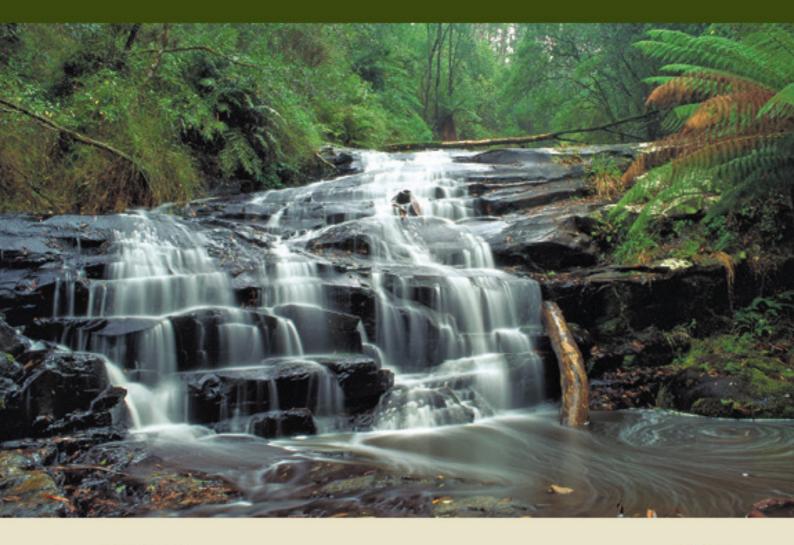


**GREAT OTWAY NATIONAL PARK AND OTWAY FOREST PARK** 

# Caring for Country The Otways and you

MANAGEMENT PLAN DECEMBER 2009 AMENDED NOVEMBER 2019





Department of Sustainability and Environment

Healthy Parks Healthy People



This Management Plan for Great Otway National Park and Otway Forest Park is approved for implementation. Its purpose is to direct all aspects of the management of the parks until the plan is reviewed.

A Draft Management Plan for the area was published in March 2008 with a draft Recreation and Tourism Access Plan and a draft Heritage Action Plan. All written submissions and comments received via three Open House and online forums were carefully considered in preparing this approved Management Plan.

For further information on this plan, please contact

Chief Ranger, West Coast Parks Victoria 7D Camp Road Anglesea VIC 3230 Phone: (03) 5220 2002

#### Copies

This plan may be downloaded from the Parks Victoria website www.parkweb.vic.gov.au. Copies of this plan may be purchased for \$8.80 including GST from:

Parks Victoria Information Centre Level 10, 535 Bourke Street Melbourne VIC 3000 Phone: 13 1963

Department of Sustainability and Environment/ Parks Victoria Colac Office 83 Gellbrand Street Colac VIC 3250

Parks Victoria Geelong Office 74 Gheringhap Street Geelong VIC 3220

Parks Victoria Apolio Bay Office Cnr Oak Avenue & Montrose Street Apolio Bay VIC 3233

Parks Victoria Lorne Office 86 Polwarth Road Lorne VIC 3232

# CARING FOR COUNTRY — THE OTWAYS AND YOU

Great Otway National Park and Otway Forest Park Management Plan December 2009 Amended November 2019



Department of Sustainability and Environment

#### Amendments to Great Otway National Park and Otway Forest Park Management Plan November 2018

The *Great Otway National Park and Otway Forest Park Management Plan* (2009) is amended as below in response to the Anglesea Futures Land Use Framework (DELWP, October 2018) and the Anglesea Heath Establishment Project (Parks Victoria, 2019).

#### Figures:

Figure 1 - Location and Zoning Map – Map depicting Anglesea Heath area is redundant. Anglesea Heath is part of Great Otway National Park. Refer to updated park zoning in Table 1.

Figure 2 – Visitor Access & Facilities – Map depicting Anglesea Heath area is redundant. Anglesea Heath is part of Great Otway National Park. Refer to Table 3 for updated visitor sites and services and refer to Table 7 for authorised road uses.

Tables:

Table 1 amended as below to reflect the management zoning of the Anglesea Heath and the additional area added to the Great Otway National Park.

Zone/Overlay	Area/Location	Values	Zone Management Aims
Conservation	Approx 44% of Great Otway National Park (46 432 ha)	Important natural and cultural values	To protect sensitive natural and cultural environments and to provide for minimal impact recreation activities and simple visitor facilities subject to ensuring minimal interference to natural processes.
Conservation and Recreation	Approx 56% of Great Otway National Park (60 020 ha)	Important natural and cultural values and scope for compatible recreation opportunities	Protect natural environments and cultural features and provide for sustainable, dispersed recreational activities and small-scale recreation facilities without significant impact on natural processes.

#### Table 1 Management Zones and Overlays:



Table 3 amended as below to include the additional visitor sites and services incorporated into the Great Otway National Park (Anglesea Heath).

Site Name	Туре	Camping (no. of sites)	Level of Service	Toilet	Picnic Table	Picnic Shelter	Informat ion	Lookout	Carpark	Campfire	Other
Great Otway	National P	ark									
Anglesea Heath Camping Area*	Camping	Yes	Mid	Y	Y	Y	Y	Ν	Y	Y	-
Anglesea Heath Day- use Area*	Day Visit	N	Mid	Y	Y	Y	Y	N	Y	Ν	-
3. Bald Hills Visitor Area*	Day Visit	N	Basic	N	Y	N	Y	Y	Y	Ν	-

Table 3 Management of Visitor Sites and Services:

\*Sites and services are scheduled for installation by 2021.

Table 4 amended as below to include the following walking and shared-use tracks into the Great Otway National Park.

#### Table 4 Management of Walking and Shared Tracks and Routes:

Track or Route	Visitor Site	Use	Length	Rating
Great Otway National Park				
Anglesea Heathland	Bald Hills Visitor Area	W <i>,</i> MVO	>5kms	E-M
Bushwalking Trail				
Marshy Creek Shared-use Trail	Anglesea Heath Day-use	W, C,	>10kms	E-M
(Harrison Track North &	Area	MVO		
Harrison Track South)				
Harrison Track North	Anglesea Heath Day-use	W, C, H,	>10kms	E-M
	Area	MVO		
Haggarts Trail	Anglesea Heath Day-use	W <i>,</i> MVO	>3kms	E-M
(incl. Haggarts Track)	Area			



Table 7 included to provide information about what uses are permitted on the road network in the additional area added to the Great Otway National Park.

Road Name	2WD	4WD	Trail bikes	Mountain bikes	Horses	Pedestrian
Great Otway	National Pa	ark		•		•
Mt Ingoldsby	Yes	Yes	Yes	Yes	Yes	Yes
Distillery Creek	Yes	Yes	Yes	Yes	Yes	Yes
Number 2	Yes	Yes	Yes	Yes	Yes	Yes
Bald Hills	Yes	Yes	Yes	Yes	Yes	Yes
Batson's (MVO)	No	No	No	Yes	No	Yes
Whites (SC)	No	SC	SC	Yes	SC	Yes
Denham's (SC)	No	SC	SC	Yes	SC	Yes
Alcoa Boundary (MVO)	No	Conditional	Conditional	Yes	Conditional	Yes
Haggarts (MVO)	No	No	No	No	No	Yes
Allardyce	No	Yes	Yes	Yes	Yes	Yes
Harrisons Track North (MVO)	No	No	No	Yes	Yes	Yes
Harrisons Track South (MVO)	No	No	No	Yes	No	Yes
Cecil	No	Yes	Yes	Yes	Yes	Yes
Shiney Eye	No	Yes	Yes	Yes	Yes	Yes
Red River (MVO)	No	No	No	Yes	No	Yes
Peregrine	No	Yes	Yes	Yes	Yes	Yes
Woodland	Yes	Yes	Yes	Yes	Yes	Yes
Firetail (MVO)	No	No	No	Yes	Yes	Yes
Honey Pots	No	No	No	No	No	No
Dusty Miller	No	Yes	Yes	Yes	Yes	Yes
Ridge View (MVO)	No	No	No	Yes	No	Yes
Pipeline	No	Yes	Yes	Yes	Yes	Yes
Alcoa Powerline	No	Yes	Yes	Yes	Yes	Yes
Raven	No	No	No	No	No	No

Table 7 Great Otway National Park (Anglesea Heath) Summary of Authorised Road Uses:

\* MVO – Management Vehicle Only, SC – Seasonal Closure, Conditional – Permitted use between Coalmine Road and Peregrine Track



<u>Text:</u>

Amendment section 1.1 Introduction PAGE 1 by changing:

• The planning area comprises Great Otway National Park and Otway Forest Park. Together the parks total just over 140,000ha

То

• The planning area comprises Great Otway National Park, Otway Forest Park and Anglesea Heath. Together the parks total over 146,400 ha

Amendment Section 1.1 PAGE 1 by changing:

• Great Otway National Park (103 185 ha)

То

• Great Otway National Park (109 617 ha approximately)

Amendment section 1.2 Introduction PAGE 1 by adding:

Following closure of the Anglesea coal mine the Anglesea Heath was included within the Great Otway National Park.

Amendment section 1.4 PAGE 3 to include:

This plan replaces the following management plan

• Anglesea Heath Management Plan – November 2002

Amendment section 2.1 PAGE 4 by removing:

• Anglesea Heath (Alcoa lease area).

Amendment section 2.2 PAGE 5 by adding:

• The Anglesea Heath which contains the most diverse vegetation community recorded in Victoria, comprising one-quarter of the state of Victoria's flora species (>620 species).'

Amendment section 2.3 PAGE 7 by adding:

• The former Anglesea Power Station and brown coal mine operated north of the Anglesea township from 1959 until 2015. Alcoa of Australia relinquished its rights to mine coal in the Anglesea Heath in 2015. The area has since become part of the Great Otway National Park due to its nationally significant biodiversity values.

Amendment section 4.5 Vegetation PAGE 24 by changing:

• 38 560 ha (17%) is within the parks.

То

• 44 992 ha (30%) is within the parks.

Amendment section 6.3 Basis – General Motor Vehicle Access PAGE 41 to include:

• For a full list of roads and tracks for authorised uses in the Anglesea Heath (including 2WD, 4WD, trailbikes, horses, mountain bikers and pedestrians) see Table 7.



Amendment section 6.5 Bushwalking PAGE 52 by adding:

• Walks to explore the wildflowers and scenic views of the Anglesea Heath.

Amendment section 6.9 Horse Riding – Basis PAGE 61 by adding:

• For roads and tracks where horse riding is permitted, see new Table 7.

Amendment section 8.4 Designated and Special Water Supply Catchment Areas – Groundwater extraction and recharge areas PAGE 77 by removing:

- Alcoa Anglesea mine and power station; and
- Sourced by Alcoa at Anglesea.

Amendment section 8.6 Apiculture – Aims PAGE 77 by adding:

• Continue to allow apiculture within the Anglesea Heath in accordance with existing permit requirements and restrictions.

Amendment section 8.6 PAGE 78 to include:

There are five designated apiary sites in Anglesea Heath, issued under one apiculture permit. The existing permit will continue to be allowed to operate, and will be managed to minimise physical impacts to surrounding vegetation until monitoring or research indicates that apiculture should be modified or terminated.

Amendment section 8.6 PAGE 78 Management strategy to include:

• Continue to allow apiculture within the Anglesea Heath in accordance with existing permit requirements and restrictions.

Amendment section 8.10 Park Boundaries and Adjacent Uses – Basis PAGE 80 by removing:

• Alcoa's (Anglesea Heath) lease area which is managed by Alcoa and Parks Victoria in partnership

[END]



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#### Acknowledgements

Acknowledgement of *Country*: In their rich culture, Aboriginal Australians are intrinsically connected to the continent — including the area now known as Victoria. Parks Victoria and the Department of Sustainability and Environment recognise that the parks are part of *Country* of the Traditional Owners.

Parks Victoria and the Department of Sustainability and Environment are grateful to all those organisations and individuals who have contributed to this Management Plan.

Note:

Technical terms used in this plan are explained in the Glossary at the end of the plan.

#### Disclaimers

This plan is prepared without prejudice to any negotiated or litigated outcome of any native title determination applications covering land or waters in the plan's area. It is acknowledged that any future outcomes of native title determination applications may necessitate amendment of this plan; and the implementation of this plan may require further notifications under the procedures in Division 3 of Part 2 of the Native Title Act 1993 (Cwlth).

The plan is also prepared without prejudice to any future negotiated outcomes between the Government/s and Victorian Aboriginal communities. It is acknowledged that such negotiated outcomes may necessitate amendment of this plan.

Every effort has been made to ensure that the information in this plan is accurate. Parks Victoria and the Department of Sustainability and Environment do not guarantee that the publication is without flaw of any kind and therefore disclaims all liability for any error, loss or other consequence that may arise from you relying on any information in the publication.

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### FOREWORD

Great Otway National Park protects extensive forest and much of the coastline between Torquay and Princetown in south-west Victoria. Otway Forest Park includes mountain and foothill forests on the northern fall of the Otway range, adjacent to the national park.

The Otways have always been, and will continue to be, a place for people. The creation of the parks represented substantial progress in achieving a major change in direction for the management of public land in the Otways. The parks make a substantial contribution to the conservation of biodiversity and cultural values. They will also continue to be an important aspect of local lifestyles and support a broad range of nature based recreation experiences and a vibrant regional tourism industry.

Parks play a vital role in ensuring the health and wellbeing of society by providing clean air and water, protecting biodiversity and habitat for native species, sequestering carbon and other ecosystem services. Parks also provide opportunities to connect with each other in a natural setting thereby reducing stress. Healthy Parks Healthy People is all about conserving the natural and cultural values to sustain communities.

The parks are an integral part of Kirrae Whurrong, Gulidjan, Gadubanud and Wathaurong Country, and Parks Victoria and the Department of Sustainability and Environment are working with Traditional Owners and other Indigenous people to support greater involvement in management of parks.

This approved plan establishes a shared vision for management and clear strategic goals for the long-term management of the parks. Ahead lies a challenge to involve the wider Otway and Victorian communities, visitors and government agencies in implementing the plan to achieve the shared vision of protecting the parks for the enjoyment of current and future generations.

GAVIN JENNINGS MLC Minister for Environment and Climate Change

This management plan, prepared under section 17 of the *National Parks Act 1975* (Vic.) and section 22 of the *Forests Act 1958* (Vic.), is approved for implementation.

The plan provides the basis for the future management of Great Otway National Park and Otway Forest Park. It was finalised following consideration of the 493 submissions and 367 additional comments received on the Draft Management Plan.

Chh

GREG WILSON Secretary to the Department of Sustainability and Environment

MARK STONE Chief Executive Parks Victoria

## SUMMARY

Great Otway National Park and Otway Forest Park were created as a result of the Victorian Goverment's acceptance of the majority of final recommendations made by the Victorian Environmental Assessment Council (VEAC 2004) following a two-year investigation. Great Otway National Park was included on Schedule Two to the National Parks Act 1975 (Vic.) on 11 December 2005. It includes the former Otway National Park and Melba Gully State Park, most of Angahook–Lorne State Park and Carlisle State Park, a number of former State forest areas, many smaller reserves and other areas of public land. Following amendments to the Crown Land (Reserves) Act 1978 (Vic.) and the Forests Act 1958 (Vic.), Otway Forest Park was proclaimed on 24 October 2006. It includes former Otway State Forest areas, Karwarren Regional Park and other smaller reserves.

For thousands of years, Gadubanud, Wathaurong, Gulidjan and Kirrae Whurrong peoples have been part of *Country* now known as the Otways. After the arrival of Europeans, land was cleared around the Otways, but many parts of the Otway Ranges were reserved as State forest in recognition of their natural values and timber resources. Since then, generations have lived and worked in the Otways forests, building a tradition of care and respect.

The parks will continue to make a significant contribution to biodiversity conservation. They will also continue to be the centrepiece of local lifestyles, nature-based recreation and a vibrant regional tourism industry. Together the parks protect most the Crown land in the Otways. This management plan —

- covers a planning area encompassing Great Otway National Park and Otway Forest Park, including eight Reference Areas, two Designated Water Supply Catchment Areas (covering five areas) and most of the Aire Heritage River corridor
- identifies strategic directions and aims to achieve desired outcomes for the parks
- identifies park values and major threats and the strategies for protecting, managing and enhancing sustainable use of the parks

• identifies opportunities for people to connect with nature and builds on the recommendations of VEAC by drawing together relevant policies, strategies, plans and community knowledge and aspirations.

Key elements of the plan are as follows:

- Recognition, respect, understanding and aspirations for cooperative management of the parks with the Traditional Owners
- Identification of current and future challenges for the sustainable management of the parks, in protection and enhancement of natural and cultural values, provision and promotion of tourism and recreation experiences, and resource utilisation
- Recognition and understanding of the strong connection many people have to special places for particular activities in the Otways
- Provision and promotion of tourism and recreation activities in the parks, for a diverse, inspirational and sustainable range of nature-based tourism and recreational experiences
- Support for a sustainable nature-based tourism and recreation industry that provides economic and social benefits to Otways communities
- Cooperation with Traditional Owners to explore the provision of culturally appropriate and authentic Aboriginal tourism opportunities, and to empower Aboriginal communities to deliver a broad range of tourism and recreation services
- Continued access to sustainable levels of firewood and minor forest produce in the Otway Forest Park
- A strategic and integrated approach to the management of the parks across the Otways that draws together the actions of the community, Parks Victoria, Department of Sustainability and Environment (DSE) and other agencies.

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#### FIGURES

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# **1** INTRODUCTION

#### 1.1 Location and planning area

The planning area comprises Great Otway National Park and Otway Forest Park. Together the parks total just over 140 000 ha and are located south-west of Melbourne between Torquay and Princetown, extending from the coast almost to the Princes Highway.

Great Otway National Park (103 185 ha) includes extensive forests and heathlands on much of the southern fall and many northern areas of the Otway Ranges, and much of the coastline between Torquay in the east and Princetown in the west. Its coastal boundary is generally the low water mark (figure 1).

Otway Forest Park (39 520) generally includes mountain and foothill forests on the northern fall of the Otway Ranges, much of which is adjacent to Great Otway National Park (figure 1).

These parks encompass a significant portion of the Otway Ranges and foothills. Both parks comprise large blocks of public land, but not all the blocks are contiguous. There are many private land holdings and small rural communities interspersed with, and adjacent to the parks, and several larger towns nearby, including Colac, Anglesea and Apollo Bay.

Within the planning area, Great Otway National Park includes:

- eight reference areas: Aquila Creek, Calder River, Crinoline Creek, Olangolah Creek, Painkalac Creek, Parker River, Porcupine Creek and Stony Creek
- the majority of the Aire Heritage River corridor
- two Designated Water Supply Catchment Areas covering five different areas (section 8.4)
- parts of several Special Water Supply Catchment Areas that also cover parts of the forest park (section 8.4).

The Great Ocean Road, Beech Forest Road, Carlisle–Colac Road, Colac–Lavers Hill Road, Deans Marsh– Lorne Road, Forrest–Apollo Bay Road, Gellibrand River Road, Lavers Hill–Cobden Road, Otway Lighthouse Road, Princetown Road and Skenes Creek Road are excluded from the parks.

#### 1.2 Creation of the parks

The Victorian Environmental Assessment Council (VEAC) commenced an investigation relating to Angahook–Lorne State Park in 2002. Since the 1980s, the environmental community advocated for the cessation of logging in the Otways (section 2.3). The purpose of the investigation was later expanded to include the investigation of a single national park in the Otway Ranges and the addition of State forest areas to the protected area network.

The Council's final report (VEAC 2004) was released in November 2004 after extensive research, analysis and community consultation. The majority of the final recommendations were accepted by the Victorian Government (Government of Victoria 2005); including the creation of a large new national park, a forest park and three new reference areas (Porcupine Creek, Aquila Creek and Painkalac Creek).

Great Otway National Park was included on Schedule Two to the *National Parks Act 1975* (Vic.) on 11 December 2005. It includes the former Otway National Park and Melba Gully State Park, most of Angahook–Lorne State Park and Carlisle State Park, a number of former State forest areas, many smaller reserves and other areas of public land. Land at Ironbark Basin, Sabine Falls and multiple areas formerly owned and managed by water corporations were added to the national park in 2006.

Following amendments to the *Crown Land* (*Reserves*) Act 1978 (Vic.) and the *Forests Act* 1958 (Vic.), Otway Forest Park was proclaimed on 24 October 2006. Otway Forest Park includes former Otway State Forest areas, Karwarren Regional Park and other smaller reserves.

#### 1.3 National park and Forest park

Great Otway National Park and Otway Forest Park complement each other and together provide for natural and cultural values conservation, the provision of tourism and recreation experiences, and access to forest products across the Otways. The parks are managed under separate legislation and, in some cases, policies, guidelines and prescriptions (sections 2.5 and 2.6).

The Great Otway National Park is managed under the National Parks Act, to preserve and protect its natural condition for use, enjoyment and education of the public, and for protection of indigenous flora and fauna, and features of scenic, archaeological, ecological, geological historic or other scientific interest. Protecting water quality and yield is the paramount consideration in managing Designated Water Supply Catchment Areas (appendix 1).

The Otway Forest Park is managed under the Forests Act. The park is managed to: (i) provide opportunities for informal recreation associated with the enjoyment of natural surroundings (ii) protect and conserve biodiversity, natural and cultural features and water supply catchments; and (iii) supply a limited range of natural resource products (appendix 1).

#### 1.4 Plan development

This Management Plan for the parks was prepared by Parks Victoria and the Department of Sustainability and Environment (DSE), with significant input from agencies and the wider community. It takes into account legislation, land use proclamations, policies, reports, research findings and community knowledge and aspirations that relate to the parks.

In particular, the plan builds on the government response to the VEAC recommendations (Government of Victoria 2005), and the creation of the parks in 2005 and 2006.

The plan content has further been informed by an extensive community engagement program under the guidance of the Otways Landscape Community Council (OLCC), appointed by the Minister for Environment in 2006. The OLCC comprised seven members and a chairperson with good community networks and a strong interest in the Otways. Public comment was invited on three draft plans from 14 March to 2 June 2008, the Draft Management Plan, the *Draft Recreation and Tourism Access Plan* (Parks Victoria & DSE 2008b) and the *Draft Heritage Action Plan* (Parks Victoria & DSE 2008a). Various opportunities were given for comment including by post, email, fax, in person at 'open house' public forums and via an 'eforum' internet discussion board. A total of 493 formal written submissions and 367 comments were received from organisations, groups and individuals (appendix 5). These were carefully considered in the preparation of this approved plan.

The plan is a strategic guide for managers of the park. It informs the development of yearly corporate plans, serves as a framework for subsequent detailed planning and governs management activities. However, as a public document, this plan is intended to be informative for a wider, non-specialist audience.

Key changes made to the draft management plan in preparing this approved management plan included:

- incorporation of the key elements *Draft Recreation and Tourism Access Plan* and *Draft Heritage Action Plan* (Parks Victoria & DSE 2008a & 2008b) into a single landscape–scale strategic plan to guide management of the parks
- retaining these two draft documents as important resource material for future management of the parks
- an enhanced focus on Traditional Owner partnerships and improving Aboriginal representation and involvement in decision making and management of the parks
- emphasis on integration of partnerships with community groups and agencies with common goals relating to the area
- improving protection for environmental values by assigning a conservation zone in the national park, based on current biodiversity condition modelling, and special protection zone in the forest park, based on the special protection zone in the West Victoria Regional Forest Agreement
- improving protection for ecosystem services and water quality through the implementation of closed catchments for Designated Water Supply Catchments
- providing greater emphasis on integrated fire management and protection of communities

- clear criteria for assessment of all new development proposals in the parks to determine suitability, priority and timing
- further refinement of access to ensure a sustainable approach for the variety of uses and more detailed information about visitor sites and facilities, walking and shared tracks and routes, and areas available for dog walking and horse riding
- generally adopting the less restrictive option for dog access areas in the national park and no timing restrictions on beach access for horses
- restructuring the plan with separate sections added to give clearer direction for
  - Traditional Owner partnerships and Aboriginal involvement in the parks' management
  - recreational fishing
  - events and commercial activities
  - development assessment criteria
  - and removal of the section on commercial timber harvesting as commercial timber harvesting in the Forest Park has been completed.

• inclusion of tourism initiatives such as the development of a nature-based accommodation 'eco-lodge', demountable accommodation, Indigenous tourism and historic heritage tourism as tourism directions. These are exciting potential opportunities requiring further assessment and planning, and exploration of partnerships with the private and public sectors.

This plan replaces the following management plans:

- Angahook–Lorne State Park Management *Plan* (Parks Victoria 1999)
- Otway National Park Management Plan (NRE 1996a)
- *Melba Gully State Park Management Plan* (NRE 1996b)
- Carlisle State Park Management Plan (Parks Victoria 1998)
- Forest Management Plan for the Otway Forest Management Area (DCE 1992).

#### 2.1 Regional context

The coasts, rivers, mountains, heath lands and forests of Great Otway National Park and Otway Forest Park are some of the many diverse highlights in this region known as the Otway Ranges. Agricultural land, timber plantations, the Great Ocean Road, coastal towns and rural towns are also prominent in the landscape. This landscape, the parks, and places in the parks have special value to many people, including Aboriginal communities, local residents and visitors.

Aboriginal tradition indicates that the parks are part of *Country* of the Gadubanud, Wathaurong, Gulidjan and Kirrae Whurrong people. Relevant local Aboriginal organisations include the Traditional Owners (Kirrae Whurrong, Gulidjan and Wathurong). The Framlingham Aboriginal Trust and Wathaurong Aboriginal Co-operative are also important local Aboriginal groups with a strong interest in the parks. Many Aboriginal people residing in the region may not be associated with any of these groups. Other Aboriginal people may reside outside the region but have an historic or traditional link with it.

Together, Great Otway National Park and Otway Forest Park provide a complementary suite of opportunities for enhanced nature conservation, protection of cultural and lifestyle values and outstanding recreation and tourism experiences on public land.

Great Otway National Park is a park of national significance, and was established based on national criteria for conservation. The coordinated management of Great Otway National Park and Otway Forest Park further enhances the network of parks and provides for a regional, landscape-scale approach to managing biodiversity, natural resources and the provision of ecosystem services.

The two parks contain an enormous diversity of life, with ecosystems ranging from ocean beaches to cool temperate rainforest. Seven national and Victorian bioregions are represented in the parks. Most ecosystems are in good condition and are protected in areas large enough to sustain largely natural ecological processes.

Several important water catchments are within the parks: the majority of the Otway Coast Basin and part of the Barwon Basin. These catchments, part of the Corangamite Catchment Management Authority Region (section 4.4) contain important water supply catchments for townships between Warrnambool and Geelong (section 8.4).

The parks are a keystone for managing crosstenure land management issues in the Otways such as road management, recreation, pest plants and animals, and wildfire. Cross-tenure co-operation and integrated planning with other authorities and private land owners is crucial to delivering outcomes.

The parks are within the Surf Coast, Corangamite and Colac Otway Shires. The creation of these parks and the cessation of sawlog and pulpwood harvesting on public land in the Otways in 2008 had significant economic and social implications for these shires and the Otways region. There are now increased opportunities in plantation forestry and a strengthened future for key industries associated with tourism and recreation.

Great Otway National Park is an integral element of Victoria's most popular regional tourism destination. The Great Ocean Road, an Australian National Landscape (section 2.2) and internationally recognised touring route, winds through Great Otway National Park and provides access to many of the park's attractions.

Other nearby parks include:

- Port Campbell National Park
- Twelve Apostles and Point Addis Marine National Parks
- The Arches, Marengo Reefs and Eagle Rock Marine Sanctuaries
- Anglesea Heath (Alcoa lease area).

#### 2.2 Park significance and values

Great Otway National Park and Otway Forest Park make a valuable contribution to Victoria's parks and reserves system, which aims to protect viable, comprehensive, adequate and representative examples of the State's natural environments, along with providing opportunities for visitors to enjoy and appreciate the natural environment and natural and cultural features.

The forest park offers Otway communities the opportunity to continue to enjoy the lifestyle benefits associated with living near large areas of bushland, including sustainable firewood and minor forest produce collection, and varied recreation opportunities.

Great Otway National Park is assigned the IUCN – World Conservation Union Category II of the United Nations List of National Parks and Protected Areas. Category II areas are managed mainly for ecosystem conservation and recreation. On a statewide basis the national park is rated as very high for the protection of natural values.

Otway Forest Park is a new land use category for Victoria and is not assigned an IUCN category.

The Great Ocean Road National Landscape has been included in the National Landscapes List which contains the best of Australia's natural and cultural landscapes.

Many areas have been included on the Register of the National Estate and are now part of the parks, including:

- the former Angahook–Lorne State Park and adjacent areas
- Anglesea Heath Bald Hills Area
- Cape Otway Lightstation
- the former Melba Gully State Park
- the former Otway National Park and adjacent areas
- Otway Stonefly Habitat Maits Rest
- Urquhart Bluff area
- the headwaters of Lake Elizabeth.

Significant existing features and opportunities of the parks include the following:

#### Natural

• Large areas of intact native vegetation and habitats of the Otway Ranges, Otway Plain, Warrnambool Plain bioregions (section 4.5)

- Areas of forest in excellent condition, including old growth forest, cool temperate rainforests and wet forests (section 4.5 and appendix 2)
- Large portions of the Barwon and Otway Coast river basins, linking largely unmodified headwaters to streams and rivers including the Aire, Gellibrand and Barwon rivers, then on to estuaries and the sea (section 4.4)
- A large area of essentially unmodified coastline, linking the land to marine ecosystems and marine national parks (section 4.4)
- An abundance of biodiversity, with many species and communities found nowhere else in Victoria, some of which are rare and threatened, and including some species of national significance such as the Spottailed Quoll, Smoky Mouse and Tall Astelia (sections 4.5, 4.6 and appendices 3 and 4)
- Many sites of geological and geomorphological significance including Artillery Rocks, Dinosaur Cove, Lion Headland, Moonlight Head to Milanesia Beach, Point Sturt and View Point (section 4.3)
- The majority of the Aire Heritage River corridor (section 4.4).

#### Cultural

- A rich cultural landscape linked through stories, family, tradition, lore, song, spirituality and contemporary meaning to the Traditional Owners of *Country* (section 5.1)
- Many significant Aboriginal places and objects (section 5.1)
- Cape Otway Lightstation, historic places and relics associated with ship travel and shipwrecks (section 5.2)
- Significant historic places including sawmills, tramways and sites with a long tourism history (section 5.2)
- Many sites of social significance to which people feel a strong connection (section 5.3).

#### **Recreation and tourism**

- A diverse range of lifestyle and recreation opportunities for communities adjacent to the parks for local permanent residents and holiday home owners
- Regionally, nationally and internationally significant tourist attractions, close to access routes and accommodation, such as spectacular coastal scenery along the Great Ocean Road, access to beautiful beaches, clifftop lookouts, picnic areas, historic sites, waterfalls and walking tracks such as the Great Ocean Walk (section 6.1)
- Opportunities for exploration by visitors of all mobility and fitness levels, on infrastructure ranging from boardwalks and short loops to longer and more strenuous walking tracks (sections 6.4 and 6.5)
- Various opportunities for overnighting in the parks or in adjoining private accommodation – including dispersed camping, designated secluded or communal campsites, high quality demountable accommodation/standing camps, and links to off-park accommodation providers in close proximity (sections 6.1 and 6.6)
- Specific provision for particular recreation activities such as maintaining access for recreational fishing including to remote beaches for fishing or surfing, routes for vehicle touring, dedicated mountain bike tracks, areas promoted for horse riding, an extensive network of walking tracks including walk-in-only camp sites, rough roads with a recreational 4WD track classification, trail bike unloading areas, launch sites for hang gliding, and convenient places for dog walking
- Opportunities for controlled educational experiences for school groups and guided or self-guided tours, with interpretive 'nature trails' and short and medium loop walks at several key feature sites (sections 6.2 and 6.4).

#### Community use

• Surface and groundwater catchments for piped domestic and industrial water supply for the communities of the region,

including Otway-sourced reticulated water for approximately 285 000 people, and industries including milk and food, timber and paper, fishing and seafood textiles and clothing, automotive parts, fertiliser and metal production (section 8.4)

- Natural flows of rivers and ground water for irrigated agriculture (crops, vegetables, fruit growing and viticulture), and significant dairying, beef, sheep and wool industries (section 4.4)
- Lifestyle and health benefits associated with access to areas of pleasant natural bushland and spectacular scenery for a variety of healthy activities such as walking, cycling, horse riding and dog walking, or just spending time with friends and family
- A range of natural resources for sustainable utilisation, including firewood, minor forest product collection, hunting and beekeeping in the forest park, and fishing in both parks
- The basis for continued growth of naturebased tourism associated with the parks and the region, providing economic opportunities for accommodation providers, food and services providers, and recreation, tourism and education operators.

#### 2.3 Past uses of the parks

Gadubanud, Wathaurong, Kirrae Whurrong and Gulidian people have a timeless link with Otways Country. Middens and other sites along the coast provide an extensive archaeological record of historic Aboriginal culture and indicate that many people lived along the Otway coastline for thousands of years. Maintaining knowledge of culture has been challenging for Aboriginal communities in Victoria, but many aspects of Gadubanud, Wathaurong, Kirrae Whurrong and Gulidjan cultural heritage have been well documented and continue to this day. Many non-physical aspects such as stories and spiritual connections remain important to both historic and contemporary Aboriginal life. Within Great Otway National Park and Otway Forest Park this connection is reflected in an ongoing desire to care for Country.

The Otways played a part in the early days of European settlement of Victoria, with sealers operating along the coast from about 1800, whaling active in the Apollo Bay area from the 1820s to 1840s, and Governor La Trobe exploring a route to Cape Otway from the west in 1846.

Completed in 1848, the Cape Otway Lighthouse was built in response to numerous shipwrecks and increased shipping in Bass Strait. Stone came from a quarry at Parker River and supplies were landed at Blanket Bay. A telegraph station was built in 1859 which played an important role in communicating shipping movements. Now in Great Otway National Park, the Lightstation precinct contains many important historic sites and contributes to the spectacular vista of Cape Otway.

Coastal and low lying areas were taken up for grazing by the late 1840s, with several large runs established. The densely forested Otway ranges, however, were not very suitable for agriculture. From the 1870s the colonial government promoted settlement and released large tracts of forested country, demonstrating a lack of understanding of the land and its values and capability and leading to many failures. Examples of abandoned farms now in the parks are found in the Carlisle area, in the Aire Valley and south of Triplet Falls.

Many forest areas in the Otway parks have a history of logging activity. From a modest start near present-day Lorne in the late 1840s, logging and milling of hardwood timber initially grew in coastal areas and utilised boat transport, such as cutting railway sleepers near Apollo Bay where the local population swelled to about 1000 in 1862. Logging and milling grew to be the dominant industry in the Otways, with over 200 mills, making it one of the State's most productive forest regions. The timber was used to build railways, regional cities and towns and in goldmining operations, and made major economic and social contributions to many local communities. Important mills included Henry's (south of Forrest), Henry's No 1 mill on the Barwon River, Knotts No 1 and Knotts No 3 mill near Wyelangata. Numerous timber tramways winding through the forest fed timber to a railway network. The Beechy Line railway built from Colac to Beech Forest in 1902

serviced about 100 mills and led to the harvesting of large quantities of timber. Birnum Station remains in the parks today and the line has become a recreational rail trail. In more recent times forestry tracks were opened up to access coupes, and many remain, providing an extensive network for management and recreational access. Experimental softwood plantations were established in areas including the Aire Valley with a large work camp set up alongside the Aire River. In 1936, Redwoods (Sequoia *sempervirens*) were planted at the camp site; now about 100 remain and form a cathedrallike setting next to the river. Timber production later declined as a result of reduced demand in the Depression years and other factors.

Beginning in the 1980s, an active environmental movement advocated the cessation of logging in the Otways and protests were held at a range of sites in the forest including Cianncio Creek, Sabine Falls, Wild Dogs Ridge and Rileys Ridge (see <u>www.oren.org.au</u>). A shift occurred in public and political opinion towards forest conservation. Great Otway National Park, incorporating some of these sites and Otways Forest Park were recommended by VEAC and established in 2005 and 2006 respectively. Logging on public land in the Otways ceased in 2008.

Major wildfires occurred within the Otway Ranges in 1851, 1886, 1898, 1919, 1926, 1939, 1951 and 1983. Following serious loss of life and the destruction of many mills in the 1939 bushfires, a network of fire observation towers was constructed including Peters Hill, Mt Cowley, Crowes, Mt Pordon and Mt Sabine. The Mt Sabine tower is the only original tower remaining in the parks.

The Ash Wednesday fire in 1983 started in Dean's Marsh, and burnt over 41 000 ha under extreme conditions. Three lives were lost and 729 houses destroyed in coastal townships including Lorne, Fairhaven and Aireys Inlet.

The parks have a long history of tourism. Attractive natural settings became popular in the late nineteenth century, and increasing numbers of people visited beaches, waterfalls and forests in accessible parts of the Otways. A formal track was constructed to Erskine Falls near Lorne in 1890. Other popular locations

included Kalimna Falls, Cora Lyn Cascades, Cumberland Falls and Sheoak Falls. Lorne and Apollo Bay became popular tourist localities and Colac became a stepping-off point to forest sites such as Triplet Falls, Hopetoun Falls, Beauchamp Falls, Maits Rest and Melba Gully. Fishing and hunting were also popular. The Great Ocean Road was constructed with the labour of returned servicemen from the First World War. Completion of the Great Ocean Road in 1932 led to a transformation in use of the Otways. Reliable vehicle access to parts of the coast and hinterland became possible, visitor numbers grew steadily and a burgeoning tourism industry developed, with the road becoming recognised as one of the world's most scenic touring routes. Many special places along the Great Ocean Road became popular stopping points. In response to increasing demand, dedicated visitor facilities such as lookouts, car parks and walking tracks have been developed.

