubs when labour is available

Vegetation

*Note 1: Revegetation work on roadsides. The Roadside Management Prescriptions adopt the maxim: 'Protect, Enhance and Restore'. Any revegetation works, whether planting or direct seeding should use indigenous species collected from local seed. Wherever possible seed should be collected from the revegetation site or close by from the same Ecological Vegetation Class.*

**Medium Conservation Value Roadsides bordering Plains Grassy Wetlands****125 Plains Grassy Wetland****Conservation Status: MEDIUM**

**EVC Notes:** Plains Grassy Wetlands are generally degraded in the Corangamite region due to the impacts of grazing, drainage and weed invasion.

**SalinityRegime:** Nonsaline

**EVCGroup:** 19 Wetlands

**MoistureRegime:** Dry - Flooded

**EVCType:** EVC

**ExposureRegime:** Open (plains & foothills)

**Structural Weeds:** Toowoomba Canary-grass, Yorkshire Fog, Hairy Hawkbit, Spear Thistle, Curled Dock, Water Couch

**Management Outline:**

**Comments:** Despite the medium quality, these sites are a priority for improved management due to their rarity.

<b>Management Techniques:</b>	<b>Use:</b>	<b>Comments:</b>
<b>Weed control</b>	YES	Any woody weeds should be removed from the roadside. Herbaceous weeds vary in their degree of impact. The focus should be on new weeds, quickly removing these before seeding. Pasture weeds fall into two categories 1/ Those that are well established and now are almost an inexorable part of the EVC but do not dominate (e.g. Onion Grass, Sweet Vernal Grass, Quaking Grass) and 2/ Those that pose a serious threat to the integrity or structure of the EVC (e.g. Phalaris, Cocksfoot, Tall Wheat Grass, Serrated Tussock)
<b>Fencing</b>	YES	To restrict stock, human or vehicle access
<b>Natural regeneration</b>	YES	Species in Wetland EVCs are adapted to fluctuations in inundation. Generally species are good colonisers in the absence of changes conditions (i.e. a natural regime)
<b>Erosion/run-off control</b>	YES	See note under 'Revegetation'
<b>Removal of Exotic Vegetation</b>	YES	Remove any garden escapees or native plants outside their natural range (e.g. Melaleucas).
<b>Burning</b>	NO	Naturally this EVC would have burnt infrequently.
<b>Slashing</b>	NO	If wetland is predominantly native grasses, sedges and herbs then slashing is not necessary or advisable. Slash areas of Phalaris and other introduced grasses if required to reduce biomass.
<b>Grazing</b>	NO	Stock trampling and nutrient issues. A short term alternative to slashing. Will not assist in improving the quality of the site.
<b>Cropping</b>	NO	
<b>Signage</b>	NO	
<b>Salinity Control</b>	NO	
<b>Rare plant specific requirements</b>	NO	No AROT/VROTs recorded for this EVC during roadside survey
<b>Graded or Ploughed Firebreaks</b>	NO	
<b>Blanket spraying</b>	NO	
<b>Seed Collection</b>	NO	Not generally required (natural regeneration)
<b>Revegetation</b>	?	The wetland itself generally will not require revegetation (relying on natural regeneration and colonization). The margins however may need to be revegetated to provide a suitable buffer strip to protect from weed invasion, nutrients and sediment

## EVC Description

**125** Plains Grassy Wetland occurs in very shallow depressions on the Volcanic Plain (VP). Some of the areas are meanders of prior streams, others are discrete depressions. The unifying feature is the heavy clay soil which holds moisture as distinct from the more free-draining soils of the adjacent terrestrial vegetation. Inundation is periodic over the winter months alternating with dry periods during the summer months. Few examples remain and much of the diversity has been lost. Species richness and dominance will also naturally vary between sites. This EVC is a (usually) treeless shallow seasonal wetland. River Red Gum may occur on the perimeter or, less frequently, be scattered throughout. Structure is generally a grassland, grading into sedgeland or herbland. Species present include a range of herbs and grasses which tolerate the seasonally inundated conditions. Aquatic species may be recorded during periods of inundation. Grasses present include Veined Swamp Wallaby-grass, Australian Sweet Grass and Brown-back Wallaby-grass. These may be flanked by tall Tussock-grass. Herbs include Drumsticks, Swamp Daisy, Hairy Willow-herb, Rough Raspwort, Common Sneezeweed, Small Loosestrife, Buttercups, Poison Lobelia, Sprawling Bluebell, and Prickfoot. Aquatic species typical of inundated sites include Running Marsh-flower, Australian Lilaepsis, Floating Pond-weed, Common Nardoo, Water Plantain, Pacific Azolla, Common Spike-sedge, Swamp Lily, Upright Milfoil, Tiny Milfoil and Amphibious Milfoil. Rushes and sedges include: Hollow Rush, Toad Rush, Yellow Rush, Joint-leaf Rush. Rush Sedge may dominate wetter areas. Common weeds include Spear Thistle, Fog Grass, Onion Grass, Hairy Hawkbit, and Cats Ear. The most serious weed is Phalaris. Significant species include Stiff Groundsel (endangered in Victoria and Australia), Barren Cane Grass (vulnerable in Australia), Water Starwort (vulnerable in Victoria and Australia).

**Potential Threatening Processes:** agriculture, drainage and other hydrological alteration, grazing, weed invasion, fire breaks

**GeneralisedStatus:** E Endangered

**This Management Prescription is currently applicable to the following Surf Coast Roadside Sections:**

ROAD NAME	SECTION_ NO_AND_SIDE:	ORIGIN:	DISTANCE FROM ORIGIN:	SECTION LENGTH:	SLU:	GMU3:	LOCALITY:	DATE SURVEYED:
BUCKLEY SOUTH	2-L	PRINCES HWY	1.3	0.34	133	6.1.4	BUCKLEY	30.8.96
BUCKLEY SOUTH	2-R	PRINCES HWY	1.3	0.34	133	6.1.4	BUCKLEY	30.8.96
DANS	3-R	BLUESTONE SCHOOL	2.1	0.36	133	6.1.4	CONNEWARRE	18.10.96

**Calendar of potential roadside management activities:**

**125M**

**Spring**

Weed control Arrange spot spraying of noxious and woody weeds

**Summer**

Weed control Arrange spot spraying of noxious and woody weeds

**General**

Fencing Arrange fencing of any areas needing a physical barrier

Natural regeneration Allow time and protect areas from disturbance

Erosion/run-off control Ensure all drain and roadworks meet a high standard. Run training activities

Removal of Exotic Vegetation Remove inappropriate trees and shrubs when labour is available

Vegetation

*Note 1: Revegetation work on roadsides. The Roadside Management Prescriptions adopt the maxim: 'Protect, Enhance and Restore'. Any revegetation works, whether planting or direct seeding should use indigenous species collected from local seed. Wherever possible seed should be collected from the revegetation site or close by from the same Ecological Vegetation Class.*

**Low Conservation roadsides containing Plains Grassland (usually Basaltic soils)****132 Plains Grassland****Conservation Status: LOW**

**EVC Notes:** Plains Grassland was once widespread but has now largely become alienated for agriculture. Roadsides contain important remnants. For management purposes this category includes both natural grasslands and grassy woodlands that are now devoid of trees

**SalinityRegime:** Nonsaline**EVCGroup:** 13 Grasslands**MoistureRegime:** Dry - Waterlogged**EVCType:** EVC**ExposureRegime:** Open (plains & foothills)**Structural Weeds:** Serrated Tussock, Chilean Needle-grass, Spear Thistle, Toowoomba Canary-grass

**Management Outline:** Management should aim to 1/ contain and/or control the weed threat inherent in these sites and 2/ alter existing management practices where these have contributed to the decline in quality. Adoption of a range of techniques is recommended that (over time) will 'tip the balance' in favour of native species. This may involve regular burning alongside targeted weed control (spot spraying of declared weeds) and limiting soil disturbance. Roadsides that contain a complete weed flora with no remnants are a liability to Council and community. An interim stage that can be considered to reduce their impact is to crop these 'No Conservation Value' areas. A summer growing crop such as Lucerne will successfully compete with weeds, reduce fire risk and stabilise the roadside until such time that revegetation is deemed practicable.

**Comments:** Grassland sites overrun with pasture grasses and herbaceous weeds.

<b>Management Techniques:</b>	<b>Use:</b>	<b>Comments:</b>
<b>Burning</b>	YES	Consider only as a means of encouraging natural regeneration. Not generally recommended as weed invasion is a likely result and will need carefully monitoring of effects. Autumn burning will remove fine fuel and lower fire risk and allow any Summer growing native grasses present to flower and seed.
<b>Slashing</b>	YES	Slash introduced grass areas prior to seeding by annual grasses and herbaceous weeds to reduce fine fuel loads. Avoid any areas of tree seedlings
<b>Weed control</b>	YES	Spot spray or remove any noxious weeds or inappropriate plants
<b>Grazing</b>	YES	Grazing can be considered on totally degraded or modified sites without native remnants as a mechanism to control grass growth (fire risk). Control of noxious weeds must be a condition of any grazing licence
<b>Natural regeneration</b>	YES	Encourage through burning and removal of threats (soil disturbance, grazing, slashing, weeds). Burning will allow regeneration of native grasses and also provide inter-tussock spaces for forbs.
<b>Erosion/run-off control</b>	YES	Road grading or management should attempt to disperse rather than concentrate water (correct road camber, run-off points, table and mitre drains). Active eroding areas should be stabilised and revegetated. Use local species able to accept the altered moisture availability in/near drains (e.g. wetter grasses and sedges)
<b>Seed Collection</b>	YES	Regulate to protect vegetation from over-collection
<b>Fencing</b>	NO	
<b>Signage</b>	NO	
<b>Salinity Control</b>	NO	Salinity is not usually a problem on these soils
<b>Rare plant specific requirements</b>	NO	
<b>Graded or Ploughed Firebreaks</b>	NO	
<b>Blanket spraying</b>	NO	

<b>Cropping</b>	?	Consider for roadsides with no conservation value as a means of reducing weed impacts on surrounding land (see management above).
<b>Revegetation</b>	?	Currently the wholesale revegetation of grasslands is not economically viable. Any funds can be much more effectively utilised in improving the management of existing remnants.
<b>Removal of Exotic Vegetation</b>	?	Remove planted trees and shrubs where these species are actively spreading.

**EVC Description**

**132** Plains Grassland occurred across large sections of the western volcanic plains as a mosaic with Plains Grassy Woodland. A vast majority has been cleared for agriculture and settlement and it now only occurs as small, isolated and disturbed remnants, mainly on road and rail reserves in the VP Bioregion. Soils are heavy grey cracking clays which are often waterlogged in winter. The combination of these soils with low rainfall severely restricts tree-root growth resulting in virtually treeless plains.

The ground flora is generally visually dominated by grasses but species diversity and composition can vary greatly, largely depending on past management practices in the area; particularly past fire and grazing regimes. The most common species include Kangaroo Grass, Lemon Beauty-heads, Pink Bindweed, Scaly Buttons, Blue Devil, Prickly Woodruff, Common Everlasting, Wallaby Grasses, Long-hair Plume-grass and Cut-leaf Goodenia.

Typical weeds are pasture grass weeds such as Briza spp, Fog Grass, Rye grasses, Squirrel-tail Fescue, Onion Grass, Plantains, various thistles, flat weeds and clovers.

**Potential Threatening Processes:** inappropriate grazing regime, ploughing and cropping, fragmentation, weed invasion, inadequate burning, road construction and maintenance, utility services,

**GeneralisedStatus:** E Endangered

**This Management Prescription is currently applicable to the following Surf Coast Roadside Sections:**

ROAD NAME	SECTION_ NO_AND_ SIDE:	ORIGIN:	DISTANCE FROM ORIGIN:	SECTION LENGTH:	SLU:	GMU3:	LOCALITY:	DATE SURVEYED:
<b>GNARWARRE</b>	4-L	BARRABOOL ROAD	8.1	0.24	119	6.1.3	GNARWARRE	23.8.96
<b>KELLYS LANE</b>	1-L	ARMYTAGE ROAD	0	3.02	117	6.1.3	OMBERSLEY	30.7.96
<b>KELLYS LANE</b>	1-R	ARMYTAGE ROAD	0	3.02	117	6.1.3	OMBERSLEY	30.7.96
<b>KELLYS LANE</b>	2-R	ARMYTAGE ROAD	3.0	0.46	117	6.1.3	OMBERSLEY	30.7.96
<b>KELLYS LANE</b>	3-L	ARMYTAGE ROAD	3.5	0.29	117	6.1.3	OMBERSLEY	30.7.96
<b>PEELS</b>	1-L	INVERLEIGH-WINCHE	0	0.092	119	6.1.3	WINCHELSEA	5.8.96
<b>RANGLES</b>	1-L	BLUESTONE SCHOOL	0	0.91	133	6.1.4	CONNEWARRE	18.10.96
<b>RANGLES</b>	1-R	BLUESTONE SCHOOL	0	0.91	133	6.1.4	CONNEWARRE	18.10.96
<b>THOMAS</b>	1-R	PEEL RD	0	1.47	119	6.1.3	WINCHELSEA	30.8.96
<b>WILLIAMS</b>	1-R		0	0.31	133	6.1.4	MOUNT DUNEE	15.11.96

**Calendar of potential roadside management activities:**



**Spring**

Slashing	Slashing program for designated areas (fuel reduction)
Weed control	Arrange spot spraying of noxious and woody weeds
Grazing	Arrange crash grazing to control pasture grass growth (fuel reduction)

**Summer**

Weed control	Arrange spot spraying of noxious and woody weeds
Seed Collection	Coordinate collection in consultation with DSE and the Ballarat Region Seed Bank

**Autumn**

Burning	Arrange burning with local CFA groups
Grazing	Arrange crash grazing to control pasture grass growth (fuel reduction)

**General**

Natural regeneration	Allow time and protect areas from disturbance
Erosion/run-off control	Ensure all drain and roadworks meet a high standard. Run training activities

*Note 1: Revegetation work on roadsides. The Roadside Management Prescriptions adopt the maxim: 'Protect, Enhance and Restore'. Any revegetation works, whether planting or direct seeding should use indigenous species collected from local seed. Wherever possible seed should be collected from the revegetation site or close by from the same Ecological Vegetation Class.*

**Medium Conservation roadsides containing Plains Grassland (usually Basaltic soils)****132 Plains Grassland****Conservation Status: MEDIUM**

**EVC Notes:** Plains Grassland was once widespread but has now largely become alienated for agriculture. Roadsides contain important remnants. For management purposes this category includes both natural grasslands and grassy woodlands that are now devoid of trees

**SalinityRegime:** Nonsaline**EVCGroup:** 13 Grasslands**MoistureRegime:** Dry - Waterlogged**EVCType:** EVC**ExposureRegime:** Open (plains & foothills)**Structural Weeds:** Serrated Tussock, Chilean Needle-grass, Spear Thistle, Toowoomba Canary-grass**Management Outline:** Some form of biomass reduction may be necessary to retain the vigour of the grassland and assist the gradual transformation into a high conservation value grassland roadside.**Comments:**

<b>Management Techniques:</b>	<b>Use:</b>	<b>Comments:</b>
<b>Burning</b>	YES	Autumn burning will remove fine fuel and lower fire risk and allow Summer growing native grasses to flower and seed. Reducing biomass in this manner will keep Themeda grasslands healthy.
<b>Weed control</b>	YES	Remove woody weeds
<b>Natural regeneration</b>	YES	Occurs naturally in absence of threats. Can be encouraged through the careful timing and combination of biomass reduction techniques and focused weed control (spot spraying of species that out compete native species)
<b>Revegetation</b>	YES	May be appropriate to create a buffer around any intact remnants. Generally not viable due to cost in broader areas.
<b>Erosion/run-off control</b>	YES	Road grading or management should attempt to disperse rather than concentrate water (correct road camber, run-off points, table and mitre drains). Active eroding areas should be stabilised and revegetated. Use local species able to accept the altered moisture availability in/near drains (e.g. wetter grasses and sedges)
<b>Removal of Exotic Vegetation</b>	YES	
<b>Seed Collection</b>	YES	Regulate to protect vegetation from over-collection
<b>Grazing</b>	NO	
<b>Cropping</b>	NO	
<b>Fencing</b>	NO	
<b>Signage</b>	NO	
<b>Salinity Control</b>	NO	Salinity is not usually a problem on these soils
<b>Rare plant specific requirements</b>	NO	
<b>Graded or Ploughed Firebreaks</b>	NO	
<b>Blanket spraying</b>	NO	
<b>Slashing</b>	?	Where burning is not suitable. Best done in autumn after native seed has set. Slashing is often carried out in late spring or early summer after the seed-set of pasture grass weeds. This considerably aids the spread of weeds. Where possible slash prior to seed set of the major problem species (e.g. Serrated Tussock). This is difficult given the number of roads that will require treatment in the timeframe. Vehicle hygiene is essential (see code of practice). Always work from medium conservation value roadsides to lower conservation roadsides.

## EVC Description

**132** Plains Grassland occurred across large sections of the western volcanic plains as a mosaic with Plains Grassy Woodland. A vast majority has been cleared for agriculture and settlement and it now only occurs as small, isolated and disturbed remnants, mainly on road and rail reserves in the VP Bioregion. Soils are heavy grey cracking clays which are often waterlogged in winter. The combination of these soils with low rainfall severely restricts tree-root growth resulting in virtually treeless plains.

The ground flora is generally visually dominated by grasses but species diversity and composition can vary greatly, largely depending on past management practices in the area; particularly past fire and grazing regimes. The most common species include Kangaroo Grass, Lemon Beauty-heads, Pink Bindweed, Scaly Buttons, Blue Devil, Prickly Woodruff, Common Everlasting, Wallaby Grasses, Long-hair Plume-grass and Cut-leaf Goodenia.

