

A man and a woman are jogging on a dirt path through a forest. The woman is on the left, wearing a white tank top and black leggings. The man is on the right, wearing a red t-shirt and dark shorts. They are both smiling and appear to be in good physical shape. The forest consists of many tall, thin trees with light-colored bark and green foliage. The ground is covered in dry leaves and twigs.

Churchill National Park and Lysterfield Park

Management Plan

April 2020

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This Management Plan for Churchill National Park and Lysterfield Park is approved for implementation. Its purpose is to direct management of the parks until the plan is reviewed. The 1998 plan was finalised following consideration of the 17 submissions received on the Draft Plan. The 2020 amendment was finalised following consideration of input received during a two month consultation period, where over 600 people provided feedback on proposed changes to the plan.

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AMENDMENTS

The following amendments to the Churchill National Park and Lysterfield Park Management Plan (1998) were approved by the Parks Victoria Board on 28 April 2020.

Amend second sentence of **Summary** to:

Their natural values, the Lysterfield Lake and panoramic views of Melbourne and nearby ranges make the Parks an attractive setting for activities including mountain biking, picnicking, bushwalking, sailing, windsurfing and horse riding.

Amend first paragraph of **1.3 Significance of the Parks** to include:

Mountain biking is a key activity in the park, with the extensive trail network recognised as a regionally significant recreation asset.

Amend **1.3 Cultural values** to include:

All of Churchill National Park and Lysterfield Park are areas of Aboriginal cultural heritage sensitivity.

Amend **1.5 Legislation and guidelines** to include:

Western Port and South-east Melbourne Conservation Action Plan (Parks Victoria, 2020).

Amend **1.6 Park management aims (Other)** to:

Co-operate with local, State and interstate government authorities, Traditional Owners, the community and other interested organisations to assist in the management of the Parks.

Amend **3.5 Cultural heritage** by inserting the following sentence at the beginning of the second paragraph:

Under the Aboriginal Heritage Act 2006, all of Churchill National Park and Lysterfield Park are areas of Aboriginal cultural heritage sensitivity.

Amend **3.5 Cultural heritage** (management strategies) by including:

Protect Aboriginal cultural heritage through the cultural heritage management planning process prior to

any new works.

Amend **5.1 The Park** visitor by changing to:

The Parks offer three distinctive visitor experiences. Lysterfield Lake visitor area caters for water-based recreation and has facilities for large numbers of visitors. The forest settings, hilltops and northern fringes of the Lake offer solitude, close to nature experiences and good views. The extensive mountain bike trail network offers an exciting range of trails catering to all abilities, including a skills park to help new users learn and practice new skills.

Amend **5.1 The Park visitor** by changing to:

In 2018-19 the parks received over 1.2 million visitors, making them one of Parks Victoria's most popular areas in the State. The parks are a valuable green refuge within a suburban context which provide the local population with opportunities for nature-based recreation; visitors from further afield are drawn to the regionally significant mountain bike trails which cater to a range of ages and abilities.

Amend **5.1 The Park visitor** by removing:

Entry fees are collected at Lysterfield Park during weekends and peak periods over summer and on public holidays. Fees are not currently collected at Churchill National Park.

Amend **5.2.1 Vehicle access** (Management strategies) to include:

Liaise with Casey City Council to develop a parking area outside the park to accommodate horse floats.

Amend **5.2.2 Day visits** by changing:

Churchill National Park attracts over 80 000 people per year, mostly during spring and autumn. Lysterfield Park attracts over 120 000 people per year, mostly during summer.

TO

The parks attract over 1.2 million people per year, mostly during summer.

Amend **5.2 Visitor recreation activities and facilities** to include the following section for Mountain Biking:

5.2. Mountain Biking

The park provides extensive opportunities for mountain bike riding, with a trail network that caters to all age groups and levels of ability.

Mountain bike riding is permitted on open roads and vehicular tracks, shared management vehicle/walking/bike tracks and mountain bike trails (figure 5 and appendix 4).