#### 2.4 Park visitation and experiences

The Great Ocean Road region attracts approximately 4 million day trip visitors and 2.4 million domestic overnight visitors per year, spending approximately 62 million dollars in the region. Visitors from outside the region account for 65% of visitors to the area. Of these, 87% are from Victoria and 60% are from Melbourne. The number of day trips to the area is declining, while overnight trips and international visitor numbers are increasing (Tourism Victoria 2006).

Many towns in the Otways are surrounded by the parks, which makes the parks very important to permanent and seasonal residents. These residents account for 35% of all visitors to the parks (Parks Victoria unpublished data).

Visitor research for the year 2005/2006 has estimated that just over one million visitors visited the Great Otway National Park. Many visited multiple times, representing 2.3 million site visits. The Great Ocean Road is the main 'supply' of visitors with Erskine Falls, Maits Rest, Point Addis, Southside (Bells Beach south) and Urquhart Bluff all receiving over 100 000 visits per annum. Triplet Falls is the most popular hinterland site with 82 500 visits per annum (Parks Victoria 2007d).

Together, the features and facilities of the Great Otway National Park and Otway Forest Park provide a complementary suite of public land opportunities for outstanding recreation and tourism experiences.

For the car or motorcycle-based tourist, the twists and turns of the Great Ocean Road and hinterland routes reveal dramatic coastal and forest views, showcase lush forests, rainforest gullies and heathlands, wildlife viewing opportunities, and vibrant tourist resort towns and rustic scenes of rolling hills and rural settlements.

For four-wheel-drivers and trail bike riders, an extensive network of roads and tracks provides many opportunities to get off the bitumen and onto rough, winding and steep sections to experience freedom, adventure and challenges. Visitor sites provide opportunities for vehiclebased camping and socialising within the parks.

For bushwalkers the variety of landforms and vegetation, combined with easy access, provides opportunities for enjoyable bushwalking experiences from easier short walks at popular natural points of interest, to full day and overnight walks with increased challenges and deeper immersion in the natural environment.

For cyclists, the dramatic coastal stretches and forested hills of the hinterland offer a number of routes for sealed road cycle touring, and many unsealed roads offer adventurous roughroad cycle touring and mountain biking. Dedicated mountain bike trails (single track) offer technical challenges in a user-friendly environment.

The enjoyment of dogs, in companionship, exercising in nature, and interaction with other dogs and dog owners is a popular and highly valued part of the Otways experience for many people.

For horse riders, the parks offer opportunities to experience enjoyable riding through bushland, forests and beaches. Riders can select routes ranging from short, easy loops to more challenging or long distance rides involving camping.

The Otway Forest Park offers hunters opportunities to pursue their pastime and enjoy the natural bush environments.

The long sandy beaches and exposed headlands provide world-renowned surf breaks

and patrolled swimming beaches, all in stunning natural settings with easy access to townships for refreshments.

A range of natural waterways and ocean for fishing (including rivers, estuaries, rock platforms and beaches) allows either an isolated or more social angling experience.

Visitors who enjoy recreational boating use a range of natural and clean coastal and inland waterways, with basic launching facilities and supplies available from nearby townships.

For hang-gliders and paragliders, strong onshore winds and the tall, vertical cliffs provide ideal conditions for hang-gliding and paragliding throughout much of the year, with the spectacular coastal scenery making for thrilling gliding experiences.

For some visitors, the most memorable part of an Otway visit is a helicopter or light plane sightseeing flight, often along the coast en route to viewing the Twelve Apostles in the Port Campbell National Park.

For many local community members the collection of firewood for cooking and heating is an enjoyable aspect of a rural lifestyle.

#### 2.5 Legislation and VEAC outcomes

#### Legislation

#### **Great Otway National Park**

Great Otway National Park was created and is managed under the National Parks Act. The provisions of section 4 and section 17 of the Act set the objectives for management of national parks. The Act also makes specific provision for the lease of the Cape Otway Lightstation area for appropriate recreation and tourism that is consistent with the conservation of heritage values.

The Act defines two Designated Water Supply Catchment Areas (comprising five different areas – see section 8.4) in the national park. These are to be jointly managed with the relevant water corporations, with the paramount consideration being the protection of the areas and their water resources and water quality. There are two agreements under section 32I of the National Parks Act with Barwon Region Water Authority and Wannon Region Water Authority in relation to the joint management of these areas in the national park.

The National Parks (Park) Regulations 2003 (Vic.) apply to Great Otway National Park.

The 35 kilometre Aire Heritage River corridor, most of which is within the national park, is also managed in accordance with the *Heritage Rivers Act 1992* (Vic.).

Eight Reference Areas are included in the national park and are managed in accordance with the *Reference Areas Act 1978* (Vic.). Reference areas are preserved in their natural state for scientific reference.

The *Parks Victoria Act 1998* (Vic.) enables Parks Victoria to provide management services for parks on behalf of the Secretary to DSE. Parks Victoria must not act in a way that is not environmentally sound.

#### **Otway Forest Park**

Otway Forest Park is reserved under the Crown Land (Reserves) Act and, under section 18 of that Act, has been placed under the control and management of the Secretary to DSE for the purposes of its management under the Forests Act.

The forest park is managed under the Forests Act in accordance with section 18A of that Act. The Act specifically prohibits the granting of licences for sawlog or pulpwood production in the forest park, but allows licences to be granted for the ongoing harvesting of firewood and minor forest produce. The Act enables regulations to be made for the care, protection, management and use of the forest park. Regulations will be prepared to assist in implementing this management plan.

#### **Both parks**

Section 27 of the *Catchment and Land Protection Act 1994* (Vic.) provides for the declaration of Special (also known as Proclaimed or Declared) Water Supply Catchment Areas with the provision to create special area plans. Several declarations have been made covering private and public land in the Otways, and large sections of the parks are within Special Water Supply Catchment Areas.

The *Aboriginal Heritage Act 2006* (Vic.) protects all Aboriginal places, objects and Aboriginal human remains (section 5.1).

The *Heritage Act 1995* (Vic.) provides for the protection of historic places, objects, shipwrecks and archaeological sites.

The Native Title Act 1993 (Cwlth) applies to the management of the parks. The Victorian Native Title Settlement Framework is being developed as a new approach to settling native title claims and addressing the land aspirations of Victorian Traditional Owner groups. The Framework will set the parameters for a 'nonnative title' agreement whereby the State recognises a Traditional Owner group alongside a package of benefits, in return for their agreement to withdraw their native title claim(s) and/or not lodge one in the future. It will deliver certainty and finality for the State through the expedited resolution of claims, will build stronger partnerships between Government and Traditional Owner groups, facilitate better management of Crown land, and deliver on Government policies.

The *Flora and Fauna Guarantee Act* 1988 (Vic.) provides for the protection of rare and threatened species.

The *Wildlife Act 1975* (Vic.) provides for the protection of wildlife.

The Environment Protection and Biodiversity Conservation Act 1999 (Cwlth) applies to the actions that have, will have, or are likely to have a significant impact on matters of national environmental or cultural significance, including listed threatened species and communities or listed migratory species in the parks.

The *Road Management Act 2004* (Vic.) applies to the management of public roads including those in the parks.

The *Forests Act 1958* (Vic.) applies to both parks and contains provisions relating to fire management.

#### **VEAC** outcomes

In its Angahook–Otway Investigation Final Report, VEAC made detailed recommendations for certain aspects of public land management in the Otways (VEAC 2004). The VEAC recommendations were broadly accepted by the State Government (Government of Victoria 2005). This Plan builds upon the government response to the VEAC recommendations.

#### 2.6 Policies and guidelines

The parks are managed in accordance with DSE's and Parks Victoria's operational policies, strategies and guidelines, including:

- Parks Victoria's Indigenous Partnership Strategy and Action Plan (Parks Victoria 2005b)
- Indigenous Partnerships Framework (DSE 2007d)
- *Heritage Management Strategy* (Parks Victoria 2005a)
- Victoria's Biodiversity Strategy (NRE 1997)
- South West Region Otway Fire District Fire Protection Plan (DSE 2003c)
- *Fire Operations Plan Otway Fire District 2008–2011* (DSE 2008b) (a new three year plan is produced annually)
- Code of Practice for Fire Management on Public Land (DSE 2006)
- Guidelines and Procedures for Ecological Burning on Public Land in Victoria (DSE 2004c)
- Policy for Sustainable Recreation and Tourism on Victoria's Public Land (NRE 2002a)
- Road Management Plan (DSE 2009b)
- *Road Operational Guidelines* (DSE & Parks Victoria 2009)
- Guidelines and Procedures for Managing the Environmental Impacts of Weeds on Public Land in Victoria 2007 (DSE 2007d)
- Code of Practice for Timber Production (DSE 2007b)
- Management Procedures for Timber Harvesting Operations and Associated Activities in State Forests 2007 (DSE 2007f)
- Victorian Coastal Strategy 2008 (VCC 2008)
- Great Ocean Walk Strategic Directions Plan 2009-2014 (Parks Victoria 2009).

The parks are also managed in a broader context of a number of other regional, state and national plans, strategies and agreements.

#### 3.1 Vision

The parks with their magnificent forests, delicate wildflowers, flourishing wildlife, healthy rivers and estuaries, unspoilt beaches and beautiful landscapes are the heart and soul of Otway communities. There is a real sense that communities value the parks, understand their regional, national and global significance, and are working together and with park managers and the Traditional Owners to care for the parks.

Traditional Owners and other Indigenous people have a prominent and important role in park management, which has become a model for successful cooperative management. The custodial role of past managers is respected and acknowledged. The parks have become a recognised Aboriginal cultural heritage destination of which we are all proud. Understanding and respect for Aboriginal cultural values is well established and the stories of the Kirrae Whurrong, Gulidjan, Gadubanud and Wathaurong are being told by local Traditional Owners, custodians of the songlines.

The parks are an inspiring example of sustainable and integrated land use where management programs have clearly maintained and improved the state of natural, cultural and social values of the Otways while enhancing tourism and recreation experiences, and providing economic benefits.

Many local people contribute to park management, are actively involved in decisionmaking and on-ground activities, and have a close association with local park managers. Local communities feel a special pride about their parks and their achievements. In particular they are pleased with the results of cooperative nature-based tourism development, biodiversity, wildfire and catchment management, and pest plant and feral animal control programs.

Great Otway National Park is a core component of the national and state park system, permanently protecting and conserving the full range of ecosystems, biodiversity and cultural heritage of the Otways. Otway Forest Park is valued for conserving complementary natural and cultural values and for the sustainable use of some natural resources and a broader range of recreation experiences.

In a time of global climate change they continue to provide essential ecosystem services such as clean water and air, and are a refuge for many species affected by climate change.

Together with the Great Ocean Road, the parks are a recreation and tourism focus for visitors, local communities and the broader region. People enjoy memorable experiences in the natural settings offered by the parks. The parks provide an opportunity to escape everyday pressures, connect to the environment and improve mental and physical health while walking, cycling, horse riding, car driving, four-wheel driving and motorcycle riding, camping, picnicking, fishing or sightseeing. Through experience, visitors continue to understand and build respect for the values and sensitivity of the natural and cultural environment.

The establishment and growth of many tourism, health and lifestyle businesses has had flow-on effects to Otway hinterland communities and coastal towns, and Aboriginal community members through employment, business developments, interpretation and involvement in management. While nature-based recreation and tourism opportunities have been substantially enhanced, tourism has been managed sustainably to avoid impacts, and tourism operators are working with park managers to ensure that the Otways is managed on a world's-best practice basis.

Both Aboriginal and the wider community connections to special places are better understood and are reflected in management decisions and actions. There is a sense in the Otways that we have found a balance with nature and that social and cultural connections are growing stronger. The elders look over healthy country with pride.

#### 3.2 Management directions

The Traditional Owners' knowledge and interests in the area and aspirations for *Country* will be reflected in the planning and management of the parks, in accordance with legislation and policies.

Other major management directions for the parks are as follows:

#### Natural values conservation

- The parks will be managed in accordance with relevant national and state legislation, regulation, policy and guidelines to conserve native vegetation and wildlife communities and allow natural evolution
- Special protection will be provided to enhance long-term survival prospects of significant communities and species and ongoing monitoring and research will be encouraged
- Pest plants and animals and pathogens will be managed to minimise impacts on priority flora, fauna and communities
- Fire will be managed in accordance with relevant legislation, regulation and policy in an integrated manner across the landscape.

#### Cultural values conservation

- Protection of Aboriginal places and objects will be guided by relevant legislation, regulation, Parks Victoria's Indigenous Partnership Strategy, and DSE's Indigenous Partnerships Framework
- Traditional Owners and other relevant Indigenous people's knowledge and interests in the area and aspirations for *Country* will be respected. Culturally appropriate Indigenous tourism experiences will be developed in partnership with Traditional Owners
- Historic places and objects will be conserved in accordance relevant legislation, regulation, policy and guidelines including the Burra Charter (Australia ICOMOS 1999).

#### Social values

 Important social values will be understood and appropriately protected. Management decisions will carefully consider social values along with other values.

#### Visitor use and experiences

• Planning for the park visitor will seek to understand the needs of visitors and

develop and market off-peak and hinterland experiences

- A diverse range of sustainable recreation opportunities reflecting community aspirations will be provided and maintained, including visitor facilities, signs and roads
- Visitors will be encouraged to develop an enhanced appreciation of natural values in the parks and expand their awareness of the potential for human impact on natural ecosystems
- Visitors will be encouraged to adopt minimal-impact techniques and to adhere to industry-developed standards appropriate to their activity
- Park managers will work with relevant road management authorities to ensure the safety of road users and to maintain and enhance the scenic amenity of main roads
- Social and economic benefits associated with sustainable tourism will be optimised.

#### Community awareness and involvement

- Opportunities for involvement in the management of the parks will be extended to and integrated with existing community groups and networks
- Collaborative partnerships will be established with relevant agencies to progress areas of mutual interest which strengthen the protection of park values.

#### **Resource use**

- Water catchment areas will be managed to protect the quality and yield of water for harvesting for human use. In the Designated Water Supply Catchment Areas, the protection of the area and the maintenance of water quality and otherwise the protection of the water resources in the areas are the paramount consideration
- The sustainable harvesting of firewood and minor forest produce will continue in Otway Forest Park and will be managed in accordance with relevant legislation, regulation, policy and wood utilisation planning processes.

#### 3.3 Zoning and permitted uses

Park management zoning:

- provides a geographic framework in which to manage parks
- reflects legislated and designated land uses and management overlays
- indicates which management directions have priority in different parts of the parks
- indicates the types and levels of use appropriate throughout the parks
- assists in minimising existing and potential conflicts between uses and activities, or between activities and the protection of the parks' values
- provides a basis for assessing the suitability of future activities and development proposals.

In Great Otway National Park three zones apply: Reference Area Zone, Conservation Zone, and Conservation and Recreation Zone.

In Otway Forest Park two zones apply: Multiple Use Zone and Special Protection Zone.

Three additional land use designations form overlays with important priorities for the management of particular areas: Heritage River Area, Designated Water Supply Catchment Area and Special Water Supply Catchment Area. The overlays are used to highlight requirements in addition to those of the underlying zone.

Details of zones and overlay characteristics and permitted activities are provided in tables 1 and 2 and the areas shown in figure 1.

Detailed management zoning, area, coupe or burn plans may be utilised in subsidiary plans such as wood utilisation plans and fire management plans (sections 4.7 and 7.1).

#### 3.4 Development assessment criteria

Engagement with community, stakeholders and special interest bodies relating to the proposals identified for investigation in the plan, or new proposals, requires a strategic approach to set priorities.

Over the life of the plan all new proposals for investigation and/or development within the parks will be assessed by the following criteria to determine the suitability, priority and timing.

Development proposal criteria:

- identified as a statewide investment priority
- identified as a priority in the management plan
- of sufficient priority to progress at this time
- show a demonstrated market demand
- provide cost–benefit analysis and a sound business case
- show availability of resources for planning, approvals, construction and ongoing maintenance
- show that risks to environmental, cultural and social values and public safety can be assessed and managed
- meet relevant standards
- meet relevant Australian (or other) standards and obligations for native vegetation management on public land
- have reasonable likelihood that relevant approvals and permits can be obtained.

ZONE/OVERLAY	AREA/LOCATION	VALUES	ZONE MANAGEMENT AIMS
Zone			
Reference Area	2% of Great Otway National Park (1708 ha): Stony Creek, Parker River, Crinoline Creek, Olangolah Creek, Painkalac Creek, Porcupine Creek, Aquila Creek and Calder River	Relatively undisturbed representative land types and associated vegetation.	Protect viable samples of one or more land types that are relatively undisturbed for comparative study with similar land types elsewhere, by keeping all human interference to the minimum essential and ensuring as far as practicable that the only long-term change results from natural processes.
Conservation	Approx 40% of Great Otway National Park (40 000 ha)	Important natural and cultural values.	To protect sensitive natural and cultural environments and to provide for minimal impact recreation activities and simple visitor facilities subject to ensuring minimal interference to natural processes.
Conservation and Recreation	Approx 60% of Great Otway National Park (60 000 ha)	Important natural and cultural values and scope for compatible recreation opportunities.	Protect natural environments and cultural features and provide for sustainable, dispersed recreational activities and small-scale recreation facilities without significant impact on natural processes.
Special Protection	30% of Otway Forest Park (8062 ha)	Important natural and cultural values.	Protect natural environments and cultural features previously identified as Special Protection Zones. Firewood and minor forest produce collection or activities which may impact on these values are not permitted.
Multiple Use	70% of Otway Forest Park (31 775 ha)	Important natural, cultural and recreation values with scope for sustainable minor resource use.	Protect natural environments and cultural features, and provide sustainable opportunities for recreation, firewood and minor forest produce collection and other forest activities.
OVERLAY			
Land Use Designation – Heritage River Area	0.8% of Great Otway National Park (about 830 ha): Aire Heritage River	River and surrounding area significant for nature conservation, recreation, scenic or cultural heritage values.	Protect significant nature conservation, recreation, scenic or cultural heritage attributes (Heritage Rivers Act).
Land Use Designation – Designated Water Supply Catchment Area (DWSCA)	16% of Great Otway National Park (16 487 ha): Arkins Creek, and West Gellibrand and Olangolah, Painkalac Creek, St Georges River, and West Barwon sections	Large, relatively undisturbed catchments supplying high-quality water for human use.	Protect the area, maintain water quality and otherwise protect the water resources by restricting the level and types of recreation activities (National Parks Act).
Land Use Designation – Special Water Supply Catchment Area (SWSCA)	17% of Great Otway National Park (17 510 ha) and 60% of Otway Forest Park (24 207 ha): Barwon Downs, Gellibrand River (South Otway), Gellibrand River, Upper Barwon, Gosling Creek, Painkalac Creek (Aireys Inlet), Lorne, Skenes Creek, West Barham River (not shown on figure 1)	Catchments for water supply.	Protect the quality of land and water resources and associated plant and anima life (Catchment and Land Protection Act)

#### TABLE 1 MANAGEMENT ZONES AND OVERLAYS

	GREAT OTWAY NATIONAL PARK						OTWAY FOREST PARK			
Αςτινιτγ	CONSERVATION & RECREATION ZONE	CONSERVATION ZONE	REFERENCE AREA ZONE	HERITAGE RIVER OVERLAY	DWSCA <sup>1</sup> OVERLAY	SWSCA OVERLAY	MULTIPLE USE ZONE	SPECIAL PROTECTION ZONE	SWSCA OVERLAY	
Apiculture	Ν	Ν	Ν	Ν	Ν	N	Y	Y	Y	
Bird watching	Y	Y	Ν	Y	$N^2$	Y	Y	Y	Y	
Bushwalking (section 6.5)	Y	Y	Ν	Y	$N^2$	Y	Y	Y	Y	
Camping – car-based, with facilities (section 6.6)	Y	Y	Ν	Y	Ν	Y	Y	Y	Y	
Camping – designated walk-in only (section 6.6)	Y	Y	Ν	Y	Ν	Y	Y	Y	Y	
Camping with horses (section 6.9)	Ν	Ν	Ν	Ν	Ν	Ν	Y	Y	$Y^3$	
Camping with dogs (section 6.8)	Y	Y	Ν	Ν	Ν	Y <sup>3</sup>	Y	Y	$Y^3$	
Camping – dispersed, no facilities (section 6.6)	Ν	Ν	Ν	Ν	Ν	Ν	Y	Y	$Y^3$	
Campfires/Wood-fuelled BBQs in designated fireplaces (section 6.6)	Y	Y	Ν	Y	Ν	Y	Y	Y	Y	
Campfires – no designated fireplaces (section 6.6)	Ν	Ν	Ν	Ν	Ν	Ν	Y	Y	$Y^3$	
Collection of fallen wood for campfires (section 6.6)	Ν	Ν	Ν	Ν	Ν	Ν	Y	Ν	Y	
Commercial fishing – eels <sup>4</sup> (section 8.7)	Y	Ν	Ν	Ν	Ν	Y	Y	Y	Y	
Cycling (section 6.7)	Y	Y	Ν	Y	$N^2$	Y	Y	Y	Y	
Dogs (section 6.8)	Y	Y	Ν	Ν	Ν	Y	Y	Y	Y	
Education, guided activities	Y	Y	Ν	Y	$N^2$	Y	Y	Y	Y	
Exploration and extraction of earth resources and minerals <sup>5</sup>	Ν	Ν	Ν	Ν	Ν	Ν	Y	Y	Y	
Feeding wildlife	Ν	Ν	Ν	Ν	Ν	Ν	Ν	Ν	Ν	
Firewood and minor forest produce collection <sup>6</sup>	Ν	Ν	Ν	Ν	Ν	Ν	Y	Ν	Y	

#### TABLE 2 SUMMARY OF PERMITTED ACTIVITIES

Great Otway National Park and Otway Forest Park Management Plan

	GREAT OTWAY NATIONAL PARK						OTWAY FORE	ST PARK	
Αςτινιτγ	CONSERVATION & RECREATION ZONE	CONSERVATION ZONE	REFERENCE AREA ZONE	HERITAGE <b>R</b> IVER OVERLAY	DWSCA <sup>1</sup> OVERLAY	SWSCA OVERLAY	MULTIPLE USE ZONE	SPECIAL PROTECTION ZONE	SWSCA OVERLAY
Fishing – recreational <sup>7</sup> (section 6.10)	Y	Y	Ν	Y	Ν	<b>Y</b> <sup>3</sup>	Y	Y	<b>Y</b> <sup>3</sup>
Fossicking and prospecting (section 6.12)	Y <sup>8</sup>	Ν	Ν	Ν	Ν	Ν	Y	Y	Y <sup>3</sup>
Fossil collecting	Ν	Ν	Ν	Ν	Ν	Ν	Ν	Ν	Ν
Four wheel driving (sections 6.3 and 8.4)	Y	Y	Ν	Y	Ν	Y <sup>3</sup>	Y	Y	Y <sup>3</sup>
Fuel stoves – gas/liquid (section 6.6)	Y	Y	Ν	Y	Ν	Y	Y	Y	Y
Geo-caching	Ν	Ν	Ν	Ν	Ν	Ν	Y	Y	Y
Grazing (section 8.5)	Ν	Ν	Ν	Ν	Ν	Ν	Y	Y	Y
Hang-gliding (section 6.14)	Y	Y	Ν	Y	Ν	Y	Y	Y	Y
Horse riding (section 6.9)	Y	Y	Ν	Y	Ν	$Y^3$	Y	Y	$Y^3$
Hunting (section 6.11)	Ν	Ν	Ν	Ν	Ν	Ν	Y	Y	Y
Licensed tours (section 6.1)	Y	Y	Ν	Y	$N^2$	Y	Y	Y	Y
Nature photography, painting	Y	Y	Ν	Y	$N^2$	Y	Y	Y	Y
Orienteering, rogaining	Y	Y	Ν	Y	Ν	Y	Y	Y	Y
Picnicking	Y	Y	Ν	Y	$N^2$	Y	Y	Y	Y
Recreational boating, canoeing, cayaking (section 6.13)	Y	Y	Ν	Y	Ν	$Y^3$	Y	Y	Y <sup>3</sup>
Scenic drives, sightseeing	Y	Y	Ν	Y	Ν	Y <sup>3</sup>	Y	Y	$Y^3$
Trail bike riding (section 6.3)	Y	Y	Ν	Y	Ν	$Y^3$	Y	Y	$Y^3$

Key: Y Permitted subject to overlay prescriptions and conditions prescribed by legislation, licensed tour permits or elsewhere in the plan as indicated. N Not permitted

1 Arkins Creek, Painkalac Creek, St Georges River, West Gellibrand and Olangolah sections of the DWSCAs closed to public access, limited access permitted in the West Barwon section

2 Limited access permitted in the West Barwon section of the DWSCAs, may be subject to permits and controls for protection of water supply quality/yield.

3 Activity may be subject to controls to protect water quality or yield, and management actions to rectify causes of any demonstrable reduction in water quality/yield

4 Existing licenses only, subject to bycatch reduction and phase-out by 2014 (section 8.7)

5 Where consistent with recreation and conservation management objectives, and subject to approval of the Minister for Environment

6 Low intensity harvesting of selected trees for firewood up to 2004 levels and other forest produce under permit

7 Permitted within Barwon Water-managed area (outside DWSCA) from West Barwon Reservoir wall

8 Fossicking for gemstones using hand tools at designated beaches at Moonlight Head only

### 4 STRATEGIES FOR NATURAL VALUES CONSERVATION

#### 4.1 Climate change & resilience planning

#### Aims

- Increase park manager and community understanding of climate change, its consequences and resilience planning.
- Develop and implement management strategies to build ecosystem and species resilience to climate change.

#### Basis

Climate change will be a significant factor in the survival and evolutionary development of natural ecosystems in the Otways. It is likely to have a significant impact on landscape, water production, vegetation, fauna, pest plants, pest animals, diseases, pathogens, fire, and the ecosystem's ability to sequester carbon. The scope and scale of the change is uncertain.

Climate trends for the Corangamite region over the past decade indicate rising temperatures and decreases in rainfall. The future climate of the region is expected to be warmer and drier than it is today (DSE 2008a).

Natural ecosystems are vulnerable to climate change. Patterns of temperature and precipitation are key factors in the distribution and abundance of species.

Key threats to Victoria's biodiversity that are likely to change in response to climate change are altered fire regimes, the arrival of new species (both native and exotic), changing land use and altered hydrology (Dunlop & Brown 2008).

Habitat for some species will expand, contract or shift, resulting in habitat losses for some and habitat gains for others. Species within ecosystems have an inherent capacity (behavioural, physiological and genetic) to cope with some degree of climate variability. This coping range may be narrow for many species and may be exceeded by short-term changes in climate extremes or long-term changes in average climate conditions (Preston & Jones 2006). Recent studies indicate that natural ecosystems throughout the world are already responding to climate change and that there are potentially severe impacts on Australian ecosystems (Preston & Jones 2006).

Climate change may also affect the distribution and incidence of diseases and pathogens such as *Phytophthora cinnamomi* (section 4.8). Further modeling and experimental studies will help to clarify whether the increased climate variability expected in southern Australia will cause *Phytophthora* to become an even greater risk to natural ecosystem health than it is already. There may also be interactive effects whereby drought stressed ecosystems and species are more susceptible to some pests and pathogens (AGO 2006).

Fire weather during Ash Wednesday in 1983 was classified as being experienced once in every 45 years. However, the number of Very High or Extreme Forest Fire Danger days is projected to increase by up to 20% by 2020 and up to 60% by 2050. There is general consensus that severe bushfire events will not only be more frequent but will also be more intense, as evidenced in February 2009. More frequent and more intense fires may significantly alter ecosystems.

The amount of carbon emitted to the atmosphere during bushfires is, when averaged over time, balanced by the amount taken up in subsequent forest regrowth, but this relationship holds only as long as the fire regime remains unchanged. More frequent or more intense fire regimes could result in a discernable decline in forest carbon stocks (AGO 2006).

Mean annual run-off projections for southwestern Victoria for the period to 2030 range from a 5 to 10% reduction under the wettest scenario to 40% in the driest scenario (Jones & Durack 2005). Projections to 2070 include a greater than 50% reduction in the driest scenario. These changes are independent of any variations in run-off caused by natural climate variability or to processes such as landuse change. In addition to the impacts of climate change on mean annual rainfall and evaporation, other associated factors such as the potential for changes in fire risk response to climate change would result in some changes in catchment water balances. However, these factors are not expected to have as large an impact on catchment water balances as would changes in the basic climate parameters (i.e. rainfall and evaporation) (Jones & Durack 2005).

Sea level rise, increased storm events and storm surges will impact on the Victorian coastline, resulting in damaging wind, waves and flooding, erosion and damage to coastal and marine ecosystems (DSE 2008a). Tools are being developed to assess the vulnerability of the Otway coastline (see DSE website, <u>www.climatechange.vic.gov.au/</u>Future Coast).

Climate change is likely to exacerbate existing threats on biodiversity values such as habitat loss and pest species, making their impacts significantly worse.

Parks and reserves will become more important as core areas for ecosystems and habitats, and are the reservoirs for genetic resources required for the long-term adaptation of the natural environment to drier and warmer conditions. Large parks provide areas of intact vegetation that allow critical opportunities for species to migrate within shifting climate envelopes (Parks Victoria 2008).

#### **Management strategies**

- Adopt adaptive strategies consistent with policy and research that assist ecosystems and species to survive and continue evolutionary development.
- In cooperation with relevant agencies and adjacent land managers, and in accordance with a landscape-scale prioritised risk based planning, lead onpark or support off-park, sustainable projects that protect, enhance quality and restore or connect remnant vegetation across the landscape (sections 4.5 and 8.10).
- Work with partners and key stakeholders to keep communities informed on potential and actual climate change implications, strategies for management and actions.
- Include climate change considerations when determining research and adaptive management priorities.

#### 4.2 Landscape

#### Aims

- Protect, enhance and restore landscape values in the parks and minimise impacts of management or visitor activities on landscape values.
- Encourage neighbouring developments and activities to have minimal adverse impact on landscape values.

#### Basis

From quiet streams to awe-inspiring coastal views, the Otway landscape is diverse and breathtakingly beautiful. The natural Otway landscape is the keystone of a vibrant tourism industry and the heart and soul of many Otway communities.

In accordance with tradition, Aboriginal perspectives encompass physical and spiritual aspects of landscape. Stories of *Country* have been passed on over countless generations. The concentration of archaeological sites along the coast, coastal rivers and reefs highlights the relationship between Aboriginal communities and the landscape (AAV 1998).

Visitors can also view Otway landscapes from lookouts, beaches, roads, four wheel drive tracks and walking tracks, including the Great Ocean Walk. The appeal of many of these experiences is the absence of human development. Intact landscapes contribute to a sense of remoteness and are an important retreat for many visitors.

Weaving along a spectacular coastline, through tall forests and rolling hills, the Great Ocean Road is an internationally recognised scenic drive. Many of the outstanding landscape features along the road are in the parks.

The Great Ocean Road Region — Landscape Assessment Study (DSE 2004a) was prepared as a component of the Great Ocean Road Region — Land Use and Transport Strategy (DSE 2004b). The study identified broad landscape character types. The majority of the parks are classified as Otway Forests and Coasts. This landscape character type is typified by tall forests and hilly terrain extending to the sea, with cliffs and beaches. It encompasses four precincts:

• Otway Ranges Forest and Coasts

- Cleared Uplands and Hilltops
- Dry Coastal Woodland and Heath
- Low Coastal Heath.

The study makes specific recommendations for the management of landscape values in these precincts, as well as key views including Point Addis, Urquhart Bluff, Castle Cove and Johanna Beach.

Landscape values can be impacted upon by sudden natural changes (e.g. fire) or inappropriately sited management infrastructure or visitor facilities. Parks Victoria and DSE seek to protect landscape values through careful planning and management. Wherever possible, signs are consolidated and designed to complement local settings.

The Victorian Coastal Council's *Siting and Design Guidelines for the Victorian Coast* (VCC 1998), which aim to protect coastal landscape values, apply to the parks and adjacent land, including landscapes associated with the parks.

Landscape impacts associated with adjoining land are managed through the Surf Coast Shire Planning Scheme (Surf Coast Shire 2000), the Corangamite Planning Scheme (Corangamite Shire 2004) and the Colac Otway Planning Scheme (Colac Otway Shire 2000). Planning schemes set out a framework for assessing proposals for developments that could impact on the landscapes associated with the parks. Local policies and significant landscape overlays include particular requirements for sensitive landscapes. There are landscape overlays adjacent to the national park at Glenaire, Cape Otway, between Colac and Forrest, and along the Great Ocean Road between Lorne and Anglesea.

Parks Victoria and DSE work closely with local government authorities on strategic landscape management issues such as coastal development. Projects that could affect landscape values are carefully managed to ensure that impacts are evaluated and minimised.

#### **Management strategies**

• Work with adjoining land managers, local governments, statutory authorities and landholders and Landcare groups in the

assessment of potential impacts of any proposed new development or use on landscape and natural and cultural values, and use that assessment to inform decisions.

• Apply government policy and guidelines to minimise impacts on landscape values (section 2.6).

# 4.3 Geological and geomorphological features

#### Aim

• Protect significant and fragile geological and geomorphological values.

#### Basis

The Otway region has been isolated many times from King Island and Tasmania by the encroachment of the ocean, made possible by the stretching and sinking of the crust beneath Bass Strait during the initial separation of Australia from Antarctica. The present-day encroachment began about 20 000 years ago after the last glacial maximum, and the last land bridge between Victoria and Tasmania was submerged between 10 000 and 5000 years ago (Birch 2003).

According to Aboriginal tradition, all geomorphological features of the landscape result from the activities of ancestral spirits.

Volcanic activity, the opening of the Southern Ocean, sedimentation and other geological processes are thought to have contributed to this unique and complex region. The geology of the coastal beaches and cliffs are particularly interesting (Bird 1993).

Ecological patterns in the Otways reflect the geomorphology of the region. Important landforms include the Otway Ranges, alluvial valleys, and coastal landforms such as marine cliffs, steep coasts, rocky coasts, coastal terraces, coastal landslips, coastal dunes, coastal bluffs and river mouths.

The Otway Ranges form the most extensive landform in the parks. The dissected ridges of the ranges are a defining part of the landscape, particularly where the ranges extend to the sea at locations such as Moonlight Head and Cape Otway. Streams, waterfalls and landslides are common throughout the ranges. There are 10 sites of international or national geological and geomorphological significance in the national park, and many sites of state, regional or local significance (Buckley 1993; Rosengren 1984). These include:

- Artillery Rocks (international significance) — one of the most clearly displayed clusters of volcanic cannonball concretions in the world
- Dinosaur Cove (international significance)
   one of the few known dinosaur fossil sites in Australia
- Lion Headland (international significance) — unique coastal cliff geology and fossils
- Moonlight Head to Milanesia Beach (international significance) unique coastal geology and fossils
- Point Sturt (international significance) an ancient sandstone shore platform
- View Point (international significance) ancient shore platform
- Cape Patton (national significance) Ramsdens Cave, coastal cliffs and important coastal geology
- Lake Elizabeth (national significance) relatively new lake formed by a landslide
- Parker River to Point Lewis (national significance) important dinosaur fossil site
- Point Franklin (national significance) important dinosaur fossil site.

The wide range of soil types in the parks reflects the diversity of soil-forming processes. Soils range from yellow calcareous sands in coastal dunes to brown friable gradational soils in the higher-rainfall parts of the Otway Ranges (Soil Conservation Authority 1981). Patterns of vegetation are closely associated with soil type. Soils are susceptible to erosion after fire and when vegetation has been trampled or removed. Corangamite CMA has undertaken soil mapping and erosion susceptibility mapping in the Otway region.

Natural processes such as erosion may alter geological features over time but are unlikely to detract from the integrity of geological or geomorphological features. Inappropriate visitor or management activity could damage these sites quickly and irreversibly. Ongoing collection of geological information, informal monitoring and the prevention of known threatening processes are employed to protect significant geological features.

#### **Management strategies**

- Maintain information on sites of geological and geomorphological significance and other significant earth science values and assess, record and monitor their condition.
- Identify and manage significant sites to prevent degradation, including understanding values at risk, threats to values, monitoring protocols and triggers for intervention and preventative action.
- Encourage sustainable research projects that will improve knowledge of geological values and support or improve management.

# 4.4 Rivers, catchments, groundwater and coasts

#### Aims

- Protect, enhance and restore natural, social and resource values associated with rivers, catchments, groundwater and coasts.
- Improve the condition of high-value streams that are not in good condition.

#### Basis

Rivers and streams in the parks, together with catchments, lakes, estuaries and groundwater provide water critical for life and habitat for biodiversity, and essential water for ecosystem function, within and beyond the parks.

The parks also provide water for human use. Much of the planning area is made up of catchments that contribute to surface water and groundwater resources used by communities across the region, including Geelong, Warrnambool, Camperdown, Colac, and coastal towns along the Great Ocean Road coast. Nine Special Water Supply Catchment Areas (SWSCAs) have been gazetted under the Catchment and Land Protection Act, and five areas constituting two Designated Water Supply Catchment Areas (DWSCAs) are under joint management agreements under the National Parks Act. Management of these catchment areas is detailed in section 8.4.

Great Otway National Park and Otway Forest Park are a critical component of the Corangamite Catchment Management Authority (CMA) Region. The parks lie within two of the four river basins in the region — the Barwon Basin (388 000 ha) and Otway Coast Basin (389 919 ha).

The *Corangamite Regional Catchment Strategy* (Corangamite CMA 2003) sets out a strategic management framework for the protection of assets in the catchments, including stream values.

The *Corangamite River Health Strategy* (Corangamite CMA 2004) identifies values, condition and threats to waterways and provides a framework for improving the health of waterways in the catchments. In accordance with this strategy, the Corangamite CMA is leading a range of activities, implemented in partnership with landholders and other stakeholders. Recommended actions include monitoring trends in stream condition, improving stream bank stabilisation and undertaking riparian revegetation.