Typical weeds are pasture grass weeds such as Briza spp, Fog Grass, Rye grasses, Squirrel-tail Fescue, Onion Grass, Plantains, various thistles, flat weeds and clovers.

**Potential Threatening Processes:** inappropriate grazing regime, ploughing and cropping, fragmentation, weed invasion, inadequate burning, road construction and maintenance, utility services,

**GeneralisedStatus:** E Endangered

## This Management Prescription is currently applicable to the following Surf Coast Roadside Sections:

ROAD NAME	SECTION_ ORIGIN: NO_AND_ SIDE:	DISTANCE FROM ORIGIN:	SECTION SLU: LENGTH:	GMU3:	LOCALITY:	DATE SURVEYED:
KELLYS LANE	2-L ARMYTAGE ROAD	3.0	0.46	117 6.1.3	OMBERSLEY	30.7.96
KELLYS LANE	3-R ARMYTAGE ROAD	3.0	0.46	117 6.1.3	OMBERSLEY	30.7.96
PEELS	1-R WINCHELSEA-INVER	0	0.092	119 6.1.3	INVERLEIGH	5.8.96
THOMAS	1-L PEELS ROAD	0	1.47	174 6.2.4	WINCHELSEA	30.8.96
WILLIAMS	1-L DICKENS ROAD	0	0.31	115 6.1.3	MOUNT DUNEE	15.11.96

## Calendar of potential roadside management activities:

132M

## Winter

Revegetation Conduct a revegetation program on eroding or priority sites with local Landcare support (Autumn-Spring)

## Spring

Weed control Arrange spot spraying of noxious and woody weeds

Revegetation Conduct a revegetation program on eroding or priority sites with local Landcare support (Autumn-Spring)

## Summer

Weed control Arrange spot spraying of noxious and woody weeds

Seed Collection Coordinate collection in consultation with DSE and the Ballarat Region Seed Bank

## Autumn

Burning Arrange burning with local CFA groups

Revegetation Conduct a revegetation program on eroding or priority sites with local Landcare support (Autumn-Spring)

## General

Natural regeneration Allow time and protect areas from disturbance

Erosion/run-off control Ensure all drain and roadworks meet a high standard. Run training activities

Removal of Exotic Vegetation Remove inappropriate trees and shrubs when labour is available

*Note 1: Revegetation work on roadsides. The Roadside Management Prescriptions adopt the maxim: 'Protect, Enhance and Restore'. Any revegetation works, whether planting or direct seeding should use indigenous species collected from local seed. Wherever possible seed should be collected from the revegetation site or close by from the same Ecological Vegetation Class.*

**High Conservation roadsides containing Plains Grassland (usually Basaltic soils)****132 Plains Grassland****Conservation Status: HIGH**

**EVC Notes:** Native grassland usually dominated by Kangaroo Grass (*Themeda triandra*) with Wallaby or Spear grasses in drier sections. For management purposes this category includes both natural grasslands and grassy woodlands that are now devoid of trees

**SalinityRegime:** Nonsaline**EVCGroup:** 13 Grasslands**MoistureRegime:** Dry - Waterlogged**EVCType:** EVC**ExposureRegime:** Open (plains & foothills)**Structural Weeds:** Serrated Tussock, Chilean Needle-grass, Spear Thistle, Toowoomba Canary-grass

**Management Outline:** The aim in managing these roadside is to maintain current conservation status. Management should focus on limiting soil disturbance as this leads to weed invasion. Monitoring of biomass levels (e.g. inter-tussock spaces) and diversity of species will give some guide to the regularity Biomass reduction (burning, slashing) is required. More fertile sites will require treatment every 3-5 years. Less fertile sites may require little if any active management. Annual burning of some more fertile sites may be advantageous in the control of some pasture weeds whilst benefiting native species.

**Comments:** The management prescription should also be applied to Plains Grassy woodland roadsides where the tree/shrub layers have been removed (e.g. sections under power lines). Plains Grasslands are one of the most endangered and depleted ecosystems in Australia. Remnants survive primarily on roadsides. Correct management is vital to protect these ecosystems from further decline.

<b>Management Techniques:</b>	<b>Use:</b>	<b>Comments:</b>
<b>Burning</b>	YES	Autumn burning will remove fine fuel and lower fire risk and allow Summer growing native grasses to flower and seed. Reducing biomass in this manner will keep Themeda grasslands healthy.
<b>Weed control</b>	YES	Spot spray or remove any noxious weeds or inappropriate plants
<b>Fencing</b>	YES	Consider fencing any fragile remnants where it becomes apparent that a lack of a physical barrier to vehicles/grazing threatens the future of the community or rare plant.
<b>Signage</b>	YES	Signage of all high conservation roadsides is recommended to raise awareness and protect values from inadvertent damage
<b>Natural regeneration</b>	YES	Encourage through burning and removal of threats (grazing, slashing, weeds). Burning will allow regeneration of native grasses and also provide inter-tussock spaces for forbs.
<b>Erosion/run-off control</b>	YES	Road grading or management should attempt to disperse rather than concentrate water (correct road camber, run-off points, table and mitre drains). Active eroding areas should be stabilised and revegetated. Use local species able to accept the altered moisture availability in/near drains (e.g. wetter grasses and sedges)
<b>Removal of Exotic Vegetation</b>	YES	
<b>Rare plant specific requirements</b>	YES	Consult the species list for the roadside. Rare, threatened or endangered plants are noted with a code. Seek advice regarding management required to protect and enhance the species (DSE). Two rare species known: Curved Rice-flower and Spiny Rice-flower
<b>Seed Collection</b>	YES	Regulate to protect vegetation from over-collection
<b>Grazing</b>	NO	Constant grazing with high stocking rates is incompatible with the conservation of native grasslands.
<b>Cropping</b>	NO	
<b>Revegetation</b>	NO	

<b>Salinity Control</b>	NO	Planting and stabilisation of (any) saline sites could be tackled in conjunction with a local Landcare group
<b>Graded or Ploughed Firebreaks</b>	NO	
<b>Blanket spraying</b>	NO	
<b>Slashing</b>	?	There is no need to regularly slash native grass for fire prevention as it remains green in Summer and has less bulk than introduced grasses. Burning is the preferred means of biomass reduction. Slash dense stands of Themeda every few years where burning is not a viable option

### EVC Description

**132** Plains Grassland occurred across large sections of the western volcanic plains as a mosaic with Plains Grassy Woodland. A vast majority has been cleared for agriculture and settlement and it now only occurs as small, isolated and disturbed remnants, mainly on road and rail reserves in the VP Bioregion. Soils are heavy grey cracking clays which are often waterlogged in winter. The combination of these soils with low rainfall severely restricts tree-root growth resulting in virtually treeless plains. The ground flora is generally visually dominated by grasses but species diversity and composition can vary greatly, largely depending on past management practices in the area; particularly past fire and grazing regimes. The most common species include Kangaroo Grass, Lemon Beauty-heads, Pink Bindweed, Scaly Buttons, Blue Devil, Prickly Woodruff, Common Everlasting, Wallaby Grasses, Long-hair Plume-grass and Cut-leaf Goodenia. Typical weeds are pasture grass weeds such as Briza spp, Fog Grass, Rye grasses, Squirrel-tail Fescue, Onion Grass, Plantains, various thistles, flat weeds and clovers.

**Potential Threatening Processes:** inappropriate grazing regime, ploughing and cropping, fragmentation, weed invasion, inadequate burning, road construction and maintenance, utility services,

**GeneralisedStatus:** E Endangered

### This Management Prescription is currently applicable to the following Surf Coast Roadside Sections:

ROAD NAME	SECTION_ NO_AND_SIDE:	ORIGIN:	DISTANCE FROM ORIGIN:	SECTION LENGTH:	SLU:	GMU3:	LOCALITY:	DATE SURVEYED:
<b>GNARWARRE</b>	4-R	BARRABOOL ROAD	8.1	0.24	119	6.1.3	GNARWARRE	23.8.96

### The following Surf Coast Roadside Sections contain listed plant species in this EVC:

<i>Pimelea spinescens</i>	<b>Spiny Rice-flower</b>	<b>AROTS:</b>	<b>VROTS: e</b>
<b>RD_NAME:</b>		<b>SECTION_NO_AND_SIDE:</b>	
GNARWARRE		4-R	

### Calendar of potential roadside management activities:

132H

**Spring**

Weed control	Arrange spot spraying of noxious and woody weeds
Rare plant specific requirements	Monitor populations of rare species each Spring and adjust management where necessary (in consultation with DSE)

**Summer**

Weed control	Arrange spot spraying of noxious and woody weeds
Seed Collection	Coordinate collection in consultation with DSE and the Ballarat Region Seed Bank

**Autumn**

Burning	Arrange burning with local CFA groups
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**General**

Fencing	Arrange fencing of any areas needing a physical barrier
Signage	Erect SRV and interpretation signage on HCV roadsides
Natural regeneration	Allow time and protect areas from disturbance
Erosion/run-off control	Ensure all drain and roadworks meet a high standard. Run training activities
Removal of Exotic Vegetation	Remove inappropriate trees and shrubs when labour is available

*Note 1: Revegetation work on roadsides. The Roadside Management Prescriptions adopt the maxim: 'Protect, Enhance and Restore'. Any revegetation works, whether planting or direct seeding should use indigenous species collected from local seed. Wherever possible seed should be collected from the revegetation site or close by from the same Ecological Vegetation Class.*

**Low Conservation roadsides along the coast containing Coastal Headland scrub****161 Coastal Headland Scrub****Conservation Status: LOW****EVC Notes:** Salt-pruned coastal scrub susceptible to soil disturbance. A number of weeds are well-established.**SalinityRegime:** Nonsaline - Brackish**EVCGroup:** 1 Coastal Scrubs Grasslands & Woodlands**MoistureRegime:** Dry - Moist**EVCType:** EVC**ExposureRegime:** Maritime exposure (mild)**Structural Weeds:** Ragwort, Boneseed**Management Outline:** Low Conservation sites require a revegetation program where they are unstable (i.e. a good cover of vegetation is not present). Restoration of indigenous vegetation along low-quality sections of this high-profile road should be attempted.**Comments:** Sites dominated by introduced salt-tolerant grasses and coastal plants

<b>Management Techniques:</b>	<b>Use:</b>	<b>Comments:</b>
<b>Weed control</b>	YES	Spot spray, cut and paint or remove serious weeds or any emerging weeds (i.e. yet to establish)
<b>Fencing</b>	YES	Fence any areas subject to soil disturbance to allow revegetation/natural regeneration. Better patches will benefit from fencing
<b>Natural regeneration</b>	YES	Should be encouraged, particularly of shrub species (see Weed Control, above). Coastal species will regenerate well once disturbance is removed (e.g. trampling, tracks)
<b>Revegetation</b>	YES	Revegetate any disturbed or eroding areas to protect the soil. Should be undertaken in stages by commencing at better sites
<b>Erosion/run-off control</b>	YES	Roadside erosion is an issue in this EVC. Coastal erosion is exacerbated by removal of remnant vegetation and traffic (paths). Fence areas to allow rehabilitation. Concentrate foot traffic to well designed and stable paths
<b>Removal of Exotic Vegetation</b>	YES	Remove woody weeds and garden escapes to prevent further degradation
<b>Seed Collection</b>	YES	Regulate to protect vegetation from over-collection
<b>Burning</b>	NO	Consider only as a means of encouraging natural regeneration. Not generally recommended as erosion and woody weed invasion is a likely result and will need carefully management
<b>Slashing</b>	NO	May be necessary to reduce fuel levels. Avoid regenerating shrubs.
<b>Grazing</b>	NO	
<b>Cropping</b>	NO	
<b>Signage</b>	NO	
<b>Salinity Control</b>	NO	
<b>Rare plant specific requirements</b>	NO	
<b>Graded or Ploughed Firebreaks</b>	NO	
<b>Blanket spraying</b>	NO	



**This Management Prescription is currently applicable to the following Surf Coast Roadside Sections:**

ROAD NAME	SECTION_ NO_AND_SIDE:	ORIGIN:	DISTANCE FROM ORIGIN:	SECTION LENGTH:	SLU:	GMU3:	LOCALITY:	DATE SURVEYED:
<b>BELLS BEACH</b>	1-L	BONES ROAD	0	0.45	158	6.2.2	BELLBRAE	28.10.96
<b>BELLS BEACH</b>	1-R	BONES ROAD	0	0.45	158	6.2.2	BELLBRAE	28.10.96
<b>BELLS BEACH</b>	2-R	BONES ROAD	0.5	0.34	158	6.2.2	BELLBRAE	28.10.96
<b>BELLS BEACH</b>	3-L	BONES ROAD	1.8	0.22	158	6.2.2	BELLBRAE	28.10.96
<b>BELLS BEACH</b>	3-R	BONES ROAD	1.8	0.22	158	6.2.2	BELLBRAE	28.10.96

**Calendar of potential roadside management activities:****161L****Winter**

Revegetation Conduct a revegetation program on eroding or priority sites with local Landcare support (Autumn-Spring)

**Spring**

Weed control Arrange spot spraying of noxious and woody weeds

Revegetation Conduct a revegetation program on eroding or priority sites with local Landcare support (Autumn-Spring)

**Summer**

Weed control Arrange spot spraying of noxious and woody weeds

Seed Collection Coordinate collection in consultation with DSE and the Ballarat Region Seed Bank

**Autumn**

Revegetation Conduct a revegetation program on eroding or priority sites with local Landcare support (Autumn-Spring)

**General**

Fencing Arrange fencing of any areas needing a physical barrier

Natural regeneration Allow time and protect areas from disturbance

Erosion/run-off control Ensure all drain and roadworks meet a high standard. Run training activities

Removal of Exotic Vegetation Remove inappropriate trees and shrubs when labour is available

*Note 1: Revegetation work on roadsides. The Roadside Management Prescriptions adopt the maxim: 'Protect, Enhance and Restore'. Any revegetation works, whether planting or direct seeding should use indigenous species collected from local seed. Wherever possible seed should be collected from the revegetation site or close by from the same Ecological Vegetation Class.*

**High Conservation roadsides along the coast containing Coastal Headland Scrub****161 Coastal Headland Scrub****Conservation Status: HIGH**

**EVC Notes:** Salt-pruned coastal scrub susceptible to soil disturbance. A number of weeds are well-established although sites contain good remnants. This EVC is virtually treeless and is dominated by shrubby tea-trees, banksias and wattles. In Surf Coast Shire, it is found on roadsides on Bells Beach Road only (one of the highest profile roads in the Shire). No VROT plants are known along this road.

**SalinityRegime:** Nonsaline - Brackish

**EVCGroup:** 1 Coastal Scrubs Grasslands & Woodlands

**MoistureRegime:** Dry - Moist

**EVCType:** EVC

**ExposureRegime:** Maritime exposure (mild)

**Structural Weeds:** Ragwort, Boneseed

**Management Outline:** Coastal plant communities are extremely vulnerable to soil disturbance. Removal of vegetation or damage caused by vehicle and human tracks may quickly result in the destabilisation of dunes. Management of this EVC involves the limiting of disturbances through fencing, designated paths, revegetation of disturbed areas. Coastal plants are extremely hardy and excellent at binding the soil. Natural regeneration is highly likely in areas where disturbance is removed. This EVC is self-managing in the absence of threats. Erosion and vehicular invasion need to be prevented. Restoration of indigenous vegetation along low-quality sections of this high-profile road should be attempted.

**Comments:** There has been much attention to the condition of the coastline in Surf Coast Shire over recent years. As a consequence the general condition has improved. Fencing, boardwalks and designated paths, revegetation and the control of particular weeds have been key factors leading to the improvement in condition.

