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Management Plan July 2006







This Management Plan for Warrandyte State Park is approved for implementation. Its purpose is to direct all aspects of management until reviewed.

A Draft Management Plan for the park was published in August 2004 Eighteen submissions were received and have been considered in preparing this approved Management plan.

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#### Copies

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Templestowe VIC 3106

# WARRANDYTE STATE PARK MANAGEMENT PLAN



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Cover: First Official Gold Discovery Cairn on Andersons Creek, Warrandyte State Park (Photo: Garry French)

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#### Acknowledgements

Acknowledgement of *Country*: In their rich culture, Indigenous Australians are intrinsically connected to the continent — including the area now known as Victoria. Parks Victoria recognises that the park is part of *Country* of the Traditional Owners.

Parks Victoria is grateful to all those organisations and individuals who have contributed to this Final 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 within 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 Indigenous 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 does not guarantee that the publication is without flaw of any kind and therefore disclaims all liability for any error, loss or other consequence which may arise from you relying on any information in the publication.

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#### **FOREWORD**

The Warrandyte State Park forms an important link in the system of parks and reserves that stretches from Western Port to the Yarra Valley and the Yarra Ranges.

Warrandyte State Park one of the most significant remaining areas with remnant indigenous flora and fauna in the north-east of the Greater Melbourne area. The park protects a diversity of fauna habitats including riparian woodland and forest, dry foothill woodland and the areas of park abutting the Yarra River, part of which is listed as Yarra River Heritage Area.

Indigenous tradition indicates that the park lies within the *Country* of the Wurundjeri people. Parks Victoria respects the cultural lore of the Traditional Owners, and those of other groups with historical associations with the park.

The park protects significant cultural heritage sites associated with Victoria's gold-mining heritage including the site of the first official discovery of gold in Victoria in 1851. Other important gold-mining sites in the park include the Pound Bend Tunnel.

Highly valued by local residents and visitors, the park provides recreational activities including walking, picnicking, mountain biking, horse riding, sightseeing and nature observation, and provides access to the Yarra River for canoeing and swimming.

Community groups continue to make a major contribution to management of the park. The dedication of these people over many years in activities such as weed removal and wildlife surveys has resulted in substantial improvements in wildlife habitats that are widely appreciated.

I thank all individuals and organisations for their valuable contributions to plan development and submissions on the Draft Management Plan.

This approved plan establishes the long-term framework to protect the important heritage and natural values of the park and to enhance the opportunities offered to park visitors.

I look forward to the community's ongoing support for, and participation in the management of Warrandyte State Park.

JOHN THWAITES MP Minister for Environment

John Monates

#### APPROVED MANAGEMENT PLAN

This Management Plan has been prepared under section 17 of the *National Parks Act* 1975 (Vic.) and is approved for implementation.

The plan provides the basis for the future management of Warrandyte State Park. It was finalised following consideration of the 17 submissions received on the Draft Management Plan.

PROF. LYNDSAY NEILSON Secretary to the Department of Sustainability and Environment MARK STONE Chief Executive Parks Victoria

#### SUMMARY

Warrandyte State Park is one of the most important natural areas close to Melbourne, forming part of a major habitat corridor extending along the Yarra River and north to Kinglake National Park.

The park protects about 485 flora species and 198 fauna species, a range of geomorphological features in an 11 km section of the Yarra Heritage River Area, and historic places associated with early gold-mining activities.

The park is popular for a range of recreation activities including walking, picnicking, mountain biking, horse riding, sightseeing and nature observation, and provides access to the Yarra River for canoeing and swimming.

Visitor facilities at Pound Bend and Jumping Creek provide for informal recreation in natural settings away from suburban development, yet accessible from the Melbourne area. Other parts of the park are popular with visitors who prefer to enjoy the bush, wildlife and mining heritage away from car parks and formal facilities.

The management plan prepared for Warrandyte State Park in 1990 has provided a successful framework for management of the park and many of its recommended actions have been implemented. Since that time, additions have been made to the park and some new issues have emerged that require resolution. This new plan builds on the earlier plan and provides a vision, aims and strategies to guide sound future management.

Significant management directions are summarised below.

- The park will continue to be managed as part of a major habitat corridor and as an important area for conservation and compatible recreation.
- Flora and fauna values will be protected and enhanced, and knowledge of values increased through ongoing research. Most cleared areas will be progressively revegetated to improve habitat values.

- Control of pest plants and animals will remain a high priority and control programs will be undertaken in cooperation with other agencies and the community.
- Fire will continue to be recognised as a major threat and will be managed in accordance with the Port Phillip Region Fire Protection Plan in cooperation with the Country Fire Authority (CFA).
- Cultural heritage values and places will be protected.
- Indigenous cultural lore relating to Country will be respected, promoted and interpreted in accordance with the views of the Traditional Owners.
- Works will be undertaken to reduce safety risks at old mining sites, consistent with heritage protection and conservation.
- Pound Bend and Jumping Creek will provide high quality settings for a range of compatible recreation activities. Modest facilities will be maintained at other popular sites.
- Existing walking tracks will be promoted and several new links constructed.
- Orientation and track signs will be improved throughout the park and interpretation updated at key sites.
- A short section of an existing horse riding track at Pound Bend will be closed and the relocation of the trail at Yarra Brae investigated to protect significant conservation values.
- Parks Victoria will work with Manningham City Council to improve facilities and access to the park and Yarra River at Wittons Reserve.
- The community, Friends groups, park neighbours, local councils and other agencies will be encouraged to continue involvement in the planning and management of the park.

#### **CONTENTS**

FOR	REWORD	iii
APP	PROVED MANAGEMENT PLAN	iv
SUM	MMARY	V
1	INTRODUCTION	1
-		-
	<ul><li>1.1 Location and planning area</li><li>1.2 Creation of the park</li></ul>	1
	1.3 Plan development	1
2	BASIS	3
	2.1 Regional context	3
	2.2 Park values and significance	3
	<ul><li>2.3 Past land use</li><li>2.4 The park visitor</li></ul>	4
	2.5 Legislation	5
	2.6 Policies and guidelines	$\epsilon$
3	STRATEGIC DIRECTIONS	7
	3.1 Park vision	7
	3.2 Zoning	7
	3.3 Management directions	7
4	STRATEGIES FOR NATURAL VALUES CONSERVATION	11
	4.1 Landscape	11
	4.2 Geological and landform features	11
	<ul><li>4.3 Soil conservation</li><li>4.4 Rivers and catchments</li></ul>	12 12
	4.5 Vegetation	13
	4.6 Fauna	15
	<ul><li>4.7 Fire management</li><li>4.8 Pest plants and animals, and diseases</li></ul>	17 18
5	STRATEGIES FOR CULTURAL VALUES CONSERVATION	20
	<ul><li>5.1 Indigenous cultural heritage</li><li>5.2 Post-settlement cultural heritage</li></ul>	20 21
	3.2 Tost-settlement curtural nertrage	2.1
6	STRATEGIES FOR VISITORS	23
	6.1 Information, interpretation and education	23
	6.2 Visitor access	24
	<ul><li>6.3 Walking</li><li>6.4 Picnicking and associated activities</li></ul>	25 26
	6.5 Water-based activities	28
	6.6 Cycling/Mountain biking	29

	6.7 6.8 6.9	Horse riding Other activities Public safety	30 31 32	
7	STR	ATEGIES FOR AUTHORISED AND ADJACENT USES	34	
	7.1 7.2	Authorised uses and occupancies Park boundaries and adjacent uses	34 35	
8	STR	ATEGIES FOR COMMUNITY AWARENESS AND INVOLVEMENT	37	
	8.1 8.2 8.3	Community awareness Community participation Agency partnerships	37 37 38	
9	PLAN IMPLEMENTATION			
	9.1 9.2 9.3	Delivery and reporting Plan amendment Evaluation and review	40 40 41	
REF	EREN	CES	43	
GLO	SSAR	YY .	45	
APP	ENDI(	CES		
	1 2 3 4 5	Management objectives for State Parks Threatened flora Threatened fauna National migratory and marine fauna Submissions received on the Draft Management Plan	47 48 49 50 51	
TAB	LES			
	1 2 3 4	Management zones and overlays Summary of recreation opportunities Management of walking tracks Management of recreation facilities	8 9 27 29	
FIGU	JRES			
	1 2 3a 3b	Regional locality map Management zones and overlays Recreation and access (western section of park) Recreation and access (eastern section of park)	End of plan	

viii Warrandyte State Park

#### 1 INTRODUCTION

#### 1.1 Location and planning area

Warrandyte State Park (680 ha) is 24 km north-east of Melbourne near the township of Warrandyte. It is an integral part of a corridor of natural areas and important national and State parks in the region (figure 1). The park extends along the Yarra River from Pound Bend in the west to Mount Lofty in the east.

The park comprises a number of blocks, mostly located along the Yarra River. This plan refers to block names in common use including Pound Bend, Jumping Creek, Black Flat, Fourth Hill, Whipstick Gully, the Timber Reserve, The Common, Stane Brae, Yarra Brae and Mount Lofty; and locality names for small sites including Normans Reserve, Taroona Reserve, Scotchman Hill and Koornong.

The planning area includes:

- Warrandyte State Park (680 ha)
- an 11 km section of the Yarra River (excluding the bed and banks of the river), part of the designated Yarra River Heritage Area, with an area of 28.5 hectares in the park.

Some reference is also made to areas adjacent to the park including Yarra Valley Parklands and land zoned Public Acquisition Overlay, although these areas are not included in the planning area.

#### 1.2 Creation of the park

Much of the current park was formerly managed by a range of authorities, committees and private owners. Concern for the protection of the area led to a proposal being developed in 1969 to establish a State Park

The then Premier, R. J. Hamer, announced the establishment of the original Warrandyte State Park in 1973 and parts of the current park, Pound Bend, Jumping Creek and Black Flat, totalling 135 ha were reserved in 1975 under the *National Parks Act 1975* (Vic.) (appendix 1)

The Northern River Frontage, balance of Jumping Creek Reserve and various small parcels of Crown land were added to the park in 1978. Additional Crown Land, The Common, Timber Reserve and Fourth Hill were added to the park in 1981. Koornong and the Eastern section of Pound Bend were added in 1984. The State government purchased the Stane Brae and Yarra Brae river frontages in 1982 and both parcels of land were incorporated into the park in 1987.

The Mount Lofty block (88 ha) was purchased from Melbourne Water and added to the park on 4 June 1997 as a result of the *National Parks (Amendment) Act 1997* (Vic.). This addition accorded with the LCC Melbourne Area District 2 Review Final Recommendations (LCC 1994) accepted by Government (section 2.5).

In 2005, an additional 2.8 ha of surplus Melbourne Water land adjacent to Wittons Reserve was added to the park as a result of the *National Parks (Otways and other Amendments Act)* 2005 (Vic.).

#### 1.3 Plan development

This Management Plan for the park was prepared by Parks Victoria, with input from stakeholders and a review of the existing management plan (DCE 1990). It takes into account existing information, reports and research findings that relate to the park and is informed and supported by a range of best practice management systems.

This plan replaces the existing management plan for this area, Warrandyte State Park Management Plan (DCE 1990) published in 1990.

This plan is a strategic guide for future management of the park. As a public document, the plan establishes how Parks Victoria will protect the natural and cultural values of the park, and describes the services and facilities that will be provided to help visitors to enjoy, appreciate and understand the park in ways that are consistent with this. The plan also serves to inform and encourage cooperative land management and participation in community-based programs between Parks Victoria and the managers of areas adjacent to the park.

As a working document for the park, the plan informs Parks Victoria's development of Corporate Plans, serves as a framework for subsequent detailed planning and governs management activities.

Overall, the previous management plan (DCE 1990) was considered to be successful and a very valuable framework for park management. The detailed review found that about 230 of the 250 high priority actions listed had been implemented or were ongoing. Some actions were no longer relevant and the remainder were listed for consideration in the development of this plan.

The previous management plan included considerable detail on park resources and values but did not include a vision for the park or concise management directions.

The Draft Management Plan was published for public comment in August 2004, and 17 submissions were received (appendix 5).

Where necessary, further consultation with the community and stakeholders was undertaken.

Key changes made to the Draft Plan in preparing this Final Management Plan included:

- an enhanced focus on partnerships with community groups and agencies with common goals relating to the area throughout the plan
- further review of walking tracks through Stane Brae to formalise a walking track minimising duplication and unnecessary multiple tracks
- the addition of a new walking track around the orchard at Pound Bend
- additional strategies to continue to build an ongoing relationship with the mountain biking community
- greater detail about plan implementation, reporting, performance measuring and evaluation at the end of the plan
- clarification of the role of Parks Victoria and other government agencies.

This Management Plan will direct future management of Warrandyte State Park until reviewed.

#### 2 BASIS

#### 2.1 Regional context

Warrandyte State Park is one of the most important natural areas north-east of Melbourne. Other major parks in the region include Yarra Valley Parklands, Plenty Gorge Parklands, Dandenong Ranges National Park and Kinglake National Park (figure 1). These parks provide for conservation and a range of recreation opportunities compatible with natural values.

Warrandyte State Park is surrounded by a mix of land uses including the Warrandyte township, residential, grazing and bush land.

Extensive visitor facilities provided at nearby parks including Westerfolds Park and Sugarloaf Reservoir Park cater for large numbers of visitors seeking regional recreation experiences in a semi-natural setting.

Manningham City Council and Shire of Nillumbik manage a network of complementary open space areas including the popular River Park in Warrandyte township, Currawong Bush Park, Wittons Reserve and The Hundred Acres. Some of these areas also provide for intensive recreation use and complement Warrandyte State Park which caters primarily for people seeking recreational experiences that provide interaction with nature conservation

The park is not a major tourist destination, however it is popular with people who enjoy natural areas and a connection to nature.

#### 2.2 Park values and significance

The park makes a valuable contribution to Victoria's parks and reserves system, which aims to protect viable, representative samples of the State's natural environments occurring on public land. Parks and reserves also provide opportunities for visitors to enjoy and appreciate natural and cultural values, and many make important contributions to tourism.

The park is assigned Category III (National Monument) of the International Union for the Conservation of Nature (IUCN) United Nations' list under National Parks and Protected Areas. Category III areas are

managed mainly for the conservation of specific natural features.

The park is also listed on the Register of the National Estate, in recognition of its outstanding values and importance as a part of our heritage.

The park is valuable as one of the most important remaining areas with remnant indigenous flora and fauna in the north-east of the Greater Melbourne area. The park is fragmented and susceptible to edge effects, with one of the lowest area-to-boundary ratios of any national or State park in Victoria (Parks Victoria 2000).

The significant features of the park are outlined below:

#### **Natural values**

- Botanical values of State significance including three species threatened nationally, 18 threatened in Victoria, and at least 81 species of regional conservation significance (Beardsell 2002).
- A total of 202 (native) known fauna species, including eight species threatened nationally, 20 threatened in Victoria and 17 species listed under the *Flora and Fauna Guarantee Act 1988* (Vic.).
- Geological values of along the Yarra River.
- Diversity of fauna habitats including riparian woodland and forest, dry foothill woodland and the areas of park abutting the Yarra River, part of which is listed as Yarra River Heritage Area.

#### **Cultural values**

- Places and objects of significance to Indigenous people.
- Evidence of Indigenous use, particularly stone scatters.
- Historical values associated with past gold mining activities including the site of the first gold discovery in Victoria.

 Historical values associated with agricultural and recreational land use (e.g. Stane Brae).

#### **Recreation values**

- Opportunities for informal recreation and nature appreciation in a natural setting.
- Sightseeing opportunities from walking tracks and viewing points along the scenic Yarra River.
- Access to the Yarra for water-based activities.

#### 2.3 Past land use

Recent systematic archaeological survey completed for the park, provides evidence of past Indigenous land use in the form of scatters and artefacts (section 5.1).