Roads, recreation areas, park management activities and resource use can impact on flow regimes, river bank stability, streamside vegetation, water quality, aquatic ecology and coastal geomorphology if not appropriately managed.

#### **Coastal management**

Great Otway National Park encompasses over 100 km of coastline that is internationally recognised. The national park's coastal areas are highly accessible due to the route and profile of the Great Ocean Road as one of the world's most stunning tourist drives. As a result, the coast experiences a very high visitation, particularly in holiday times, and requires careful management approaches to ensure visitation and conservation objectives are met.

Coastal management is recognised as becoming increasingly complex due to growing community awareness, expectations and visitation. The national park does not include all coastal areas. Coastal management requires integrated and respectful management approaches across park boundaries with adjacent public and private land managers.

Coastal planning and management is guided by a strategic framework identified through the Coastal Management Act 1995 (Vic.). This Act establishes advisory bodies for coastal management including the Victorian Coastal Council and the Western Coastal Board, and provides for the creation of the Victorian Coastal Strategy (VCS) which is the overarching strategic document for the future of the coast. The VCS promotes the integration of terrestrial and marine management, and outlines a hierarchy of principles that apply to all coastal activities. Regional approaches are promoted through the Central West Regional Coastal Action Plan and the Great Ocean Road Region Strategy, while local planning schemes play a critical role in providing for further development of coastal areas for residential and tourism purposes adjacent to the national park. Parks Victoria and DSE work collaboratively with the Western Coastal Board and other authorities to develop relevant coastal action plans and implement agreed actions for the parks.

Marine pollution is a significant threat to the natural values of beaches and other intertidal areas, aesthetics and public safety. The response to pollution at sea is guided by the *National Plan to Combat Pollution of the Sea by Oil and Other Noxious and Hazardous Substances* (AMSA 1998).

DSE is a lead agency in response to a range of marine incidents including cetacean strandings and entanglements and as the manager of around 70% of Victoria's coastal areas, Parks Victoria plays a significant support role. Such responses often require a diverse range of skills and resources, involving coordination between multiple agencies and members of the community. For Victorian waters the Victorian Marine Pollution Contingency Plan (VICPLAN) (MSV 2002a) outlines broad response arrangements to combat an oil or chemical spill. Under this plan, the national park is within the Port of Portland and Port Phillip Regions with coverage of waters to the west and east of Cape Otway respectively.

#### **Barwon Basin**

The Barwon River and the Barwon Basin support diverse natural, recreational, social and

economic values. The small streams that form the headwaters of the Barwon River are in Great Otway National Park and Otway Forest Park, near Forrest. The parks make up approximately 10% of the Barwon Basin. The West Barwon Dam, on the Barwon River West Branch near Forrest, stores domestic water for Geelong. Streams in the upper catchment are generally in good or excellent condition, but the majority of streams lower in the catchment are in marginal to poor condition, have reduced flows and are subject to major threats (Corangamite CMA 2004).

## **Otway Basin**

The Otway Basin has particularly important environmental values, and approximately 50% of the basin is in the parks. The Otway Basin includes two rivers with large catchments — Gellibrand River and Aire River.

The Gellibrand River catchment encompasses the western section of the parks, from the river's headwaters around Gellibrand to the river mouth near Princetown. The river mouth, the lower reaches of the estuary and a portion of a nationally significant wetland are in Great Otway National Park. The Gellibrand River is important for recreation, including fishing. Waterways in the catchment are in excellent to marginal condition (Corangamite CMA 2004). A stream flow management plan has been prepared for the Gellibrand River to guide the protection of river values (Corangamite CMA 2006).

The mouths of the Gellibrand and Aire Rivers are intermittently closed by natural sand bars. Parks Victoria works collaboratively with the Corangamite CMA in managing these river mouths. The mouths are opened in accordance with permits, protocols and guidelines to minimise environmental impacts (Barton & Sherwood 2004). The South West Estuaries Action Plan provides broad direction for the management of the estuaries of the two rivers (Western Coastal Board 2002b). A detailed study of the biological characteristics of these and other estuaries in Western Victoria has helped to explain the values and complexity of estuaries in the region (Western Coastal Board 2002a). Parks Victoria works collaboratively with the Western Coastal Board in the development and implementation of relevant coastal action plans.

The Otway Basin includes many smaller rivers that discharge directly into the sea between Anglesea and Moonlight Head, including Ford River, Elliot River, Geary River, Parker River, Cumberland River, St George River, Erskine River, Wye River, Grey River and Kennett River, as well as many minor streams.

## Aire Heritage River

The Aire River corridor within Great Otway National Park, including the river mouth and estuary, is part of a designated heritage river under the Heritage Rivers Act. In total, the heritage river area is 35 km long and covers 60 ha, most of which is within the national park, where it extends 200 m either side of the river.

The Act provides for the protection and management of significant nature conservation, recreation, scenic or cultural heritage values in the designated area. Significant values of the Aire Heritage River include:

- a larger river that is one of the least modified in south-western Victoria
- natural values including large stands of cool temperate rainforest
- many significant flora and fauna species
- geomorphological sites of significance
- a high diversity of native fish species including six threatened species, and only one introduced fish species
- popular areas for fishing, boating, picnicking and camping on the river's lower reaches
- scenic values between Hopetoun Falls and the Great Ocean Road and at the river estuary.

The broader Aire River catchment covers southern portions of the national park between the river's headwaters south of Beech Forest and the river mouth at Glenaire Beach. It includes Triplet Falls, Hopetoun Falls and Beauchamp Falls. Waterways in the catchment are in excellent to good condition (Corangamite CMA 2004).

Careful management of the river catchment is essential to protect the river's heritage values. The construction of dams and other impoundments in the Aire Heritage River is not permitted.

All strategies in this plan that apply to the Great Otway National Park also apply to the Aire Heritage River, and heritage river values are protected through park and catchment management. It is considered that the strategies in this plan adequately address the management of the heritage river area in the park.

#### Ground water

Several important groundwater flow systems exist in the parks, including the regional flow system of the Dilwyn and Eastern View formations, Wiridjil gravel intermediate flow system in the area of the Gellibrand River, and Otway Group – Otway ranges local flow system underlying much of the Otway range (Dahlhaus, Heislers & Dyson 2002). Groundwater dependent ecosystems and water bodies are found in the parks, such as the Gellibrand River and estuary, and several freshwater meadows, marshes and springs such as Rainbow Falls near Cape Otway. Groundwater recharge zones are also located within the parks.

Groundwater resources are used to supply water to many communities and agricultural and industrial operations in the region. This is achieved by utilisation of privately-owned bores, or by water corporations supplying mains water to communities such as Geelong and Timboon (section 8.4).

### **Management strategies**

- In accordance with appropriate legislation, regulations and policies implement appropriate erosion control measures for management activities to minimise the impact of the activity on wetlands, streams, catchments and the coast in the parks.
- Implement relevant guidelines, protocols and standards for minimising sedimentation and contamination of streams from roads, tracks and other sources within the parks.
- Protect water quality and protect water resources by managing the DWSCAs as closed catchments in accordance with water corporation policy (section 8.4).

- Monitor activities within the Aire Heritage River overlay and ensure compliance with the Heritage Rivers Act.
- Work with Corangamite CMA to manage the artificial opening of the river mouths as required.

## 4.5 Vegetation

#### Aims

- Protect, enhance and restore indigenous flora species and communities.
- Where possible, allow natural processes that shape floral biodiversity to continue with minimal interference.
- Increase knowledge of flora species and communities, and threatening processes to improve management effectiveness.

## Basis

Great Otway National Park and Otway Forest Park protect significant remnants of Victoria's native vegetation that are an important component of our biodiversity. The vegetation is a cornerstone of Otway ecosystems and provides unique settings for many visitor experiences.

Aboriginal people recognise vegetation as an intrinsic element of *Country*, and have a sophisticated knowledge of its values and uses. Many plant species in the area have specific traditional and contemporary uses (Dawson 1881; Pascoe 2003).

Victoria's Native Vegetation Management — A Framework for Action (NRE 2002e) aims to reverse, the long-term decline in the extent and quality of native vegetation, leading to a net gain across the entire landscape. The Corangamite Native Vegetation Plan 2003– 2008 supports this by establishing regional goals and actions across the Corangamite Catchment, which includes the parks (Corangamite CMA 2005).

The parks span three Victorian bioregions the Warrnambool Plain, Otway Ranges and Otway Plain. There are 28 Ecological Vegetation Classes (EVCs) in the national park including 15 EVCs which also occur in the forest park. EVCs are given a conservation status that represents their extent and quality in a bioregion (NRE 2002e, appendix 2). Of the 1388 plant species recorded in the parks, 97 are rare or threatened in the national park, 25 are rare or threatened in the forest park including 21 which also occur in the national park (appendix 3). The parks are particularly important for protecting Wrinkled Buttons, Anglesea Grevillea, Slender Treefern, Leafy Greenhood and Spiral Sun-orchid. This EVC and flora information is being made publically available as biodiversity interactive maps at the DSE website, www.dse.vic.gov.au. Data sources include Parks Victoria's Environmental Information System (EIS) which contributes to DSE's statewide Flora Information System (FIS). Modelling and mapping of this biodiversity data were used in developing the conservation zone in the national park (section 3.3).

## **Otway Ranges bioregion**

The Otway Ranges extend north-eastwards from Moonlight Head to Forrest and from there southwards to the coast. Most of the parks are in the Otway Ranges bioregion. Most of the bioregion remains uncleared (81%) and 97 773 ha (65%) is within the parks.

Moist Foothill Forest Complexes are the most widespread EVCs in the parks, extending across the higher-rainfall inland ranges from Lavers Hill to Lorne. They contain tall stands of Mountain Ash, Messmate and Mountain Grey Gum and a diverse understorey of shrubs, ferns and grasses that characterise the Otways and the bioregion. Widespread EVCs include Shrubby Wet Forest and Wet Forest, interspersed with Cool Temperate Rainforest.

Although not widespread, Riparian Forest Complexes, including Riparian Forest, occur throughout both parks along valleys and watercourses. Dry Foothill Forest Complexes, typified by Shrubby Dry Forest, occur in Great Otway National Park along the coastal ranges between Cape Otway and Aireys Inlet and on the northern slopes of the Otway Ranges, particularly in Otway Forest Park. Heath Complexes occur along the coast.

### **Otway Plain bioregion**

The Otway Plain encompasses the plains and foothills surrounding the Otway Ranges, from the Bellarine Peninsula west towards Colac and Princetown and coastal areas between Cape Otway and Glenaire. Much of the bioregion has been cleared for agriculture or forestry plantations and 38 560 ha (17%) is within the parks.

Within this bioregion, 24 EVCs occur in Great Otway National Park including 13 which also occur in Otway Forest Park. However, the vegetation consists mostly of Heathy Woodland and Lowland Forest EVCs. Heathy Woodlands and Lowland Forests are particularly important for biodiversity conservation because they are among the most diverse communities in Australia.

## Warrnambool Plain bioregion

The Warrnambool Plain lies to the east of Warrnambool, between Princetown and Colac. Most of the bioregion has been cleared for agriculture. Only 5905 ha (5%) is in the parks.

EVCs in the bioregion include Lowland Forest, Shrubby Foothill Forest and Herb-rich Foothill Forest, and are partially isolated from more intact parts of the parks by cleared land.

## Vegetation conservation

Over many years various threatening processes have reduced vegetation extent and quality within the parks. Areas that have been subject to past timber harvesting are regenerated to approximate the original forest composition (DSE 2007b). Many parts of the parks abut cleared land and are close to population centres and the Great Ocean Road. Fragmentation as a result of vegetation clearance, including the construction of roads and tracks has increased the spread of pest plants and diseases such as *Phytophthora* dieback in some areas.

Large areas of the wet forests and rainforests are in good condition but are threatened by the spread of pest plants, particularly around areas of disturbance such as roads, tracks and park boundaries. Riparian vegetation communities in large intact areas are in relatively good condition, but areas in smaller blocks are already in poor condition and susceptible to further pest plant invasion (section 4.8).

Many of the dry forests that occur closer to the Great Ocean Road, townships and cleared farmland are in poor condition because of visitor pressures (sections 6.3 to 6.11), rabbits and pest plants and diseases (section 4.8) and altered fire regimes (section 4.7). Additionally, an extensive interface with agricultural land in the Warrnambool Plain bioregion means that habitat fragmentation, pest plants and pest

animals are prominent threats to vegetation in the bioregion. Undulating topography and low Otway Plain vegetation allow greater access for recreation. As a result, EVCs in this bioregion are generally more disturbed and fragmented from the creation of unauthorised roads and tracks and informal walking tracks where the quality of many is in decline.

Altered fire regimes are a major threat to vegetation conservation in the Otways. Careful fire management which is integrated across land tenures is required to protect life and property, and to conserve biodiversity values (section 4.7).

The spread of *Phytophthora cinnamomi* and Myrtle Wilt continue to threaten vegetation values (section 4.8). Vegetation requires protection from recreational impacts such as off-track walking (sections 6.4–6.11), especially near the coast where visitation is high and vegetation is susceptible (University of Ballarat 2002).

At several sites in Great Otway National Park over browsing by growing Koala populations is threatening isolated coastal manna gum stands (section 4.6).

Vegetation surveys have been undertaken at several locations in the parks. Benchmarks for vegetation quality have been established to guide specific management objectives for each EVC. In Great Otway National Park, the Signs of Healthy Parks ecological monitoring program includes long-term monitoring of core EVCs such as Herb-rich Foothill Forest, Cool Temperate Rainforest, Lowland Forest and Heathland and priority threatened plant species. The program includes activity measures such as area treated e.g. sprayed, burnt or containment efforts for Phytophthora, effectiveness measures such as change in presence and distribution of pest plants, and outcome measures such as vegetation structure and condition, presence of key fire response species and presence /abundance of susceptible plant species.

Volunteers also contribute significantly to the conservation of flora species and communities throughout the parks (section 9.3).

The harvesting of firewood and minor forest produce, is permitted in Otway Forest Park. These activities are managed in accordance with relevant legislation, codes of practice, procedures and prescriptions to minimise any decline in vegetation condition (sections 7.1 and 7.2).

# **Management strategies**

- Plan and implement management activities and developments in accordance with relevant native vegetation legislation, regulations and policies to maintain vegetation communities, improve the likelihood of controlling known threats and minimising the introduction of new threats.
- Continue threatened species monitoring across tenures in accordance with Action for Biodiversity Conservation (ABC) priorities and use results to refine management.
- Prioritise and implement vegetation restoration to reduce fragmentation and to improve habitat connectivity for priority vegetation communities.
- In the national park, continue to implement best practice (Signs of Healthy Parks) ecological monitoring program and use the results to refine management objectives and actions.
- Encourage sustainable research projects that will improve knowledge of flora values and support or improve management.
- Encourage volunteers and interest groups to contribute records to the EIS and FIS and support survey and monitoring activities.

# 4.6 Fauna

### Aims

- Protect indigenous fauna and habitats from threatening processes where possible.
- Where possible, allow natural processes that shape faunal biodiversity to continue with minimal interference.
- Increase knowledge of fauna and threatening processes to improve management effectiveness.

## Basis

The parks provide habitat for a large range of fauna typical of south-eastern Australia including rare or threatened species, transient and migratory species. Some iconic species such as the Koala, Eastern Grey Kangaroo and Platypus are important components of visitor experiences and make a significant contribution to tourism. Others such as the Spot-tailed Quoll are rarely seen but their protection is critical and symbolic of successful park management. The parks contain a rich assemblage of medium-sized and small ground-dwelling mammals. These mammal communities are susceptible to many threats such as fox and cat predation and habitat fragmentation and have been lost from many other parts of Victoria. The parks also complement habitats in adjoining marine national parks, the coast and private land (section 8.10).

Some 372 fauna species have been recorded in the parks, including 77 rare and threatened species in the national park including 28 which also occur in the forest park (appendix 4) (DSE 2007b). Within the national park, 18 bird species listed under the CAMBA and JAMBA agreement have been recorded including eight which also occur in Otway Forest Park (appendix 4). This fauna information is being made publicly available as biodiversity interactive maps at the DSE website, www.dse.vic.gov.au. Data sources include PV's Environmental Information System (EIS) which contributes to DSE's statewide Atlas of Victorian Wildlife (AVW). Modelling and mapping of this biodiversity data were used in developing the conservation zone in the national park.

Great Otway National Park is particularly important for the conservation of the Spottailed Quoll, Rufous Bristlebird, Hooded Plover, and White-bellied Sea-Eagle. Other fauna of conservation importance in the parks include:

 ground-dwelling mammals such as Dusky Antechinus, Swamp Antechinus, Whitefooted Dunnart, Southern Brown Bandicoot, Long-nosed Bandicoot, Smoky Mouse, New Holland Mouse and Longnosed Potoroo

- ground-nesting birds such as Fairy Tern, Caspian Tern and Lewin's Rail
- owls and bats such as the Masked Owl, Barking Owl, Powerful Owl and Common Bent-wing Bat
- native fish such as Australian Grayling.

Fauna surveys have been conducted in some parts of the parks, but many species such as the Spot-tailed Quoll are elusive and information about their habitat requirements is incomplete. Some other species recorded in the parks do not rely on the parks as a primary habitat.

### Fauna conservation

Fauna require a specific habitat structure in which to survive and flourish. Habitat fragmentation and the decline of vegetation quality are often closely associated with the survival prospects of fauna. Vegetation management, in conjunction with other programs, is essential for maintaining habitats and fauna values in the parks (sections 4.5 and 4.8).

Small mammals require a diverse understorey structure to provide food and shelter, while owls are dependent on old-growth forests which provide hollows for nesting. Stream conditions such as flow, water quality and riparian vegetation are important to water birds, fish and other species such as Platypus. Over many years, various threatening process have reduced the distribution of many species. Predation by foxes and cats (section 4.8), fragmentation (section 4.5) and altered fire regimes (section 4.7) continue to threaten fauna values.

Viewing fauna such as Koalas, Platypus, birds and kangaroos in their natural habitats is a highlight for many visitors. While most traditional nature-based recreation is compatible with fauna conservation, some activities need to be carefully managed to avoid disturbing fauna or their habitats.

Some local populations of native fauna have increased to the extent that they pose a threat to their habitat and therefore to their long-term local survival. For example, some populations of Koalas have locally increased to the extent that they pose a threat to some Otway coastal manna gum woodlands by causing defoliation and tree death. Koalas in the Otways are managed in accordance with Victoria's *Koala*  *Management Strategy*, which aims to ensure that viable wild populations of the Koala persist throughout its natural range (DSE 2004d).

In Great Otway National Park, the Signs of Healthy Parks ecological monitoring program includes long-term monitoring of threatened faunal assemblages, such as small mammal and bird communities including threatened species. The program includes activity measures such as areas treated with fox baits, effectiveness measures such as fox abundance and outcome measures such as distribution and abundance of species susceptible to fox predation.

Volunteers also contribute significantly to the conservation of fauna and habitat throughout the parks (section 9.3).

Oil spills and pollution are potential risks to shorebirds and other wildlife (section 4.4). Cetacean (whale and dolphin) strandings on the national park's beaches occur from time to time. Parks Victoria is responsible for beach clean up within the national and marine national parks and are a support agency to DSE for wildlife affected by oil. Parks Victoria and DSE respond to cetacean incidents in accordance with the *Victorian Cetacean Contingency Plan* (NRE 1999).

# **Management strategies**

- Utilise best practice environmental planning and risk management to focus and prioritise resources for predator management and habitat restoration (sections 4.7 and 4.8).
- Plan and implement management activities in accordance with relevant wildlife legislation, regulations and policies to improve the likelihood of controlling known threats and minimising the introduction of new threats.
- Continue threatened species monitoring across tenures in accordance with Action for Biodiversity Conservation (ABC) priorities and use results to refine management.
- Encourage volunteers and interest groups to contribute records to the EIS and AVW and support survey and monitoring activities.

- In the national park, continue to implement best practice (Signs of Healthy Parks) ecological monitoring program and use the results to refine management objectives and actions.
- Encourage sustainable research projects that will improve knowledge of fauna values and support or improve management.
- Monitor the impact of locally overabundant native animal populations and investigate the efficacy of managing these where they are threatening other significant conservation values.

# 4.7 Fire management

### Aims

- Protect human life, property, and public assets as far as practicable from the deleterious consequences of wildfire.
- Investigate, evaluate and where appropriate implement fire regimes and strategies to reduce the potential for the development of landscape scale fires and also maintain the environmental integrity of the landscape.
- In partnership with other agencies and the community, undertake effective fire prevention, preparedness, response and recovery activities.

### Basis

Fire is an essential component for maintaining the health and regeneration of a range of Otway ecosystems. It is an integral component of Aboriginal culture and an important management tool (Dawson 1881).

There have been a significant number of major wildfires in the Otways that have caused serious loss of property and life, including the 1939 'Black Friday' fires and the 1983 'Ash Wednesday' fires. Fires in the Otways have generally been characterised by relatively large and damaging fires occurring infrequently, predominately human caused and burning from private lands into the public forests.

The National Parks Act requires the Secretary to DSE to ensure that appropriate measures are taken to protect national parks from injury by fire. The Forests Act requires the Secretary to DSE to carry out proper and sufficient work for the prevention and suppression of fire in State forests and national parks, and on all protected public land.

The *Code of Practice for Fire Management on Public Land* (DSE 2006) provides a framework for fire management procedure and practice on public land in Victoria. The code requires fire management planning and activities to protect, as far as practicable, environmental values from the harmful effects of wildfire and altered fire regimes.

Fire management plans and fire operations plans prepared in accordance with the *Code of Practice for Fire Management on Public Land* (DSE 2006) will guide activities throughout the parks. Under the new code four fire management zones will apply to the parks:

- Asset Protection Zone for the highest level of strategic protection to human life, property and highly valued assets.
- Strategic Wildfire Moderation Zone —to reduce the speed and intensity of fires, reduce the damage to assets and assist in making fire suppression activities safer and more effective.
- Ecological Management Zones —for the use of prescribed burning for specific land management objectives.
- Prescribed Burning Exclusion Zone.

Work has commenced on an integrated system for fire planning across public and private land with Integrated Fire Management Planning Committees to be established for each local government area. An example of this asset protection works adjoining coastal townships on both public and private land recognising the shared risks to communities. It is expected that this integrated approach will evolve during the life of this management plan.

Fire management activities encompass land management burning, prevention, preparedness, response and recovery. Fire management activities are undertaken by DSE with support from Parks Victoria, the Country Fire Authority and other organisations.

The response to wildfire throughout the parks are guided by the *Readiness and Response Plan South West Area* (DSE 2008c), which is reviewed annually. All fire management activities require careful planning and implementation to avoid impacts on cultural sites, historic heritage sites, water supplies, visitor facilities, visitor enjoyment and biodiversity values. Roads, signs, water extraction points and other infrastructure are essential for fire protection. Consistent with government-accepted VEAC recommendations, fire protection in the parks is managed to give emphasis to nearby towns and settlements and critical infrastructure assets.

Fire as a management tool maintains or improves ecosystem health and resilience, based on a particular ecosystem's requirements of fire frequency, intensity, scale and patchiness. In most Ecological Vegetation Classes in the parks, prescribed burning is an essential management tool. Since the arrival of Europeans, fire regimes have progressively altered.

A number of heathy vegetation communities, in particular, have declined in condition partly due to a reduced fire frequency.

# **Management strategies**

- Integrate fire planning and prevention works such as strategic fuelbreaks and asset protection zones across-tenure to protect landscape scale biodiversity and protect private assets that abut the parks.
- Prepare an integrated fire management plan to replace the Fire Protection Plan in accordance with legislation and policy in conjunction with key stakeholders and with community consultation.
- Fire management planning for the parks will be undertaken in accordance with current legislation and policy (currently the Code of Practice for Fire Management on Public Land) in conjunction with key stakeholders and with community consultation.
- Encourage research projects that will improve knowledge of fire management, including Aboriginal use of fire, that will support or improve management.
- Increase the planned burning program based on ecological and risk management objectives.

• Enhance the community's understanding of the role of fire in the environment and shared responsibility for fire risk and prevention and preparedness for bushfire.

# 4.8 Pest plants, pest animals and diseases

### Aims

- Eradicate or prevent the establishment of new or emerging pest plants, animals and diseases.
- Control and where possible eradicate pest plants, animals and diseases from the parks, giving priority to areas with priority species and communities or areas in good condition.
- Improve the effectiveness of pest and disease management by increasing the knowledge of pest species and treatment methods through research, record-keeping and monitoring.

## Basis

There are approximately 370 species of exotic plants in the Otways, many of which are pest plants that are invasive, displacing native plant species and altering critical habitats. Pest plants are widespread in the Otways and can alter ecosystem functioning, affect stream dynamics, restrict recreation and spoil landscapes. They are often concentrated in previously disturbed areas such as road verges, cleared sites and boundaries with private property. An ecological risk assessment identified Blackberry, Boneseed, Bridal Creeper and Sweet Pittosporum as priority pest plants in the parks (Raulings 2006), but many others are also of concern, such as Ragwort and Sea Spurge.

The management of pest plants in the parks are guided by the *Guidelines and Procedures for Managing the Environmental Impacts of Weeds on Public Land in Victoria 2007* (DSE 2007d) and the Invasive Plant and Animal Policy Framework (DPI in prep). Parks Victoria and DSE in partnership with the Catchment Management Authorities, local communities and park neighbours are taking a collaborative and cross-tenure approach to pest management to achieve the sustainable protection of biodiversity values. Ongoing monitoring such as the Signs of Healthy Parks program (sections 4.5 and 4.6) enables an evaluation of the effectiveness of programs and ongoing refinement.

Foxes, cats, rabbits, deer, hares, pigs, Brown Trout, introduced birds, feral Honey Bees and European Wasps have been recorded in the parks. Rabbits are widespread in the parks, particularly near agricultural land. They create conditions suitable for pest plants and alter vegetation structure by browsing, which also prevents regeneration, and contribute to erosion. The management of rabbits is guided by the Victorian Pest Management: Rabbit Management Strategy — A Framework for Action (NRE 2002d).

Foxes prey on ground-dwelling mammals, birds and reptiles throughout both parks and pose a serious threat because of the high number of susceptible native species. Foxes can also spread pest plants such as Blackberry. The management of foxes is guided by the *Victorian Pest Management: Fox Management Strategy* — A Framework for Action (NRE 2002c).

Anecdotal evidence suggests that feral cats are increasing in number, and they may be having serious impacts on fauna. There is potential for feral pig and goat populations to become a concern. Their management is guided by the *Victorian Pest Management: Feral Pig and Feral Goat Management Strategy* — A *Framework for Action* (NRE 2002b).

*Phytophthora cinnamomi* is an introduced soilborne pathogen that attacks the roots of susceptible plants, causing dieback and death. It is present at several coastal heathland and woodland sites in Great Otway National Park and Otway Forest Park. Once introduced to an area it can spread quickly, and there are no known ways to eradicate it. *Phytophthora* is spread by the movement of water or soil or gravel on vehicles, machinery, animals, bicycles and boots.

Myrtle Wilt, a fatal disease affecting the dominant rainforest tree Myrtle Beech is caused by the fungal pathogen *Chalara australis*. The disease, which is thought to occur naturally at low levels, has reached epidemic levels in the national park. The risk of spread is thought to be increased by soil disturbance (Cameron & Turner 1996). Management seeks to avoid all unnecessary soil disturbances within cool temperate rainforest.

The vegetation restoration program also contributes to pest control (section 4.5). Parks Victoria and DSE regularly survey the parks to prevent the establishment of new pest infestations. Volunteers also contribute significantly to the early identification and control of pest plants throughout the parks (section 9.3).

## **Management strategies**

- Undertake prioritised pest control using an integrated and asset-based risk management approach in collaboration with the community, including CMAs and neighbours. Priority for pest management will be given to:
  - new and emerging weeds
  - *pest plants identified as environmental threats.*
- Undertake targeted fox and rabbit control programs in the parks to achieve management objectives for priority fauna and flora species.
- Implement community education, hygiene protocols and other measures to minimise the spread of pest species and pathogens, such as Phytophthora cinnamomi.

- Develop and implement a Myrtle Wilt hygiene and risk management plan.
- Work cooperatively with relevant agencies and adjacent land managers on the development and implementation of integrated landscape pest management programs.
- Where available use non-chemical methods for control of pest animals or plants within DWSCAs. Follow protocols (when established) under the joint management agreements. In the absence of protocols, seek the advice of the water corporation before chemicals are used.
- Monitor and evaluate control programs including (Signs of Healthy Parks) ecological monitoring program and encourage sustainable research programs that will improve knowledge of pest plant and animal species and diseases and effectiveness of treatments that will support or improve operational management.
- Encourage research projects that will improve knowledge of the impacts of pest plants and animals, and that will support or improve management.

# 5.1 Aboriginal cultural heritage

## Aims

- Recognise and respect the cultural connections that Traditional Owners and other Aboriginal people have with *Country* within the parks.
- Provide and maintain opportunities for Aboriginal cultural connections and practices within the parks.
- Work together with the Traditional Owners to protect and enhance Aboriginal cultural heritage.

## Basis

'When I asked their names and where the country was they belonged to, they were at the time seated on the ground on the heights ... when the man, with emotion struck the ground and said, "This is my country, deen deen, this this." (Robinson 1841).

Great Otway National Park and Otway Forest Park are an integral part of Kirrae Whurrong, Gulidjan, Gadubanud and Wathaurong *Country*. Living cultural heritage in the Otways has been sustained and nourished by Aboriginal people continuing to maintain, rebuild and advance connections to *Country*, encompassing spirituality, culture and lifestyle connections to the environment, landscape and region.

To the east of Painkalac Creek is Wathaurong ('the people who say *wada* for no') *Country*. The Tjuraaltja clan belongs to the land and sea between Painkalac Creek and Kuarka Dorla (Anglesea). The Maa:mart clan is thought to belong to the land and sea east of Kuarka Dorla.

To the west of the Gellibrand River is the *Country* of Kirrae Whurrong, whose name means 'blood lip' (Dawson 1881). The Kirrae Whurrong is thought to have consisted of at least 21 clans with two language subdialects, sharing many aspects of culture (Clark 1998a). The Ngaragurd gundidj clan is the closest recorded to the parks (Clark 1998a).

To the east of the Gellibrand River is Gadubanud *Country*. Little is known about the Gadubanud, which means 'King Parrot language' (Dawson 1881). Early squatters thought the Otways were uninhabited, but at least five clans are recorded from there, including Bangura gundidj, Guringid gundidj, Ngalla gundidj, Ngarowurd gundidj and Yan Yan Gurt (Clark 1998a). The Gadubanud were considered *mainmait* (wild) by neighbouring language groups.

Gulidjan *Country* extends from Gellibrand to Colac and the lakes wetlands to the north of the parks. It encompasses four recorded clans, including the Birregurra ('place where kangaroo rests') from the area around Birregurra and the Guraldin balug from Ingleby station on the Barwon River.

The post-European contact history of these Aboriginal groups is marked by violence, disease, displacement and institutionalisation. There are many recorded massacres in Western Victoria, including the murder of seven Gadubanud people at the mouth of the Aire River (Clark 1995). Following extensive violence and the progressive displacement of clans from hunting grounds that had been altered by Europeans, survivors gravitated to local pastoral stations, and many eventually moved to Buntingdale Wesleyan Mission near Birregurra and then were moved on to Framlingham Aboriginal Station, Lake Condah and Lake Tyers in Gippsland. As a result many aspects of culture are now shared between language and clan groups throughout the region.

Despite this tragic history, Aboriginal people are committed to maintaining their cultural identity (Critchett 1998; Clark 1998b). Local Aboriginal people and communities, including Traditional Owners, Framlingham Aboriginal Trust, Kirrae Whurrong Native Title Group, Southern Otways Indigenous Group and Wathaurong Aboriginal Cooperative advocate the area's cultural significance, which they aspire to maintain and enhance in partnership with park managers.

Cultural heritage in the parks encompasses archaeological sites as well as non-physical aspects such as massacre sites, songlines, family links and stories. Many plants and animals are also important to Indigenous communities as they relate to identity, spirituality and social and economic wellbeing and responsibilities. There are over 100 archaeological sites registered on the Victorian Aboriginal Heritage Register within the parks, including shell middens, burial sites, scar trees and scatter sites, and this is likely to be a small percentage of the cultural sites that actually exist. Archaeological sites, particularly shell middens, are prevalent along the coast.

Cultural sites are often located adjacent to rivers, streams and the coast, and these natural systems are considered an integral part of *Country*. Rivers and streams are a plentiful source of eels, which in the past were caught by Aboriginal people using elaborate traps constructed from stones and long woven baskets (Dawson 1881; Pascoe 2003).

All Aboriginal places, objects and human remains are protected under the Aboriginal and Torres Strait Islander Heritage Protection Act 1984 (Cwlth) and Aboriginal Heritage Act 2006 (Vic.). The discovery of an Aboriginal place, object or human remains must be reported to the Department of Planning and Community Development (Aboriginal Affairs Victoria) who keep the Victorian Aboriginal Heritage Register. Cultural Heritage Management Plans for conservation of Aboriginal places and objects are developed with the relevant Registered Aboriginal Party (or, if there is no Party, with the Department of Planning and Community Development). It is an offence to damage, interfere with or endanger an Aboriginal place, object or human remains except in accordance with a Cultural Heritage Management Plan.

Aboriginal archaeological sites can be easily damaged by activities such as illegal artefact collection, off-road vehicle use, the construction of fire lines, roads, tracks and visitor facilities, and erosion associated with those facilities and activities. Damage is often gradual and may be exacerbated by the erosion of sensitive coastal sites and natural impacts.

The preservation of non-physical aspects of culture such as caring for *Country*, visiting special places, conducting ceremonies, teaching and resource harvesting depends largely on providing and maintaining opportunities to undertake cultural practices in the parks.

Park managers respect Aboriginal people's ongoing custodianship, knowledge, interests, rights and aspirations for *Country*, and seek to nurture and revitalise relationships between Aboriginal people and *Country* (section 9.2). Parks Victoria has developed an *Indigenous Partnerships Strategy and Action Plan* (Parks Victoria 2005b), applicable to management of the Great Otway National Park, which identifies programs (with corresponding strategies and actions) for developing:

- Relations and partnerships with indigenous communities
- Cross-cultural awareness and learning exchanges
- Indigenous employment and training
- Managing indigenous cultural heritage and environmental values
- Tourism information, interpretation and education
- Indigenous business enterprises
- Native title
- Internal co-ordination.

Parks Victoria will lead the management of Aboriginal Cultural Heritage across both parks. Parks Victoria has guidelines relating to working with Indigenous communities and protecting cultural sites from management activities and a process for assessing all permits to be issued for the national park that includes indigenous cultural heritage values.

DSE has developed an *Indigenous Partnerships Framework* (DSE 2007e), applicable to management of the Otway Forest Park which identifies principles, key strategic initiatives, outcomes and actions for:

- Indigenous cultural awareness program
- Indigenous community partnerships
- Capacity building in indigenous communities
- Cultural heritage, land and water management
- Indigenous employment
- Indigenous economic development
- Communication

• Governance, monitoring and evaluation.

Indigenous tourism has been identified as a key tourism opportunity (section 6.1).

## **Management strategies**

- Respect and include Aboriginal people's knowledge, cultural heritage and aspirations for Country in management of the Otway parks, through implementation of relevant strategies and actions of Parks Victoria's Indigenous Partnerships Strategy and Action Plan and DSE's Indigenous Partnerships Framework.
- Work in partnership with the relevant Registered Aboriginal Parties and, Traditional Owners to manage Aboriginal cultural heritage places. In partnership, identify conservation actions, aspirations for promotion and interpretation, themes and appropriate sites (section 9.2).
- Ensure that relevant permits and consents are obtained where required, prior to undertaking any works that will impact on cultural sites.
- Support staff, consultants, contractors and tour operators to receive cross-cultural training and be aware of Indigenous cultural heritage, legislative requirements, threats and management principles.
- Allow Aboriginal traditional practices in the parks in accordance with legislation.
- Liaise with Traditional Owners, and as appropriate with other Aboriginal groups and relevant agencies in relation to the investigation into the establishment of one or more Indigenous cultural and interpretation centres in the Otways.
- Progress joint management / comanagement aspirations in accordance with the Victorian Native Title Settlement Framework.

# 5.2 Historic heritage

# Aims

• Protect, conserve and present places with significant historic (non-indigenous) cultural heritage values in accordance with applicable legislation, strategies and charters.

• Increase visitor and local community involvement, understanding and appreciation of Otway historic heritage, including sustainable provision of access, presentation, interpretation and promotion of selected sites.

# Basis

Great Otway National Park and Otway Forest Park have outstanding non-indigenous heritage significance related particularly to the numerous sawmilling and tramway sites dating from the 1850s, the Cape Otway Lightstation and the Great Ocean Road. A series of sites with high aesthetic value, particularly panoramic coastal settings, several waterfalls and sections of Myrtle Beech rainforest, also have high cultural heritage significance, long recognised by visitors to the Otways (Parks Victoria and DSE 2008a).

## Management of heritage sites

The Victorian Heritage Register lists four sites that are within the parks: Cape Otway Lightstation, Henry's No.1 Mill and Henry's Tramway Tunnel near Forrest, and Knott's No.3 Mill at Wyelangta. A total of 181 places in the Great Otway National Park and Otway Forest Park are included in Parks Victoria's database for non-Indigenous heritage places. There are 52 sites of state and regional significance (Parks Victoria and DSE 2008a). These sites are generally the highest priority for management.

The Cape Otway Lightstation encompasses the lighthouse and a number of associated buildings constructed during the 1840s and 1850s. The lighthouse and lighthouse keepers' quarters are the oldest intact buildings of their type on the Australian mainland and played a crucial role in immigration to Australia. The Cape Otway Telegraph Station linked Tasmania to the mainland via a submarine cable, signalled ships and conveyed shipping news to Melbourne. A World War II radar station and generator bunkers are also located within the precinct. Protection of the heritage features of Cape Otway Lightstation is guided by the Cape Otway Lightstation Conservation Management Plan (CLS 1994). Conservation issues are also addressed in the lease for the site (section 8.3).