<b>Management Techniques:</b>	<b>Use:</b>	<b>Comments:</b>
<b>Weed control</b>	YES	Spot spray, cut and paint or remove serious weeds or any emerging weeds (i.e. yet to establish)
<b>Fencing</b>	YES	Fence any areas subject to soil disturbance to allow revegetation/natural regeneration. May be required to prevent vehicular destruction of vegetation.
<b>Signage</b>	YES	Raise awareness of coastal vegetation through interpretive signage identifying values, key species, fauna associations and threats. Promote a respect for the coastal vegetation. May be advantageous where vehicles often park
<b>Natural regeneration</b>	YES	Coastal species will regenerate well once disturbance is removed (e.g. trampling, tracks)
<b>Revegetation</b>	YES	Revegetate any disturbed or eroding areas to maintain floristic value, aesthetic values and protect the soil.
<b>Erosion/run-off control</b>	YES	Coastal erosion is exacerbated by removal of remnant vegetation and traffic (paths). Fence areas to allow rehabilitation. Concentrate foot traffic to well designed and stable paths
<b>Removal of Exotic Vegetation</b>	YES	
<b>Rare plant specific requirements</b>	YES	Consult the species list for the roadside. Rare, threatened or endangered plants are noted with a code. Seek advice regarding management required to protect and enhance the species (DSE).
<b>Seed Collection</b>	YES	Regulate to protect vegetation from over-collection
<b>Burning</b>	NO	This EVC would have naturally burnt infrequently.
<b>Slashing</b>	NO	Not applicable or required
<b>Grazing</b>	NO	
<b>Cropping</b>	NO	

Salinity Control	NO
Graded or Ploughed Firebreaks	NO
Blanket spraying	NO

### This Management Prescription is currently applicable to the following Surf Coast Roadside Sections:

ROAD NAME	SECTION_ NO_ AND_ SIDE:	ORIGIN:	DISTANCE FROM ORIGIN:	SECTION LENGTH:	SLU:	GMU3:	LOCALITY:	DATE SURVEYED:
BELLS BEACH	2-L	BONES ROAD	0.5	1.34	89	6.2.2	BELLBRAE	28.10.96

### Calendar of potential roadside management activities:

161H

#### Winter

Revegetation Conduct a revegetation program on eroding or priority sites with local Landcare support (Autumn-Spring)

#### Spring

Weed control Arrange spot spraying of noxious and woody weeds

Revegetation Conduct a revegetation program on eroding or priority sites with local Landcare support (Autumn-Spring)

Rare plant specific requirements Monitor populations of rare species each Spring and adjust management where necessary (in consultation with DSE)

#### Summer

Weed control Arrange spot spraying of noxious and woody weeds

Seed Collection Coordinate collection in consultation with DSE and the Ballarat Region Seed Bank

#### Autumn

Revegetation Conduct a revegetation program on eroding or priority sites with local Landcare support (Autumn-Spring)

#### General

Fencing Arrange fencing of any areas needing a physical barrier

Signage Erect SRV and interpretation signage on HCV roadsides

Natural regeneration Allow time and protect areas from disturbance

Erosion/run-off control Ensure all drain and roadworks meet a high standard. Run training activities

Removal of Exotic Vegetation Remove inappropriate trees and shrubs when labour is available

*Note 1: Revegetation work on roadsides. The Roadside Management Prescriptions adopt the maxim: 'Protect, Enhance and Restore'. Any revegetation works, whether planting or direct seeding should use indigenous species collected from local seed. Wherever possible seed should be collected from the revegetation site or close by from the same Ecological Vegetation Class.*

**Low Conservation value Grassy Woodland roadsides****175 Grassy Woodland****Conservation Status: LOW**

**EVC Notes:** Formerly a range of Grassy Woodlands dominated variously by Manna Gum, Swamp gum, Silver Banksia and She-Oaks on a mix of non-basaltic soil types. Often reduced to scattered trees, woody weeds and pasture grass.

**SalinityRegime:** Nonsaline

**EVCGroup:** 5 Lower Slopes or Hills Woodlands

**MoistureRegime:** Dry - Moist

**EVCType:** EVC

**ExposureRegime:** Open (plains & foothills)

**Structural Weeds:** Gorse, Serrated Tussock, Ragwort, Cocksfoot, Toowoomba Canary-grass, Radiata Pine, Golden Wreath Wattle, Sweet Pittosporum

**Management Outline:** Focus on high threat weeds

**Comments:** Much of the range of this EVC has been lost. Sites are generally degraded by disturbance and weed invasion.

Management Techniques:	Use:	Comments:
<b>Slashing</b>	YES	Slash areas of introduced grass or woody weed seedlings only, to restrict fire risk if required. Care should be taken not to spread seed to other sections of the road with higher conservation values. Slashing is best carried out prior to seeding of annual grasses (by December)
<b>Weed control</b>	YES	Control of Gorse and other woody weeds is recommended as an alternative management practice to slashing or burning to reduce fire risk
<b>Revegetation</b>	YES	Degraded roadsides with high amenity should be considered for revegetation with local trees, shrubs or grasses to improve aesthetic values and reduce long term management costs and weed problems
<b>Erosion/run-off control</b>	YES	Road grading or management should attempt to disperse rather than concentrate water (correct road camber, run-off points, table and mitre drains). Active eroding areas should be stabilised and revegetated
<b>Removal of Exotic Vegetation</b>	YES	Remove any garden escapees or native plants outside their natural range (e.g. Coast tea-tree may invade areas following disturbance)
<b>Seed Collection</b>	YES	Regulate to protect vegetation from over-collection
<b>Signage</b>	NO	
<b>Salinity Control</b>	NO	
<b>Rare plant specific requirements</b>	NO	
<b>Graded or Ploughed Firebreaks</b>	NO	
<b>Blanket spraying</b>	NO	
<b>Burning</b>	?	Burning can be considered to encourage natural regeneration provided follow up weed spraying is conducted
<b>Grazing</b>	?	Grazing can be considered on totally degraded or modified sites without native remnants as a mechanism to control grass growth (fire risk). Control of noxious weeds must be a condition of any grazing licence
<b>Cropping</b>	?	Should be considered for roadsides completely dominated by Phalaris or woody weeds (completely devoid of remnants) as a means of reducing management costs or problems. Licence to adjoining owner
<b>Fencing</b>	?	To allow grazing

<b>Natural regeneration</b>	?	Scattered trees and or shrubs may be present on the roadside. Slash around seedlings. Leave a zone under tree canopy (drip zone) to encourage regeneration. Consider spraying woody weeds and grasses around trees to allow regeneration
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**EVC Description**

**175** Pre-European settlement Grassy Woodland occurred across large areas, on a variety of geologies and in a range of environments. All Grassy Woodlands, not considered part of Plains Grassy Woodland (EVC55) are placed in this group. It is a very broad EVC which encompasses a number of floristic communities. Further sampling and analyses are required to refine these groupings. In general, Grassy Woodlands grow in areas with moderate to low rainfall and relatively fertile soils in the CVU/VP/OP. The largest area of Grassy Woodland is on the eastern section of the Otway Plain (including the Bellarine Peninsula). This is a large area of gently undulating plains extending from Portarlington to Colac. Geology is Tertiary sands (The same land form and geology continues further west but with increased rainfall it supports forested communities). Altitude is generally below 250m and the average annual rainfall varies from a low of 550mm p. a. near Torquay to 700mm at Colac. In the drier eastern sections, the overstorey is dominated by Drooping She-oak with Manna Gum and Black Wattle. The shrub layer is sparse and includes scattered Golden Wattle and Sweet Bursaria. The ground layer is likely to have been dominated by Wallaby-grasses and Spear Grasses. As rainfall increases to the west, Drooping She-oak and shrubs disappear, Manna Gum and Blackwood become dominant in the overstorey and Kangaroo Grass dominates the ground layer.

**Potential Threatening Processes:** grazing, weed invasion, habitat loss, fragmentation, clearing for agriculture, minor forest produce, mining

**GeneralisedStatus:** E Endangered

**This Management Prescription is currently applicable to the following Surf Coast Roadside Sections:**

ROAD NAME	SECTION_ NO_AND_SIDE:	ORIGIN:	DISTANCE FROM ORIGIN:	SECTION LENGTH:	SLU:	GMU3:	LOCALITY:	DATE SURVEYED:
ANDERSONS	1-L	PRINCES HWY	0	4.941	70	3.2.2	BARRABOOL	30.08.96
ANDERSONS	1-R	PRINCES HWY	0	4.941	70	3.2.2	BARRABOOL	30.08.96
BARRABOOL	3-L	MERRAWARP ROAD	12	2.008	190	6.2.4	BUCKLEY	08.08.96
BARRABOOL	3-R	MERRAWARP ROAD	12	2.008	70	3.2.2	BUCKLEY	08.08.96
BARRABOOL	4-L	MERRAWARP ROAD	14	0.35	190	6.2.4	BUCKLEY	08.08.96
BLACKGATE	3-L	BREAMLEA ROAD	5.7	0.96	202	6.2.5	TORQUAY	11.10.96
BLACKGATE	4-L	BREAMLEA ROAD	6.7	0.92	171	6.2.4	TORQUAY	11.10.96
BLACKGATE	4-R	BREAMLEA ROAD	6.7	0.92	202	6.2.5	TORQUAY	11.10.96
BLACKGATE	6-L	BREAMLEA ROAD	9.3	1.03	202	6.2.5	BELLBRAE	11.10.96
BLACKGATE	6-R	BREAMLEA ROAD	9.3	1.03	190	6.2.4	BELLBRAE	11.10.96
BONES	3-R	ADDISCOTT ROAD	1.9	0.845	79	6.2.4	JAN JUC	28.10.96
BRICKMAKERS	1-L	CAPE OTWAY ROAD	0	2.39	73	3.2.2	BAMBRA	04.12.96
BRICKMAKERS	1-R	CAPE OTWAY ROAD	0	2.39	171	6.2.4	BAMBRA	04.12.96
BRUSHFIELDS	1-L	HENDY MAIN ROAD	0	0.84	171	6.2.4	BELLBRAE	23.09.96
BRUSHFIELDS	1-R	HENDY MAIN ROAD	0	0.84	79	6.2.4	BELLBRAE	23.09.96
BUCKLEY NORTH	2-L	PRINCES HWY	2.4	1	190	6.2.4	BUCKLEY	23.07.96
BUCKLEY NORTH	2-R	PRINCES HWY	2.4	1	190	6.2.4	BUCKLEY	30.8.96
CAPE OTWAY	1-L	PRINCESS HWY	0	3.14	133	6.1.4	MORIAC	04.12.96
CAPE OTWAY	1-R	PRINCESS HWY	0	3.14	133	6.1.4	WAURN PONDS	04.12.96
CAPE OTWAY	8-R	PRINCESS HWY	11	0.27	171	6.2.4	LAYARD	04.12.96
CENTRE	4-L	WORMBETE STATION	1.4	0.11	73	3.2.2	WENSLEY DALE	17.12.96

<b>CENTRE</b>	4-R	WORMBETE STATION	1.4	0.11	73	3.2.2	WENSLEY DALE	17.12.96
<b>CENTRE</b>	7-L	WORMBETE STATION	1.9	0.9	79	6.2.4	WENSLEY DALE	17.12.96
<b>CENTRE</b>	7-R	WORMBETE STATION	1.9	0.9	73	3.2.2	WENSLEY DALE	17.12.96
<b>CENTRE</b>	9-L	WORMBETE STATION	3	0.479	73	3.2.2	WENSLEY DALE	17.12.96
<b>CENTRE</b>	9-R	WORMBETE STATION	3	0.479	73	3.2.2	WENSLEY DALE	17.12.96
<b>COALMINE</b>	1-L	WINCHELSEA-DEANS	0	0.53	73	3.2.2	WINCHELSEA S	04.12.96
<b>COALMINE</b>	1-R	WINCHELSEA-DEANS	0	0.53	73	3.2.2	WINCHELSEA S	04.12.96
<b>CONNIES</b>	1-L	CAPE OTWAY ROAD	0	0.52	133	6.1.4	MODEWARRE	05.09.96
<b>CONNIES</b>	1-R	CAPE OTWAY ROAD	0	0.52	133	6.1.4	MODEWARRE	05.09.96
<b>CRAFTERS</b>	1-L	GHERANG ROAD	0	0.87	171	6.2.4	GHERANG	28.11.96
<b>CRAFTERS</b>	2-L	GHERANG ROAD	0.9	0.065	171	6.2.4	GHERANG	28.11.96
<b>DEVON</b>	1-L	PRINCES HWY	0	4.75	70	3.2.2	BARRABOOL	30.08.96
<b>DEVON</b>	1-R	PRINCES HWY	0	4.75	70	3.2.2	BARRABOOL	30.08.96
<b>DICKINS</b>	11-L	SURFCOAST HWY	11	0.45	133	6.1.4	FRESHWATER	6.12.96
<b>DICKINS</b>	11-R	SURFCOAST HWY	11	0.45	133	6.1.4	FRESHWATER	6.12.96
<b>DICKINS</b>	1-L	SURFCOAST HWY	0	0.85	79	6.2.4	MOUNT DUNEE	6.12.96
<b>DICKINS</b>	2-L	SURFCOAST HWY	0.9	0.62	79	6.2.4	MOUNT DUNEE	6.12.96
<b>DICKINS</b>	3-L	SURFCOAST HWY	1.5	0.56	133	6.1.4	MOUNT DUNEE	6.12.96
<b>DICKINS</b>	3-R	SURFCOAST HWY	1.5	0.56	133	6.1.4	MOUNT DUNEE	6.12.96
<b>DICKINS</b>	5-L	SURFCOAST HWY	2.3	2.22	133	6.1.4	FRESHWATER	6.12.96
<b>DICKINS</b>	5-R	SURFCOAST HWY	2.3	2.22	133	6.1.4	FRESHWATER	6.12.96
<b>DREWRY</b>	1-L	CAPE OTWAY ROAD	0	1	70	3.2.2	MORIAC	13.09.96
<b>DREWRY</b>	1-R	CAPE OTWAY ROAD	0	1	171	6.2.4	MORIAC	13.09.96
<b>DREWRY</b>	3-L	CAPE OTWAY ROAD	1.4	0.2	171	6.2.4	MORIAC	13.09.96
<b>DREWRY</b>	3-R	CAPE OTWAY ROAD	1.4	0.2	70	3.2.2	MORIAC	13.09.96
<b>DWYERS</b>	1-L	BARRABOOL ROAD	0	1.18	70	3.2.2	GNARWARRE	17.08.96
<b>DWYERS</b>	1-R	BARRABOOL ROAD	0	1.18	70	3.2.2	GNARWARRE	17.08.96
<b>ERVINS</b>	1-L	PRINCES HWY	0	3.043	70	3.2.2	MORIAC	13.09.96
<b>ERVINS</b>	1-R	PRINCES HWY	0	3.043	70	3.2.2	MORIAC	13.09.96
<b>FOREST</b>	6-R	ANGELSEA ROAD	13	0.64	79	6.2.4	MODEWARRE	2.9.96
<b>FOREST</b>	7-L	ANGELSEA ROAD	13	1.018	171	6.2.4	MODEWARRE	2.9.96
<b>FOREST</b>	7-R	GREAT OCEAN ROAD	13	1.018	171	6.2.4	MODEWARRE	2.9.96
<b>GEORGES EAST</b>	3-L	MERRAWARP ROAD	1.0	0.36	70	3.2.2	BARRABOOL	17.08.96
<b>GEORGES EAST</b>	3-R	MERRAWARP ROAD	1.0	0.36	70	3.2.2	BARRABOOL	17.08.96
<b>GEORGES EAST</b>	4-R	MERRAWARP ROAD	1.4	0.1	70	3.2.2	BARRABOOL	17.08.96
<b>GHAZEIPORE</b>	3-L	MT DUNEED ROAD	2.2	1.56	171	6.2.4	FRESHWATER	15.11.96
<b>GHAZEIPORE</b>	3-R	MT DUNEED ROAD	2.2	1.56	79	6.2.4	FRESHWATER	15.11.96
<b>GHAZEIPORE</b>	6-R	MT DUNEED ROAD	5.9	0.63	89	6.2.2	BELLBRAE	15.11.96
<b>GHAZEIPORE</b>	8-L	MT DUNEED ROAD	7.3	0.14	89	6.2.2	BELLBRAE	15.11.96
<b>GHAZEIPORE</b>	8-R	MT DUNEED ROAD	7.3	0.14	171	6.2.4	BELLBRAE	15.11.96

<b>GHAZEETPORE</b>	9-L	MT DUNEEED ROAD	7.5	0.53	171	6.2.4	BELLBRAE	15.11.96
<b>GHAZEETPORE</b>	9-R	MT DUNEEED ROAD	7.5	0.53	79	6.2.4	BELLBRAE	15.11.96
<b>GNARWARRE</b>	1-L	BARRABOOL ROAD	0	0.29	190	6.2.4	GNARWARRE	23.8.96
<b>GNARWARRE</b>	1-R	BARRABOOL ROAD	0	0.29	119	6.1.3	GNARWARRE	23.8.96
<b>GRASSDALE</b>	1-L	HENDY MAIN ROAD	0	0.09	190	6.2.4	PARAPARAP	13.9.96
<b>GRASSDALE</b>	2-L	HENDY MAIN ROAD	0.09	0.12	156	6.1.5	PARAPARAP	13.9.96
<b>GRASSDALE</b>	2-R	HENDY MAIN ROAD	0.09	0.12	171	6.2.4	PARAPARAP	13.9.96
<b>GRASSDALE</b>	3-L	HENDY MAIN ROAD	0.2	1.622	190	6.2.4	PARAPARAP	13.9.96
<b>GROSSMANS</b>	1-L	SURFCOAST HWY	0	0.66	79	6.2.4	TORQUAY	18.12.96
<b>HAINES</b>	1-L	BARRABOOL RD	0	3.32	70	3.2.2	BARRABOOL	17.8.96
<b>HAINES</b>	1-R	BARRABOOL ROAD	0	3.32	70	3.2.2	BARRABOOL	17.8.96
<b>HEATHS</b>	1-L	BARRABOOL ROAD	0	1.66	70	3.2.2	GNARWARRE	17.8.96
<b>HEATHS</b>	1-R	BARRABOOL ROAD	0	1.66	70	3.2.2	GNARWARRE	17.8.96
<b>HENDY MAIN</b>	1-L	BARRABOOL ROAD	0	4.6	171	6.2.4	BARRABOOL	18.8.96
<b>HENDY MAIN</b>	1-R	BARRABOOL ROAD	0	4.6	171	6.2.4	BARRABOOL	18.8.96
<b>HENDY MAIN</b>	2-L	BARRABOOL ROAD	4.6	6.16	171	6.2.4	MORIAC	18.8.96
<b>HENDY MAIN</b>	2-R	BARRABOOL ROAD	4.6	6.16	171	6.2.4	MORIAC	18.8.96
<b>HONEYS</b>	1-L	BARRABOOL ROAD	0	2.24	70	3.2.2	CERES	30.8.96
<b>HONEYS</b>	1-R	BARRABOOL ROAD	0	2.24	70	3.2.2	CERES	30.8.96
<b>HORSESHOE BEND</b>	1-L	LOWER DUNEEED RO	0	1.63	133	6.1.4	MOUNT DUNEE	15.11.96
<b>HORSESHOE BEND</b>	1-R	LOWER DUNEEED RO	0	1.63	172	6.2.4	MOUNT DUNEE	15.11.96
<b>HORSESHOE BEND</b>	5-R	LOWER DUNEEED RO	5.3	0.21	172	6.2.4	TORQUAY	15.11.96
<b>KARAMARRA</b>	1-L	GHERANG ROAD	0	0.079	171	6.2.4	GHERANG	28.11.96
<b>KARAMARRA</b>	1-R	GHERANG ROAD	0	0.079	171	6.2.4	GHERANG	28.11.96
<b>KARAMARRA</b>	2-L	GHERANG ROAD	0.08	0.401	171	6.2.4	GHERANG	28.11.96
<b>KARAMARRA</b>	2-R	GHERANG ROAD	0.08	0.401	171	6.2.4	GHERANG	28.11.96
<b>KILDEAN</b>	1-L	CAPE OTWAY ROAD	0	1.33	117	6.1.3	WINCHELSEA	23.8.96
<b>KILDEAN</b>	1-R	CAPE OTWAY ROAD	0	1.33	180	6.2.4	WINCHELSEA	23.8.96
<b>LARCOMBES</b>	1-L	ANGELSEA ROAD	0	0.19	171	6.2.4	PARAPARAP	23.7.96
<b>LARCOMBES</b>	1-R	ANGELSEA ROAD	0	0.19	171	6.2.4	PARAPARAP	23.7.96
<b>LARCOMBES</b>	2-R	HENDY MAIN ROAD	0.2	0.22	171	6.2.4	PARAPARAP	23.7.96
<b>LARCOMBES</b>	3-L	HENDY MAIN ROAD	0.4	0.77	171	6.2.4	MODEWARRE	23.7.96
<b>LARCOMBES</b>	3-R	HENDY MAIN ROAD	0.4	0.77	171	6.2.4	MODEWARRE	23.7.96
<b>LARCOMBES</b>	4-L	ANGELSEA ROAD	1.2	0.6	171	6.2.4	MODEWARRE	23.7.96
<b>LARCOMBES</b>	4-R	ANGELSEA ROAD	1.2	0.6	171	6.2.4	MODEWARRE	23.7.96
<b>LARCOMBES</b>	6-L	ANGELSEA ROAD	2.2	0.35	171	6.2.4	MODEWARRE	23.7.96
<b>LARCOMBES</b>	6-R	ANGELSEA ROAD	2.2	0.35	171	6.2.4	MODEWARRE	23.7.96
<b>LIDGERWOODS</b>	1-L	CAPE OTWAY ROAD	0	0.532	180	6.2.4	BIRREGURRA	4.12.96
<b>LIDGERWOODS</b>	1-R	CAPE OTWAY ROAD	0	0.532	180	6.2.4	BIRREGURRA	4.12.96
<b>LOUTITT BAY</b>	1-L	HENDY MAIN ROAD	0	0.51	171	6.2.4	BELLBRAE	6.12.96