The 'Statewide Mountain Bike Guideline' sets out guidelines for safe cycling and methods to minimise the impacts of bicycle riding on park values. All mountain bike trails are rated for difficulty to assist users to ride within their ability.

Aims

- Provide opportunities for mountain bike riding.
- Protect park values and avoid conflicts with the activities of other park visitors.

Management strategies

- *Manage mountain biking, including e-Bikes/power-assisted bicycles, in accordance with the Parks Victoria mountain bike policy.*
- *Permit mountain bike riding on open roads and vehicular tracks, shared management vehicle/walking/bike tracks and mountain bike trails in accordance with figure 5 and appendix 4.*
- *Prohibit power-assisted bicycles that don't meet the Transport (Compliance and Miscellaneous) Act (1983) definition of a bicycle are prohibited on all tracks and trails within the park.*
- *Prohibit cycling on 'walkers only' tracks.*
- *Provide opportunities for new mountain bike trails within the conservation and recreation zone in both Lysterfield Park and Churchill National Park. New trails are required to meet Parks Victoria's state-wide mountain bike guidelines, and are conditional on environmental and cultural heritage assessments.*

- *Prohibit new trail development within the Conservation Zone and within areas subject to the Special Protection Area overlay.*
- *Where appropriate promote single direction policy on blue (more difficult) and black (very difficult and extremely difficult) graded trails.*
- *Maintain shared management vehicle/walking/bike tracks to ensure rider and pedestrian safety.*
- *Encourage bike riders to adhere to the industry 'Mountain Biking Code'.*
- *Support mountain biking groups to volunteer to maintain tracks in the park.*

Amend **5.3 Visitor information and interpretation** (Management strategies) to include:

- *Provide mountain biking specific information such as trail maps and the mountain biking code to encourage safe riding.*

Amend **5.4 Commercial operations** (Management strategies) to include:

- *Work with local council and stakeholders to manage its interface at the park entrance as there is currently a proposed café development adjoining Lysterfield Park entrance. This will include pedestrian flow, car parking space and safety for all users.*

Amend **Appendix 2 Significant Fauna** to include Southern Toadlet (*Pseudophryne semimarmorata*), listed as vulnerable on the Advisory List of Threatened Vertebrate Fauna in Victoria (2014).

AMENDMENTS

Amend **Table 1 Management Zones and Overlays** to reflect revised management zoning and overlays.

TABLE 1 MANAGEMENT ZONES AND OVERLAYS

	ZONE			OVERLAY	
	CONSERVATION & RECREATION	CONSERVATION	RECREATION DEVELOPMENT	SPECIAL PROTECTION AREA	SPECIAL MANAGEMENT AREA
AREA / LOCATION	1513 ha of the park. Most of the Parks.	193 ha of the park	18 ha (1%) of the park. Main visitor areas.	447 ha (26%) of the park	45 ha (2,6%) of the park.
VALUES	Registered Aboriginal Cultural Heritage Sites and Environmental values including native vegetation (relatively weed-free to weed-infested), native fauna populations, non- indigenous eucalypts, pasture and the Lake.	Provides primarily for protection of environmental values	Provides primarily for high use visitor nodes with a concentration of recreation and/or interpretation facilities.	Registered Aboriginal Cultural Heritage Sites and overall an area of Aboriginal cultural sensitivity. Very high value of wetland, riparian and swamp habitat and resident flora and fauna species including endangered and depleted Ecological Vegetation Classes.	Significant state-wide infrastructure commitments.
GENERAL MANAGEMENT AIM	Protection of environmental and cultural values while allowing for recreation. Dispersed recreation and tourism activities are encouraged. The level of activities and small-scale recreation facilities are provided without significant impact on natural processes. Further recreation development would only be considered after on-ground assessment of Aboriginal cultural heritage and environmental values.	Protection of environmental and cultural values while allowing for recreation.	Small areas with a high level of facility development catering for high numbers of visitors.	Protect specific natural or cultural values in specific areas and sites where a special management focus is required. Further recreation development in the Special Protection Area is not supported due to significant environmental values.	Special management provisions are needed to protect and manage licenced state-wide infrastructure.