Several important sites and artefacts of shipwreck history are found along the coast, such as anchors from several shipwrecks and the Cape Otway Cemetery with graves of shipwreck victims.

Since the 1840s the timber industry has been a major industry in the Otways. Heritage sites associated with the timber industry include sawmills, remnants of timber tramways and railway lines. The timber industry heritage in the Otways is recognised as outstanding in the state, and three sites are listed on the Victorian Heritage Register: Henry's No. 1 Mill, Henry's Tramway Tunnel, and Knott's No. 3 Mill. Knott's No. 1 Mill was one of the largest mills operating and is relatively well preserved. Remnants of numerous other early sawmills exist, such as the relatively intact Smedley sawmill at Olangolah. The former Colac -Beech Forest - Crowes railway line is now a recreational rail trail linking Colac to Beech Forest partly through the forest park. The rail trail is known as the Old Beechy Rail Trail.

The parks have a long history of tourism, which expanded further after the completion of the Great Ocean Road in the 1930s. Sites with a long history of tourism include Melba Gully, Erskine Falls and Triplet Falls. The Great Ocean Road has a high historical significance as an engineering accomplishment and as a major contributor to the development of tourism in south-western Victoria. The road helped provide access to the natural and landscape values of the coast to generations of tourists.

Other important cultural heritage sites are natural areas with a high aesthetic value, such as Triplet, Erskine, Hopetoun and Beauchamp Falls, Aire and Gellibrand Rivers, rainforest settings e.g. Melba Gully and Maits Rest, and scenic coastal views e.g. Point Addis, Urquhart Bluff, Cape Otway and Johanna Beach (Crocker & Associates 1999).

Environmental factors such as high rainfall and bushfires in the Otways have led to the deterioration of much exposed timber and metal fabric. Preventing this deterioration is not practicable at most sites. Management should focus on limiting manageable threats to site fabric, such as controlling deterioration from visitor access, discouraging removal of artefacts, removal of damaging vegetation, and stabilising structures. Minimising safety risks to visitors and staff is also important (section 6.16).

Protecting significant sites from visitor pressures and management activities is an important priority for management. Historic sites are protected under the Heritage Act which contains prescriptions that apply to disturbance of archaeological sites more than 50 years old. Another important strategy is Victoria's Heritage: strengthening our communities (Heritage Victoria 2006). Heritage sites within the national park are managed in accordance with Parks Victoria's Heritage Management Strategy (Parks Victoria 2005a). The Burra Charter (Australia ICOMOS 1999) provides guiding principles, of which *preservation* is generally the approach taken in managing heritage sites in the Otway parks. Restoration may be appropriate at the Cape Otway Lightstation (Parks Victoria and DSE 2008a).

Continued protection of the special features identified in the government response to the VEAC recommendations will occur through implementation of relevant policies and procedures.

#### Access, presentation and interpretation

Heritage site presentation and provision of interpretation is focussed on accessible sites, with good visitor facilities and on-site opportunities to present stories which interest visitors and help to illustrate key historic themes of 'using resources - forestry', 'accessing natural wonders' and 'shipping along the coast' (section 6.2). Some of the most significant forestry sites are sensitive and inaccessible however, and therefore are not suitable as visitor destinations. A framework for identifying priority sites for interpretation is provided in Heritage Access, Presentation and Interpretation Framework (Crocker & Associates 2002), and a detailed assessment of the main hinterland visitor sites, including visitor appeal and cultural values, is provided in Tourism Plan for Public Land in the Otway Hinterland (DSE 2005).

Historic heritage tourism has been identified in this plan as a key tourism opportunity (section 6.1).

#### **Management strategies**

- Prepare and implement a monitoring program for significant historic places taking into consideration values, threats and natural events such as bushfires. Use information gathered to inform appropriate management actions. Investigate opportunities to involve community groups in implementation of the monitoring program and management actions.
- Ensure that relevant permits and consents are obtained where required, prior to undertaking any works that will impact on heritage places.
- Provide interpretation and directional information such as signage, printed and online information for key heritage sites. Focus on-site interpretation at sites that are accessible, have on-site opportunities for interesting interpretation, and illustrate key historic themes, including Cape Otway Lightstation, Erskine Falls, Triplet Falls, Hopetoun Falls, Beauchamp Falls, Old Beechy Rail Trail and sites near the Great Ocean Road.
- Work co-operatively with other land managers, visitor information centres, tourism organisations and tourist operators to ensure adequate awareness of heritage values, issues and management.
- Encourage community interest and involvement, and continue to work with historical societies and interested community groups in the conservation and interpretation of historic heritage values of the parks.
- Consider appropriate research projects that will foster community understanding and appreciation and influence management outcomes in relation to Otway heritage, e.g. oral histories.

### 5.3 Social values

#### Aim

• Understand the social values of the parks, and enhance and protect places, landscapes, features and character that contribute to social values.

#### Basis

Local communities such as Anglesea, Kennett River, Lavers Hill, Lorne, Forrest and Gellibrand are unusual in that they are situated in a landscape dominated by parks. The Otways have special meaning to Otway people and to visitors. Park management needs to understand the social values of the parks and protect them where possible.

Social values encompass the places and qualities of places that have taken on special meaning to people. This includes what is described as place attachment or sense of place, and refers to the positive emotional bonds that develop between individuals and their environment. It involves a mixture of feelings about specific physical settings and types of settings, and how these settings provide meaning and purpose to life (Brown 2006).

A study of Otway residents and visitors has shown that both groups exhibit similar patterns of place attachment – indicating that visitors are also vested interest stakeholders in land management decisions. Place attachment is most closely associated with peoples' spiritual values for the landscape, and was also shown to be influenced by knowledge of the Otway region, length of residence and advocacy for the environment. Sites shown to have important spiritual and therapeutic values to people were predominantly along the coast (including promoted visitor sites such as Lorne, Apollo Bay, Aire River estuary, Johanna Beach and Wreck Beach, but also many that are not) and some popular inland forest and water feature sites (such as Melba Gully, Triplet Falls and Lake Elizabeth) (Brown 2006).

Community consultation undertaken as a part of the Angahook–Otway Investigation (VEAC 2004) provided some insight into the social values of the parks. Many residents, coastal communities and visitors are concerned that tourism pressures may erode the social value of their special places and ultimately impact on their lifestyle. Many Otway residents want development confined to hinterland areas, avoiding expansion at natural destinations. Feedback received from the community indicates a high level of support for the different management emphases which apply to the protection of social values in the Great Otway National Park and the Otway Forest Park. Community participation in management helps managers understand social values (section 9.3). Interpretation and promoting community awareness contributes to visitors' understanding of the social significance of special places (sections 6.2 and 9.1). Social values research and the development of a social values framework for the parks will provide important information to help guide the management of socially significant sites.

#### **Management strategy**

• Encourage research projects that will improve knowledge of social values and support or improve the management and value of parks to the community.

# 6.1 Tourism and recreation directions

## Aims

- Provide and enhance a sustainable range of tourism and recreation opportunities and products within the parks. Contribute to the region's tourism and recreation opportunities and profile.
- Provide high quality, memorable, authentic and educational experiences for visitors that capitalise on the Otways unique attributes, to generate an understanding and appreciation of park values, and meet or exceed visitor expectations.
- Increase opportunities for participation of commercial and community partners in the provision of tourism and recreation experiences, particularly the Aboriginal community.
- Ensure that tourism and recreation activities and infrastructure are conducted and managed in a way that respects natural settings, conservation requirements, and cultural sensitivities.

### Basis

The Great Ocean Road Tourism Region, of which the parks are an integral part, is one of Victoria's major tourist destinations. The region has a 15% market share of visitors to regional Victoria, the second largest share of all regions (Tourism Victoria 2004). The tourism industry supports a significant part of the region's economy and accounts for 5.3% of total employment (Tourism Victoria 2004). Nature-based activities are strongly associated with destinations in the region, making up more than 60% of activities undertaken by visitors, compared to 46% for regional Victoria as a whole (Tourism Victoria 2004). Recent government initiatives have built on this. aiming to enhance nature-based tourism opportunities particularly in the Otway hinterland.

Nature-based tourism is defined as 'Tourism that relies on experiences directly related to natural attractions' (Tourism Victoria 2008). The parks play an integral two-fold role in nature-based tourism in the region as they provide:

- a base for many nature based tourism, ecoadventure and recreation activities such as bushwalking, organised tours, wildlife viewing, cycling and horse riding
- the setting or backdrop for many activities in the region that draw on the parks' features, such as touring the Great Ocean Road, visiting the Cape Otway Lightstation and holidaying in coastal towns.

Nature based tourism activities are diverse, and have varying appeal for local, national and international visitors. A collaborative approach between government and industry targets marketing to those more likely to be interested in nature-based tourism experiences. The approach aims to provide enhanced experiences and increased visitor satisfaction while catering to forecasted growth in visitation. It is also predicated on providing the maximum economic returns to Victoria.

Parks Victoria and DSE recognise that tourism and recreation are integral to park management, successful tourism provides local community benefits, increasing local employment as well as appreciation and support for park values and assets.

Key overarching policies are:

*Victoria's Nature-based Tourism Strategy* 2008–2012 (Tourism Victoria 2008) aims to provide a coordinated and strategic approach to policy, planning, development and marketing in the sector to optimise the economic, social and environmental benefits to Victoria. The strategy identifies the Great Ocean Road as one of the key nature-based tourism development areas in Victoria, and proposes that nature-based tourism accommodation and activity hub projects be developed for the Otways and Great Ocean Road.

The Great Ocean Road Regional Tourism Development Plan 2004–2007 (Tourism Victoria 2004) provides the strategic direction for tourism development in the region. It identifies that the creation of the Great Otway National Park and Otway Forest Park presents a 'stand-out opportunity for nature based tourism'.

The Great Ocean Road strategy (DSE 2004b) contains strategies for strengthening protection of public land and parks, protection of environment and landscapes, and development of sustainable tourism in the region.

The *Tourism Plan for Public Land in the Otway Hinterland* (DSE 2005) provides specific recommendations for developing and promoting tourism in the hinterland areas.

Park managers have regular liaison and work in collaboration with the highly organised local tourism associations: Surf Coast Tourism and Otways Tourism, and the regional bodies Geelong-Otway Tourism and Shipwreck Coast Tourism.

A licence is required to provide tourism services in Great Otway National Park and Otway Forest Park. Parks Victoria and DSE work closely with licensed tour operators to ensure that tours are compatible with park management objectives. There are 140 (as of 2008) licensed tour operators licensed to conduct tours in the parks, including 4WD touring, sightseeing, educational activities and bushwalking. Licensed tour operators provide enhanced services for visitors who prefer to have additional interpretation, guidance, instruction, catering or accommodation provided while visiting the parks. They also help to promote park values and appropriate usage of the parks.

### Key tourism opportunities

The following key tourism opportunities are exciting potential developments for the parks. They are not, however, overnight ventures, and require substantial long-term assessment, planning, partnership and commitment from the public and private sectors, and are presented for consideration with the expectation that they can only proceed subject to development assessment criteria (section 3.4).

#### **Indigenous tourism**

The Otway parks provide significant opportunities for Indigenous tourism, a highly sought product by international visitors. Park managers are keen to work closely with Traditional Owners and Aboriginal groups to explore opportunities for Indigenous tourism businesses and products that are authentic, respectful and support Aboriginal community development and engagement. These could include (among other things): provision of interpretive services such as guided short interpretive walks or multi-day camping safaris with a focus on indigenous sites, stories, food and culture; supply of services to visitors within the parks such as provision of fuel for camp cooking and facility maintenance; and dissemination of park information to visitors.

#### **Demountable accommodation**

To attract people who are seeking a more comfortable camping experience, the Otway parks are suited to the provision of a limited number of high-end camping options. Purpose built demountable accommodation/standing camps offer immersion in nature, while providing a high degree of comfort and security for campers.

# Nature based accommodation 'eco-lodge' adjacent to Great Otway National Park

The development of a nature-based accommodation 'eco-lodge' adjacent to Great Otway National Park offering high quality, energy efficient 'green' accommodation and associated services has been identified as an opportunity in *Tourism Plan for Public Land in the Otway Hinterland* (DSE 2005). It would serve as a key marketable product, would better connect park visitors with the natural environment and meet an identified gap in accommodation options.

### Great Ocean Walk enhancements

Destined to be 'one of the worlds great walks', the Great Ocean Walk will continue to be developed and enhanced in line with the Great Ocean Walk Strategic Directions Plan 2009-2014 (Parks Victoria 2009) to firmly establish it as a nationally and internationally recognised icon. Sections of the walk that run along roads are to be re-routed onto walking tracks to provide for a high quality walking experience. Cooperative partnerships have been developed with private sector accommodation and tourism providers for mutually beneficial product development, promotion and provision of services. Opportunities exist to enhance the range of services currently provided on the walk, such as enhanced interpretive experiences including interpretation of

Aboriginal cultural heritage, quality catering services, and easier access to off-park accommodation.

#### Long distance horse riding route

An opportunity exists to investigate the provision and promotion of a long distance horse riding route that links existing horse riding 'hubs' and provides the opportunity for a multi-day horse riding experience. Partnerships with horse friendly off-park accommodation providers could also be explored.

#### **Group camping**

Demand for large group camping facilities is growing particularly along the Great Ocean Walk. However, the campgrounds associated with the Great Ocean Walk are not designed for large groups and increases in large groups of campers will diminish the experiences of small-group independent walkers. An opportunity exists to investigate the potential for development of camping areas for larger groups which link to other features, particularly walking tracks.

#### Vehicle touring routes

*Tourism Plan for Public Land in the Otway Hinterland* (DSE 2005) has recommended the development and promotion of three vehicle touring routes, including a 4WD route, to encourage the dispersal of tourists into the hinterland. This could be supported by appropriate private sector investment in tourism infrastructure and provision of services.

### Trail bike riding facilities

Trail bike riding loading and unloading areas will be established. Opportunities for developing riding routes on the public road system will be analysed.

### Mountain biking opportunities

Mountain biking is a growing recreation activity in the parks, popular for cross-country style riding and suitable for mountain bike touring. Purpose-built, technically challenging mountain bike tracks have been constructed near the town of Forrest. Opportunities exist for the promotion of rough-road routes for cross-country riding and touring, and also for development of introductory and familyoriented cycling on shared walking/cycling tracks.

#### Historic heritage tourism

The Otway parks are rich in historic heritage. An opportunity exists to work with tourism bodies and the private sector to explore the potential for the development of historic heritage tourism and delivery of guided historic heritage tours of significant sites and features, while ensuring that heritage values are protected.

#### **Events**

Events are popular throughout the Otways as the diverse natural setting and the proximity of the parks to Melbourne and regional cities attract many activities. Activities range from arts and music to adventure races, mountain bike racing, surfing and other sports. Previous studies indicate that events can be useful in attracting people to hinterland and shoulder season visits, and can contribute to an increased length of stay, thereby contributing more to local economies.

#### Wildlife tourism

Visitors to the Otway parks regularly encounter Koalas, swamp wallabies, grey kangaroos, Echidnas and birds such as black cockatoos and falcons. With planning and local knowledge, Platypus, bandicoots and bats are also able to be observed. There is great potential for promotion of wildlife viewing experiences and increasing the diversity of wildlife tours to visitors from outside the region and from overseas, in combination with other Otway attractions.

# **Management strategies**

- Continue to develop and promote sustainable tourism in the parks and the region, based on regional and local strategies and key opportunities. Continue to work with local and regional tourism associations and contribute to regional and statewide tourism.
- Continue to develop and enhance the Great Ocean Walk and its partnerships opportunities.
- Work with the tourism and recreation industry and the private sector in reviewing and designing tourism product

and experiences, and create an enabling environment for the consideration of new tourism or recreation product and opportunities that diversify nature-based activities and provide authentic and diverse experiences, encourage off-peak tourism, and deliver increased yield.

- Assist relevant Registered Aboriginal Parties, Traditional Owners or other relevant Aboriginal groups to investigate and develop culturally appropriate Indigenous tourism experiences.
- Encourage and support ecologically sustainable tourism development in the hinterland.
- Encourage and support the private sector and tourism bodies to investigate opportunities for a nature-based accommodation 'Eco lodge' adjacent to the national park.
- Work with tour operators to assist with the incorporation of park value messages into tours and interpretive information.
- In partnership with local government, develop township recreation plans supporting cross-tenure and integrated community recreation.

# 6.2 Information, interpretation and education

### Aim

• Promote and encourage visitors' safe and sustainable discovery, enjoyment, understanding and appreciation of the parks natural and cultural values.

# Basis

Providing information, interpretation and education can help orientate and inform visitors, foster an understanding and appreciation of special natural and cultural values, build the understanding of management activities, and help visitors to experience, understand and appreciate the parks in a safe and appropriate manner.

Park infrastructure must be functional and meet relevant standards. It should also be sympathetic to the site and complement nearby colours, shapes and textures. Well-designed infrastructure such as signs can enhance visitor experiences by using materials of special significance, using special construction methods or integrating particular artistic elements. Community involvement in design also provides an opportunity to access unique skills while building community stewardship and pride.

## Promotion and pre-visit information

The Great Ocean Road is a high-profile tourism destination, and the establishment of the Great Otway National Park and Otway Forest Park increases the scope for promoting the region internationally and within Australia through Tourism Victoria and local tourism bodies. Accredited visitor information centres at Geelong, Colac, Torquay, Lorne and Apollo Bay and Port Campbell, as the 'shop front' for the attractions of the region, play an important role in providing pre-visit information for visitors. Tourism businesses throughout the Great Ocean Road and Otway hinterland also help promote the parks.

Parks managers support the promotional work of Tourism Victoria, local tourism associations, accredited visitor information centres and local businesses, who help to ensure that visitors receive appropriate and upto-date information about the parks. Parks Victoria also provides information through its website (<u>www.parkweb.vic.gov.au</u>), Parknotes and other brochures, information centre hotline and feature segments on television travel, tourism and wildlife programs. DSE also provides information about recreation and tourism activities in Otway Forest Park on the DSE website (<u>www.dse.vic.gov.au</u>) and in Forests Notes and other brochures.

# Orientation

Orientation ensures that visitors can enjoy the parks, access facilities and undertake appropriate activities. Providing sufficient, effective orientation is a challenge because of the size of the parks and the complexity of their boundaries.

Park managers use information boards, signs on access roads and in the parks, ranger patrols, Parknotes, Forestnotes and maps, in conjunction with a public awareness program, to help orientate visitors (section 9.1). Detailed visitor orientation information is provided on information boards at most of the popular visitor sites in the parks. Park managers also provide information on roads, tracks and facilities in the parks to the publishers of various popular maps and guidebooks.

#### Interpretation

Interpretation is a critical part of maintaining and enhancing visitor experiences. Information boards, interpretive trails, tours and activities by licensed activity providers, activities led by rangers or volunteers, and interpretive facilities are provided to build an understanding of the parks and their special values. An interpretive centre for showcasing the natural and heritage values of the Great Ocean Road Region has been identified as a priority project (Tourism Victoria 2004), and with reference to Aboriginal cultural interpretation, was included in the VEAC recommendations accepted by government (section 5.1).

Features in the parks with interpretive information readily available include waterfalls such as Triplet Falls, rainforests such as Melba Gully and Maits Rest, shipwreck sites and the Cape Otway Lightstation, with interpretive themes of appreciating natural values and shipping along the coast. An opportunity exists to link sites based on themes of Aboriginal cultural heritage or historic heritage (sections 5.1 and 5.2). Integrated and planned interpretive themes across the parks can create a more enjoyable, higher quality experience, build a broader understanding of park values, threats and uses, and promote additional opportunities for visitors, including other attractions in the Otway hinterland.

#### Schools and group education

The parks provide many opportunities for education to schools and other groups. Licensed tour operators also provide a range of environmental, activity-based schools education programs in the parks.

The parks provide good access for buses to many visitor nodes. Interpretive trails and walking tracks through different ecosystems and habitats provide a basis for education for all levels. Visitor facilities and walking tracks around Anglesea and Lorne are very popular with school groups.

There are opportunities for school groups to utilise larger camping areas within, or private camp and accommodation facilities outside, the parks. The provision of facilities and camping areas for school groups is discussed in section 6.6.

#### **Management strategies**

- Strengthen relationships with and support for accredited visitor information centres, and ensure that good-quality information is available to park visitors through these outlets.
- Provide thematic interpretation with consistent style and content at key visitor sites and access nodes, including signage on main and supporting touring routes. Encourage the development of consistent or standardised signage across land tenures.
- Investigate the establishment of a schools camp program in the vicinity of Anglesea.

#### 6.3 Motor vehicle access

#### Aims

- Provide and maintain a sustainable network of roads for a variety of uses, including general access for recreation, tourism and transit, and access for park management activities, fire suppression and authorised resource extraction.
- Provide opportunities for people to enjoy car and motorcycle touring, four-wheeldriving and trail bike riding experiences within the parks, where this is sustainable and compatible with the protection of other park values.
- Minimise impacts of the road network on natural, cultural and resource values of the parks.
- Encourage responsible vehicle use to minimise damage to the road network and the environment, and minimise conflict between park users and with neighbours.

# Basis

#### General motor vehicle access

Access to Great Otway National Park and Otway Forest Park is provided by a network of established access and through roads (figure 2). The extensive road network in the Otway Ranges has evolved over many years. In the hinterland this has historically been to facilitate access to land for settlement and agriculture, and access for resource extraction. On the coast, roads have developed to increase access and services to towns that are tourism and holiday destinations, most notably the Great Ocean Road.

DSE together with VicRoads and each local government agency are recognised as road management authorities under the *Road Management Act 2004* (Vic.). The term 'road' as used in this plan has the same definition as in the *Land Conservation (Vehicle Control) Regulations 2003* (see glossary).

Well-used through roads (section 1.1) and roads accessing private land are not included in the parks. Some roads, such as the Great Ocean Road, are arterial roads managed by VicRoads, and many others are municipal roads managed by local government authorities (Colac Otway Shire, Corangamite Shire or Surf Coast Shire).

Many roads are used to provide access to recreation or tourism sites such as lookouts, picnic sites, activity staging areas (car parks near beaches, trail heads etc.), campgrounds and historic or cultural sites. As such, they are considered to be public roads and are managed according to the *Road Management Plan* (DSE 2009b), which sets minimum road maintenance standards for public roads. It also contains a register of public roads, including those within the Great Otway National Park and Otway Forest Park for which DSE is the road management authority.

Other roads are used specifically for park management purposes (e.g. patrols for safety and compliance, emergency preparation and response, fire management, search and rescue, managing and servicing park facilities, pest control). These roads are operational roads and while some may be open to the public, they are not managed to the same standards as public roads. Rather, operational roads are managed in line with available resources and operational needs.

Some roads within the Otway Forest Park are used for the cartage of resources such as firewood and other minor forest produce. Most of these roads are also operational roads. Some key roads are maintained to a standard for wildfire suppression access as part of DSE's *Fire Protection Plan* (DSE 2003c).

Roads, whether categorised as public roads or operational roads, may be:

- open for public use with any means of conveyance (truck, bus, car, motorcycle, horse, bicycle, walking) permitted under a right of passage given by the Road Management Act. Vehicles must be registered and vehicle drivers licensed.
- closed to public use with signs and barriers to indicate the closure and prevent access. Access is permitted to authorised management vehicles only. Park managers undertake consultation and notification before closing a road for more than one day. Roads may be closed on a seasonal basis (referred to as seasonally closed roads) or permanently (referred to in national parks as *management vehicle only* roads). Seasonally closed roads are listed annually at Parks Victoria's website www.parkweb.vic.gov.au. Walkers are generally permitted to use seasonally closed and management vehicle only roads, and in some cases horse riding, cycling or other activities may be allowed. Roads may also be closed temporarily for maintenance, protection of environmental or cultural values, or in response to hazards or emergency.

Under a 'closed catchment' policy to maintain water quality, the Designated Water Supply Catchment Areas of the national park, including roads within these areas, are generally closed to the public (section 8.4).

Under the Land Conservation (Vehicle Control) Regulations 2003, unauthorised driving of motor vehicles (including trail bikes) off road and parking areas in the parks is illegal, including riding on natural areas or on walking or cycling tracks. Due to this and the requirements of maintaining safe, navigable and environmentally and economically sustainable roads, the special requirements and demands of more challenging motorsports such as trail bike riding on 'single-track' (i.e. narrow tracks) cannot be accommodated in the parks.

The road network is extensive throughout the Otway parks (figure 2). Roads can lead to

environmental impacts such as sedimentation of streams, habitat loss and fragmentation, increased spread of pest plants and soil-borne pathogens, and increased access by feral and pest animals. However, roads are important to provide access for park managers to undertake management activities and for park users to undertake recreational activities.

The road network requires rationalisation from time to time as roads become superfluous to needs or cause unmanageable and unacceptable environmental, cultural or safety risks. Similarly roads may be realigned or constructed to provide better access for management or other activities.

Roads will be discontinued in accordance with applicable legislation and policy on due process and public notification, and the road areas will be rehabilitated where necessary. DSE has developed a policy on the consultation and rehabilitation process for proposed road and track closures specifying a six-week consultation period.

### Car and motorcycle touring

Some roads are used for car and motorcycle touring, sightseeing and car rally events (section 6.15). The Great Ocean Road is an internationally recognised scenic drive through Great Otway National Park, and other roads within the parks are also very scenic and form loops for vehicle touring. To complement Great Ocean Road experiences and draw and disperse tourists into the Otway hinterland, the establishment and promotion of inland touring routes is important (Tourism Victoria 2004). Touring routes have been identified as 'three key drives through the hinterland' (DSE 2005). A main loop, completed with the upgrade of Turtons Track, connects Skenes Creek, Apollo Bay, Glenaire, Lavers Hill and Beech Forest, allowing stops at key attractions such as Otway Fly and Cape Otway Lighthouse. Supporting this are a two-wheel-drive touring route connecting Lorne, Erskine Falls, Forrest and Kennett River, partly on unsealed roads, and a four-wheel-drive touring route connecting Lavers Hill, Gellibrand River and Beech Forest.

The development of vehicle touring routes is identified in this plan as a key tourism opportunity (section 6.1).

#### Four wheel driving

Four-wheel-drive enthusiasts are able to use all open roads (public and operational roads) in the parks. Some of these roads provide challenging conditions and access to many areas, including crossing over the top of the Otway Ranges and the opportunity to travel along the spine of the range for a considerable distance. The greatest extent of roads is open in the dry months (November-May). Fourwheel-drive touring routes in the Otways include the Aire Valley Experience (25 km), Carlisle Wildflowers Tour (40 km), Goat Track (25 km), Neck Track (50 km), Ocean Track (15–25 km) and Savers Circuit (40 km). Parks managers and Four-Wheel-Drive Victoria have signed a memorandum of cooperation to maintain a positive and constructive working relationship to preserve and enhance four-wheel-driving in Victoria in an environmentally and economically sustainable manner. The memorandum sets up the Four-Wheel-Driving Committee as a forum for developing recommendations for management. At the regional level, the Otway Four-Wheel-Drive Liaison Committee has been formed with regional club representatives to discuss and make recommendations on regional and local issues. Visitors participating in four-wheel-drive activities are encouraged to comply with the Four-Wheel-Driving -Adventure Activity Standards (ORC 2005c).

# Trail bike riding

Trail bike riding is a popular activity at Anglesea, Gherang and Paddys Swamp, and many other areas throughout the parks. Some local riders ride their bikes to the parks, but those coming from farther away often transport their bikes by trailer and unload them at staging points on the periphery of the parks.

As with other motor vehicles, trail bikes with full registration are permitted on all open public and operational roads in the parks. Victorian road legislation applies, and therefore off-road and single track riding, unlicensed (including under-age) riding, and riding of unregistered trail bikes is illegal. Exhaust noise emissions must not exceed legal limits. Trail bikes with recreation registration are permitted on open public and operational roads, subject to some legislated limitations on the roads that may be used (see <u>www.vicroads.vic.gov.au</u>). Riders must be licensed.

In 2006 DSE began a four-year statewide Trail Bike Initiative with the objective of providing for socially and environmentally sustainable trail bike riding on public land. Under this initiative the Otways is an area of particular interest. Implementation of the initiative in the Otways will result in:

- construction of loading / unloading areas within Otway Forest Park that contain information to educate riders on appropriate riding behaviour on public land
- signage of 'reduced noise' zones in areas of high disturbance of neighbours and other park users
- investigation of designated trail bike touring routes on public roads
- rehabilitation of damaged and degraded areas
- information, education and compliance campaigns to help ensure riders are riding legally and responsibly.

Trail bike riders conducting their activity in groups are encouraged to comply with the *Trail Bike Touring* — *Adventure Activity Standards* (ORC 2005g).

# Management strategies General motor vehicle access

- Provide roads for access to tourism and recreation sites, provision of recreation experiences, management of infrastructure and natural resources, public safety, and authorised resource extraction (figure 2).
- Develop and make publically available an up-to-date spatial database of roads information for both parks.
- Monitor and maintain public roads according to the standards specified in the Roads Management Plan (DSE 2009b). Manage operational roads according to operational needs and available resources.
- Manage roads in accordance with relevant legislation, regulations and guidelines. Follow applicable policy on process and public notification.

• Implement seasonal closures of applicable roads from 1 June to 31 October.

## Car and motorcycle touring

• Support the development and promotion of touring routes as per the 'three key drives through the hinterland' strategy (DSE 2005). Support the development of route signage, inclusion in printed information, and appropriate visitor sites to support touring (section 6.1).

### Four-wheel-driving

- Continue to foster the relationship with Four Wheel Drive Victoria and affiliated clubs in accordance with the memorandum of cooperation and through the Otways Four-Wheel-Drive Liaison Committee. Work with the Otway Four-Wheel-Drive Liaison Committee on the track classification project.
- Authorisation to access a limited number of management vehicle only roads in the national park may be given to licensed tour operators, and Four-Wheel-Drive Victoria affiliated clubs engaged in volunteer park management activities. Allow access at low frequency, subject to controls to protect values and assets and to manage risk.

### Trail bikes

- In partnership with Victoria Police encourage appropriate trail bike riding behaviour in appropriate areas, and ensure compliance with relevant laws, particularly those relating to licensing, registration, riding off-road and the creation of illegal tracks.
- With the cooperation of formalised trail bike groups like Otway Trailbike Riders (OTR), form a regional advisory committee to strengthen liaison on park and trail bike management issues.
- Encourage sustainable trail bike riding through the completion of the actions identified in the trail bike initiative, including provision of facilities, education and compliance.
- Consider giving authorisation to access a limited number of management vehicle only roads in the national park to licensed tour operators, and recognised,

incorporated clubs such as AMTRA Victoria or OTR engaged in volunteer park management activities under an agreement with park managers. Allow access at low frequency, subject to controls to protect environmental, cultural and social values, and safety.

### 6.4 Visitor sites and services

### Aims

- Provide a system of designated visitor sites and services for sustainable recreation, education and enjoyment of experiences in the parks, and as nodes for access to park features and recreation areas.
- Minimise conflicts between parks users and impact on park values from visitor facilities.

### Basis

Visitor sites in Great Otway National Park and Otway Forest Park are an integral part of access to and provision of experiences in one of Australia's most prominent tourism regions. Visitor sites provide for picnicking, socialising, resting and recharging in the bushland and coastal settings of the Otways, particularly for visitors with young children, limited time or limited mobility. Visitor sites also act as staging points for access to the spectacular and unique natural features of the Otways.

In accordance with legislation, visitor sites will not be located in Designated Water Supply Catchment Areas (section 8.4), or within reference areas.

Sites for day visitors include picnic grounds, lookouts, car parks and trail heads. Some visitor sites in the parks cater for overnight camping (section 6.6), and the Cape Otway Lightstation precinct has roofed accommodation and a cafe.

Visitor sites are typically within walking distance of points of interest, such as beaches, cliffs, points and headlands, lookouts, rainforests, rivers, lakes and waterfalls. They cater for a range of activities including picnicking, sightseeing, and resting while touring. Visitor sites are also staging points for many activities such as swimming, bushwalking, wildlife and nature viewing, mountain biking, horse riding, trail bike riding and four-wheel-driving.

Facilities and services are designed and managed to reflect the needs and expectations of visitors at each site. However, some sites are subject to peak usage during holiday periods that is beyond the designed capacity. Park staff undertake regular patrols of visitor sites to encourage appropriate visitor behaviour, monitor visitor safety and monitor environmental impacts. The maintenance of infrastructure such as toilets, fences, bollards and car park surfaces is important to ensure visitor satisfaction and minimise impacts on the environment. Park managers regularly review the services and facilities provided at each site and maintain them to ensure visitor enjoyment and safety.

Visitor research (Parks Victoria 2006a) has indicated priorities for service increases at key visitor sites:

- Increasing the provision and quality of amenities (such as facilities for cooking and picnicking, shelter, clean and accessible toilets, and walking tracks) at key visitor sites on main touring routes and high use locations, namely Distillery Creek, Lake Elizabeth, Moggs Creek Picnic Area, Sheoak Picnic Area, Shelly Beach Picnic Area, Grey River Picnic Area, Blanket Leaf Picnic Area, Melba Gully, and Beauchamp Falls, to provide for high quality social activities.
- Increasing provision and quality of amenities (such as beach access, car parking, clean toilets, and directional signage) at Urquhart Bluff, Point Addis, Southside and Johanna Beach access points, to provide high quality experiences for those seeking beach activities.
- Increasing provision and quality of amenities (such as road maintenance, car parking, directional signage and gateway information) at some key visitor sites on main touring routes and at high use locations namely Blanket Leaf Picnic Area, Beauchamp Falls, Blanket Bay, Johanna Beach, Parker Hill, Sheoak Picnic Area and Triplet Falls to provide ease of access and high quality nature experiences.

# TABLE 3 MANAGEMENT OF VISITOR SITES AND SERVICES

SITE NAME	TYPE (S = ACCESS SUBJECT TO SEASONAL CLOSURE)	CAMPING (NO. SITES)	LEVEL OF SERVICE	Тоіцет	<b>P</b> ICNIC <b>TABLE</b>	PICNIC SHELTER	INFORMATION	Соокоит	Сакракк	CAMPFIRE	OTHER
GREAT OTWAY NATIONAL PARK											
Aire Crossing Camping Area	Camping	Y (5)	Basic	Y			Y		Y	No	
Aire River (East) Camping Area	Camping	Y (20)	Mid	Y	Y		Y		Y	No	Boat launching, jetty
Aire River (West) Camping Area	Camping	Y (50+)	Mid	Y	Y		Y		Y	In designated fireplace/s only	Boat launching
Aire River West Walk-in Camping Area (Great Ocean Walk)	Camping	Y (8)	Mid	Shared with above	Y	Y	Shared with above			No	
Allenvale Mill Camping Area (walk-in)	Camping	Y (20)	Basic	Y			Y		Y	No	School groups.
Big Hill Camping Area	Camping (S)	Y (20)	Basic	Y						In designated fireplace/s only	
Blanket Bay Camping Area	Camping	Y (22)	Mid	Y	Y	Y	Y			In designated fireplace/s only	Boat launching
Blanket Bay Walk-in Camping Area (Great Ocean Walk)	Camping	Y (15)	Mid	Shared with above	Y	Y	Y			No	
Cape Otway Walk-in Camping Area (Great Ocean Walk)	Camping	Y (15)	Mid	Y	Y	Y	Y			No	
Cora Lynn Camping Area (walk- in)	Camping	Y (2)	Basic							No	
Devils Kitchen Walk-in Camping Area (Great Ocean Walk)	Camping	Y (8)	Mid	Y	Y	Y	Y			No	
Elliot Ridge Walk-in Camping Area (Great Ocean Walk)	Camping	Y (15)	Mid	Y	Y	Y	Y			No	

SITE NAME	TYPE (S = ACCESS SUBJECT TO SEASONAL CLOSURE)	CAMPING (NO. SITES)	LEVEL OF SERVICE	Тоісет	<b>P</b> ICNIC <b>T</b> ABLE	PICNIC SHELTER	INFORMATION	Соокоит	CARPARK	САМРЕІЯЕ	OTHER
Hammond Road South Camping Area	Camping	Y (20)	Basic	Y						In designated fireplace/s only	Horse camping permitted in Forest Park on north side of road.
Herberts Camping Area	Camping	Y (20)	Basic							No	
Jamieson Track Camping Area	Camping (S)	Y (6)	Basic						Y	No	
Johanna Beach Camping Area	Camping	Y (50)	Mid	Y	Y	Y	Y	Y	Y	No	
Johanna Beach Walk-in Camping Area (Great Ocean Walk)	Camping	Y (8)	Mid	Y	Y	Y	Y			No	
Lake Elizabeth Camping Area (walk/cycle)	Camping	Y (15)	Mid	Y	Y	Y	Y	Y	Y	In designated fireplace/s only	
Parker Hill Camping Area	Camping	Y (20)	Mid	Y	Y	Y	Y		Y	No	
Ryans Den Walk-in Camping Area (Great Ocean Walk)	Camping	Y (8)	Mid	Y	Y	Y	Y			No	
Sharps Track Camping Area	Camping	Y (4)	Basic						Y	No	
Wye River Road Camping Area	Camping	Y (12)	Basic							No	
Blanket Bay Day Visitor Area	Day Visit	N	Mid	Y	Y		Y		Y	No	Boat launching
Carisbrook Falls Visitor Area	Day Visit	Ν	Basic					Y	Y	No	
Castle Cove Visitor Area	Day Visit	Ν	Basic				Y	Y	Y	No	
Crayfish Bay beach access	Day Visit	Ν	Basic							No	
Cumberland River beach access	Day Visit	Ν	Basic							No	

Site Name	TYPE (S = ACCESS SUBJECT TO SEASONAL CLOSURE)	Camping (no. sites)	LEVEL OF SERVICE	Тоісет	PICNIC TABLE	PICNIC SHELTER	INFORMATION	Гоокоит	CARPARK	CAMPFIRE	OTHER
Devils Kitchen beach access	Day Visit	N	Basic							No	
Erskine Falls Visitor Area	Day Visit	Ν	Mid				Y	Y	Y	No	
Godfrey beach access	Day Visit	N	Basic					Y		No	
Guvvos beach access	Day Visit	Ν	Basic						Y	No	
Hutt Gully beach access	Day Visit	Ν	Basic						Y	No	
Little Aire Falls Visitor Area	Day Visit	Ν	Basic					Y		No	
Maits Rest Visitor Area	Day Visit	Ν	Mid				Y	Y	Y	No	
Marriners Falls Visitor Area	Day Visit	N	Basic		Y			Y	Y	No	
Milanesia Beach Access	Day Visit	Ν	Basic							No	
O'Donohue Road beach access	Day Visit	Ν	Basic							No	
Point Addis Visitor Area	Day Visit	Ν	Mid	Y			Y	Y	Y	No	
Rivernook beach access	Day Visit	Ν	Basic						Y	No	
Sabine Falls Visitor Area	Day Visit	Ν	Basic						Y	No	Horses allowed.
Sheoak Falls Visitor Area	Day Visit	Ν	Basic				Y	Y	Y	No	
Southside Carpark	Day Visit	Ν	Mid		Y			Y	Y	No	
Sunnymeade beach access	Day Visit	Ν	Basic							No	
The Gable Visitor Area	Day Visit	N	Basic					Y	Y	No	Horses allowed.
The Gap beach access	Day Visit	Ν	Basic						Y	No	
Urquharts Bluff Visitor Area	Day Visit	Ν	Mid	Y	Y			Y	Y	No	Boat launching.
Wreck Beach Visitor Area	Day Visit	Ν	Basic						Y	No	Horses allowed.