The park has been used for a range of activities since European settlement and evidence of these can still be seen.

The site of the first gold discovery in Victoria in 1851 is in the park on Andersons Creek. A range of mining methods was subsequently used (section 5.2). Many areas of forest were cleared during the mining period and have subsequently regenerated. The main mining sites are still accessible to visitors.

Agricultural and horticultural development followed as Melbourne developed. These land uses are evident in former orchard areas at Pound Bend and Black Flat, cleared grazing land at Mount Lofty and Stane Brae and the remains of homestead plantings and farm buildings at Stane Brae.

Gold mining largely ceased in 1909, agriculture ceased in 1985 and grazing in 1996 (Parks Victoria 2000). The majority of the park has been affected by these former land uses.

Past recreational uses include scout camps at Black Flat and the first Youth Hostel in Australia built at Pound Bend in the 1940s, but no longer standing. The park also complements the Warrandyte township with its bushland settings, heritage character and links with the Yarra River, landscape painting and other arts and crafts.

#### 2.4 The park visitor

The park is popular with local residents and visitors seeking bushland settings for a range of informal recreational activities such as walking, picnicking, sight seeing, nature observation, mountain biking and horse riding. The park also provides access points to the Yarra River for swimming, canoeing and kayaking.

Access to most parts of the park is by secondary or minor local roads. Few areas are accessible by public transport (bus) and most visitors travel to the park by car.

The park is not a major destination for interstate or international visitors, partly because of narrow road access, the fragmented nature of the park, and its relatively low profile.

Observations indicate that Pound Bend and Jumping Creek are the most visited sites in the park. Areas with limited access, e.g. Yarra Brae, Stane Brae, The Common, the Timber Reserve and Koornong attract small numbers of visitors. Visits to Mount Lofty are presently limited however recent upgrading of the main access point at Wittons Reserve provides Mount Lofty with the potential to become an important visitor site.

Visitor surveys conducted for Parks Victoria at Pound Bend and Jumping Creek in 1998 and 1999 indicated that 82% of visitors were from the eastern and northern suburbs and that only 29% were first time visitors. Nearly all visitors (98%) made a day trip from home and stayed in the park from less than 1 to 2-4 hours. Satisfaction with the park was rated as average or slightly below average compared with other parks managed by Parks Victoria. Improvements requested included more or better signs, longer opening hours and more facilities.

Opening hours are regularly reviewed by Parks Victoria. Visits to the park may have declined in recent years although changes in monitoring make this difficult to assess.

Visitor numbers from 1997-98 to 2000-01 ranged from about 98 000 to 138 000 visits each year (Parks Victoria ParkWeb site).

Observations by staff suggest little change in visitor numbers at the main recreation sites during peak times since 1990.

In terms of statewide priorities, Parks Victoria has rated Warrandyte State Park as a park of regional value for the provision of visitor services. An appreciation of the park's natural and cultural values will be promoted, together with walking and picnicking. Resources will focus on Pound Bend and Jumping Creek, the principal visitor sites in the park.

#### 2.5 Legislation

Warrandyte State Park is reserved and managed under the *National Parks Act 1975* (Vic.). The Act requires the Secretary to the Department of Sustainability and Environment (DSE) to preserve and protect the natural conditions of the park, and its natural and other features and, subject to this, to provide for the use of the park by the public for enjoyment, recreation and education. Appropriate research activities are also provided for under the Act.

The objects and provisions of the National Parks Act set the framework for the management of the park (appendix 1). Specific legislation and LCC/ECC recommendations accepted by government also govern specific aspects of management of the park as described below and in subsequent sections of the plan.

Parks Victoria is responsible for management of the park on a day to day basis. Melbourne Water manages the water, bed and banks of the Yarra River and streams within the park.

Parks Victoria manages visitor activities on this section of the Yarra River adjacent to the park in accordance with the *Water Industry Act 1994* (Vic.) and the Water Industry (Waterways Land) Regulations 2002. Melbourne Water continues to manage the bed, soil and banks of the river as part of their drainage responsibilities. Parks Victoria also manages visitor activities on Crown land within 20 metres of waterways adjacent to the park.

The section of the Yarra River Heritage Area from the eastern boundary of the park at Mount Lofty to the north end of Blue Tongue Bend (11 km in length); which includes a section of Yarra River (bed and bank) and overlaps a strip of park, is included in the planning area for the plan and managed under the *Heritage Rivers Act 1992* (Vic.). The heritage rivers were proclaimed on 10

September 1992 and accord with the LCC Rivers and Streams Special Investigation Final Recommendations (LCC 1991a).

The Heritage Rivers Act provides for the protection of particular parts of rivers and catchments that have significant values. A Heritage Rivers and Natural Catchment Areas Draft Management Plan (NRE 1997b) also applies to the area which includes unreserved Crown land, land managed under the National Parks Act and freehold land (section 4.4).

The Archaeological and Aboriginal Relics Preservation Act 1972 (Vic.) and the Aboriginal and Torres Strait Islander Heritage Protection Act 1984 (Cwlth) apply to the park and protect all Aboriginal cultural heritage values including places and objects (section 5.1).

Issues relating to native title are dealt with according to the *Native Title Act 1993* (Cwlth).

The provisions of the *Environment Protection* and *Biodiversity Conservation Act 1999* (Cwlth) apply to the whole of the planning area with respect to actions that have, will have or are likely to have a significant impact on matters of national environmental significance including listed threatened species and communities and listed migratory species in the park (appendix 4).

The *Parks Victoria Act 1998* (Vic.) enables management services for Warrandyte State Park to be provided on behalf of the Secretary to DSE by Parks Victoria. The National Parks (Park) Regulations 2003 apply to the park.

Other policies and guidelines (section 2.6) at both the commonwealth and state levels apply to management of the park and specific activities and uses.

#### **LCC Recommendations**

In its Final Recommendations for the Melbourne Area District 2 Review, the former Land Conservation Council (LCC 1994) emphasised the need to conserve and protect natural environments, to protect sites of cultural importance and water supply catchments and to provide opportunities for recreation and education associated with the enjoyment and understanding of natural and cultural environments.

The former LCC also recommended that the following areas be added to the park:

- the Mount Lofty area (88 ha) (added to the park in 1997, section 1.2)
- certain public land water frontage (54 ha) (section 7.2).

#### 2.6 Policies and guidelines

The park is managed in accordance with Parks Victoria's operational policies, and as appropriate, with other policies and guidelines including the following:

- Indigenous Partnership Strategy and Action Plan (Parks Victoria 2005)
- Heritage Management Strategy (Parks Victoria 2003)
- Guidelines for Working with Aboriginal Communities and Protection of Cultural Sites (Parks Victoria 2002a)
- National Strategy for Ecologically Sustainable Development (COAG 1992)
- National Strategy for the Conservation of Australia's Biological Diversity (ANZECC 2001)

- Victoria's Biodiversity Strategy (NRE 1997a)
- Port Phillip Region Fire Protection Plan for Public Land within the East Port Phillip Fire District (NRE 2000)
- Heritage Rivers and Natural Catchment Areas Draft Management Plans (NRE 1997c)
- Victoria's Native Vegetation Management: A Framework for Action (NRE 2002)
- Yarra Catchment Action Plan (NRE 1999a).

The park is also managed within a broader context of a number of other plans and strategies, including:

- Nature Based Tourism Directions and Opportunities for Victoria 2000–2003 (Tourism Victoria 2000)
- Policy for Sustainable Recreation and Tourism on Victoria's Public Land (NRE 2002)
- Port Phillip and Westernport Regional Catchment Management Strategy (PPWPCMA 2004)
- *Linking People and Spaces* (Parks Victoria 2002b).

#### 3 STRATEGIC DIRECTIONS

#### 3.1 Park vision

A future visitor to the Warrandyte State Park finds a peaceful natural setting with many opportunities for informal recreation and relaxation. The park's natural and cultural values and excellent access to the Yarra River make it one of the most popular bushland areas in the metropolitan area.

The park is recognised as one of Melbourne's most attractive and significant bushland parks, complementing the larger Dandenong Ranges, Yarra Ranges and Kinglake National Parks, Plenty Gorge Parklands and the more intensively used open space along the Yarra Valley.

The park is a significant portion of a major habitat corridor extending along the Yarra River and north along Watsons Creek to Kinglake National Park. Park values and biodiversity are well protected and the important flora and fauna values are well understood and conserved. Remaining populations of pest plants and animals are controlled and areas disturbed by past land use are being restored.

The rich cultural heritage of the park, including Indigenous cultural heritage, gold mining sites and links with Warrandyte's heritage, is well protected, interpreted where appropriate and appreciated.

Visitors enjoy fine views and access via a network of walking tracks to many parts of the park and the Yarra which is popular for sightseeing, photography, swimming, canoeing and kayaking. Marked trails provide for horse riding in less sensitive areas and mountain bike riding on the park's management vehicle tracks

Small groups and visitors are catered for with well-designed visitor facilities at Pound Bend and Jumping Creek. People who enjoy the simple pleasures of walking and relaxing in the bush have additional opportunities at other sites.

The local community and Friends groups contribute to improved management, monitoring and interpretation of the park with

active encouragement and support from Parks Victoria. The potential impact of adjacent land use on the park is recognised and is limited through a cooperative relationship between park managers, park neighbours and local councils.

#### 3.2 Zoning

A management zoning scheme has been developed to:

- provide a geographic framework in which to manage the park
- indicate which management directions have priority in different parts of the park
- indicate the types and levels of use appropriate throughout the park
- assist in minimising existing and potential conflicts between uses and activities, or between those and the protection of the park's values
- provide a basis for assessing the suitability of future activities and development proposals.

Three zones apply to the planning area: Conservation, Conservation and Recreation, and Recreation Development.

Three overlays, Land Use Designation - Yarra River Heritage Area, Land Use Designation - Prospecting and Special Protection Area – Natural Values are also used to indicate management requirements additional to those of the underlying management zone.

Management zone and overlay characteristics are shown in table 1, and their locations are shown in figure 2.

#### 3.3 Management directions

Major management directions for the park are outlined below:

#### **Natural values conservation**

 Areas of high natural value in good condition will be maintained.

TABLE 1 MANAGEMENT ZONES AND OVERLAYS

ZONE/OVERLAY	AREA/LOCATION	VALUES	GENERAL MANAGEMENT AIM
ZONES			
Conservation	161 ha; 23.6% of the park located between Blue Tongue Bend and Yarra Brae.	Broad areas containing sensitive natural environments or ecosystems.	Protect sensitive natural environments and provide for minimal impact recreation activities and simple visitor facilities subject to ensuring minimal interference with natural processes.
Conservation and Recreation	511 ha; 75.6% of the park. Most of the park outside the conservation zone.	Important natural values and scope for recreational opportunities.	Protect less sensitive natural environments and provide for sustainable dispersed recreation activities and small-scale recreation facilities without significant impact on natural processes.
Recreation Development	7 ha, 1% of the park. Small areas at the two main visitor nodes: Jumping Creek and Pound Bend.	Sites with major/significant facility development in a natural setting.	Provide primarily for high-use visitor nodes with a concentration of recreation and/or interpretation facilities.
OVERLAYS			
Land Use Designation - Yarra River Heritage Area	28.5 ha, 3.5% of the park in 200 m wide corridor adjacent to Yarra River.	Designated river significant for nature conservation, recreation, scenic or cultural heritage. Yarra River Heritage Area includes sites of conservation and landscape significance.	Protect the heritage values of the area.  Protect and enhance natural and landscape values and provide for minimal impact access to the river.
Land Use Designation - Prospecting	6.5 ha, 1% of the park. Short section of creeklines along Andersons, Jumping and Stony Creeks.	Prospecting area.	Allow suitable prospecting while protecting biodiversity, catchment, geological and cultural values.
Special Protection Area – Natural Values	160 ha; 23.5% of the park. Areas with high habitat values.	Discrete significant areas required special attention. Include areas of high natural values defined as 'Core Areas'.	Protect specific natural values in specific areas and sites where a special management focus is required.

- Threatened and significant vegetation communities will be maintained and restored.
- Populations and habitats of threatened species will be protected and maintained.
- The original range of vegetation communities within the park, with characteristic species and structure, will be restored and maintained to a selfsustaining condition with representative age classes in the long-term.
- Self-generating, genetically viable populations of threatened species will be restored and preserved in the long-term.

- Links between habitats will be restored to extend and link wildlife corridors to enhance connectivity.
- New or emerging pest species will be eradicated or otherwise controlled where possible.
- The park will be protected against the deleterious effects of wildfires and inappropriate fire regimes.

#### **Cultural values conservation**

• Historic relics and places will be conserved by protecting them from damaging or inappropriate activities.

TABLE 2 SUMMARY OF RECREATIONAL ACTIVITIES

ACTIVITY	MANAGEMENT ZONE			Overlay		
	Conservation	CONSERVATION AND RECREATION	RECREATION DEVELOPMENT	LAND USE DESIGNATION - PROSPECTING	LAND USE DESIGNATION -HERITAGE RIVER	SPECIAL PROTECTION AREA - NATURAL VALUES
	(23.6% of park)	(75.6% of park)	(1% of park)	(1% of park)	(3.5% of park)	(23.5% of park)
Canoeing, Kayaking*	Y	Y	Y	N	Y	Y
Cycling (section 6.6)	Y	Y	Y	N	Y	Y
Walking/Bushwalki ng	Y	Y	Y	Y	Y	Y
Picnicking	Y	Y	Y	Y	Y	N
Scenic viewing	Y	Y	Y	Y	Y	Y
Dog walking (section 6.8)	N	Y**	N	N	N	N
Fires (in fireplaces only)	N/A	N/A	Y	N/A	N/A	N/A
Firewood collecting	N	N	N	N	N	N
Fishing*	Y	Y	Y	Y	Y	Y
Prospecting (section 6.8)	N	Y	N	Y	N	N
Horse riding (section 6.7)	Y	Y	N	N	Y	N
Hunting	N	N	N	N	N	N
Organised events (by permit)	N	Y	Y	Y	Y	N
Orienteering & rogaining (section 6.8)	N	Y	Y	Y	Y	N
Rock climbing & abseiling (section 6.8)	N	Y	N	N	N	N
Camping	N	N	N	N	N	N
Swimming*	Y	Y	Y	N	Y	Y

<sup>\*</sup> The Yarra River (bed and banks) is outside the park and is managed by Melbourne Water, hence swimming, canoeing etc do not occur in the park itself. However, Parks Victoria has responsibility for managing recreation activities on the Yarra River.

N Not appropriate

N/A Not applicable

<sup>\*\*</sup> Dogs on leads are permitted at Norman Reserve, Taroona and Koornong only (figure 3a).

Y Yes—subject to overlay prescriptions and conditions prescribed by legislation, licensed tour permits or elsewhere in the plan as indicated

- Indigenous places and objects will be protected from interference or damaging activities.
- The Traditional Owners' cultural lore, interests and rights in the area and aspirations for *Country*, will be reflected in the park's planning and management, in accordance with legislation and policies.
- Indigenous cultural lore relating to Country will be respected, promoted and interpreted in accordance with the views of the Traditional Owners.

#### The park visit

- Provision will continue to be made for informal recreation activities in keeping with the park's largely natural character and regional recreational needs and opportunities.
- Good walking access will be provided to the Yarra River in the Conservation and Recreation Zone.
- Recreational opportunities will be provided in accordance with table 2.

- A better understanding of the park's natural and cultural values will be promoted, primarily through targeted interpretive activities.
- Visitors will be encouraged to adopt minimal-impact techniques and to adhere to industry developed standards appropriate to their activity.

#### **Community awareness and involvement**

- Strong collaborative partnerships will be developed with the Traditional Owners to facilitate the reflection of their cultural lore, rights, and interests and aspirations in the park's planning and management.
- Friends groups and other volunteers will continue to be actively encouraged to participate in management programs.
- Liaison will be maintained with community groups, park neighbours, neighbouring Councils and relevant Government agencies, and a working partnership adopted in dealing with issues of mutual concern relating to the park, as appropriate.

