Coastal Vegetation Strategy 2022

PART TWO: RECOMMENDED MANAGEMENT ACTIONS



Continue the story. www.greatoceanroadauthority.vic.gov.au



Report Version: FINAL August 2022 Field assessment: Luke Hynes Report: Luke Hynes

Disclaimer

The author advises that the information presented in this report, including any management advice, has been prepared with all due diligence and care, and based on the best available knowledge and research.

However, the author takes no responsibility for any loss, injury or financial damage resulting from the reliance and/or application of management advice provided in the report.

Table of Contents

1.	Introduction	4
	1.1 Management recommendations	4
2.	Management Area A (Torquay)	6
	A1 Point Impossible to the Gap Management Zone	7
	A2 Whites Beach Management Zone	9
	A3 Torquay Foreshore Management Zone	11
	A4 Spring Creek Management Zone	13
	A5 Taylor Park Management Zone	14
	A6 Jan Juc Dunes Management Zone	16
	A7 Jan Juc Clifftops Management Zone	18
	A8 Jan Juc Heath Management Zone	20
3.	Management Area B (Anglesea)	22
	B1 Anglesea Coastal Heath Management Zone	23
	B2 Anglesea Caravan Park Clifftops Management Zone	25
	B3 Anglesea River Management Zone	27
	B4 Four Kings Dunes Management Zone	29
	B5 Anglesea S.L.S.C. Heath Management Zone	31
	B6 Anglesea Woodland Management Zone	33
	B7 Soapy Rocks Management Zone	35
	B8 Point Roadknight Management Zone	37
	B9 Melba Parade Management Zone	39
4.	Management Area C (Aireys Inlet)	41
	C1 Eagle Rock Parade Management Zone	42
	C2 Split Point East Management Zone	44
	C3 Split Point West Management Zone	45
	C4 Painkalac Dunes Management Zone	46
	C5 Painkalac Estuary Management Zone	48
	C6 Fairhaven to Moggs Creek Management Zone	49
	C7 Moggs Creek to Eastern View Management Zone	51
5.	Management Area D (Lorne)	53
	D1 Stony Creek to Armistead Street Management Zone	54
	D2 Bert Alsop Track Management Zone	55

	D3 Erskine Estuary Management Zone
	D4 Lorne Foreshore Management Zone
	D5 Lorne Point Management Zone
	D6 Lorne Back Beaches Management Zone
	D7 Queens Park Central Management Zone
	D8 Queens Park West Management Zone
	D9 Queens Park Oceanside Management Zone
6.	Management Area E (Wye River)
	E1 Wye River Beach Management Zone
	E2 Wye River Inland Management Zone
7.	Management Area F (Kennett River)
	F1 Kennett River Beach Management Zone
	F2 Kennett River Riparian Strip Management Zone
8.	Management Area G (Apollo Bay)
	G1 Onion Bay Management Zone
	G2 Von Mueller Management Zone
	G3 Browns Creek Management Zone
	G4 Petticoat Creek Management Zone
	G5 Skenes Creek to Wild Dog Creek Management Zone
	G6 Apollo Bay Management Zone
	G7 Marengo Management Zone80
	G8 Marengo Back Beaches Management Zone
Ret	erences
Ap	pendices83
	Appendix 1. Common and scientific names of mapped weed species

1. Introduction

The Great Ocean Road Coast and Parks Authority (the Authority) was established as part of the *Great Ocean Road and Environs Protection Act 2020* (the Act) and came into being on 1 December 2020.

The Authority was established to deliver better protection and management of the iconic coast and parks of Victoria's Great Ocean Road. In partnership with the Traditional Owners, we manage, protect and foster resilience of the natural, cultural and heritage values of coastal Crown land and marine waters along the Great Ocean Road.

As a public land manager for the Great Ocean Road coast and parks, we manage a wide variety of public land from National Parks to coastal beaches and town foreshores.

Currently the Authority manages 65 kilometres of coastline between Torquay and Marengo. This area supports significant native vegetation with high social, biodiversity and economic value.

The transfer of coastal public land parcels to the Authority will transition progressively over several years, with the Authority committed to working with existing land managers and volunteer groups to ensure valued local community assets continue to be maintained.

The Authority's Coastal Vegetation Strategy 2022 (the Strategy) guides on-ground management to protect and enhance ecological values over the next five years within these areas.

This plan reviews and builds on the first GORCC Native Vegetation and Weed Action Plan prepared in 2009 (Coomes 2009) and the subsequent GORCC Native Vegetation and Weed Action Plan 2015 – 2020 (Beacon Ecological 2015).

The Strategy is presented as two volumes. Part One of this document provides an overview, condition assessment and review of conservation and weed management work undertaken in the last five years. Part Two includes site maps and outlines the recommended on-ground management actions for the next five years for each zone.

Note: Further objectives will be identified to manage intertidal and marine environs when marine parcels are transferred to the Authority and this Strategy is reviewed and updated.

1.1 MANAGEMENT RECOMMENDATIONS

Coastline managed by the Authority is divided into seven management areas. These areas have been divided up into 45 smaller management zones to assist with identifying management issues and objectives. The following is detailed for each management zone:

- A description of the management zone including ecological vegetation classes and main management issues.
- Review of significant management issues taken from the GORCC 2009 Native Vegetation and Weed Action Plan (Coomes 2009) and GORCC Native Vegetation and Weed Action Plan 2015 2020

(Beacon Ecological 2015) for areas previously managed by GORCC. Note that issues that appear to have improved are in **green bold text**, issues that appear to have remained stable or difficult to determine change are in **orange bold text** and issues that appear to have deteriorated are in **red bold text**.

- A management table detailing:
 - Zone management priority
 - Ecological Vegetation Classes (EVC)
 - Level of environmental community group activity
 - Vegetation quality
 - Any significant ecological values
 - Five-year objectives for weed threats and other management issues.

For a list of common and scientific names of mapped species see <u>Appendix 1</u>.

2. Management Area A (Torquay)

Management Area A is the largest of the eight management areas. It extends along 11 kilometres of coast and is 230 hectares in size adjacent to the townships of Torquay and Jan Juc. It begins in the northeast at Point Impossible and finishes in the southwest at Bones Road, adjacent to the eastern end of Bells Beach Surfing Reserve.

The landscape changes from sandy dune systems in the east to rocky clifftops in the west. The native vegetation is of very high value in the eastern and western sections and is fragmented by modified vegetation and intensive recreational use at Torquay and Jan Juc main beaches. All of Area A is located within the Otway Plains bioregion.

The eight Management Zones in Management Area A are:

•	Point Impossible to the Gap	A1	• Taylor Park	A5
•	Whites Beach	A2	• Jan Juc Dunes	A6
•	Torquay Foreshore	A3	• Jan Juc Clifftops	A7
•	Spring Creek	A4	• Jan Juc Heath	A8



Figure 1 Management zones within the Torquay area.

A1 POINT IMPOSSIBLE TO THE GAP MANAGEMENT ZONE

Point Impossible to the Gap is the largest management zone within the Torquay Management Area A. The dune system contains extensive areas of intact Coastal Dune Scrub and Coastal Alkaline Scrub dominated by stands of Moonah *Melaleuca lanceolata* in the rear dunes. The state significant Coast Wirilda *Acacia uncifolia* is present as a large, healthy population along the rear dunes as well as several smaller populations among the middle dunes. Numerous national and state significant bird species have been noted in the adjacent Thompson Creek estuary and beach by local bird watchers from the Torquay Coast Action group.

Weed cover is generally low, apart from large infestations of Coast Tea-tree. Management objectives reflect this with the majority of infestations aiming to have control of all mature woody weed plants and all non-woody weed infestations controlled annually.

- **Coast Tea-tree:** This species appears to have increased in cover from sporadic populations in 2009 to now dominating large areas in 2015. Some minor control appears to have taken place, slightly reducing the extent of this species in 2021.
- **Boneseed:** Boneseed was mapped as small, widespread localised populations in 2009. 2014 mapping indicates very few records, suggesting a significant decrease in cover. 2021 mapping shows this species as isolated occurrences only.
- African Boxthorn: Noted as being largely under control in 2009. Only isolated specimens were recorded in 2014. Only one specimen was recorded in 2021.
- **Thistles and Mustard Weed:** These species were not noted in 2009, however are now present as light infestations in the rear dunes in the north of the zone. 2021 mapping shows these light infestations to be continuing.
- **Rabbits:** Rabbit numbers were noted as being low in 2009 due to fumigating and baiting by GORCC. Fumigation is continuing on a biannual basis, integrated with efforts by adjacent landholders, the Surf Coast Shire and The Sands Torquay Resort. Evidence of significant rabbit populations was noted during the 2014 and 2021 assessments.
- **Bridal creeper:** Despite annual control over the past five years, this species persists with a limited distribution of small populations. The 2021 mapping shows that this species appears to be increasing in cover and distribution despite control efforts.
- **Dolichos Pea:** Increase in cover between 2014 and 2021.
- **Serrated Tussock:** Was noted in one location in 2009. This infestation has persisted with a second location now recorded. 2021 mapping shows this species as persisting.

Point Impossible t	to the Gap Values and Objectives
Priority	Medium
EVCs present	Coastal Dune Scrub (EVC 160 <i>depleted</i>) Coastal Alkaline Scrub (EVC 858 <i>endangered</i>)
Environmental community group activity	Occasional weed control working bees by Torquay Coast Action.
Vegetation quality	Excellent. Large areas of relatively intact native vegetation, among major weed infestations of Coast Tea- tree.
Significant ecological values	Hooded Plover - Thinornis cucullatus cucullatus (EPBC
	Act vulnerable, FFG Act vulnerable)
	Habitat for Rufous Bristlebird - <i>Dasyornis broadbenti</i> caryochrous (FFG Listed)
	Coastal Moonah Woodland (FFG Listed) Wirilda - Acacia uncifolia (FFG Act endangered) Coast Bitter-bush - Adriana quadripartita (FFG Act endangered) Numerous national and state significant bird species have been noted in the adjacent Thompson Creek estuary and beach.
Weed Threat/Management Action	5 Year Objectives
Weed Threat/Management Action Coast Tea-tree	5 Year Objectives Maintain existing infestations (remove regrowth in areas of previous control).
	Maintain existing infestations (remove regrowth in areas
Coast Tea-tree Woody weeds: Boxthorn, Italian Buckthorn, Myrtle-leaf Milkwort, Sallow	Maintain existing infestations (remove regrowth in areas of previous control).
Coast Tea-tree Woody weeds: Boxthorn, Italian Buckthorn, Myrtle-leaf Milkwort, Sallow Wattle, Mirror Bush	Maintain existing infestations (remove regrowth in areas of previous control). Effectively eradicate mature plants. Restrict to current cover level. No infestations to be
Coast Tea-tree Woody weeds: Boxthorn, Italian Buckthorn, Myrtle-leaf Milkwort, Sallow Wattle, Mirror Bush Bridal Creeper Non-woody weeds: Dolichos Pea, Angled	Maintain existing infestations (remove regrowth in areas of previous control). Effectively eradicate mature plants. Restrict to current cover level. No infestations to be greater than a 10 square metre area.
Coast Tea-tree Woody weeds: Boxthorn, Italian Buckthorn, Myrtle-leaf Milkwort, Sallow Wattle, Mirror Bush Bridal Creeper Non-woody weeds: Dolichos Pea, Angled Onion, Agapanthus, Terracina Spurge Non-woody Weeds: Mustard Weed, Spear	Maintain existing infestations (remove regrowth in areas of previous control).Effectively eradicate mature plants.Restrict to current cover level. No infestations to be greater than a 10 square metre area.Effectively eradicated.
Coast Tea-tree Woody weeds: Boxthorn, Italian Buckthorn, Myrtle-leaf Milkwort, Sallow Wattle, Mirror Bush Bridal Creeper Non-woody weeds: Dolichos Pea, Angled Onion, Agapanthus, Terracina Spurge Non-woody Weeds: Mustard Weed, Spear Thistle, Twiggy Mullein	Maintain existing infestations (remove regrowth in areas of previous control).Effectively eradicate mature plants.Restrict to current cover level. No infestations to be greater than a 10 square metre area.Effectively eradicated.Restrict to current cover levels.

A2 WHITES BEACH MANAGEMENT ZONE

The Whites Beach management zone supports Coastal Dune Scrub vegetation of varying conditions. This zone supports high public visitation with walking tracks, the Torquay Anglers Club, boat ramp, the Torquay Sailing Club's clubrooms and several beach access points. Weed cover across the zone is variable with generally only scattered woody weeds remaining apart from Coast Tea-tree, which provides dense infestations in some areas. Non-woody weed cover is also variable with infestations generally located along the north of the zone adjacent to modified recreation areas and particularly the northeast corner, with infestations of grassy weeds such as Kikuyu and Buffalo grass, as well as annual herbs such as Petty Spurge, Mustard Weed and Twiggy Mullein. Bridal Creeper is also present as scattered infestations across the zone.

The foredune of the Whites Beach management zone is in good condition with the absence of Marram Grass, Sea Spurge and Sea Wheat Grass. This area should be monitored for these species and controlled if noted.

- **Coast Tea-tree:** There is significant reduction of this species in the south of this zone since 2015 with isolated mature patches remaining in the north.
- The mouth of Deep Creek: In 2009, dense Coast Tea-tree and other weeds including Red-eyed Wattle, Coast Banksia, Sea Spurge, Dolichos Pea and Cotoneaster were identified as serious threats, particularly to vegetation to the north along Deep Creek. These weeds have all been removed with only a low cover (1-10%) of Coast Tea-tree persisting. 2021 mapping shows that this area has continued to be managed effectively with the reduced cover of Tea-tree to the east.
- **Boneseed:** In 2009 noted in two locations. Not recorded within management zone in 2014. 2021 mapping shows this species is still absent.
- **Myrtle-leaf Milkwort:** In 2009 this species was noted in the east of the site. Not recorded within management zone in 2014 or 2021.
- **Italian Buckthorn:** In 2009 noted as invading from the west. Reduced cover noted in 2014. 2021 mapping shows some scattered mature plants only.
- **Bridal creeper:** Despite annual control over the past five years this species is persisting with a limited distribution of small populations. 2021 mapping indicates that this species is increasing in cover and distribution across this zone.
- **Serrated Tussock:** This species was not noted within this zone in 2009. In 2014 this species was noted in four locations along the walking track, which borders the north of the zone and must be controlled immediately. 2021 mapping indicates that this species is persisting along the track edge in the north of the zone and increasing in cover.

Table A2 Whites Beach Values and Objectives

Whites Beach Values and Objectives		
Priority	High	
EVCs present	Coastal Dune Scrub (EVC 160 <i>depleted</i>)	
Environmental community group activity	Occasional weed control working bees by Torquay Coast Action.	
Vegetation quality	Vegetation structure altered with moderate to severe infestations, particularly of Coast Tea-tree.	
Significant ecological values	Hooded Plover - <i>Thinornis cucullatus cucullatus</i> (EPBC Act <i>vulnerable</i> , FFG Act <i>vulnerable</i>)	
	Habitat for Rufous Bristlebird - <i>Dasyornis broadbenti</i> caryochrous (FFG Listed)	
Weed Threat/Management Action	5 Year Objectives	
Various woody weeds: Coast Tea-tree, Myrtle-leaf Milkwort, Italian Buckthorn, Karo	Effectively eradicate mature plants.	
Bridal Creeper	Restrict to current cover level. No infestations to be greater than 10 square metre area.	
Non-woody (Bluebell Creeper, Carpet Weed, Watsonia)	Effectively eradicated.	
Non-woody (Mustard Weed, Spear Thistle, Twiggy Mullein)	Restrict to current cover levels.	
Serrated Tussock	Effectively eradicated.	

A3 TORQUAY FORESHORE MANAGEMENT ZONE

The Torquay Foreshore management zone comprises a mix of ecological and recreation areas at Cosy Corner, Yellow Bluff, Point Danger and Torquay Beach. Ecological values include remnant Moonah at the southern end of Cosy Corner and areas of relatively intact Coastal Headland Scrub at Yellow Bluff, Point Danger and Torquay Beach.

Woody weed infestations include occasional Coast Tea-tree and scattered African Boxthorn, Italian Buckthorn and Mirror Bush. Some areas of Coast Tea-tree are providing amenity value and should be removed using a staged approach over the long term. Grassy weeds invading from adjacent recreation areas are also an issue.

- **Coastal Tea-tree:** 2021 mapping shows large areas of successful woody weed removal, particularly Coast Tea-tree since 2014.
- African Boxthorn: Several infestations were recorded across the zone in 2009. This species was absent from the Torquay Foreshore area in 2014 but present at Point Danger and Cosy Corner. 2021 mapping shows this species to be restricted to isolated specimens.
- **Blue Periwinkle:** In 2009 noted in two infestations. In 2014 noted in only one infestation. 2021 mapping shows this species to be reduced in cover.
- **Italian Buckthorn:** Similar levels of infestation were noted between 2009 and 2014. 2021 mapping shows a significant decrease in the cover of this species.
- **Mirror Bush:** In 2009 noted in three locations on Torquay Foreshore. Additional infestations were noted in 2014. The cover of this species significantly reduced in 2021 mapping.
- **Non-woody weeds:** 2021 mapping shows Climbing Groundsel; infestation removed from the centre of management zone.
- **Angled Onion:** Four infestations were noted in 2009. Similar levels of infestation were noted in 2014. Lower levels of cover were recorded in 2021 mapping, although this may be a seasonal effect.
- **Bridal Creeper:** Only noted as a minor infestation in 2015, this species was noted as moderate infestation in 2021 behind the Torquay Surf Lifesaving Club.