SITE NAME	TYPE (S = ACCESS SUBJECT TO SEASONAL CLOSURE)	CAMPING (NO. SITES)	LEVEL OF SERVICE	Тоіцет	<b>P</b> ICNIC <b>T</b> ABLE	PICNIC SHELTER	INFORMATION	Соокоит	Carpark	САМРЕІRE	OTHER
Princetown and Johanna Beaches**, Kaanglang Quarry											Horses allowed.
Cape Otway Lighthouse Precinct (roofed accommodation)	Lease - Commercial	N	High	Y	Y	Cafe	Y	Y	Y	No	
Addis Bay Picnic Area	Picnic	N	Basic	Y	Y				Y	No	
Aire Valley Reserve (Redwoods) Picnic Area	Picnic	N	Basic	Y	Y		Y		Y	No	
Blanket Leaf Picnic Area	Picnic	N	Mid	Y	Y	Y	Y		Y	*Gas BBQ's	
Distillery Creek Picnic Area	Picnic	N	Mid	Y	Y		Y	Y	Y	*Gas BBQ's	Bird hide
Grey River Picnic Area	Picnic	Ν	Basic	Y	Y			Y	Y	No	
Hopetoun Falls Picnic Area	Picnic	Ν	Basic		Y		Y	Y	Y	No	
Ironbark Basin Picnic Area	Picnic	Ν	Basic		Y				Y	No	
Melba Gully Picnic Area	Picnic	Ν	Mid	Y	Y	Y	Y	Y	Y	*Gas BBQ's	
Moggs Creek Picnic Area	Picnic	Ν	Mid	Y	Y		Y		Y	*Gas BBQ's	
Point Franklin Picnic Area	Picnic	Ν	Basic		Y		Y		Y	No	
Shelly Beach Picnic Area	Picnic	Ν	Mid	Y	Y		Y		Y	*Gas BBQ's	
Sheoak Picnic Area	Picnic	N	Mid	Y	Y	Y	Y		Y	Gas BBQ's	
Triplet Falls Picnic Area	Picnic	N	Mid	Y	Y		Y	Y	Y	*Gas BBQ's	
OTWAY FOREST PARK											
Beauchamp Falls Camping Area	Camping	Y (12)	Basic	Y	Y			Y	Y	In designated fireplace/s only	
Dandos Camping Area	Camping	Y (50)	Mid	Y	Y		Y		Y	In designated fireplace/s only	Horse camping allowed.

SITE NAME	TYPE (S = ACCESS SUBJECT TO SEASONAL CLOSURE)	Camping (no. sites)	LEVEL OF SERVICE	Тоісет	<b>P</b> ICNIC TABLE	PICNIC SHELTER	INFORMATION	Соокоит	CARPARK	САМРЕІRE	OTHER
Goat Track Camping Area	Camping (S)	Y (6)	Basic							In designated fireplace/s only	Horse camping allowed.
Stevensons Falls Camping Area	Camping	Y (50)	Mid	Y	Y		Y	Y	Y	In designated fireplace/s only	Horse camping allowed.
Tanners Road Camping Area	Camping	Y (10)	Basic				Y			In designated fireplace/s only	Horse camping allowed.
Hammond Road North Camping Area	Camping	Y	Basic				Y			In designated fireplace/s only	Horse camping allowed.
DISPERSED CAMPING	Camping	Various	V. Basic				Y			Fires in accordance with State forest regulations that ensure fires do not escape	
Forrest Mountain Bike Trailhead	Day Visit	Ν	Basic	Y					Y	No	
Yaugher Mountain Bike Trailhead	Day Visit	N	Basic						Y	No	
Paddy's Swamp Trail Bike Visitor Area	Day Visit	Ν	Mid	Y	Y	Y	Y		Y	No	
Birnam Station Picnic Area	Picnic	Ν	Basic		Y				Y	Wood BBQ(s)	
Loves Creek Picnic Area	Picnic	Ν	Basic		Y				Y	Wood BBQ(s)	

Key:

\* Fireplaces to be upgraded to Gas BBQs.

\*\* LTO horseriding permtted on Station Beach

Notes: Bookings are required for use of Great Ocean Walk walk-in camping areas Cars, caravans and camping trailers are permitted in most camping areas, subject tot road and site conditions, except walk-in camping areas

#### LOS Levels of service:

High – high level of visitor facilities and amenities provided Mid – moderate levels of visitor facilities and amenities provided Basic- limited visitor facilities and amenities provided V Basic- offer very basic level of service and basic access only

- Increase the provision and quality of activity-specific amenities (such as for four-wheel-driving, horse riding, mountain bike riding and trail bike riding) at some visitor sites, namely Big Hill Camping Area, Birnam Station, Dandos, Goat Track, Hammond Road Camping Area, Lake Elizabeth and Stevensons Falls, to provide for high quality track-based activities.
- Improving the provision and quality of amenities (such as car parking, toilets, walking tracks and directional signage) at high visitation sites where over-use is an issue, namely Erskine Falls, Triplet Falls, Urquhart Bluff, Point Addis and Southside to maintain visitor satisfaction.
- Increased levels of environmental protection by fencing, signage and control of access at sites of high natural and cultural significance, namely Milanesia Beach, Rotten Point, Dinosaur Cove, Sabine Falls, Aire River (West), Allenvale Mill and Parker Hill.
- A broader market may be reached by linking visitor sites to a particular recreation activity, providing appropriate services, and promoting the site and activity. Suggested sites are Birnam Station, Dandos, Goat Track, Hammond Road, Lake Elizabeth, Stevensons Falls, Tanners Road and Big Hill.

The enhancement of visitor facilities in the Otway hinterland, such as improved services at key sites located on car and motorcycle touring routes (section 6.3) has been identified as a priority (DSE 2005). Facilities at Triplet Falls have been upgraded as a part of the Otway Tourism Initiative.

Priorities for additional facilities and services will be guided by Level of Service assessment, trends in visitor needs and expectations, visitor safety considerations, and the enhancement or provision of a wider variety of opportunities for visitors. This will be balanced by the protection of natural and cultural values. Site relocation, redesign or revegetation may be necessary to minimise the visitor site 'footprint'.

#### Management strategies

• Develop and maintain visitor sites to provide services appropriate for intended,

sustainable and safe use, with minimal threat to natural, cultural and social values and minimised potential for conflict between user groups (table 3).

- Review visitor sites periodically to determine if the number, location and level of services provided meet identified strategic directions for recreation and tourism, and the needs of intended users, recreation activity groups and market segments. Consider relevant research and recommend changes. Disused areas will be closed and revegetated.
- Development of any new visitor service infrastructure will be subject to assessment criteria (section 3.4).

### 6.5 Bushwalking

#### Aims

- Provide opportunities for visitors (including disabled and low mobility visitors) to enjoy a diverse range of bushwalking experiences in the parks by accessing a sustainable network of walking tracks of various lengths, standards, and degrees of challenge.
- Minimise impacts of the track network and bushwalking activities on park values and on other park users, and minimise excessive safety risks. Encourage responsible bushwalking behaviour.

### Basis

Great Otway National Park and Otway Forest Park provide an extensive network of walking tracks with numerous walking opportunities ranging from short cliff-top, beach, rainforest and waterfall walks to overnight hikes along one of the most spectacular scenic coastlines in the world.

Longer walks include the Great Ocean Walk which is designed as a world class long distance walking product for Victoria, and has a high national and international profile. Extending approximately 100 km along the spectacular coastline between Apollo Bay and Glenample Homestead near the Twelve Apostles, it provides short or long walking options by allowing walkers to step on and off the walk at a number of points.

Walkers who book a campsite may camp at purpose-built walk-in campsites, or stay in roofed accommodation at Cape Otway Lightstation or other accommodation provided outside the parks. The Great Ocean Walk Partners program with local tourism operators and accommodation providers has enabled cross-promotion and the development of various services such as catering and transport to and from entry points and off-park accommodation. Development of the walk has been successful at drawing walkers to experience Great Otway National Park and the region; 47% of Great Ocean Walk walkers are experiencing Great Otway National Park for the first time (Parks Victoria 2007a). Further development of the Great Ocean Walk has been identified in this plan as a key tourism opportunity (section 6.1).

The Surf Coast Walk stretches nearly 30 km from Jan Juc along the coast to Moggs Creek, linking towns, popular beaches and points of interest.

The Old Beechy Rail Trail, which is partly in Otway Forest Park, is a 45 km shared track linking Colac and Beech Forest.

Other experiences are provided by short walks, such as:

- walks through forest to scenic waterfalls at Erskine, Hopetoun, Triplet, Beauchamp, Stevenson and Carisbrook Falls
- rainforest and tall tree viewing walks at Maits Rest and Melba Gully
- scenic forest and lakeside walks at Lake Elizabeth
- beach and cliff-top walking with spectacular views at many points along the Otway coast
- walks to explore the history and heritage of the area, such as lighthouses and shipwreck sites.

The parks are occasionally used for orienteering, rogaining and other organised adventure activities (section 6.15). Geocaching and earthcaching or virtual caching are emerging new activities. Due to potential impacts on natural and cultural values, geocaching, which involves the physical placement of a cache, is not permitted in the national park.

Issues for management of bushwalking include the spread of pest plants and soil or water borne pathogens such as Phytophthora cinnamomi (section 4.8), erosion and degradation of soft track surfaces and management of human waste. If walkers venture off-track, issues include the trampling or removal of vegetation, soil degradation and the creation of unauthorised tracks. To minimise potential impacts, bushwalking is not permitted in reference areas or Designated Water Supply Catchment Areas, except within St Georges River, Painkalac Creek and West Barwon areas where it may be permitted on some designated MVO roads and walking tracks. Off-track walking is not permitted in areas signposted 'Keep to the Track' or 'Area Closed'.

Most designated walking tracks are for walkers only, but some are shared with horse riders or cyclists, or both. The designated walking track network provides an abundance of short (less than 1 hour) or medium (half-day) walks concentrated around townships and particular points of interest, mainly beaches, coastal view points and waterfalls. Signage including trail markers is progressively upgraded and will be improved by adopting a consistent or standardised approach (section 6.2).

There are opportunities for further improvement of the walking track network. Bushwalking experiences could be enhanced by a more diverse range of walking tracks, including half-day loop walks, more diverse full-day walks, wildlife viewing opportunities, interpretive walks that build on themes currently not widely promoted or accessible (such as Aboriginal cultural heritage and timber heritage sites), and walks suitable for people with limited mobility (DSE 2005; Parks Victoria 2006a). Walking clubs have expressed a desire for experiences on rough tracks in remote locations with minimal infrastructure, and opportunities for multi-day walks in the hinterland.

Parks Victoria and Bushwalking Victoria have entered into a memorandum of cooperation to advance communication, cooperation and partnership on common issues related to bushwalking. Walkers are encouraged to comply with the *Bushwalking Adventure Activity Standards* (ORC 2005a).

TRACK OR ROUTE	VISITOR SITE (ASSOCIATED)	USE	LENGTH	RATING
GREAT OTWAY NATIONAL PARK				
Moggs Creek Circuit Walk	Moggs Creek Picnic Area	W	1.8 km	Е
Eumeralla tracks.	Eumeralla	W, C, MVO	8 km	E-M
Distillery Creek Nature Trail	Distillery Creek Picnic Area	W, C	1.5 km	Е
Bird hide access track	Distillery Creek Picnic Area	W, C	0.3 km	Е
Currawong Falls Circuit Walk	Distillery Creek Picnic Area	W, C	12 km	М
O'Donohue Tracks	O'Donahues	W, C, MVO	9 km	E-M
Surf Coast Walk Stage 4 (Anglesea to Aireys Inlet)	[Anglesea Town, O'Donahues, Urquhart Bluff, Aireys Inlet Town]	W	10 km	Е
Ironbark Basin Circuit Walk	Ironbark Basin Picnic Area	W, C	4.5 km loop	М
Southside to Point Addis (part of Surf Coast Walk route)	Ironbark Basin Picnic Area, Southside Picnic Area	W, C, MVO	5 km	М
Point Addis to Red Rocks (Surf Coast Walk Stage 3A)	Point Addis Visitor Area, Red Rocks / Hurst Road.	W	2.5 km	М
Red Rocks to Anglesea (Surf Coast Walk Stage 3B)	Red Rocks, Eumerella	W, C	3.5 km	М
Swallow Cave – Castle Rock Walking Loop: Sheoak Picnic Area to Swallow Cave, Sheoak Falls and Castle Rock Lookout, return by Sheoak Track and link to Sheoak Picnic Area. Also links to Great Ocean Rd and Sheoak Falls car park.	Sheoak Picnic Area	W	7 km loop	М
Henderson Falls W Track: Sheoak Picnic Area to Henderson Falls, the Canyon and Phantom Falls	Sheoak Picnic Area	W	8.6 km return	Μ
Cumberland Falls W Track and link to Garvey Tk/ Sheoak Tk junction.	[Cumberland River Reserve]	W	<9 km	D
6 km return to/from Cumberland Falls. 9 km loop via to Garvey Tk/ Sheoak Tk, Sheoak Tk via Castle Rock to Falls Carpark	[Cumberland River Reserve]	W	<9 km	D
Phantom Falls Walk: Blanket Leaf Picnic Area/ Cora Lynn Camping Area to Phantom Falls to Allenvale Mill Camping Area	Blanket Leaf Picnic Area, Cora Lynn Camping Area and Allenvale Mill Camping Area	W	7 km one- way	D
Lemonade Creek Track : Blanket Leaf Picnic Area to Erskine Falls	Blanket Leaf Picnic Area, Erskine Falls Visitor Area	W	5.5 km one- way	М
Erskine River Walk: Erskine Falls to Erskine River Caravan Park	Erskine Falls Visitor Area and [Erskine River Caravan Park]	W	7.5 km one- way	D
Grey River Track (Forest Walk)	Grey River Picnic Area	W	1.5 km	М
Kennett River Glow Worm Walk	Grey River Picnic Area	W, R	Short 100 m	Е
Marengo to Shelly Beach walk (follows route of Great Ocean Walk)	Marengo, Shelly Beach Picnic Area	W	4.7 km one- way	М
Three Creeks Circuit Walk	Shelly Beach Picnic Area – extension loop to Shelly Beach Circuit Walk	W	Short +1 km	М

### TABLE 4 MANAGEMENT OF WALKING AND SHARED TRACKS AND ROUTES

TRACK OR ROUTE	VISITOR SITE (ASSOCIATED)	USE	Length	RATING
Cape Otway Lighthouse Road to Sandy Ridge Track	Junction of Cape Otway Lighthouse Road and Great Ocean Road	W, C	1 km	Е
Gadabanud (Katabanut) Circuit Walk	Blanket Bay Camping Area	W	1.5 km loop	М
Blanket Bay to Parker Inlet walk (follows route of Great Ocean Walk)	Blanket Bay Camping Area, Parker Hill Camping Area	W	4 km one- way	Е
Parker River Inlet Walk	Parker Hill Camping Area	W	500 m return	D
Cape Otway Lightstation Precinct Walk	Cape Otway Lightstation Precinct	W	1 km loop	Е
Rainbow Falls Walk (from Cape Otway Lightstation carpark)	Cape Otway Lightstation Precinct (car park)	W	5 km return	Е
Cape Otway to Aire River Walk (follows route of Great Ocean Walk with detour to Rainbow Falls)	Cape Otway Lightstation Precinct (carpark), Aire River East Camping Area	W	10 km one- way (13 km via Rainbow Falls)	М
Great Ocean Walk 2: Elliot Ridge Walk-in Camping Area to Blanket Bay Walk-in Camping Area	Elliot Ridge Walk-in Camping Area, Blanket Bay Walk-in Camping Area	W, MVO	11.6 km	M-D
Great Ocean Walk 4: Cape Otway Walk-in Camping Area to Aire River Walk-in Camping Area	Cape Otway Walk-in Camping Area, Aire River Walk-in Camping Area	W	9.5 km	М
Great Ocean Walk 6: Johanna Beach Walk- in Camping Area to Ryans Den Walk-in Camping Area	Johanna Beach Walk-in Camping Area, Ryans Den Walk-in Camping Area	W	13.4 km	M-D
Great Ocean Walk 8: Devils Kitchen Walk- in Camping Area to Glenample Homestead	Devils Kitchen Walk-in Camping Area, [Glenample Homestead]	W, R	13.5 km	Е
Aire River to Johanna Beach Walk (follows route of Great Ocean Walk)	Aire River West Camping Area, Johanna Beach Camping Area	W	12.4 km one-way	M-D
Lake Elizabeth Walking Loop	Lake Elizabeth Camping Area	W	4.8 km	Е
Barlidjaru and Red Carpet Trails	Lake Elizabeth Camping Area	С	2 – 6 km	E-D
Track from Henrys Rd to Carisbrook Creek	Henrys Rd	W, MVO	800m	Е
Radio Mast Loop Walk	Carlisle section	R	12 km loop	E-M
Mount Murray-Boggy Creek Heathland Walk	Carlisle section	R	2 days	
Milanesia Beach Track	Milanesia Beach	W, H	1.7 km	М
Rivernook Walk (follows route of Great Ocean Walk)	Princetown Recreation Reserve	W, R	11 km	М
Ocean View Circuit Walk	Moggs Creek Picnic Area	W	4.5 km	М
Dam Walk: Moggs Creek Picnic Area to Painkalac Dam to Distillery Creek Picnic Area	Moggs Creek Picnic Area and Distillery Creek Picnic Area	W, C	10.4 km return	М
Ironbark Gorge Circuit Walk	Distillery Creek Picnic Area	W	4.5 km	M-D
Teds Ridge Track	[Aireys Inlet town (Gilbert Street)]	W	1 km loop	Е
Castle Rock (also called Kelsalls Rock) Track	[Santa Monica Camp]	W	2 km return	М
Ironbark Basin Nature Walk	Ironbark Basin Picnic Area	W	1 km	М
Koori Cultural Walk (route of Surf Coast	Point Addis Visitor Area	W	2 km return	Е

TRACK OR ROUTE	VISITOR SITE (ASSOCIATED)	USE	LENGTH	RATIN
Sheoak Picnic Area Nature Trail (self- guided)	Sheoak Picnic Area	W	1.5 km return	Е
Kalimna Falls W Track (Tramline Tk): Sheoak Picnic Area to Lower and Upper Kalimna Falls.	Sheoak Picnic Area	W, R	6 km return	М
• Optional link to return by Garvey Tk	Sheoak Picnic Area	W, R	8 km loop	М
Sheoak Falls and Swallow Cave W Track	[Sheoak Falls Carpark]	W	3 km loop	М
Cora Lynn Cascades Walk from Blanket Leaf Picnic Area	Blanket Leaf Picnic Area and Cora Lynn Camping Area	W	3 km return	М
St George River Walk: Allenvale Mill Camping Area to Great Ocean Road	Allenvale Mill Camping Area	W	3.4 km return	М
Erskine Falls Lookout Walk to first and second lookouts, extension to Straw Falls and Splitter Falls:	Erskine Falls Visitor Area	W	< 4.7 km return	E-D
• lookout: 0.3 km return	Erskine Falls Visitor Area	W	0.3 km return	Е
• Second lookout: 0.7 km return	Erskine Falls Visitor Area	W	0.7 km return	М
• Straw Falls: 1.5 km return	Erskine Falls Visitor Area	W	1.5 km return	М
• Splitter Falls 4.7 km return	Erskine Falls Visitor Area	W	4.7 km return	D
Beach access track from Jamieson Track Camping Area	Jamieson Track Camping Area	W	0.5 km	Е
Marriners Falls Walk	[Marriners Falls Carpark]	W	Short 3 km return	E-M
Carisbrook Falls Walk	Carisbrook Falls Visitor Area	W	Short 1.5 km return	Е
Shelly Beach Circuit Walk	Shelly Beach Picnic Area	W	2 km loop	М
Elliot River Circuit Walk	Shelly Beach Picnic Area	W, MVO	4.2 km loop	М
Red Hill Track	Blanket Bay Road	W, C	3 km	Е
Telegraph Circuit Walk	Blanket Bay Camping Area	W	6 km loop	М
Parker Forest Circuit Walk (includes Stringybark Track)	Parker Hill Camping Area	W	3 km loop	Е
Point Franklin and Crayfish Bay Walk (Crayfish Bay Track)	Point Franklin Picnic Area	W	850 m	Ε
Cape Otway Lighthouse Cemetery Walk	Cape Otway Lightstation Precinct (car park)	W	1.6 km return	Ε
Station Beach Track	[Bimbi Caravan Park]	W	3.5 km return	Е
Great Ocean Walk 1: Apollo Bay Visitor Information Centre to Elliot Ridge Walk-in Camping Area	Elliot Ridge Walk-in Camping Area	W	9.9 km	E-D
Great Ocean Walk 3: Blanket Bay Walk-in Camping Area to Cape Otway Walk-in Camping Area	Blanket Bay Walk-in Camping Area, Cape Otway Walk-in Camping Area	W, R	10.5 km	E-M

TRACK OR ROUTE	VISITOR SITE (ASSOCIATED)	USE	LENGTH	RATING
Great Ocean Walk 5: Aire River Walk-in Camping Area to Johanna Beach Walk-in Camping Area	Aire River Walk-in Camping Area, Johanna Beach Walk-in Camping Area	W	13.8 km	М
Great Ocean Walk 7: Ryans Den Walk-in Camping Area to Devils Kitchen Walk-in Camping Area	Ryans Den Walk-in Camping Area, Devils Kitchen Walk-in Camping Area	W	15.5 km	E-D
Aire River Escarpment Lookout Walk	Aire River West Camping Area	W	4 km return	М
Triplet Falls Rainforest Walk	Triplet Falls Picnic Area	W	2 km return	M-D
Little Aire Falls Walk	Little Aire Falls	W	5 km	D
Sabine Falls Track	Sabine Falls Visitor Area	W	3.6 km return	D
A Wild Dog Walk	[Krambruck North]	W	5.5	М
Madsens Track Nature Walk	Melba Gully Picnic Area	W	1.2 km loop	М
Beauty Spot Walking Track	Beauty Spot	W	0.9 km return	Е
Bunker Hill Track Walk	Carlisle section	R	8.5 km loop	E-M
Wreck Beach Walk	Moonlight Head Road	W	2 km return	D
The Gable Lookout Walk	Moonlight Head Road	W	Long	
Princetown to Glenample Homestead Walk (follows route of Great Ocean Walk)	Princetown, Glenample Homestead	W	5.5 km one- way	М
OTWAY FOREST PARK				
Beauchamp Falls Walk	Beauchamp Falls Camping Area	W	3 km	E-D
Hopetoun Falls to Aire River	Hopetoun Falls Picnic Area	W	2.4 km return	E-D
Hopetoun Falls Walk	Hopetoun Falls Picnic Area	W	Base of falls: 1.5 km return	E-D
Hopetoun Falls Walk	Hopetoun Falls Picnic Area	W	500m return	E-D
Roller Coaster, Third time lucky, Follow the dog Trials	Forrest Mountain Bike Trailhead, Lake Elizabeth Camping Area	С	Various 2 – 6 km	E-D
Yaugher Super Loop, Grasstrees, Marriners Run, Foxtail, J2, Yo Yo, Casper Black, Barre Warre, Vista	Yaugher Mountain Bike Trailhead	С	Various 1.5 – 11.5 km	E-D
Forrest Loop	Forrest Mountain Bike Trailhead	W, C	3 km loop	Е
Stevensons Falls Walk	Stevensons Falls Camping Area	W	1.2 km return	Е
Old Beechy Rail Trail. Note: Managed by Committee of Management	[Colac, Barongarook], Birnam Station Picnic Area, [Kawarren, Gellibrand, Beech Forest]	W, C	Short to 1- day walks	E-D

Key:

Use: W = walking C = cycling

H = horse riding

MVO = management vehicle only (walking allowed)

Rating: E = easy M = mediumD = difficultVisitor sites or access nodes outside the parks are indicated in [brackets]

R = road (walking, cycling, vehicles allowed, may be subject to seasonal closure)

Several community groups share an interest with park managers in maintaining and enhancing bushwalking experiences in the parks. They have identified and promoted a range of bushwalks, and have developed ideas for new walks (ORWTA 2007).

Walks developed and promoted on existing routes are generally more desirable than creation of new routes, as the latter must be carefully considered because of the potential for undesirable safety and environmental impacts.

## **Management strategies**

- Provide and maintain a sustainable range of bushwalking opportunities on dedicated walking-only or shared (walking, horse riding, cycling) tracks, including short walks, overnight and multi-day walks on tracks of various difficulties and standards, and tracks suitable for disabled and low mobility visitors (table 4).
- Work with managers of nearby public and private land in the cooperative management of a sustainable network of walking or shared tracks that cross park boundaries.
- Continue the enhancement and development of the Great Ocean Walk, to achieve world-class status. Improvements and strategies will aim to protect natural and cultural values, improve and extend the quality of the walking experience, improve visitor management and safety, and increase quality of service.
- Work with Great Ocean Walk partners to explore a range of service enhancements to the Great Ocean Walk such as interpretive services, Indigenous interpretation, merchandise and catering services. This may include infrastructure to support enhanced services.
- Allow earthcaching and virtual caching activities in the parks. Do not allow placement of geocaches in the national park.
- Periodically review the network of walking, cycling and horse riding tracks to determine if the number of tracks, alignments and experiences offered meet

the needs of intended users while protecting park values.

- Monitor track usage condition and where considered appropriate, discontinue and revegetate tracks.
- Development of any new walking or shared tracks or enhancement of existing tracks, such as the Surf Coast Walk and the Trans Otway Waterfall Walk will be subject to considerations including statewide track investment priorities and development assessment criteria (section 3.4).

# 6.6 Camping

### Aims

- Provide a sustainable range of opportunities for people to enjoy camping experiences in the parks, and utilise camping areas as a base for recreation activities.
- Minimise impacts on park values and conflicts between park users from camping.

### Basis

Camping areas provide for overnight or longer stays in the park, provide opportunities for enjoyable experiences socialising with family and friends in a natural setting, and are used as a base for recreational activities.

Great Otway National Park and Otway Forest Park provide more than 25 campgrounds, with a limited diversity of experience at each. Camping with few or no facilities is offered at sites such as Goat Track campground and by dispersed camping throughout Otway Forest Park. Camping with basic facilities is available at many sites including pre-booked walk-in sites (table 3). Campgrounds and caravan parks in adjacent towns often provide more highly serviced camping options.

Popular coastal camping areas in the parks include Blanket Bay, Parker Hill, Johanna Beach, Allenvale and Aire River. Popular hinterland camping areas include Lake Elizabeth, Dandos, Stevensons Falls and Big Hill. Camping is particularly popular in the summer and Easter holidays, and on public holiday long weekends. Risk management is a necessity for all camping areas. Design and management of the camping areas and associated sites is important to visitor safety and satisfaction and to minimise impacts on cultural and natural values, and water supply. Camping experiences could be enhanced by planning or upgrading campgrounds to cater for a broader range of visitors, and to strengthen the link between camping and other recreational activities (Parks Victoria 2006a). An opportunity exists for the provision of more highly serviced camping. The provision of 'demountable' accommodation and the facilitation of group camping have been identified in this plan as key tourism opportunities (section 6.1).

Issues for the management of camping include fire and emergency management, managing waste, visitors camping outside designated areas leading to unauthorised and progressive campground expansion, conflicts between campers due to different expectations including excessive noise, accommodating demand from school groups and other users, over-collection of firewood, and overutilisation of some camping areas during peak periods. Campers are encouraged to adhere to the *Bushwalking Adventure Activity Standards* (ORC 2005a) and codes of practice in Forests Notes 'Camping in a State Forest' (DSE 2003a).

Fireplaces and wood barbecues are provided in some camping areas (table 3). The lighting of campfires, barbecues and stoves are subject to controls for community safety. On days of Total Fire Ban, all fires, including campfires, barbecues and stoves are prohibited.

## **Management strategies**

In Great Otway National Park:

- Develop a consistent booking and fee system for all camping areas in the Otways parks, based on Parks Victoria's Statewide Camping Product Strategy (Parks Victoria 2007b). Camping fees may apply and will be relative to the levels of service and infrastructure provided at each campground.
- Permit fires only in fireplaces provided at designated camping areas (table 3).

- In accordance with established market demand, investigate the development of group camping (e.g. schools) areas in different parts of the parks or with private camping accommodation providers, to provide alternatives to the Great Ocean Walk camping areas.
- Investigate the feasibility of providing basic camping areas at Curtis Clearing and Link Track.

#### In Otway Forest Park:

• Permit fires only in fireplaces provided at designated camping areas, and in other areas according to State forest regulations (table 3).

#### In both parks:

- Ensure camping areas and facilities are located, designed and maintained for intended and sustainable use, to provide a range of camping experiences in the parks, and to complement and provide access to a range of recreation activities (table 3).
- In accordance with park regulations, ensure adequate control of the use of campfires, barbecues and fuel stoves, to protect the public and the parks from wildfire. Ensure that park visitors are provided with adequate general or site specific information in regard to the use of campfires, barbecues and stoves, and undertake appropriate enforcement.

## 6.7 Cycling

#### Aims

- Provide opportunities for people to enjoy cycling experiences in the parks, including mountain biking and bicycle touring, where this is sustainable and compatible with the protection of other park values.
- Minimise conflicts with other park users and impacts on park values from cycling activities.

#### Basis

Bicycle touring and mountain biking are popular ways to enjoy the Otway parks. Diverse and spectacular scenery, an abundance of visitor attractions, and a number of routes on roads or bicycle-permitted tracks can take riders along the coast or through the bush over a variety of challenging terrain types.

Mountain biking is becoming increasingly popular and has become an important part of the tourism industry in the Otway hinterland particularly around the town of Forrest. 'Soft adventure' activities such as mountain biking are under-supplied and under-promoted compared to market demand, and may be a point of difference for promoting the Otway hinterland (DSE 2005). A network of dedicated tracks for mountain biking use has been developed to the west of the town of Forrest and to the north of Forrest at Yaugher. A longer trail extending from Forrest to West Barwon Reservoir and Lake Elizabeth has also been established.

Many of the unsealed roads in the parks including a number of shared tracks with bushwalkers (section 6.5) are used for mountain biking. A number of cycle touring routes and mountain biking loops based on existing roads have been promoted, mostly in coastal areas such as Anglesea and Lorne. Available publications include the *Great Ocean Road Cycling Guide* (GOT 2004) and *Cycling the Surf Coast Shire* (Surf Coast Shire 2006).

A shared track from Colac to Beech Forest known as the Old Beechy Rail Trail provides mountain biking and walking opportunities along the alignment of the former Beechy Line railway line which runs partly through the Otway Forest Park.

Cyclists are well catered for in the towns on the coast and in the hinterland in terms of accommodation, cafes and other refreshment options, and visitor service sites with toilets and water. There are also opportunities for cyclists to camp in the parks. Cyclists are encouraged to undertake cycling in a safe and sustainable manner through signage and provision of appropriate information such as the *Mountain Biking Adventure Activity Standards* (ORC 2005e).

Tour operators provide bike hire and guided cycling activities. Club events and competitions are held occasionally in the parks (section 6.15).

Parks Victoria and Mountain Biking Australia (MTBA) have entered into a memorandum of cooperation to advance communication, cooperation and partnership on common issues related to mountain biking. An opportunity exists to develop a similar memorandum of cooperation between DSE and MTBA.

Issues for the management of cycling include the spread of weeds and soil-borne pathogens such as *Phytophthora cinnamomi* (section 4.8), erosion and degradation of soft track surfaces and management of human waste. If cyclists ride off-track, issues include the trampling or removal of vegetation, soil degradation and the creation of unauthorised tracks.

The *Tourism Plan for Public Land in the Otway Hinterland* (DSE 2005) identified several options for enhancing cycling opportunities in the parks. These include new mountain bike tracks, touring routes, and enhanced cycling tourism services. The development of mountain biking opportunities has been identified in this plan as a key tourism opportunity (section 6.1).

#### **Management strategies**

- Permit cycling only on open roads (public and operational roads outside seasonally closed periods, designated shared-use tracks and cycling-only tracks (figure 2 and table 4).
- Development of any new cycling or shared trails or enhancement of existing trails will be subject to considerations including statewide track investment priorities and development assessment criteria (section 3.4).

#### 6.8 Companion dogs

#### Aims

- Provide opportunities for people to enjoy experiences with dogs in the parks where this is sustainable and compatible with the protection of other park values.
- Minimise impacts on park values and conflicts with other park users from dogs.

#### Basis

Many residents and visitors to the Otways region enjoy recreation with dogs. This may include having their dogs with them while they go walking, camping, horse riding, cycling, fishing or picnicking.

#### TABLE 5 DESIGNATED COMPANION DOG AREAS IN GREAT OTWAY NATIONAL PARK

Where dogs are permitted in the national park they must be on a leash at all times unless in a trial off lead area below.

LOCATION	Conditions		
Southside Carpark, Ironbark Basin Picnic Area, Southside to Point Addis section of Surf Coast Walk (Jarosite Track/ Southside Track, and Ironbark Track)	Permitted on lead		
MVO tracks in the park adjacent to O'Donahues Road and the Gap beaches	Permitted on lead		
Addiscott Beach (Southside to Point Addis)	Permitted on lead		
Point Addis Visitor Area and Point Addis to Anglesea section of Surf Coast Walk including section of beach	Permitted on lead		
Unnamed tracks and MVO roads between Eumeralla Scout Camp, Hurst Road and Great Ocean Road	Permitted on lead		
Urquhart Bluff Visitor Area, Hutt Gully, Guvvos, The Gap and O'Donohue Road beach access tracks	Permitted on lead		
Urquhart Bluff Beach from the eastern-most access track at Urquhart Bluff lower carpark (beach access marker 103W) east to O'Donohue Rd beach access steps (beach access marker 99W).	Permitted off lead on a trial basis*		
Western end of Urquhart Bluff beach from the eastern-most access track at Urquhart Bluff lower carpark (beach access marker 103W), around Urquhart Bluff to Urquhart Bluff South beach to 'Mermaid Pools' rocks.	Permitted on lead between 9 am and 7 pm from 1 December to end of February and Easter. Permitted off lead (on a trial basis) at all other times*		
Sunnymede Beach access (at marker 104W)	Permitted on lead		
Sunnymede Beach (from beach access marker 104W) north east to 'Mermaid Pools' rocks.	Permitted off lead on a trial basis*		
Distillery Creek Picnic Area and Ironbark Gorge Walking Track	Permitted on lead		
Fairhaven Ridge Track	Permitted on lead		
Moggs Creek Picnic Area and Ocean View Walking Track	Permitted on lead		
Erskine Falls Walking Track (south-east section only, from Erskine River caravan park uphill to first bridge)	Permitted on lead		
St George River Walking Track	Permitted on lead		
Cleared Asset Protection Zone firebreaks in the national park immediately adjacent to private property in Anglesea, Aireys Inlet, Lorne	Permitted on lead		
Lake Elizabeth Camping Area and Lake Elizabeth Walking Track	Permitted on lead		
Cape Otway Lightstation car park	Permitted on lead		
Johanna Beach car park, camping area, walking tracks to the beach, and Johanna Beach western section between Johanna River and western bluff	Permitted on lead		
Marriners Falls Day Visitor Area and Marriners Falls Walk	Permitted on lead		

\* subject to baseline surveys and monitoring of impacts on shorebirds, incl Hooded Plover, seasonal restrictions may apply

A number of tourist accommodation providers in the Otway region market themselves and the area as a dog-friendly holiday destination, providing places for tourists to stay with their dogs (Bedford 2006). A high proportion of residents along the Otways coast own dogs (S. Wall, pers. comm.). Some towns have a shortage of suitable public land available for dog activities. In coastal areas, some beaches have been used for this purpose. There is a need for integrated planning for and management of dog walking activities particularly at a township and settlement level. Planning and management will require ongoing community consultation, to balance the need for convenient places to walk and exercise dogs in the outdoors with protection of conservation values.