Amend **Table 3 Existing and Proposed Recreation Facilities** to update existing and proposed visitor sites and services in Churchill National Park and Lysterfield Park.

TABLE 3 EXISTING AND PROPOSED RECREATION FACILITIES

SITE	TOILETS	PICNIC TABLE SEATS	BARBECUE FACILITIES	PARK INFO	WALK TRACK	SHELTER	COMMENTS
Churchill National Park							
Churchill visitor area	1 block	E (10 tables)	2 gas	Information board	E + P	E	Established day visitor area. Install new tables and seats. Refurbish shelter. Construct walking and cycling track link to Police Paddocks
Lysterfield Park							
Lysterfield visitor area	2 blocks	E (20 tables)	10 electric	Visitor Centre and information board	E	P	Established day visitor area with two breakwaters, swimming beaches, boat rigging area, bird hide, additional beach proposed. No entry after closing time
Boys Farm site				E	E		Established Historic Trail with interpretative signs. Maintain historic artefacts.
Donelan Homestead site					E		Lookout and interpretation of site required. Provide information board.
Lysterfield Hills Lookout		P		P	E		Construct walking and cycling track linking the Parks and viewing platform. Install 1 seat.
Monbulk Ck Lookout					E		Install 1 seat. Interpretation of view required.
Tramline Quarry		E		E	E		Interpretation of site required.
Dandenong Lookout		P			E		Install 1 seat.
Dargon Homestead							Interpretation of site required.
Horse riding trails				E			
E existing facility:		P proposed facility					

AMENDMENTS

Amend **Table 2 Summary of Recreation Activities** to include Mountain Biking:

TABLE 2 SUMMARY OF RECREATION ACTIVITIES

ACTIVITY	ZONES		OVERLAYS	
	CONSERVATION & RECREATION	RECREATION DEVELOPMENT	SPECIAL PROTECTION AREA	SPECIAL MANAGEMENT AREA
Mountain Biking	YC	YC	YC*	YC
YC conditional – refer to relevant section for details				
* restricted to existing trails (refer figure 5)				

Amend **Appendix 4 Management of Roads and Tracks** to recognise current names, status, and management strategies of roads and tracks:

APPENDIX 4 MANAGEMENT OF ROADS AND TRACKS

Track or Route	COMMENTS/USES	STATUS/CLASS		MANAGEMENT STRATEGY
		Current	Proposed	
Abrahams Track	Internal track	MVO 2	MVO 2	-
Acacia Nature Walk	Walking track	W C	W B	-
Aneurysm	MTB (15)	MTB G	MTB G	-
Army Track East	Public access to Churchill NP	O 1	O 1	Seal with bitumen.
Army Track West	Internal track	MVO 1	MVO 1/W	Realign unsightly straight sections. Close to bicycles.
Asling Break	Slashed break	MVO 3	-	Close and rehabilitate.
Ballart Track	Internal track	MVO 2	MVO 2	-
Bayview Track	Internal track	MVO 1	-	Close and rehabilitate, subject to SEC agreement.
Beach Road	Access to Beach car park	O 1	O 1	Maintain as sealed road.
Bellbird Track	Internal track	MVO 3	MVO 3	-
Boys Farm Track	Internal track	MVO 2	MVO 2	-
Boys Farm Heritage Walk	Walking track	W D	W C	-
Buckle Down	MTB (16)	MTB F	MTB F	-
Casuarina Track	Internal track	MVO 1	MVO 1	-
Channel Track	Internal track	MVO 2	MVO 1/W	The section (Channel Walk) between Army and Link Tracks is for walkers only.
Cloverdale Track	Slashed break	MVO 3	MVO 3	-
Dargon Track	Internal track	MVO 3	MVO 1	-
Donelan Track	Internal track	MVO 3	MVO 2	-
Dog Pound	MTB (17)	MTB F	MTB F	-
East Boundary Track	Internal track	MVO 3	MVO 1/H	Horse access between Nodosa and Echidna only. Close and rehabilitate to south of Echidna.
East West Break	Slashed break	MVO 3	MVO 3	Maintain as slashed break.
Eastern Horse Trail	Horse trail	MVO 2/H	MVO 1/H	All weather horse trail.
Echidna Track	Horse trail	MVO 3/H	MVO 1/H	All weather horse trail. Close and rehabilitate to South of former Native Cherry Tk.
Eumemmering Track	Internal track	MVO 3	-	Close and rehabilitate.
Farm Trail	MTB trail (20)	MTB F	MTB F	-