Table A3 Torquay Foreshore Values and Objectives

Torquay Foreshore Values and Objectives		
Priority	Medium	
EVCs present	Coastal Headland Scrub (EVC 161 <i>vulnerable</i>) Coastal Alkaline Scrub (EVC 858 <i>endangered</i>)	
Environmental community group activity	There has been significant activity by Torquay Coast Action in the north of this zone at Yellow Bluff with successful grants for revegetation and woody weed removal. Contractors used abseiling equipment in steep locations.	
	Friends of Cosy Corner are a more recent group who have been involved with weed control and revegetation.	
Vegetation quality	A mix of areas of vegetation in good condition interspersed with dense infestations of woody weeds.	
Significant ecological values	Coastal Moonah Woodland (FFG Listed)	
Weed Threat/Management Action	5 Year Objectives	
Coastal Tea-tree	Effectively eradicate from management zone except for amenity plants and dune between the caravan park and beach.	
Various woody weeds: African Boxthorn, Italian Buckthorn, Mirror Bush, Hollyhock	Effectively eradicate all mature plants where accessible.	
Non-woody weeds: Angled Onion, Blue Periwinkle	Effectively eradicate.	
Grassy weeds: Kikuyu	Maintain a buffer of Kikuyu control along the edge of native vegetation.	
Bridal Creeper	Restrict infestation to current levels.	

A4 SPRING CREEK MANAGEMENT ZONE

Spring Creek is dominated by large recreation areas supporting non-locally indigenous trees and shrubs over mown grass. One area of native vegetation with affinities to Coastal Alkaline Scrub vegetation is present in the north of the zone. This area supports relatively intact native vegetation dominated by Moonah with very little woody weed infestation. The understorey supports moderate levels of introduced grasses, such as Panic Veldt-grass, Prairie Grass and Cocksfoot.

Review of significant management issues noted in *GORCC NVWAP* (Coomes 2009) and Beacon Ecological (2015):

- **Agapanthus:** In 2009 noted in several locations within native vegetation at Spring Creek. This species was not noted in 2014 nor 2021.
- Willow Myrtle: One mature specimen was noted in 2014 which has been removed.
- **Bridal Creeper:** While not noted in 2014, isolated specimens were noted north of this zone.

Table A4 Spring Creek Values and Objectives

Spring Creek Values and Objectives		
Priority	Medium	
EVCs present	Coastal Alkaline Scrub (EVC 858 endangered)	
Environmental community group activity	No.	
Vegetation quality	Excellent. Relatively intact native vegetation with some grassy weed in the understorey.	
Significant ecological values	Coastal Moonah Woodland (FFG Listed)	
Weed Threat/Management Action	5 Year Objectives	
Woody Weeds: Coast Tea-tree, Italian Buckthorn, Myrtle-leaf Milkwort	Prevent juveniles from developing into mature specimens.	
Bridal Creeper	Effectively eradicate from the management zone.	

A5 TAYLOR PARK MANAGEMENT ZONE

Taylor Park supports an overstorey of large, planted, non-locally indigenous trees dominated by Sugar Gum *Eucalyptus cladocalyx*. Native vegetation is generally of low quality with some small areas supporting native understory species representative of Grassy Woodland (EVC 175).

Weed cover across the site is moderate with only species that pose a risk to the adjacent native vegetation at Zeally Bay mapped during the current mapping, particularly Sallow Wattle Coast Tea-tree and Italian Buckthorn.

Review of significant management issues noted in GORCC NVWAP (Coomes 2009) and Beacon Ecological (2015):

- **Boneseed:** While not mapped in 2009, removal of Boneseed is identified as a high priority action. This species was not recorded at Taylor Park in 2014 nor 2021.
- **Crassula and Miniature Pine Trees:** While not mapped in 2009 staged removal of these two species is a medium priority action. 2014 cover of these species suggests that staged removal had not occurred. 2021 mapping shows a significant reduction of cover for these species.
- **Italian Buckthorn:** While not mapped in 2009, removal of Buckthorn is identified as a high priority action. One infestation was noted in 2014. The cover of this infestation has been reduced in 2021 mapping.
- **Bridal Creeper:** While not mapped in 2009, removal of Bridal Creeper is identified as a high priority action. This species was not recorded at Taylor Park in 2014. One specimen was recorded in 2021.
- **Watsonia:** Watsonia was not recorded during the 2014 assessment but was recorded as several small infestations close to the Torquay Bowls Club in 2021.

Table A5 Taylor Park Values and Objectives

Taylor Park Values and Objectives	
Priority	Low
EVCs present	Grassy Woodland (EVC 175 endangered)
Environmental community group activity	Friends of Taylor Park have implemented weed control and revegetation over many years.
Vegetation quality	Degraded. While the site supports some ecological values, mostly understorey species with affinities to Grassy Woodland, weeds dominate Taylor Park.
Significant ecological values	Potential habitat for Swift Parrot - <i>Lathamus discolor</i> (EPBC Act <i>critically endangered</i> , FFG Act <i>critically</i> <i>endangered</i>)

Weed Threat/Management Action	5 Year Objectives
Woody weeds: Coast Tea-tree, Sallow Wattle, Sweet Pittosporum, Italian Buckthorn, Cootamundra Wattle, Giant Honey Myrtle	Effectively eradicate all mature plants.
Grassy weeds: Serrated Tussock and Chilean Needle Grass	Maintain as effectively eradicated.
Succulent weeds: Aeonium, Fairy Crassula, Miniature Pine Tree	Effectively eradicate.

A6 JAN JUC DUNES MANAGEMENT ZONE

The Jan Juc dunes are a large area of sand dunes supporting Coastal Dune Scrub with Coastal Headland Scrub vegetation on the cliff edge and at Rocky Point. While some high ecological values are present overall, the vegetation condition is moderate with large areas dominated by Coast Tea-tree. This zone is subject to illegal camping and fire remains with campsites noted during the field assessment.

- **Woody weeds:** (Italian Buckthorn, Myrtle-leaf Milkwort, Boneseed, African Boxthorn, Sallow Wattle, Sweet Pittosporum) 2021 mapping shows a significant decrease in cover of these species in this zone, particularly Italian Buckthorn.
- **Gazania:** In 2009 two infestations were noted in the dunes adjacent to the Jan Juc Creek river mouth. The 2014 mapping identified that these infestations are still present. 2021 mapping shows these infestations to have been removed.
- **Coast Tea-tree**: In 2009 noted that this zone is dominated by numerous woody weeds, particular Coast Tea-tree. The 2014 and 2021 mapping notes that this is still the case with a dense cover of Coast Tea-tree persisting with some control occurring in the west.
- **Bridal Creeper:** 2014 mapping showed a small infestation in the east. This infestation has been removed but a larger infestation was mapped nearby in the 2021 mapping.

Table A6 Jan Juc Dunes Values and Objectives

Jan Juc Dunes Values and Objectives		
Priority	Medium	
EVCs present	Coastal Dune Scrub (EVC 160 <i>depleted</i>), Coastal Headland Scrub (EVC 161 <i>vulnerable</i>)	
Environmental community group activity	No.	
Vegetation quality	Degraded. While the site supports some ecological values, woody weeds such as Coast Tea-tree, Sallow Wattle and Italian Buckthorn dominate the overstorey.	
Significant ecological values	Coast Twin-leaf - <i>Roepera billardierei</i> (FFG Act <i>endangered</i>)	
Weed Threat/Management Action	5 Year Objectives	
Coast Tea-tree	Effectively eradicate mature plants from Rocky Point, estuary to Rocky Point and between Jan Juc Creek and the Jan Juc Surf Lifesaving Club. Remove 25% of mature plants within the remainder of the management zone.	
Various Woody Weeds: Italian Buckthorn, African Boxthorn, Boneseed, Myrtle-leaf Milkwort.	Effectively eradicate all mature plants.	
Dolichos Pea	Maintain as effectively eradicated.	

A7 JAN JUC CLIFFTOPS MANAGEMENT ZONE

The Jan Juc Clifftops is bordered to the north by the Jan Juc township. Vegetation condition is generally excellent, supporting remnant native vegetation and revegetation with affinities to Coastal Headland Scrub. Remnant grassland vegetation dominated by Kangaroo Grass is also present in the centre of the zone. Given the proximity to residential areas and high visitation rates, the majority of tracks have been fenced to prevent inappropriate access.

Woody weeds are restricted to scattered seedlings. Non-woody weeds include several pasture grasses, particularly Toowoomba Canary-grass, Cocksfoot, Yorkshire Fog, Vulpia and Rats-tail Fescue. After several years of control, Gazania is mostly absent. Several illegal campsites were noted within Moonah stands at the western end of the zone.

- **Woody weeds** (Coast Tea-tree, Italian Buckthorn, Myrtle-leaf Milkwort, Boneseed, African Boxthorn, Sallow Wattle, Sweet Pittosporum): In 2009 it was noted that this zone supports numerous small infestations and seedlings of various woody weeds. The 2014 mapping notes that all mature plants were eliminated and only seedlings were present. 2021 mapping shows similar results with a few isolated Sallow Wattle, Sugar Gum and Myrtle-leaf Milkwort. 2021 mapping did identify significant amounts of Myrtle-leaf Milkwort seedlings near the Steps and Boobs beach access.
- **Non-woody weeds** (Diosma and Crassula): These species were noted west of the Bird Rock lookout in 2009. Both these species were not recorded within the management zone in 2014 nor 2021.
- **Gazania:** 2009 mapping indicates that Gazania is a conspicuous weed that should be removed over 3-5 years. 2014 mapping showed that despite consistent control of this species by volunteers, GORCC staff and contractors Gazania is still present. 2021 mapping shows this species to be effectively eradicated.
- **Inappropriate access:** The 2009 report noted that inappropriate access was occurring in some areas of native vegetation, particularly grassland vegetation. The majority of native vegetation within the Jan Juc Clifftops is now fenced with post and wire fencing. Some inappropriate access is still occurring in Moonah clifftop areas.
- Adjacent landholders: Given the proximity of residential gardens and risk of garden escapees, the 2009 report identified engagement of the local community as an important action. Efforts have been made to raise awareness of Gazania; however, other invasive species have not been targeted.
- **South African Weed Orchid:** This is a new and emerging weed for Victoria and has been noted as a moderate infestation in the grassland area south of Carnoustie Avenue during the 2021 assessment. This species was not recorded in 2009 or 2014.

Table A7 Jan Juc Clifftops Values and Objectives

Jan Juc Clifftops Values and Objectives		
Priority	High	
EVCs present	Coastal Headland Scrub (EVC 161 vulnerable)	
Environmental community group activity	Jan Juc Coast Action group undertakes monthly working bees in this zone targeting woody weed seedlings, Gazania and grassy weeds.	
Vegetation quality	Excellent. Zone supports several significant ecological values.	
Significant ecological values	Coast Twin-leaf - Roepera billardierei (FFG Act endangered) Rufous Bristlebird - Dasyornis broadbenti caryochrous (FFG Act vulnerable) Swamp Diuris - Diuris palustris (FFG Act endangered) Peninsula Daisy-bush - Olearia sp. 2 (FFG Act endangered) Bellarine Yellow Gum - Eucalyptus leucoxylon subsp. bellarinensis (FFG Act critically endangered) Coastal Moonah Woodland (FFG Listed)	
Weed Threat/Management Action	5 Year Objectives	
Woody weeds: Coast Tea-tree, Italian Buckthorn, Myrtle-leaf Milkwort, Boneseed, African Boxthorn, Sallow Wattle, Sweet Pittosporum, Tree Mallow, Tuart	Prevent juveniles from developing into mature specimens.	
Non-woody weeds: Gazania, Carpet Weed	Maintain as effectively eradicated.	
South African Weed Orchid	Control annually.	

A8 JAN JUC HEATH MANAGEMENT ZONE

The Jan Juc Heath is a large area dominated by high-quality native vegetation with affinities to Coastal Headland Scrub and Clay Heathland. This zone supports a single walking track along the northern edge with a car park and beach access to the surf breaks Steps and Boobs at the eastern end. Low-density residential areas about the zone to the north and the Bells Beach Recreation Reserve managed by the Surf Coast Shire to the west. The native species Prickly Tea-tree may be increasing in cover across the heathland area adversely impacting ecological values and biodiversity of the site. The cover of this species should be monitored and action, such as a prescribed burn or manual removal of shrubs, implemented if required.

Weeds are restricted to isolated occurrences of woody weed seedlings and juveniles including Boneseed, Sallow Wattle and Coast Tea-tree across the zone and Myrtle-leaf Milkwort at the eastern end. Nonwoody weeds include various pasture grasses scattered mostly along the walking track edge and one area with small infestations of Serrated Tussock and Bridal Creeper.

- **Boneseed:** In 2009 noted as numerous infestations, particularly around the beach access track in the east of the zone. In 2014, infestations were greatly reduced. In 2021 most records showed isolated juvenile plants.
- **Woody weeds** (Coast Tea-tree, Myrtle-leaf Milkwort, African Boxthorn, Sallow Wattle, Sweet Pittosporum, Mirror Bush): In 2009 noted that this zone supports numerous small infestations and seedlings of various woody weeds. The 2014 and 2021 mapping notes that all mature plants were essentially eliminated with only seedlings present.
- **Black Kennedia:** In 2009 recorded as one infestation on the north border of the zone. This species was not recorded in 2014 and 2021 and is considered absent from the zone.
- **Serrated Tussock:** In 2009 this species was recorded as two infestations. 2014 mapping indicates that these infestations persist and may have increased. 2021 mapping shows only one infestation of Serrated Tussock with reduced cover.
- **Bridal Creeper:** In 2009 this species was recorded as one infestation. 2014 mapping recorded three small infestations. 2021 mapping shows a reduced cover of this species although this may be a seasonal effect.

Table A8 Jan Juc Heath Values and Objectives

Jan Juc He	ath Values and Objectives
Priority	High
EVCs present	Coastal Headland Scrub (EVC 161 <i>vulnerable</i>) Clay Heathland (EVC 7 <i>vulnerable</i>)
Environmental community group activity	While within the Jan Juc Coast Action group area, this group undertakes little activity in this zone.
Vegetation quality	Excellent. The zone supports relatively intact native vegetation and significant ecological values.
Significant ecological values	Coast Twin-leaf - <i>Roepera billardierei</i> (FFG Act endangered) Rufous Bristlebird - <i>Dasyornis broadbenti caryochrous</i> (FFG Act vulnerable)
	(FFG Act valuerable) Bellarine Yellow Gum - Eucalyptus leucoxylon subsp. bellarinensis (FFG Act critically endangered) Paper Flower - Thomasia petalocalyx (FFG Act endangered) Coastal Moonah Woodland (FFG Listed)
Weed Threat/Management Action	5 Year Objectives
Woody Weeds: Coast Tea-tree (and hybrids), Italian Buckthorn, Myrtle-leaf Milkwort, Boneseed, African Boxthorn, Sallow Wattle, Sweet Pittosporum	Prevent juveniles from developing into mature specimens.
Bridal Creeper	Maintain as effectively eradicated.
Serrated Tussock	Maintain as effectively eradicated.
Non-woody weeds: Toowoomba Canary- grass, Cocksfoot, Panic Veldt-grass, Sweet Vernal-grass	Contain to existing infestations.
Illegal camping and fires	Remove campsites as required.

3. Management Area B (Anglesea)

Management Area B covers approximately five kilometres of coast and is 99 hectares in size. It begins at the Anglesea Coastal Heath in the northeast at Inverlochy Street and finishes in the southwest at the intersection of O'Donohue Road and Melba Parade. All of area B is located within the Otway Plains bioregion.

The landscape is variable with coastal cliffs in the east and sand dune and saltmarsh systems bordering the Anglesea River mouth. Coastal cliffs dominate the centre of the area with dune systems at the western end. The Anglesea township borders much of the management area. The community environmental group ANGAIR and subgroup Friends of Anglesea Coast are active across this area.

B2

B3

B4

B5

The nine Management Zones in Management Area B are:

- Anglesea Coastal Heath B1
- Anglesea Caravan Park Clifftops
- Anglesea River
- Four Kings Dunes
- Anglesea S.L.S.C Heath

- Anglesea Woodland B6
- Soapy Rocks
 B7
- Point Roadknight B8
- Melba Parade B9



B1 ANGLESEA COASTAL HEATH MANAGEMENT ZONE

The Anglesea Coastal Heath is a large area supporting significant ecological values, dominated by highquality native vegetation with affinities to Clay Heathland and Heathy Woodland. This zone supports a walking track along the southern edge with a car park and access track at the eastern end. Residential areas about the zone in the west, Barwon Water sewerage works to the north and The Great Otway National Park to the east.