Dog activities in public spaces can conflict with other uses through noise, frightening or threatening behaviour, defecation, and (rarely) injury to people or to other dogs.

Dog activities can also compromise conservation values by predation and disturbance of small mammals and grounddwelling or ground-nesting birds. On beaches, the reproductive success of beach-nesting birds such as the Hooded Plover can be threatened during the breeding period by predation and disturbance of eggs or chicks, and by disturbance of breeding adults (Weston 2003).

Assistance dogs for disabled visitors are allowed in the parks where visitor access is allowed, and the strategies below for companion dogs do not apply.

#### **Management strategies**

In Great Otway National Park:

- Support local government and the community in the development of an integrated, cooperative and sustainable approach for the provision of dog access.
- Provide a balance of off and on-lead areas for companion dogs in accordance with table 5, subject to review in the event of unacceptable risk to park values or visitors.
- Monitor the impacts of dog access on natural, cultural and social values. Manage dog access to minimise any impacts on values, including seasonal beach access restrictions or the revoking of trial off-lead access (table 5).
- Install signage consistent with local government communication planning in priority areas where dogs are permitted indicating access conditions, including the requirement to clean up and time restrictions.

In Otway Forest Park

• Dogs are required by regulation to be on lead and under direct control at all times

at Stevensons Falls Camping Area, Dandos Camping Area, Beauchamp Falls Camping Area, Goat Track Camping Area, Tanners Road Camping Area, Birnam Station Picnic Area, Loves Creek Picnic Area and Paddy's Swamp Trail Bike Visitor Area.

• Dogs are allowed off lead outside these areas.

#### 6.9 Horse riding

#### Aims

- Provide opportunities for enjoyable and diverse nature-based horse riding experiences in the parks, including trail riding and camping with horses, where this is sustainable and compatible with the protection of other park values.
- Minimise impacts on park values and conflicts with other park users from horse riding activities.

#### Basis

Horse riding is a popular recreational activity in both parks. Many residents of communities in the hinterland, such as Beech Forest, Gellibrand, Carlisle River, Forrest, Barwon Downs, Bambra and Wensleydale (and to a lesser extent on the coast, such as Lorne and Anglesea) keep horses for recreation. Residents engage in horse riding in the parks as individuals, as private groups or in clubs, mostly on day trips and less commonly camping. Horses are either ridden to the park from nearby properties or brought by horse float.

Areas popular for horse riding include selected beaches along the coast and park sections near Anglesea, Bellbrae, Aireys Inlet, Gherang, Wensleydale, Bambra, Deans Marsh, Barwon Downs, Wonga, Barongarook, Forrest, Cape Otway, Lorne, Moonlight Head, and Princetown. A designated short cross-country course exists in the forest park at Ferguson Hill, maintained by the local pony club.

Commercial operations such as at Bellbrae, Aireys Inlet, Apollo Bay, Cape Otway and Moonlight Head provide nature-based horse riding experiences, mostly as day trips. Some commercial operators provide horse-drawn caravan tours. Horse riding, especially in large groups, may conflict with other parks users, and visitors may be disturbed or frightened by horses or annoyed by the presence of horse manure. Trails and campsites in high-use areas can quickly become degraded, reducing amenity to other users and requiring maintenance. Horse riders are encouraged to adhere to the code of practice contained in *Horse Trail Riding – Adventure Activity Standards* (ORC 2005d).

Horses can have a negative impact on conservation values by browsing and trampling vegetation and causing the degradation and erosion of soils. Horses can also introduce and spread weeds, especially by seeds in fodder and manure, and soil-borne pathogens in soil on hooves (section 4.8).

Horses on beaches can pose a risk to beachnesting birds in the breeding season, particularly Hooded Plovers, by trampling nests and disturbing chicks and adults. Beach riding will be restricted to certain periods and areas to reduce this risk.

Horse riding on declared arterial, municipal, or other roads (and associated road reserves) that are not included in the parks is generally permitted subject to the policies of the road manager (either VicRoads or the relevant local government authority).

Opportunities exist to enhance horse riding experiences in the parks, particularly in Otway Forest Park. Previous studies have concluded that there is a general under-provision of guided horse riding tours in the Otways and that this soft adventure activity could be enhanced (DSE 2005).

The development of a long-distance horse riding route has been identified in this plan as a key tourism opportunity (section 6.1).

## Management strategies

- Allow horse riding
  - on formed roads and tracks in the forest park including seasonally closed roads during open periods
  - on open roads and tracks in the national park including seasonally closed roads during open periods, and management vehicle only tracks as indicated in table 6

- on beaches and in designated areas as indicated in tables 3 and 4
- on cleared fuel breaks along Kents Rd, Benwerrin – Mt Sabine Rd, Garvey Track, Kaanglang Rd, Delaneys Rd, and Mt Cowley Track.
- In the national park, horse riding is not permitted on other management vehicle only roads except under licence or permit.
- Permit camping with horses in designated areas in the forest park including across the road from Hammond Road camping area (table 3).
- Development of any new horse riding experiences will be subject to assessment criteria (section 3.4).

## 6.10 Recreational fishing

## Aims

- Provide high quality opportunities for recreational fishing in and adjacent to the parks, where this is sustainable and compatible with the protection of park values.
- Maintain recreational fishing access while protecting environmental and cultural values.
- Minimise conflicts with other park users and impacts on park values from fishing.

## Basis

Beaches and coastal rock platforms in the national park are popular for surf fishing, and many different species are caught. Convenient access points with car parking and tracks to the beach or rocks are valued by fisher people carrying fishing gear. Rock platform fishing can be hazardous under some conditions and based on studies of visitation to Victorian parks between 2000-2005, has the highest number of visitor personal injury incidents relative to the number of participants of all activities undertaken in Victorian parks (Newspoll 2006). Safety advice is contained in the *Victorian Recreational Fishing Guide* (published annually by DPI).

ROAD NAME	ROAD CLASSIFICATION	MVO	SEASONAL CLOSURE
Allenvale Road	5B	-	-
Bald Hills Road	5C	-	-
Big Hill Track	5D	-	Y
Birds Track	5E	-	Y
Blanket Bay Road	5C	-	-
Boggy Creek Track	5E	-	Y
Bunker Hill Track	5D	-	Y
Colac Tree Road	5D	-	-
Coopers No. 2 Track	5E	-	Y
Cricket Pitch Road	5C	-	-
Denham Track	5D	-	Y
Dunse Track	5E	-	Y
Elliot Road (Parker Spur Road to Snowy Ridge Track)	5E	Y	-
Fairhaven Ridge Track	5E	Y	-
Five Mile Track	5E	-	Y
Garvey Track	5E	-	Y
Gentle Annie Track	5E	-	Y
Godfrey Track	5E	-	Y
Grey River Road	5C	-	-
Hayden Road	5E	-	Y
Jamieson Track	5E	-	Y
Kennett Road	5D	-	Y
Kennett-Wye Jeep Track	5E	-	Y
Loves Track	5E	-	Y
Milanesia Track	5D	Y	-
Moggs Creek Track	5E	-	Y
Moonlight Head Road	5C	-	-
Mt Cowley Track	5E	-	-
Mt Mckenzie Road incl western section	5D	-	-
Newcombe Spur Track	5E	-	Y
No 2 Road	5D	-	-
Old Carlisle Track	5D	-	Y
Parker Spur Road	5D	Y	-
Parkes Lodge Road	5E	-	-
Peppermint Parade	5D	-	Y
Pipeline Road (East)	5D	-	-
Princetown Beach - Gravel Road	5D	Y	-
Rapier Ridge Track	5D	-	Y

#### TABLE 6 ROADS OPEN FOR HORSE RIDING IN GREAT OTWAY NATIONAL PARK

#### Table 6 cont.

ROAD NAME	ROAD CLASSIFICATION	Μνο	SEASONAL CLOSURE
Rifle Range Track	5E	-	-
Sandy Ridge Track	5D	Y	-
Sharps Track	5D	-	Y
Sheepyard Track	5D	-	Y
Skinner Creek Track	5E	-	Y
Snowy Ridge Track	5D	Y	-
The Gable Track	5C	Y	-
Thompson Track	5D	-	Y
Tucker Orchard Road	5C	-	-
Upper Sheepyard Track	5D	-	Y
Wreck Beach Track	5C	Y	-
Wye River Road (Curtis Track to Mt Sabine Road)	5D	-	Y
Wye River Road (GOR to Curtis Track)	5C	-	Y
Wye Track	5E	-	Y
Track to Yarringa Road	5D	Y	-
Area bounded by Forest, Portreath and Gundrys Roads	5E	Y	-

Key:

MVO Management vehicle only track

5B All-weather, two laned formed and gravelled or single lane sealed with gravel shoulders.

5C Generally all-weather, single lane two-way unsealed formed road, usually lightly gravelled.

5D Substantially single lane, two-way, generally dry weather formed (natural materials) track/road.

5E Predominantly single lane, two-way earth tracks (unformed) at or near the natural surface level.

In coastal areas, the boundary of the Great Otway National Park is the low water mark, except where the national park adjoins a marine national park, where the boundary between them is the high water mark. The collection of organisms other than fish (such as worms, crustaceans, echinoderms and molluscs) from within the national park is not permitted under Regulation 9 of the National Park (Park) Regulations.

Larger water bodies within the parks suitable for recreational fishing are the Aire and Gellibrand Rivers and estuaries, the Cumberland River and Lake Elizabeth. River fish targeted include River Blackfish and Brown Trout. The National Park (Park) Regulations prohibit activities within Designated Water Supply Catchment Areas (DWSCA) that present risks to water quality, such as contact with or polluting the water and fishing. Fishing will continue to be permitted within the Barwon Water-managed area (outside the DWSCA and national park) from West Barwon Reservoir wall.

Victorian fishing laws apply in the parks. Refer to the latest *Victorian Recreational Fishing Guide* (DPI 2009) for information. *Recreational Angling Activity Standards* (ORC 2005f) and VR Fish's *Recreational Fishing Code of Conduct* (www.vrfish.com.au) also provide guidelines for minimal impact fishing practices.

In some areas, litter such as bait bags and discarded fishing line is a recurring problem requiring education and encouragement of fisher people to take their rubbish home.

Parks Victoria and VR Fish, the Victorian recreational fishers representative organisation continue to work together to provide high quality opportunities for recreational fishing in the Otways parks. This shared position recognises the significant social and economic benefits of Victoria's unique and valuable recreational fisheries and is based on principles including consultation, sustainable resource use and the mutual importance to both fishers and park managers of healthy fisheries into the future.

## **Management strategies**

- Allow fishing in the parks, subject to existing legislation and regulations identified in the DPI Victorian Recreational Fishing Guide, except in the Reference Area Zone and Designated Water Supply Catchment Areas (figure 1).
- Provide recreational fishing access and opportunities while managing foreshore areas. Consult with local and peak recreational fishing representative groups prior to any access consolidation necessary to increase sustainability or to manage risk.

## 6.11 Recreational hunting

#### Aims

- Provide opportunities for enjoyable recreational hunting experiences in Otway Forest Park, where compatible with the protection of other park values and visitor safety.
- Minimise conflicts with other parks users and impacts on park values from recreational hunting.

#### Basis

Recreational hunting or the carrying of firearms is not permitted in Great Otway National Park.

Recreational hunting of pest animals and declared game species is permitted in Otway Forest Park. Commonly hunted pest species include rabbits, foxes, and feral pigs. Declared game species, including deer and duck species, are also hunted

Other opportunities are available in nearby areas, such as the Aire River Wildlife Reserve, which is a designated State Game Reserve on the Aire River floodplain. Recreational hunting of pest species does not require a permit, and may be conducted at any time of year. The hunting of game species requires a game licence issued by DSE, and may only be conducted during officially notified seasons. Hunters are responsible for ensuring that they are aware of restrictions applicable to hunting in the forest park. Restrictions include never shooting on or across roads, and never shooting towards populated areas, including camping and picnic areas and walking tracks. The Victorian Hunting Guide (DSE 2007g) contains complete information on various forms of hunting, including legal, ethical and safety requirements, and allowed seasons, areas and species. The provisions in the guide that apply to state forest apply to Otway Forest Park. Parks Victoria and DSE work with the Victorian Hunting Advisory Committee to facilitate the involvement of shooting groups in hunting management and the development of programs such as Hunter Awareness. Under memorandums of cooperation, recreational hunting groups are also engaged in some parks on a volunteer basis to assist in pest control programs and deer management programs.

## **Management strategies**

- Allow recreational hunting of declared game species and pest species in Otway Forest Park subject to relevant legislation and regulations and the Victorian Hunting Guide.
- To ensure visitor safety and reduce potential conflicts, prohibit hunting within 1 km of all visitor sites and trailheads (table 3) by regulation.

## 6.12 Fossicking and prospecting

## Aim

• Provide opportunities for gemstone fossicking at Wreck Beach in Great Otway National Park, and fossicking and prospecting in all areas of Otway Forest Park.

#### Basis

Gemstone fossicking has been a popular permitted activity at Wreck Beach (Moonlight Beach) in Great Otway National Park for many years. Sand movements and erosion and deposition by wave action replenish the resource providing new material for searching and discovery. Gemstone fossicking in that location is authorised under section 32D of the National Parks Act, in accordance with the government-accepted VEAC recommendations for the park. Prospecting or fossicking in other areas of the national park is not permitted.

Although no significant deposits are known to exist in the forest park, opportunities are available for fossicking for gemstones and prospecting for other minerals using nonmechanical hand tools.

Fossicking or prospecting for minerals is regulated under the Mineral Resources (Sustainable Development) Act 1990 (Vic.) and, in the national park, the gazettal notice under section 32D of the National Parks Act. Fossickers and prospectors are required to obtain and operate under a miner's right or operate under a tourist fossicking authority. They must only use non-mechanical hand tools; and they must not disturb vegetation and archaeological sites or Aboriginal places or objects. Fossickers and prospectors are encouraged to follow the Prospecting Guide (DPI 2004) including the Prospectors and Miners Association of Victoria and Victorian Gem Clubs Association Code of Conduct.

## **Management strategies**

- In Great Otway National Park allow fossicking for gemstones only at Wreck Beach (Moonlight Beach) using nonmechanical hand tools and subject to relevant legislation and regulations.
- In Otway Forest Park allow fossicking for gemstones and prospecting for other minerals using non-mechanical hand tools and subject to relevant legislation and regulations.

## 6.13 Boating and water sports

#### Aims

• Provide opportunities for enjoyable water sports including boating, swimming and surfing in and adjacent to the parks, where this is sustainable and compatible with the protection of park values.

• Minimise conflicts with other park users and impacts on park values from boating, swimming and other water sports.

#### Basis

The Otway coastline and rivers have for decades attracted large numbers of residents and visitors seeking activities such as fishing, surfing, swimming, beachcombing, scuba diving, snorkelling, kayaking and boating. All these activities are popular in areas within the parks, and in the ocean waters immediately adjacent to the Great Otway National Park. These activities are highly seasonal, with a major influx of visitors over summer, the great majority from Melbourne.

Great Otway National Park provides visitor services such as toilets, showers, picnic facilities, camping areas, beach access, and car parking for large numbers of people seeking coastal recreation (section 6.4).

In many coastal areas foreshore access tracks have evolved and multiplied unsustainably. Such tracks may present an increased environmental footprint, ongoing erosion problems and public safety risks. In these areas there is a need to review duplicate and unofficial tracks and consolidate access into fewer, well-maintained and signposted tracks.

#### Boating, kayaking and canoeing

Personal watercraft use such as boating, canoeing and kayaking is generally permitted in inland waters in the parks (note that water supply reservoirs are outside the parks and access is restricted by the relevant water corporation). The lower reaches of the Aire and Gellibrand Rivers are popular for boating. Lake Elizabeth is popular for canoeing and kayaking, while powered craft are not permitted. On the coast there are boat launching opportunities at Urquhart Bluff, Blanket Bay and Aire River West, though launching is across the beach and suitable for smaller craft only. There is also a jetty at Aire River East.

Victorian boating laws apply in the parks, including a 5 knot speed limit for all boats including jet skis on inland waters and the requirement for operators of powered recreational vessels to have a boat operator licence. The *Victorian Recreational Boating Safety Handbook* (MSV 2002b) contains important information for recreational boating. The *Canoeing and Kayaking Adventure Activity Standards* (ORC 2005b) provide guidelines for safe, minimal impact practices for paddle craft use.

# Swimming, surfing and other beach activities

Most beaches in and adjoining Great Otway National Park are not patrolled and can be dangerous for swimming because of rocky reefs, large swells, rips and currents, deep water and low temperatures. Beach swimmers are encouraged to use beaches seasonally patrolled by the Surf Lifesaving Association of Australia outside the parks at Anglesea, Fairhaven, Lorne, Apollo Bay and Port Campbell.

Surfers frequent many places along the coast to gain access to surf breaks. When weather and wave conditions are favourable, large numbers of surfers can congregate at a particular location. Organised surfing events occur regularly in the national park, particularly at Johanna Beach and Southside Beach.

## **Management strategies**

- Allow the use of personal watercraft in the parks, subject to existing legislation and regulation. Do not permit:
  - the use of personal watercraft in Designated Water Supply Catchment Areas
  - motorised watercraft with electrical or internal combustion motors on Lake Elizabeth.
- Retain existing facilities and access for boat launching at Urquharts Bluff, Aire River East, Aire River West, and Blanket Bay.

## 6.14 Recreational aircraft

#### Aims

- Permit opportunities for hang-gliding and paragliding activities in the parks, where this is sustainable and compatible with the protection of park values and does not significantly impact on the enjoyment of other park visitors.
- Provide appropriate access by powered aircraft for scenic over-flights of the parks,

where this is sustainable and compatible with the protection of park values and does not significantly impact on the enjoyment of other park visitors.

• Minimise conflicts with other park users and impacts on park values from air sports and aircraft.

## Basis

#### Non-powered aircraft

The Otway coast is an important area for hangglider and paraglider recreation. Launching points along the coastline in the national park are popular because of the favourable geography, weather and prevailing winds, and easy access and nearby services.

Hang-glider and paraglider launch sites at Johanna Beach and Spion-kop and paraglider launch sites at Southside (Bells Beach) and Jarosite, are licensed to the Hang Gliding Federation of Australia (HGFA) for use in accordance with site management plans. Hangglider and paraglider pilots using these sites must be members of the HGFA and must also be flight-certified.

#### **Powered** aircraft

Commercial scenic flights are an important niche service for tourists who want a quick and spectacular Otway experience. Commercial and private scenic flights occur regularly over parts of the national park from Anglesea to Princetown, viewing features of the Otway coastal and mountain landscapes such as waterfalls, rainforest, cliffs and rocky shores en route to the Twelve Apostles. Most flights originate at airfields close to population centres. Flights are most frequent during summer holiday periods, and are mainly in coastal areas. Takeoff and landing of recreational aircraft in the parks are not permitted.

Aircraft noise can have a negative impact on the recreational values of the parks, and can disturb residents and park visitors. Aircraft noise can also affect natural values, particularly by disturbing wildlife.

Flights in the region are regulated by the Civil Aviation Safety Authority (CASA).

Park users and adjoining land owners have identified a need to rationalise commercial scenic flight paths and restrict flights near noise-sensitive areas and areas of highconservation or high social value areas.

Codes of conduct for aircraft activities, such as Environmental Principles and Procedures for Minimising the Impact of Aircraft Noise (ASA 2002) and voluntary Fly Neighbourly Agreements, have been adopted in other areas to reduce disturbance from aircraft.

Research has been undertaken to identify areas in the national park where it is a priority to protect natural and recreational values from noise disturbance (Parks Victoria 2006b). This study recommended the development and adoption of a fly neighbourly agreement containing minimum flight heights and horizontal distances from important areas, and a preferred flight path. As an interim measure, operating procedures have been developed in *Draft Flight Paths and Interim Sustainable Operating Procedures for Aircraft Overflying Otways Protected Areas* (Parks Victoria 2006b) and agreed to by operators with regular flights over the parks.

Occasionally, low over-flights and landings are needed for management purposes such as for fire management and emergency response and remote area access. Landings are also sometimes needed for special events, filming or news-gathering, and these activities will require a permit from the park manager.

## **Management strategies**

- Allow the takeoff and landing of nonpowered craft in the designated hangglider and paraglider launch sites at Johanna Beach and Spion-kop and paraglider launch sites at Southside (Bells Beach) and Jarosite, licensed to the HGFA.
- Encourage operators of powered aircraft to agree to and comply with the draft operating procedures in Flight Paths and Interim Sustainable Operating Procedures for Aircraft Overflying Otways Protected Areas (Parks Victoria 2006b). For any new overflight proposals request the proponent to prepare a Fly Neighbourly Agreement for the operation of powered aircraft over the parks that identifies permissible flight heights, minimum horizontal distances from important areas, and preferred flight paths.

## 6.15 Events and commercial activities

## Aims

- Allow and manage appropriate events and functions and minimise impacts on park values.
- Provide for appropriate commercial businesses to operate within the parks.
- Ensure commercial operators are licensed to conduct their business within the parks.

## Basis

#### **Event and functions**

The Otways parks are popular places for hosting recreational, cultural and social events, including bicycle races, surfing competitions, horse riding club events, concerts and opera performances. Organisers of commercial or large private events and functions are required to obtain a permit, generally one month in advance, or three months in advance for larger events. The involvement of Traditional Owners in relevant events can enrich participants' experiences.

Current activities that require an event or function permit within the parks are:

- non-timed motor vehicle events such as tours, navigation or observation rallies (in both parks) and Confederation of Australian Motor Sport (CAMS)-approved timed racing events in Otway Forest Park
- bushwalking events including competitive orienteering and rogaining in the parks
- cycling events including races
- dog club activities, competitive dog events and dog training
- horse riding events including competitions and groups of over 20 horses
- organised surfing events.

#### **Commercial activities**

Visitation to and use of the parks is also supported by a number of commercial business operations. Licensed tour operators provide structured tourism, recreational or educational activities. All persons or organisations undertaking commercial activities in the parks are required to obtain a licence or permit under the relevant legislation and regulations.

#### Licensed tour operators

Commercial tour operators and recreation or education providers require a Victorian Tour Operator Licence to conduct their business in the parks. Licensed commercial tour, recreation or education activities currently provided within the parks are:

- coach and bus tours
- four-wheel-driving
- bicycle touring
- bushwalking
- canoeing and kayaking
- coastal walking
- fishing and angling
- mountain bike riding
- spotlight tours and nightwalks
- surfing and surf education
- horse riding
- non-powered aircraft (hang-gliding).

#### Other commercial providers

Providers of commercial services other than licensed tours, are required to obtain a 'trade or business' licence or permit under the relevant legislation or regulations.

#### Leases licences and permits

Leases, licences and permits may be considered subject to relevant legislation and management objectives. Before issuing a licence or permit for a private or commercial event or other commercial activity, park managers will assess the impact of the proposed event or commercial activity on the environment and on other visitors, and include conditions in the licence or permit to minimise impacts. Events and commercial activities will not be permitted in some areas including Designated Water Supply Catchment Areas, Reference Areas or other sensitive areas.

#### **Management strategies**

• Consider and approve sustainable events that are based on the natural or cultural settings and which contribute to people's appreciation of the parks.

- Support events which contribute to hinterland tourism and shoulder or off season tourism.
- Build knowledge of recreation and tourism operators in relation to Otway natural and cultural values, and an understanding of threats to improve the sustainability of their operations. Ensure that licensing and conditions on licences for recreation and tourism operators in the parks adequately respect and protect natural and cultural values.
- Work with the private sector to provide suitable tenures for diverse, sustainable commercial tourism products and opportunities.
- Encourage licensed tour operators to adopt best practice activity standards.

## 6.16 Public safety

#### Aims

- Promote awareness of recreation risks, responsibility for considering risks, and adherence to safe practices to park users.
- Identify public safety risks and implement risk management strategies.
- Plan for and respond appropriately to public safety incidents and emergencies.

## Basis

#### **Risk management**

Use of the parks involves being outdoors in natural environments in varied settings. Elements of risk will always be present in nature, and recreation activities can be, by their nature, inherently dangerous. It is not desirable to remove all risk from recreation, as risk is an intrinsic part of visitor experience. However, park managers have a duty of care to visitors to ensure that they avoid foreseeable risks of injury.

From studies of visitation to Victorian parks between 2000 and 2005, recreation activities shown to have the highest number of visitor personal injury incidents relative to the number of participants are rock fishing, hang gliding and rock climbing/abseiling (Newspoll 2006). The *Statewide Visitor Risk Management Strategy* (Parks Victoria 2007c) identifies three recreation categories to be highest risk: cycling/mountain biking, swimming and rock fishing.

The Statewide Visitor Risk Management Strategy addresses risks that apply to all levels of service-rated areas managed by Parks Victoria. A key component is the Visitor Risk Treatment Framework which integrates the expected type of visitor (market segment), the level of service offered at the visitor site, and the identifiable risk to determine visitor risk control measures. A tree risk mitigation system is implemented at visitor sites.

Public information dissemination and education of park users, and signage, are the most effective ways to increase awareness of risks and promote safety. Adventure Activity Standards (produced by the Outdoor Recreation Centre specific to particular recreation activities) contain important information for conducting safe recreation and are recommended for dissemination, as are Park Notes, Forest Notes and other government or peak representative bodysupported information.

#### **Emergency preparedness and response**

Relevant agencies cooperate and respond to incidents in the parks in accordance with the Emergency Management Act 1986 (Vic.) and the Emergency Management Manual Victoria (State of Victoria 2008) which contains the State Emergency Response Plan and defines the role of emergency management agencies in relation to particular incident types. In the context of the Otways parks, DSE has the important role of the lead agency for reducing the incidence and minimising the impact of fire in state forest, national parks, and protected public lands, and the control agency with responsibility for the suppression of all fires that occur in those areas. Parks Victoria has responsibilities for fire prevention,

preparedness and suppression in collaboration with DSE. Following on from this, the response of park managers to emergency incidents is guided by various emergency management plans. The national park is covered by emergency management plans including the Western Otways Ranger in Charge Area Emergency Management Plan and Eastern Otways RIC Area Emergency Management Plan (unpublished Parks Victoria).

In accordance with the Emergency Management Act the relevant shires have prepared municipal emergency management plans in which an integrated fire response involving multiple agencies is outlined. DSE's role is the lead agency in fire management on protected public land and has some supporting roles in other emergencies. The identification of DSE in this context includes Parks Victoria, Department of Primary Industries and other organisations and contractors involved in emergency preparedness and response under the umbrella of DSE.

The SES is the lead agency for the preparation and implementation of the *South West Region Flood Response Plan* (SES 2008) with DSE as a support agency.

DSE is the lead agency for implementing the Readiness and Response Plan South West Area (DSE 2008c), Otway Fire District Fire Protection Plan (DSE 2003c) and Fire Operations Plan (DSE 2008b)

## Management strategy

 Increase visitors' awareness of safety issues and potential hazards in the parks through the use of information signs, Park Notes, Forests Notes, Parks Victoria and DSE and peak body websites and ranger patrols.

## 7.1 Firewood harvesting

#### Aims

- Allow firewood harvesting for commercial and personal use from the Otway Forest Park in accordance with relevant legislation, codes of practice, procedures and prescriptions.
- Minimise the impacts of harvesting firewood on the natural, cultural and recreational values of the Otway Forest Park.

## Basis

The forests in the Otway region have been a source of significant economic and social benefit to local communities for many years. The Otway forests continue to support Indigenous communities, who use the seasonal and local abundance of particular plants for use in daily life and for important ceremonies.

Firewood is harvested commercially and for personal use in Otway Forest Park. Firewood harvesting is not permitted within Great Otway National Park.

Otway Forest Park is managed under the Forests Act, with the harvesting of minor timber products including firewood controlled by the Sustainable Forests (Timber) Act 2004 (Vic.) and the Sustainable Forests (Timber Harvesting) Regulations 2006. The collection of firewood must comply with this legislation, the Code of Practice for Timber Production (DSE 2007b), and Management Procedures for timber harvesting operations and associated activities in Victoria's State forests (DSE 2007f).

A three year (rolling) Wood Utilisation Plan (WUP) for the Otway Forest Management Area (DSE 2009a) will be prepared and updated annually and community input will be invited. This Wood Utilisation Plan will identify areas where firewood can be harvested in the Otway Forest Park for commercial and personal use under licence or permit. Such areas will not include Special Protection Zones (section 3.3) or areas excluded through the WUP planning process. In the areas identified in the WUP only specified trees or fallen timber will be taken for firewood. The nomination of Public Safety Zones or other strategies to manage risk to the public may also be put in place.

The commercial harvesting of firewood requires a commercial Forest Produce Licence and a Timber Harvesting Operators Licence. Harvesting firewood for personal use requires a separate Forest Produce Licence. Information about these licences can be obtained from DSE offices or at <u>www.dse.vic.gov.au/forests</u>.

## **Management strategies**

- Prepare an annually updated three-year Wood Utilisation Plan to provide for the sustainable supply of firewood in accordance with relevant legislation, codes of practice, procedures and prescriptions.
- Monitor compliance with permits for domestic firewood collection and commercial firewood operations to ensure adherence to legislation, codes, procedures and prescriptions.

## 7.2 Minor forest produce harvesting

## Aim

- Allow minor forest produce harvesting in Otway Forest Park in alignment with relevant legislation, codes of practice, procedures and prescriptions.
- Minimise the impacts of minor forest produce harvesting on the natural, cultural and recreational values of Otway Forest Park.

#### Basis

The State Government accepted the VEAC recommendation that harvesting of selected trees and vegetation will continue to be allowed in Otway Forest Park for a range of minor forest produce such as posts and poles, woodchop blocks, stakes, hobby wood and timber for specialist uses such as the manufacture of musical instruments. Lowintensity harvesting of material such as seeds for revegetation and foliage for decorative purposes is also allowed. Minor forest produce may be harvested commercially and for personal use from the forest park under licence or permit. Areas available for this activity do not include Special Protection Zones (section 3.3) or areas excluded through planning processes. Commercial harvesting of minor forest produce is not permitted within the Great Otway National Park.

#### **Management strategies**

- Allow the harvesting of minor forest produce in the forest park in accordance legislation, codes, procedures and prescriptions.
- Plan and monitor minor forest produce harvesting to ensure protection of natural and cultural values. Harvesting will not be allowed in Special Protection Zones and other areas of the forest park that could be adversely affected by such activities.

## 8.1 Public utilities infrastructure

## Aim

• Manage authorised public utilities infrastructure within the parks through formal consents, leases, licences, permits and agreements in accordance with relevant legislation, and to minimise impacts on park values.

## Basis

There is extensive network of public utilities infrastructure in the parks, including power lines, communications cables, communications towers, antennae, monitoring stations and pipelines. Public utilities corporations such as Telstra, Powercor, Barwon Water and Wannon Water, and other bodies such as the Australian Maritime Safety Authority and Surf Coast Shire utilise land within the parks for access to, and the siting, operation and management of, this infrastructure.

New public utilities infrastructure sites may not be located in or across reference areas, and should not be located in or across national or state parks wherever possible. If necessary, consent may be given under section 27 of the National Parks Act to a public authority (or an agreement may be entered into with an electricity company under section 27A relating to pre-existing works) to perform its functions and powers within a national park. In the forest park, the Forests Act provides that leases, licences or permits may be issued or agreements made to enable the formal establishment and operation of utilities infrastructure.

Consents under section 27 of the National Parks Act require the endorsement of the Minister and are only given after demonstration of a need with no alternative outside the parks, and after cultural and environmental site assessments have been conducted and impacts minimised.

Typically, the consent, lease, licence, permit or agreement includes a description of the works, conditions to protect park values, a site plan and details of management arrangements and responsibilities. Installation of most of the public utilities infrastructure pre-dates the current parks, and there are several instances of infrastructure sites lacking up-to-date consents, leases, licences, permits or agreements, and lacking accurate spatial information.

## **Management strategies**

- Undertake an audit of public utilities infrastructure in the parks and determine authorisation status. Seek authorisation under appropriate legislation for existing unlicensed public infrastructure in the parks, where this is consistent with policy and protection of park values.
- Ensure that park values are adequately protected in consideration and authorisation of public utilities infrastructure developments and ongoing access and maintenance provisions.

## 8.2 Private occupancies

## Aims

- Manage authorised occupancies to allow for specified uses while minimising their impacts on park values.
- Resolve unauthorised occupancies by removal or authorisation.

## Basis

The government acknowledged that specific private occupancies in Otway Forest Park should continue (Government of Victoria 2005). These occupancies are managed by community groups and include:

- Victorian Field and Game Association's Colac shooting ground
- Colac–Otway Archers field range
- Patonga Scout Camp
- Colac Moto-cross Track at Barongarook.

#### **Management strategies**

• Issue or renew licences for existing or proposed occupancies in the parks and manage occupancies in accordance with park objectives and relevant policies.

• Review unauthorised occupancies within the parks. In determining the future of these occupancies, consider social, environmental, cultural and management implications and ensure adherence to legislation and policy.

## 8.3 Cape Otway Lightstation

## Aims

- Provide for the ongoing commercial operation of the Cape Otway Lightstation Tourist and Heritage precinct.
- Provide for the ongoing operation of marine navigation and weather recording instruments.

## Basis

The Cape Otway Lightstation Tourist and Heritage precinct (the precinct) is within Great Otway National Park. The government accepted VEAC's recommendations concerning the precinct (Government of Victoria 2005), including:

- continuation of existing accommodation and associated facilities
- provision for a long-term commercial lease under the National Parks Act.

Part of the Cape Otway precinct is leased for tourism purposes. Section 29B of the National Parks Act provides for the continuation of the existing leases in the 'Cape Otway lighthouse area' (the precinct). It also enables a new lease to be granted over any part of the precinct for the purposes of recreation or tourism that is consistent with the conservation of the area's heritage values.

Two small sites within the precinct are leased to Australian Maritime Safety Authority for the operation of marine navigational aids, and one small site is leased to the Bureau of Meteorology for weather monitoring equipment. At the expiry of these leases, it is anticipated that consents would be granted under section 27 of the National Parks Act for the ongoing occupation of those sites.

#### **Management strategies**

• Continue to manage approved leases in accordance with lease conditions.

• In accordance with an agreed schedule, the Cape Otway Lightstation lessee or Parks Victoria will ensure ongoing maintenance, stabilisation, and (where appropriate) restoration of structures at Cape Otway by implementing the Cape Otway Lightstation Conservation Management Plan.

## 8.4 Designated and Special Water Supply Catchment Areas

## Aims

- Minimise impacts on water quality and yield in water supply catchment areas from fire, recreation, extraction and management activities.
- Manage Designated Water Supply Catchments as closed catchments.
- Protect the public health of communities that depend on water supply catchments, through minimising threats to water quality and yield within water supply catchment areas.

## Basis

The Otways are a critical source of water for many south-western Victorian communities, from Geelong to Warrnambool. Many water storages, diversion facilities and buffer areas are located in the parks. Wannon Water and Barwon Water harvest water from catchments in the parks in accordance with the *Water Act 1989* (Vic.).

Wannon Water supplies reticulated water from Otway surface and groundwater sources to an area inhabited by 45 000 people (approximately 18 500 residences and 3400 other sites), and Barwon Water supplies an area inhabited by 240 000 people (approximately 119 700 residences and 10 832 other sites). The catchments for these water sources are within the Otway parks, and are managed under two legislated mechanisms.

#### **Designated Water Supply Catchment Areas**

The government has adopted VEAC's recommendations regarding important human use water supply catchment areas in Otways, designating two Designated Water Supply Catchment Areas (DWSCAs) under the National Parks Act comprising five different areas (see below) to protect catchment areas for major reservoirs and water off-takes.

The DWSCAs will be managed as 'closed catchments' consistent with VEAC recommendations along the model used for Melbourne's water supply areas. A 'closed catchment' is a water catchment supplying high-quality water for human use, which is 'closed' to protect the water supply from risks associated with public access. The paramount consideration in managing these areas is to protect the areas, maintain water quality and otherwise protect their water resources.

The water supply catchments above the Arkins Creek weir, and the West Gellibrand, Olangolah, Allen and Painkalac Reservoirs will be managed as closed catchments and the West Barwon catchment will allow limited public access (section 3.3 and table 2). The reservoirs and weirs are outside the national park and the DWSCAs. In accordance with section 32L of the National Parks Act, the areas are jointly managed under management agreements between the Secretary and the relevant water corporation (Barwon Water or Wannon Water) including catchment management plans, works programs and fire protection plans. Policies for protecting the area, maintaining water quality, and restricting public access are determined by the water corporations and through the the National Parks (Park) Regulations that prohibit activities within DWSCAs that present risks to water quality, such as contact with or polluting the water, and fishing.

The two DWSCAs in Great Otway National Park: one relating to Barwon Water and the other Wannon Water. The DWSCA jointly managed by Parks Victoria (for the Secretary) and Barwon Water comprises the following four sections:

- Painkalac Creek: this catchment area of 3466 ha feeds the Painkalac Reservoir which supplies Aireys Inlet with 100% of its reticulated water.
- St Georges River: this catchment area of 1478 ha feeds the Allen Reservoir which supplies Lorne with 100% of its reticulated water.
- West Barwon: this catchment area of 4683 ha feeds the West Barwon Reservoir which (via the Wurdee Boluc reservoir) supplies

the Geelong region with the majority of its reticulated water.

• West Gellibrand & Olangolah: this catchment area of 2312 ha feeds the West Gellibrand and Olangolah Reservoirs which supply the Colac region with 100% of its reticulated water.

The DWSCA jointly managed by Parks Victoria (for the Secretary) and Wannon Water comprises:

• Arkins Creek: this catchment of 1200 ha feeds diversion weirs on the three branches of the Arkins Creek. Water is fed into the North Otway Pipeline which supplies the region including Simpson, Cobden, Camperdown, Terang, Mortlake and Warrnambool. Approximately 30% of the reticulated water used by this region comes from this DWSCA (the balance is sourced from the Gellibrand River, Newlingrook aquifer and other groundwater sources, see below).