Follow Me	MTB trail (11)	MTB G	MTB G	-
Glen Track	Internal track	MVO 3	MVO 2	-
Granite Link	MTB trail (9)	MTB H	MTB H	-
Granite Track	Internal track	MVO 3	MVO 2	-
Grassy Spur Walk	Internal track	MVO 3	MVO 2/W	MVO and walkers only.
Gully Break	Internal track	MVO 3	MVO 3	-
Gun Club Track	Internal track	MVO 2	MVO 1/H	All weather track and horse trail.
Horswood Road West	Public access to Lysterfield Park and boat ramp	O 1	O 1	Maintain as sealed road. Close after hours.
Hug	MTB trail (6)	MTB F	MTB F	-
Humping Hound	MTB trail (18)	MTB F	MTB F	-
Lake Circuit Trail	MTB trail (1)	MVO 2/E	MVO 2/E	-
Lake Track	Internal track	MVO 2	MVO 1	-
Lamberts Track	Internal track	MVO 2	MVO 1	-
Lanes Track	Internal track	MVO 2	MVO 2	-
Lil Shawty	MTB trail (21)	MTB F	MTB F	-
Link Track (Churchill)	Internal track	MVO 2	MVO 2	-
Logan Park Road	Internal track	MVO 1/H	MVO 1/H	-
Lower Blair Witch	MTB trail (7)	MTB F	MTB F	-
Lower Buckle	MTB trail (2)	MTB F	MTB F	-
Lyster Track	Internal track	MVO 2	MVO 2	-
Lysterfield Hills Track	Internal track	MVO 2	MVO 2	-
Lysterfield Hills Track East	New track	-	MVO 1	Develop new trail.
Mahogany Track	Internal track	MVO 2	MVO 1	-
Middle	MTB (4)	MTB F	MTB F	-
Native Cherry Track	Internal track	MVO 3/H	MVO 1/H	Rename to Echidna Track.
Native Track	Internal track	MVO 3	MVO 3	-
Native Track	Internal track	MVO 2	MVO 1	Former Nth Boundary Track LLP.
Nodosa Track	Internal track	MVO 3	MVO 1/H	All weather horse trail.
North Boundary Track	Internal track	MVO 1	MVO 1/W	Close and rehabilitate the section between Army and Link Tracks subject to SEC agreement. Close to bicycles.
Powells Track	Internal track	MVO 1	MVO 1	-
Pump Track	MTB (14)	MTB F	MTB F	-
Pusilla Track	Slashed break	MVO 2	-	Close and rehabilitate.
Quarry Track	Internal track	MVO 2	MVO 2	-
Red Gum	MTB (5)	MTB F	MTB F	-
Ridge Track	Internal track	MVO 1	MVO 1/W	Close to bicycles.
Short Cut Walk	Walking track	W C	W B	-
Skills Park	MTB (19)	MTB EFG	MTB EFG	-
Snipe	MTB trail (12)	MTB F	MTB F	-
Snipe Track	Internal track	MVO 1	MVO 1	-
South Break	Slashed break	MVO 3	MVO 3	Maintain slashed break.
Southern Horse Trail	Horse trail	MVO 3/H	MVO 1/H	All weather horse trail.
State MTB Course	MTB trail (10)	MTB G	MTB G	-
Stonemason Track	Internal track	MVO 1	MVO 1/W	Close to bicycles.
Sugar Glider Track	Internal track	MVO 3	-	Close and rehabilitate.
Sunset Track	Internal track	MVO 3	MVO 2	-
Swampy Break	Internal track	MVO 3	MVO 2	Maintain slashed break.
Syphon Walk	Internal track	W C	W C	-
Thompson Track	Internal track	MVO 3	W C	-
Trailmix	MTB (13)	MVO 1/E	MVO 1/E	-
Tramline Walk	Walking track	W B	W B	-
Upper Blair Witch	MTB trail (8)	MTB F	MTB F	-
Upper Buckle	MTB trail (3)	MTB F	MTB F	-
Valley View Track	Internal track	MVO 2/W	MVO 2/W	MVO and walkers only.