LOUTITT BAY	1-R	HENDY MAIN ROAD	0	0.51	190	6.2.4	BELLBRAE	6.12.96
MCCANNS	1-L	SURFCOATS HWY	0	1.2	133	6.1.4	MOUNT DUNEE	18.10.96
MCCANNS	1-R	SURFCOATS HWY	0	1.2	133	6.1.4	MOUNT DUNEE	18.10.96
MCCORMACKS	1-L	READS ROAD	0	1.22	190	6.2.4	MOUNT MORIAC	17.8.96
MCCORMACKS	1-R	READS ROAD	0	1.22	190	6.2.4	MOUNT MORIAC	17.8.96
MCGILVRAYS	1-L	BRICKMAKERS ROAD	0	3.965	171	6.2.4	WINCHELSEA S	4.12.96
MCGILVRAYS	1-R	BRICKMAKERS ROAD	0	3.965	171	6.2.4	WINCHELSEA S	4.12.96
MCPHEES	1-L	LARCOMBS ROAD	0	0.37	171	6.2.4	PARAPARAP	2.8.96
MCPHEES	1-R	LARCOMBS ROAD	0	0.37	171	6.2.4	PARAPARAP	2.8.96
MCPHEES	3-L	LARCOMBS ROAD	1.1	0.235	171	6.2.4	PARAPARAP	2.8.96
MCPHEES	3-R	LARCOMBS ROAD	1.1	0.235	171	6.2.4	PARAPARAP	2.8.96
MOORES EAST	1-R	ANGELSEA ROAD	0	0.52	158	6.2.2	BELLBRAE	18.12.96
MOORES WEST	1-L	ANGELSEA ROAD	0	0.787	79	6.2.4	BELLBRAE	18.12.96
MOORES WEST	1-R	ANGELSEA ROAD	0	0.787	79	6.2.4	BELLBRAE	18.12.96
MT DUNEE	1-R	CAPE OTWAY ROAD	0	0.09	79	6.2.4	FRESHWATER	15.11.96
MT DUNEE	2-R	CAPE OTWAY ROAD	0.09	0.87	133	6.1.4	FRESHWATER	15.11.96
MT DUNEE	4-R	CAPE OTWAY ROAD	1.2	0.33	171	6.2.4	FRESHWATER	15.11.96
PETTAVEL	3-L	PRINCES HWY	7.4	0.54	133	6.1.4	BELLBRAE	6.12.96
PETTAVEL	3-R	PRINCES HWY	7.4	0.54	135	6.1.4	BELLBRAE	6.12.96
POLLEYS	1-L	DEVON RD	0	0.975	70	3.2.2	BARRABOOL	30.8.96
POLLEYS	1-R	DEVON ROAD	0	0.975	70	3.2.2	BARRABOOL	30.8.96
POLLOCKSFORD	1-L	BARRABOOL ROAD	0	0.99	119	6.1.3	GNARWARRE	17.8.96
POLLOCKSFORD	1-R	BARRABOOL ROAD	0	1000	190	6.2.4	GNARWARRE	17.8.96
PORTREATH	5-L	FOREST RD	2.3	2.02	89	6.2.2	PARAPARAP	17.12.96
PORTREATH	7-L	FOREST ROAD	4.9	0.33	89	6.2.2	BELLBRAE	17.12.96
PORTREATH	7-R	FOREST ROAD	4.9	0.33	89	6.2.2	BELLBRAE	17.12.96
PORTREATH	9-L	FOREST ROAD	5.5	0.445	89	6.2.2	BELLBRAE	17.12.96
PORTREATH	9-R	FOREST ROAD	5.5	0.445	89	6.2.2	BELLBRAE	17.12.96
READS	1-L	MONAHANS ROAD	0	1.6	190	6.2.4	MOUNT MORIAC	17.8.96
READS	1-R	MONAHANS ROAD	0	1.6	190	6.2.4	MOUNT MORIAC	17.8.96
RESERVOIR	2-L	PETTAVEL ROAD	0.8	0.29	171	6.2.4	WAURN PONDS	13.9.96
RESERVOIR	3-L	PETTAVEL ROAD	1.1	0.07	171	6.2.4	WAURN PONDS	13.9.96
RESERVOIR	3-R	PETTAVEL ROAD	1.1	0.07	171	6.2.4	WAURN PONDS	13.9.96
RESERVOIR	4-L	PETTAVEL RD	1.1	0.205	135	6.1.4	WAURN PONDS	13.9.96
ROCHFORTS	1-L	GHERANG ROAD	0	0.2	89	6.2.2	GHERANG	4.11.96
ROCHFORTS	1-R	GHERANG ROAD	0	0.2	89	6.2.2	GHERANG	4.11.96
SIMMONDS	1-L	PRINCES HWY	0	0.975	70	3.2.2	MOUNT MORIAC	30.8.96
SIMMONDS	1-R	PRINCES HWY	0	0.975	70	3.2.2	MOUNT MORIAC	30.8.96
WALTER	2-L	MERRAWARP ROAD	0.1	0.36	70	3.2.2	BARRABOOL	30.8.96
WENSLEYDALE STATI	2-R	CAPE OTWAY ROAD	1.3	0.38	79	3.3.1	WURDALE	17.12.96



WENSLEYDALE STATI	3-R	CAPE OTWAY RD	1.7	0.52	79	6.2.4	WURDALE	17.12.96
WENSLEYDALE STATI	5-L	CAPE OTWAY ROAD	2.9	0.33	79	6.2.4	WURDALE	17.12.96
WESTS	1-R	CENTRE RD	0	0.22	79	3.3.1	WENSLEY DALE	17.12.96
WESTS	3-L	CENTRE ROAD	0.4	0.22	73	3.2.2	WENSLEY DALE	17.12.96
WESTS	3-R	CENTRE ROAD	0.4	0.22	79	3.3.1	WENSLEY DALE	17.12.96
WILLOWITE	1-L	MT DUNEED RD	0	0.83	171	6.2.4	FRESHWATER	13.9.96
WILLOWITE	1-R	MT DUNEED RD	0	0.83	171	6.2.4	FRESHWATER	13.9.96
WILLOWITE	3-L	MT DUNEED RD	2.2	0.57	133	6.1.4	BELLBRAE	13.9.96
WILLOWITE	3-R	MT DUNEED RD	2.2	0.57	190	6.2.4	BELLBRAE	13.9.96
WINCHELSEA-GHERA	1-R	CAPE OTWAY ROAD	0	0.77	79	6.2.4	WURDIBOLUC	28.11.96
WINCHELSEA-GHERA	2-R	CAPE OTWAY ROAD	0.8	0.48	133	6.1.4	WURDIBOLUC	28.11.96
WINCHELSEA-GHERA	3-L	CAPE OTWAY ROAD	1.3	1.02	133	6.1.4	GHERANG	28.11.96
WURDALE	1-L	CAPE OTWAY ROAD	0	0.68	89	6.2.2	WURDALE	4.12.96
WURDALE	1-R	CAPE OTWAY ROAD	0	0.68	79	6.2.4	WURDALE	4.12.96
WURDALE	5-L	CAPE OTWAY ROAD	3.1	0.4	171	6.2.4	WINCHELSEA S	4.12.96
WURDALE	5-R	CAPE OTWAY ROAD	3.1	0.4	95	3.3.3	WINCHELSEA S	4.12.96

## Calendar of potential roadside management activities:

175L

## Winter

Revegetation Conduct a revegetation program on eroding or priority sites with local Landcare support (Autumn-Spring)

## Spring

Slashing Slashing program for designated areas (fuel reduction)  
 Weed control Arrange spot spraying of noxious and woody weeds  
 Revegetation Conduct a revegetation program on eroding or priority sites with local Landcare support (Autumn-Spring)

## Summer

Weed control Arrange spot spraying of noxious and woody weeds  
 Seed Collection Coordinate collection in consultation with DSE and the Ballarat Region Seed Bank

## Autumn

Revegetation Conduct a revegetation program on eroding or priority sites with local Landcare support (Autumn-Spring)

## General

Erosion/run-off control Ensure all drain and roadworks meet a high standard. Run training activities  
 Removal of Exotic Vegetation Remove inappropriate trees and shrubs when labour is available

*Note 1: Revegetation work on roadsides. The Roadside Management Prescriptions adopt the maxim: 'Protect, Enhance and Restore'. Any revegetation works, whether planting or direct seeding should use indigenous species collected from local seed. Wherever possible seed should be collected from the revegetation site or close by from the same Ecological Vegetation Class.*

**Medium Conservation value Grassy Woodland roadsides****175 Grassy Woodland****Conservation Status: MEDIUM**

**EVC Notes:** A range of Grassy Woodlands dominated variously by Manna Gum, Swamp gum, Silver Banksia and She-Oaks on a mix of non-basaltic soil types.

**SalinityRegime:** Nonsaline **EVCGroup:** 5 Lower Slopes or Hills Woodlands

**MoistureRegime:** Dry - Moist **EVCType:** EVC

**ExposureRegime:** Open (plains & foothills)

**Structural Weeds:** Gorse, Serrated Tussock, Ragwort, Cocksfoot, Toowoomba Canary-grass, Radiata Pine, Golden Wreath Wattle, Sweet Pittosporum

**Management Outline:** Management should focus on program to enhance values such that sections reach HCV standard. Restricting disturbance and using a combination of techniques and timing, time and monitoring will be required to achieve this change. These woodlands are often invaded by exotic grasses, so soil disturbance (which favours growth of exotic species) should be avoided. A burning program will be beneficial to native vegetation and may reduce slashing costs.

**Comments:** Much of the range of this EVC has been lost. Sites are generally degraded by disturbance and weed invasion.

<b>Management Techniques:</b>	<b>Use:</b>	<b>Comments:</b>
<b>Burning</b>	YES	Burning can be considered to encourage natural regeneration provided follow up weed spraying is conducted
<b>Weed control</b>	YES	Any woody weeds should be removed from the roadside. Herbaceous weeds vary in their degree of impact. The focus should be on new weeds, quickly removing these before seeding. Pasture weeds fall into two categories 1/ Those that are well established and now are almost an inexorable part of the EVC but do not dominate (e.g. Onion Grass, Sweet Vernal Grass, Quaking Grass) and 2/ Those that pose a serious threat to the integrity or structure of the EVC (e.g. Phalaris, Cocksfoot, Tall Wheat Grass, Serrated Tussock)
<b>Natural regeneration</b>	YES	Encourage natural regeneration through the removal of threats such as grazing, slashing or weed competition around any remnants. Regeneration may be poor where exotic grasses dominate. Reduce competition where possible
<b>Revegetation</b>	YES	Consider revegetation with trees and shrubs as a mechanism to cut long term management costs (i.e. remove the need for regular slashing/weed control). Use to increase populations of the three rare species. Ensure local provenance seed is used.
<b>Erosion/run-off control</b>	YES	Road grading or management should attempt to disperse rather than concentrate water (correct road camber, run-off points, table and mitre drains). Active eroding areas should be stabilised and revegetated
<b>Removal of Exotic Vegetation</b>	YES	Remove any garden escapees or native plants outside their natural range (e.g. Coast tea-tree may invade areas following disturbance)
<b>Seed Collection</b>	YES	Regulate to protect vegetation from over-collection
<b>Grazing</b>	NO	
<b>Cropping</b>	NO	
<b>Fencing</b>	NO	
<b>Signage</b>	NO	
<b>Salinity Control</b>	NO	
<b>Rare plant specific requirements</b>	NO	

Graded or Ploughed Firebreaks	NO	
Blanket spraying	NO	
Slashing	?	Slash areas of introduced grass or woody weed seedlings only, to restrict fire risk if required. Care should be taken not to spread seed to other sections of the road with higher conservation values. Slashing is best carried out prior to seeding of annual grasses (by December). Burning will give better long-term results for native vegetation

### EVC Description

**175** Pre-European settlement Grassy Woodland occurred across large areas, on a variety of geologies and in a range of environments. All Grassy Woodlands, not considered part of Plains Grassy Woodland (EVC55) are placed in this group. It is a very broad EVC which encompasses a number of floristic communities. Further sampling and analyses are required to refine these groupings. In general, Grassy Woodlands grow in areas with moderate to low rainfall and relatively fertile soils in the CVU/VP/OP. The largest area of Grassy Woodland is on the eastern section of the Otway Plain (including the Bellarine Peninsula). This is a large area of gently undulating plains extending from Portarlington to Colac. Geology is Tertiary sands (The same land form and geology continues further west but with increased rainfall it supports forested communities). Altitude is generally below 250m and the average annual rainfall varies from a low of 550mm p. a. near Torquay to 700mm at Colac. In the drier eastern sections, the overstorey is dominated by Drooping She-oak with Manna Gum and Black Wattle. The shrub layer is sparse and includes scattered Golden Wattle and Sweet Bursaria. The ground layer is likely to have been dominated by Wallaby-grasses and Spear Grasses. As rainfall increases to the west, Drooping She-oak and shrubs disappear, Manna Gum and Blackwood become dominant in the overstorey and Kangaroo Grass dominates the ground layer.