#### 4 STRATEGIES FOR NATURAL VALUES CONSERVATION

#### 4.1 Landscape

The park has high landscape values, particularly the unspoilt reaches of the Yarra River and associated riparian vegetation and wooded slopes, and makes an important contribution to the overall landscape values of the Yarra Valley.

Scenic views are provided from a series of high points including Mount Lofty, Stane Brae and the lookout on the Kangaroo Ground-Warrandyte Road. Revegetation work at Mount Lofty and Stane Brae should be planned to retain good views from high points, e.g. by not planting tall species at lookout points.

There are also many attractive close-up views of the Yarra from the riverbank and nearby roads and tracks, some of which could be improved with better signage and access to help visitors locate and reach viewing points.

The bushland areas away from the river have their own attraction with more intimate views through the dry foothill forest evocative of the paintings of the Heidelberg School artists.

The landscape of the Upper Yarra Valley, including the park, is classified by the National Trust Australia (Victoria).

The 'naturalness' of the park is a key factor in its perceived landscape value, which is highly valued by the local and broader community. This can be adversely affected by unsympathetic adjacent land uses including dominant buildings and other structures, roads, bare ground, rubbish and areas invaded by weeds. Within the park, values are affected by past clearing, erosion, worn facilities and weeds - especially willows along the Yarra.

The planning schemes of Manningham City Council and Shire of Nillumbik provide a degree of protection from unsympathetic development near the park and there is strong community support to protect natural areas around Warrandyte.

#### **Aims**

• Provide for visitor viewing of attractive landscapes.

- Protect and enhance the park's natural and cultural landscape values.
- Minimise or ameliorate undesirable visual intrusions.

#### Management strategies

- Improve opportunities for views from walking tracks and high points in the park by proper alignment of walking tracks.
- Maintain open woodland landscapes at Stane Brae to protect heritage values.
- Continue to liaise with Shire of Nillumbik and Manningham City Council to minimise visual impacts of nearby development and protect the landscape character of the area.

## 4.2 Geological and landform features

Warrandyte State Park contains a range of important geological features and landforms associated with the Yarra River. These contribute to landscape values and provide valuable educational opportunities. The Yarra River abutting the park features the highly distinctive Yarra Gorge and includes examples of abandoned meanders, levees, rockbars, islands, dykes and exposed outcrops. In addition, Pound Bend is one of the largest entrenched meanders in any Victorian river.

Other distinctive features include outcrops of the sedimentary Anderson Formation and the Warrandyte Conglomerate member. Whipstick Gully and Fourth Hill provide educational opportunities with exposed outcrops and folds and geological processes revealed by gold mining activities last century.

The park's geological features are robust and not threatened unless inappropriate management works are undertaken. Natural erosion processes have been lessened by reduced flows in the Yarra resulting largely from the construction of dams for Melbourne's water supply.

#### **Aims**

Protect important geological and landform features.

 Provide for educational opportunities associated with geological and landform features.

#### Management strategies

- In conjunction with Melbourne Water, ensure that management activities do not adversely affect geological features along the Yarra River.
- Maintain adequate walking access to important geological and geomorphological sites for educational purposes, compatible with conservation objectives.

#### 4.3 Soil conservation

Two broad categories of soils occur in the park: duplex and gradational types formed from local bedrock, and alluvial soils formed by deposition of sediments along the Yarra. Silty-clay duplex soils cover most of the park and are characteristically skeletal on ridges.

Soils in the park are susceptible to erosion when drainage is impeded or vegetative cover removed by recreation or management activities. This factor constrains the location of tracks and facilities and necessitates careful siting of any development and ongoing management to deal with erosion. Damage to soils has occurred along some sections of the riverbank used for recreation, and where horses or mountain bikes have been ridden off tracks or on wet ground (sections 6.6 and 6.7). Erosion in adjacent properties, e.g. Wittons Reserve, can also have an impact on the park (section 7.2).

#### Aims

- Control soil erosion caused by visitor and management activities.
- Rehabilitate sites where soil degradation has occurred.

#### Management strategies

- Regulate visitor access and activities in areas susceptible to erosion, particularly along the Yarra River and revegetate areas damaged by erosion.
- Encourage park users and recreation groups to minimise impacts of recreation

- activities on soils through information and education.
- Work with relevant land managers and park neighbours to rehabilitate eroded areas affecting the park (section 7.2).

#### 4.4 Rivers and catchments

The natural and cultural importance of the Yarra River and its catchment are widely recognised. The future management and protection of the Yarra Catchment has been researched and documented in detail since 1990. The Yarra Catchment Action Plan (NRE 1999a) supports a habitat corridor including the park, action to protect flora and fauna, community education regarding conservation values and development of the Yarra Trail. The Port Phillip and Westernport Regional Catchment Strategy 2004-2009 (PPWCMA 2004) sets out a strategic framework for the protection of assets within the catchment.

The Yarra River Heritage Area includes a section of the river abutting the park from Blue Tongue Bend to Mount Lofty. The Heritage Area protects the rocky Yarra Gorge and largely intact riparian vegetation and provides for canoeing and sightseeing in attractive surroundings (NRE 1997b).

Melbourne Water is responsible for managing the bed and banks of the Yarra River including that within the section of Heritage Area abutting the park, and the bed and banks of creeks in the park. Cooperative activities, e.g. weed control, are frequently undertaken with Parks Victoria.

Sections of riverbank are subject to erosion (section 4.3) and weed invasion.

There are also five creeks in the park with important natural values: Andersons, Jumping Stony, Brushy and Watsons Creeks.

#### **Aims**

- Protect and enhance river, creek and catchment values.
- Increase community commitment to sound catchment management.

#### Management strategies

 Regulate access to the Yarra River and creeks in the park to minimise damage to

- natural values, particularly sensitive riparian vegetation.
- In cooperation with Melbourne Water, undertake erosion and weed control work along the Yarra River (section 8.3).
- Support community education programs promoting sound catchment management.

#### 4.5 Vegetation

The park falls within the Victorian Highlands-Southern Falls Bioregion. Much of the remaining indigenous vegetation in and around the park is fragmented or degraded and only about a quarter is considered intact (Beardsell pers. comm.). The majority of the park supports indigenous vegetation, which is important on at least a State level. Many areas including The Common, Timber Reserve, Fourth Hill, Pound Bend, Yarra Brae, Mount Lofty and Stane Brae were extensively modified in the past by timber harvesting, agriculture, mining and grazing activities. However, indigenous vegetation has naturally regenerated and the majority these areas now support mostly native vegetation. Natural regeneration has been supplemented by revegetation in some areas of Yarra Brae and Stan Brae.

A total of 511 indigenous vascular plant taxa (species, sub-species and recognised varieties and hybrids) have been recorded in the park. Approximately 400 species of fungi and 60-80 bryophytes have also been reported (Fuhrer pers. comm.).

Four flora species of national and 22 of State conservation significance occur in the park (appendix 3), while a large number of taxa are considered rare or threatened in the Victorian Highlands-Southern Falls bioregion (e.g. less than 1% of records found in the bioregion).

Fifteen vegetation communities comprising 26 sub-communities occur in the park (Beardsell 2002). Fourteen sub-communities are considered threatened in the Melbourne region. Communities considered to be threatened in Victoria include Creekline Herb-rich Woodland, Floodplain Riparian Woodland, Gully Woodland, Swampy Riparian Woodland and Valley Grassy Forest (Beardsell pers. comm.). Several other communities including Riverine Escarpment Scrub and Riparian

Shrubland in Warrandyte Gorge have a naturally disjunct distribution.

Areas of high biodiversity value and vegetation quality are termed 'Core Areas' and are afforded management priority. Core Areas are the most intact examples of the vegetation sub-communities or assemblages of integrated sub-communities, have high species diversity and generally contain rare or threatened species (figure 2 – Special Protection Area – Natural Values)

The vegetation communities of the park occur in two broad landtypes, riverine and foothill.

#### Riverine landtype

The riverine landtype includes riverbanks, alluvial terraces and associated gullies, floodplain wetlands, escarpments and cliffs.

This landtype supports the most substantial populations of two species of State conservation significance, Forest Bitter-cress and Tall Club-sedge, in the Greater Melbourne area. The largest populations of both species are at Blue Tongue Bend. The landtype also supports large populations of the threatened Green-top Sedge. There are numerous regionally significant plant species recorded in the riverine landtype including the most substantial populations in the Greater Melbourne area of Annual Fern, Leek Lily, Bristly Cloak-fern and Autumn Bird-orchid.

Ecological Vegetation Communities include:

- Floodplain Riparian Woodland
- Floodplain Wetland
- Gully Woodland
- Herb-rich Foothill Forest
- Riparian Forest (river)
- Riparian Shrubland
- Riverine Escarpment Scrub
- Riverine Escarpment Woodland
- Riverine Terrace Woodland
- Swampy Riparian Complex
- Swampy Riparian Woodland.

The latter two communities and Floodplain Riparian Woodland are represented only as degraded remnants. The most intact stands of

vegetation are Riverine Terrace Woodland, Riparian Forest, Riverine Escarpment Scrub and Riverine Escarpment Woodland at Blue Tongue Bend and Riparian Shrubland at Mount Lofty. These are among the finest stands in the Greater Melbourne and Port Phillip Region (Beardsell pers. comm.).

#### Foothill landtype

This landtype includes creeks, gullies, valleys, hill-crests and hill-slopes. It occurs from Fourth Hill/Andersons Creek to the Timber Reserve and at The Common with small but significant stands of remnant native vegetation along lower Jumping Creek and Pound Bend Road. Partially degraded stands also occur at Elongata Gully in Jumping Creek Reserve and Yarra Brae.

Ecological Vegetation Communities include:

- Box Stringybark Woodland
- Creekline Herb-rich Woodland
- Herb-rich Foothill Forest
- Riparian Forest (creek)
- Valley Grassy Forest.

The most intact vegetation is Box-Stringybark Woodland in the headwaters of Fiddler Gully, and adjoining section of the Timber Reserve and Fourth Hill, and Herb-rich Foothill Forest in Hansons Gully and Fiddler Gully (Beardsell pers. comm.). These vegetation communities support a highly significant orchid assemblage (50 species) and numerous other rare plant species. The nationally significant Wine-lipped Spider-orchid and a number of State significant species including Round-leaf Pomaderris, Arching Flax-lily and a substantial population of the Woodland Plume-orchid occur in the Foothill Landtype.

A number of regionally significant species occur in the park, including Arching Flax-lily along the School Track fence, Variable Billybuttons and Narrow Lobelia along Wildcat Gully and Hansons Gully. The park also supports the largest reserved population in the region of the regionally endangered Grey Guinea-flower (Fiddler Gully-Timber Reserve area).

Herbivore exclusion fences erected at various sites in the park including School Track, Betton Track, Fiddler Gully Track, Harding Road and Haslam Track are making notable improvement to the protection of significant plant species (i.e. Wine-lipped Spider-orchid and Bacchus Marsh Varnish Wattle).

The major potential threats to vegetation in the park are fragmentation through clearing and development of surrounding land, recreational disturbance, grazing by rabbits and invasion by weeds. Other potential threats include inappropriate fire regimes (section 4.7), eucalypt dieback (section 4.8) and development of tracks, roads and other recreational facilities.

#### **Aims**

- Protect and preserve indigenous flora, particularly threatened species.
- Increase information and knowledge of flora species and communities and associated management requirements.

#### Management strategies

- Restore and maintain all areas of high natural value (Core Areas) to good condition, with priority on the Conservation Zone, Fourth Hill and Timber Reserve.
- Extend Core Areas within the Special Protection Areas by 30% by:
  - restoring adjoining areas to good condition, with priority given to communities in the riverine landtype to provide linked habitat corridors;
  - restoring reference samples of all 15 vegetation communities in the park to good condition.
- Restore the middle and upper storey structure of threatened vegetation communities with representative character species.
- Restore or reinstate the middle and upper storey structure of all communities in the Conservation Zone with representative character species.
- Implement priority actions from approved recovery plans to address threats to threatened species or communities listed under the Environment Protection and Biodiversity Conservation Act.

- Support DSE in the development of programs for threatened species such as Wine-lipped Spider orchid, Fringed Helmet-orchid and Woodland Plumeorchid.
- Develop a revegetation plan for the park, in line with the priorities listed above, that addresses location, genetic integrity, staging, establishment techniques (revegetation or regeneration) and appropriate methods of delivery.
- Continue the revegetation programs for Yarra Brae and Stane Brae to create a continuous tract of native vegetation.
- Continue to maintain existing herbivore exclusion fences and expand exclusion zones to additional areas supporting populations of grazing-sensitive species.
- In partnership with volunteers and academic institutes, encourage research on rare and threatened plant species and communities to improve knowledge of their management requirements (section 8.2).
- Encourage community groups to continue to propagate and maintain plant stocks of rare and threatened species recorded in the park for restocking and revegetation (section 8.2).
- Ensure all species, particularly significant species recorded in the park, including those identified by conservation groups and field naturalists, are incorporated into the Parks Victoria Environmental Information System (EIS).

#### 4.6 Fauna

Warrandyte State Park is one of the few relatively large areas of remnant terrestrial fauna habitat remaining close to Melbourne. The park supports seven broad habitat types including riparian woodland and forest, dry open woodland, shrubland, wetlands, introduced pasture and areas of native grassland. The most diverse fauna habitats are along the riparian zone, particularly the Yarra River, its tributaries and damp gullies.

A total of 202 native terrestrial fauna species recorded from the park, including 29 mammals (including 11 bats), 144 birds, 18 reptiles and 11 frogs (DSE database 2005c). In addition 13

native fish species (eight migratory) have been recorded along the Yarra River and its tributaries while numerous invertebrate species such as the threatened butterflies, the Large Ant-blue and the Yellow-spot Jewel have also been recorded.

Fauna groups such as native birds and mammals have been relatively well surveyed, but additional data is required on the distribution, abundance and ecology of other fauna groups such as reptiles, amphibians and invertebrates.

Of the nationally significant fauna species recorded in the park, four terrestrial species (Grey-headed Flying Fox, Regent Honeyeater, Swift Parrot and Southern Warty Bell Frog), and four aquatic species (Yarra Pigmy Perch, Murray Cod, Macquarie Perch and Australian Grayling) are considered threatened on a national level (appendix 3).

The park has records of 15 terrestrial and five aquatic species of State conservation significance (appendix 3). Most of these are listed under the Flora and Fauna Guarantee (FFG) Act, one of which, Large Ant-blue Butterfly has not been recorded since 1988 (appendix 3).

The Box–Stringybark Woodland (Beardsell 2002) and riverine escarpment woodlands of the park support one of the highest population densities in the region of the Brush-tailed Phascogale. The core habitat for this species in the park is at Jumping Creek Reserve and Koornong Reserve.

At least three breeding pairs of Powerful Owl are resident in Warrandyte State Park and the park is important for this species on a regional level (D. Farrar pers. comm.). A substantial roosting population of the Common Bent-wing Bat and a small population of the rare Southern Myotis have been recorded in Pound Bend tunnel. These species also occur at other mines.

Warrandyte State Park provides habitat for 33 terrestrial fauna species and one fish species considered regionally significant in the Victorian Highlands-Southern Falls Bioregion and numerous other species of local significance. In addition, records include 20 birds listed as 'migratory' and three birds listed as 'marine' under the Environment Protection and Biodiversity (EPBC) Act (appendix 4).

Overall, Warrandyte State Park (and the Yarra River) is a site of 'State Zoological Significance' (Beardsell 1997; Mansergh et al 1989; DSE 2005b).