AMENDMENTS

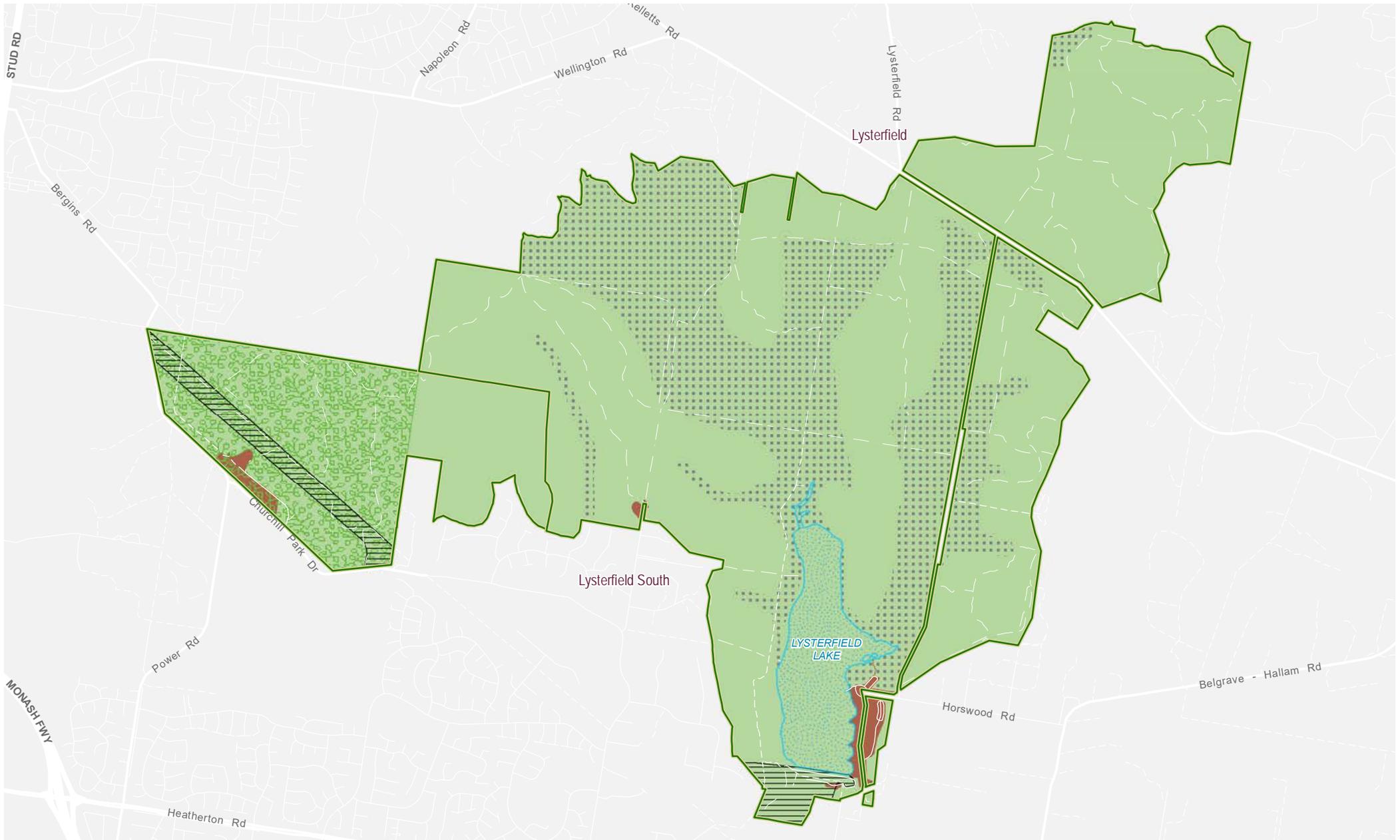
Wallaby Track	Internal track	MVO 1	MVO 1	-
West Boundary Track	Internal track	MVO 3	MVO 1	-
Woodland Walk	Internal track	MVO 3	MVO 3/W	-