**Potential Threatening Processes:** grazing, weed invasion, habitat loss, fragmentation, clearing for agriculture, minor forest produce, mining

**GeneralisedStatus:** E Endangered

### This Management Prescription is currently applicable to the following Surf Coast Roadside Sections:

ROAD NAME	SECTION_ ORIGIN: NO_AND_ SIDE:	DISTANCE FROM ORIGIN:	SECTION SLU: LENGTH:	GMU3:	LOCALITY:	DATE SURVEYED:
BARRABOOL	1-L MERRAWARP ROAD	0	12.26	133 6.1.4	GNARWARRE	8.8.96
BARRABOOL	1-R MERRAWARP ROAD	0	12.26	190 6.2.4	BARRABOOL	8.8.96
BARRABOOL	4-R MERRAWARP ROAD	14	0.35	133 6.1.4	BUCKLEY	8.8.96
BLACKGATE	3-R BREAMLEA ROAD	5.7	0.96	171 6.2.4	TORQUAY	11.10.96
BONES	3-L ADDISCOTT ROAD	1.9	0.845	158 6.2.2	JAN JUC	28.10.96
CAPE OTWAY	8-L PRINCES HWY	11	0.27	133 6.1.4	LAYARD	4.12.96
CENTRE	5-L WORMBETE STATION	1.5	0.12	73 3.2.2	WENSLEY DALE	17.12.96
CENTRE	5-R WORMBETE STATION	1.5	0.12	73 3.2.2	WENSLEY DALE	17.12.96
CENTRE	8-L WORMBETE STATION	2.8	0.19	79 6.2.4	WENSLEY DALE	17.12.96
CENTRE	8-R WORMBETE STATION	2.8	0.19	79 6.2.4	WENSLEY DALE	17.12.96
CRAFTERS	2-R GHERANG ROAD	0.9	0.065	171 6.2.4	GHERANG	28.11.96
DANGERS	5-L TANNERS ROAD	4.3	0.49	171 6.2.4	MODEWARRE	11.11.96
DANGERS	5-R TANNERS ROAD	4.3	0.49	171 6.2.4	MODEWARRE	11.11.96
DICKINS	1-R SURFCOAST HWY	0	0.85	133 6.1.4	MOUNT DUNEE	6.12.96
DICKINS	2-R SURFCOAST HWY	0.9	0.62	133 6.1.4	MOUNT DUNEE	6.12.96
DICKINS	4-L SURFCOAST HWY	2.0	0.3	79 6.2.4	MOUNT DUNEE	6.12.96
DICKINS	4-R SURFCOAST HWY	2.0	0.3	133 6.1.4	MOUNT DUNEE	6.12.96

DREWRY	2-L	CAPE OTWAY ROAD	1	0.4	70	3.2.2	MORIAC	13.9.96
DREWRY	2-R	CAPE OTWAY ROAD	1	0.4	70	3.2.2	MORIAC	13.9.96
FOREST	4-L	GREAT OCEAN ROAD	10	0.62	171	6.2.4	PARAPARAP	2.9.96
FOREST	4-R	GREAT OCEAN ROAD	10	0.62	171	6.2.4	PARAPARAP	2.9.96
FOREST	5-L	GREAT OCEAN ROAD	11	1.69	171	6.2.4	GHERANG	2.9.96
FOREST	5-R	GREAT OCEAN ROAD	11	1.69	171	6.2.4	GHERANG	2.9.96
FOREST	6-L	GREAT OCEAN ROAD	13	0.64	171	6.2.4	MODEWARRE	2.9.96
FULTONS	1-L	WINCHELSEA-DEANS	0	4.695	73	3.2.2	BAMBRA	26.8.96
FULTONS	1-R	WINCHELSEA-DEANS	0	4.695	73	3.2.2	WINCHELSEA	26.8.96
GEORGES EAST	2-L	WINCHELSEA-DEANS	0.8	0.26	70	3.2.2	BARRABOOL	30.8.96
GEORGES EAST	2-R	WINCHELSEA-DEANS	0.8	0.26	70	3.2.2	BARRABOOL	30.8.96
GEORGES EAST	4-L	WINCHELSEA-DEANS	1.4	0.1	70	3.2.2	BARRABOOL	30.8.96
GHAZEEPORE	6-L	MT DUNED ROAD	5.9	0.63	171	6.2.4	BELLBRAE	15.11.96
GIDDINGS	1-L	MC PHEES RD	0	0.24	156	6.1.5	PARAPARAP	2.9.96
GIDDINGS	1-R	MC PHEES RD	0	0.24	171	6.2.4	PARAPARAP	2.9.96
GIDDINGS	3-L	MC PHEES RD	0.4	1.2	156	6.1.5	PARAPARAP	2.9.96
GIDDINGS	3-R	MC PHEES RD	0.4	1.2	171	6.2.4	PARAPARAP	2.9.96
GRASSDALE	1-R	HENDY MAIN ROAD	0	0.09	156	6.1.5	PARAPARAP	13.9.96
GRASSDALE	3-R	HENDY MAIN ROAD	0.2	1.622	171	6.2.4	PARAPARAP	13.9.96
GRAYS	3-L	FOREST ROAD	3.0	0.285	171	6.2.4	PARAPARAP	2.9.96
GRAYS	3-R	FOREST ROAD	3.0	0.285	171	6.2.4	PARAPARAP	2.9.96
GROSSMANS	1-R	SURFCOAST HWY	0	0.66	79	6.2.4	BELLBRAE	18.12.96
GUYE	1-L	DANGERS ROAD	0	0.58	79	6.2.4	GHERANG	28.11.96
GUYE	1-R	DANGERS ROAD	0	0.58	79	6.2.4	GHERANG	28.11.96
HENDY MAIN	3-L	BARRABOOL ROAD	11	7.64	171	6.2.4	PARAPARAP	17.8.96
HENDY MAIN	3-R	BARRABOOL ROAD	11	7.64	171	6.2.4	PARAPARAP	17.8.96
HORSESHOE BEND	5-L	LOWER DUNED RO	5.3	0.21	172	6.2.4	TORQUAY	15.11.96
HUNTS	1-L	BLACKGATE ROAD	0	3	133	6.1.4	FRESHWATER	13.9.96
HUNTS	1-R	BLACKGATE ROAD	0	3	133	6.1.4	FRESHWATER	13.9.96
LARCOMBES	2-L	HENDY MAIN ROAD	0.2	0.22	171	6.2.4	PARAPARAP	23.7.96
LARCOMBES	5-R	HENDY MAIN ROAD	1.8	0.45	133	6.1.4	MODEWARRE	23.7.96
LAYARD	1-L	CAPE OTWAY ROAD	0	2.61	171	6.2.4	MODEWARRE	13.9.96
LAYARD	1-R	CAPE OTWAY ROAD	0	2.61	171	6.2.4	MODEWARRE	13.9.96
MATHISONS	1-L	CAPE OTWAY ROAD	0	0.5	171	6.2.4	WURDIBOLUC	5.9.96
MATHISONS	1-R	CAPE OTWAY ROAD	0	0.5	171	6.2.4	WURDIBOLUC	5.9.96
MATHISONS	2-L	CAPE OTWAY ROAD	0.5	0.57	133	6.1.4	WURDIBOLUC	5.9.96
MATHISONS	2-R	CAPE OTWAY ROAD	0.5	0.57	133	6.1.4	WURDIBOLUC	5.9.96
MCPHEES	2-L	LARCOMBES ROAD	0.4	0.73	171	6.2.4	PARAPARAP	2.8.96
MCPHEES	2-R	LARCOMBES ROAD	0.4	0.73	171	6.2.4	PARAPARAP	2.8.96
MINYA	1-L	BLACKGATE ROAD	0	0.822	171	6.2.4	TORQUAY	18.10.96

<b>MINYA</b>	1-R	BLACKGATE ROAD	0	0	171	6.2.4	TORQUAY	18.10.96
<b>MOORES EAST</b>	1-L	ANGELSEA ROAD	0	0.52	158	6.2.2	BELLBRAE	18.12.96
<b>MT DUNEED</b>	2-L	CAPE OTWAY ROAD	0.09	0.87	171	6.2.4	FRESHWATER	15.11.96
<b>MT DUNEED</b>	4-L	CAPE OTWAY ROAD	1.2	0.33	171	6.2.4	FRESHWATER	15.11.96
<b>MT DUNEED</b>	6-L	CAPE OTWAY ROAD	1.7	1.48	171	6.2.4	FRESHWATER	15.11.96
<b>MT DUNEED</b>	6-R	CAPE OTWAY ROAD	1.7	1.48	171	6.2.4	FRESHWATER	15.11.96
<b>PETTAVEL</b>	1-L	PRINCES HWY	0	2.96	190	6.2.4	WAURN PONDS	6.12.96
<b>PETTAVEL</b>	1-R	PRINCES HWY	0	2.96	133	6.1.4	FRESHWATER	6.12.96
<b>PETTAVEL</b>	2-L	PRINCES HWY	3	4.46	190	6.2.4	WAURN PONDS	6.12.96
<b>PETTAVEL</b>	2-R	PRINCES HWY	3	4.46	190	6.2.4	FRESHWATER	6.12.96
<b>PETTAVEL</b>	4-L	PRINCES HWY	8	1.57	135	6.1.4	BELLBRAE	6.12.96
<b>PETTAVEL</b>	4-R	PRINCES HWY	8	1.57	190	6.2.4	BELLBRAE	6.12.96
<b>PORTREATH</b>	5-R	FOREST ROAD	2.3	2.02	89	6.2.2	PARAPARAP	17.12.96
<b>PORTREATH</b>	8-L	FOREST ROAD	5.2	0.25	79	6.2.4	BELLBRAE	17.12.96
<b>PORTREATH</b>	8-R	FOREST ROAD	5.2	0.25	89	6.2.2	BELLBRAE	17.12.96
<b>RESERVOIR</b>	1-L	null	0	0.76	70	3.2.2	WAURN PONDS	13.9.96
<b>RESERVOIR</b>	1-R	null	0	0.76	135	6.1.4	WAURN PONDS	13.9.96
<b>RESERVOIR</b>	4-R	null	1.1	0.205	70	3.2.2	WAURN PONDS	13.9.96
<b>RIFLE BUTTS</b>	1-L	WINCHELSEA-DEANS	0	3.152	78	3.3.1	DEANS MARSH	26.8.96
<b>RIFLE BUTTS</b>	1-R	WINCHELSEA-DEANS	0	3.152	78	3.3.1	DEANS MARSH	26.8.96
<b>VICKERYS</b>	1-L	HENDY MAIN ROAD	0	0.84	79	6.2.4	BELLBRAE	23.9.96
<b>VICKERYS</b>	1-R	HENDY MAIN ROAD	0	0.84	171	6.2.4	BELLBRAE	23.9.96
<b>WALTER</b>	2-R	MERRAWARP ROAD	0.1	0.36	70	3.2.2	BARRABOOL	30.8.96
<b>WENSLEYDALE STATI</b>	1-R	CAPE OTWAY ROAD	0	1.3	89	6.2.2	WURDALE	17.12.96
<b>WESTS</b>	1-L	CENTRE ROAD	0	0.22	79	3.3.1	WENSLEY DALE	17.12.96
<b>WESTS</b>	2-L	CENTRE ROAD	0.2	0.13	73	3.2.2	WENSLEY DALE	17.12.96
<b>WESTS</b>	2-R	CENTRE ROAD	0.2	0.13	79	3.3.1	WENSLEY DALE	17.12.96
<b>WILLOWITE</b>	2-L	MOUNT DUNEED RO	0.8	1.4	133	6.1.4	BELLBRAE	13.9.96
<b>WILLOWITE</b>	2-R	MOUNT DUNEED RO	0.8	1.4	79	6.2.4	BELLBRAE	13.9.96
<b>WILLOWITE</b>	6-L	MOUNT DUNEED RO	3.5	2.55	171	6.2.4	BELLBRAE	13.9.96
<b>WILLOWITE</b>	6-R	MOUNT DUNEED RO	3.5	2.55	133	6.1.4	BELLBRAE	13.9.96
<b>WILLOWITE</b>	8-L	MOUNT DUNEED RO	6.1	1.433	133	6.1.4	BELLBRAE	13.9.96
<b>WILLOWITE</b>	8-R	MOUNT DUNEED RO	6.1	1.433	171	6.2.4	BELLBRAE	13.9.96
<b>WINCHELSEA-GHERA</b>	3-R	CAPE OTWAY ROAD	1.3	1.02	171	6.2.4	GHERANG	28.11.96
<b>WURDALE</b>	4-L	CAPE OTWAY ROAD	2.7	0.34	79	6.2.4	WURDALE	4.12.96
<b>WURDALE</b>	4-R	CAPE OTWAY ROAD	2.7	0.34	95	3.3.3	WURDALE	4.12.96

## Calendar of potential roadside management activities:

175M

**Winter**

Revegetation Conduct a revegetation program on eroding or priority sites with local Landcare support (Autumn-Spring)

**Spring**

Weed control Arrange spot spraying of noxious and woody weeds

Revegetation Conduct a revegetation program on eroding or priority sites with local Landcare support (Autumn-Spring)

**Summer**

Weed control Arrange spot spraying of noxious and woody weeds

Seed Collection Coordinate collection in consultation with DSE and the Ballarat Region Seed Bank

**Autumn**

Burning Arrange burning with local CFA groups

Revegetation Conduct a revegetation program on eroding or priority sites with local Landcare support (Autumn-Spring)

**General**

Natural regeneration Allow time and protect areas from disturbance

Erosion/run-off control Ensure all drain and roadworks meet a high standard. Run training activities

Removal of Exotic Remove inappropriate trees and shrubs when labour is available

Vegetation

*Note 1: Revegetation work on roadsides. The Roadside Management Prescriptions adopt the maxim: 'Protect, Enhance and Restore'. Any revegetation works, whether planting or direct seeding should use indigenous species collected from local seed. Wherever possible seed should be collected from the revegetation site or close by from the same Ecological Vegetation Class.*

## High Conservation value Grassy Woodland roadsides

## 175 Grassy Woodland

Conservation Status: HIGH

**EVC Notes:** A range of Grassy Woodlands dominated variously by Manna Gum, Swamp gum, Silver Banksia and She-Oaks on a mix of non-basaltic soil types. Lightly timbered grassy country with a sparse or absent shrub layer.

Grassy Woodland is a common EVC in Surf Coast Shire, with high quality examples occurring on 21 roads. Classified rare plants are Bellarine Yellow Gum and Yarra Gum.

**SalinityRegime:** Nonsaline

**EVCGroup:** 5 Lower Slopes or Hills Woodlands

**MoistureRegime:** Dry - Moist

**EVCType:** EVC

**ExposureRegime:** Open (plains & foothills)

**Structural Weeds:** Gorse, Serrated Tussock, Ragwort, Cocksfoot, Toowoomba Canary-grass, Radiata Pine, Golden Wreath Wattle, Sweet Pittosporum

**Management Outline:** Use a range of management techniques and timing to 'tip the balance' in favour of native species. Natural regeneration, diversity and weed control may benefit from ecological burning in more open sections. Heavier timbered sections and areas with good tree/shrub regeneration (seedlings) should be avoided in any burning activities.

**Comments:** Much of the range of this EVC has been lost. Sites are generally degraded by disturbance and weed invasion. High conservation value remnants are therefore extremely valuable.

Management Techniques:	Use:	Comments:
<b>Burning</b>	YES	Autumn burning can be used providing follow up weed control is carried out. Use on grassland sections to maintain health and reduce fuel loads. Avoid areas of trees/shrubs particularly where seedlings are present (such as rarer elements like Banksia, Casuarina, Snow Gum)
<b>Weed control</b>	YES	Any woody weeds should be removed from the roadside. Herbaceous weeds vary in their degree of impact. The focus should be on new weeds, quickly removing these before seeding. Pasture weeds fall into two categories 1/ Those that are well established and now are almost an inexorable part of the EVC but do not dominate (e.g. Onion Grass, Sweet Vernal Grass, Quaking Grass) and 2/ Those that pose a serious threat to the integrity or structure of the EVC (e.g. Phalaris, Cocksfoot, Tall Wheat Grass, Serrated Tussock)
<b>Fencing</b>	YES	Consider fencing any fragile remnants where it becomes apparent that a lack of a physical barrier to vehicles/grazing threatens the future of the community or rare plant
<b>Signage</b>	YES	Signage of all high conservation roadsides is recommended to raise awareness and protect values from inadvertent damage
<b>Natural regeneration</b>	YES	Encourage natural regeneration through the removal of threats such as grazing, slashing or weed competition. Shrub regeneration is a priority to replace woody weeds and improve habitat values. Normally adequate in this EVC provided no threats (eg weeds) are present. Rocks, logs and stumps can prevent accidental mowing of regenerating trees and shrubs
<b>Erosion/run-off control</b>	YES	Road grading or management should attempt to disperse rather than concentrate water (correct road camber, run-off points, table and mitre drains). Active eroding areas should be stabilised and revegetated
<b>Removal of Exotic Vegetation</b>	YES	Remove any garden escapees or native plants outside their natural range (e.g. Coast tea-tree may invade areas following disturbance)

<b>Rare plant specific requirements</b>	YES	Consult the species list for the roadside. Rare, threatened or endangered plants are noted with a code. Seek advice regarding management required to protect and enhance the species . (DSE). Slashing and burning must avoid regenerating rare plants.
<b>Seed Collection</b>	YES	Regulate to protect vegetation from over-collection. Seed from the three rare plants is available for most of the year if required.
<b>Slashing</b>	NO	May be deemed necessary to reduce fuel loads, but often unnecessary where native grasses dominate. Leave until autumn, when native species have flowered and seeded. Avoid regenerating trees and shrubs
<b>Grazing</b>	NO	
<b>Cropping</b>	NO	
<b>Revegetation</b>	NO	
<b>Salinity Control</b>	NO	
<b>Graded or Ploughed Firebreaks</b>	NO	
<b>Blanket spraying</b>	NO	

### EVC Description

**175** Pre-European settlement Grassy Woodland occurred across large areas, on a variety of geologies and in a range of environments. All Grassy Woodlands, not considered part of Plains Grassy Woodland (EVC55) are placed in this group. It is a very broad EVC which encompasses a number of floristic communities. Further sampling and analyses are required to refine these groupings. In general, Grassy Woodlands grow in areas with moderate to low rainfall and relatively fertile soils in the CVU/VP/OP. The largest area of Grassy Woodland is on the eastern section of the Otway Plain (including the Bellarine Peninsula). This is a large area of gently undulating plains extending from Portarlington to Colac. Geology is Tertiary sands (The same land form and geology continues further west but with increased rainfall it supports forested communities). Altitude is generally below 250m and the average annual rainfall varies from a low of 550mm p. a. near Torquay to 700mm at Colac. In the drier eastern sections, the overstorey is dominated by Drooping She-oak with Manna Gum and Black Wattle. The shrub layer is sparse and includes scattered Golden Wattle and Sweet Bursaria. The ground layer is likely to have been dominated by Wallaby-grasses and Spear Grasses. As rainfall increases to the west, Drooping She-oak and shrubs disappear, Manna Gum and Blackwood become dominant in the overstorey and Kangaroo Grass dominates the ground layer.