Woody weeds are restricted to isolated, scattered infestations mostly of seedlings and juveniles. Nonwoody weeds also occur as isolated infestations. The native species Prickly Tea-tree may be increasing in cover across the heathland area, adversely impacting ecological values and biodiversity of the site. The cover of this species should be monitored and action, such as a prescribed burn or manual removal of shrubs, implemented if required. While the walking tracks are not fenced, this area does not appear to receive high levels of visitation and access appears restricted to existing paths.

- Woody weeds (Coast Tea-tree, African Boxthorn, Sallow Wattle, Sweet Pittosporum, Radiata Pine, Green Honey-myrtle): In 2009 it was noted that this zone supports numerous small infestations and seedlings of various woody weeds. The 2014 and 2021 mapping notes virtually all mature plants were eliminated and only seedlings or juveniles present.
- Spanish Heath: One infestation was noted in 2009. Not recorded in 2014 nor 2021.
- **Boneseed:** In 2009 noted as numerous infestations. In 2014 and 2021 the number of infestations was greatly reduced with juvenile plants accounting for most of the records.
- **Gravel pit rehabilitation**: In 2009 it was noted that the old gravel pit required ongoing rehabilitation and revegetation. The 2014 site assessment and comparison of historical aerial photos noted that this area has improved in condition. The 2021 assessment shows this improvement continuing.
- **Watsonia:** One infestation of the species was mapped in 2009 adjacent to the Barwon Water sewerage works. Two Watsonia infestations were mapped along the residential areas in the east in 2014. This species was not noted during the 2021 assessment.
- **Freesia:** This species was not recorded in 2009. 2014 mapping identified several infestations in the northeast. 2021 mapping shows a decrease in cover for this species.
- **Bluebell Creeper: This** species was not recorded in 2009. Several small infestations were mapped in 2014. 2021 showed a reduction in cover and number of infestations for this species.
- **Bridal Creeper:** This species was not recorded in 2009. One infestation was mapped in the east in 2014. 2021 mapping shows this species to have retained a similar cover.

Table B1 Anglesea Coastal Heath Values and Objectives

Anglesea Coasta	l Heath Values and Objectives
Priority	High
EVCs Present	Heathy Woodland (EVC 48 <i>least concern</i>) Clay Heathland (EVC 7 <i>vulnerable</i>)
Environmental Community Group Activity	ANGAIR runs annual working bees in this area controlling woody weeds.
Vegetation Quality	Near pristine. The zone supports relatively intact native vegetation and significant ecological values.
Significant Ecological Values	Spiral Sun orchid - <i>Thelymitra matthewsii</i> (EPBC Act <i>vulnerable,</i> FFG Act <i>endangered</i>) Rufous Bristlebird - <i>Dasyornis broadbenti caryochrous</i> (FFG Act <i>vulnerable</i>) Swamp Antechinus - <i>Antechinus minimus</i> <i>maritimus</i> (EPBC Act <i>vulnerable,</i> FFG Act <i>vulnerable</i>)
Weed Threat/Management Action	5 Year Objectives
Woody Weeds: Coast Tea-tree, African Boxthorn, Sallow Wattle, Sweet Pittosporum, Radiata Pine, Green Honey- myrtle, Boneseed	Prevent juveniles from developing into mature specimens.
Non-woody weeds: Bridal Creeper, Watsonia, Bluebell Creeper, Freesia	Effectively eradicate.
Encroachment of Drooping Sheoak, Prickly Tea-tree and Golden Wattle	Monitor cover and remove plants as required, Investigate ecological burn.

B2 ANGLESEA CARAVAN PARK CLIFFTOPS MANAGEMENT ZONE

The Anglesea Family Caravan Park Clifftops is a thin strip of native vegetation with affinities to Coastal Headland Scrub along the clifftops and an area of Moonah dominated Coastal Alkaline Scrub at the west end of the zone. The zone is adjacent to the Anglesea Family Caravan Park. Fencing exists for the Coastal Headland Scrub vegetation but not for the Coastal Alkaline Scrub. Two walking tracks are present in the east which merge to form a single track along between the caravan park and native vegetation.

This zone appears to have a reduction in woody weeds with various woody weeds in the east although mostly as seedlings and juveniles with scattered mature Coast Tea-tree present along the clifftops. Non woody cover is low.

- **Woody Weeds** (African Boxthorn, Sallow Wattle, Sweet Pittosporum, Sweet Hakea, Boneseed, Mirror Bush): In 2009 noted that this zone supports numerous infestations of various woody weeds, particularly in the east. The 2014 mapping notes many of the mature plants were eliminated and only seedlings or juveniles present. 2021 mapping shows virtually all mature woody weeds removed apart from some scattered individuals and those close to the cliff edge that are unsafe to remove.
- **Coast Tea-tree:** Recorded across the zone in 2009. Numerous infestations were mapped in 2014 but a great proportion of these are seedlings. Several mature plants are present on the cliff edge where removal may be unsafe for occupational health and safety or erosion. 2021 mapping shows cover of this species to have been reduced further.
- **Freesia:** One Freesia infestation was noted in 2009. One Freesia infestation was noted in 2009 and again in 2021 in the same location.
- **Asparagus Fern:** This species was not recorded in 2009. One infestation was recorded in the northeast of the zone. This species was not noted in 2021 but may be due to seasonal effects.
- **Bridal Creeper:** One infestation was noted at the west end in 2009. Numerous infestations were noted in 2014. Bridal Creeper appears to be expanding in cover and moving east. 2021 mapping shows that this species is absent from much of the east of the zone with some infestation in the west although this may be because of seasonal effects.

Anglesea Family Carava	n Park Clifftops Values and Objectives
Priority	High
EVCs Present	Coastal Alkaline Scrub (EVC 858 <i>endangered</i>) Coastal Headland Scrub (EVC 161 <i>vulnerable</i>)
Environmental community group activity	ANGAIR has conducted works within this area.
Vegetation quality	Very Good. Areas of relatively intact native vegetation interspersed with woody and non-woody weed infestations.
Significant ecological values	Rufous Bristlebird - <i>Dasyornis broadbenti caryochrous</i> (FFG Act <i>vulnerable</i>)
	Coastal Moonah Woodland (FFG listed)
Weed Threat/Management Action	5 Year Objectives
Currently sufficient resources to achi	eve
Woody Weeds: Coast Tea-tree, African Boxthorn, Sallow Wattle, Sweet Pittosporum, Radiata Pine, Green Honey- myrtle, Boneseed.	Effectively eradicate all mature plants.
Non-woody weeds: Bridal Creeper, Watsonia, Bluebell Creeper, Freesia.	Effectively eradicate.
Encroachment of Drooping Sheoak, Prickly Tea-tree and Golden Wattle.	Monitor cover and remove plants as required, Investigate ecological burn.

Table B2 Anglesea Family Caravan Park Clifftops Values and Objectives

B3 ANGLESEA RIVER MANAGEMENT ZONE

The Anglesea River Management Zone includes the sand dunes on the east side of the Anglesea River mouth supporting modified Coastal Dune Scrub and Coastal Saltmarsh north of the caravan park supporting a mix of Coastal Saltmarsh and Coastal Alkaline Scrub vegetation. Coastal Saltmarsh vegetation meets the condition thresholds for the EPBC listed *Subtropical and Temperate Coastal Saltmarsh* community.

A stormwater outflow pipe from the caravan park enters the Coastal Saltmarsh in the north of the zone. This may be altering local conditions and reducing biodiversity. The increase in Common Reed cover is consistent with reported negative impacts of stormwater on Saltmarsh systems (Victorian Saltmarsh Study 2011, TSSC 2013).

Weed infestations are negligible within this zone excepting a few isolated woody weeds, Spiny Rush in the centre and Bridal Creeper infestation in the west.

- **Woody Weeds:** (Coast Tea-tree and Mirror Bush): Cover of these species has been reduced to low levels in general with some new isolated infestations noted.
- **Sea Spurge:** Two infestations were noted in 2009. This species was not noted in 2014 mapping. One small infestation was noted in the 2021 mapping.
- **Bridal Creeper:** This species is noted in the 2009 mapping but no indication of size or severity. 2014 mapping indicates that while cover is low in the dunes it is relatively consistent across the site. This species was not noted during the 2021 mapping however this may be due to seasonal effects.
- **Purple Groundsel:** 2021 mapping showed a reduced cover although this may be a seasonal effect.
- **Spiny Rush:** 2021 mapping shows that the infestation noted in 2014 has been controlled with some reshooting occurring. Two additional small infestations were noted in the saltmarsh area.
- **Dolichos Pea:** 2021 mapping shows this species has marginally increased in cover since 2014 in the dune area.

Anglesea Riv	ver Values and Objectives
Priority	High
EVCs Present	Coastal Dune Scrub (EVC 160 depleted) Coastal Saltmarsh (EVC 9 endangered) Coastal Alkaline Scrub (EVC 858 endangered)
Environmental Community Group Activity	No.
Vegetation Quality	Degraded in dune area. Native remnant shrub species are present over a highly modified understorey. Pristine in Saltmarsh Area. Native vegetation within this area is relatively intact with very little weed cover.
Significant Ecological Values	Subtropical and Temperate Coastal Saltmarsh (EPBC listed, <i>vulnerable</i>) Coastal Moonah Woodland (FFG Listed) Salt Lawrencia - <i>Lawrencia spicata</i> (FFG Act <i>endangered</i>)
Weed Threat/Management Action	5 Year Objectives
Woody Weeds: Coast Tea-tree, Mirror Bush, Sallow Wattle	Effectively eradicate all mature plants.
Bridal Creeper	Control annually. Maintain infestation levels with no infestations greater than 5m2.
Purple Groundsel and Sea Spurge	Control annually.
Dolichos Pea	Effectively eradicate.
Spiny Rush	Effectively eradicate.

B4 FOUR KINGS DUNES MANAGEMENT ZONE

The Four Kings Dunes is immediately west of the Anglesea river mouth and supports Coastal Dune Scrub vegetation. This zone is adjacent to a large car parking area and receives high visitation as a main access point to Anglesea Beach.

Significant weed control and revegetation by has been undertaken by ANGAIR in conjunction with GORCC. Infestations are now mostly small, scattered infestations with Coast Tea-tree dominant on the foredune.

- **Woody Weeds** (Myrtle-leaf Milkwort, Mirror Bush, Boneseed, Coast Tea-tree): The 2009 mapping and vegetation description indicates that this area supported dense infestations of woody weeds. 2014 mapping indicates a significant reduction woody weed levels. Coast Tea-tree infestations are still present on the foredunes. 2021 mapping shows these levels to have been maintained
- **Dolichos Pea:** This species is noted as several infestations in the 2009 mapping. 2014 mapping indicates that infestations are at a similar level. 2021 mapping shows that the cover of this species has decreased.
- Agapanthus: 2021 mapping shows that cover of this species has decreased since the 2014 mapping.
- **Bluebell Creeper:** One infestation was noted in 2014 which was not recorded during the 2021 mapping.
- **Bridal Creeper:** This species is noted as several infestations in the 2009 mapping. 2014 mapping indicates that this species is persisting but possibly at lower cover.
- **Blue Periwinkle:** 2021 mapping shows that cover of this species has decreased since the 2014 mapping but not significantly.
- Asparagus Fern: This species was not noted during the 2014 assessment but has been recorded as a moderate infestation in the west during 2021. *This species should be targeted for control.*
- **Gazania:** This species was not noted during the 2014 assessment but has been recorded as a small infestation in the west during 2021. *This species should be targeted for control.*

Table B4 Four Kings Dunes Values and Objectives

Four King	s Values and Objectives
Priority	Medium
EVCs Present	Coastal Dune Scrub (EVC 160 <i>depleted</i>)
Environmental Community Group Activity	Significant weed control and revegetation by ANGAIR.
Vegetation Quality	Very good. Significant resources over the last five years have enhanced vegetation quality of this zone.
Significant Ecological Values	Rufous Bristlebird - <i>Dasyornis broadbenti caryochrous</i> (FFG Act <i>vulnerable</i>)
	Coast Twin-leaf - <i>Roepera billardierei</i> (FFG Act endangered)
Weed Threat/Management Action	5 Year Objectives
Woody Weeds: Coast Tea-tree Blackberry, Mirror Bush, Myrtle-leaf Milkwort, Showy Honey-myrtle	Effectively eradicate mature plants.
Bridal Creeper and Asparagus Fern	Control annually. Maintain infestation levels with no infestations greater than 5m2.
Non-woody weeds: Dolichos Pea, Agapanthus, Gazania, Blue Periwinkle	Effectively eradicated.
Purple Groundsel and Sea Spurge	Control annually.

B5 ANGLESEA S.L.S.C. HEATH MANAGEMENT ZONE

Anglesea S.L.S.C Heath is between the Anglesea Surf Lifesaving Club and the Great Ocean Road lookout. The Coastal Headland Scrub is exposed to ocean influences, supporting a diversity of low heath species. Native vegetation is fenced with a walking path along the northern boundary. Significant weed control and ongoing follow up has been undertaken by ANGAIR in conjunction with the Authority.

- Woody Weeds (Coast Tea-tree, Green Honey-myrtle, Sweet Pittosporum, Sallow Wattle, Monterey Cypress, Boneseed): The 2009 mapping and vegetation description indicates that this area had recently been cleared of the majority of woody weeds. 2014 and 2021 mapping indicates a significant follow up weed control is being implemented with only woody weed seedlings and juvenile plants present.
- **Watsonia:** This species is noted as a single infestation in the 2009 mapping. 2014 mapping indicates that this infestation is persisting but significantly reduced in size. A second small infestation was noted in 2021.
- **Bluebell Creeper:** This species was not noted in the 2009 mapping. 2014 mapping indicates that several infestations are present in the centre of the zone. 2021 mapping shows that while reduced in cover, this species is present across the majority of the zone.
- **English Ivy:** 2021 mapping identified a small infestation in the east of the zone. This species has not been previously recorded in this zone.

Table B5 Anglesea S.L.S.C. Values and Objectives

Anglesea S.L.	S.C. Values and Objectives
Priority	High
EVCs Present	Coastal Headland Scrub (EVC 161 <i>vulnerable</i>)
Environmental Community Group Activity	Significant weed control by ANGAIR.
Vegetation Quality	Pristine. Significant woody weed control over the last five years have enhanced vegetation quality of this zone.
Significant Ecological Values	Rufous Bristlebird - Dasyornis broadbenti caryochrous
	(FFG Act vulnerable)
	Paper Flower - <i>Thomasia petalocalyx</i> (FFG Act endangered)
Weed Threat/Management Action	5 Year Objectives
Woody Weeds: Coast Tea-tree, Mirror Bush, Blackberry, Boneseed, Sallow Wattle, Sweet Pittosporum	Effectively eradicate all mature plants.
Non-woody Weeds: Watsonia, Bluebell Creeper, English Ivy	Effectively eradicate all plants.
Encroachment by native Boobialla	Monitor and control as required. Investigate possibility of ecological burn.

B6 ANGLESEA WOODLAND MANAGEMENT ZONE

This area supports vegetation with affinity to Coastal Headland Scrub in areas exposed to the ocean and Heathy Woodland moving away from the coast. An unfenced walking track is present along the south of the zone. The dense nature of the native vegetation is generally preventing inappropriate access off the tracks.

The Authority has undertaken significant woody weed control within areas of Heathy Woodland and also targeted Bridal Creeper with a significant reduction in cover of Sweet Pittosporum, Boneseed and Sallow Wattle. Woody weeds are present mostly in unsafe to access locations with some woody weed infestations still present. This area was not assessed as part of the GORCC NVWAP (Coomes 2009). Given the difficulties in controlling weeds close to the clifftops, different objectives have been set for the ocean and inland side of the walking track.

- **Woody Weeds:** (Sallow Wattle, Sweet Pittosporum, Boneseed, Coast Tea-tree) Woody weed cover has decreased significantly across the zone between 2021 and 2014 with large areas of mature plants controlled successfully. Seedling cover is still prevalent across much of the zone and will need ongoing management.
- Asparagus Fern and Bridal Creeper: 2021 mapping shows cover of these species has decreased since 2014 although this may be a seasonal effect.
- Watsonia: 2021 mapping of this species shows that cover of this species is significantly reduced.
- Agapanthus: 2021 and 2014 cover of this species has remained roughly the same.
- Bluebell Creeper: 2021 mapping shows cover of this species has increased since 2014.