Under a 'closed catchment' approach, public access to Designated Water Supply Catchment Areas will not be permitted except for limited access to the West Barwon section of the DWSCA where access may be permitted for some recreational activities (section 3.3 and table 2) and volunteers conducting management work under a formal arrangement with park managers. Any impacts of public use will be monitored and prompt action taken to rectify adverse impacts should they occur.

#### Special (or Proclaimed or Declared) Water Supply Catchment Areas

Most of these catchment areas were declared prior to the creation of the parks, and cover areas of the national park and forest park, other Crown land and private land. The Catchment and Land Protection Act aims to ensure that the quality of the land and water resources and associated plant and animal life are maintained and enhanced, and the declaration of Special Water Supply Catchment Areas (SWSCAs) is one of the mechanisms in the Act for achieving this. The SWSCAs protect catchment areas for water collection and offtake points on waterways or from groundwater. Special Area Plans may be prepared for management of land and water resources within a SWSCA. On private land within a SWSCA, controls in local planning schemes and recommendations in

literature such as *Living in a drinking water catchment area* (DHS 2009) guide actions for reducing risk to water values.

There are nine SWSCAs in the parks:

- Gellibrand River SWSCA: This 49 853 ha catchment of which 27 761 ha are within the parks, feeds the Gellibrand River in its upper reaches including the Barramunga, Olangolah, Asplins, Lardner's, Charley's, Arkins, Ten Mile, Loves and Gum Creeks, and the Carlisle River. Parts of this SWSCA are overlain by the Arkins Creek DWSCA and West Gellibrand and Olangolah sections of the other DWSCA. Water is sourced by Wannon Water from the Gellibrand River close to the Carlisle River township and (together with water extracted from the Newlingrook aquifer) added to the North Otway Pipeline system supplying Simpson, Cobden, Camperdown, Terang, Mortlake and Warrnambool.
- Gellibrand River (South Otway) SWSCA: This 16 707 ha catchment, of which 11 048 ha are within the parks, feeds the lower reaches of the Gellibrand River including Chapple and Skinner Creeks. Water is sourced by Wannon Water from the Gellibrand River at Chapple Vale, which feeds the South Otway Pipeline to provide 80% of the water used by Warrnambool, Allansford and Koroit.
- Barwon Downs Wellfield Intake SWSCA: This 7783 ha catchment, of which 2395 ha are within the parks, feeds the Barwon Downs Graben aquifer. Water is extracted from this aquifer by Barwon Water at the Barwon Downs bore field near Gerangamete, to supplement the water supply to the Geelong area, via the Wurdeeboluc Reservoir.
- Barham River SWSCA: This 6359 ha catchment feeds the east and west branches of the Barham River. A Barwon Water offtake is located west of Apollo Bay, which supplies 100% of Apollo Bay's reticulated water.
- Skenes Creek SWSCA: This catchment is currently not used for water offtake and will be revoked in the future.

- Upper Barwon SWSCA: This 15 547 ha catchment, of which 13 466 ha are within the parks, feeds the West and East Barwon Rivers, Kings, Callahans, Den and Dewings Creeks. The area is partly overlain by West Barwon DWSCA, and includes the catchment area for West Barwon Reservoir providing one of the main sources of water for the Geelong region (see above). Additionally, this SWSCA feeds three offtakes on the East Barwon River, Callahans and Dewings Creeks; the water contributing to Barwon Water's supply to the Geelong region.
- Pennyroyal, Matthews and Gosling Creeks SWSCA: These catchments, totalling 7190 ha, of which 5259 ha are within the parks, feed the Pennyroyal, Matthews & Gosling creeks. Two offtakes on the Pennyroyal and Matthews creeks contribute to Barwon Water's supply to the Geelong region. Gosling Creek is not currently used for water off-take and the boundary of the SWSCA will be amended in the future to exclude the catchment of Gosling Creek.
- Lorne SWSCA: This 2754 ha catchment, of which 2435 ha are within the parks, provides Lorne's reticulated water supply. A portion of the SWSCA (corresponding to the catchment of the St Georges River) is overlain by the St Georges River DWSCA section supplying the Allen Reservoir (see above). The remaining portion, covering the catchments of the Erskine River and Cherry Tree Creek, is not used for water off-take and will be formally removed from the SWSCA in the future.
- Painkalac Creek (Aireys Inlet) SWSCA: This 3348 ha catchment feeds the Painkalac Reservoir, enabling Barwon Water to supply reticulated water to Aireys Inlet. 3343 ha of the SWSCA are within the parks, and the SWSCA is almost entirely overlain by the Painkalac Creek section of the Barwon Water DWSCA.

#### Groundwater extraction and recharge areas

At present there is no groundwater extraction in the parks. Important groundwater extraction sites near the parks for domestic use include Barwon Downs borefield, Carlisle borefield and Port Campbell; and for industrial use, the Alcoa Anglesea mine and power station. There are also many private bores in the region predominantly for stock and agricultural irrigation. In the future water may be extracted for domestic supply from Newlingrook and Gellibrand borefields. The Anglesea borefield includes a small area of Great Otway National Park near Forest Road.

There are important aquifer recharge areas located within the parks that supply water to the bores mentioned above. The Gellibrand River valley is a recharge zone for the Port Campbell bore (Dilwyn aquifer) and the Newlingrook aquifer, with the groundwater flow system being interconnected with the river. The Barwon Downs Wellfield Intake SWSCA is the recharge zone for the Barwon Downs borefield (Barwon Downs Graben aquifer). In the eastern part of the parks, an area from Eastern View to Wensleydale is important for recharging the groundwater resources (Upper and Lower Eastern View aquifers) sourced by Alcoa at Anglesea and at Anglesea borefield.

Management of water catchments will focus on reduction of risk to water quality and yield. By far, the greatest risk to water supply in the Otways is from wildfire, but erosion and sedimentation, nutrient runoff, and contamination from hydrocarbons or human or animal wastes are also risks.

## **Management strategies**

- In partnership with water corporations implement the DWSCA joint management agreements, including preparation of catchment management (including fire management) plans, works programs and risk management plans.
- Undertake necessary activities to increase awareness and compliance with the closed catchment management arrangements for DWSCAs.
- Manage and monitor the limited access allowed to the West Barwon DWSCA.

## 8.5 Grazing

#### Aims

• Permit low-intensity grazing in cleared areas of Otway Forest Park where it is pre-

existing and consistent with conservation and recreation objectives.

• Phase out grazing in Great Otway National Park.

## Basis

Domestic stock grazing has occurred in many parts of the parks. At the time of its creation there were 28 grazing licences applicable to Great Otway National Park. Grazing is to cease in the park by 30 September 2009.

In accordance with government-accepted VEAC recommendations in relation to grazing (Government of Victoria 2005), low-intensity grazing may continue in Otway Forest Park where it pre-exists on previously cleared land and is consistent with conservation and recreation objectives.

## **Management strategies**

- Monitor and manage grazing in the Otway Forest Park under existing licences and to minimise impacts on other park values.
- Terminate existing grazing licences in relation to the national park and implement management to restore natural values.

## 8.6 Apiculture

## Aims

- Provide for apiculture in Otway Forest Park while minimising impacts on other park values.
- Do not allow apiculture in Great Otway National Park.

## Basis

Apiculture is not an extensive activity in the parks.

The government-accepted VEAC recommendations for apiculture in the parks, (Government of Victoria 2005) are:

- Great Otway National Park apiculture not to be permitted
- Otway Forest Park apiculture to be permitted.

Apiary licences for three former sites in the national park expired prior to the creation of the parks.

In 2009, there were no apiary site licences issued in the forest park.

## **Management strategy**

• Permit apiculture in Otway Forest Park subject to careful assessment of applications and issue apiary site licences with appropriate license conditions to protect park values and minimise impacts on visitors.

## 8.7 Commercial fishing

#### Aim

• Provide for existing commercial eel fishing entitlements in Great Otway National Park.

#### Basis

Two operators undertake small-scale commercial eel fishing in the lower reaches of the Aire and Gellibrand rivers and Lake Elizabeth in Great Otway National Park. Immature Short-finned Eels are harvested and on-sold to supplement stocks in lakes to the north of the parks.

In its Angahook–Otway Investigation Final Report, VEAC made specific recommendations in relation to commercial fishing in Great Otway National Park that were subsequently varied by government (Government of Victoria 2005). The government response was that:

- new commercial fishing entitlements will not be permitted
- existing commercial fishing entitlements (eel harvesting) will be allowed to continue.

The fishery is managed in accordance with the *Fisheries Act 1995* (Vic.) and the *Victorian Eel Fishery Management Plan* (NRE 2003). The Department of Primary Industries — Fisheries Victoria manages commercial fisheries, including those sites in Great Otway National Park, to ensure a sustainable balance between resource use and conservation.

#### **Management strategy**

• Work with relevant agencies to facilitate fishery management, including the minimisation of the impacts of commercial fishing on natural and cultural values.

#### 8.8 Earth resources

## Aim

• Ensure that earth resources activities are conducted in accordance with the relevant legislation and that park values are adequately protected.

#### Basis

Parts of the parks, particularly the Otway Forest Park, are subject to mineral exploration licences and petroleum exploration permits. The parks are completely covered by geothermal exploration permits. In addition, there are a small number of quarries in the parks, including a sandstone quarry known as the Bambra Rd Quarry in the Great Otway National Park.

The *Extractive Industries Development Act* 1995 (Vic.) prohibits the granting of search permits for stone in Great Otway National Park, and section 40 of the National Parks Act prohibits the granting of work authorities under the Extractive Industries Development Act in the national park except in relation to Bambra Road Quarry.

Under the provisions of the *Mineral Resources* (*Sustainable Development*) Act 1990 (Vic.) and the National Parks Act, no new mineral exploration and mining licences can be granted over Great Otway National Park.

Operations in national parks under the Greenhouse Gas Geological Sequestration Act 2008 (Vic.), Geothermal Energy Resources Act 2005 (Vic.) and the Petroleum Act 1998 (Vic.) may be permitted subject to section 40 of the National Parks Act.

The Otway Forest Park is restricted Crown land under the Mineral Resources (Sustainable Development) Act. Any stone, mineral, petroleum or geothermal exploration and extraction or greenhouse gas storage exploration or operations in the forest park requires the consent of the Crown land Minister (Minister for Environment and Climate Change). Earth resources activities have the potential to impact on park values and need to be carefully managed subject to appropriate conditions/safeguards.

**Note:** Commencement of the *Resources Industry Legislation Amendment Act 2009* (Vic.) will combine the Mineral Resources (Sustainable Development) Act and the Extractives Industries Development Act.

## **Management strategies**

- Consider and where appropriate allow earth resources activities to be undertaken in the parks in accordance with relevant legislation and management objectives.
- Assess all earth resources proposals (and existing activities, as appropriate) to ensure adequate protection of park values via appropriate conditions and monitor compliance.
- Facilitate grant of a work authority with appropriate conditions in relation to Bambra Road Quarry, in accordance with the National Parks Act and the Extractive Industries Development Act.

## 8.9 Occasional uses

#### Aim

• Allow authorised occasional uses and minimise their impacts on park values.

## Basis

Great Otway National Park and Otway Forest Park are used from time to time for other activities such as commercial filming, defence force training and research.

Park managers recognise the significant role that the filming and photography industry plays in supporting the social and economic well-being of the community, promoting opportunities in the parks, and promoting the protection of natural and cultural values in the parks. All filming and photography conducted as part of a trade or a business is undertaken through a permit system. Amateur photographers or people taking film or video for personal or hobby interest do not require a permit.

Adventure training and field navigation exercises by Australian Defence Force units may be undertaken in the parks, subject to a permit outlining conditions to ensure minimal impacts on park values.

Any research and monitoring in the national park requires a research permit under the National Parks Act.

## **Management strategies**

- Permit Defence Force adventure training and field navigation exercises in the parks in accordance with each park management agency's operational policies and relevant permit conditions.
- Manage commercial filming and photography in accordance with legislation and each park management agencies operational policies.
- Monitor authorised activities to ensure conditions of authorisation are met.

# 8.10 Park boundaries and adjacent uses

## Aims

- Coordinate management activities with those of park neighbours where these are complementary to the protection of park values.
- Work with park neighbours to address issues of pest plant and animal control.
- Provide access through the parks to neighbouring properties for authorised uses such as timber carting where that access does not impact on park values.
- Provide reasonable rights of access to freehold land abutting or surrounded by the Great Otway National Park and minimise the impacts on park values.

## Basis

Great Otway National Park and Otway Forest Park extend across a vast area with a large private property interface and several outlying blocks. The parks form an extensive and contiguous protected area network, linking marine and terrestrial ecosystems.

Most of Great Otway National Park and Otway Forest Park adjoins cleared farmland, but the parks also adjoin urban areas, timber plantations and privately owned forest areas. The National Parks Act allows the provision of access rights to freeholders in relation to the Great Otway National Park.

Some areas of Crown land along the coast are managed on behalf of the Minister by Committees of Management established under the Crown Land (Reserves) Act. The committees may be an agency (local council, Parks Victoria or DSE) or a committee appointed by the Minister.

Great Otway National Park also adjoins:

- Point Addis Marine National Park near Anglesea, managed by Parks Victoria
- Twelve Apostles Marine National Park near Princetown, managed by Parks Victoria
- State waters below the low water mark not within the marine national parks or other reserves, managed by DSE
- Alcoa's (Anglesea Heath) lease area which is managed by Alcoa and Parks Victoria in partnership
- coastal reserves between Apollo Bay and Kennett River, managed by the Apollo Bay

   Kennett River Public Reserves
   Committee of Management
- coastal reserves at Wye River and Separation Creek managed by the Wye River Foreshore Committee
- coastal reserves between Kennett River and Anglesea managed by The Great Ocean Road Coast Committee of Management
- several arterial roads, including the Great Ocean Road, which are managed by VicRoads or local government
- land managed by Barwon Water and Wannon Water, used for water supply such as reservoirs, weirs and borefields.

Park boundaries are marked at most access points by signs. The extensive interface between the parks and private property highlights the importance of close cooperation between park managers and park neighbours in management. Conservation practices on land neighbouring the parks such as Land for Wildlife and Landcare are encouraged. The State Planning Policy Framework (DSE 2003b), in conjunction with the Surf Coast Planning Scheme (Surf Coast Shire 2000), Corangamite Planning Scheme (Corangamite Shire 2004) and the Colac Otway Planning Scheme (Colac Otway Shire 2000), provides a framework for development proposals adjoining the parks.

Various main roads, including the Great Ocean Road, pass through the two parks at several locations but are excluded from them. The boundaries of eleven road reserves excluded from the national park need to be indentified consistent with the government response to VEAC recommendation, R5, that any new road reserve should, generally, not be wider than 20 metres. Where a road is not included in a road reserve and it is excluded from the park by name, the area excluded is defined as per clause 3 of Schedule 5 to the *Road Management Act 2004* (Vic.).

At times, local realignments of the Great Ocean Road through the Great Otway National Park may be required outside the defined road or road reserve. Such realignments require the consent of the Secretary to DSE under section 27 of the National Parks Act.

Parks Victoria and DSE contribute to the preparation by the relevant road authority of roadside management plans, including the plan for the Great Ocean Road. Objectives of the roadside management plans will include managing the roads for roads users, safety, scenic quality, tourism value and natural values of adjoining areas.

## **Management strategies**

- Encourage road management authorities to prepare roadside management plans for 'tourist' roads that traverse the parks.
- Work with Surf Coast, Colac Otway and Corangamite Shires to ensure complementary management of issues on park boundaries.
- Where necessary, permit conditional access to freehold land via existing roads or tracks in the Great Otway National Park, as allowed by section 30I of the National Parks Act.

## 9.1 Community awareness

#### Aim

• Increase the community's awareness and understanding of the parks' values and management activities.

## Basis

Great Otway National Park and Otway Forest Park are spread across a large area and are encompassed and interspersed by communities and neighbours. The creation of the parks has resulted in some major land use and management changes in the Otways. Many of these changes have important implications for local residents and park users and visitors.

Raising the awareness of the parks' values is an essential step in developing the community's sense of custodianship for the parks and engagement in their management. The community is more likely to develop this sense of custodianship if its views and values are respected and park-related social networks are encouraged and supported. A strong community connection with the parks among visitors and the local and wider community will assist in broader public education and awareness raising. Management of the parks can be greatly assisted if park managers work closely with existing networks including community groups and agencies to promote park values and achieve management objectives in relation to activities such as fire management, pest plant and animal control and the undertaking of volunteer conservation programs.

Education and interpretation programs (section 6.2) play an important role in raising the awareness of the parks in the wider community. Parks Victoria aims to communicate the benefits of a healthy parks system and its contribution to the health of individuals and society through the 'Healthy Parks, Healthy People' program.

Parks Victoria, DSE, Barwon Water, Corangamite CMA, Surf Coast Shire, Colac Otway Shire, Corangamite Shire and Geelong Otway Tourism conduct programs to increase public awareness of important values, issues and management approaches in the region. Peak bodies, environmental groups, sporting clubs, Aboriginal communities, Landcare groups and other community groups also help promote community awareness.

## **Management strategy**

• Liaise with communities, groups and with the three local government Councils to enhance community understanding of shared management issues and to foster opportunities for local communities to contribute to achieving park management objectives.

## 9.2 Traditional Owner partnerships

#### Aims

- Build collaborative relationships to engage Traditional Owners in the parks' planning and management.
- Improve opportunities for Aboriginal participation in the parks' management.

## Basis

The involvement of Traditional Owners in park management is critical for keeping *Country* healthy and culture strong. Traditional Owners have considerable interest in and aspirations for the parks as part of *Country*. They are an important potential source of traditional knowledge about the area that has yet to be documented. A strong working relationship with Traditional Owners and Registered Aboriginal Parties will be essential to reflecting their perspectives on park management and reconciliation of their interests and aspirations with other members of the community.

The government-accepted VEAC recommendations (Government of Victoria 2005) supported specific recommendations to enhance the involvement of Aboriginal communities in the planning and management of the parks.

## **Management strategies**

- Consistent with broader Government discussions and in conjunction with Traditional Owners, the relevant Registered Aboriginal Parties and other relevant Aboriginal groups, develop a preferred model for cooperative management of Great Otway National Park and Otway Forest Park.
- In conjunction with the relevant Registered Aboriginal Parties, and Traditional Owners and other relevant Aboriginal groups, explore ways to improve Aboriginal representation and participation in decision making in relation to management of the parks.
- Work with the relevant Registered Aboriginal Parties, Traditional Owners and other relevant Aboriginal groups deliver the Parks Victoria Indigenous Partnership Strategy and Action Plan and DSE Indigenous Partnership Framework.

## 9.3 Community participation

#### Aims

- Build a sense of shared ownership and custodianship for the parks among community groups and individuals.
- Support and encourage people to actively assist in implementing the plan and managing the parks.

#### Basis

Victoria's parks and network of other public land are vital not only to the protection of natural and cultural resources, but also contribute significantly to the livelihood, lifestyle and well-being of Victorians. Experience has demonstrated that management of these areas is most effective where people value their parks and participate in an active and informed way. Many people and community groups have a long history of involvement in the areas now included in the parks. Active community participation in management can enrich and strengthen park management and is pivotal to effective longterm park planning, use and care.

There is a growing community expectation for meaningful input into government decisionmaking. In accordance with this expectation, the Victorian Government's policy statement Growing Victoria Together expresses a commitment to open and inclusive partnerships with the community. A Fairer Victoria sets an agenda for better coordination and integration of government services at a regional level, among other initiatives to give all Victorians a fair go. Research also demonstrates that more relevant policies, programs and services eventuate through deliberation and collaboration at local regional and state levels.

A healthy, viable and sustainable Otway region is reliant on an investment by Parks Victoria and DSE in the community, in order that community support for the parks can be maximised. Providing opportunities for communities to participate in all levels of the planning, use and care of the parks will maximise community assistance in developing the parks for Victorians now and in the future.

Volunteers and community groups make valuable contributions to park management projects. They bring diverse and valuable information, knowledge, skills and experience to the parks that may not be otherwise be available to the park managers. Volunteers also bring great enthusiasm and add valuable resources to assist with the care of the parks. Collaborative projects with tertiary institutions and work experience placements in the parks can have mutual benefits.

The interests of community groups in the park often overlap and may not be complementary. There can be considerable mutual benefits where such groups work together with Parks Victoria, DSE and the Traditional Owners to achieve common goals. Many management activities such as pest plant control, fox control and habitat restoration, require community support and participation outside park boundaries to be effective. Community consultation will be undertaken prior to any significant changes to visitor services in the parks.

#### **Otways Landscape Community Council**

The Otways Landscape Community Council (OLCC) was established in 2006 to advise Parks Victoria and DSE on community engagement for the parks establishment and planning and to monitor the effectiveness of that engagement. Working in partnership with Parks Victoria and DSE, the OLCC established a framework for community engagement for the parks, guided engagement on the draft plans, and established the following vision:

• People of Victoria are active participants in the planning and care of the Great Otway National Park and Otway Forest Park so the management of the parks responds to both community aspirations and Government policy.

Community participation and engagement is the lens through which all work in the parks are planned and implemented.

## **Management strategies**

- Encourage and support park-related social networks with Friends, volunteers, educational institutions, students and community groups that participate in the parks' management to provide guidance and support and to ensure that they have opportunities to appropriately exercise their interests and use their knowledge and skills.
- Encourage community involvement in monitoring and recording programs using standard methods.
- Explore options for community participation in the implementation of this plan, including appropriate formal structures.
- Celebrate the achievements of Friends, volunteers and other groups in meeting park management objectives.

## 9.4 Agency partnerships

## Aims

- Enhance park management by collaborating with other agencies to ensure they give appropriate consideration to park values in planning and implementing activities that relate to the parks.
- Contribute to cooperative programs and activities undertaken by other agencies where these complement management of the parks.

## Basis

Although Parks Victoria is responsible for the overall management of Great Otway National Park and DSE manages the Otway Forest Park, other agencies are responsible for planning and managing certain activities in the parks. The VEAC outcomes provide clear direction to deliver integrated management of the parks, and Parks Victoria and DSE work closely to deliver services across both parks.

All activities undertaken in the parks by Parks Victoria, DSE and other agencies must accord with all legislation and government policy and, as far as practicable, be consistent with agencies' policies and guidelines. To ensure this, Parks Victoria and DSE work closely with:

- Corangamite CMA, which is responsible for ensuring the protection and sustainable development of land, vegetation and water resources in the region, including the preparation of a regional catchment strategy to address the impact of land use and management on the catchment (sections 4.2 and 4.4).
- Western Coastal Board which provides for the long-term strategic planning of the west coast of Victoria, including the preparation of Coastal Action Plans (section 4.4).
- Country Fire Authority (CFA) a mainly volunteer-based community service that responds to a variety of fire and emergency incidents.
- Barwon Water and Wannon Water which are responsible for providing retail, urban and rural water customers with water and wastewater services in South West Victoria.
- Colac Otway Shire, Surf Coast Shire and Corangamite Shire which manage a range of local government services, administer planning schemes and work with local communities on a range of issues.
- VicRoads, Colac Otway Shire, Corangamite Shire and Surf Coast Shire which manage some roads through the parks including the Great Ocean Road.
- Aboriginal Affairs Victoria (AAV), Department of Planning and Community

Development which has responsibility for administering legislation protecting Aboriginal cultural heritage (section 5.1).

- Heritage Victoria (DPCD) which is the central government agency which provides information and advice about places listed on the Victorian Heritage Register and Archaeological Inventory. It supports the Heritage Council through research, recommends additions to the Register and issues permits for alterations to heritage places.
- Tourism Victoria is the State government authority responsible for developing and marketing Victoria to Australian and international travellers.

• Commonwealth Department of the Environment and Water, Heritage and the Arts which works with the State agencies on the management of regional ecosystem conservation issues.

#### Management strategy

• Maintain and enhance partnerships with all relevant agencies to implement the plan vision and direction.

## 10.1 Delivery and reporting

The actions identified in this plan form the basis for the annual programming of works. Management actions are planned each year in response to available resources and outstanding actions and priorities may change, often due to emerging issues. Each year, progress towards realisation of the aims and strategic directions of the plan will be reviewed in order to inform the following year's program.

Many aspects of implementation will involve collaboration with a range of individuals, groups and agencies. The plan also identifies circumstances for community consultation in the delivery of projects with strong public interest.

Implementation of the plan will be consistent with the commitment of DSE and Parks Victoria to sustainable practices, which involves the delivery of operations, services and facilities in an ecologically and socially responsible manner with minimal use of expendable resources and minimal generation of waste. The threat of accelerated climate change on the parks' ecosystems and wildlife, and on human health and economies worldwide is of increasing concern. As part of its 'Healthy Parks Healthy People' program, Parks Victoria is changing practices to reduce greenhouse emissions, reducing its environmental footprint, and seeking to become carbon neutral. DSE is similarly committed to adapting to climate change through a range of programs and initiatives.

In implementing the plan, management will respond to monitoring and research information as it emerges. The future condition of values will be considered in identifying threats and developing actions to ameliorate them.

DSE and Parks Victoria report annually to government on the overall delivery of regional and divisional programs. This broader reporting on management performance is available in the National Parks Act, and Parks Victoria and DSE annual reports.

Future State of the Parks reports, which will be available on the Parks Victoria's website, will

also include information on progress towards achievement of broad biodiversity goals in the parks.

## 10.2 Plan amendment

During the life of the plan, amendments to the plan may only be made by the Secretary to DSE, following an authorised process which includes community consultation, as appropriate.

Circumstances that might lead to amendment of the plan include:

- the establishment of a cooperative management arrangement either within or outside Native Title legislation
- the results of monitoring or research, management experience or new information, such as greater understanding of new threatening processes (e.g. climate change) which indicate the need for a change in management direction
- significant changes in visitation or use
- a change in policy that calls into question plan objectives
- new legislation (e.g. legislation that enacts significant boundary changes).

The plan may also be amended if an activity, development or use which does not align with the provisions of the plan is approved by government (such as native title outcomes).

#### 10.3 Evaluation and review

During the life of this plan, Parks Victoria and DSE will regularly audit overall progress towards achieving the plan vision, directions, and strategies. Progress in implementing the plan is formally assessed 5, 10 and 15 years after release of the plan. These evaluations will help in deciding whether amendment or revision of the plan is required.

Methods for evaluating the benefits of the plan are likely to be refined over time. Parks Victoria and DSE have introduced a range of structured monitoring practices to collect standardised and scientifically robust information. In particular, these will improve understanding of the outcomes of management on natural values; and allow improved reporting and assessment of performance.

DSE and Parks Victoria also facilitate research (via partnerships and permits) by external research agencies to enhance the knowledge and understanding of the values and features of the parks and to inform management decisions, particularly in relation to pest and fire management. By using sound methods, this monitoring and research work will strengthen the basis for comparing management performance over time.

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# GLOSSARY

**Aboriginal cultural heritage** – Aboriginal places, objects and Aboriginal human remains.

**Aboriginal communities** – Aboriginal people who share cultural values and activities relating to the parks.

**Aboriginal people** – people who are descendants of Aboriginal Australians or Torres Strait Islanders.

**Aquifer** – an underground geological structure capable of being saturated with, and transmitting groundwater.

**Biodiversity** – the natural diversity of all life: the sum of all our native species of flora and fauna, the genetic variation within them, their habitats and the ecosystems of which they are an integral part.

**Bioregion** – an area with unique underlying environmental and ecological features.

**Catchment** – the area of land from which rainfall flows into a waterway or aquifer.

**Closed catchment policy** – a policy to protect water catchments from risks associated with public access. Public access is generally not permitted (access is permitted on certain walking tracks and roads and for some authorised activities).

**Committee of Management** – a committee appointed under the *Crown Land (Reserves) Act 1978* to manage reserved Crown land on behalf of the Minister. For coastal land, committees are either an agency (e.g. the local municipality, Parks Victoria or the Department of Sustainability and Environment) or a committee appointed through an expression of interest process.

**Conservation zone** – in the national park is managed for the protection of sensitive and high value natural environments and minimal impact recreation (see table 1).

*Country* – A region or landscape to which people have special connections, the land occupied by ancestors, land of custodianship, including all of nature, culture and spirituality relating to that area.

Crown land – land belonging to the State.

**Customs** – observances and practices of people (including land management and resource use) in accordance with tradition.

**Declared Water Supply Catchment** see Special Water Supply Catchment

**Designated Water Supply Catchment Area**– a catchment area managed for the protection of water supply for human use under a joint management agreement as enabled by the *National Parks Act 1975*.

**Ecological values** – the importance of natural assets in maintaining natural ecosystems and ecological processes, of which it is a part.

**Ecologically sustainable development (ESD)** – development that improves the total quality of life both now and in the future, in a way that maintains the ecological processes on which life depends.

**Ecologically sustainable use** – the use of a species or ecosystem at a level that enables it to recover naturally.

**Ecosystem** – a dynamic complex of interacting organisms and their associated non-living environment.

Freehold land – land held in private ownership.

**Geomorphology** – the scientific study of landforms and geological formations and the processes that shape them.

**Groundwater** – water located beneath the ground surface in soil or rock formations.

**Heritage** – a place, activity, cultural way of life, structure or group of structures that has aesthetic, historic, scientific or social value for the past, present or future generations.

**Infrastructure** – physical structures that facilitate the human use of an area (e.g. roads, paths, toilet blocks).

**Levels of Service Framework** – a strategic framework for visitor services and asset management that is used to support resource allocation decision-making to best provide appropriate recreational infrastructure in a consistent manner.

Matters of national environmental significance – defined by the Environment Protection and Biodiversity Conservation Act to include World Heritage properties, Ramsar wetlands, nationally threatened species and communities, migratory species protected under international agreements, the Commonwealth marine environment, and nuclear actions.

**Monitoring** – the process of systematic observation of one or more elements of the environment over time.

**Multiple use zone** – in the forest park is managed for the protection of natural environments and cultural features, sustainable recreation, and firewood and minor forest produce collection and other forest activities (see table 1). **Nature-based tourism** – tourism that provides a range of experiences that rely on attractions directly related to the natural environment.

**Pest** — exotic organism (plant, animal or pathogen) that, if introduced outside its natural or previous distribution, causes significant changes to habitats, food chains, ecosystems or human health by feeding on or competing with native species. Can refer to either terrestrial or marine species.

**Preservation** – defined in the Burra Charter as maintaining the fabric of the place in its existing condition and retarding deterioration.

**Proclaimed Water Supply Catchment** see Special Water Supply Catchment Area

**Prospecting** – the search for minerals (including gemstones) under a Miner's Right or Tourist Fossicking Authority.

**Reconstruction -** defined in the Burra Charter as returning the existing fabric of a place to a known earlier state, by reassembling components or removing accretions, without the introduction of new materials.

**Registered Aboriginal Party** – a body registered under part 10 of the Aboriginal Heritage Act by the Aboriginal Heritage Council.

**Reticulated water** – water delivered to consumers through a pipe network.

**Road** – for the purposes of this plan has the same definition as in the *Land Conservation (Vehicle Control) Regulations 2003* and means a road open to the public formed for the passage of motor vehicles having 4 or more wheels. This includes what is commonly known as a 'vehicular track', 'four-wheel-drive track' and rough roads that use the name 'track' e.g. Noonday Track.

**Sediment** – insoluble material suspended in water, consisting mainly of particles derived from rock, soil and organic material.

Special (also called Declared or Proclaimed) Water Supply Catchment Area – a catchment area managed for the protection of water supply for human use declared under the *Catchment and Lands Protection Act 1994*.

**Special protection zone** – in the forest park is managed for the protection of natural environments and cultural features (see table 1).

**Stakeholders** – those people and organisations who may affect, be affected by, or perceive themselves to be affected by, a decision or activity.

**Stormwater** – runoff from land during and following rain. Stormwater removes accumulated material including litter, soil, nutrients, pathogens, chemicals, pesticides, oils and grease.

**Threatening process** – a source of potential harm or a situation with a potential to cause loss.

**Track** – for the purposes of this plan the term 'track' is used where a route is not a road (i.e. has not been formed to allow the passage of motor vehicles having 4 or more wheels), such as a walking track, horse riding track or cycling track.

**Tradition** – the body of knowledge, belief and customs that is passed from generation to generation.

**Traditional Owner** – person with traditional or familial links, an Aboriginal person with particular knowledge about traditions, observances, customs or beliefs associated with the area, and the person has responsibility under Aboriginal tradition for significant Aboriginal places located in, or significant Aboriginal objects originating from, the area; or is a member of a family or clan group that is recognised as having responsibility under Aboriginal tradition for significant aboriginal places located in or significant Aboriginal objects originating from, the area.

**Values** – natural and cultural assets (e.g. historic artefacts, features, landscapes, flora and fauna species, flora communities) that have been given worth or are considered to be desirable.

**Waterway** – an area in which water regularly flows such as a river, creek, stream, reservoir, lake or marsh.

#### Acronyms

AAV - Aboriginal Affairs Victoria

**ANZECC** – former Australian and New Zealand Environment and Conservation Council

CMA - Catchment Management Authority

**DPI** – Department of Primary Industries

**DSE** – Department of Sustainability and Environment

**DWSCA** – Designated Water Supply Catchment Area

ECC - former Environment Conservation Council

**EPA** – Environment Protection Authority (Victoria)

**HV** – Heritage Victoria

**NRE** – former Department of Natural Resources and Environment

PV – Parks Victoria

SWSCA – Special (also called Declared or Proclaimed) Water Supply Catchment Area

**VEAC** – Victorian Environmental Assessment Council

### APPENDIX 1 MANAGEMENT OBJECTIVES

### National Park management objectives

Management objectives for national and state parks included on Schedule Two of the National Parks Act are listed below.

For an up-to-date copy of the *National Parks Act 1975* (Vic.), refer to Victorian Acts on the Victorian Parliament website: www.parliament.vic.gov.au/legislation&bills.

### 4. Objects of the Act

The objects of this Act are ----

- (a) to make provision, in respect of national parks, State parks, marine national parks and marine sanctuaries
  - (i) for the preservation and protection of the natural environment including wilderness areas and remote and natural areas in those parks;
  - (ii) for the protection and preservation of indigenous flora and fauna and of features of scenic or archaeological, ecological, geological, historic or other scientific interest in those parks; and
  - (iii) for the study of ecology, geology, botany, zoology and other sciences relating to the conservation of the natural environment in those parks; and
  - (iv) for the responsible management of the land in those parks;

### 17. National parks and State parks

- (2) The Secretary shall, subject to this Act —
- (a) ensure that each national park and State park is controlled and managed, in accordance with the objects of this Act, in a manner that will —
  - (i) preserve and protect the park in its natural condition for the use, enjoyment and education of the public;
  - (ii) preserve and protect indigenous flora and fauna in the park;
  - (iii) exterminate or control exotic fauna in the park;
  - (iv) eradicate or control exotic flora in the park; and
  - (v) preserve and protect wilderness areas in the park and features in the park of

scenic, archaeological, ecological, geological, historic or other scientific interest;

- (aa) have regard to all classes of management actions that may be implemented for the purposes of maintaining and improving the ecological function of the park;
- (b) ensure that appropriate and sufficient measures are taken to protect each national park and State park from injury by fire;
- (ba) ensure that appropriate and sufficient measures are taken
  - (i) to protect designated water supply catchment areas; and
  - (ii) to maintain water quality of and otherwise protect the water resources in those areas; and
  - (iii) to restrict human activity in those areas for the purposes of sub-paragraphs (i) and (ii);
- (c) promote and encourage the use and enjoyment of national parks and State parks by the public and the understanding and recognition of the purpose and significance of national parks and State parks; and
- (d) prepare a plan of management in respect of each national park and State park

### Forest Park management objectives

Objectives for managing the Otway Forest Park are provided by the Government response to VEAC's *Angahook–Lorne Investigation Final Report* (Government of Victoria 2005).

#### That Otway Forest Park

(a) be used to:

- (i) provide opportunities for informal recreation associated with the enjoyment of natural surroundings;
- (ii) protect and conserve biodiversity, natural and cultural features and water supply catchments; and
- (iii) supply a limited range of natural resource products;

- (b) be managed sustainably to provide for, in particular, the following activities:
  - (i) horseriding, trail-bike riding and four wheel driving on formed vehicular tracks and roads;
  - (ii) camping at designated sites and dispersed camping, including overnight camps for horse riders;
  - (iii) hunting of deer, with an emphasis on controlling animal numbers;
  - (iv) low-intensity grazing of domestic stock where pre-existing and consistent with recreation and conservation management objectives;
  - (v) apiculture;
  - (vi) low-intensity harvesting of selected trees for firewood up to current levels, posts and poles, woodchop blocks, stakes, hobby wood or specialty applications and the low intensity harvesting of other vegetative material (such as seeds for revegetation and foliage for decorative products), where such harvesting is demonstrably sustainable; and
  - (vii) exploration and extraction of earth resources and minerals where consistent with recreation and conservation management objectives, and subject to the approval of the Minister for the Environment;
- (c) be regulated to exclude the following activities:
  - (i) timber harvesting for sawlog and pulpwood production, other than for harvesting in accordance with approved Wood Utilisation Plans to meet existing timber licence obligations up to 2008;

- (d) be managed in a manner that gives particular emphasis to:
  - (i) strategies to reduce the risk of soil erosion from vehicular use, especially on steep forest vehicular tracks;
  - (ii) providing for the safety of riders and drivers, especially on narrow, undulating vehicular tracks—including the development of a track classification system;
  - (iii) providing for the quality and yield of the domestic water supply catchments;
  - (iv) fire protection in water supply catchments and in the vicinity of rural settlements;
  - (v) pest plant and animal control, especially on public land margins;
  - (vi) revegetation of previously harvested areas where the restoration of a natural mix of overstorey and understorey species has been unsuccessful;
  - (vii) maintaining opportunities for environmental education and research in mountain ash forest and foothill forest at, respectively, Barramunga and Bambra; and
  - (viii) protecting the special features listed in the schedule below;
- (e) be permanently protected as a forest park under the *Forests Act 1958* with explicit legislative recognition given to the three management objectives for forest parks listed in (a) above.