**Potential Threatening Processes:** grazing, weed invasion, habitat loss, fragmentation, clearing for agriculture, minor forest produce, mining

**GeneralisedStatus:** E Endangered

### This Management Prescription is currently applicable to the following Surf Coast Roadside Sections:

ROAD NAME	SECTION_ NO_AND_ SIDE:	ORIGIN:	DISTANCE FROM ORIGIN:	SECTION LENGTH:	SLU:	GMU3:	LOCALITY:	DATE SURVEYED:
<b>BARRABOOL</b>	2-L	MERRAWARP ROAD	12	0.144	70	3.2.2	BUCKLEY	8.8.96
<b>BARRABOOL</b>	2-R	MERRAWARP ROAD	12	0.144	190	6.2.4	BUCKLEY	8.8.96
<b>BLACKGATE</b>	2-L	BREAMLEA ROAD	0.3	5.48	171	6.2.4	TORQUAY	11.10.96
<b>BLACKGATE</b>	2-R	BREAMLEA ROAD	0.3	5.48	171	6.2.4	TORQUAY	11.10.96
<b>BLACKGATE</b>	5-L	BREAMLEA ROAD	7.6	1.63	171	6.2.4	TORQUAY	11.10.96
<b>BLACKGATE</b>	5-R	BREAMLEA ROAD	7.6	1.63	171	6.2.4	TORQUAY	11.10.96
<b>BLACKGATE</b>	7-L	BREAMLEA ROAD	10	6.15	190	6.2.4	FRESHWATER	11.10.96
<b>BLACKGATE</b>	7-R	BREAMLEA ROAD	10	6.15	171	6.2.4	BELLBRAE	11.10.96
<b>CAPE OTWAY</b>	9-L	PRINCES HWY	11	27.94	171	6.2.4	MODEWARRE	4.12.96
<b>CAPE OTWAY</b>	9-R	PRINCES HWY	11	27.94	171	6.2.4	MODEWARRE	4.12.96



<b>CRAFTERS</b>	1-R		0	0.87	171	6.2.4	GHERANG	28.11.96
<b>DANGERS</b>	4-L	TANNERS ROAD	3.7	0.63	171	6.2.4	GHERANG	11.11.96
<b>DANGERS</b>	4-R	TANNERS ROAD	3.7	0.63	171	6.2.4	GHERANG	11.11.96
<b>DANGERS</b>	6-L	TANNERS ROAD	4.8	1.46	79	6.2.4	MODEWARRE	11.11.96
<b>DANGERS</b>	6-R	TANNERS ROAD	4.8	1.46	79	6.2.4	MODEWARRE	11.11.96
<b>DANGERS</b>	7-L	TANNERS ROAD	6.2	1.099	79	6.2.4	LAYARD	11.11.96
<b>DANGERS</b>	7-R	TANNERS ROAD	6.2	1.099	171	6.2.4	MODEWARRE	11.11.96
<b>DICKINS</b>	10-L	SURFCOAST HWY	9.7	0.45	133	6.1.4	FRESHWATER	6.12.96
<b>DICKINS</b>	10-R	SURFCOAST HWY	9.7	0.45	133	6.1.4	FRESHWATER	6.12.96
<b>DICKINS</b>	9-L	SURFCOAST HWY	7.6	2.1	133	6.1.4	FRESHWATER	6.12.96
<b>DICKINS</b>	9-R	SURFCOAST HWY	7.6	2.1	79	6.2.4	FRESHWATER	6.12.96
<b>DUFFIELDS</b>	1-L	GROSSMANS ROAD	0	2.035	158	6.2.2	JAN JUC	18.12.96
<b>FISHER</b>	1-L	HORSESHOE BEND R	0	2.5	171	6.2.4	TORQUAY	18.10.96
<b>FISHER</b>	1-R	HORSESHOE BEND R	0	2.5	171	6.2.4	TORQUAY	18.10.96
<b>GHAZEEPORE</b>	4-L	MOUNT DUNEED RO	3.8	0.43	171	6.2.4	BELLBRAE	15.11.96
<b>GHAZEEPORE</b>	4-R	MOUNT DUNEED RO	3.8	0.43	171	6.2.4	BELLBRAE	15.11.96
<b>GRAYS</b>	1-L	FOREST ROAD	0	1.89	171	6.2.4	PARAPARAP	2.9.96
<b>GRAYS</b>	1-R	FOREST ROAD	0	1.89	171	6.2.4	PARAPARAP	2.9.96
<b>GRAYS</b>	2-L	FOREST ROAD	1.9	1.15	171	6.2.4	PARAPARAP	2.9.96
<b>GRAYS</b>	2-R	FOREST ROAD	1.9	1.15	171	6.2.4	PARAPARAP	2.9.96
<b>HENDY MAIN</b>	4-L	BARRABOOL ROAD	18	2.27	190	6.2.4	BELLBRAE	18.8.96
<b>HENDY MAIN</b>	4-R	BARRABOOL ROAD	18	2.27	171	6.2.4	BELLBRAE	18.8.96
<b>HORSESHOE BEND</b>	2-L	LOWER DUNEED RO	1.6	0.89	171	6.2.4	TORQUAY	15.11.96
<b>HORSESHOE BEND</b>	2-R	LOWER DUNEED RO	1.6	0.892	172	6.2.4	CONNEWARRE	15.11.96
<b>HORSESHOE BEND</b>	3-L	LOWER DUNEED RO	2.5	2.51	171	6.2.4	TORQUAY	15.11.96
<b>HORSESHOE BEND</b>	3-R	LOWER DUNEED RO	2.5	2.51	172	6.2.4	TORQUAY	15.11.96
<b>LARCOMBES</b>	5-L	HENDY MAIN ROAD	2.2	0.35	133	6.1.4	MODEWARRE	23.7.96
<b>LOUTTIT BAY</b>	4-L	HENDY MAIN ROAD	3.5	1.328	190	6.2.4	BELLBRAE	6.12.96
<b>LOUTTIT BAY</b>	4-R	HENDY MAIN ROAD	3.5	1.328	171	6.2.4	BELLBRAE	6.12.96
<b>MT DUNEED</b>	1-L	CAPE OTWAY ROAD	0	0.09	79	6.2.4	FRESHWATER	15.11.96
<b>NOBLES (PRIM)</b>	1-L	LARCOMBS ROAD	0	2.19	171	6.2.4	GHERANG	11.11.96
<b>NOBLES (PRIM)</b>	1-R	LARCOMBS ROAD	0	2.19	171	6.2.4	GHERANG	11.11.96
<b>NOBLES (PRIM)</b>	2-L	LARCOMBS ROAD	2.2	1.08	171	6.2.4	GHERANG	11.11.96
<b>NOBLES (PRIM)</b>	2-R	LARCOMBS ROAD	2.2	1.08	171	6.2.4	GHERANG	11.11.96
<b>NOBLES (PRIM)</b>	3-L	LARCOMBS ROAD	3.3	0.15	171	6.2.4	GHERANG	11.11.96
<b>NOBLES (PRIM)</b>	3-R	LARCOMBS ROAD	3.3	0.15	171	6.2.4	GHERANG	11.11.96
<b>PENNYROYAL VALLE</b>	1-L	DEANS MARSH-LORN	0	0.8	95	3.3.3	DEANS MARSH	17.1.97
<b>PENNYROYAL VALLE</b>	1-R	DEANS MARSH-LORN	0	0.8	95	3.3.3	DEANS MARSH	17.1.97
<b>RESERVOIR</b>	2-R	PETTAVEL ROAD	0.8	0.29	171	6.2.4	WAURN PONDS	13.9.96
<b>WENSLEYDALE STATI</b>	1-L	CAPE OTWAY ROAD	0	1.3	79	3.3.1	WURDIBOLUC	13.9.96

<b>WENSLEYDALE STATI</b>	2-L	CAPE OTWAY ROAD	1.3	0.38	79	3.3.1	WURDALE	13.9.96
<b>WENSLEYDALE STATI</b>	3-L	CAPE OTWAY ROAD	1.7	0.52	79	6.2.4	WURDALE	13.9.96
<b>WENSLEYDALE STATI</b>	5-R	CAPE OTWAY ROAD	2.9	0.33	79	3.3.1	WURDALE	13.9.96
<b>WINCHELSEA-GHERA</b>	1-L	CAPE OTWAY ROAD	0	1.77	171	6.2.4	GHERANG	28.11.96
<b>WINCHELSEA-GHERA</b>	2-L	CAPE OTWAY ROAD	1.8	0.48	156	6.1.5	GHERANG	28.11.96
<b>WINCHELSEA-GHERA</b>	4-L	CAPE OTWAY ROAD	2.3	0.77	133	6.1.4	GHERANG	28.11.96
<b>WINCHELSEA-GHERA</b>	4-R	CAPE OTWAY ROAD	2.3	0.77	133	6.1.4	GHERANG	28.11.96
<b>WURDALE</b>	2-L	CAPE OTWAY ROAD	0.7	0.72	89	6.2.2	WURDIBOLUC	4.12.96
<b>WURDALE</b>	2-R	CAPE OTWAY ROAD	0.7	0.72	171	6.2.4	WURDIBOLUC	4.12.96

The following Surf Coast Roadside Sections contain listed plant species in this EVC:

*Eucalyptus leucoxylon ssp. bellarina* Bellarine Yellow-gum

AROTS: VROTS: e

RD\_NAME:

DUFFIELDS

SECTION\_NO\_AND\_SIDE:

1-L

*Eucalyptus yarraensis*

Yarra Gum

AROTS: VROTS: k

RD\_NAME:

DANGERS

WINCHELSEA-GHERANG

CAPE OTWAY

WINCHELSEA-GHERANG

WINCHELSEA-GHERANG

WINCHELSEA-GHERANG

NOBLES (PRIM)

NOBLES (PRIM)

NOBLES (PRIM)

NOBLES (PRIM)

CRAFTERS

DANGERS

WENSLEYDALE STATION

DANGERS

WURDALE

WURDALE

WENSLEYDALE STATION

WENSLEYDALE STATION

CAPE OTWAY

DANGERS

DANGERS

PENNYROYAL VALLEY

PENNYROYAL VALLEY

DANGERS

*Melaleuca armillaris ssp. armillaris* Giant Honey-myrtle

AROTS: VROTS: r

RD\_NAME:

WINCHELSEA-GHERANG

SECTION\_NO\_AND\_SIDE:

1-L

**Spring**

Weed control	Arrange spot spraying of noxious and woody weeds
Rare plant specific requirements	Monitor populations of rare species each Spring and adjust management where necessary (in consultation with DSE)

**Summer**

Weed control	Arrange spot spraying of noxious and woody weeds
Seed Collection	Coordinate collection in consultation with DSE and the Ballarat Region Seed Bank

**Autumn**

Burning	Arrange burning with local CFA groups
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**General**

Fencing	Arrange fencing of any areas needing a physical barrier
Signage	Erect SRV and interpretation signage on HCV roadsides
Natural regeneration	Allow time and protect areas from disturbance
Erosion/run-off control	Ensure all drain and roadworks meet a high standard. Run training activities
Removal of Exotic Vegetation	Remove inappropriate trees and shrubs when labour is available

*Note 1: Revegetation work on roadsides. The Roadside Management Prescriptions adopt the maxim: 'Protect, Enhance and Restore'. Any revegetation works, whether planting or direct seeding should use indigenous species collected from local seed. Wherever possible seed should be collected from the revegetation site or close by from the same Ecological Vegetation Class.*

**Low Conservation Roadsides containing Foothill Forest****178 Herb-rich Foothill Forest / Shrubby Foothill Forest Complex Conservation Status: LOW****EVC Notes:** Degraded roadsides containing little of the structure or diversity of this EVC Complex**SalinityRegime:** Nonsaline **EVCGroup:** 6 Dry Forests**MoistureRegime:** Dry - Moist **EVCType:** complex**ExposureRegime:** Various aspects in hilly country or open plains**Structural Weeds:** Blackberry, Ragwort, Spear Thistle, Cocksfoot, English Broom, Montpellier Broom, Radiata Pine, Hawthorn, Hemlock**Management Outline:** Focus on high threat weeds**Comments:** Fertile soils make this EVC Complex extremely vulnerable to weed invasion post disturbance

Management Techniques:	Use:	Comments:
<b>Slashing</b>	YES	Slash areas of introduced grass or woody weed seedlings only, to restrict fire risk if required. Care should be taken not to spread seed to other sections of the road with higher conservation values. Slashing is best carried out prior to seeding of annual grasses (by December)
<b>Weed control</b>	YES	Spot spraying or hand removal (cut & paint) of woody weeds is recommended
<b>Revegetation</b>	YES	Consider revegetation with trees and shrubs as a mechanism to cut long term management costs (i.e. remove the need for regular slashing/weed control)
<b>Erosion/run-off control</b>	YES	Road grading or management should attempt to disperse rather than concentrate water (correct road camber, run-off points, table and mitre drains). Active eroding areas should be stabilised and revegetated
<b>Removal of Exotic Vegetation</b>	YES	Remove any garden escapees or native plants outside their natural range (e.g. Coast tea-tree may invade areas following disturbance)
<b>Seed Collection</b>	YES	Regulate to protect vegetation from over-collection.
<b>Burning</b>	NO	A burn may assist natural regeneration. Burning must protect existing trees. The area should not be burnt again until seedlings are well established (20 year plus cycle). It is imperative that any burning does not damage seedlings (wet down prior to burning). Consider the impact of any proposed burn on the spread of weeds.
<b>Cropping</b>	NO	
<b>Signage</b>	NO	
<b>Salinity Control</b>	NO	
<b>Rare plant specific requirements</b>	NO	
<b>Graded or Ploughed Firebreaks</b>	NO	
<b>Blanket spraying</b>	NO	
<b>Grazing</b>	?	Grazing can be considered on totally degraded or modified sites without native remnants as a mechanism to control grass growth (fire risk). Control of noxious weeds must be a condition of any grazing licence
<b>Fencing</b>	?	To allow grazing

<b>Natural regeneration</b>	?	Scattered trees and or shrubs may be present on the roadside. Slash around seedlings. Leave a zone under tree canopy (drip zone) to encourage regeneration. Consider spraying woody weeds and grasses around trees to allow regeneration
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**EVC Description**

**178** Shrubby Foothill Forest/Herb-rich Foothill Forest Complex contains the diverse herb layer of Herb-rich Foothill Forest (EVC 23) while retaining the diverse shrub layer of Shrubby Foothill Forest (EVC 45). It is usually dominated by species which occur at the drier end of both EVC's.

**Potential Threatening Processes:**

**GeneralisedStatus:** D Depleted

**This Management Prescription is currently applicable to the following Surf Coast Roadside Sections:**

ROAD NAME	SECTION_	ORIGIN:	DISTANCE	SECTION	SLU:	GMU3:	LOCALITY:	DATE
	NO_AND_		FROM	LENGTH:				SURVEYED:
	SIDE:		ORIGIN:					
<b>PARKERS</b>	3-L	BAMBRA CEMETERY	3.3	0.63	73	3.2.2	DEANS MARSH	17.1.97

**Calendar of potential roadside management activities:****178L****Winter**

Revegetation Conduct a revegetation program on eroding or priority sites with local Landcare support (Autumn-Spring)

**Spring**

Slashing Slashing program for designated areas (fuel reduction)  
 Weed control Arrange spot spraying of noxious and woody weeds  
 Revegetation Conduct a revegetation program on eroding or priority sites with local Landcare support (Autumn-Spring)

**Summer**

Weed control Arrange spot spraying of noxious and woody weeds  
 Seed Collection Coordinate collection in consultation with DSE and the Ballarat Region Seed Bank

**Autumn**

Revegetation Conduct a revegetation program on eroding or priority sites with local Landcare support (Autumn-Spring)

**General**

Erosion/run-off control Ensure all drain and roadworks meet a high standard. Run training activities  
 Removal of Exotic Remove inappropriate trees and shrubs when labour is available  
 Vegetation

*Note 1: Revegetation work on roadsides. The Roadside Management Prescriptions adopt the maxim: 'Protect, Enhance and Restore'. Any revegetation works, whether planting or direct seeding should use indigenous species collected from local seed. Wherever possible seed should be collected from the revegetation site or close by from the same Ecological Vegetation Class.*

**Medium Conservation Roadsides containing Foothill Forest****178 Herb-rich Foothill Forest / Shrubby Foothill Forest Complex Conservation Status: MEDIUM****EVC Notes:** Sections with diverse shrub and ground layers compromised to some degree by weed invasion.**SalinityRegime:** Nonsaline **EVCGroup:** 6 Dry Forests**MoistureRegime:** Dry - Moist **EVCType:** complex**ExposureRegime:** Various aspects in hilly country or open plains**Structural Weeds:** Blackberry, Ragwort, Spear Thistle, Cocksfoot, English Broom, Montpellier Broom, Radiata Pine, Hawthorn, Hemlock**Management Outline:** Management should focus on program to enhance values such that sections reach HCV standard. Restricting disturbance and using a combination of techniques and timing, time and monitoring will be required to achieve this change**Comments:** Fertile soils make this EVC Complex extremely vulnerable to weed invasion post disturbance

Management Techniques:	Use:	Comments:
<b>Weed control</b>	YES	Spot spraying or hand removal (cut & paint) of woody weeds is recommended. Grassy weeds could be reduced around any regenerating rare eucalypts.
<b>Natural regeneration</b>	YES	Encourage natural regeneration through the removal of threats such as grazing, slashing or weed competition around any remnants. Protect regenerating rare species with rocks, logs or stumps to prevent accidental mowing.
<b>Revegetation</b>	YES	Medium conservation value sites could be revegetated with suitable species as a means to reduce long-term management costs in the absence of sufficient natural regeneration. Tree and shrub planting will smother exotic grasses and could be of value in some sites.
<b>Erosion/run-off control</b>	YES	Road grading or management should attempt to disperse rather than concentrate water (correct road camber, run-off points, table and mitre drains). Active eroding areas should be stabilised and revegetated
<b>Removal of Exotic Vegetation</b>	YES	Remove any garden escapees or native plants outside their natural range (e.g. Coast tea-tree may invade areas following disturbance)
<b>Seed Collection</b>	YES	Regulate to protect vegetation from over-collection
<b>Burning</b>	NO	Not generally required as an active management approach. The desirable frequency of burning to promote regeneration is covered by the incidence of wildfire. Consider burning the groundlayer only as a trial to aid regeneration as part of a weed control/restoration program. Careful follow-up spot spraying will be necessary to control weed regrowth and germination.
<b>Grazing</b>	NO	
<b>Cropping</b>	NO	
<b>Fencing</b>	NO	
<b>Signage</b>	NO	
<b>Salinity Control</b>	NO	
<b>Rare plant specific requirements</b>	NO	
<b>Graded or Ploughed Firebreaks</b>	NO	
<b>Blanket spraying</b>	NO	

<b>Slashing</b>	?	Consider slashing on medium value roadsides only and limit to areas of introduced grass or woody weed seedlings to restrict fire risk. Care should be taken not to spread seed to other sections of the road with higher conservation values. Slashing is best carried out prior to seeding of annual grasses (by December)
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**EVC Description**

**178** Shrubby Foothill Forest/Herb-rich Foothill Forest Complex contains the diverse herb layer of Herb-rich Foothill Forest (EVC 23) while retaining the diverse shrub layer of Shrubby Foothill Forest (EVC 45). It is usually dominated by species which occur at the drier end of both EVC's.