Table B6 Anglesea Woodland Values and Objectives

Anglesea Woo	dland Values and Objectives
Priority	High
EVCs Present	Heathy Woodland (EVC 48 <i>least concern</i>) Coastal Headland Scrub (EVC 161 <i>vulnerable</i>)
Environmental Community Group Activity	No.
Vegetation Quality	Excellent. While this zone supports a variety of woody and non-woody weeds, cover of these species is generally low.
Significant Ecological Values	Paper Flower - Thomasia petalocalyx (FFG Act endangered) Otway Grey Gum - Eucalyptus litoralis (FFG Act endangered) Habitat for Southern Brown Bandicoot - Isoodon obesulus obesulus (EPBC Act endangered, FFG Act endangered) Habitat for White Footed Dunnart - Sminthopsis leucopus (FFG Act vulnerable)
Weed Threat/Management Action	5 Year Objectives
Weed Threat/Management Action Inland side of walking track	5 Year Objectives
	5 Year Objectives Effectively eradicate all mature plants.
Inland side of walking track Woody Weeds: Blackberry, Coast Tea-tree, Boneseed, Sallow Wattle, Myrtle-leaf Milkwort, Showy Honey-myrtle, Sweet	
Inland side of walking track Woody Weeds: Blackberry, Coast Tea-tree, Boneseed, Sallow Wattle, Myrtle-leaf Milkwort, Showy Honey-myrtle, Sweet Pittosporum, Blackberry	Effectively eradicate all mature plants. Control annually. Maintain infestation levels with no
Inland side of walking track Woody Weeds: Blackberry, Coast Tea-tree, Boneseed, Sallow Wattle, Myrtle-leaf Milkwort, Showy Honey-myrtle, Sweet Pittosporum, Blackberry Asparagus Fern and Bridal Creeper,	Effectively eradicate all mature plants. Control annually. Maintain infestation levels with no infestations greater than 10m2.
Inland side of walking track Woody Weeds: Blackberry, Coast Tea-tree, Boneseed, Sallow Wattle, Myrtle-leaf Milkwort, Showy Honey-myrtle, Sweet Pittosporum, Blackberry Asparagus Fern and Bridal Creeper, Bluebell Creeper, Watsonia, Pampas Grass	Effectively eradicate all mature plants. Control annually. Maintain infestation levels with no infestations greater than 10m2.
Inland side of walking trackWoody Weeds: Blackberry, Coast Tea-tree, Boneseed, Sallow Wattle, Myrtle-leaf Milkwort, Showy Honey-myrtle, Sweet Pittosporum, BlackberryAsparagus Fern and Bridal Creeper, Bluebell Creeper, Watsonia, Pampas GrassOcean side of walking track	Effectively eradicate all mature plants. Control annually. Maintain infestation levels with no infestations greater than 10m2. Control annually. Effectively eradicated.

B7 SOAPY ROCKS MANAGEMENT ZONE

Soapy Rocks supports areas of relatively intact native vegetation and one area dominated by introduced woody weeds. Heathy Woodland is present on the clifftop and Coastal Headland Scrub on the exposed coastal cliffs. A large portion of the zone was subject to a landslip during the 1970's and was then planted back out with non-locally indigenous trees and shrubs. In association with school groups, the Authority and ANGAIR have removed large woody weed infestations implemented minor amounts of supplementary planting as required however natural recruitment is also occurring.

- **Woody Weeds** (Coast Tea-tree, Green Honey-myrtle, Sweet Pittosporum, Sallow Wattle, Boneseed and many more): The 2009 mapping indicates that Soapy Rocks supports infestations of numerous woody weeds. 2014 mapping indicates that woody weed removal of the clifftops and an area within the landslip has occurred. Follow up weed control is being implemented with only woody weed seedlings and juvenile plants present. 2021 mapping shows significant removal of mature woody species across the majority of the site. Remaining weeds are isolated plants or those located on cliff edges.
- **Agapanthus:** This species is noted as a single infestation in the 2009 mapping. 2014 mapping indicates that this species is persisting. 2021 mapping did not record this species.
- **Freesia:** This species was not noted in the 2009 mapping. Several infestations of this species were noted in the 2014 mapping. 2021 mapping did not record this species.
- **Watsonia:** A moderate infestation of this species was noted in the 2014 mapping. 2021 mapping did not record this species.
- Bluebell Creeper: 2021 mapping shows that cover of this species had reduced since 2014.
- **Kikuyu:** 2021 mapping shows that cover of this species had reduced since 2014.
- **Pampas Grass:** This species is not noted in the 2009 mapping. 2014 mapping identified several infestations. 2021 mapping shows that these infestations are persisting.
- Asparagus Fern: 2021 and 2014 mapping show similar levels of this species.

Table B7 Soapy Rocks Heath Values and Objectives

Soapy Rocks Values and Objectives		
Priority	Medium	
EVCs Present	Heathy Woodland (EVC 48 <i>least concern</i>) Coastal Headland Scrub (EVC 161 <i>vulnerable</i>)	
Environmental Community Group Activity	Significant woody weed control by ANGAIR.	
Vegetation Quality	Very Good. Vegetation generally dominated by native species with isolated weed infestations.	
Significant Ecological Values	Rufous Bristlebird - <i>Dasyornis broadbenti caryochrous</i> (FFG Act <i>vulnerable</i>)	
	Coast Twin-leaf - <i>Roepera billardierei</i> (FFG Act endangered)	
Weed Threat/Management Action	5 Year Objectives	
Woody Weeds: Coast Tea-tree, Myrtle-leaf Milkwort, Sallow Wattle, Sweet Pittosporum	Effectively eradicate all mature woody weeds that are safely accessible.	
Non-woody weeds (Bluebell Creeper, Pampas Gras)	Maintain as effectively eradicated.	
Asparagus Fern	Control annually. Maintain infestation levels with no infestations greater than 5 square metres.	

B8 POINT ROADKNIGHT MANAGEMENT ZONE

Point Roadknight supports relatively intact native vegetation with affinities to Coastal Alkaline Scrub dominated by an overstorey of Moonah. ANGAIR have removed woody weed infestations, particularly Myrtle Leaf-milkwort with follow up control over many years. This zone also includes a native botanic garden walk in the north of the zone planted out and interpretive signage erected by ANGAIR. Weed cover at Point Roadknight is generally low with mapped woody weeds noted as seedlings or juvenile plants only.

- **Myrtle-leaf Milkwort:** In 2009 recorded as numerous infestations. In 2014 and 2021 mapped as scattered juveniles and seedlings only.
- **Bluebell Creeper:** Several infestations were noted in the north of this zone in 2009. 2014 mapping indicates that these infestations appear to be persisting at similar levels. 2021 mapping shows these levels to have reduced in cover.
- **Coast Tea-tree:** This species was not noted in 2009. Three isolated infestations of mature plants were recorded in 2014. 2021 mapping shows nearly all mature plants removed.
- **Fairy Crassula, Freesia, Purple Groundsel, Agapanthus:** These species were not recorded in 2009. One or two infestations of each species were recorded in 2014. 2021 mapping shows most of these species not recorded or significantly reduced.

Table B8 Point Roadknight Heath Values and Objectives

Point Roadknight Values and Objectives		
Priority	High	
EVCs Present	Coastal Alkaline Scrub (EVC 858 <i>endangered</i>) Coastal Headland Scrub (EVC 161 <i>vulnerable</i>)	
Environmental Community Group Activity	Significant weed control by ANGAIR over several years.	
Vegetation Quality	Very Good. Vegetation generally dominated by native species with isolated weed infestations.	
Significant Ecological Values	Coastal Moonah Woodland (FFG listed) Rufous Bristlebird - <i>Dasyornis broadbenti caryochrous</i> (FFG Act <i>vulnerable</i>)	
Weed Threat/Management Action	5 Year Objectives	
Woody Weeds: Coast Tea-tree, Boneseed, Cape Wattle, Italian Buckthorn, Myrtle- leaf Milkwort, Sweet Pittosporum, Mirror Bush	Effectively eradicate all mature woody weeds that are safely accessible.	
Non-woody weeds: Agapanthus, Freesia, Bluebell Creeper	Effectively eradicate.	
Purple Groundsel, Cretan Trefoil and Sea Spurge	Control annually.	
Introduced grasses (Kikuyu)	Control annually. Reduce infestation by 50%.	

B9 MELBA PARADE MANAGEMENT ZONE

Melba Parade comprises large dune systems supporting Coastal Dune Scrub in exposed areas and Moonah dominated Coastal Alkaline Scrub in the rear dunes. ANGAIR in conjunction with local schools have removed significant woody weed infestations particularly Coast Tea-tree and Myrtle-leaf Milkwort in the rear dunes. Supplementary planting has been implemented in some areas to assist with rehabilitation. Panic Veldt Grass is present in some locations beneath the Moonah trees in the east.

- **Myrtle-leaf Milkwort:** Numerous infestations noted in the rear dunes in 2009. Virtually all mature plants removed in 2014 with mapped infestations generally seedlings and juveniles. 2021 mapping shows no mature specimens and significant reductions in seedling cover.
- **Mirror Bush:** Several infestations noted across the zone in 2009. One infestation noted in 2014. No infestations noted in 2021.
- **Boneseed:** Numerous infestations noted across the zone in 2009. Greatly reduced numbers of infestations noted in 2014. Infestations noted as juveniles and seedlings only. No infestations noted in 2021.
- **Coast Tea-tree:** This species is mapped as infestations across the zone in 2009 although difficult to determine how widespread this species was. 2014 mapping identifies varied levels of infestation on top and foredunes scattered mature trees in east. Seedlings only in rear dunes where substantial removal and follow up work has occurred. 2021 mapping shows a significant reduction of mature Coast Tea-tree cover.
- **Italian Buckthorn:** A few infestations of this species noted in the east in 2009. Similar levels of infestation noted in 2014 mapping. 2021 mapping showed no mature plants and a reduction in cover.
- Freesia: Small infestations of freesia were noted in 2014. These were not recorded in 2021.
- **Purple groundsel:** This species was noted as relatively small infestations in the centre and east of the zone. Despite annual control 2014 mapping indicates this species is spread along the entire foredune system. 2021 mapping showed a reduced cover of this species however this is likely due to seasonal conditions and the species dying back during summer.
- **Bridal Creeper:** This species was not recorded in 2009. Two infestations were mapped in 2014. This species was not noted during the 2021 mapping but should be monitored for regularly as it may be due to seasonal effects
- **Agapanthus and Spanish Bluebell:** These species were not recorded in 2009. 2014 mapping identifies a few scattered infestations of these species in the east. 2021 mapping did not record agapanthus, but Spanish bluebell was noted at similar levels.

Table B9 Melba Parade Values and Objectives

Melba Parade Values and Objectives		
Priority	Medium	
EVCs Present	Coastal Alkaline Scrub (EVC 858 <i>endangered</i>) Coastal Dune Scrub (EVC 160 <i>depleted</i>)	
Environmental Community Group Activity	Significant weed control by ANGAIR and local schools in rear dunes over several years.	
Vegetation Quality	Good. Some areas of relatively intact native vegetation however some dune areas are dominated by Coast Tea- tree.	
	Coastal Moonah Woodland (FFG listed) Rufous Bristlebird - <i>Dasyornis broadbenti caryochrous</i>	
Significant Ecological Values	(FFG Act vulnerable)	
	Coast Twin-leaf - <i>Roepera billardierei</i> (FFG Act endangered)	
Weed Threat/Management Action	5 Year Objectives	
Coast Tea-tree	Effectively eradicate all mature plants.	
Woody Weeds: Myrtle-leaf Milkwort, Boneseed, Sallow Wattle, Italian Buckthorn	Prevent juveniles from developing into mature specimens.	
Non-woody weeds: Bridal Creeper, Bluebell Creeper	Control annually. Effectively eradicate.	
Purple Groundsel and Sea Spurge	Control annually.	

4. Management Area C (Aireys Inlet)

Management Area C covers approximately 12 kilometres of coast and is 96 hectares. The eastern end begins at Boundary Road in Aireys Inlet finishing at Eastern View in the west. Aireys Inlet east of Moggs Creek is located within the Otway Plain bioregion, while the area west of Moggs Creek is located within the Otway Ranges bioregion.

The landscape varies from coastal cliffs at Aireys Inlet to estuarine systems at the mouth of the Painkalac Creek and dune systems from Fairhaven to Eastern View. The Aireys Inlet township supports residential areas adjacent to the management zone. Fairhaven to Eastern view supports low-density residential areas separated from the management zone by the Great Ocean Road. The Friends of Aireys Inlet Coast Reserve have been very active over the last 15 years, gradually removing woody weed infestations on the clifftops.

The eight management zones in Management Area C are:

• Boundary Road Clifftops	C1.1	• Painkalac Dunes	C2.2
• Eagle Rock Parade	C1.2	• Fairhaven	C2.3
• Split Point East	C1.3	Moggs Creek	C2.4
• Split Point West	C2.1	• Easternview	C2.5



C1 EAGLE ROCK PARADE MANAGEMENT ZONE

Eagle Rock Parade supports Coastal Headland Scrub vegetation dominated by native coastal scrub and introduced woody weeds in some locations. Over many years the Friends of Aireys Inlet Coast Reserve have removed large woody weed infestations in stages to retain habitat for the Rufous Bristlebird (DEPI 2007). The majority of mature woody weeds have been removed except for inaccessible areas on the coastal cliffs. The zone is bordered by Eagle Rock Parade to the east and supports a walking track along the cliff edge.

Review of significant management issues noted in GORCC NVWAP (Coomes 2009) and Beacon Ecological (2015). Note that the 2009 mapping appears to have only mapped the clifftops edges and not the entire zone:

- **Woody Weeds** (Coast Tea-tree, Boneseed, Cape Wattle, Sweet Hakea, Sweet Pittosporum, Giant Honey-myrtle, Myrtle-leaf Milkwort, Sallow Wattle): While much of the management zone appears to have been left out of the 2009 mapping presence of cut stumps and woody weed seedlings suggests that the infestation level of woody weeds has decreased. 2021 mapping shows that large areas of woody weeds have been removed and remaining areas are on cliff edges or small pockets.
- **Bluebell Creeper:** 2009 mapping identifies several infestations in the north with one infestation in the centre. 2014 mapping indicates that this species may have similar infestations levels. 2021 mapping indicates a significant reduction in this species.
- **Dolichos pea:** This species was not recorded in 2009. One infestation was noted on to the east of the centre car park. This species was not noted in 2021.
- Bridal Creeper: Not noted in 2009. One infestation in south in 2014. Not noted in 2021.
- Agapanthus: Significant reduction in cover between 2014 and 2021.
- **Sweet Violet:** One infestation noted in 2009 in the centre of the zone. While this infestation has been treated several times, 2014 mapping notes it still persisting. 2021 mapping shows a slight decrease in cover of this species.
- **Sugar Gums:** Two infestations of mature trees mapped in 2009. 2014 and 2021 mapping indicates that Infestations persist.

Table C1 Eagle Rock Parade Values and Objectives

Eagle Rock Parade Values and Objectives		
Priority	High	
EVCs Present	Coastal Headland Scrub (EVC 161 <i>vulnerable</i>)	
Environmental Community Group Activity	Control of woody weeds has been implemented by the Friends of Aireys Inlet Coastal Reserve	
Vegetation Quality	Excellent. Relatively intact native vegetation with minor woody weed infestations.	
	Rufous Bristlebird - Dasyornis broadbenti caryochrous	
Significant Ecological Values	(FFG Act vulnerable)	
Weed Threat/Management Action	5 Year Objectives	
Inland side of walking track		
Woody Weeds (Coast Tea-tree, Myrtle-leaf Milkwort, Sweet Pittosporum, Boneseed, Pin-cushion Hakea, Giant Honey-myrtle, Flax-leaf Broom, Sugar Gums)	Effectively eradicate all mature plants.	
Bluebell Creeper	Control annually. Reduce infestation by 50%.	
Non-woody weeds: Sweet Violet, Agapanthus, Red Hot Pokers	Control annually. Reduce infestation by 50% or effectively eradicate.	
Ocean side of walking track		
Woody Weeds (Coast Tea-tree, Myrtle-leaf Milkwort, Sweet Pittosporum, Boneseed, Pin-cushion Hakea, Giant Honey-myrtle, Flax-leaf Broom)	Effectively eradicate all mature plants where safely accessible.	
Bluebell Creeper	Control annually. Reduce infestation by 50% where safely accessible.	

C2 SPLIT POINT EAST MANAGEMENT ZONE

Split Point East is a small management zone from the Split Point Lighthouse car park to the Split Point Lighthouse. Steep coastal cliffs support Coastal Headland Scrub vegetation dominated by native coastal species with scattered weeds. The zone is bordered by private properties to the east, several of which have weed species in their gardens. Access through the zone is difficult with no walking tracks and steep cliffs which has resulted in very little works being carried out over the past five years.

Review of significant management issues noted in GORCC NVWAP (Coomes 2009) and Beacon Ecological 2015. Note that the 2009 mapping appears to have only mapped the clifftops edges and not the entire zone:

- **Dolichos pea:** This species not recorded in 2009. Three infestations mapped in 2014. 2021 mapping did not record this species.
- **Woody Weeds:** Scattered Cape Wattle, Coast Tea-tree, Myrtle-leaf Milkwort, Boneseed and Sweet Hakea mapped in 2009. Similar levels of infestation mapped in 2014. 2021 mapping shows a possible increase in cover of woody weeds.
- **Agapanthus:** Two infestations noted in 2009. Numerous infestations noted in 2014. 2021 mapping identified continuing infestations.
- **Hottentot Fig:** One infestation recorded in 2009. One infestation recorded in 2014. Not recorded in 2021 but difficult to identify as not in flower.