Although intensive urban development has occurred throughout the Yarra Valley, substantial lengths of the riparian zone retain habitat values for a number of native fauna. The Yarra River is regarded as the principal wildlife corridor in Port Phillip Region (Mansergh et al 1989). The riparian vegetation in the park links to other remnants along and adjacent to the Yarra River and forms part of a habitat corridor which links up to larger remnants such as Kinglake National Park. Some park fauna is dependent on movement along the corridor.

Management is continuing to maintain and enhance the riparian zone by revegetation works and by improving habitat values in suitable areas.

The park supports a population of Koala, which was reintroduced in 1985. Surveys show there is a healthy population scattered through the park, with the exception of Mount Lofty. Pound Bend supports approximately 35 individuals, often visible to visitors (D. Farrar pers. comm.). This population has had some localised impacts on vegetation and some eucalypts have been collared to allow the trees to recover from the effects of Koala grazing.

There is a relatively stable population of Eastern Grey Kangaroo in the park with about 80-100 individuals in the Stane Brae area, 12 at Mount Lofty, and small groups in other sections of the park. The population does not appear to be adversely affecting vegetation.

Threats to fauna include damage to habitat, dogs, cats and other introduced animals and activities associated with recreation and adjacent land uses.

#### **Aims**

- Maintain fauna habitat diversity and integrity.
- Protect native fauna, particularly threatened species and maintain genetic diversity.
- Increase knowledge in the distribution, abundance and preferred habitats of threatened fauna species.

 Increase knowledge of the distribution and impact of the Koala and Eastern Grey Kangaroo in the park.

#### **Management strategies**

- Implement priority actions from approved action statements or recovery plans to address threats to threatened species or communities listed under the FFG and EPBC Acts
- Manage and alleviate, where possible, risks to native fauna associated with visitor activities, adjacent landholder activities, the presence of pest plants and animals and other threatening processes.
- Continue to liaise with neighbouring landholders, local municipalities, Landcare groups, and others to encourage enhancement of fauna habitat and documentation of significant fauna (sections 7.2 and 8.2).
- Enhance fauna habitat by revegetating priority areas (section 4.5), maintaining habitat corridors and linking remnant vegetation.
- Contribute to investigations of the current status, distribution and habitat requirements in the park of the Southern Warty Bell Frog, and manage potentially threatening processes.
- Continue to monitor known Brush-tailed Phascogale nesting sites including nesting boxes, and improve habitat attributes for this species where practicable.
- Contribute to investigations of the Powerful Owl population (number, age) including roosting and nesting sites, identify other suitable sites and continue programs to control or exclude foxes, dogs and cats.
- Facilitate additional fauna surveys giving priority to butterflies, reptiles, and frogs.
- Encourage and support surveys and research on invertebrate communities in the park to identify significant species and sites for invertebrate conservation with a particular emphasis on butterflies.

- Record faunal surveys and incidental records (especially threatened species) on Parks Victoria's EIS.
- Monitor Koala and Eastern Grey
  Kangaroo populations, using approved
  protocols, for their impact on the park and
  take action as appropriate.

#### 4.7 Fire management

The National Parks Act requires the Secretary to ensure that appropriate and sufficient measures be taken to protect parks against the deleterious effects of wildfires. The Act also requires that natural and cultural values are preserved and protected. In the case of Warrandyte State Park, a very high priority is placed on the safety of visitors and people in nearby areas.

Fire management in the park is governed by the Port Phillip Region Fire Protection Plan for Public Land within the East Port Phillip Fire District (NRE 2000). Fire protection measures, including fuel reduction burning, are undertaken in accordance with the Code of Practice for Fire Management on Public Land (DSE 2006) and Parks Victoria's operational policies.

Parks Victoria works closely with DSE, the Country Fire Authority (CFA) and local Councils on fire management, especially in relation to cooperative wildfire control planning and suppression. Local 'Fire Guard' groups also assist in educating the community about fire.

The park has the potential to be prone to bushfires because of its flammable vegetation and close proximity to developed areas, especially in years with low summer rainfall. There is an extensive network of 'management vehicle only' (MVO) tracks and fire breaks in the park providing good access for fire prevention and suppression.

The park has a varied fire history with 11 significant fires recorded between 1851 and 1969. The largest fires occurred in 1851, 1939 and 1962 (DCE 1990).

Major fires have affected the age structure of the vegetation with most overstorey trees regrowing after the 1939 and 1962 fires. However, a few remnant trees date back beyond 1851. The dry foothill forest vegetation community is well adapted to cope with periodic fires but the riparian forest community is more susceptible to frequent burning.

Fuel reduction burning is carried out in accordance with the Port Phillip Region Fire Protection Plan for Public Land (NRE 2000) to protect people and property and to reduce the possible severity of a wildfire event.

Where possible, ecological outcomes for specific vegetation communities and other objectives (weed control) are being incorporated into any fuel reduction burning program.

#### **Aims**

- Protect park values from the deleterious effects of wildfire or inappropriate fire regimes.
- Cooperate with relevant agencies and land managers in the protection of human life, neighbouring properties and assets.
- Minimise the adverse effects of fires and fire suppression methods.

#### Management strategies

- Implement fire protection works in accordance with the East Port Phillip Region Fire Protection Plan and the Code of Practice for Fire Management on Public Land.
- Work closely with DSE, the CFA, local councils and community organisations to minimise the risk of fire to visitors and people in nearby areas (section 8.3).
- Develop programs for the ecological management of fire to assist restoration and weed control objectives and for areas proposed for fuel reduction burning.
- Develop natural values management objectives for all ecological and fuel reduction burns to meet specific ecological requirements, in relation to weed control or enhancing vegetation or habitat condition. Where possible, conduct burning operations at the most appropriate time of year to best achieve objectives.

## 4.8 Pest plants and animals, and diseases

#### **Pest plants**

The park has approximately 250 pest plant species, half or these are environmental weeds of which over 50 are considered highly invasive. The highest weed concentration occurs along sections of the riparian strip (e.g. The Island and in areas subjected to high levels of recreational disturbance). The most invasive species include Willow, Wandering Jew, Bridal Creeper, Blackberries and several newly established species along the river including Parrot's Feather, Square-stem St Johns Wort and Tutsan. Control of these weeds is difficult in steep and inaccessible areas particularly along the riparian strip.

Grassy weeds including Sweet Vernal-grass, Large Quaking-grass and Panic Veldt Grass threaten the indigenous ground flora including a number of threatened species. Sweet Pittosporum and Three-cornered Garlic have also invaded creeks and gullies and affect native flora and fauna species.

Burgan, a native shrub species of the park, has spread so extensively that it may be having a deleterious impact on other native flora and fauna species including threatened species.

Factors exacerbating weed invasion in the park include:

- the presence of large populations of weeds on adjacent land
- disturbance caused by visitor activities, tracks, clearing, dumping of garden waste and erosion
- the spread of weeds into areas by native and introduced fauna species including horses

#### Pest animals

The 15 introduced terrestrial fauna species recorded in the park include 10 birds (Mallard, Rock Dove, Spotted Turtle-Dove, Common Blackbird, Song Thrush, House Sparrow, European Goldfinch, European Greenfinch, Common Mynah and Common Starling) and five mammals (Black Rat, House Mouse, European Rabbit, Red Fox and Feral Cat) (DSE database 2005c). All of these species are likely to exist in high numbers and place

pressure on indigenous flora and fauna. A number of invertebrate species such as feral bees and European Wasp also occur in the park.

Rabbit numbers have been reduced by cooperative community and park control programs including exclusion fencing.

Manningham City Council's community-based Rabbit Action Groups have been particularly successful. Future management will need to continue rabbit control and exclusion from sensitive sites.

Foxes and cats predate on many fauna species including threatened species such as the Brushtail Phascogale and Powerful Owl fledglings. Wandering domestic dogs have been found to kill native fauna, particularly large species such as Kangaroos and Wallabies and are also a concern for visitor safety and enjoyment.

Rabbit and fox are targeted species for control programs in the Port Phillip and Westernport Catchment Management Region (PPWCMA 2004). A number of native fauna species, including Bell Miners and Noisy Miners, may have a negative impact on fauna species, particularly other birds.

#### Diseases

Dieback of eucalypts in sections of the park may be caused by Cinnamon Fungus, high numbers of the territorial Bell Miner or other factors and requires investigation. It is important that proper quarantine measures are followed if Cinnamon Fungus risks are identified.

#### **Aims**

- Monitor, control, and where possible eradicate, non-indigenous plants, animals and diseases.
- Minimise the potential for introduction and spread of pest plants and animals and diseases.
- Minimise the impact of control programs on native flora and fauna species.
- Restore native vegetation in areas where weeds have been controlled or eradicated.

#### Management strategies

• Control or eradicate pest plants in accordance with the following priorities:

- protection of threatened species
- protection of areas of high natural value (Core Areas) (section 4.5)
- vigorous new and emerging weeds before they become established
- priority weeds listed under the Catchment and Land Protection Act 1994 (Vic.) (CALP Act)
- major weeds in highly infested areas especially The Island and Stony Creek
- weeds which adversely affect natural and amenity values in popular visitor areas.
- Liaise with park neighbours and local municipalities to reduce the planting of invasive species in adjacent areas and the dumping of garden waste.
- Monitor Burgan infestations in Special Protection Areas and determine whether control is necessary.
- Control foxes and feral cats in the park concentrating on areas of high fauna significance, e.g. core Brush-tail Phascogale localities and Powerful Owl sites.

- Promote responsible pet ownership in the local areas, especially properties adjoining the park (section 8.2).
- Continue to liaise with Melbourne Water, neighbouring Councils, Landcare and Friends groups, adjacent landholders and other relevant bodies, to coordinate pest plant and animal control works on both public and private land (sections 7.2, 8.2 and 8.3).
- Destroy European Wasp and feral honeybee colonies where they affect native species or visitor amenity and in other areas as appropriate.
- Undertake appropriate control measures, including monitoring for disease outbreak, in regards to the significant movement of soil and/or vegetation.
- Monitor known eucalypt dieback sites (including Jumping Creek and Black Flat) and determine the likely causes. Implement hygiene protocols and/or other management actions as appropriate to reduce the impacts where possible.

#### 5 STRATEGIES FOR CULTURAL VALUES CONSERVATION

#### 5.1 Indigenous cultural heritage

Warrandyte State Park is within the traditional lands of several Wurundjeri Clans of the Woiwurung language-speaking group.

The rich culture of the Wurundjeri is recognised and their perspectives and interests on the landscape, traditions, aspirations for the park, and rights in the land are acknowledged and respected by Parks Victoria.

A systematic archaeological survey was completed for the park in May 2004. A total of eight Indigenous sites are formally recorded on the Aboriginal Affairs Victoria Register from within the park. All sites comprise of stone artefact occurrences.

It has been assessed that the park contains two broad zones of archaeological potential. A zone of low-moderate archaeological sensitivity comprised of ridgelines and upper slopes in areas which have been less impacted by gold mining activities. The remainder of the park has been assessed as having low archaeological sensitivity which may be a reflection of the intensive nature of past land use through this area.

The park is also listed as a place having associations with congregations of people, burials and links to significant people.

An Aboriginal Reserve was established at Pound Bend in the 1840s, however the Aboriginal society at the reserve disintegrated rapidly following European settlement (also in the 1840s) and the reserve was soon abandoned (DCE 1990).

The confluence of Brushy Creek and the Yarra River (Birrarrung), near Mount Lofty, is said to be the birthplace of William Barak, a prominent Wurundjeri elder. As a child, William Barak, witnessed the signing of the treaty between elders of his tribe and John Batman. He passed away at Healesville in 1903.

All Aboriginal places, objects and relics in Victoria are protected under the *Aboriginal* and *Torres Strait Islander Heritage Protection* Act 1984 (Cwlth) and the Archaeological and Aboriginal Relics Preservation Act 1972

(Vic.). It is an offence to damage, interfere with or endanger an Aboriginal site, place or object without obtaining prior written consent from the scheduled Aboriginal Community.

Issues relating to the protection of such cultural heritage and the involvement of the scheduled Aboriginal Community are approached in accordance with these Acts. Under the Commonwealth Act, the Wurundjeri Tribe Land Compensation and Cultural Heritage Council Inc. is scheduled as the scheduled Aboriginal Community.

Issues relating to native title are dealt with according to the Native Title Act (section 2.5).

Parks Victoria works with the Wurundjeri people, the Wurundjeri Tribe Land Compensation and Cultural Heritage Council and Aboriginal Affairs Victoria regarding Aboriginal site identification, monitoring, protection and assessment and in other aspects of park management (section 8.2).

Parks Victoria respects the Traditional Owners' cultural lore, interests and rights in the land, and aspirations for *Country* and seeks to reflect these in planning and management (Parks Victoria 2005).

#### **Aims**

- Protect Indigenous cultural heritage from interference or damaging activities.
- Nurture Indigenous cultural lore relating to the park.
- Improve knowledge of archaeological sites and places and Aboriginal cultural values.
- Strengthen park management with input from Indigenous knowledge and assistance.

#### **Management strategies**

- Protect and care for all Indigenous places and objects from disturbance and damage in partnership with the Traditional Owners and in cooperation with the scheduled Aboriginal community, and AAV (section 8.3), and in accordance with:
  - relevant legislation including the Archaeological and Aboriginal Relics

Preservation Act and Aboriginal and Torres Strait Islander Heritage Protection Act

- Parks Victoria's Guidelines for Working with Aboriginal Communities and Protection of Cultural Sites (Parks Victoria 2002a).
- Ensure that all management actions are in accordance with the Native Title Act.
- Assess annual park programs to integrate relevant Indigenous practices and minimise the potential for impact of park management activities on Indigenous cultural heritage in consultation with the Traditional Owners, and the scheduled Aboriginal community.
- Continue to build relationships with the Wurundjeri community and relevant organisations including the Wurundjeri Tribe Land Compensation and Cultural Heritage Council and maintain the consultative process established.
- Respect Indigenous cultural lore and the Traditional Owners' aspirations for <u>Country</u> and in collaboration with them and the scheduled Aboriginal Community and in accordance with Parks Victoria's operational policies, reflect the Traditional Owners' cultural lore, interests and rights in all planning and management of the park (section 8.2).
- Maintain confidentiality in respect of Indigenous cultural lore, places, objects and aspirations, in accordance with the views of the Traditional Owners (sections 6.1 and 8.2).
- Assess and identify Indigenous cultural heritage suitable for promotion and interpretation in collaboration with Traditional Owners and in liaison with AAV (sections 6.1 and 8.2).
- Encourage and support in accordance with statewide prioritised programs the detailed archaeological assessment of the park in a working partnership with the Wurundjeri community and Aboriginal Affairs Victoria.

#### 5.2 Post-settlement cultural heritage

The park has a range of sites resulting from early mining and agricultural and horticultural development in the Warrandyte area (section 2.3).

The site of the first official discovery of gold in Victoria in 1851 is marked with a cairn at Andersons Creek. There are examples of surface working in the park and several quartz mines at Fourth Hill and Whipstick Gully. The Caledonia mine at Black Flat was the richest in Warrandyte, employing up to 250 men from 1904-1914 with a shaft about 200 m deep.

The 145-metre-long Pound Bend Gold Diversion (or Evelyn) Tunnel was constructed in 1870 to enable alluvial working along a five km bend in the Yarra cut off by the tunnel and a diversion weir. The tunnel is of State significance and is the only site in the park on the Victorian Heritage Register. The Island, near Warrandyte township, was also created when a bend in the Yarra River was cut off to allow mining of the riverbed. Heritage values of the mining sites in the park are generally of regional significance (Bannear 2000).

Most mining sites are accessible, providing good opportunities for interpretation and education (section 6.1), however they do have the potential for significant public risk. Parks Victoria, in consultation with the Victorian Inspector of Mines and Quarries, has established that unrestricted public access to a number of mines and adits are no longer permitted for safety reasons (section 6.9).