STATUS:	O	Open to public vehicles	CLASS:	1	All vehicle - all weather
	MVO	Management vehicles, walkers and cyclists		2	4WD - all weather
	H	Horse trail		3	4WD - dry weather only
	W	Walkers only		B	A well-defined walking track, benched and drained
	MTB	Cyclists only		C	A walking track, defined through use, which may be benched or drained
				D	A walking track or path defined through use but having no basic construction
				E	Easy – wide, smooth surface, gentle gradients, free of obstacles.
				F	More difficult – single track with moderate gradients, variable surface and obstacles.
				G	Very Difficult – single track with steep gradients, variable surface and many obstacles.
			H	Extremely Difficult – very steep gradients, highly variable surface and unavoidable, severe obstacles.	

Amended figures (shown on following pages):

Amend **Figure 3** – Management Zones: Replace map to show revised management zones and overlays.

Amend **Figure 5 (NEW)** - Trail Network: Include new map to show existing trail network.

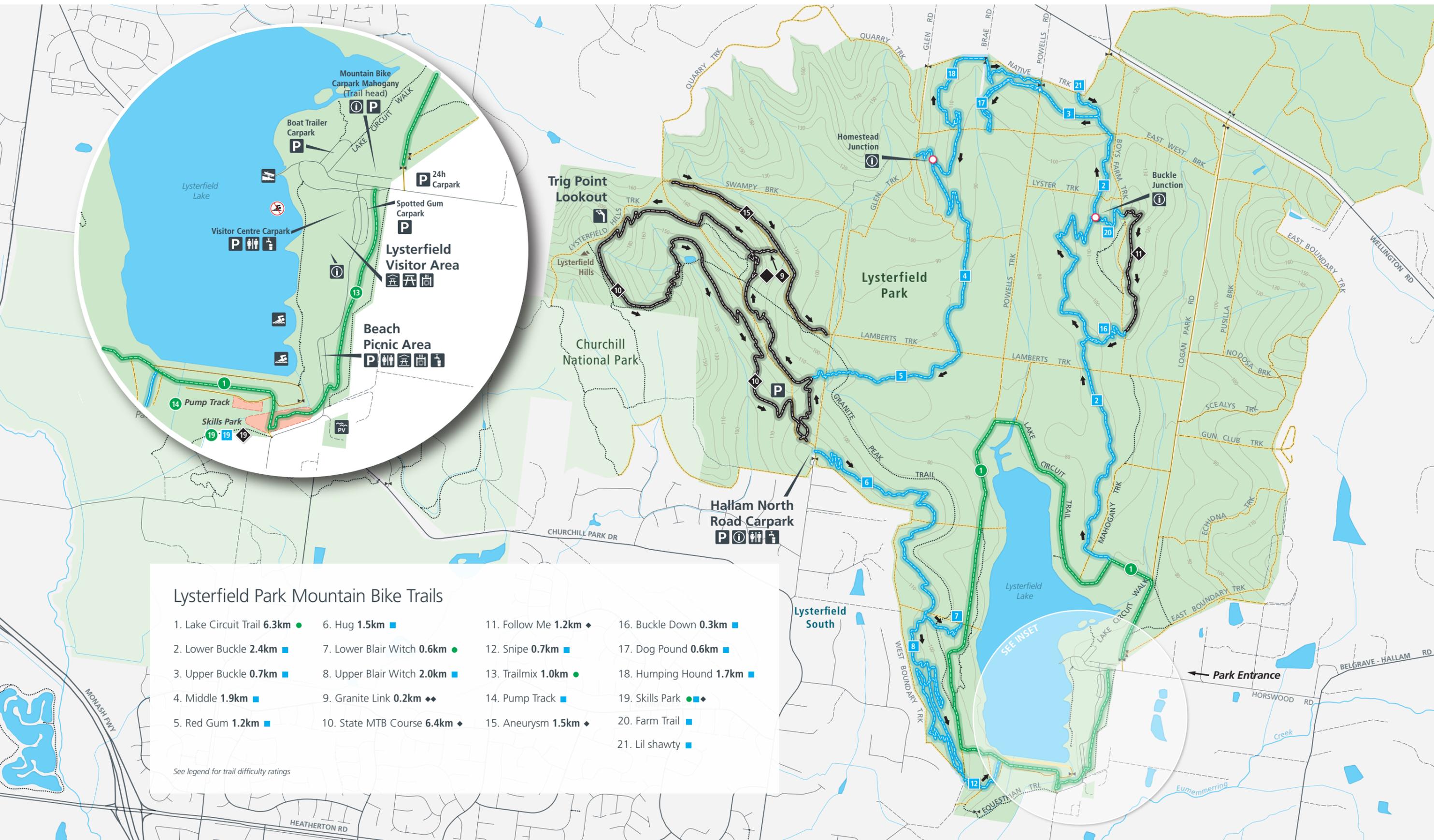


Lysterfield Park and Churchill NP Management Zones

Unsealed road	Planning Area	OVERLAYS	ZONES	
4WD	Waterbody			Special Protection Area
Sealed road				Special Management Area
			Recreation Development	
			Conservation and Recreation Zone 1	
			Conservation Zone	



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0 0.25 0.5 1 Km

P Parking	Sheltered area	Drinking water	Freeway/Highway	4WD	Creek/stream	Mountain Bike Trail Difficulty Rating	
Information	Barbecue (Electric)	Swimming	Main road	Walking track	Lysterfield Park		Easy
Toilets	Boat ramp	No swimming	Sealed road	Mountain bike trail	Other park/reserve		More difficult
Picnic area	Parks Victoria office	Gate	Unsealed road	Shared management vehicle/ walking/ bike track	Lake/waterbody		Very difficult
						Extremely difficult	
						Trail junction	