Eagle Rock Parade Values and Objectives		
Priority	Low	
EVCs Present	Coastal Headland Scrub (EVC 161 <i>vulnerable</i>)	
Environmental Community Group Activity	No.	
Vegetation Quality	Good. Relatively intact native vegetation amongst scattered woody weed infestations.	
Significant Ecological Values	Rufous Bristlebird - <i>Dasyornis broadbenti caryochrous</i> (FFG Act <i>vulnerable</i>)	
Weed Threat/Management Action	5 Year Objectives	
Woody Weeds: Cape Wattle, Coast Tea- tree, Myrtle-leaf Milkwort, Boneseed	Remove 25% of mature plans where safely accessible.	
Non-woody weeds: Dolichos Pea, Agapanthus.	Control where safely accessible.	

Table C2 Split Point Values and Objectives

C3 SPLIT POINT WEST MANAGEMENT ZONE

Split Point West is bordered by the Split Point Lighthouse in the east and Painkalac Creek in the west. Walking tracks and lookouts at the base of the lighthouse receive high tourist visitation. Coastal Headland Scrub vegetation dominates the zone, in generally good condition in the east with higher weed cover in the west. Common woody weeds are present including Coastal Tea-tree, Sallow Wattle, Sweet Pittosporum, Boneseed, Myrtle-leaf Milkwort and Sweet Hakea. Non-woody weeds of note include several Bridal Creeper and Agapanthus infestations that should be controlled immediately. Introduced grasses are prevalent in the west of the zone, particularly Panic Veldt-grass and Kikuyu.

Review of significant management issues noted in GORCC NVWAP (Beacon Ecological 2015). This area was not mapped in the 2009 GORCC NVWAP (Coomes 2009):

- **Woody Weeds:** Infestations of African Boxthorn, Boneseed, Cape Wattle, Coast Tea-tree, Myrtleleaf Milkwort, Sallow Wattle and Sweet Pittosporum mapped in 2014. 2021 mapping shows a reduction in cover of all woody weeds with some not recorded. Some mature Coast Tea-tree are still present near the lighthouse.
- **Bridal Creeper:** Moderate infestations mapped in 2014. 2021 mapping did not record this species although this may be due to seasonal effects.
- Agapanthus: Two small infestations noted in 2014. Not recorded during 2021 mapping.

Split Point West Values and Objectives		
Priority	Low	
EVCs Present	Coastal Headland Scrub (EVC 161 <i>vulnerable</i>)	
Environmental Community Group Activity	No.	
Vegetation Quality	Good. Relatively intact native vegetation in the east, becoming weedier in the west.	
Significant Ecological Values	Rufous Bristlebird - <i>Dasyornis broadbenti caryochrous</i> (FFG Act <i>vulnerable</i>)	
	Swamp Antechinus - <i>Antechinus minimus maritimus</i> (FFG Act vulnerable, EPBC Act <i>vulnerable</i>) Coastal Moonah Woodland (FFG Listed)	
Weed Threat/Management Action	5 Year Objectives	
Woody Weeds: Coastal Tea-tree, Sallow Wattle, Sweet Pittosporum, Boneseed, Myrtle-leaf Milkwort and Sweet Hakea	Effectively eradicate all mature plants where safely accessible.	
Non-woody weeds: Bridal Creeper, Agapanthus, Red Hot Pokers, Bluebell Creeper	Control annually. Effectively eradicate.	

Table C3 Split Point West Values and Objectives

C4 PAINKALAC DUNES MANAGEMENT ZONE

Painkalac Dunes is a dune system on a large sandy spit bordering the Painkalac Creek estuary system. Coastal Dune Scrub dominates the zone with areas of Coastal Alkaline Scrub bordering the estuary system to the north. There is no public access to vegetation within this zone.

Weed cover is generally low, apart from large infestations of Coast Tea-tree. Fox dens have been annually fumigated in this zone for several years.

- **Myrtle-leaf Milkwort:** 2009 mapping indicates significant infestations noted in the west with scattered infestations noted throughout remainder of zone. 2014 mapping indicates that infestation level remains similar although the majority of mature plants have been controlled with juvenile and seedlings present. 2021 mapping indicates scattered seedlings in the east with the western infestations controlled.
- **Boneseed:** Numerous infestations noted across the zone in 2009. Significant reduction with only one infestation noted in 2014. Similar negligible levels recorded in 2021.
- Sea Spurge: Three infestations noted in 2009. Two infestations noted in 2014. Not noted in 2021.
- **Coast Tea-tree:** This species appears not to have been mapped in 2009 despite significant stands of mature plants present in 2014. 2021 mapping shows reduction in cover of western end of zone.
- Sallow Wattle: Significant reduction in cover of mature plants between 2021 and 2014.
- **Purple Groundsel:** Not mapped in 2009. Numerous infestations noted in 2014. 2021 mapping shows reduced cover although this is likely due to summer die back.

Table C4 Painkalac Dunes Values and Objectives

Painkalac Dunes Values and Objectives		
Priority	Medium	
EVCs Present	Coastal Dune Scrub (EVC 160 <i>depleted</i>) Coastal Alkaline Scrub (EVC 858 <i>endangered</i>)	
Environmental Community Group Activity	No.	
Vegetation Quality	Very Good. Supports a mix of high quality vegetation as well as areas dominated by woody weeds.	
Significant Ecological Values	Hooded Plover - Thinornis cucullatus cucullatus (EPBC Act vulnerable, FFG Act vulnerable) Rufous Bristlebird - Dasyornis broadbenti caryochrous (FFG Act vulnerable) Swamp Antechinus - Antechinus minimus maritimus	
	(FFG Act <i>vulnerable</i> , EPBC Act <i>vulnerable</i>) Coastal Moonah Woodland (FFG Listed)	
Weed Threat/Management Action	5 Year Objectives	
Coast Tea-tree	Reduce mature plant cover by 25%.	
Woody Weeds: Sallow Wattle, Myrtle-leaf Milkwort	Effectively eradicate mature plants.	
Purple Groundsel and Sea Spurge	Control annually.	

C5 PAINKALAC ESTUARY MANAGEMENT ZONE

Painkalac Estuary supports vegetation with affinities to Coastal Alkaline Scrub. The zone is bordered by Painkalac Creek to the east and a walking path to the west. Dominant weed species include common woody weeds, Bluebell Creeper and Blackberry.

Five year management objectives aim for elimination of all mature woody weeds and control of all nonwoody weeds. The site was not mapped in detail for the 2009 GORCC NVWAP (Coomes 2009).

- **Bluebell Creeper and Blackberry:** 2021 mapping indicates a significant reduction as compared to 2014 for both species.
- **Blackberry:** Numerous infestations noted across the zone in 2009. Significant reduction with only one infestation noted in 2014. Similar negligible levels recorded in 2021.
- Woody Weeds (Coast Tea-tree, Giant Honey-myrtle, Sweet Hakea, Sallow Wattle): Effective woody weed control has occurred in the northeast of the zone but substantial mature infestations are present in the southwest.

Painkalac Estuary Values and Objectives		
Priority	Medium	
EVCs Present	Coastal Alkaline Scrub (EVC 858 <i>endangered</i>) Coastal Tussock Grassland (EVC163 <i>vulnerable</i>) Coastal Saltmarsh (EVC 9 <i>endangered</i>)	
Environmental Community Group Activity	No.	
Vegetation Quality	Very Good. Supports a mix of high quality vegetation with scattered weeds. Many infestations were seedling and juvenile regrowth.	
Significant Ecological Values	Rufous Bristlebird - <i>Dasyornis broadbenti caryochrous</i> (FFG Act <i>vulnerable</i>)	
Weed Threat/Management Action	5 Year Objectives	
Woody Weeds: Coast Tea-tree, Giant Honey-myrtle, Sweet Hakea, Sallow Wattle	Effectively eradicate mature plants.	
Bluebell Creeper	Control all plants annually. Reduce infestations by 50%.	
Blackberry	Control all plants annually. Reduce infestations by 50%.	

Table C5 Painkalac Estuary Values and Objectives

C6 FAIRHAVEN TO MOGGS CREEK MANAGEMENT ZONE

Fairhaven supports a long thin stretch of Coastal Dune Scrub bordered by Moggs Creek to the west. Vegetation condition varies with heavy infestations of Coast Tea-tree in the east and west. Areas free of woody weeds in the centre of the zone supports Moonah trees often with an understorey dominated by Panic Veldt-grass. This zone supports many beach access points and pedestrian traffic.

- **Sea Spurge:** Numerous infestations noted in 2009. Two infestations noted in 2014. 2021 mapping shows slightly lower cover to 2014 but scattered across numerous locations.
- **Boneseed:** Numerous infestations noted in 2009. Not recorded in 2014. Small level of infestations noted in 2021.
- **Myrtle-leaf Milkwort:** 2009 mapping indicates several infestations west of the Fairhaven S.L.S.C. 2014 and 2021 mapping indicates that infestation level remains similar.
- **Coast Tea-tree:** 2009 mapping indicates that this species is present. 2014 mapping identified significant infestations of Coast Tea-tree. 2021 mapping indicates a slight reduction in cover for this species.
- **Dolichos Pea:** Infestation noted to the west of Fairhaven S.L.S.C in 2009. Same infestations noted in 2014. 2021 mapping identified similar levels of infestation.
- **Blue Periwinkle:** One infestation noted on roadside in 2009. Same infestation noted in 2014 and 2021.
- **Purple Groundsel:** Noted as one infestation in 2009. Infestation appears to have increased in size due to sand dune disturbance for the construction for the new Fairhaven S.L.S.C. This infestation should be controlled immediately. 2021 mapping showed similar levels of cover.
- **Giant Honey-myrtle:** Not recorded in 2009. Two infestations noted in 2014. 2021 showed similar levels of infestation.

Table C6 Fairhaven to Moggs Creek Values and Objectives

Fairhaven to Moggs Creek Values and Objectives		
Priority	Medium	
EVCs Present	Coastal Dune Scrub (EVC 160 depleted) Coastal Alkaline Scrub (EVC 858 <i>endangered</i>)	
Environmental Community Group Activity	Friends of Moggs Creek and ANGAIR have conducted significant works.	
Vegetation Quality	Very Good. Supports a mix of high quality vegetation amongst moderate weed infestations.	
Significant Ecological Values	Rufous Bristlebird - <i>Dasyornis broadbenti caryochrous</i> (FFG Act <i>vulnerable</i>)	
	Coastal Moonah Woodland (FFG Listed) Hooded Plover - <i>Thinornis cucullatus cucullatus</i> (FFG Act <i>vulnerable</i> , EPBC Act <i>vulnerable</i>)	
Weed Threat/Management Action	5 Year Objectives	
Currently sufficient resources to achieve (h	nigh priority actions)	
Coast Tea-tree	Eliminate outlying infestations. Reduce core infestation by 25%.	
Woody Weeds: Giant Honey-myrtle, Blackberry, Myrtle-leaf Milkwort.	Effectively eradicate mature plants.	
Non-woody Weeds: Dolichos Pea, Blue Periwinkle, Purple Groundsel, Bridal	Control annually. Effectively eradicate.	
Creeper.		

C7 MOGGS CREEK TO EASTERN VIEW MANAGEMENT ZONE

Moggs Creek to Eastern View supports a thin stretch of Coastal Dune Scrub. The zone supports varying ecological values however dense infestations of Coast Tea-tree are present. This zone supports several beach access points including the tourist the Great Ocean Road sign tourist icon which receives high public visitation. Tennis courts were historically present within the centre of this zone and are potential sources of infestations of introduced grasses Buffalo Grass and Kikuyu. The nationally significant Hooded Plover annually nests within this zone.

- **Coast Tea-tree:** Not noted in 2009. Moderate to dense infestations noted in 2014. 2021 Mapping shows a significant reduction in cover in some areas and containment to major infestation in others.
- **Cape Wattle:** 2009 mapping indicates 2 infestations. 2014 mapping indicates four infestations across the zone. 2021 mapping shows a slight reduction in cover.
- Flax-leaf Broom: Not recorded in 2009. Two infestations recorded in 2014. Not recorded in 2021.
- **Blackberry:** One infestation recorded in 2009. Numerous infestations noted within zone in 2014, mostly along roadside. 2021 mapping shows a significant reduction in cover.
- **Sea Spurge:** 2009 mapping indicated numerous infestations across the zone. 2014 mapping indicates two infestations only. 2021 mapping shows a similar cover to 2014 (less than 100 square metres of cover).
- **Boneseed:** Numerous infestations noted in 2009. Not recorded in 2014. 2021 mapping shows only one infestation of seedlings.
- **Gazania:** 2009 mapping indicates one infestation in the centre of the zone. Not recorded in 2014 or 2021.
- **Bluebell Creeper:** Not recorded in 2009. One infestation noted in 2014. 2021 mapping shows this species to be effectively eradicated (less than 100 square metres of cover).
- **Blue Periwinkle:** Not noted in 2009. Two infestations noted in 2014. 2021 mapping shows a slight reduction.
- **Dolichos Pea:** 2009 mapping indicates several infestations. 2014 mapping indicates similar infestations across a similar area. 2021 mapping shows an increase in cover and distribution, particularly near Moggs Creek bridge.
- Buffalo Grass: 2021 mapping shows a slight increase in cover to 2014 mapping.

Moggs Creek to Eastern View Values and Objectives		
Priority	Medium	
EVCs Present	Coastal Dune Scrub (EVC 160 <i>depleted</i>)	
Environmental Community Group Activity	Friends of Moggs Creek have been active in this zone targeting woody weeds, Dolichos Pea and Sea Spurge. This group is also active in protecting any Hooded Plovers that nest on the beach.	
Vegetation Quality	Very Good. Supports a mix of varying quality vegetation amongst scattered weed infestations.	
Significant Ecological Values	Hooded Plover - <i>Thinornis cucullatus cucullatus</i> (EPBC Act <i>vulnerable</i> , FFG Act <i>vulnerable</i>) Rufous Bristlebird - <i>Dasyornis broadbenti caryochrous</i> (FFG Act <i>vulnerable</i>) Coastal Moonah Woodland (FFG Listed)	
Weed Threat/Management Action	5 Year Objectives	
Coast Tea-tree	Eliminate mature plants outside large infestations.	
Woody Weeds: Cape Wattle, Sweet Pittosporum, Boneseed, Mirror Bush	Maintain effective eradication of mature woody weeds.	
Blackberry	Reduce infestations by 50%.	
Non-woody Weeds: Dolichos Pea, Tree Pelargonium, Blue Periwinkle	Control annually. Effectively eradicate.	
Purple Groundsel and Sea Spurge	Control annually.	

Table C7 Moggs Creek to Eastern View Values and Objectives

5. Management Area D (Lorne)

Management Area D is 113 hectares, covering approximately eight kilometres of coast as well as Queens Park. The eastern end begins at Stony Creek and finishes at St George River in the west. All of Management Area D is located within the Otway Ranges bioregion.

The landscape varies from primary dunes along the Lorne Foreshore to steep forest vegetation within Queens Park. Residential and highly modified recreation areas border the majority of the Lorne foreshore which generally supports highly modified weedy vegetation with some areas of ecological value. Queens Park borders residential areas to the north and the Great Otway National Park to the west. Community environment group LorneCare is active in this area, particularly around the two Fat Ladies car park, Lorne Point and Queens Park. The Friends of Queens Park are active in Queens Park.

D2

D3

D4

D5

The nine Management Zones in Management Area D are:

- Stony Creek to Armistead Street D1
- Bert Alsop Track
- Erskine Estuary
- Lorne Foreshore
- Lorne Point

٠	Lorne Back Beaches	D6
---	--------------------	----

- Queens Park Central
 D7
- Queens Park West D8
- Queens Park Oceanside D9



Figure 4 Management Zones within the Lorne area.

D1 STONY CREEK TO ARMISTEAD STREET MANAGEMENT ZONE

Stony Creek to Armistead Street supports a thin stretch of highly modified Coastal Dune Scrub. The zone supports some ecological values however dense areas of Coast Tea-tree are also present.

Review of significant management issues noted in GORCC NVWAP (Coomes 2009) and Beacon Ecological (2015):

- **Woody Weeds:** Virtually all woody weed cover has been reduced with several species not recorded during the 2021 mapping. Coast Tea-tree had a similar level of cover in 2021 to 2014.
- **Non-woody weeds:** Virtually all woody weed cover has been reduced with several species not recorded during the 2021 mapping. Climbing Groundsel had a similar level of cover to 2014.
- **Revegetation:** Revegetation has been carried out in areas of woody weed removal.
- Sea Spurge: Sea spurge was not recorded in 2014 but was recorded at low levels in 2021.