The Scouting movement has been associated with the park since the large world Jamborees of 1948 and 1955 and the 1961 World Rover Moot. Remains of these events are located within the park along the Yarra River frontage adjacent to the Clifford Park Scout Activity Centre.

Local heritage studies have identified several other sites in the park of regional significance: Stane Brae, Yarra Brae, Mount Lofty landscape, Black Flat, Fourth Hill and Whipstick Gully (Context 1997). These are recognised in the City of Manningham's planning scheme.

Existing cleared areas in the park are reminders of past orcharding at Pound Bend and Black Flat, and grazing at Stane Brae and

Mount Lofty. Some plantings remain at the site of the Stane Brae homestead and this area should be retained as a link with the past. Revegetation of cleared grassy woodland areas at Stane Brae with the original open grassy woodland is planned to maintain an open landscape that preserves the heritage values. There are also many other examples of agricultural and horticultural land use in the region.

Historic places and cultural places are to be managed in accordance with the *Heritage Act 1995* (Vic.) and ICOMOS Charter for Conservation of Places of Cultural Significance (Burra Charter) (Australia ICOMOS 1999).

#### **Aims**

- Conserve and protect places and values of historic and cultural significance.
- Provide opportunities for visitors to understand the significance of cultural values of the park, particularly those values relating to gold mining.

#### Management strategies

- Protect, conserve and interpret significant historic sites in accordance with the Heritage Act, Burra Charter, and Parks Victoria's operational policies, giving emphasis to major gold mining sites.
- Liaise with Heritage Victoria, local heritage and other stakeholder groups, and specialist staff on the further development of interpretation at specific gold mining sites.
- Provide opportunities for research into social history, technological change, past land uses and their impact on the environment or significance of particular heritage places and values.
- Document heritage values and record the information in Parks Victoria information systems.
- Assess the extent of threats to significant heritage places and develop a maintenance and threat remediation program.

#### 6 STRATEGIES FOR VISITORS

## 6.1 Information, interpretation and education

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

Parks Victoria delivers information, interpretation and education to visitors by various means, including its website, ranger patrols, Park Notes, signage, tourism brochures and other publications, displays, and licensed tour operators. These services may be developed and provided in collaboration with other agencies.

There are opportunities to improve information and interpretation services and assist with educational use of the park.

#### Information and orientation

Accurate pre-visit information is important for people interested in the park. This may include up to date printed information, e.g. Park Notes available via Parks Victoria's website (ParkWeb) or from Parks Victoria sites.

Orientation information is particularly important for visitors to Warrandyte State Park because of the park's fragmented nature and limited road access. Research indicates that street directories are an important source of information on the park. Orientation information will include appropriate direction signs (section 6.2) and up to date information in street directories and publications. Sites located at the end of narrow residential roads, e.g. The Boulevard and Koornong, should not be signposted because of the restricted access and limited facilities.

Information shelters with up to date information play a valuable role at the main visitor sites. The health benefits of walking are widely recognised and improved information and walking track signs will encourage greater use of the extensive network in the park.

#### Interpretation

The park's natural and cultural features and park management activities provide good opportunities for interpretation. Current interpretive themes in the park include gold mining heritage, the Yarra River habitat corridor, management of natural values and changing community attitudes to conservation.

The park has a series of interpretive signs at Pound Bend covering a range of themes and additional signs at Fourth Hill and Whipstick Gully on gold mining heritage. There are self-guided nature walks, with leaflets provided, at Jumping Creek and Black Flat. Interpretive material is also provided in several information shelters, however signs are in fair to poor condition and leaflets are dated. Information on ParkWeb provides an alternative to interpretive signs but requires action by visitors before a site visit. On-site interpretive material is much more likely to be effective for casual visitors but would incur significant capital and maintenance costs.

Provision of interpretive signs must accord with Parks Victoria regional objectives and should respond to a perceived demand, recognise vandalism threats, be consistent with the 'levels of service' for individual sites (table 4) and build on key messages for the park.

Visitor research has indicated that only about 29% of visitors are visiting the park for the first time. This means that there are many repeat visitors who are unlikely to read interpretive material they have seen before.

Pound Bend and Jumping Creek have been assessed as having the highest priority for interpretive signs. Given the range of themes and the easier access at Pound Bend, this area has the highest priority for new interpretive signs. The important gold heritage at Fourth Hill/Whipstick Gully is of regional/State significance and may warrant special consideration. Notes and maps available on ParkWeb are probably the most efficient means for delivery of interpretation to many visitors.

Holiday interpretive programs are provided in the park with moderate success. They focus on

explaining the park's values and management activities to local people and visitors.

A park-wide interpretive strategy would assist in developing objectives, messages and provide a framework with clear priorities for future interpretation facilities and services. A best practice model has been developed to guide park interpretive planning (NRE 1999b).

#### Schools education

The park is well located for many school and tertiary groups and provides good opportunities for education related to geology, flora and fauna, the Yarra River and park management. Gold era history is readily accessible in the park and provides a good opportunity to develop further educational materials or programs.

Park staff currently provide some assistance to school and other study groups using the park. There are opportunities for staff to provide brief introductory talks to more groups and promote use of site-specific information available on ParkWeb.

Education services could be extended by developing additional material for Parks Victoria's ParkWeb and involving volunteers, e.g. from the local historical society and Friends groups.

#### **Aims**

- Orientate visitors in relation to park localities, features and recreation opportunities.
- Encourage visitors' discovery, enjoyment and appreciation of the park's natural and cultural values.
- Inform visitors of appropriate behaviour during their park visit.
- Support education activities.

#### Management strategies

- Prepare and maintain up to date Park Notes and make these available on ParkWeb and in response to inquiries.
- Liaise with local government to include park information in municipal guides.
- Review and, where appropriate, provide 'lead-up' directional signs to Pound Bend, Jumping Creek and Mount Lofty.

- Continue to provide up to date information in information shelters at the main visitor sites.
- Review and update direction, regulation and walking track signs in the park. Include destinations and time and/or distance on track signs at Pound Bend, Black Flat, Jumping Creek, Fourth Hill/Whipstick Gully and Mount Lofty.
- Provide basic orientation information at other visitor sites, e.g. The Common, Timber Reserve and The Island.
- Prepare and implement an interpretation strategy for the park. Include objectives, messages, priorities and methods for delivery. Give consideration to:
  - interpreting key themes such as gold heritage, indigenous cultural heritage, the Yarra corridor and the management of natural values
  - concentrating on priority sites i.e. Pound Bend, Black Flat, Jumping Creek and Fourth Hill/Whipstick Gully
  - developing new signs interpreting key themes at Pound Bend
  - using ParkWeb to provide additional interpretive information on park features and values
  - providing targeted face-to-face activities in busy periods
  - encouraging and supporting volunteer and community involvement in interpretation and education activities (sections 5.1, 5.2, 8.1 and 8.2).
- Support park-specific material available on ParkWeb with targeted face-to-face information for education groups.

#### 6.2 Visitor access

The park is close to Melbourne but is generally not readily accessible by public transport (bus) and many sites can only be reached along narrow roads. Unlike many other parks, Warrandyte State Park does not have direct access off a main road and is difficult to promote to passing motorists.

Some visitors travel to the park on foot, by bicycle or by canoe along the Yarra.

Community groups regularly visit Pound Bend in small buses.

Good road access is provided to Jumping Creek and moderate access to Pound Bend, Whipstick Gully, Fourth Hill, The Common and Mount Lofty. Most other sites have limited access via winding gravel roads and tracks. Access to the popular visitor area at Pound Bend will continue to be limited by the narrow access along Pound Road and Everard Drive. Access roads are shown on figures 3a and 3b.

Unsealed parking areas are provided at most sites (table 4). Existing parking facilities generally cater adequately for likely visitor levels, however some improvements could be made to better cater for visitors with disabilities. The informality of the park's gravel parking areas complement nearby bush and sealing is undesirable unless erosion and sediment run-off becomes a problem.

Improved access to the west side of the Mount Lofty block is a high priority to increase use and enjoyment of the area's facilities and fine views. This would be subject to the proposed development of the adjacent Wittons Reserve by Manningham City Council.

Extensive access within the park is provided by a network of walking and unsealed, single lane 'management vehicle only' (MVO) tracks and several horse riding trails (table 3, figures 2, 3a, 3b, sections 6.3, 6.6 and 6.7).

There are opportunities to close short dead-end MVO tracks that are surplus to management and fire requirements which also are of minimal value to walkers and cyclists. This will assist to reduce habitat fragmentation, erosion and the spread of weeds, without unduly limiting public access and access for fire management purposes. Where MVO tracks are closed they shall be rehabilitated through reforming the ground to near original profile and by establishing appropriate vegetation.

Access for people with disabilities is generally adequate at Pound Bend, at Mount Lofty near the Lower Homestead Road visitor area and at Jumping Creek picnic area. Many other parts of the park have steep slopes and may present difficulties for people with limited mobility.

#### **Aims**

- Maintain the range of access in the park, particularly to main visitor areas.
- Recognise the limitations of road access to some parts of the park.
- Increase opportunities for disabled access particularly to the Yarra River.

#### **Management strategies**

- Continue to negotiate with Manningham City Council regarding improved access to the park via Wittons Reserve (section 8.3).
- Continue to liaise with Shire of Nillumbik and Manningham City Council to encourage appropriate maintenance of existing road access to the park (section 8.3).
- Maintain car parks at present capacities and retain predominantly gravel surfaces that complement local settings with improved all abilities access.
- Close and rehabilitate MVO tracks as shown on figures 3a and 3b. Undertake closures in consultation with local community and park users.

#### 6.3 Walking

The park provides a range of popular walking opportunities on walking and 'management vehicle only' (MVO) tracks (table 3). Walks are particularly popular at Jumping Creek and Pound Bend. Short to medium walking opportunities are provided in nearly all blocks.

Research indicates that Victorians want tracks with good surfaces, signs and information and many people prefer short tracks in attractive and diverse settings (Parks Victoria 2004).

The previous management plan (DCE 1990) proposed upgrading the existing walking track network and developing several new walking tracks, which included tracks in Mount Lofty, Stane Brae and Yarra Brae, and from Pound Bend to Yarra Valley Parklands. With the exception of the main Mount Lofty tracks, these tracks have not been built. Visitor numbers have not increased as previously expected and the demand for new tracks has been generally low.

The Yarra River is a key attraction for visitors and improved access to natural vantage points, including disabled access, could be provided, within environmental constraints.

Maintaining existing walking tracks to an appropriate standard and improving signs and promotion to increase use and enjoyment are important. Improved track signs and shade plantings at Mount Lofty are also desirable to improve the experience for walkers.

Provision of short sections of new track to link Mount Lofty, improve access along the Yarra near Wittons Reserve and provide access around the orchard site and complete a loop near the workcentre on Pound Bend would improve walking opportunities and reduce damage to soils and vegetation. Existing and proposed walking tracks are shown in figures 2, 3a and 3b and table 3.

Extension of the Main Yarra Trail to Warrandyte and the provision of additional walking tracks along the Yarra beyond the town have been proposed in other regional studies (MPW 1993; PV 1998; PV 2004; PV 2002b). Assessments of possible routes in Warrandyte State Park indicate that very extensive works would be required to construct an adequate track along steep sections of riverbank and escarpment in the park. At present, construction of such tracks is considered inappropriate but further investigation might reveal suitable routes in or outside the park.

The Whipstick Gully Access Track has a very low level of visitor use, and is considered unnecessary. Alternative access to Whipstick Gully is provided by the Whipstick Gully Road.

Informal walking currently occurs through Stane Brae and Yarra Brae mainly by experienced bushwalkers. As the route is not defined it has resulted in some track duplication. Track duplications also occur at Fourth Hill where rationalisation of informal walking tracks would enhance visitor experience and reduce fragmentation.

#### Aim

 Provide and maintain a range of opportunities for walking that enhance visitor enjoyment and appreciation, while minimising impacts on the park.

#### Management strategies

- Manage walking tracks in accordance with table 3 and promote walking opportunities (section 6.1).
- Improve viewing opportunities along the Yarra River at vantage points accessible from existing walking tracks.
- Provide new walking track links at Pound Bend, near Wittons Reserve and at Mount Lofty to standards specified in table 3 (figures 3a and 3b).
- Retain a single walking route through Stane Brae and Yarra Brae to allow bushwalkers to walk the length of the park, rehabilitate closed or unwanted informal tracks.
- Rationalise informal tracks across Fourth Hill, close and rehabilitate tracks shown on figure 3a. Undertake closures in consultation with local community and park users.
- Support investigations of possible future walking tracks along the Yarra.

### 6.4 Picnicking and associated activities

Pound Bend, Jumping Creek, Stiggants Reserve (Warrandyte township) and Wittons Reserve were identified in a regional study as the major visitor nodes in the area (PV 1998). Stiggants Reserve and Wittons Reserve are adjacent to the park and are managed by Manningham City Council.

While present facilities cater adequately for most existing and expected visitor needs some minor upgrading is required particularly signage. New visitor nodes proposed in the current management plan (DCE 1990) for Yarra Brae and on the old orchard site at Pound Bend are no longer considered appropriate.

TABLE 3 MANAGEMENT OF WALKING TRACKS

WALKING TRACK	PARK BLOCK	CURRENT GRADE	PLANNED GRADE	MANAGEMENT ACTION/COMMENTS
River Track	Pound Bend	2	2	Maintain to current standard.
Orchard Track	Pound Bend	-	2	New track, construct to grade 2 standard.
Ridge Track	Pound Bend	MVO	2	Manage as a walking track and maintain at grade 2 standard.
'Longshed' connection Track	Pound Bend	-	2	New track, construct to grade 2 standard.
Stiggants Access Track	Taroona	4	4	Maintain to current standard.
River Track	Norman Reserve	4	4	Footpad, not a constructed track. Basic maintenance as needed.
Bruce Bence Track	Fourth Hill	3	3	Maintain to current standard and rationalise track duplications.
Gold Memorial Loop	Fourth Hill	2	2	Undertake extensive improvements to track surface when resources available and rationalise track duplications.
Whipstick Gully Access Track	Fourth Hill	3	-	Track not required, close track.
Nature Trail	Black Flat	3	3	Review interpretation role. Upgrade if required.
River Track (Jumping Creek to Black Flat)	Jumping Creek/ Black Flat	4	4	Improve track surface when resources available.
River Track (to Blue Tongue Bend)	Jumping Creek	4	4	First km of track in good condition. Upgrade poor section when resources available.
Nature Trail	Jumping Creek	3	3	Review interpretation role. Upgrade if required.
Ridge Track	Jumping Creek	4	4	Upgrade when resources available.
Stane Brae to Yarra Brae	Stane Brae/ Yarra Brae	5	5	Retain as grade 5 trail and rationalise track duplications.
Clifford Park to Wittons Reserve	Adjacent to Clifford Park	-	4	New track, construct to grade 4 standard.
River Track (West)	Mount Lofty	3	3	Maintain to current standard.
Lower Homestead Rd River Track (Stage 1)	Mount Lofty	3	3	Maintain to current standard.
Lower Homestead Rd River Track (Stage 2)	Mount Lofty	-	3	New track, construct to grade 3 standard.
Lower Homestead Rd – Mount Lofty Link Track	Mount Lofty	-	3	New track, construct to grade 3 standard.

Note: All 'management vehicle only' (MVO) tracks in the park (figures 2, 3a and 3b) provide opportunities for walking and cycling, they are generally unsealed and will continue to be well maintained.

Key: Australian Standards Classification for walking tracks (AS 2156.1—2001):

- Grade 2 For a large number of visitors to walk easily in a natural environment with frequent encounters and a moderate to high level of interpretation and facilities.
- Grade 3 For visitors to walk in slightly disturbed natural environments, requiring moderate levels of fitness with occasional encounters and perhaps signage—interpretation and facilities are not common.
- Grade 4 For visitors to explore and discover relatively undisturbed natural environments along defined and distinct tracks with few encounters and no interpretive signage.
- Grade 5 For visitors with advanced outdoor knowledge and skills to find their way along often-indistinct trails to remote locations with frequent opportunities for solitude and few encounters.