**Potential Threatening Processes:**

**GeneralisedStatus:** D Depleted

**This Management Prescription is currently applicable to the following Surf Coast Roadside Sections:**

ROAD NAME	SECTION_ ORIGIN: NO_AND_ SIDE:	DISTANCE FROM ORIGIN:	SECTION SLU: LENGTH:	GMU3:	LOCALITY:	DATE SURVEYED:
<b>PARKERS</b>	3-R BAMBRA CEMETERY	3.3	0.63	63	3.1.2 BOONAH	17.1.97
<b>PARKERS</b>	4-L BAMBRA CEMETERY	3.9	1.36	63	3.1.2 BOONAH	17.1.97
<b>PARKERS</b>	4-R BAMBRA CEMETERY	3.9	1.36	63	3.1.2 BOONAH	17.1.97

**Calendar of potential roadside management activities:****178M****Winter**

Revegetation Conduct a revegetation program on eroding or priority sites with local Landcare support (Autumn-Spring)

**Spring**

Weed control Arrange spot spraying of noxious and woody weeds  
Revegetation Conduct a revegetation program on eroding or priority sites with local Landcare support (Autumn-Spring)

**Summer**

Weed control Arrange spot spraying of noxious and woody weeds  
Seed Collection Coordinate collection in consultation with DSE and the Ballarat Region Seed Bank

**Autumn**

Revegetation Conduct a revegetation program on eroding or priority sites with local Landcare support (Autumn-Spring)

**General**

Natural regeneration Allow time and protect areas from disturbance  
Erosion/run-off control Ensure all drain and roadworks meet a high standard. Run training activities  
Removal of Exotic Vegetation Remove inappropriate trees and shrubs when labour is available

*Note 1: Revegetation work on roadsides. The Roadside Management Prescriptions adopt the maxim: 'Protect, Enhance and Restore'. Any revegetation works, whether planting or direct seeding should use indigenous species collected from local seed. Wherever possible seed should be collected from the revegetation site or close by from the same Ecological Vegetation Class.*

**High Conservation Roadsides containing Foothill Forest****178 Herb-rich Foothill Forest / Shrubby Foothill Forest Complex Conservation Status: HIGH**

**EVC Notes:** Sections with diverse shrub and ground layers. Forest with a dense shrub layer and a diversity of herbs. This EVC is found on two Surf Coast roadsides, with Pennyroyal Valley Road having the only high-quality occurrence. Southern Blue Gum and Brooker's Gum are VROT species listed.

**SalinityRegime:** Nonsaline **EVCGroup:** 6 Dry Forests

**MoistureRegime:** Dry - Moist **EVCType:** complex

**ExposureRegime:** Various aspects in hilly country or open plains

**Structural Weeds:** Blackberry, Ragwort, Spear Thistle, Cocksfoot, English Broom, Montpellier Broom, Radiata Pine, Hawthorn, Hemlock

**Management Outline:** Restrict soil disturbance. In the absence of disturbance, little active management should be required.

**Comments:** Fertile soils make this EVC Complex extremely vulnerable to weed invasion post disturbance

Management Techniques:	Use:	Comments:
<b>Weed control</b>	YES	Weeds are normally a problem only on disturbed sites. Remove woody weeds and garden escapes. Spot spray, cut and paint or remove serious weeds or any emerging weeds (i.e. yet to establish)
<b>Signage</b>	YES	Signage of all high conservation roadsides is recommended to raise awareness and protect values from inadvertent damage
<b>Natural regeneration</b>	YES	
<b>Erosion/run-off control</b>	YES	Road grading or management should attempt to disperse rather than concentrate water (correct road camber, run-off points, table and mitre drains). Active eroding areas should be stabilised and revegetated
<b>Removal of Exotic Vegetation</b>	YES	Remove any garden escapees or native plants outside their natural range (e.g. Coast tea-tree may invade areas following disturbance)
<b>Rare plant specific requirements</b>	YES	Consult the species list for the roadside. Rare, threatened or endangered plants are noted with a code. Seek advice regarding management required to protect and enhance the species. (DSE). Both species of eucalypts regenerate adequately. No special management for them is required
<b>Seed Collection</b>	YES	Regulate to protect vegetation from over-collection. Both eucalypt species carry seed for most of the year if required
<b>Burning</b>	NO	This EVC benefits from infrequent burning, approximately every 20 years.
<b>Slashing</b>	NO	Not applicable or required
<b>Grazing</b>	NO	
<b>Cropping</b>	NO	
<b>Fencing</b>	NO	
<b>Revegetation</b>	NO	Normally occurs adequately in absence of threats (mostly weed invasion)
<b>Salinity Control</b>	NO	
<b>Graded or Ploughed Firebreaks</b>	NO	
<b>Blanket spraying</b>	NO	



## EVC Description

**178** Shrubby Foothill Forest/Herb-rich Foothill Forest Complex contains the diverse herb layer of Herb-rich Foothill Forest (EVC 23) while retaining the diverse shrub layer of Shrubby Foothill Forest (EVC 45). It is usually dominated by species which occur at the drier end of both EVC's.

## Potential Threatening Processes:

**GeneralisedStatus:** D Depleted

## This Management Prescription is currently applicable to the following Surf Coast Roadside Sections:

ROAD NAME	SECTION_ NO_ AND_ SIDE:	ORIGIN:	DISTANCE FROM ORIGIN:	SECTION LENGTH:	SLU:	GMU3:	LOCALITY:	DATE SURVEYED:
<b>PENNYROYAL VALLE</b>	4-L	DEANS MARSH-LORN	5.3	1.58	73	3.2.2	DEANS MARSH	17.1.97
<b>PENNYROYAL VALLE</b>	4-R	DEANS MARSH-LORN	5.3	1.98	73	3.2.2	DEANS MARSH	17.1.97

## The following Surf Coast Roadside Sections contain listed plant species in this EVC:

<i>Eucalyptus brookeriana</i>	Brooker's Gum	AROTS:	VROTS: r
<b>RD_NAME:</b>		<b>SECTION_NO_AND_SIDE:</b>	
PENNYROYAL VALLEY		4-L	
PENNYROYAL VALLEY		4-R	

## Calendar of potential roadside management activities:

178H

## Spring

Weed control	Arrange spot spraying of noxious and woody weeds
Rare plant specific requirements	Monitor populations of rare species each Spring and adjust management where necessary (in consultation with DSE)

## Summer

Weed control	Arrange spot spraying of noxious and woody weeds
Seed Collection	Coordinate collection in consultation with DSE and the Ballarat Region Seed Bank

## General

Signage	Erect SRV and interpretation signage on HCV roadsides
Natural regeneration	Allow time and protect areas from disturbance
Erosion/run-off control	Ensure all drain and roadworks meet a high standard. Run training activities
Removal of Exotic Vegetation	Remove inappropriate trees and shrubs when labour is available

*Note 1: Revegetation work on roadsides. The Roadside Management Prescriptions adopt the maxim: 'Protect, Enhance and Restore'. Any revegetation works, whether planting or direct seeding should use indigenous species collected from local seed. Wherever possible seed should be collected from the revegetation site or close by from the same Ecological Vegetation Class.*

## High Conservation Roadsides containing Shrubby Wet Forest

### 201 Shrubby Wet Forest

**Conservation Status: HIGH**

**EVC Notes:** Otway Forest Roadsides. Tree-ferns and a variety of tall and medium shrubs dominate the mid-storey of this EVC, with other smaller ferns common below. The ground layer is less varied, with Forest Wire-grass often dominating. This EVC is found on four Surf Coast roads, where it is of high quality in all cases. Brooker's Gum and Southern Blue Gum are classified rare plants (VROTS).

**SalinityRegime:** Nonsaline

**EVCGroup:** 7 Wet or Damp Forests

**MoistureRegime:** Moist

**EVCType:** EVC

**ExposureRegime:** Highly Sheltered

**Structural Weeds:** Ragwort, Blackberry, Oxeye Daisy, Tutsan, Spear Thistle, English Ivy

**Management Outline:** Restrict disturbance due to road construction, road maintenance and logging practices. Little active management will be required in the absence of major disturbance.

**Comments:** Vegetation on these high-quality roadsides is self-sustaining in the absence of threats. Prevent soil disturbance and watch for weed invasion

Management Techniques:	Use:	Comments:
<b>Weed control</b>	YES	Spot spray, cut and paint or remove serious weeds or any emerging weeds (i.e. yet to establish)
<b>Signage</b>	YES	Signage of all high conservation roadsides is recommended to raise awareness and protect values from inadvertent damage
<b>Natural regeneration</b>	YES	
<b>Erosion/run-off control</b>	YES	Road grading or management should attempt to disperse rather than concentrate water (correct road camber, run-off points, table and mitre drains). Active eroding areas should be stabilised and revegetated
<b>Removal of Exotic Vegetation</b>	YES	Remove any garden escapees or native plants outside their natural range (e.g. Melaleucas).
<b>Rare plant specific requirements</b>	YES	Seek advice regarding management required to protect and enhance the species . (DSE). Brooker's Gum and Southern Blue Gum are listed species. Both Eucalypts normally regenerate satisfactorily
<b>Seed Collection</b>	YES	Regulate to protect vegetation from over-collection. Both species of eucalypts have seed available for many months of the year if required
<b>Burning</b>	NO	Burning is likely to be catered for through the incidence of wildfire. This EVC responds positively to a burn approximately every 20 years
<b>Slashing</b>	NO	Not applicable or required
<b>Grazing</b>	NO	
<b>Cropping</b>	NO	
<b>Fencing</b>	NO	
<b>Revegetation</b>	NO	Occurs naturally in the absence of threatening processes
<b>Salinity Control</b>	NO	
<b>Graded or Ploughed Firebreaks</b>	NO	
<b>Blanket spraying</b>	NO	

### EVC Description

**201** Shrubby Wet Forest is widely distributed in the Otways (OR/OP/WP). It occupies western and northern aspects and ridgelines and grows in association with Wet Forest (EVC30) where the elevation and rainfall decreases. Average annual rainfall is high, soils are fertile clay loams over medium to heavy clay.

Shrubby Wet Forest differs from Wet Forest in generally having no epiphyte cover, a lower diversity of ground ferns, and Rough Tree-fern is the common tree-fern (Soft Tree-fern occurring only rarely). In addition, it has a higher diversity and cover of herbs due to increased light reaching the forest floor. The overstorey is a tall forest dominated by Messmate, Mountain Grey Gum, and Manna Gum. Blackwood and Hazel Pomaderris form a lower tree layer. The tall-shrub layer is dominated by mesic shrubs including Prickly Currant-bush, Musk Daisy-bush, Snow daisy-bush, Hazel Pomaderris, Tree Everlasting and Austral Mulberry. Prickly Moses and Hop Goodenia form a mid shrub layer. Tree-form Varnish Wattle and Dwarf Silver Wattle and the shrubs Balm Mint-bush and Dusty Miller also commonly occur, their density varying, possibly in response to timber harvesting. Rough Tree-fern and Mother Shield-fern are common ferns with Austral Bracken dominating.

The ground layer may be sparse and includes the herbs Bidgee-widgee, Cinquefoil Cranesbill, Ivy-leaf Violet, Creeping Wood-sorrel, Galium sp. and Forest Starwort. Mountain Clematis is the only climber and Tall Sword-sedge the only sedge. Forest Wire-grass is commonly present and may dominate, often in response to disturbance.

**Potential Threatening Processes:** timber harvesting, indirect impacts of road construction and maintenance

**Generalised Status:** LC Least Concern

**This Management Prescription is currently applicable to the following Surf Coast Roadside Sections:**

ROAD NAME	SECTION_ NO_AND_SIDE:	ORIGIN:	DISTANCE FROM ORIGIN:	SECTION LENGTH:	SLU:	GMU3:	LOCALITY:	DATE SURVEYED:
<b>BENWERRIN-MT SABI</b>	1-L	LORNE-DEANS	MARS	0	1.6	59 3.1.1	LORNE	28.1.97
<b>BENWERRIN-MT SABI</b>	1-R	LORNE-DEANS	MARS	0	1.6	59 3.1.1	LORNE	28.1.97
<b>BENWERRIN-MT SABI</b>	3-L	LORNE-DEANS	MARS	2.3	5.04	59 3.1.1	BENWERRIN	28.1.97
<b>BENWERRIN-MT SABI</b>	3-R	LORNE-DEANS	MARS	2.3	5.04	59 3.1.1	BENWERRIN	28.1.97
<b>BENWERRIN-MT SABI</b>	5-L	LORNE-DEANS	MARS	8.3	0.61	59 3.1.1	BENWERRIN	28.1.97
<b>BENWERRIN-MT SABI</b>	5-R	LORNE-DEANS	MARS	8.3	0.61	59 3.1.1	BENWERRIN	28.1.97
<b>DEANS MARSH-LORN</b>	5-L	BIRREGURRA-DEANS		12	3.5	63 3.1.2	LORNE	28.1.97
<b>DEANS MARSH-LORN</b>	5-R	BIRREGURRA-DEANS		12	3.5	64 3.1.2	LORNE	28.1.97
<b>ERSKINE FALLS</b>	3-L	POLWARTH ROAD		4.1	7.397	64 3.1.2	LORNE	27.1.97
<b>ERSKINE FALLS</b>	3-R	POLWARTH ROAD		4.1	7.397	64 3.1.2	LORNE	27.1.97
<b>ERSKINE FALLS ACC</b>	1-L	ERSKINE FALLS ROA		0	1.485	61 3.1.2	LORNE	27.1.97
<b>ERSKINE FALLS ACC</b>	1-R	ERSKINE FALLS ROA		0	1.485	61 3.1.2	LORNE	27.1.97

**The following Surf Coast Roadside Sections contain listed plant species in this EVC:**

<b><i>Eucalyptus brookeriana</i></b>	<b>Brooker's Gum</b>	<b>AROTS:</b>	<b>VROTS: r</b>
<b>RD_NAME:</b>		<b>SECTION_NO_AND_SIDE:</b>	
DEANS MARSH-LORNE		5-L	
DEANS MARSH-LORNE		5-R	
BENWERRIN-MT SABINE		1-R	
BENWERRIN-MT SABINE		1-L	
ERSKINE FALLS		3-R	
ERSKINE FALLS		3-L	
<b><i>Eucalyptus globulus ssp. globulus</i></b>	<b>Southern Blue-gum</b>	<b>AROTS:</b>	<b>VROTS: r</b>
<b>RD_NAME:</b>		<b>SECTION_NO_AND_SIDE:</b>	
BENWERRIN-MT SABINE		1-R	
BENWERRIN-MT SABINE		1-L	
ERSKINE FALLS		3-R	
ERSKINE FALLS		3-L	

**Spring**

Weed control	Arrange spot spraying of noxious and woody weeds
Rare plant specific requirements	Monitor populations of rare species each Spring and adjust management where necessary (in consultation with DSE)

**Summer**

Weed control	Arrange spot spraying of noxious and woody weeds
Seed Collection	Coordinate collection in consultation with DSE and the Ballarat Region Seed Bank

**General**

Signage	Erect SRV and interpretation signage on HCV roadsides
Natural regeneration	Allow time and protect areas from disturbance
Erosion/run-off control	Ensure all drain and roadworks meet a high standard. Run training activities
Removal of Exotic Vegetation	Remove inappropriate trees and shrubs when labour is available

*Note 1: Revegetation work on roadsides. The Roadside Management Prescriptions adopt the maxim: 'Protect, Enhance and Restore'. Any revegetation works, whether planting or direct seeding should use indigenous species collected from local seed. Wherever possible seed should be collected from the revegetation site or close by from the same Ecological Vegetation Class.*

**Medium Conservation Roadsides alongside Brackish Wetlands**

656 Brackish Wetland

Conservation Status: **MEDIUM**

**EVC Notes:** Volcanic Plain sites containing Sedgeland or herbland, occasionally grassland, dominated by salt-tolerant species. Sites are localised and intact sites are rare.