Stony Creek to Armistead Street Values and Objectives	
Priority	Low
EVCs Present	Coastal Dune Scrub (EVC 160 <i>depleted</i>)
Environmental Community Group Activity	Nil
Vegetation Quality	Variable. Some areas have reduced infestation levels and allowed regeneration of native species. Some areas dominated by introduced species.
	Rufous Bristlebird - Dasyornis broadbenti caryochrous
Significant Ecological Values	(FFG Act <i>vulnerable</i>)
	Otway Grey Gum - <i>Eucalyptus litoralis</i> (FFG Act endangered)
Weed Threat/Management Action	5 Year Objectives
Woody Weeds: Giant Honey-Myrtle, Mirror Bush, Sallow Wattle, Sweet	5 Year Objectives Effectively eradicate mature plants.
Woody Weeds: Giant Honey-Myrtle,	
Woody Weeds: Giant Honey-Myrtle, Mirror Bush, Sallow Wattle, Sweet Pittosporum.	Effectively eradicate mature plants.
Woody Weeds: Giant Honey-Myrtle, Mirror Bush, Sallow Wattle, Sweet Pittosporum. Blackberry Non-woody weeds: African Daisy, Agapanthus, Blue Periwinkle, Dolichos Pea, Nasturtium, Red Valerian, Silver	Effectively eradicate mature plants. Effectively eradicate.

Table D1 Stony Creek to Armistead Street Values and Objectives

D2 BERT ALSOP TRACK MANAGEMENT ZONE

The Bert Alsop Track Management Zone extends from Armistead Street to the Swing Bridge and supports a thin stretch of Coastal Dune Scrub that has been worked on by LorneCare volunteers and Authority staff to remove weeds and implement revegetation with locally indigenous species. The zone supports car parking, toilets and beach access and receives high amounts of public visitation.

- Coast Tea-tree: Two infestations noted in 2009. Not recorded in 2014.
- **Mirror Bush:** Several infestations noted in 2009. While several infestations were noted in 2014, infestations appear to have been reduced. No mature plants in 2021.
- Agapanthus: Several infestations noted in 2009. Several infestations noted in 2014. Not recorded in 2021.
- **Red Hot Pokers:** Several infestations noted in 2009. Despite control several significant infestations persist in 2014. Effectively eradicated in 2021.
- **English Ivy:** One infestation noted in 2009 in north. Two infestations noted in 2014. Not recorded in 2021.
- **Blackberry:** One infestation recorded in 2009. Numerous infestations noted within zone in 2014. Significantly reduced in 2021.

Table D2 Bert Alsop Track Values and Objectives

Bert Alsop Track Values and Objectives	
Priority	Medium
EVCs Present	Coastal Dune Scrub (EVC 160 <i>depleted</i>)
Environmental Community Group Activity	LorneCare has been active in this zone, removing weeds and implanting revegetation.
Vegetation Quality	Very Good. Ongoing weed control has reduced infestation levels and allowed regeneration of native species.
	Rufous Bristlebird - Dasyornis broadbenti caryochrous
Significant Ecological Values	(FFG Act vulnerable)
Weed Threat/Management Action	5 Year Objectives
Currently sufficient resources to achie	eve (high priority actions)
Woody Weeds: Blackberry, Mirror Bush,	
Sallow Wattle, Coast Tea Tree	Effectively eradicate all mature plants.
	Effectively eradicate all mature plants. Control annually. Effectively eradicate.

D3 ERSKINE ESTUARY MANAGEMENT ZONE

Erskine Estuary includes a thin strip of riparian vegetation along the Erskine River as well as the Lorne Foreshore Caravan Park. The overstorey is generally dominated by introduced Cypress and Coast Teatree with remnant Blue Gums in the west.

Review of significant management issues noted in GORCC NVWAP (Coomes 2009) and Beacon Ecological (2015):

- **Sweet Pittosporum:** Three infestations noted in 2009. Noted in park area only in 2014 and 2021 which was not assessed in 2009.
- **Cape Broom:** One infestation noted in 2009. Not noted in 2014 or 2021.
- Agapanthus: Two infestations noted in 2009. One infestation noted in 2014 and 2021.
- English Ivy: Not recorded in 2009. Two infestations noted in 2014 and reduced cover in 2021.
- Asparagus Fern: Not noted in 2009. Several infestations noted in 2014. Not noted in 2021 but may be seasonal effect.
- Coast Tea-tree: One infestation noted in 2009. Infestations still present in 2014 and 2021.

Table D3 Erskine Estuary Values and Objectives

Erskine Estuary Values and Objectives	
Priority	Low
EVCs Present	Shrubby Foothill Forest (EVC 45 <i>least concern</i>) Estuarine Wetland (EVC 10 <i>endangered</i>) Coastal Dune Scrub (EVC 160 <i>depleted</i>)
Environmental Community Group Activity	No.
Vegetation Quality	Degraded. Large areas dominated by overstorey of introduced species. Some areas of remnant vegetation in west of zone.
Significant Ecological Values	Nil.
5	
Weed Threat/Management Action	5 Year Objectives
Weed Threat/Management Action	
Weed Threat/Management Action Currently sufficient resources to achie	eve (high priority actions)

D4 LORNE FORESHORE MANAGEMENT ZONE

Lorne Foreshore supports a thin strip of highly modified Coastal Dune Scrub between the Erskine Rivermouth and Lorne S.L.S.C. The zone supports some ecological values however the majority of the area comprises dense infestations of introduced species cover. Given the high cover of Coast Tea-tree five-year management objectives aim for prevention of the spread of this species, control of other woody weeds and some control of non-woody weeds.

Review of significant management issues noted in GORCC NVWAP (Coomes 2009) and Beacon Ecological (2015):

• All weed species: The 2009 mapping indicated numerous infestations of various species. As this is a low priority site, little control has been implemented and the site condition is unlikely to have altered significantly.

Lorne Foreshore Values and Objectives	
Priority	Low
EVCs Present	Coastal Dune Scrub (EVC 160 <i>depleted</i>)
Environmental Community Group Activity	No.
Vegetation Quality	Highly degraded. Vegetation generally dominated by introduced species.
Significant Ecological Values	Rufous Bristlebird - <i>Dasyornis broadbenti caryochrous</i> (FFG Act <i>vulnerable</i>)
Weed Threat/Management Action	5 Year Objectives
Coast Tea-tree	Remove every third mature plant. Reduce cover by 40%.
Woody Weeds: Blackberry, Mirror Bush, Sallow Wattle	Effectively eradicate all mature plants.
Non-woody Weeds: Montbretia, Asparagus Fern, Sweet Violet	Control annually. Reduce infestations by 20%.
Sea Spurge	Control annually.

Table D4 Lorne Foreshore Values and Objectives

D5 LORNE POINT MANAGEMENT ZONE

Lorne Point supports a thin strip of Coastal Dune Scrub and Herb-rich Foothill Forest along the Doug Stirling Track from the Lorne S.L.S.C to Point Grey pier. While weed control and revegetation implemented by GORCC and LorneCare had reduced weed cover and protected ecological values, works have stopped for the last two years while determining how to best protect indigenous values while achieving ecological outcomes. As such, weed cover has increased in this zone.

- **Coast Tea-tree:** Several infestations noted in 2009. Not noted in 2014 or 2021 near Lorne S.LS.C but present closer to pier.
- **Sweet Pittosporum:** Two infestations noted in 2009. Small infestation noted in 2014 with slight reduction in cover in 2021.
- Cape Ivy: Not noted in 2009. One infestation noted in 2014. Slightly lower cover noted in 2021.
- **Cape Broom:** Numerous infestations noted in 2009. Low levels note din 2014. Similar levels noted in 2021.
- **Agapanthus:** Several infestations noted in 2009. Not noted in 2014. Slight decrease in 2021 mapping.
- **Cotoneaster:** Not noted in 2009. Two infestations noted in 2014. Similar level of cover noted in 2021.
- **Watsonia:** Numerous infestations noted in 2009. Despite ongoing control numerous infestations were mapped in 2014. Cover slightly reduced in 2021.
- **Blackberry:** One infestation recorded in 2009. Several infestations noted in 2014. 2021 mapping shows increase in cover.
- **Blue Periwinkle:** One infestation mapped in the west in 2009. Numerous infestations mapped across zone in 2014. 2021 mapping shows increase in cover.
- Bluebell Creeper: Small infestation noted in 2021 mapping. Not previously recorded.
- English Ivy: Small infestations noted in 2021. Not previously recorded.
- Boneseed: One infestations noted in 2009. Not noted in 2014. Small infestations noted in 2021.
- **Myrtle-leaf Milkwort:** Not noted in 2009. Two infestations noted in 2014. Cover increased in 2021 mapping.

Table D5 Lorne Point Values and Objectives

Lorne Point Values and Objectives	
Priority	Medium
EVCs Present	Coastal Headland Scrub (EVC 161 <i>depleted</i>)
Environmental Community Group Activity	LorneCare has implemented weed control and revegetation in this zone for several years.
Vegetation Quality	Very good. Weed control and revegetation has protected swards of Kangaroo Grass and Moonah Trees.
	Rufous Bristlebird - Dasyornis broadbenti caryochrous
Significant Ecological Values	(FFG Act vulnerable)
Weed Threat/Management Action	5 Year Objectives
Weed Threat/Management Action Currently sufficient resources to achie	
Currently sufficient resources to achie Woody Weed: Blackberry, Myrtle-leaf Milkwort, Cotoneaster, Briar Rose, Cape	
Currently sufficient resources to achie Woody Weed: Blackberry, Myrtle-leaf	eve (high priority actions)

D6 LORNE BACK BEACHES MANAGEMENT ZONE

Lorne Back Beaches supports a thin strip of highly modified Coastal Headland Scrub. The zone supports areas dominated by weed species amongst mown grass at the northern end and a mix of native species and woody weeds at the southern end. Given the high weed cover five-year management objectives aim for containing weedy species and controlling outlying infestations only.

Review of significant management issues noted in GORCC NVWAP (Coomes 2009) and Beacon Ecological (2015):

- Agapanthus: Significant reduction in cover between 2014 and 2021.
- **Woody Weeds:** (Blackberry, Briar Rose, Cape Wattle, Sweet Pittosporum and Mirror Bush) most woody weed species had a decrease in cover between the 2014 and 2021 mapping. This is likely due to some significant earthworks that removed large areas of introduced vegetation.
- Watsonia and Nasturtium: Reduced cover between 2014 and 2021.
- **Boneseed:** Increase in cover between 2014 and 2021.

Table D6 Lorne Back Beaches Values and Objectives

Lorne Back Beaches Values and Objectives	
Priority	Low
EVCs Present	Coastal Headland Scrub (EVC 161 <i>depleted</i>)
Environmental Community Group Activity	No.
Vegetation Quality	Degraded. Vegetation generally dominated by introduced species or in association with native species.
Significant Ecological Values	Rufous Bristlebird - <i>Dasyornis broadbenti caryochrous</i> (FFG Act <i>vulnerable</i>)
Weed Threat/Management Action	5 Year Objectives
Woody Weeds: Blackberry, Boneseed	Control at St George River mouth and where accessible.
Sea Spurge	Control annually.

D7 QUEENS PARK CENTRAL MANAGEMENT ZONE

Queens Park Central management zone covers the centre of Queens Park. Native vegetation communities include Lowland Forest on the ridge line and Herb-rich Foothill Forest on slopes. Vegetation is generally intact with scattered Boneseed and Sweet Pittosporum as well as infestations of Cape Broom. Slashed asset protection zones are present along Francis Street and Charles Street.

- **Boneseed:** Two infestations noted in 2009. 2014 mapping identified scattered juvenile plants across the zone. 2021 notes mostly non-mature plants.
- **Sweet Pittosporum:** Scattered infestations noted in 2009. Scattered juvenile plants noted in 2014. Reduced cover noted in 2021 mapping.
- **Cape Broom:** Several infestations noted in 2009. 2014 mapping shows these infestations are persisting and possible expanding. 2021 mapping shows these infestations as reducing in cover.
- **Bluebell Creeper:** Not noted in 2009. Numerous infestations noted in 2014. Reduced cover noted in 2021.
- **Bridal Creeper:** Not noted in 2009. Group of small infestations noted in 2014. Slight reduction in cover noted in 2021 mapping.
- **Watsonia:** Two infestations noted in 2009. Numerous infestations noted in 2014. Significantly reduced cover of infestations noted in 2021.
- **Agapanthus:** One infestation noted in 2009. One infestation noted in 2014. 2021 mapping shows this species is absent.
- **Dolichos Pea:** Not noted in 2009. One infestation noted in 2014. Slightly reduced cover in 2021 mapping. *Control immediately.*
- Asparagus Fern: Similar levels of cover between 2014 and 2021.
- **Blackberry:** Three infestations noted in 2009. Additional infestations noted in 2014. Similar level of cover in 2021 mapping with numerous infestations were noted along St George River in 2014 and 2021.
- **English Ivy:** One infestation noted in 2009. Not noted in 2014. Two small infestations noted again in 2021.

Table D7 Queens Park Central Values and Objectives

Queens Park Central Values and Objectives	
Priority	High
EVCs Present	Shrubby Foothill Forest (EVC 45 <i>least concern)</i> Damp Sand Herb Rich Woodland (EVC 3 <i>vulnerable</i>)
Environmental Community Group Activity	Friends of Queens Park and LorneCare have been active working on woody weeds with a focus on Boneseed, Sweet Pittosporum and Cape Broom.
Vegetation Quality	Near Pristine. Large areas dominated by native species with scattered Boneseed and Sweet Pittosporum. Some infestations of Cape Broom.
Significant Ecological Values	Potential habitat for Swift Parrot - Lathamus discolor (EPBC Act critically endangered, FFG Act critically endangered) Swamp Antechinus - Antechinus minimus maritimus (FFG Act vulnerable, EPBC Act vulnerable) Grey Goshawk - Accipiter novaehollandiae (FFG Act endangered) Long Nosed Potoroo - Potorous tridactylus trisulcatus (EPBC Act vulnerable, FFG Act vulnerable)
Weed Threat/Management Action	5 Year Objectives
Woody Weeds: Cape Broom, Boneseed, Sweet Pittosporum, Sallow Wattle, Blackberry	Effectively eradicate all mature plants.
Non-woody Weeds: Bridal Creeper, Agapanthus, Watsonia, Bluebell Creeper, Dolichos Pea	Control annually. Effectively eradicate.
South African Weed Orchid	Control annually.

D8 QUEENS PARK WEST MANAGEMENT ZONE

Queens Park West management zone is bordered by the fire break track to the west, George Street to the north and Queens Park Central to the south. Native vegetation communities include Lowland Forest on the ridge line and Herb-rich Foothill Forest on higher slopes and Coastal Headland Scrub on lower slopes. Vegetation is modified in places with areas of dense infestations of Boneseed and Sweet Pittosporum and scattered infestations of Cape Broom.

- **Sweet Pittosporum:** Scattered infestations noted in 2009. Scattered juvenile plants noted in 2014. Dense infestations noted within gullies and on the slope down to St George River. Reduced cover of mature plants to existing tracks.
- **Boneseed:** Scattered infestations noted in 2009. Scattered juvenile plants noted in 2014. More dense infestations noted on the slope down to St George River. Cover reduced in outlying areas in 2021 mapping.
- Pampas Grass: One infestation noted in 2009. Not noted in 2014 or 2021.
- **Spanish Heath:** One infestation noted in 2009. While this infestation appears to have been controlled two new infestations were noted within the asset protection zone. 2021 mapping shows reduced cover.
- **Cape Broom:** Infestations noted in the north in 2009. 2014 mapping shows these infestations are persisting and possible expanding as well as new infestations mapped in gullies. 2021 mapping shows cover to have reduced.
- **Watsonia:** Not noted in 2009. Several infestations noted along walking track in 2014. Absent from 2021 mapping.
- **Bluebell Creeper:** two infestation noted in 2009. Three infestations noted in 2014. Additional infestations noted in 2021 mapping. *Control immediately.*
- Asparagus Fern: Not noted in 2009. Three infestations noted in 2014. Similar levels of infestation noted during 2021 mapping. *Control immediately.*

Table D8 Queens Park West Values and Objectives

Queens Park West Values and Objectives	
Priority	Medium
EVCs Present	Shrubby Foothill Forest (EVC 45 <i>least concern</i>) Damp Sand Herb Rich Woodland (EVC 3 <i>vulnerable</i>) Herb-rich Foothill Forest (EVC 23 <i>depleted</i>)
Environmental Community Group Activity	Friends of Queens Park and LorneCare have been active working on woody weeds with a focus on Boneseed, Sweet Pittosporum and Cape Broom.
Vegetation Quality	Good. Large areas dominated by native species but infestations of Boneseed and Sweet Pittosporum present. Some infestations of Cape Broom.
Significant Ecological Values	Potential habitat for Swift Parrot - Lathamus discolor (EPBC Act critically endangered, FFG Act critically endangered) Swamp Antechinus - Antechinus minimus maritimus (FFG Act vulnerable, EPBC Act vulnerable) Grey Goshawk - Accipiter novaehollandiae (FFG Act endangered) Long Nosed Potoroo - Potorous tridactylus trisulcatus (EPBC Act vulnerable, FFG Act vulnerable)
Weed Threat/Management Action	5 Year Objectives
Woody Weeds: Boneseed, Sweet Pittosporum, Blackberry, Cape Broom	Effectively eradicate all mature plants where safely accessible.
Non-woody Weeds: Bluebell Creeper, Dolichos Pea, Agapanthus, Watsonia	Control annually. Reduce infestations by 50% where safely accessible.
Asparagus Fern	Control annually. Restrict to existing infestations.