The pleasant picnic facilities, and toilets provided at Pound Bend and Jumping Creek for day visitors have 'worn well' since construction in the 1980s, although some modest improvement is desirable to meet visitor expectations and protect soils and vegetation, e.g. near Pound Bend tunnel.

Basic picnic facilities are provided at Gold Memorial, Whipstick Gully, Fourth Hill, Black Flat and Mount Lofty. A range of day visitor facilities have been constructed at Mount Lofty consistent with master plans prepared for the area (EDGe 1998). In addition to these facilities, new toilet facilities are proposed at Mount Lofty.

There are two 'deep-drop' toilets at Black Flat. One has been associated with camping (section 6.8) while the other is serving walkers and picnickers requirements. This type of toilet system could cause environmental damage to sensitive areas close to the Yarra River.

#### Aim

 Provide and maintain picnic and toilet facilities that enhance visitor enjoyment and are consistent with the protection of park values.

#### Management strategies

- Improve and continue to manage day visitor areas at Pound Bend and Jumping Creek as the main visitor destinations in the park in accordance with table 4.
- Replace the 'deep-drop' toilet serving picnickers and walkers at Black Flat with a toilet in a more suitable location with an appropriate sewage treatment method.
- Provide new toilet facilities at Mount Lofty.
- Manage day visitor facilities shown on figures 3a and 3b, and in accordance with table 4.

# 6.5 Water-based activities

The park provides good access to the Yarra River for a range of water-based recreational activities including swimming, fishing, canoeing and kayaking.

The Yarra includes good rapids for canoeing and kayaking, particularly downstream from

Wittons Reserve. Water quality is regarded as generally suitable for swimming.

Whilst Melbourne Water has responsibility for managing the water, bed and banks of the Yarra River, the section of river within the Yarra River Heritage Area is managed in accordance with the Draft Heritage Rivers Management Plan (NRE 1997b). Parks Victoria has the responsibility of managing recreation activities on the Yarra River under the Water Industry (Waterways Land) Regulations.

Swimming is popular in summer, particularly at Pound Bend, Jumping Creek and Norman Reserve.

Fishing is undertaken from the river bank at several locations. Damage to fragile soils and vegetation has occurred in some areas causing loss of vegetation and erosion.

New access steps for canoeing have been constructed at Pound Bend and ongoing maintenance of all launching sites is important to ensure adequate safety. Signs showing river levels, distances between sites and warning of potential dangers, are also important at launching sites. Facilities for launching could be improved at Homestead Road (Mount Lofty) and adjacent to Clifford Park to reduce environmental impacts including soil erosion.

#### **Aims**

- Provide and maintain safe access to the Yarra for swimming, canoeing and kayaking.
- Provide for fishing consistent with protection of park values.

# Management strategies

- Continue to liaise with user groups and maintain canoe-launching sites to a safe standard.
- Improve launching facilities at Homestead Road (Mount Lofty) and adjacent to Clifford Park in consultation with user groups.
- Ensure provision of adequate safety signs for water users at popular sites.

TABLE 4 MANAGEMENT OF RECREATION FACILITIES

SITE	EXISTING/ PLANNED LEVEL OF SERVICE	CAR PARK SPACES	TOILETS	PICNIC TABLES	FIRE PLACES / BBQS	INFO SHELTER	WATER SUPPLY
Pound Bend	H/H	50	E	E/U	N	E	N
Jumping Creek	H/H	25	E	E/U	E/U	E	E
Mount Lofty	M/M	16	N/P	Е	N	E	N
Whipstick Gully	M/M	15	N	E	N	E	N
Fourth Hill/ Gold Memorial	M/M	15	N	E	N	Е	N
Whipstick Gully – Tunnel Street	B/B	5	N	N	N	N	N
Black Flat	B/B	10	E/R, P	N/P	N	N	N
Normans Reserve	B/B	10	N	E	N	N	N
Timber Reserve – Webb Street	B/B	5	N	N	N	N	N
Timber Reserve – Harding Road	B/B	5	N	N	N	N	N
The Common	B/B	4	N	N	N	N	N
Koornong	B/B	4	N	N	N	N	N
100 Steps	B/B	15	N	N	N	N	N

#### Key:

E Existing facility

U Upgrade existing facility

P Proposed facility

N No existing facility

R Removal of facility proposed

- Continue to provide access through the park for fishing. Monitor access routes for damage to soils and vegetation, and introduce seasonal or annual closures as necessary to protect park values and prevent permanent degradation.
- Liaise and continue to work cooperatively with Melbourne Water to provide effective overall management of the river and associated recreation activities, in accordance with the Draft Heritage Rivers Management Plan (NRE 1997b) and the Water Industry (Waterways Land) Regulations 2002 (section 8.3).

Levels of service

H – High – high level of visitor facilities and amenities provided.

M – Mid – moderate level of visitor facilities and amenities provided.

B – Basic – limited visitor facilities and amenities provided.

# 6.6 Cycling/Mountain biking

The park is a destination for road touring cyclists and there are excellent opportunities for 'bush riding' on the park's extensive network of 'management vehicle only' (MVO) tracks (figures 3a and 3b).

The level of bike riding in the park is relatively low, partly because there are no long-distance riding opportunities and that MVO's are generally not interconnected to provide circuit rides.

Cycling is currently permitted on the park's MVO tracks except for the Mt Lofty section of the park. Cycling is not permitted on the walking tracks because of their narrow width, the potential conflicts with walkers and other

park users and potential environmental impacts, however some low usage tracks maybe suitable to enable the creation of circuit rides.

Off-track riding (freeriding) particularly at Fourth Hill and Whipstick Gully has led to damage to soils and vegetation. Further action is needed to minimise these impacts on the park while continuing to permit on-track riding.

Parks Victoria and the mountain biking community will work together to enhance riding opportunities across the park and to minimise off-track riding.

The park is not suitable for organised cycling events due to its limited size, the popularity of walking and other nature-based activities and the erosion-prone nature of the soils. More appropriate sites are available elsewhere on public land, e.g. at Gembrook, Toolangi and Lysterfield.

The 'Mountain Bike Code' sets out guidelines for safe cycling and methods to minimise the impacts of bicycle riding on park values.

Long distance tour cycling opportunities are provided on the Main Yarra Trail, which is planned to eventually be extended to Warrandyte, providing a safe cycling and touring link to Melbourne.

#### **Aim**

 Provide for cycling while minimising environmental damage and conflicts with other recreation activities.

# **Management strategies**

- Permit cycling on all MVO tracks in the park including Mount Lofty as shown on figures 3a and 3b.
- Promote minimal-impact riding techniques through park information and the Parks Victoria website, and encourage local riding groups to promote the techniques through their networks and websites.
- Investigate the opportunities for creating extended circuit rides in consultation with the mountain biking community.
- Take action to minimise off-track cycling and implement measures to minimise any impacts in conjunction with the mountain

biking community and Mountain Bike Australia (MTBA).

## 6.7 Horse riding

Horse riding is a popular activity in some adjacent rural areas. There are two riding schools adjacent the park at Yarra Brae and The Common. An equestrian trail network on roadsides is linked with some designated firebreaks and MVO tracks in the park shown as 'Horse Trail' on figures 3a and 3b.

Unfortunately some horse riding has occurred off the designated routes in the park causing damage to soils and vegetation.

Research has shown that horses can spread weed seeds to natural areas and damage established trails, particularly in steep, wet or boggy areas. Damage can be minimised by locating trails on the perimeter of natural areas or in modified areas.

A better understanding of the park's natural values has been developed over the past decade and some significant areas have been identified that should be protected from impacts resulting from horse riding.

These include an area zoned Conservation at Yarra Brae, and an area with a Special Protection Overlay at Pound Bend. Relocation of horse riding from the significant areas at Yarra Brae is desirable to minimise environmental impacts and an alternative trail around Clifford Park should be investigated. Due to the very low usage of Pound Bend and a lack of suitable connections to other horse trails, riding should be removed from this area.

Horse riding is also relatively expensive to provide for because of high facilities maintenance and enforcement costs (Landsberg et al. 2001).

#### **Aims**

- Provide opportunities for horse riding consistent with protection of the park's values.
- Minimise conflicts between horse riders and other park users.

# Management strategies

 Permit horse riding only on MVO tracks designated as 'Horse Trail' and shown on figures 3a and 3b.

- Discontinue horse riding at Pound Bend.
- Investigate and implement relocating horse riding from Conservation Zone land at Yarra Brae to the existing MVO track on land zoned Conservation and Recreation near Clifford Park (figure 3a), in consultation with local horse riding groups and the wider community.
- Temporarily close sections of trail that are susceptible to damage in wet periods.
- Monitor the impact of horse riding on the park. Close trails or sections of trail as necessary to avoid unacceptable impacts on the park's natural values in consultation with user groups.

#### 6.8 Other activities

#### Camping

Camping has been a traditional use at Black Flat, particularly by scouting groups, but this use is now sporadic. Only 'deep-drop' toilet facilities are provided and the site is degraded, therefore camping is to be phased out. Alternative sites for scouts are available at Clifford Park in Wonga Park and Cresco Park at Pound Bend.

Other parts of the park are generally not suitable for camping because of site constraints.

Toilets and associated camping facilities are provided downstream at Longridge in the Yarra Valley Parklands.

#### **Prospecting**

Parks Victoria seeks to manage prospecting in cooperation with prospecting clubs and organisations in a manner that protects the natural and cultural features of the park. Prospecting activities demonstrate a clear link to the park's association with the history of gold discovery in Warrandyte (section 5.2).

Prospecting may be permitted in the park, under Section 32D of the National Parks Act. The areas set aside for prospecting using metal detectors, hand tools, pans and/or simple cradles are in the bed of Andersons Creek, Stony Creek and Jumping Creek, upstream from the Jumping Creek road bridge (figure 2). Only non-mechanical hand tools are permitted

for prospecting, excavations must be backfilled and vegetation must not be disturbed.

To date, the low level of prospecting in the park has resulted in little impact. Increased use may lead to damage of soil and vegetation.

The Prospectors and Miners Association of Victoria (PMAV) has developed a Prospectors and Miners Code, which sets out guidelines for safe prospecting and methods to minimise the impacts of prospecting on park values.

#### Orienteering

Use of the park for orienteering has declined in recent years. Parts of Mount Lofty, Pound Bend and The Common are suitable for orienteering but Fourth Hill and Black Flat are not safe because of the presence of mining sites. Small-scale use by permit is unlikely to adversely affect the park.

# **Abseiling**

Abseiling is undertaken in a small quarry at Whipstick Gully. Impacts are low.

## Licensed tour operators

Parks Victoria's licensed tour operators play a key role in nature-based tourism in Victoria by offering guided park tours and supported recreation activities, and information that promotes park values and appropriate use.

About ten licensed tour operators advertise guided activities in the planning area, including canoeing, bushwalking and horse riding, but use levels are low.

#### Dogs

Dogs can have impacts on bird populations and other wildlife. Their presence, scent and noise may disturb native animals and prevent roosting and feeding. Some visitors, particularly small children, may be annoyed or intimidated by unrestrained dogs. Droppings are a potential source of pollution and can reduce amenity of visitor sites.

While dogs on-leads are currently permitted at Normans Reserve, Taroona and Koornong to provide opportunities for local residents to walk dogs, dog owners are encouraged to be responsible and immediately collect their dog's droppings and remove them from the park at the end of their visit.

Dogs are considered incompatible with the aims and objectives of the other parts of the park.

#### Aim

 Provide opportunities for a range of appropriate recreation activities.

#### Management strategies

- Discontinue camping in the park and remove the camper's toilet at Black Flat. Promote nearby alternative sites.
- Continue to permit non-mechanical prospecting in the bed of Andersons Creek, Stony Creek and Jumping Creek (upstream of bridge) (figure 2).
- Monitor the impact of prospecting and take appropriate action should unacceptable impacts occur, in consultation with prospecting groups.
- Work cooperatively with the PMAV to encourage prospectors to adhere to the 'Prospectors and Miners Code'.
- Continue to permit small-scale orienteering in appropriate parts of Mount Lofty, Yarra Brae and The Common only, in accordance with the National Parks (Park) Regulations 2003 and Parks Victoria's operational policies.
- Continue to permit low-impact abseiling in the quarry at Whipstick Gully, consistent with Parks Victoria's operational guidelines.
- Ensure all tour operators using the park are licensed and promote awareness of Adventure Activity Standards and Minimal Impact Guidelines.
- Continue to work with licensed tour operators and the tourism industry to assist with the delivery of appropriate park information.
- Encourage licensed tour operators to develop and deliver guided tours that enhance visitors' park experience (sections 6.1 and 8.2).
- Continue to permit 'on-lead' dog walking at Normans Reserve, Taroona and Koornong only.

# 6.9 Public safety

Potential hazards and risks to visitors in the park include wildfire during periods of high fire danger, steep slopes and rocks, falling tree limbs and the inherent dangers of water-based activities. Old mine shafts and workings at Whipstick Gully/Fourth Hill, Black Flat and the Timber Reserve are also a potential hazard to visitors. Consistent with a detailed assessment of risks at Pound Bend and Whipstick Gully (Marsh & McLennan 1997) and evaluations by the Victorian Inspector of Mines and Quarries, unrestricted public access to some mines and adits is no longer permitted. measures to reduce risks have been undertaken at old mining shafts and improved signs regarding water activities have been installed.

Parks Victoria is not the lead agency for most emergency response situations, but provides a support role for emergency incidents where required.

Relevant agencies respond to incidents within the park in accordance with the City of Manningham and Shire of Nillumbik's municipal emergency response plans. Parks Victoria's response to emergency incidents during normal operating activities within the park is guided by the Emergency Management Plan for Warrandyte State Park (PV 2004) and Port Phillip Region Fire Protection Plan for Public Land (section 4.7).

Risks are regularly assessed and remedial action taken in accordance with Parks Victoria's Risk Management Guidelines.

Clear orientation, direction and regulation signs would assist visitors to locate entry and exit points in the park and promote safe use of the park and river.

# Aims

- Promote public safety in use of the park.
- Comply with Parks Victoria's guidelines on risk management.

# Management strategies

- Manage public safety in the park in accordance with:
  - Parks Victoria's operational guidelines
  - the Fire Protection Plan (section 4.7)

- the Emergency Management Plan.
- Ensure the Emergency Management Plan for the park is updated.
- Provide and maintain safety and information signage at key locations in the park (section 6.1).
- Regulate access to old mining sites at Whipstick Gully and Fourth Hill, consistent with protecting natural and

- heritage values, in consultation with the Warrandyte Mines Community Consultative Committee.
- Monitor risks to visitor safety at Whipstick Gully/Fourth Hill, Black Flat and Timber Reserve mine sites and where necessary undertake appropriate works for the protection and safety of visitors.
- Audit identified risks and hazards within the park on a regular basis.

# 7 STRATEGIES FOR AUTHORISED AND ADJACENT USES

# 7.1 Authorised uses and occupancies

There are a number of uses and activities that may be permitted in the park, subject to specified conditions to minimise impacts. The operation of public utilities in the park is subject to consent from the Secretary to DSE with conditions to minimise effects on the park and visitors

A number of public utilities permitted in the park under the National Parks Act include - power lines, a water pipeline, drains, telephone cables and sewerage lines. Impacts are minimised by conditions attached to consents.

A number of unlicensed private pumps and associated structures are located in the park along the Yarra. Access to these can have a negative impact on park vegetation and amenity. Melbourne Water, under particular terms and conditions permits water diversions in accordance with the *Water Act 1989* (Vic.).