**SalinityRegime:** Brackish**EVCGroup:** 19 Wetlands**MoistureRegime:** Dry - Flooded**EVCType:** EVC**ExposureRegime:** Open (plains & foothills)**Structural Weeds:** Sharp Rush, Hastate Orache**Management Outline:** Restrict soil disturbance. Active management should not be required other than targeted weed control.

**Comments:** Brackish wetlands occur inland rather than near the coast. In the Surf Coast Shire they are found along Shelford Road and Cressy Road; both are high quality examples. No AROT/VROT plants are listed. Native trees and shrubs are scarce or absent. Weeds include grasses, other small plants and woody weeds such as Boxthorn.

Management Techniques:	Use:	Comments:
<b>Weed control</b>	YES	Spot spray or remove any noxious weeds or inappropriate plants. Spot-spray around better sites or plant populations
<b>Natural regeneration</b>	YES	Species in Wetland EVCs are adapted to fluctuations in inundation. Generally species are good colonisers in the absence of changes conditions (i.e. a natural regime)
<b>Erosion/run-off control</b>	YES	Road grading or management should attempt to disperse rather than concentrate water (correct road camber, run-off points, table and mitre drains). Active eroding areas should be stabilised and revegetated
<b>Removal of Exotic Vegetation</b>	YES	Remove planted trees and shrubs where these species are actively spreading.
<b>Seed Collection</b>	YES	Regulate to protect vegetation from over-collection
<b>Burning</b>	NO	Wetland itself should require little active management
<b>Slashing</b>	NO	Not applicable or required
<b>Grazing</b>	NO	
<b>Cropping</b>	NO	
<b>Fencing</b>	NO	
<b>Signage</b>	NO	
<b>Salinity Control</b>	NO	
<b>Rare plant specific requirements</b>	NO	
<b>Graded or Ploughed Firebreaks</b>	NO	
<b>Blanket spraying</b>	NO	
<b>Revegetation</b>	?	

**EVC Description**

**656** Sedgeland or herbland, occasionally grassland, dominated by salt-tolerant species, but samphires typically with low cover, if present. Typically occurs on heavy, at least seasonally shallowly inundated to waterlogged soils, on a range of geologies. Previously rare and localised, now mostly degraded by grazing, nutrient runoff and other disturbances. Recorded from the VP bioregion. Victorian Volcanic Plains Brackish Wetland is variously dominated or co-dominated by a wide range of sedges or rushes including Sea Cub-rush, Chaffy Saw-sedge, Sea Rush, Sharp club-rush, and/or herbs including Creeping Monkey-flower, Streaked Arrow-grass, Australian Lilaeopsis, sometimes also Water

ribbons. A Sedgeland mostly to 1–2 m height, or herbland to 0.2 m height. Inundated depressions, including along poorly defined drainage lines. Floristic composition indicates the presence of salinity, but not at levels which greatly restrict species-richness

**Potential Threatening Processes:** clearing for agriculture, grazing, hydrological alteration, salinity, weed invasion

**Generalised Status:** E Endangered

**This Management Prescription is currently applicable to the following Surf Coast Roadside Sections:**

ROAD NAME	SECTION_ NO_AND_SIDE:	ORIGIN:	DISTANCE FROM ORIGIN:	SECTION LENGTH:	SLU:	GMU3:	LOCALITY:	DATE SURVEYED:
SHELFORD	2-L	CRESSY ROAD	0.4	0.21	117	6.1.3	WINCHELSEA	5.8.96
SHELFORD	2-R	CRESSY ROAD	0.4	0.21	117	6.1.3	WINCHELSEA	5.8.96

**Calendar of potential roadside management activities:**

656M

**Spring**

Weed control Arrange spot spraying of noxious and woody weeds

**Summer**

Weed control Arrange spot spraying of noxious and woody weeds

Seed Collection Coordinate collection in consultation with DSE and the Ballarat Region Seed Bank

**General**

Natural regeneration Allow time and protect areas from disturbance

Erosion/run-off control Ensure all drain and roadworks meet a high standard. Run training activities

Removal of Exotic Vegetation Remove inappropriate trees and shrubs when labour is available

*Note 1: Revegetation work on roadsides. The Roadside Management Prescriptions adopt the maxim: 'Protect, Enhance and Restore'. Any revegetation works, whether planting or direct seeding should use indigenous species collected from local seed. Wherever possible seed should be collected from the revegetation site or close by from the same Ecological Vegetation Class.*

**High Conservation Roadsides alongside Brackish Wetlands**

656 Brackish Wetland

**Conservation Status: HIGH**

**EVC Notes:** Volcanic Plain sites containing Sedgeland or herbland, occasionally grassland, dominated by salt-tolerant species. Sites are localised and intact sites are rare.

**SalinityRegime:** Brackish**EVCGroup:** 19 Wetlands**MoistureRegime:** Dry - Flooded**EVCType:** EVC**ExposureRegime:** Open (plains & foothills)**Structural Weeds:** Sharp Rush, Hastate Orache

**Management Outline:** Restrict soil disturbance. Active management is not generally necessary in high quality examples of this EVC. Focus on woody weed eradication and prevention of other weeds invading high quality sites. Brackish wetlands also need protection from soil disturbance, with vehicular access being a particular threat.

**Comments:** Brackish wetlands occur inland rather than near the coast. In the Surf Coast Shire they are found along Shelford Road and Cressy Road; both are high quality examples. No AROT/VROT plants are listed. Native trees and shrubs are scarce or absent. Weeds include grasses, other small plants and woody weeds such as Boxthorn.

<b>Management Techniques:</b>	<b>Use:</b>	<b>Comments:</b>
<b>Weed control</b>	YES	Spot spray or remove any noxious weeds or inappropriate plants. Woody weeds and aggressive grasses are the major weeds requiring removal
<b>Signage</b>	YES	Signage of all high conservation roadsides is recommended to raise awareness and protect values from inadvertent damage
<b>Natural regeneration</b>	YES	Species in Wetland EVCs are adapted to fluctuations in inundation. Generally species are good colonisers in the absence of changes conditions (i.e. a natural regime - without human intervention and in absence of grazing )
<b>Erosion/run-off control</b>	YES	Road grading or management should attempt to disperse rather than concentrate water (correct road camber, run-off points, table and mitre drains). Active eroding areas should be stabilised and revegetated. Careful site consideration and construction of roadside run-off drains is required to minimise ecological damage
<b>Removal of Exotic Vegetation</b>	YES	Remove planted trees and shrubs where these species are actively spreading.
<b>Rare plant specific requirements</b>	YES	Consult the species list for the roadside. No AROTs or VROTs are listed. Rare, threatened or endangered plants are noted with a code. Seek advice regarding management required to protect and enhance the species (DSE).
<b>Seed Collection</b>	YES	Regulate to protect vegetation from over-collection
<b>Burning</b>	NO	Wetland itself should require little active management
<b>Slashing</b>	NO	Not applicable or required
<b>Grazing</b>	NO	
<b>Cropping</b>	NO	
<b>Revegetation</b>	NO	Normally not necessary except after major soil disturbances
<b>Salinity Control</b>	NO	
<b>Graded or Ploughed Firebreaks</b>	NO	
<b>Blanket spraying</b>	NO	

<b>Fencing</b>	?	Consider fencing any fragile remnants where it becomes apparent that a lack of a physical barrier to vehicles/grazing threatens the future of the community or rare plant.
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**EVC Description**

**656** Sedgeland or herbland, occasionally grassland, dominated by salt-tolerant species, but samphires typically with low cover, if present. Typically occurs on heavy, at least seasonally shallowly inundated to waterlogged soils, on a range of geologies. Previously rare and localised, now mostly degraded by grazing, nutrient runoff and other disturbances. Recorded from the VP bioregion.

Victorian Volcanic Plains Brackish Wetland is variously dominated or co-dominated by a wide range of sedges or rushes including Sea Cub-rush, Chaffy Saw-sedge, Sea Rush, Sharp club-rush, and/or herbs including Creeping Monkey-flower, Streaked Arrow-grass, Australian Lilaeopsis, sometimes also Water ribbons. A Sedgeland mostly to 1–2 m height, or herbland to 0.2 m height. Inundated depressions, including along poorly defined drainage lines. Floristic composition indicates the presence of salinity, but not at levels which greatly restrict species-richness

**Potential Threatening Processes:** clearing for agriculture, grazing, hydrological alteration, salinity, weed invasion

**GeneralisedStatus:** E Endangered

**This Management Prescription is currently applicable to the following Surf Coast Roadside Sections:**

ROAD NAME	SECTION_ NO_AND_SIDE:	ORIGIN:	DISTANCE FROM ORIGIN:	SECTION LENGTH:	SLU:	GMU3:	LOCALITY:	DATE SURVEYED:
<b>CRESSY</b>	7-L	RAILWAY LINE	9.7	0.58	117	6.1.3	OMBERSLEY	30.7.96
<b>CRESSY</b>	7-R	RAILWAY LINE	9.7	0.58	117	6.1.3	OMBERSLEY	30.7.96
<b>SHELFORD</b>	5-L	CRESSY ROAD	5.5	0.26	141	6.1.4	WINCHELSEA	5.8.96
<b>SHELFORD</b>	5-R	CRESSY ROAD	5.5	0.26	117	6.1.3	WINCHELSEA	5.8.96

**Calendar of potential roadside management activities:**

656H

**Spring**

Weed control	Arrange spot spraying of noxious and woody weeds
Rare plant specific requirements	Monitor populations of rare species each Spring and adjust management where necessary (in consultation with DSE)

**Summer**

Weed control	Arrange spot spraying of noxious and woody weeds
Seed Collection	Coordinate collection in consultation with DSE and the Ballarat Region Seed Bank

**General**

Signage	Erect SRV and interpretation signage on HCV roadsides
Natural regeneration	Allow time and protect areas from disturbance
Erosion/run-off control	Ensure all drain and roadworks meet a high standard. Run training activities
Removal of Exotic Vegetation	Remove inappropriate trees and shrubs when labour is available

*Note 1: Revegetation work on roadsides. The Roadside Management Prescriptions adopt the maxim: 'Protect, Enhance and Restore'. Any revegetation works, whether planting or direct seeding should use indigenous species collected from local seed. Wherever possible seed should be collected from the revegetation site or close by from the same Ecological Vegetation Class.*



**Medium Conservation Roadside containing a mosaic of Heathy woodland and Sand Heath**

892 Heathy Woodland / Sand Heath Mosaic

Conservation Status: MEDIUM

**EVC Notes:** This EVC contains a diverse range of shrubs and ground layer plants. This EVC is listed for only two Surf Coast Roads. The best example is along Grossman's Road. No listed rare plants (VROTS) are recorded. Weed infestations are generally few.

**SalinityRegime:** Nonsaline**EVCGroup:** 2 Heathy Woodlands**MoistureRegime:** Dry - Waterlogged**EVCType:** mosaic**ExposureRegime:** Sheltered**Structural Weeds:****Management Outline:** Manage as per 48M Heathy Woodland**Comments:**

Management Techniques:	Use:	Comments:
Weed control	YES	Remove or spray weeds encroaching on better quality areas
Natural regeneration	YES	
Revegetation	YES	Revegetate around existing higher-quality patches
Erosion/run-off control	YES	Road grading or management should attempt to disperse rather than concentrate water (correct road camber, run-off points, table and mitre drains). Active eroding areas should be stabilised and revegetated
Removal of Exotic Vegetation	YES	Particularly of woody weeds and garden escapes as required
Seed Collection	YES	Regulate to protect vegetation from over-collection
Burning	NO	This EVC benefits from infrequent burns [once in 20 years?]
Slashing	NO	Slash areas of introduced grass or woody weed seedlings only, to restrict fire risk if required. Care should be taken not to spread seed to other sections of the road with higher conservation values. Slashing is best carried out prior to seeding of annual grasses (by December)
Grazing	NO	
Cropping	NO	
Fencing	NO	
Signage	NO	
Salinity Control	NO	
Rare plant specific requirements	NO	
Graded or Ploughed Firebreaks	NO	
Blanket spraying	NO	

**EVC Description**

892 See EVC48 Heathy Woodland

**Potential Threatening Processes:****GeneralisedStatus:** LC Least Concern**This Management Prescription is currently applicable to the following Surf Coast Roadside Sections:**

ROAD NAME	SECTION_	ORIGIN:	DISTANCE	SECTION	SLU:	GMU3:	LOCALITY:	DATE
	NO_AND_		FROM	LENGTH:				SURVEYED:
	SIDE:		ORIGIN:					
GHAZEEMORE	10-L	MT DUNEED ROAD	8	0.288	133	6.1.4	BELLBRAE	15.11.96

<b>GHAZEEPORE</b>	10-R	MT DUNEED ROAD	8	0.288	171	6.2.4	BELLBRAE	15.11.96
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## Calendar of potential roadside management activities:

892M

**Winter**

Revegetation Conduct a revegetation program on eroding or priority sites with local Landcare support (Autumn-Spring)

**Spring**

Weed control Arrange spot spraying of noxious and woody weeds  
 Revegetation Conduct a revegetation program on eroding or priority sites with local Landcare support (Autumn-Spring)

**Summer**

Weed control Arrange spot spraying of noxious and woody weeds  
 Seed Collection Coordinate collection in consultation with DSE and the Ballarat Region Seed Bank

**Autumn**

Revegetation Conduct a revegetation program on eroding or priority sites with local Landcare support (Autumn-Spring)

**General**

Natural regeneration Allow time and protect areas from disturbance  
 Erosion/run-off control Ensure all drain and roadworks meet a high standard. Run training activities  
 Removal of Exotic Vegetation Remove inappropriate trees and shrubs when labour is available

*Note 1: Revegetation work on roadsides. The Roadside Management Prescriptions adopt the maxim: 'Protect, Enhance and Restore'. Any revegetation works, whether planting or direct seeding should use indigenous species collected from local seed. Wherever possible seed should be collected from the revegetation site or close by from the same Ecological Vegetation Class.*

**High Conservation Roadside containing a mosaic of Heathy Woodland and Sand Heath**

892 Heathy Woodland / Sand Heath Mosaic

Conservation Status: HIGH

**EVC Notes:** This EVC contains a diverse range of shrubs and ground layer plants. This EVC is listed for only two Surf Coast Roads. The best example is along Grossman's Road. No listed rare plants (VROTS) are recorded. Weed infestations are generally few.

**SalinityRegime:** Nonsaline**EVCGroup:** 2 Heathy Woodlands**MoistureRegime:** Dry - Waterlogged**EVCType:** mosaic**ExposureRegime:** Sheltered**Structural Weeds:****Management Outline:** Manage as per 48H Heathy Woodland**Comments:**

Management Techniques:	Use:	Comments:
<b>Weed control</b>	YES	Mostly for invasive woody weeds, plus occasional infestations of exotic grasses and possible other species. Spot spray where appropriate
<b>Signage</b>	YES	SRV signs to be used where desirable for community awareness.
<b>Natural regeneration</b>	YES	Usually occurs satisfactorily, with significant increase after fire
<b>Salinity Control</b>	YES	
<b>Erosion/run-off control</b>	YES	Road grading or management should attempt to disperse rather than concentrate water (correct road camber, run-off points, table and mitre drains). Active eroding areas should be stabilised and revegetated
<b>Removal of Exotic Vegetation</b>	YES	Particularly of woody weeds and garden escapes as required
<b>Seed Collection</b>	YES	Regulate to protect vegetation from over-collection
<b>Burning</b>	NO	Burning is likely to be catered for through the incidence of wildfire. A 20-50 year cycle should be sufficient to maintain diversity.
<b>Slashing</b>	NO	Not applicable or required
<b>Grazing</b>	NO	
<b>Cropping</b>	NO	
<b>Fencing</b>	NO	
<b>Graded or Ploughed Firebreaks</b>	NO	
<b>Blanket spraying</b>	NO	
<b>Revegetation</b>	?	Normally unnecessary but may be required after disturbance
<b>Rare plant specific requirements</b>	?	No AROT/VROTs are known

**EVC Description**

892 See EVC48 Heathy Woodland

**Potential Threatening Processes:****GeneralisedStatus:** LC Least Concern**This Management Prescription is currently applicable to the following Surf Coast Roadside Sections:**

ROAD NAME	SECTION_ NO_AND_ SIDE:	ORIGIN:	DISTANCE FROM ORIGIN:	SECTION LENGTH:	SLU:	GMU3:	LOCALITY:	DATE SURVEYED:
<b>GROSSMANS</b>	2-L	SURFCOAST HWY	0.7	4.28	79	6.2.4	TORQUAY	18.12.96
<b>GROSSMANS</b>	2-R	SURFCOAST HWY	0.7	4.28	79	6.2.4	BELLBRAE	18.12.96

## Calendar of potential roadside management activities:

892H

**Spring**

Weed control Arrange spot spraying of noxious and woody weeds

**Summer**

Weed control Arrange spot spraying of noxious and woody weeds

Seed Collection Coordinate collection in consultation with DSE and the Ballarat Region Seed Bank

**General**

Signage Erect SRV and interpretation signage on HCV roadsides

Natural regeneration Allow time and protect areas from disturbance

Salinity Control Seek grants to rehabilitate secondary salinity areas in conjunction with CCMA and Landcare

Erosion/run-off control Ensure all drain and roadworks meet a high standard. Run training activities

Removal of Exotic Remove inappropriate trees and shrubs when labour is available

Vegetation

*Note 1: Revegetation work on roadsides. The Roadside Management Prescriptions adopt the maxim: 'Protect, Enhance and Restore'. Any revegetation works, whether planting or direct seeding should use indigenous species collected from local seed. Wherever possible seed should be collected from the revegetation site or close by from the same Ecological Vegetation Class.*