D9 QUEENS PARK OCEANSIDE MANAGEMENT ZONE

Queens Park St George Side management zone is bordered by Queens Park Caravan Park to the north, Queens Park Central Zone to the west and the Great Ocean Road to the south. Native vegetation communities include highly modified Shrubby Foothill Forest on upper slopes and Coastal Headland Scrub on lower slopes towards the ocean. Vegetation is generally modified dense Boneseed and Sweet Pittosporum infestations. A walking track is present along the southeast of the zone. This zone also contains the Slaughterhouse site which is an open area of slashed introduced grasses.

Review of significant management issues noted in GORCC NVWAP (Coomes 2009) and Beacon Ecological (2015):

• All weed species: The 2009 mapping does not map specific species in this zone. Boneseed, and Sweet Pittosporum are described a dominant with patches of Cape Broom and this appears to have remained the same. Additional weed species were mapped in 2014 and 2021, particularly along the tramway path around the bottom of the slope.

Queens Park Oceanside Values and Objectives	
Priority	Low
EVCs Present	Shrubby Foothill Forest (EVC 45 <i>least concern</i>) Damp Sand Herb Rich Woodland (EVC 3 <i>vulnerable</i>) Coastal Headland Scrub (EVC 161 <i>depleted</i>)
Environmental Community Group Activity	No.
Vegetation Quality	Degraded. The majority of vegetation is dominated by Boneseed and Sweet Pittosporum.
Significant Ecological Values	Nil.
Weed Threat/Management Action	5 Year Objectives
Isolated Woody Weeds: Spanish Heath, Cape Broom, Mirror Bush, Blackberry	Effectively eradicate mature plants by 25% where safely accessible.
Watsonia	Control annually.

Table D9 Queens Park Oceanside Values and Objectives

6. Management Area E (Wye River)

Management Area E is 38 hectares, covering approximately two kilometres of coast between the townships of Separation Creek and Wye River and includes the Wye River Beachfront Campground, Wye River S.L.S.C clubrooms and leased BIG4 Wye River Caravan Park. Management Area E is located within the Otway Ranges bioregion. Wye River receives high visitation levels with the beaches being a primary tourist attraction.

The landscape varies with dune vegetation along the Separation Creek and Wye River Foreshores and short, steep rocky headlands between the townships and at each end of the zone. Relatively intact vegetation forming an eco-tone with Coastal Headland Scrub (EVC 161) and Shrubby Foothill Forest (EVC 45) is present south of private property on the northern side of the Great Ocean Road between Wye River Beach and Separation Beach. Residential areas border the majority of the Wye River Management Area with the Wye River General Store, Big 4 Wye River Caravan Park, Wye River Foreshore Caravan Park and Wye River Pub bordering the Management Area behind Wye River Beach. The Wye to Wongarra Landcare Group has recently become active in this area, undertaking weed control on the foreshore.

The two Management Zones in Management Area E are:

Wye River Beach Eı • Wye River Inland E2

Figure 5 Management zones within the Wye River area.

E1 WYE RIVER BEACH MANAGEMENT ZONE

Wye River beach supports a thin stretch of partially modified Coastal Dune Scrub and Coastal Headland Scrub on the ocean side of the Great Ocean Road. Relatively intact vegetation forming an eco-tone with Coastal Headland Scrub (EVC 161) and Shrubby Foothill Forest (EVC 45) is present south of private property on the northern side of the Great Ocean Road between Wye River Beach and Separation Beach is also included in this zone. The zone supports some ecological values however dense areas of Coast Tea-tree are also present. Some community activity has occurred in the zone recently with the Wye to Wongarra Landcare Group securing funding for Sweet Pittosporum and Pomas Grass control.

Wye River Beach Values and Objectives	
Priority	High
EVCs Present	Coastal Headland Scrub (EVC 161 <i>depleted</i>) Coastal Dune Scrub (EVC 160 <i>depleted</i>)
Environmental Community Group Activity	The Wye to Wongarra Landcare Group has recently reformed and undertaken weed control of Sweet Pittosporum and Pampas Grass in this zone.
Vegetation Quality	Variable. Areas of Coastal Dune Scrub adjacent to the Wye River and Separation Creek beaches support moderate levels of woody weed infestation. Rocky Coastal Headland Scrub and vegetation north of the Great Ocean Road between Wye River and Separation Creek support higher vegetation quality and reduced weed cover. Blackberry is a significant weed in this zone, often low in cover but across large areas.
Significant Ecological Values	Hooded Plover - <i>Thinornis cucullatus cucullatus</i> (EPBC Act <i>vulnerable</i> , FFG Act <i>vulnerable</i>) Rufous Bristlebird - <i>Dasyornis broadbenti caryochrous</i>
	(FFG Act <i>vulnerable</i>)
Weed Threat/Management Action	5 Year Objectives
Woody Weeds: Coast Tea-tree, Cotoneaster, Mirror Bush, Myrtle-leaf Milkwort, Sweet Pittosporum, Flax-leaf Broom, Giant Honey-Myrtle.	Effectively eradicate mature plants.
Blackberry	Effectively eradicate.
Non-woody weeds: Pampas Grass, Agapanthus, Cape Ivy, Sea Spurge	Effectively eradicate.
Non-woody Weeds: Asparagus Fern, Blue Periwinkle	Maintain to current levels.

Table E1 Wye River Beach Values and Objectives

E2 WYE RIVER INLAND MANAGEMENT ZONE

The Wye River Inland Management Zone includes a thin parcel of land between residential properties and the Wye River Hotel and the Great Ocean Road from the Wye River Foreshore Caravan Park to Sturt Court in the west. This vegetation supports some ecological values but is generally degraded and on steep slopes adjacent to the Great Ocean Road, often providing conditions unsafe for weed control.

As this zone is considered low priority and supports generally low ecological values, some species safe to control may be targeted with some secondary objectives listed if additional resources become available. Key weed species include Blue Periwinkle, Cape Ivy, Sweet Pittosporum, Mirror Bush and Asparagus Fern which are often dense at times.

Wye River Inland Values and Objectives	
Priority	Low
EVCs Present	Coastal Headland Scrub (EVC 161 <i>depleted</i>)
Environmental Community Group Activity	Nil
Vegetation Quality	Modified. Dense cover of Sweet Pittosporum and Asparagus Fern are present across this zone in association with several other weed species. Some areas are dominated by introduced species.
Significant Ecological Values	Nil
Weed Threat/Management Action	5 Year Objectives
Numerous woody and non-woody weeds.	No objectives listed considering the low ecological values and difficult, unsafe access.
Secondary objectives	
Woody Weeds: Sweet Pittosporum, Coast Tea-tree, Mirror Bush, Boneseed	Reduce cover where safe to do so if additional resources become available.

Table E2 Wye River Inland Values and Objectives

7. Management Area F (Kennett River)

Management Area F is 11 hectares, covering approximately one kilometre of coast as well as land adjacent to the Kennett River for approximately 600 metres inland. This area also includes the Kennett River Family Caravan Park. Management Area F is located within the Otway Ranges bioregion. Kennett River receives high visitor levels with the beach being a primary tourist attraction as well as the opportunity of seeing koalas adjacent to the Kennett River General store.

The landscape varies with dune vegetation behind the beach and short, steep rocky headlands at each end. Residential areas border the majority of the Kennett River Management Area with the Kennett River General Store, and Kennett River Family Caravan Park bordering the Management Area behind Kennett River Beach. The Kennett River SLSC has a beachside storage building within the management area. The Wye to Wongarra Landcare Group has recently become active in this area, undertaking weed control on the foreshore.

The two Management Zones in Management Area D are:

- ett River Beach D1 Kennett River Riparian Strip D3
- Kennett River Beach

Figure 6 Management zones within the Kennett River area.

F1 KENNETT RIVER BEACH MANAGEMENT ZONE

The Kennett River Beach Management Zone covers the Kennett River foreshore including short, rocky headlands at both ends of the beach and extends out to the end of the Kennett River point. The zone supports some ecological values, however dense, areas of Coast Tea-tree are also present and Sea Spurge is present across the foredunes. Some community activity has occurred in the zone recently with the Wye to Wongarra Landcare Group securing funding for Sweet Pittosporum and Pomas Grass control.

Kennett River Beach Values and Objectives	
Priority	High
EVCs Present	Coastal Headland Scrub (EVC 161 <i>depleted</i>)
Environmental Community Group Activity	The Wye to Wongarra Landcare Group has recently reformed and undertaken weed control of Sweet Pittosporum and Pampas Grass in this zone.
Vegetation Quality	Variable. Coastal Dune Scrub vegetation supports some large infestations of Coast Tea-tree with Coastal Headland Scrub supporting more intact vegetation. Some burns adjacent to the Kennett River S.L.S.C. beach side building have opened up native vegetation with some introduced cover encroaching.
Significant Ecological Values	Hooded Plover - <i>Thinornis cucullatus cucullatus</i> (EPBC Act <i>vulnerable</i> , FFG Act <i>vulnerable</i>) Rufous Bristlebird - <i>Dasyornis broadbenti caryochrous</i> (FFG Act <i>vulnerable</i>)
Weed Threat/Management Action	5 Year Objectives
Woody Weeds: Coast Tea-tree, Sweet Pittosporum	Reduce mature plant cover by 50% using staged removal
Woody Weeds: Cape Broom, Mirror Bush	Effectively eradicate mature plants
Blackberry	Reduce cover by 50%
Non-woody weeds: Agapanthus, Blue Periwinkle, Bluebell Creeper, Sea Spurge	Reduce cover by 50%

Table F1 Kennett River Beach Values and Objectives

F2 KENNETT RIVER RIPARIAN STRIP MANAGEMENT ZONE

The Kennett River Riparian Strip Management Zone includes land on the south side of the Kennett River and is bordered by residential areas to the south, Kennett River Beach to the east and merges with the Great Ocean Otway National Park to the west. The zone supports some ecological values, primarily an overstorey of mature eucalypt trees and a vegetated wetland area however the majority of the zone supports a slashed understorey of introduced grasses.

Kennett River Riparian Strip Values and Objectives		
Priority	Medium	
EVCs Present	Riparian Forest (EVC 18 <i>least concern</i>) Shrubby Foothill Forest (EVC 45 <i>least concern</i>)	
Environmental Community Group Activity	Local community group is revegetating this area.	
Vegetation Quality	Modified. Vegetation supports an overstorey of Manna Gum and Blue Gum with Blackwoods over a generally modified understorey. Understorey weeds include Banana Passionfruit, and Blackberry. The adjacent wetland area supports modified vegetation with Blackberry and Sweet Pittosporum infestations.	
Significant Ecological Values	Nil	
Weed Threat/Management Action	5 Year Objectives	
Blackberry	Reduce cover by 50%.	
Revegetation	Implement revegetation with local community group in the riparian strip.	

Table F2 Kennett River Riparian Strip Values and Objectives

8. Management Area G (Apollo Bay)

Management Area G is 278 hectares, covering approximately 17 kilometres of coast. The eastern end begins at Wongarra and finishes behind Marengo in the west and includes the townships of Skenes Creek, Apollo Bay and Marengo. Skenes Creek Foreshore Caravan Park, Apollo Bay Recreation Reserve and Marengo Family Caravan Park are also located in the area. The foreshore within the townships of Skenes Creek, Apollo Bay and Marengo receive large amounts of tourist visitation with the Apollo Bay foreshore supporting large public open spaces.

The landscape varies from coastal dunes along sandy beaches to steep rocky headlands and tall coastal cliffs. Several locations support known breeding locations for the nationally significant Hooded Plover and habitat for the state significant Rufous Bristlebird. Wild Dog Creek to Marengo Point is located within the Otway Plain Bioregion and the remainder of the area Otway Ranges bioregion.

Issues with sand erosion between Wild Dog Creek and Marengo over the last 10 years has included loss of sand and vegetation, exposure of important infrastructure and in some areas too much sand was deposited. Ongoing works are occurring in these areas to mitigate sand erosion risks.

Community activity includes revegetation at Skenes Creek by the Skenes Creek Advancement Association and between Apollo Bay and Marengo by the Townies Landcare group.

The eight Management Zones in Management Area D are:

•	Onion Bay	G1	•	Skenes Creek to Wild Dog Creek	G5
•	Von Muellers	G2	•	Apollo Bay	G6
•	Browns Creek	G3	•	Marengo	G7
•	Petticoat Creek	G4	•	Marengo back beaches	G8



Figure 6 Management zones within the Apollo Bay area.



G1 ONION BAY MANAGEMENT ZONE

The Onion Bay Management Zone extends from approximately 500 metres east of Sugarloaf Creek in the east to Whalebone Creek in the west. This Management Zone supports a strip of vegetation varying in width from approximately 100 metres at its widest in the east to 10 metres at its narrowest. The zone supports two car parking areas with beach access in the centre and east with some informal access in the west and receives regular visitor access for beachgoing and surfing.

Ecological values are high in some areas however Blackberry is present across the majority of the zone in low levels with some dense infestations along with Cape Ivy, Blue Periwinkle, Boneseed and Mirror Bush. As this zone is considered medium priority, only new and emerging weeds will be targeted with secondary objectives listed if additional resources become available.

The nationally significant Hooded Plover has been noted within this Management Zone.

Onion Bay Values and Objectives			
Priority	Medium		
EVCs Present	Coastal Headland Scrub (EVC 161 <i>depleted</i>) Coastal Dune Scrub (EVC 160 <i>depleted</i>)		
Environmental Community Group Activity	Historically some works have been undertaken in the east of the zone and adjacent to the Onion Bay carpark by the Wye to Wongarra Landcare group although this was likely 10 to 15 years ago.		
Vegetation Quality	Excellent. While the zone supports some significant weed infestations there are also areas of relatively intact native vegetation.		
Significant Ecological Values	Rufous Bristlebird - <i>Dasyornis broadbenti caryochrous</i> (FFG Act <i>vulnerable</i>)		
	Hooded Plover - <i>Thinornis cucullatus cucullatus</i> (EPBC Act <i>vulnerable</i> , FFG Act <i>vulnerable</i>)		
Weed Threat/Management Action	5 Year Objectives		
Woody Weeds: Mirror Bush, Boneseed, Coastal Tea-tree, Woody Weeds: Rose, Desert Ash	Reduce cover by 50%		
Pampas Grass	Reduce cover by 50%.		

50%.

Table G1 Onion Bay Values and Objectives

Control annually. Maintain current cover.

Control annually where safe to do so. Reduce cover by

Non-woody Weeds: Cape Ivy, Blue

Periwinkle

Blackberry

G2 VON MUELLER MANAGEMENT ZONE

Von Mueller Management Zone extends from Whale Bone Creek in the east to approximately 700 metres east of Browns Creek in the west. This zone supports some areas of relatively intact Coastal Headland Scrub vegetation mostly on very steep tall coastal cliffs with several areas of weed infestation in some more open, less steep areas. There is no beach access within this zone given the steep unpassable cliffs. The steep cliffs and lack of access also make weed control works generally unsafe.

Onion Bay Values and Objectives		
Priority	Medium	
EVCs Present	Coastal Headland Scrub (EVC 161 <i>depleted</i>)	
Environmental Community Group Activity	Nil	
Vegetation Quality	Pristine to good. Steeper areas support relatively intact Coastal Headland scrub with virtually no weed cover and lower quality area on less steep areas.	
Significant Ecological Values	Nil	
Weed Threat/Management Action	5 Year Objectives	
Woody Weeds: Mirror Bush	Effectively eradicate mature plants where safely accessible from the beach.	

Table G2 Von Mueller Values and Objectives

G3 BROWNS CREEK MANAGEMENT ZONE

Browns Creek Management Zone extends from approximately 700 metres east of Browns Creek in the east to Petticoat Creek Beach in the west. A large gravel car park and beach access is present just east of Browns Creek. This zone supports some areas of relatively intact Coastal Headland Scrub and Coastal Dune Scrub in the west and more modified vegetation in the east around the car park and beach access.

The nationally significant Hooded Plover has been noted numerous times within this Management Zone.

As this zone is considered medium priority at this stage but supports some high ecological values, only new and emerging weeds will be targeted with some secondary objectives listed if additional resources become available.