There are no grazing licences in the park. Grazing ceased in 1996 as a result of LCC recommendations. Grazing is considered inappropriate for vegetation regeneration.

There are no commercial businesses operating in the park, apart from guided tours and recreational activities provided by licensed tour operators (section 6.8).

#### Occasional uses

Weddings and other small-scale events and other activities are conducted in the park from time to time. Large-scale organised events are not appropriate in the park because of space, access and facility limitations and potential impacts on other users and natural values.

All research and monitoring planned in a park by external organisations or individuals, requires a research permit under the National Parks Act.

Parks Victoria recognises the significant role that the filming and photography industry plays in the social and economic well-being of the community, and in providing for these activities seeks to ensure protection of the natural and cultural values of the park. This is

achieved through a permit system for all filming and photography conducted as part of a trade or a business. Amateur photographers or people taking film or video for personal or hobby interest do not require a permit.

Protected areas are generally avoided as locations for Defence Force training exercises, although they occasionally host search and rescue, field navigation and incident response activities. Adventure training and field navigation exercises by Defence Force units may be undertaken subject to a permit outlining conditions to ensure minimal impacts on the park.

#### Aim

 Manage authorised uses in accordance with the National Parks Act and minimise their impact on park values.

#### Management strategies

- Ensure all existing public authority installations and services in the park are authorised by a Section 27 consent under the National Parks Act, and include conditions to ensure construction, operation and maintenance are consistent with protection of the park's natural and cultural values and amenity of visitors.
- Ensure any new proposals for utilities in or adjacent to the park are assessed for their conservation and landscape impacts.
- Identify irregular occupancies or use of the park and take action in accordance with Parks Victoria's guidelines.
- Review the use of water extraction infrastructure in the park and, in cooperation with Melbourne Water, phase out. Encourage Melbourne Water to not permit new water extraction licences.
- Manage authorised occupancies and activities in accordance with the National Parks Act, and minimise their impacts on park values. Continue to permit compatible low-key community events and activities at appropriate sites in accordance with Parks Victoria's operational policies.

- Permit Defence Force training or field navigation exercises in the park in accordance with Parks Victoria's operational policies and relevant permit conditions.
- Manage commercial filming and photography in accordance with Parks Victoria's operational policies.

# 7.2 Park boundaries and adjacent uses

# Park neighbours

The park has a very long boundary, 74 km, with numerous abutting private properties. Support is vital for a park with such a large number of neighbours and strong neighbour relations are essential for the protection and ongoing viability of the park.

Involving neighbours in park planning and management, and community education about park values is an important ongoing task. The Good Neighbour Program is assisting with this activity.

Encroachments have occurred along parts of the boundary, particularly at Pound Bend and Jumping Creek. Site assessments indicate that problems include removal of vegetation, pets in the park, dumping of rubbish and garden waste, storage of firewood and construction of fences, sheds and gardens. Possible actions identified include liaison with owners, letter drops, boundary surveys and input into revegetation and weed control. A long-term cooperative approach will be needed, probably with phased-in deadlines for removal of structures and materials.

Scouting groups are important park neighbours, with a high level of use of Clifford Park and adjacent park areas. There are also opportunities for park neighbours to undertake indigenous planting near boundaries to improve habitat and landscape values.

# Adjacent uses

There are several opportunities to enhance and link habitat corridors in and near the park:

 strategic proposals to strengthen the habitat corridor along the Yarra River and the link to Kinglake National Park will

- increase the chances of long-term survival of flora and fauna in the park
- the acquisition of blocks zoned Public Acquisition Overlay at Pound Bend and near Black Flat (following normal acquisition processes) would consolidate important blocks in the park in the longterm
- upgrading and complementary
  management of Wittons Reserve at Wonga
  Park by Manningham City Council would
  substantially improve public use of the
  area including access along the Yarra
  upstream into Mount Lofty and
  downstream to Yarra Brae. A detailed
  master plan has been prepared by
  Manningham City Council to guide
  upgrading of the site and associated
  walking tracks
- several areas of Crown land near the park may be suitable for addition to the park although most have serious weed infestations. These include a strip of land along the north side of the Yarra from Pigeon Bank Creek to Mount Lofty recommended for addition to the park by the former LCC (section 2.5), and areas beside the access road to Whipstick Gully and along Andersons Creek
- seven unused road reserves located in the park could be beneficially added to the park to rationalise management (figure 2).

#### Aims

- Increase awareness and support for the park and maintain good relations with neighbours and the local community.
- Remove encroachments into the park.
- Enhance habitat corridors associated with the park.
- Consolidate the park area as opportunities
- Encourage complementary management of Wittons Reserve.

# **Management strategies**

 Maintain liaison with the local community and landowners and, as appropriate, involve them in relevant aspects of planning and management to resolve

- matters of joint interest that affect the park.
- Encourage adjacent landowners to develop native vegetation buffers alongside the park, particularly where the park is narrow.
- Continue to apply and encourage the application of the Good Neighbour Program to management issues on or near the boundary of the park.
- Liaise with the local community, Manningham City Council and Shire of Nillumbik to enhance community understanding of responsible pet ownership, planting of indigenous vegetation and problems associated with environmental weeds.
- With the support of the park's neighbours, progressively implement a program to remove intrusions and repair impacts from boundary encroachments through community education, letters, site visits, surveys and follow-up inspections, where necessary.

- Encourage scouting groups to protect natural values near scout camps.
- Support the development of habitat corridors involving the park.
- Liaise with DSE to investigate options for seeking incorporation of other adjacent intact high value uncommitted Crown lands into the park.
- Pursue opportunities to consolidate the park through the acquisition of neighbouring land covered by a Public Acquisition Overlay as it becomes available for sale.
- Seek the incorporation of unused road reserves into the park.
- Continue to negotiate with Manningham City Council regarding complementary management of Wittons Reserve and minimise impacts of erosion on the park.

# 8 STRATEGIES FOR COMMUNITY AWARENESS AND INVOLVEMENT

# 8.1 Community awareness

Raising the community's awareness of the park's values is an essential step to develop its sense of custodianship for the park and engagement in the area's management. The community is more likely to develop a sense of custodianship for the park if its views and values are respected and park-related social networks are encouraged and supported. A strong connection with the park among visitors and in the local and wider community will assist in broader public education, raising awareness and reaching others in the community.

Education and interpretation programs (section 6.1) play an important role in raising the awareness of the park 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.

#### **Aims**

- Increase the community's awareness and understanding of the park's values and management activities.
- Build a sense of shared ownership and custodianship for the park in community groups and individuals.

# **Management strategies**

- Promote opportunities for community members to improve park management through taking shared responsibility and becoming directly involved.
- Increase public awareness and understanding of significant park management activities, including fire management and fuel reduction burning, pest plant and animal control, ecological management and the conservation of threatened species.
- Promote information on park features, values and management activities to the local community.

- Communicate to the broader community the work of Friends, volunteers and community groups.
- Liaise with the local community and Manningham City Council to enhance community understanding of responsible pet ownership, planting of indigenous vegetation and problems associated with environmental weeds.

# 8.2 Community participation

The participation of community groups and individuals in the park's management is pivotal in effective long-term planning, use and care of the park's values.

Volunteers and community groups make valuable contributions to park management projects. They bring diverse and valuable information, knowledge, skills and experience to the park that may otherwise not be to available to the park's managers. Volunteers also bring great enthusiasm and add valuable resources to assist with the care of the park.

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 and with Parks Victoria to achieve common goals.

The Traditional Owners have considerable interest in and aspirations for the park 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 them will be essential to the reflection of the Traditional Owners' cultural lore in the park's planning and management and reconciliation of their interests and aspirations with those of other members of the community.

Working partnerships have become an increasingly important and valued component of park management in recent years.

Parks Victoria is working with the Indigenous community as a partner in practical park management. Organisations involved include the Wurundjeri Tribe Land and Compensation

Cultural Heritage Land Council and Aboriginal Affairs Victoria.

Community groups, particularly the Friends of Warrandyte State Park, Osborne Landcare Group, Friends of The Island, Friends of Stony Creek, the Warrandyte Historical Society and the Warrandyte Community Association have long been valuable partners. The Friends of Warrandyte State Park is one of the most active and successful in the State with over 230 members. The group has made a major contribution with the propagation of indigenous plants in a nursery at Pound Bend, restoration of vegetation, monitoring of flora and fauna and success in obtaining grants.

Conservation Volunteers Australia, Greening Australia, Green Corps and schools also assist with the park's conservation programs and there are opportunities to increase the involvement of service clubs and recreational user groups.

Manningham City Council has a series of programs that support environmental works and partnerships in the community, e.g. Parkcare and the Local Assistance Fund. The Council also runs a course on property management and seminars on the environment.

#### Aims

- Strengthen park management with community knowledge and assistance.
- Build and maintain strong working partnerships to assist with sound park management.
- Encourage, assist and support volunteer groups to undertake appropriate management activities in the park.

# Management strategies

- Work closely with the Wurundjeri community and relevant organisations to strengthen park management and improve the knowledge of Indigenous culture, sites and places.
- Continue to build, and strengthen and maintain relationships with relevant Indigenous communities. In particular, seek to further develop a close inclusive working partnership with the Traditional Owners and cooperation with the scheduled Aboriginal community.

- Support Friends groups and other volunteers and diversify the volunteer program at the park, e.g. with service and recreational user groups.
- Provide support to the nursery managed by the Friends of Warrandyte State Park.
- Assist volunteer groups to pursue funding for park projects.

# 8.3 Agency partnerships

Although Parks Victoria is responsible for overall management of the park, other agencies are responsible for planning, managing or regulating certain activities in the park.

All activities relating to the park that are carried out by Parks Victoria or other agencies need to accord with all legislation and government policy and, as far as practicable, be consistent with agencies' policies and guidelines. To ensure this occurs, park staff must work closely with staff of relevant agencies and collaborate in implementing activities where appropriate.

Parks Victoria works actively with Manningham City Council, Shire of Nillumbik, Melbourne Water, DSE, the CFA and other organisations in managing the park.

DSE establishes parks, and provides strategic direction and policy advice for the management of the park, including flora and fauna values and threatening processes.

The Country Fire Authority (CFA) is a volunteer-based community service, which responds to a variety of fire and emergency incidents.

Melbourne Water is responsible for providing retail, urban and rural water customers with water and wastewater services in the Melbourne Metropolitan area. Melbourne Water manages the water, bed and banks of the Yarra River and streams within the park (section 4.4).

Port Phillip and Westernport Catchment Management Authority is responsible for ensuring the protection and sustainable development of land, vegetation and water resources within the region, including the preparation of the regional catchment strategy to address the impact of land use and management on the catchment (section 4.4).

Manningham City Council and the Shire of Nillumbik administer the planning schemes for land adjacent to the park, including assessing developments that could have an impact on park values. Parks Victoria provides input into planning applications via DSE to ensure that park values are protected. The councils also manage areas of land adjacent to the park, and coordinate community programs relating to responsible pet ownership etc (sections 7.2 and 8.2).

Through Aboriginal Affairs Victoria (AAV), the Department of Victorian Communities has responsibility for administering legislation protecting cultural heritage (section 5.1). AAV and the Central Victoria Cultural Heritage Unit advise Parks Victoria on Indigenous matters.

Heritage Victoria (DSE) is the 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.

Victorian agencies work cooperatively with the Commonwealth Department of the Environment and Heritage on the management of regional ecosystem conservation issues.

#### Aim

 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 park.

#### Management strategy

- Work collaboratively with all agencies to implement the plan vision and direction. In particular work with:
  - DSE to regarding future planning and management, including protection of

- flora and fauna from potentially threatening processes and fire management
- Melbourne Water to ensure management of water extraction infrastructure in the park is consistent with the protection of park values (section 7.1), and in undertaking cooperative weed control works on the banks of the Yarra River (section 4.8)
- Manningham City Council and the Shire of Nillumbik via DSE regarding administration of the planning scheme, including input into adjacent or nearby developments that may impact on the park and the promotion of responsible pet ownership (section 7.2)
- Country Fire Authority and DSE to ensure safety and protection of park values in managing fire within and around the park
- Port Phillip and Westernport CMA to reduce the impacts of land use and management on the park and the development of appropriate actions in the Regional Catchment Strategies
- AAV and the Central Victoria Cultural Heritage Unit on issues relating to Indigenous affairs and to ensure compliance with the Archaeological and Aboriginal Relics Preservation Act and the Aboriginal and Torres Strait Islander Heritage Protection Act
- Heritage Victoria on heritage management, and compliance with the Heritage Act
- Commonwealth Department of the Environment and Heritage on the management of regional ecosystem conservation issues.

# 9 PLAN IMPLEMENTATION

# 9.1 Delivery and reporting

A range of approaches will be used to implement strategies in this plan. Some will be undertaken as part of routine management activities such as ranger visits; others will be addressed as part of regional programs undertaken across the State each year.

A priority list of all the strategies in the plan will be used to guide routine management, and identify detailed actions in annual regional programs. Priorities for regional programs vary from year to year depending on available resources and government priorities.

At the end of each year, progress towards implementing the plan will be reviewed and the priority list updated. Staff report internally against 'on time and within budget' delivery of regional programs and whether the completed strategy has achieved the objective. Parks Victoria reports annually to government on the overall delivery of regional and divisional programs. This broader reporting on management performance is available in annual reports prepared on the National Parks Act and Parks Victoria.

During implementation of the plan, Parks Victoria will work in partnership with Traditional Owners and the scheduled Aboriginal Community. Ongoing collaborative activities with the relevant Indigenous communities, interested members of the community, scientists and agencies in realising the vision and management directions for the park will be especially important as outlined in previous sections of the plan.

Implementation of the plan will be consistent with Parks Victoria's commitment 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.

In implementing the plan, management will respond to monitoring and research information as it emerges. Parks Victoria's environmental management framework makes this possible. Based on the International Standard for Environmental Management

Systems (ISO 14001), the framework ensures that the future condition of values is considered in identifying threats and developing actions to ameliorate them. Over time the success of actions is reviewed against set objectives to ensure ongoing learning and refinement of management. The selection of actions and treatments of threats are guided by the precautionary principle. Management options are evaluated on the basis of least impact on the environment. Treatment of threats with a potential for serious damage that is not addressed in the plan will not be postponed for lack of information.

Parks Victoria will use a variety of means to report to the community about the progress of implementation of the plan. The primary means will be through routine liaison between Parks Victoria, interested groups and individuals from the local community and relevant government agencies. In addition to giving regular updates, there will be opportunities for input by interested members of the community into annual priority setting and feedback on management performance. Events such as park open days and community and volunteer forums will offer similar opportunities for reporting and discussions about annual programs.

The results of monitoring and research work will continue to be available to the community as technical reports available on Parks Victoria's website, www.parkweb.vic.gov.au.

Parks Victoria will also report on evaluation of the plan (section 9.3) at the start of the new or revised plan, through routine liaison and community forums and in the subsequent draft plan.

Future State of the Parks reports, which will be available on the Parks Victoria's website, will also include information on management performance in relation to the park.

# 9.2 Plan amendment

During the 10-year 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.

Circumstances that might lead to amendment of the plan include:

- the results of monitoring or research, management experience or new information (such as greater understanding of new threatening processes) 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 (such as significant boundary changes).

The plan may also be amended if an activity, development or use which conflicts with the provisions of the plan is approved by government (such as native title outcomes).

## 9.3 Evaluation and review

Periodically through the life of the plan, Parks Victoria will assess overall progress towards implementing the strategies in the plan and will also assess progress towards achieving the plan vision and directions. These evaluations will inform a decision about whether a new or revised plan is required. The achievements of the plan will be assessed by considering performance areas such as:

#### **Protecting natural values**

- Overall progress towards achieving environmental conservation objectives:
  - restoring and maintaining all areas of high natural value (Core Areas) to good condition
  - restoring the middle and upper storey structure of threatened vegetation communities with representative character species
  - restoring or reinstating the middle and upper storey structure of communities in the Conservation Zone.
- Meeting prescribed burning targets.
- Meeting community expectations as a good environmental manager.
- Timely management intervention to minimise threats.