The VEAC final report (VEAC 2004) details special features in the Forest Park including recreation sites, landscapes, native conservation and historical sites grouped by geographic region.

	CONSERVATION STATUS	GREAT OTWAY	OTWAY FOREST PARK (HA)
ECOLOGICAL VEGETATION CLASS		(HA)	
Wet Heathland	E/D/LC	1183	348
Wet Sands Thicket	R	906	264
Estuarine Wetland	Е	30	
Swamp Scrub	Е	6	
Damp Sands Herb-rich Woodland	E/V	715	
Lowland Forest	V / D	9682	9907
Herb-rich Foothill Forest	V / D	1100	1014
Coastal Headland Scrub	V / D	1306	
Damp Heath Scrub	Е	82	
Riparian Scrub/Swampy Riparian Woodland Complex	V/D/LC	1796	887
Coastal Tussock Grassland	V	155	
Shrubby Wet Forest	LC	16883	8914
Riparian Forest	V / LC	1222	887
Coastal Dune Scrub/Coastal Dune Grassland Mosaic	V / D	867	
Heathy Woodland	V/LC	10899	3162
Scoria Cone Woodland	E	1	
Herb-rich Foothill Forest/Shrubby Foothill Forest Complex	V / D	1432	1910
Sedgy Riparian Woodland	V / D	436	431
Shrubby Foothill Forest	D/LC	16830	5292
Wet Forest	LC	28172	4737
Cool Temperate Rainforest	V	6403	624
Sand Heathland	R	142	
Shrubby Dry Forest	LC	1255	12
Swampy Riparian Woodland	Е	436	5
Grassy Woodland	Е	14	
Grassy Dry Forest	D	177	
Clay Heathland	V	1	
Coastal Headland Scrub/Coastal Tussock Grassland Mosaic	V	103	

## APPENDIX 2 ECOLOGICAL VEGETATION CLASSES

Source: DSE (2007a)

Key:

Е	endangered	D	depleted
V	vulnerable	LC	least concern
R	rare		

COMMON NAME	SCIENTIFIC NAME	CONSE	RVATION S	VATION STATUS		PARK	
		FFG	STATE	AUST	GONP	OFP	
Dwarf Silver Wattle	Acacia nano-dealbata		r		$\checkmark$		
Ground Spleenwort	Asplenium appendiculatum subsp. appendiculatum		r			$\checkmark$	
Tall Astelia	Astelia australiana	L, A	v	V	$\checkmark$		
Small Shade-nettle	Australina pusilla subsp. pusilla		r		$\checkmark$		
Coast Fescue	Austrofestuca littoralis		r		$\checkmark$		
Dwarf Boronia	Boronia nana var. pubescens		r		$\checkmark$		
Wiry Bossiaea	Bossiaea cordigera		r		$\checkmark$		
Pale Grass-lily	Caesia parviflora var. minor		k		$\checkmark$		
Southern Spider-orchid	Caladenia australis		k		$\checkmark$		
Green-comb Spider-orchid	Caladenia dilatata s.s.		k		$\checkmark$		
Summer Spider-orchid	Caladenia flavovirens		r		$\checkmark$		
Angahook Pink-fingers	Caladenia maritima	Ν	e		$\checkmark$		
Cryptic Pink-fingers	Caladenia mentiens		k		$\checkmark$		
Wine-lipped Spider-orchid	Caladenia oenochila		v		$\checkmark$		
Large White Spider-orchid	Caladenia venusta		r		$\checkmark$		
Slender Pink-fingers	Caladenia vulgaris		r		$\checkmark$		
Short Water-starwort	Callitriche brachycarpa	L	v		$\checkmark$		
Slender Beard-orchid	Calochilus gracillimus		k		$\checkmark$		
Brown's Mitre-moss	Calyptrochaeta brownii		r		$\checkmark$		
Otway Mitre-moss	Calyptrochaeta otwayensis		r		$\checkmark$		
Swamp Swan-neck Moss	Campylopus acuminatus var. kirkii		k		$\checkmark$	$\checkmark$	
Swan-neck Moss	Campylopus chilensis		k			$\checkmark$	
Coast Correa	Correa backhouseana var. backhouseana		v		$\checkmark$		
Fringed Midge-orchid	Corunastylis ciliata		k		$\checkmark$		
Swamp Pelican-orchid	Corybas fordhamii		r		$\checkmark$		
Spotted Gum	Corymbia maculata		v		$\checkmark$		
Gipsy $\times$ Finger Fern hybrids	Ctenopteris heterophylla ×Grammitis billardieri		r		$\checkmark$		
Skirted Tree-fern	Cyathea × marcescens		v		$\checkmark$	$\checkmark$	
Slender Tree-fern	Cyathea cunninghamii	L	v		$\checkmark$	$\checkmark$	
Dalton Mitre-moss	Daltonia splachnoides		k		$\checkmark$		
Slender Tick-trefoil	Desmodium varians		k		$\checkmark$		
Swamp Flax-lily	Dianella callicarpa		r			$\checkmark$	
Crisped Mitre-moss	Distichophyllum crispulum		r		$\checkmark$		
Madeira Moss ontinued	Echinodium hispidum		r		$\checkmark$		

# APPENDIX 3 RARE OR THREATENED FLORA

# Appendix 3 continued

COMMON NAME	SCIENTIFIC NAME	CONSERVATION STATUS			PARK	
		FFG	STATE AUST		GONP	OFF
West Coast Peppermint	Eucalyptus aff. willisii (south-western Vic)		r		$\checkmark$	
Brooker's Gum	Eucalyptus brookeriana		r		$\checkmark$	$\checkmark$
Southern Blue-gum	Eucalyptus globulus subsp. globulus		r		$\checkmark$	$\checkmark$
Bog Gum	Eucalyptus kitsoniana		r		$\checkmark$	
West-coast Swamp-gum	Eucalyptus ovata var. grandiflora		r		$\checkmark$	
Otway Grey-gum	Eucalyptus litoralis		v		$\checkmark$	
Yarra Gum	Eucalyptus yarraensis		r		$\checkmark$	$\checkmark$
Feather Moss	Eurhynchium asperipes		k		$\checkmark$	
Rosy Baeckea	Euryomyrtus ramosissima subsp. prostrata		r		$\checkmark$	$\checkmark$
Coast Ballart	Exocarpos syrticola		r		$\checkmark$	
Compact Bedstraw	Galium compactum		r		$\checkmark$	
Snow-berry	Gaultheria hispida	L	e		$\checkmark$	
Bluebeard Wax-lip Hybrid Orchid	×Glossadenia tutelata		r			
Silky Golden-tip	Goodia lotifolia var. pubescens		r		$\checkmark$	
Beech Finger-fern	Grammitis magellanica subsp. nothofageti		v		$\checkmark$	$\checkmark$
Anglesea Grevillea	Grevillea infecunda		v	V	$\checkmark$	$\checkmark$
Long Clubmoss	Huperzia varia		v		$\checkmark$	
Yellow Star	Hypoxis vaginata var. brevistigmata		k		$\checkmark$	
Tufted Club-sedge	Isolepis wakefieldiana		r		$\checkmark$	
Ruddy Blown-grass	Lachnagrostis scabra		r		$\checkmark$	
Bristly Shield-fern	Lastreopsis hispida		r		$\checkmark$	$\checkmark$
Wrinkled Buttons	Leiocarpa gatesii	L	v	V	$\checkmark$	$\checkmark$
Hoary Rapier-sedge	Lepidosperma canescens		r		$\checkmark$	
Showy Lobelia	Lobelia beaugleholei		r			$\checkmark$
Austral Trefoil	Lotus australis		k		$\checkmark$	
Bog Clubmoss	Lycopodiella serpentina		r		$\checkmark$	
Giant Honey-myrtle*	Melaleuca armillaris subsp. armillaris		r		$\checkmark$	
Hairy Shepherd's Purse	Microlepidium pilosulum		e		$\checkmark$	
Currant-wood	Monotoca glauca		r		$\checkmark$	$\checkmark$
Satinwood	Nematolepis squamea		r		$\checkmark$	
Satinwood	Nematolepis squamea subsp. squamea		r		$\checkmark$	$\checkmark$
Pouncewort	Nephelolejeunea hamata		r		$\checkmark$	
Velvet Daisy-bush	Olearia pannosa subsp. cardiophylla		v		$\checkmark$	
Netted Daisy-bush	Olearia speciosa		k		$\checkmark$	$\checkmark$
Starry Daisy-bush	Olearia stellulata		k		$\checkmark$	$\checkmark$
Rayless Daisy-bush	Olearia tubuliflora		r		$\checkmark$	
Snowdrop Wood-sorrel	Oxalis magellanica		r		$\checkmark$	
Fluffy-fruit Wood-sorrel continued	Oxalis thompsoniae		k			

### Appendix 3 continued

COMMON NAME	SCIENTIFIC NAME	CONSERVATION STATUS		PARK	PARK	
		FFG	STATE	AUST	GONP	OFP
Nunniong Everlasting	Ozothamnus rogersianus		r		$\checkmark$	
Coast Stork's-bill	Pelargonium littorale		k		$\checkmark$	
Dwarf Sickle-fern	Pellaea nana		r		$\checkmark$	
Green Leek-orchid	Prasophyllum lindleyanum		v		$\checkmark$	
Silurian Leek-orchid	Prasophyllum pyriforme s.s.		e		$\checkmark$	
Dense Leek-orchid	Prasophyllum spicatum		e	V	$\checkmark$	
Leafy Greenhood	Pterostylis cucullata	L	v	V	$\checkmark$	
Coast Bush-pea	Pultenaea canaliculata		r		$\checkmark$	
Otway Bush-pea	Pultenaea prolifera		r		$\checkmark$	$\checkmark$
Umbrella Thyme-moss	Pyrrhobryum bifarium		v		$\checkmark$	
Ferny Small-flower Buttercup	Ranunculus pumilio var. politus		k		$\checkmark$	
Coast Fireweed	Senecio ×orarius		r		$\checkmark$	
Swamp Fireweed	Senecio psilocarpus		v	V		$\checkmark$
Coast Stackhousia	Stackhousia spathulata		k		$\checkmark$	
Tasman Fan-fern	Sticherus tener s.s.		r		$\checkmark$	$\checkmark$
Arc Moss	Tetraphidopsis pusilla		v		$\checkmark$	
Merran's Sun-orchid	Thelymitra ×merraniae	L	e		$\checkmark$	
Blotched Sun-orchid	Thelymitra benthamiana		v		$\checkmark$	
Spiral Sun-orchid	Thelymitra matthewsii	L	v	V	$\checkmark$	
Pallid Sun-orchid	Thelymitra pallidifolia		e		$\checkmark$	
Paper Flower	Thomasia petalocalyx		r		$\checkmark$	
Forest Weft-moss	Thuidium laeviusculum s.s.		v		$\checkmark$	
Slender Fork-fern	Tmesipteris elongata		v		$\checkmark$	$\checkmark$
Crisp Moss	Tortella knightii		k		$\checkmark$	
Trachyloma	Trachyloma planifolium		r		$\checkmark$	
Earth Moss	Trematodon mackayii		k		$\checkmark$	
Yacca	Xanthorrhoea semiplana subsp. semiplana		r		$\checkmark$	
Parsley Xanthosia	Xanthosia leiophylla		r		$\checkmark$	
Southern Xanthosia	Xanthosia tasmanica		r		$\checkmark$	
Coast Twin-leaf	Zygophyllum billardierei		r		$\checkmark$	

#### Source DSE 2007c

#### Key:

\* problem species in the Otways

#### FFG — status under the Victorian Flora and Fauna Guarantee Act N nominated for listing, awaiting recommendation

- L listed
- A Action statement approved

State - status in Victoria

e endangered

v vulnerable

r rare

d depleted

k poorly known

Aust — status under the Commonwealth Environment Protection and Biodiversity Conservation Act

- E endangered
- V vulnerable

COMMON NAME	SCIENTIFIC NAME	CONSE	RVATION S	TATUS		PARK		
		FFG	STATE	AUST	TREATIES	GONP	OFP	
Mammals								
Swamp Antechinus	Antechinus minimus	L	nt			$\checkmark$	$\checkmark$	
Spot-tailed Quoll	Dasyurus maculatus	L, A	en	VU		$\checkmark$	$\checkmark$	
Swamp Skink	Egernia coventryi	L	vu			$\checkmark$		
Southern Brown Bandicoot	Isoodon obesulus obesulus	L	nt	EN		$\checkmark$		
Broad-toothed Rat	Mastacomys fuscus		nt			$\checkmark$	$\checkmark$	
Common Bent-wing Bat	Miniopterus schreibersii	L				$\checkmark$	$\checkmark$	
Long-nosed Potoroo	Potorous tridactylus	L	en	VU		$\checkmark$	$\checkmark$	
Smoky Mouse	Pseudomys fumeus	L	en	EN		$\checkmark$		
New Holland Mouse	Pseudomys novaehollandiae	L, A	en			$\checkmark$		
Grey-headed Flying-fox	Pteropus poliocephalus	L	vu	VU		$\checkmark$		
White-footed Dunnart	Sminthopsis leucopus	L	vu			$\checkmark$		
Birds								
Grey Goshawk	Accipiter novaehollandiae	L	vu			$\checkmark$	$\checkmark$	
Common Sandpiper	Actitis hypoleucos		vu		C/J	$\checkmark$		
Australasian Shoveler	Anas rhynchotis		vu			$\checkmark$		
Fork-tailed Swift	Apus pacificus				C/J	$\checkmark$	$\checkmark$	
Great Egret	Ardea alba	L	vu		C/J	$\checkmark$	$\checkmark$	
Cattle Egret	Ardea ibis				C/J	$\checkmark$		
Intermediate Egret	Ardea intermedia	L	cr			$\checkmark$	$\checkmark$	
Ruddy Turnstone	Arenaria interpres				C/J	$\checkmark$		
Hardhead	Aythya australis		vu			$\checkmark$		
Musk Duck	Biziura lobata		vu			$\checkmark$		
Australasian Bittern	Botaurus poiciloptilus	L	en			$\checkmark$		
Bush Stone-curlew	Burhinus grallarius	L	en			$\checkmark$		
Sharp-tailed Sandpiper	Calidris acuminata				C/J	$\checkmark$	$\checkmark$	
Sanderling	Calidris alba		nt		C/J	$\checkmark$		
Red-necked Stint	Calidris ruficollis				C/J	$\checkmark$		
Cape Barren Goose	Cereopsis novaehollandiae		nt			$\checkmark$		
Whiskered Tern	Chlidonias hybridus		nt			$\checkmark$		
Black-eared Cuckoo	Chrysococcyx osculans		nt			$\checkmark$		
Spotted Quail-thrush	Cinclosoma punctatum		nt			$\checkmark$		
Spotted Harrier	Circus assimilis		nt			$\checkmark$		
Brown Quail ontinued	Coturnix ypsilophora		nt			$\checkmark$		

### APPENDIX 4 RARE OR THREATENED FAUNA

# Appendix 4 continued

COMMON NAME	SCIENTIFIC NAME	CONSE	RVATION S	TATUS		PARK		
		FFG	STATE	AUST	TREATIES	GONP	OFF	
Rufous Bristlebird	Dasyornis broadbenti	L, A	nt					
Shy Albatross	Diomedea cauta	L	vu	VU		$\checkmark$		
Wandering Albatross	Diomedea exulans	L	en	VU	J	$\checkmark$	$\checkmark$	
Little Egret	Egretta garzetta	L	en			$\checkmark$		
Black Falcon	Falco subniger		vu			$\checkmark$		
Latham's Snipe	Gallinago hardwickii		nt		C/J	$\checkmark$	$\checkmark$	
Sooty Oystercatcher	Haematopus fuliginosus		nt			$\checkmark$	$\checkmark$	
White-bellied Sea-Eagle	Haliaeetus leucogaster	L	vu		С	$\checkmark$		
White-throated Needletail	Hirundapus caudacutus				C/J	$\checkmark$	$\checkmark$	
Chestnut-rumped Heathwren	Hylacola pyrrhopygia	L	vu			$\checkmark$		
Little Bittern	Ixobrychus minutus	L	en			$\checkmark$		
Pacific Gull	Larus pacificus		nt			$\checkmark$		
Swift Parrot	Lathamus discolor	L	en	EN		$\checkmark$		
Southern Giant-Petrel	Macronectes giganteus	L	vu	EN		$\checkmark$		
Barking Owl	Ninox connivens	L, A	en			$\checkmark$		
Powerful Owl	Ninox strenua	L, A	vu			$\checkmark$		
Nankeen Night Heron	Nycticorax caledonicus		nt			$\checkmark$		
Fairy Prion	Pachyptila turtur		vu	VU		$\checkmark$		
White-faced Storm-Petrel	Pelagodroma marina		nt			$\checkmark$		
Common Diving-Petrel	Pelecanoides urinatrix		nt			$\checkmark$		
Ground Parrot	Pezoporus wallicus	L	en			$\checkmark$		
Black-faced Cormorant	Phalacrocorax fuscescens		nt			$\checkmark$		
Pied Cormorant	Phalacrocorax varius		nt			$\checkmark$	$\checkmark$	
Royal Spoonbill	Platalea regia		vu			$\checkmark$		
Glossy Ibis	Plegadis falcinellus		nt		С	$\checkmark$		
Pacific Golden Plover	Pluvialis fulva		nt		C/J	$\checkmark$		
Grey Plover	Pluvialis squatarola		nt		C/J	$\checkmark$		
Baillon's Crake	Porzana pusilla	L	vu			$\checkmark$		
Short-tailed Shearwater	Puffinus tenuirostris				J	$\checkmark$	$\checkmark$	
Lewin's Rail	Rallus pectoralis	L	vu			$\checkmark$	$\checkmark$	
Diamond Firetail	Stagonopleura guttata	L	vu			$\checkmark$		
Arctic Jaeger	Stercorarius parasiticus				J	$\checkmark$		
Caspian Tern	Sterna caspia	L	nt		C/J	$\checkmark$		
Fairy Tern	Sterna nereis	L	en			$\checkmark$		
Yellow-nosed Albatross	Thalassarche chlororhynchos	L	vu			$\checkmark$		
Black-browed Albatross	Thalassarche melanophris		en				$\checkmark$	
Hooded Plover ontinued	Thinornis rubricollis	L, A	vu			$\checkmark$		

### Appendix 4 continued

COMMON NAME	SCIENTIFIC NAME	CONSERVATION STATUS				PARK		
		FFG	STATE	AUST	TREATIES	GONP	OFP	
Masked Owl	Tyto novaehollandiae	L	en				$\checkmark$	
Fish								
Australian Grayling	Prototroctes maraena	L	vu	VU		$\checkmark$		
Macquarie Perch	Macquaria australasica	L	en	EN		$\checkmark$		
Mountain Galaxias	Galaxias olidus	L					$\checkmark$	
Amphibians								
Growling Grass Frog	Litoria raniformis	L	en	VU		$\checkmark$		
Southern Toadlet	Pseudophryne semimarmorata		vu			$\checkmark$	$\checkmark$	
Invertebrates								
Otway Stonefly	Eusthenia nothofagi	D, A				$\checkmark$	$\checkmark$	
Glenelg Freshwater Mussel	Hyridella glenelgensis	L	r/r				$\checkmark$	
Otway Black Snail	Victaphanta compacta	L	vu			$\checkmark$		

### Source DSE 2007a

Key:

- FFG ---- status under the Victorian Flora and Fauna Guarantee Act
  - L listed
  - D De-listed after original listing
  - A Action statement approved

#### State — status in Victoria

- cr critically endangered
- en endangered
- vu vulnerable
- nt near threatened
- r/r rare or restricted
- dd data deficient

Aust --- status under Commonwealth Environment Protection and Biodiversity Conservation Act

- EN endangered
- VU vulnerable

International Treaties

- C Listed under the China-Australia Migratory Bird Agreement
- J Listed under the Japan–Australia Migratory Bird Agreement

### APPENDIX 5 SUBMISSIONS ON THE DRAFT PLAN

Public submissions on the draft Otways plans (the Draft Management Plan, the Draft Recreation and Tourism Access Plan and the Draft Heritage Action Plan) were invited from 14 March to 2 June 2008. Submissions received on the draft plans included 493 written submissions, and 367 comments via 'Open House' public forums and an 'eForum' online discussion board. Twenty-five submissions from individuals were marked as confidential.

#### ORGANISATIONS

Adventure Guides Australia Aireys Inlet and District Association Inc. Aireys Inlet Tourism and Traders Inc. Alcoa of Australia Ltd Angair Anglesea Baptist Camping Apollo Bay Landcare Group Association of Geelong and District Angling Clubs Australian Greens Victoria - Otway Branch Barwon Water Beech Forest Progress Association Bellarine 4x4 Club Inc. Bird Observation and Conservation Australia Birds Australia - Victoria Conservation Committee **Blazing Saddles** Bushwalking Victoria Business & Tourism Anglesea C/o Great Ocean Road Coast Committee Cape Otway Lightstation Cape Otway Preservation Society Chelsea Lodge Hostel Colac Anglers Club Inc. Colac Otway Shire Corangamite CMA Deerstalkers Club, SSAV Didyabringyarodalong Angling Club Eco-Logic Forrest & District Historical Society Forrest Horse Riding Club Inc. Four Wheel Drive Victoria Geelong 4WD Club Framlingham Aboriginal Trust Friends of Moggs Creek Friends of Otway National Park Geelong Bushwalking Club Geelong Environment Council Geelong Otway Tourism Inc Gramayre Fresian Horse Stud Great Ocean Road Adventure Tours

Great Ocean Road Adventure Tours Great Ocean Road Coast Committee Harrington Memorial Park Keep On Track Kuuyang Marr Aboriginal Corp Lorne Business and Tourism Association National Parks Advisory Council Otway 4WD Club Otway Conservation Council Inc. Otway Off-Road Motorcycle Tours Otway Ranges Environment Network Otway Ranges Walking Track Association Otway Scenic Circle Association Inc. Otway Trail Horse Riders Association Otway Trail Riders Inc Otways Tourism Inc Painkalac Pastoral Company Soudan Holdings Pty. Ltd. Southern Otways Landcare Network Sporting Shooters Association Surf Coast Offroad Riders Surf Coast Shire Surf Coast Tourism Board Surf Coast Walk Working Group The Forrest Tiger Railtrail The Friends of Eastern Otways Torquay & Surf Coast Dog Action Group Inc. VicRoads Victorian Apiarists Association Inc. Victorian Field and Game Association. Colac Branch Inc. Victorian Gem Clubs Association Victorian National Parks Association VR Fish Wannon Water Wathaurung Aboriginal Corporation Western Coastal Board Wurdale Landcare Group Wye River & Separation Creek Progress Assoc.

Wye River Residents Action Group

### Appendix 5 continued

#### INDIVIDUALS

Joe Addams Shaun Altmann Nicholas Amore F.E. Anderson Ian Anderson Matthew Appleyard Gordon Argent Peter Arnold Tamara Atkinson Stephen Bairnes Carol Baker Susan Ball Nigel Bate Stuart Bates Rachel Beckwith John Beecroft James Beeny Aaron Bell Rob Bellam Christina & Jackie Bennett Shane Benning Terry Berryman Ken Best Glenn Bethune Alastair Bird J. Black Jonathan Black Scott Blackney Stuart Boag James Bowden Adrian Brideson Andrew Broomfield

Frances Bruce Jane Buckingham Darryl Bull

Philip Brown

Sue Dods Andrew Dods Pam Dodsworth Troy Dorron Craig Dostine Helen Douglas & David Upfill Matthew Dowel Martyn Downs Jacqui Doyle Luke Drayton Brett Drayton Pat Dressel Nathan Drew Belinda Duddy Ben Dumesny

Ben Dumesny Bruce & Susan Dupe

A Edwards Brad Edwards Scott Ellis David Emmerson

Rosemary Faris Kelvin Fenemor Ross Fenner David Ferchie Paul Feria Peter Fillmore Mathew Fish Amy Fishar Tim Fisher

Lloyd & Barbara Fletcher Stephen Floate Frank Flynn Max Folly Paul Ford

Edward Fortey

**Rick Francis** 

Joel Hotker Stephen Hotker Lyn Hughes Paul Hulett Ralph Hundhammer Jason Hutchinson

Roki Infantino Paul Jacklin Wendy James David Jenkins Wallis Jenkyn Ron Jenner Sandra & Richard Jennings Erik Johnson B. Johnstone Darren Jones

Joshua Justin Daniel Kearney Nicholas Keats Andrew Kerr

Garry Kerr David Kesey Anthony Kiernan Alexander King Chris Krausz M. Lanyon Karen Lappas Phillip Lawson Barbara & Dennis Leavesley B. Leen

Kristen Lees Alistair Lindeman Carole Lindeman Damien Lucas Norman Lussetti Matthew Ly Marcus Neagle Luke John Neesham Luke Neivandt Cameron Newbold Gary Newton Ben Nielsen

Bruce Nixon Mick Nocera Frances Normoyle Bryce Norton Les Noseda Murray Nugent Matt Nuspan

Caroline Nutbean Margaret O'Borne Gary Owen

Scott Owen Kurt Pamvouscoslov Anthony Parisotto Gavin Parker

Craig Parsons Darren Patten S Patterson Donna Pearce Rod Pearce Lee Pearsall Craig Perrett A.M. Pescott Donald Phillips

Tama Piahana Steve Pickard Graeme & Lorraine Pleasance Drew Puddy Robert Puiatti Charlie Rawlings Roger Smith Sherryl Smith Judy Spafford Dale Spargo Helen Speirs Chris Starns Thomas Starns

Cain Steenholdt Mark Steenholdt Matthew Stewart Vicki Stewart Ian Stone Jeff Sullivan

Murray Tainton Freda Tarr Tania & Graham Teague Stephen Theodore Ian Thomson Steve Towers Anthony Traumanis Rowan Trefz Andrew Trigg

Chris Tsaptsalis Neil Tucker Peter Turnbull Travis Turnbull Greg Turner John Turner Stuart Turner Jake Turnour Michal Turnour Daniel Tute Jim Tutt

Matthew Van Galew Michael Van Lith W.J. Van Megchelen

### Appendix 5 continued

Jolyne Burgess Fred Butterworth Andrew Caddell Josh Caddy

Anthony Cahill Jan Calaby, Carol Liebscher & Paul Turner

Len Campbell

Glen Campbell Derrick Capers Peter Cassin Jack Cassin Mitchell Cassin Helen Chambers & Julian Flack

Murray Champion Mark Chapman Daryl Chappell

Glenn Charterim Michael Ciangurd Matthew Clark Alan Clarke Paul Cleeland Daniel Clutterbuck Joanne Clutterbuck Darren Coad Shane Colbert Christopher Collins Michelle Collins Michael Connor Stephen Cooper John Courtney Nicholas Coxwell Kerr Greg Currie Shane Dalziel Ian Dans John Davis Ben De Bono Adam Dean

Sally Freeman Martin Furst Tony Fusti Andrew Gannon James Gannon Matthew Gannon

Gerry Gauci

Tim Gawith Roslyn Gibson Richard Gilbert Brianna Giles Brenton Gilligan Regina Gleeson

David Glover Chris Gordyn Jack Gould

Glenn Graham Helen & Tony Grant Lorraine Green Trent Griffith Derrick Grist Nicole Grist John Groos Chris Guppy Tim Guthrie Geoff Guy Doug Hallifax Clive Halls Phil Hancock Janine Haniver Nick Harper

Joshua Hawkins Angela & Tony Heard Adam Hearsum Barry Hewitt John Hickleton Daniel Hickleton Margaret MacDonald Sam Malignaggi Gerard Malthouse Dave Mansfield Roydon Mapleson Cyril Marriner

Andrew Marriner

M.W. Marriner John Marriner Tim Marriott Jeffrey Marsh Stuart Martin Bruce Mattingley

Maile Mayne Stuart McCallum Don McClouhan

Damian McCormack Tony McGuire Johnathan McKean Sue McKenzie Brian McKenzie Pat McKenzie G.K. McKenzie Angus McKenzie Stephen McMahon Brett McMurrick P. Miller Peter Milnes Emma Mitchell Catherine Moffat Michael Moloney

Charlie Mondon Jarrod Morey Stephen Morris Brett Morrison Jason Munari Josh Readhead Paul Rebbechi Burke Renouf Bev Richards Noel Richards Lachlan Richardson

Shane & Diane Riordon B. Ritches Dave Robbins Chris Roberts Wayne Roberts Max Robertson Adam Rodgers

Kurt Rogers Stephen Romanin Jarrod Runciman

Scott Runciman Mellita Salmon Alan Salter Rebecca Saunders Ray Saunders Peter Savic James Sawyer Helen Schofield Chris Scorcie Greg Seear Brett Senior Melinda Shaw Jan & Laurie Shaw Mick Shearer Gretta Shearer

Kayleigh Shearer Peter Shearer Gary Sheather Glenda Shomaly

Glenn Shore Stephen Simpkin Corey Vanderle Jason Varsamis Steve Venus Michelle Vernieux Eddie Von Moger Phil Wade

Bevan Walker

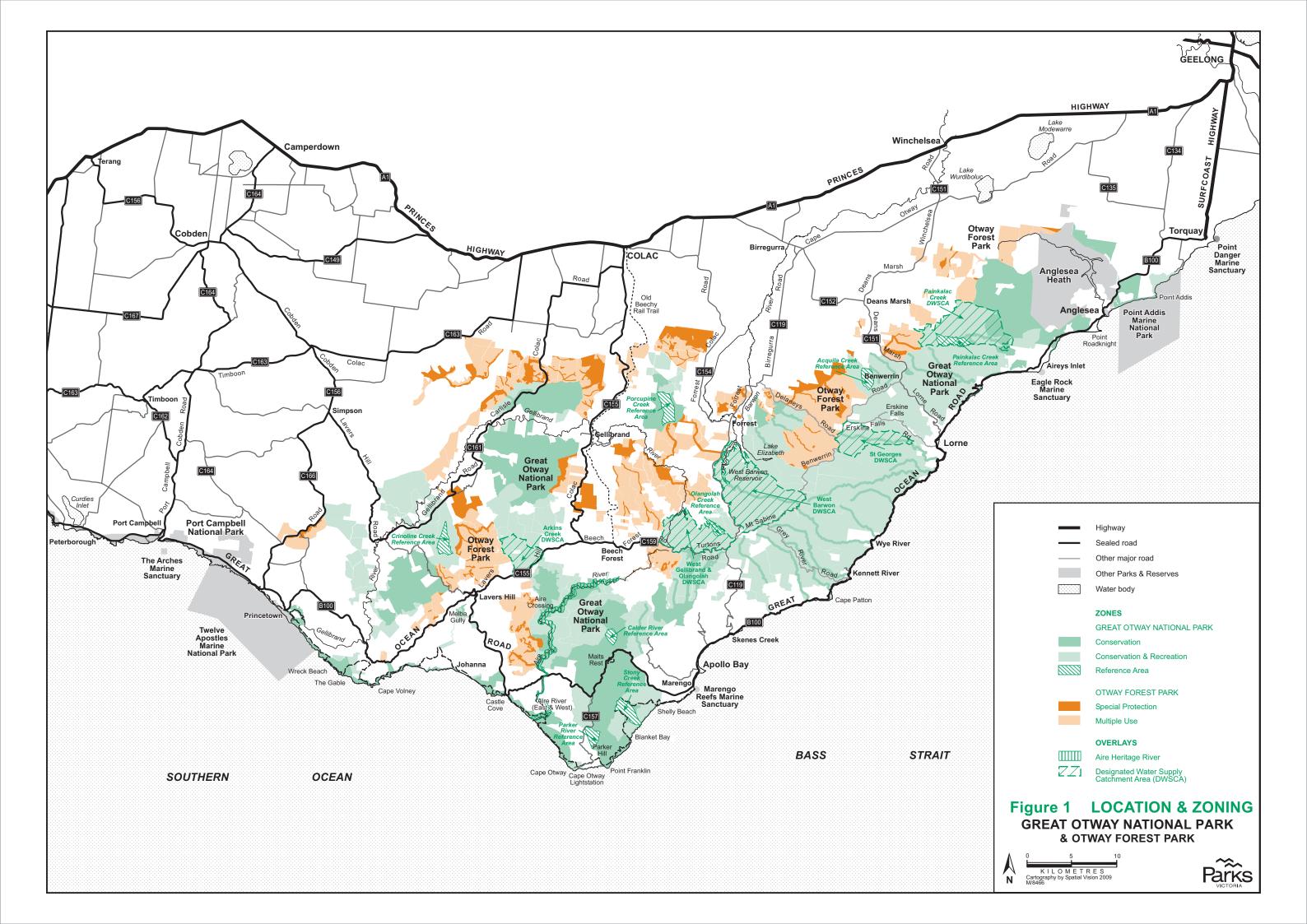
Trevor Walker Adam Walker Heather Walker Glenn Wallace Jason Wallis David Wanless

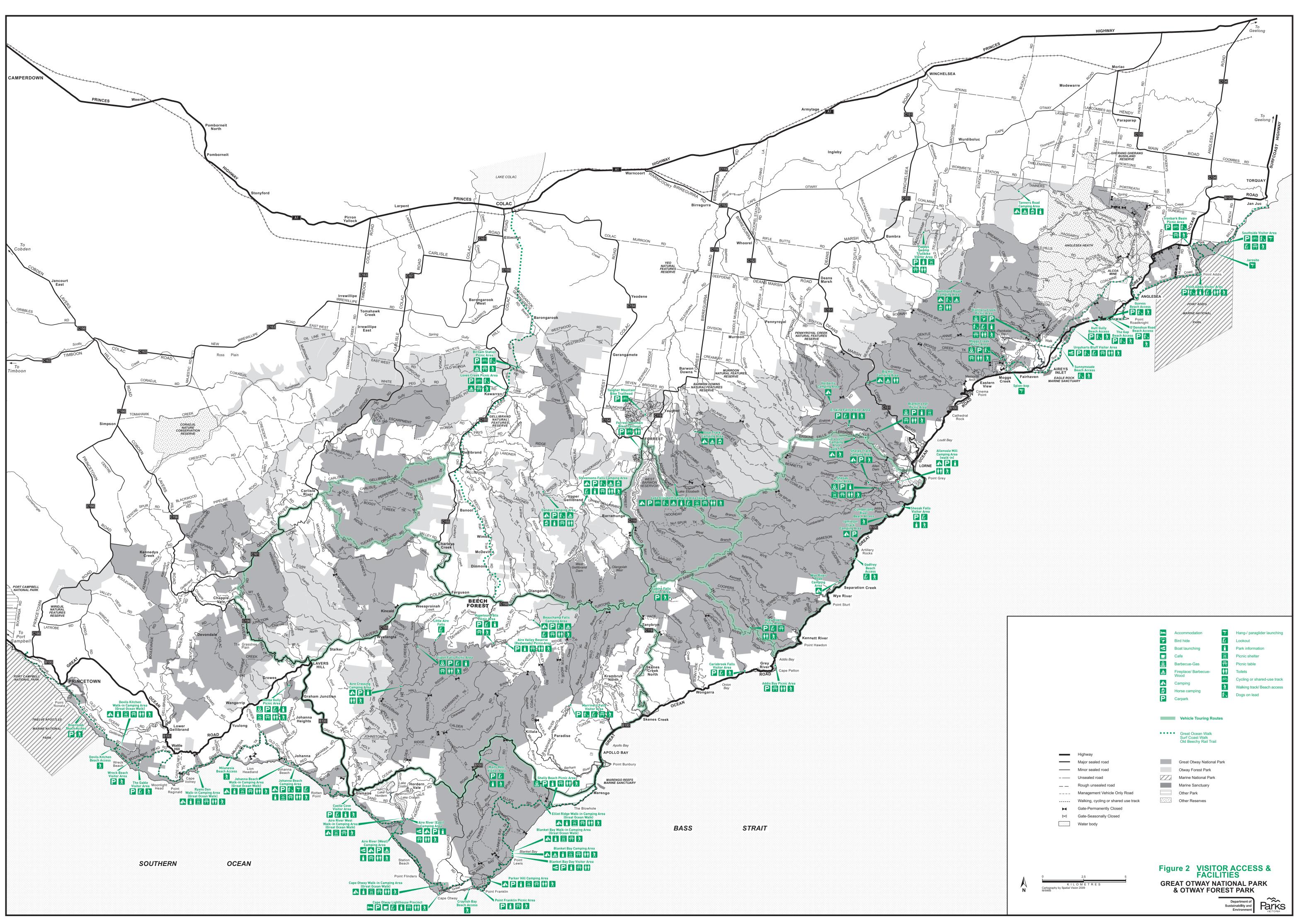
Sharon Warby Kent Warland David & Carole Weblev Bruce Webster Jim Welsh Evan West Adrian Westman Leeanne Westman Luke Westwood Jill Whitehead Kerry Wiffer David Wilkinson Peter Williams James Wilson Rodney Wilson Michael Wilson Brett Wiltshire Tim Wood

Toby Wood Mark Woodhouse Rob Worland Stefan Wosciechowski Danny Woulfe Chris Wright

# Appendix 5 continued

Maurie Deans	Kate Holmes	Helen Murphy	Mick Sinclair	Nick Wright
Darryl Dear	Darren Hope	Andrew Murray	Robert Sinclair & Sally Cleary	Ray Wright
Neil Dendle	John Hose	Chris Murray	Paul Smith	
Cameron Dixon	Neil Hotchin	Liam Myers	Sarah Smith	





	Highway
_	Major sealed road
	Minor sealed road
	Unsealed road
_	Rough unsealed road
	Management Vehicle Only Road
	Walking, cycling or shared use track
•	Gate-Permanently Closed
۵	Gate-Seasonally Closed
	Water body