Browns Creek Values and Objectives		
Priority	Medium	
EVCs Present	Coastal Headland Scrub (EVC 161 <i>depleted</i>) Coastal Dune Scrub (EVC 160 <i>depleted</i>)	
Environmental Community Group Activity	Nil	
Vegetation Quality	Good. Some areas of relatively intact native vegetation but some significant infestation of woody weeds present and areas of modified understorey dominated by introduced grasses.	
Significant Ecological Values	Hooded Plover - <i>Thinornis cucullatus cucullatus</i> (EPBC Act <i>vulnerable</i> , FFG Act <i>vulnerable</i>) Rufous Bristlebird - <i>Dasyornis broadbenti caryochrous</i> (FFG Act <i>vulnerable</i>)	
Weed Threat/Management Action	5 Year Objectives	
Woody Weeds: Mirror Bush, Woody Weeds: Mirror Bush, Japanese Spindletree	Reduce cover of mature plants by 50%.	
Non-woody Weeds: Cap Ivy, Dolichos Pea, Fairy Crassula	Control annually to maintain current infestation levels.	
Blackberry	Control annually where safe to do so. Reduce cover by 50%.	

Table G3 Browns Creek Values and Objectives

G4 PETTICOAT CREEK MANAGEMENT ZONE

The Petticoat Creek Management Zone includes the small Petticoat Beach and the larger area of relatively intact native vegetation to the west. This zone supports a gravel carpark and beach access in the west. The wide area of vegetation in the west (approximately 185 metres wide at its widest point) is very dense but supports relatively intact native vegetation with scattered Blackberry and Sweet Pittosporum. Coastal Dune Scrub along the beach is of lower quality. The foredunes support large Sea Spurge infestations.

Petticoat Creek Values and Objectives		
Priority	High	
EVCs Present	Coastal Headland Scrub (EVC 161 <i>depleted</i>) Coastal Dune Scrub (EVC 160 <i>depleted</i>)	
Environmental Community Group Activity	The Wye to Wongarra Landcare Group has recently undertaken some Sweet Pittosporum control in the zone.	
Vegetation Quality	Generally excellent. The wide area of vegetation in the west (approximately 185 metres wide at its widest point) is very dense but supports relatively intact native vegetation with a low cover of Blackberry and Sweet Pittosporum. Coastal Dune Scrub along the beach is of lower quality with a prominent large infestation of Sea Spurge.	
Significant Ecological Values	Rufous Bristlebird - <i>Dasyornis broadbenti caryochrous</i> (FFG Act <i>vulnerable</i>)	
Weed Threat/Management Action	5 Year Objectives	
Woody Weeds: Wormwood, Mirror Bush	Effectively eradicate mature plants where safely accessible.	
Blackberry	Reduce cover by 20%.	
Sweet Pittosporum	Reduce cover of mature plants by 50%.	
Non-woody weeds: Agapanthus, Arum Lily, Bridal Creeper	Reduce cover by 50%.	
Pampas Grass	Effectively eradicate.	
Sea Spurge	Reduce cover by 50%.	

Table G4 Petticoat Creek Values and Objectives

G5 SKENES CREEK TO WILD DOG CREEK MANAGEMENT ZONE

The Skenes Creek to Wild Dog Creek Management Zone extends from Skenes Creek beach in the east to Wild Dog Creek in the west. This zone supports a popular swimming beach at Skenes Creek, two gravel car park son the side of the road with beach access and a car park at Pirates Cove with beach access. Ecological values include Coastal Dune Scrub and Coastal Headland Scrub in rocky areas. The nationally significant Hooded Plover regularly nests to the east of Wild Dog Creek. Key weed species include Blackberry, Sallow Wattle, Sweet Pittosporum, Monterey Cypress and Coastal Tea-tree.

Petticoat Creek Values and Objectives		
Priority	High	
EVCs Present	Coastal Headland Scrub (EVC 160 <i>depleted</i>) Coastal Dune Scrub (EVC 160 <i>depleted</i>)	
Environmental Community Group Activity	The Skenes Creek Advancement Association has undertaken some weed control and revegetation in this zone.	
Vegetation Quality	Good to Very Good.	
Significant Ecological Values	Hooded Plover - <i>Thinornis cucullatus cucullatus</i> (EPBC Act <i>vulnerable</i> , FFG Act <i>vulnerable</i>) Rufous Bristlebird - <i>Dasyornis broadbenti caryochrous</i> (FFG Act <i>vulnerable</i>)	
Weed Threat/Management Action	5 Year Objectives	
Woody Weeds: Coast Tea-tree, Mirror Bush, Sweet Pittosporum, Sallow Wattle,	Effectively eradicate all mature plants.	
Monterey Cypress	Effectively eradicate all mature plants three metres or less in height. (Large trees will be costly to remove and may have heritage requirements)	
Blackberry	Reduce cover by 50% where safe to do so.	
Non-woody weeds: Cape Ivy, Fairy Crassula, Agapanthus, Blue Periwinkle, Pampas Grass, Sea Spurge	Reduce cover by 50%.	

Table G5 Skenes Creek to Wild Dog Creek Values and Objectives

G6 APOLLO BAY MANAGEMENT ZONE

The Apollo Bay Management Zone extends from Wild Dog Creek in the north to the Apollo Bay Harbour in the south. This zone includes the Apollo Bay foreshore and supports large areas of high visitation public open space as well as numerous beach car parks and access points and the beginning of the Great Ocean Walk. The foreshore contains numerous public amenities, the Apollo Bay Visitor Centre and Apollo Bay Lifesaving club.

The foreshore supports Coastal Dune Scrub of varying quality. The zone supports some ecological values however dense areas of Coast Tea-tree are also present. The entrance to Apollo Bay is also lined with mature Monterey Cypress trees.

Petticoat Creek Values and Objectives		
Priority	High	
EVCs Present	Coastal Dune Scrub (EVC 160 <i>depleted</i>)	
Environmental Community Group Activity	Some historically with the Southern Otway Landcare Network Townies implementing weed control, particularly Sea Spurge. The Otway Barham Landcare Group has undertaken weed control and revegetation in this zone.	
Vegetation Quality	Good. The dunes support some ecological values but significant weed infestations, particularly Coast Tea tree are present.	
Significant Ecological Values	Rufous Bristlebird - <i>Dasyornis broadbenti caryochrous</i> (FFG Act <i>vulnerable</i>)	
Weed Threat/Management Action	5 Year Objectives	
Woody Weeds: Coast Tea-tree, Cotoneaster, Sweet Pittosporum, Privet.	Effectively eradicate mature plants. Ensure large infestations are removed using a staged approach.	
Blackberry	Reduce cover by 50%.	
Non-woody weeds: Cape Ivy, Nasturtium, Sea Spurge	Reduce cover by 50%.	
Bridal Creeper	Control annually and contain to current infestations.	

Table G6 Apollo Bay Values and Objectives

G7 MARENGO MANAGEMENT ZONE

The Marengo Management Zone extends from the Apollo Bay Harbour in the north to Marengo Point in the south and includes the Barham River estuary, several beach access points and carparks. The Great Ocean Walk continues through this zone. Vegetation is generally a thin strip, in some places reduced to only one metre wide due to sand erosion. Wider areas including a large area of Coastal Tussock Grassland adjacent to the Barham estuary are present in the north. Hooded Plovers have been observed nesting annually near the Barham River estuary.

Sand erosion management works are currently occurring in this zone. Key weed species include Coast Tea-tree and Sweet Pittosporum in the north, Sea Spurge and Cape Ivy. Some small Bridal Creeper infestations were also noted which should be targeted for control. Dense weed infestations are present adjacent to the Marengo Family Caravan Park in the south of the zone. Control of this dense infestation should focus on containing it to this area.

Marengo Values and Objectives		
Priority	High	
EVCs Present	Coastal Headland Scrub (EVC 161 <i>depleted</i>) Coastal Dune Scrub (EVC 160 <i>depleted</i>) Coastal Tussock Grassland (EVC 163 <i>vulnerable</i>)	
Environmental Community Group Activity	The Otway Barham Landcare Group has undertaken weed control and revegetation in this zone.	
Vegetation Quality	Generally good condition with some small excellent areas. Vegetation is generally a thin strip, in some places reduced to only one metre wide due to sand erosion. Wider areas including a large area of Coastal Tussock Grassland adjacent to the Barham estuary are present in the north.	
Significant Ecological Values	Hooded Plover - <i>Thinornis cucullatus cucullatus</i> (EPBC Act <i>vulnerable</i> , FFG Act <i>vulnerable</i>) Rufous Bristlebird - <i>Dasyornis broadbenti caryochrous</i>	
	(FFG Act vulnerable)	
Weed Threat/Management Action	5 Year Objectives	
Woody Weeds: Coast Tea-tree, Sweet Pittosporum, Giant Honey-myrtle, Mirror Bush.	Effectively eradicate mature plants except for dense infestations adjacent to Marengo Family Caravan Park in the south which are to be contained to this area.	
Monterey Cypress	Effectively eradicate all mature plants less than three metres tall.	
Blackberry	Reduce cover by 50% except for except for dense infestations adjacent to Marengo Family Caravan Park in the south which are to be contained to this area.	
Non-woody weeds: Bridal Creeper, Montbretia, Asparagus Fern, Bluebell Creeper, Nasturtium, Sea Spurge	Reduce cover by 50%.	

Table G7 Marengo Values and Objectives

G8 MARENGO BACK BEACHES MANAGEMENT ZONE

The Marengo Back Beaches Management Zone extends from Marengo Point in the north for approximately two kilometres south. This management zone is dominated by Coastal Headland Scrub with patches of Coastal Dune adjacent to small, sandy beaches. Access to this zone is from Marengo point and numerous private access points from private properties that border the zone. Vegetation is generally of excellent condition with scattered patches of Blackberry and Sweet Pittosporum. Mirror Bush was noted as occasional plants on edges of native vegetation and some Sallow Wattle infestations in the southern end. Sea Spurge is also present on sandy beach fringes. The Great Ocean Walk continues through this zone.

Marengo Back Beaches Values and Objectives		
Priority	High	
EVCs Present	Coastal Headland Scrub (EVC 161 <i>depleted</i>) Coastal Dune Scrub (EVC 160 <i>depleted</i>)	
Environmental Community Group Activity	Nil.	
Vegetation Quality	Excellent. Native vegetation is generally relatively intact with some lower quality areas in the north of the zone.	
Significant Ecological Values	Rufous Bristlebird - <i>Dasyornis broadbenti caryochrous</i> (FFG Act <i>vulnerable</i>)	
Weed Threat/Management Action	5 Year Objectives	
Woody Weeds: Sallow Wattle, Sweet Pittosporum, Mirror Bush, Giant Honey- myrtle	Effectively eradicate mature plants.	
Blackberry	Reduce cover by 50%.	
Non-woody weeds: Agapanthus Sea Spurge, Watsonia, Sea Spurge	Reduce cover by 50%.	

Table G8 Marengo Back Beaches Values and Objectives

References

Beacon Ecological 2012. *Queens Park, Lorne. Weed Management Plan.* Unpublished report by Beacon Ecological for GORCC.

Beacon Ecological 2014. *Vegetation Assessment to investigate impacts of the Anglesea Caravan Park Stormwater Outflow, Anglesea, Victoria.* Unpublished letter report for GORCC.

Beacon Ecological 2015 *Great Ocean Road Coast Committee – Native Vegetation and Weed Action Plan 2015 - 2020.* Unpublished report for GORCC.

Coomes 2009. *Great Ocean Road Coast Committee – Native Vegetation and Weed Action Plan.* Unpublished report by Coomes Consulting in association with Mark Trengove Ecological Services.

Ecology Australia, Robin Crocker and Associates and Context 2006. *Environment and Land Management Plan for Coastal Crown land Reserves Between Torquay and Lorne. Unpublished report for Great Ocean Road Coast Committee.*

GORCC 2006 *Great Ocean Road Coast Committee Environment and Land Management Plan.* Unpublished Report by Ecology Australia.

GORCC 2013. *Great Ocean Road Coast Committee Coastal Management Plan*. Published by the Great Ocean Road Coast Committee.

Nillumbik Shire Council 2013. *Environmental Works Bushland and Wetland Reserves Prioritisation and Planning Guidelines*. Report published by the Nillumbik Shire Council

Appendices

APPENDIX 1. COMMON AND SCIENTIFIC NAMES OF MAPPED WEED SPECIES

Common name	Scientific name
African Boneseed	Chrysanthemoides monilifera subsp. monilifera
African Boxthorn	Lycium ferocissimum
African Daisy	Osteospermum spp.
Agapanthus	Agapanthus praecox
Aloe spp.	Aloe spp.
Angled Onion	Allium triquetrum
Apple	Malus spp.
Arum Lily	Zantedeschia aethiopica
Asparagus Fern	Asparagus scandens
Banana Passionfruit	Passiflora mollissima
Blackberry	Rubus anglocandicans
Blue Periwinkle	Vinca major
Bluebell Creeper	Billardiera heterophylla
Bridal Creeper	Asparagus asparagoides
Buffalo Grass	Stenotaphrum secundatum
Bushy Yate	Eucalyptus luehmannii
Cape Ivy	Delairea odorata
Cape Wattle	Paraserianthes lophantha
Carpet Weed	Aizoon pubescens
Climbing Groundsel	Senecio angulatus
Coast Banksia	Banksia integrifolia
Coast Tea-tree	Leptospermum laevigatum
Cocksfoot	Dactylis glomerata
Cotoneaster	Cotoneaster spp.
Desert Ash	Fraxinus angustifolia
Dolichos Pea	Dipogon lignosus
Drain-flat Sedge	Cyperus eragrostis
English Ivy	Hedera helix
Eucalyptus spp.	<i>Eucalyptus</i> spp.
Fairy Crassula	Crassula multicava
Flax-leaf Broom	Genista linifolia
Freesia	Freesia spp.
Gazania	Gazania linearis
Giant-honey Myrtle	Melaleuca armillaris
Gladiolus	Gladiolus spp.
Golden-wreath Wattle	Acacia saligna
Green Honey-myrtle	Melaleuca diosmifolia
Hillock Bush	Melaleuca hypericifolia
Hollyhock	Alcea spp.
Hottentot Fig	Carpobrotus edulis
Italian Buckthorn	Rhamnus alaternus
Giant-honey Myrtle	Melaleuca armillaris
Gladiolus	Gladiolus spp.
Golden-wreath Wattle	Acacia saligna
Green Honey-myrtle	Melaleuca diosmifolia
Hillock Bush	Melaleuca hypericifolia
Hollyhock	Alcea spp.
Hottentot Fig	Carpobrotus edulis
Italian Buckthorn	Rhamnus alaternus
	กานแทนร นเนเยา แนร

Common name	Scientific name
Japanese Honeysuckle	Lonicera japonica
Japanese Spindle	Euonymus japonicus
Karo	Pittosporum crassifolium
Kikuyu	Cenchrus clandestinum
Loquat	Eriobotrya japonica
Paperbark	Melaleuca spp.
Miniature Pine	Crassula tetragona
Mirror Bush	Coprosma repens
Montbretia	Crocosmia x crocosmiiflora
Monterey Cypress	Hesperocyparis macrocarpa
Montpellier Broom	Genista monspessulana
Morning Glory	Ipomoea purpurea
Mustard Weed	Brassicaceae spp.
Myrtle-leaf Milkwort	Polygala myrtifolia
Nasturtium	Tropaeolum majus
New Zealand Cabbage	Cordyline australis
Pampas Grass	Cortaderia selloana
Panic Veldt-grass	Ehrharta erecta
Paspalum	Paspalum dilatatum
Petty Spurge	Euphorbia peplus
Pincushion Hakea	Hakea laurina
Prunus	Prunus spp.
Purple Groundsel	Senecio elegans
Radiata Pine	Pinus radiata
Rats Tail Fescue	Sporobolus africanus
Red Hot Pokers	Kniphofia uvaria
Red Valerian	Centranthus ruber
Rose	Rosa spp.
Sallow Wattle	Acacia longifolia subsp. sophorae
Sally Wattle	Acacia floribunda
Sea Rocket	Cakile maritima
Sea Spurge	Euphorbia paralias
Seaside Daisy	Erigeron glaucus
Serrated Tussock	Nassella trichotoma
Showy Honey-myrtle	Melaleuca nesophila
Silver Arctotis	Arctotis stoechadifolia
Spanish Bluebell	Hyacinthoides hispanica
Spanish Heath	Erica lusitanica
Spear Thistle	Cirsium vulgare
Spiny Rush	Juncus acutus
Sugar Gum	Eucalyptus cladocalyx
Sweet Hakea	Hakea drupacea
Sweet Pittosporum	Pittosporum undulatum
Sweet Violet	Viola odorata
Tall Wheat-grass	Thinopyrum ponticum
Toowoomba Canary Grass	Phalaris aquatica
Travellers Joy	Clematis vitalba
Tree Pelargonium	Pelargonium cucullatum
Tuart	Eucalyptus gomphocephala
Tutsan	Hypericum androsaemum
Twiggy Mullein	Verbascum virgatum
Watsonia	Watsonia meriana
Willow Myrtle	Agonis flexuosa Artemisia absinthium
Wormwood	

APPENDIX 2. BEACON ECOLOGICAL MAPPING OF WEED SPECIES 2020 - 2021