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CHURCHILL NATIONAL PARK

AND

LYSTERFIELD PARK

MANAGEMENT PLAN



This 1998 plan was evaluated in 2009 and amended in April 2020.

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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 State or Federal Governments and Victorian Aboriginal communities. It is acknowledged that such negotiated outcomes may necessitate amendment of this plan.

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

FOREWORD

Churchill National Park and Lysterfield Park take in much of the southern side of the Lysterfield Hills and form a valuable public land link between the Dandenong Valley and the Dandenong Ranges.

The parks protect significant natural values while offering a range of opportunities for visitors, including appreciating the native vegetation and wildlife of Churchill National Park, exploring Lysterfield Lake, and walking and cycling on the extensive trail networks.

This Management Plan was first developed and approved in August 1998. A review of the plan was undertaken in 2009 to ensure that it could continue to provide up-to-date direction for management of the parks. Following a period of public consultation, the plan was amended in April 2020 to address changes in recreation so that park values would continue to be protected.

This Management Plan has been prepared under Sections 17 and 18 of the *National Parks Act 1975* (Vic.) and is approved for implementation.

The Plan will provide the basis for management of the two parks until it is reviewed.

Matthew Jackson
Chief Executive Officer
Parks Victoria

SUMMARY

The Parks, totalling 1668 ha, are a scarce haven for wildlife and people close to Melbourne. Their natural values, the Lysterfield Lake and panoramic views of Melbourne and nearby ranges make the Parks an attractive setting for activities including picnicking, bushwalking, sailing, windsurfing and horse riding.