- Minimal impact of permitted uses.
- Compliance with park regulations.

# **Protecting cultural values**

- Progress towards working with Traditional Owners in managing the park and in protecting and interpreting Indigenous cultural heritage.
- Timely management intervention to avoid damaging activities and threats.
- Overall progress towards achieving directions for Indigenous places and objects.
- Overall progress towards achieving directions for historic places.
- Meeting community expectations as a good manager of historic places.

# Managing recreation and visitor use

- Maintaining the levels of information and interpretation (section 6.1).
- Meeting and maintaining the levels of service for visitor facilities (table 4).
- All facilities meet public safety standards and the majority of facilities with more than five years life expectancy.
- Meeting agreed track standards (table 3).
- All 2WD roads in at least fair to good condition.
- Minimal impact from visitors, including individuals and school and tour groups.
- Maintaining visitor use levels.
- Maintaining visitor satisfaction with adequacy of recreational opportunities.
- Meeting community expectations in relation to Parks Victoria's management of the park.
- Improving community and visitor awareness.

# Providing for research and promoting understanding

 Progress towards reflecting Traditional Owners' wishes and aspirations will be reflected in the park's planning and management.

- Improving understanding of the key threats.
- Ongoing Traditional Owners and other community participation.
- Ongoing partnerships with Indigenous communities and wider community participation.

Methods for evaluating the benefits of the plan are likely to be refined over time. Parks Victoria has 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. Parks Victoria also partners with external research agencies to enhance knowledge and understanding of the values and features of the park and inform management decisions particularly in relation to pest and fire management. By using sound monitoring and assessment methods this monitoring and research work will strengthen the basis for comparing management performance over time.

## **REFERENCES**

- ANZECC 2001, National Strategy for the Conservation of Australia's Biological Diversity. Australia and New Zealand Environment and Conservation Council, Environment Australia, Canberra.
- Australia ICOMOS 1999, The Australian ICOMOS Charter for the Conservation of Places of Cultural Significance (the Burra Charter), revised edition, Australian National Committee of the International Council of Monuments and Sites Inc., Canberra.
- Beardsell, C. 1997, Sites of Faunal and Habitat Significance in North East Melbourne, Shire of Nillumbik.
- Beardsell, C. 2002, Vegetation Community Survey and Sites of Botanical Significance in Warrandyte State Park and Conservation Reserves, Parks Victoria, Melbourne.
- Context 1997, *Wonga Park Heritage Study*, City of Manningham.
- COAG 1992, National Strategy for Ecologically Sustainable Development, Council of Australian Governments, Ecologically Sustainable Development Steering Committee.
- DCE 1990, Warrandyte State Park

  Management Plan, Dept of Conservation
  and Environment, East Melbourne.
- DSE 2003, Advisory List of Threatened Vertebrate Fauna in Victoria 2003, Department of Sustainability and Environment, Victoria.
- DSE (database) 2005a, Flora Information System, Department of Sustainability and Environment, Melbourne.
- DSE (database) 2005b, Victorian Flora Species List (electronic flora database). Biodiversity and Natural Resources, Department of Sustainability and Environment, Melbourne.
- DSE (database) 2005c, Atlas of Victorian Wildlife, Department of Sustainability and Environment, Melbourne.
- DSE 2005a, Advisory List of Rare or Threatened Plants in Victoria 2005.

- Department of Sustainability and Environment, Victoria.
- DSE 2005b, *Biosites Maps and Reports Port Phillip Region*, State Government of Victoria, Department of Sustainability and Environment, Melbourne.
- DSE 2006, Code of Practice for Fire Management on Public Land, Department of Sustainability and Environment, Melbourne.
- EDGe 1998, Mount Lofty Master Plan, for Parks Victoria, EDGe Environmental Design Group, Melbourne (unpub).
- Landsberg, J., Logan, B., Shorthouse, D. 2001 Horse riding in urban conservation areas: Reviewing scientific evidence to guide management, *Ecological Management & Restoration*, Vol 2 No 1.
- LCC 1994, *Melbourne Area District 2 Review Final Recommendations*, Land Conservation Council, Melbourne.
- Mansergh, I., Beardsell, C., Bennett, S., Brereton, R., O'Connor, W., Sandiford, K. and Schulz, M. 1989, Report on the sites of zoological significance in the Upper Yarra Valley (western sections) and Dandenong Ranges. Report No. 25, Upper Yarra Valley and Dandenong Ranges Authority.
- MCC 2005, Warrandyte River Reserve Management Plan, Manningham City Council
- Marsh & McLennan 1997, Warrandyte State Park Risk Evaluation and Risk Management Report (unpub).
- MPW 1993, *The Middle Yarra Concept Plan Bourke Road to Watsons Creek*, Melbourne Parks & Waterways, Melbourne.
- NRE 1997a, *Victoria's Biodiversity Directions in Management*, Department of Natural Resources and Environment, Melbourne.
- NRE 1997b, Heritage Rivers and Natural
  Catchment Areas Draft Management Plans,
  Volume 3 Gippsland, Department of
  Natural Resources and Environment,
  Melbourne.

- NRE 1999a, *Yarra Catchment Action Plan*, Department of Natural Resources and Environment, Melbourne.
- NRE 1999b, Best Practice in Park
  Interpretation and Education, Report to
  ANZECC Working Group, Department of
  Natural Resources and Environment,
  Melbourne.
- NRE 2000, Port Phillip Region Fire Protection Plan for Public Land within the East Port Phillip Fire District, Department of Natural Resources and Environment, Victoria.
- NRE 2002, Victoria's Native Vegetation: A Framework for Action, Department of Natural Resources and Environment, Melbourne.
- NRE in prep., A typology for vegetation in Victoria: Towards a census of Victorian plant communities, Department of Natural Resources and Environment, Melbourne.
- PPWPCMA 2004, Port Phillip and Westernport Regional Catchment Management Strategy, Port Phillip and Westernport Catchment Management Authority.
- Parks Victoria 1998, *A Guide to Priorities for Melbourne's Open Space Network Yarra*, Parks Victoria, Melbourne.

- Parks Victoria 2000, *State of the Parks 2000*, Parks Victoria, Melbourne.
- Parks Victoria 2002, Guidelines for working with Aboriginal communities and protection of cultural sites, Parks Victoria, Melbourne (unpub).
- Parks Victoria 2003, *Heritage Management Strategy*, Parks Victoria, Melbourne.
- Parks Victoria 2005, *Indigenous Partnership Strategy and Action Plan*, Parks Victoria, Melbourne.
- PV 2004, *Victorian Trails Strategy 2005-2010* Victorian Trails Coordinating Committee, Melbourne.
- Parks Victoria 2002, *Linking People and Spaces*, Parks Victoria, Melbourne.
- Tourism Victoria 2000, *Nature Based Tourism Directions and opportunities for Victoria* 2000 2003, Tourism Victoria, Melbourne.

#### **Personal communication**

Cam Beardsell, Local Naturalist, May 2002 David Farrar, Parks Victoria, May 2002 Bruce Fuhrer, Friends of Warrandyte State Park, May 2002.

# **GLOSSARY**

**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 that drains to a watercourse or estuary.

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.

**Country** – all of nature, culture and spirituality relating to an area.

Crown land —land belonging to the State.

**Cultural lore**— tradition about stories, songs, rituals, ceremonies, dances, art, customs and spiritual beliefs.

**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.

**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.

**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.

**Indigenous cultural heritage** – the cultural lore, places and objects of significance to Indigenous people in accordance with tradition.

**Indigenous people** – people who are descendants of Aboriginal Australians.

**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.

Nature-based tourism – tourism that provides a range of experiences associated with the natural environment, generally related to outdoor activity.

**Pest -** exotic organisms (plants, animals or pathogens) that, if introduced outside their natural or previous distribution, they cause 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.

**Relevant Indigenous communities** – includes the Traditional Owners and the scheduled Aboriginal Community for the area including the park.

**Scheduled Aboriginal community** – body/s scheduled as the Local Aboriginal Community under the Aboriginal and Torres Strait Islander Heritage Protection Act relating to the park.

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

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

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

**Traditional Owners** – communities that reasonably assert an association with the park area that is based on direct descent from the original Indigenous custodians of *Country*, in accordance with Indigenous tradition.

**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.

#### Acronyms

AAV – Aboriginal Affairs Victoria.

**ANZECC** – former Australian and New Zealand Environment and Conservation Council. ANZECC was represented by government Ministers and guided national policy and programs relating to the management of the environment and its conservation.

**DPI** – Department of Primary Industries.

**DSE** – Department of Sustainability and Environment.

**ECC** – Environment Conservation Council.

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

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

PV – Parks Victoria.

**VEAC** – Victorian Environmental Assessment Council

#### APPENDIX 1 MANAGEMENT OBJECTIVES FOR STATE PARKS

Management objectives for national and State parks included on Schedule Two or Two B 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 Legislation and Parliamentary Documents website www.dms.dpc.vic.gov.au.

# 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;
- (c) to make provision in accordance with the foregoing for the use of parks by the public for the purposes of enjoyment, recreation or education, and for the encouragement and control of that use.

## Section 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 subparagraphs (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.

# APPENDIX 2 THREATENED FLORA

SCIENTIFIC NAME	COMMON NAME	Conservation status	
		Australia	VICTORIA
Acacia leprosa (Dandenong Range variant)	Dandenong Range Cinnamon Wattle		r
Acacia verniciflua (Bacchus Marsh variant)	Bacchus Marsh Varnish Wattle		v
Caladenia australis	Southern Spider-orchid		k
Caladenia oenochila	Wine-lipped Spider-orchid	K	v
Caladenia prolatus	Fertile Finger-orchid		k
Caladenia venusta	Large White Spider-orchid	R	r
Billardiera scandens var. brachyantha	Velvet Apple-berry		r
Bolboschoenus fluviatilis	Tall Club-sedge		k
Callitriche sonderi	Matted Water-starwort		k
Cardamine papillata	Forest Bitter-cress		v
Carex chlorantha	Green-top Sedge		k
Corunastylis despectans	Sharp Midge-orchid	K	
Corybas fimbriatus	Fringed Helmet-orchid		r
Desmodium varians	Slender Tick-trefoil		k
Dianella sp. aff. longifolia (Benambra)	Arching Flax-lily	K	v
Eucalyptus yarraensis	Yarra Gum		r
Geranium solanderi var solanderi s.s.	Austral Cranesbill		v
Geranium sp. 3	Pale-flower Cranesbill		r
Levenhookia sonderi	Slender Stylewort		r
Pomaderris vacciniifolia	Round-leaf Pomaderris		v
Pterostylis fischii	Fisch's Greenhood		r
Pterostylis sp. aff. parviflora (Southern Victoria)	Red-tip Greenhood		r
Pterostylis sp. aff. plumosa (Woodland)	Woodland Plume-orchid		r

Source: DSE database (2005a), DSE database (2005b), DSE (2005a)

# Conservation status

Austra	lia:	Victor	ia:
E	endangered	e	endangered
V	vulnerable	V	vulnerable
R	rare	r	rare
K	poorly known	k	species poorly known

#### APPENDIX 3 THREATENED FAUNA

SCIENTIFIC NAME	COMMON NAME	Conservat	CONSERVATION STATUS		
		Australia	VICTORIA	FFG Act	
Mammals					
Miniopterus schreibersii	Common Bent-wing Bat		Vul	L	
Myotis macropus	Large-footed Myotis		NT		
Phascogale tapoatafa	Brush-tailed Phascogale		Vul	L	
Pteropus poliocephalus	Grey-headed Flying-fox	V	Vul	L	
Birds					
Ardea alba	Great Egret		Vul	L	
Chthonicola sagittata	Speckled Warbler		Vul	L	
Lathamus discolor	Swift Parrot	E	End	L	
Melanodryas cucullata	Hooded Robin		NT	L	
Ninox connivens	Barking Owl		End	L	
Ninox strenua	Powerful Owl		Vul	L	
Nycticorax caledonicus	Nankeen Night Heron		NT		
Xanthomyza phrygia	Regent Honeyeater	E	CEn	L	
Frogs					
Litoria raniformis	Southern Warty Bell Frog	V	End	L	
Fish*					
Maccullochella peelii	Murray Cod	V	End	L	
Macquaria australasica	Macquarie Perch	Е	End	L	
Nannoperca obscura	Yarra Pigmy Perch	V	NT	L	
Prototroctes maraena	Australian Grayling	V	Vul	L	
Tandanus tandanus	Freshwater Catfish		End	L	
Invertebrates					
Acrodipsas brisbanensis	Large Ant-blue Butterfly		End	L	
Hypochrysops byzos hecalius	Yellow-spot Jewell		Th		

Source: DSE database (2005c), DSE (2003)

Conservation status

V

Australia: Victoria:

E endangered CEn critically endangered

vulnerableEndendangeredVulvulnerableNTnear threatenedDDdata deficient

FFG Act:

L listed under the Act

<sup>\*</sup> Fish records are outside the park and are listed for information only. Melbourne Water manages the Yarra River bed and banks. DSE manages the aquatic species.

APPENDIX 4 NATIONAL MIGRATORY AND MARINE FAUNA

SCIENTIFIC NAME	COMMON NAME	STATUS	
Accipiter fasciatus	Brown Goshawk	Mi	
Anas castanea	Chestnut Teal	Mi	
Anas gracilis	Grey Teal	Mi	
Anas superciliosa	Pacific Black Duck	Mi	
Apus pacificus	Fork-tailed Swift	Mi	
Aquila audax	Wedge-tailed Eagle	Mi	
Ardea alba	Great Egret	Mi	
Chenonetta jubata	Australian Wood Duck	Mi	
Elanus axillaris	Black-shouldered Kite	Mi	
Elseyornis melanops	Black-fronted Dotterel	Mi	
Falco berigora	Brown Falcon	Mi	
Falco cenchroides	Nankeen Kestrel	Mi	
Falco longipennis	Australian Hobby	Mi	
Falco peregrinus	Peregrine Falcon	Mi	
Hieraaetus morphnoides	Little Eagle	Mi	
Haliastur sphenurus	Whistling Kite	Mi	
Hirundapus caudacutus	White-throated Needletail	Mi	
Phalacrocorax carbo	Great Cormorant	Ma	
Phalacrocorax melanoleucos	Little Pied Cormorant	Ma	
Phalacrocorax sulcirostris	Little Black Cormorant	Ma	
Vanellus miles	Masked Lapwing	Mi	
Xanthomyza phrygia	Regent Honeyeater	Mi	
Zoothera lunulata	Bassian Thrush	Mi	

# Key:

Mi = Migratory under the Environment Protection and Biodiversity Conservation Act 1999

Ma = Marine under the Environment Protection and Biodiversity Conservation Act 1999

# APPENDIX 5 SUBMISSIONS RECEIVED ON THE DRAFT MANAGEMENT PLAN

A total of 17 submissions were received on the Draft Management Plan from the following organisations and individuals. No submissions were marked confidential.

ORGANISATION	Submission No.
Submissions from Groups	Total: 14
Bend of Islands Conservation Association	16
Department of Sustainability and Environment – Port Phillip Region	15
Friends of Warrandyte State Park	14
Koonung Bushwalking Club	1
Manningham City Council	17
Maroondah Bushwalking Club	7
Orienteering Victoria	8
Prospectors and Miners Association, Victoria	5
Shire of Nillumbik	12
Tourism Victoria	3
Victorian National Parks Association	13
Warrandyte Community Association	6
Warrandyte Community Association (amended submission)	9
Wonga Park Environment Group	11

Name	SUBMISSION NO.
Submissions from Individuals	Total: 3
Geoff Durham	2
Val Polley	10
Marcus Walker	4