The two Parks, which are physically linked, will be managed as an integrated area for conservation and recreation.

Visitors will be able to enjoy a range of high quality experiences in forested and lake settings.

Major management directions are summarised below:

- provision of new walking and cycling trails, linking the two Parks and adjoining public land in the Dandenong Ranges and the Dandenong Valley; upgrading of trails

around Lysterfield Lake and between the Lake and Churchill visitor area; and development of several minor entry points to improve access to the Parks;

- improvement of existing facilities in the main visitor areas at Lysterfield Lake and in Churchill National Park;
- conservation of other areas of the Parks in an essentially undeveloped condition;
- re-establishment of indigenous vegetation on degraded and pastured areas;
- special protection for significant natural and cultural features.

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1 INTRODUCTION

1.1 Location and planning area

Churchill National Park and Lysterfield Park are located on the southern foothills of the Dandenong Ranges, 35 kilometres south-east of the Central Business District of Melbourne (figure 1).

This Management Plan covers 1668 ha in the following areas (figure 3):

- Churchill National Park (271 ha);
- Lysterfield Park (1397 ha).

It replaces previous plans for Churchill National Park (NPS 1978) and recreation use at Lysterfield Lake (CFL 1986).

1.2 Regional context

The Parks are close to the south-eastern suburbs and adjoin the Pakenham and Lysterfield growth corridors (figure 1).

They are a major component of the open space links between the Dandenong Creek Valley and the Dandenong Ranges (MPW 1995).

Figure 2 shows other major open space parks and reserves in the area, which include:

- Dandenong Ranges National Park – a major tourist attraction with tall trees and rainforest gullies;
- Police Paddocks Reserve – abuts Churchill National Park and offers developed facilities and opportunities for active and passive recreation in natural bushland;
- Dandenong Valley Parklands – offering a wide range of recreation opportunities in a semi-natural setting;
- Birds Land Reserve – a Yarra Ranges Shire Council bushland reserve adjacent to Monbulk Creek and the Parks.

1.3 Significance of the Parks

Churchill National Park and Lysterfield Park make a valuable contribution to Victoria's parks system, which aims to protect viable representative samples of the State's natural environments occurring on public land. Parks

also provide opportunities for visitors to enjoy and appreciate natural and cultural values, and many make important contributions to tourism.

The Parks are assigned the IUCN Category III (Natural Monuments) of the United Nation's List of National Parks and Protected Areas. Category III areas are managed primarily for protection of outstanding natural features, recreation, education and research.

The Parks contain viable patches of relatively undisturbed native vegetation, which is scarce close to Melbourne. The forest types are similar to those on the western and southern slopes of the Dandenong Ranges National Park.

The Parks are a major component of habitat linking the Dandenong Creek Valley and the Dandenong Ranges.

Significant features are summarised below.

Natural values

- Areas of relatively undisturbed open forest with large mature trees.
- Panoramic views across Melbourne and the Dandenong Ranges from high knolls and rocky outcrops.
- Natural backdrop to the surrounding urban development.
- A major wetland with many waterbirds, including migratory species.
- A diversity of wildlife including many significant species of birds.
- A large population of Eastern Grey Kangaroos.
- A Regional Site of Botanical and Zoological Significance.

Cultural values

- Disused aqueducts from the days when Lysterfield Lake was used for water supply.

- Ruins of old homesteads, dairies and disused quarries, reminders of previous land uses.

Tourism and recreational values

- Quality picnic facilities in forested and lake settings.
- A large waterbody (Lysterfield Lake) offering sailing, windsurfing and swimming opportunities close to Melbourne.
- Opportunities for extended walking and cycling in the Parks and to the Dandenong Creek Valley and the Dandenong Ranges.
- Bushland offering a sense of remoteness and tranquillity close to Melbourne.
- Opportunities for large group functions in a natural setting.
- Opportunities for commercial operations to provide services, facilities and information for visitors.

1.4 Creation of the Parks

Churchill National Park (originally 193 ha and referred to as Dandenong National Park) was created in 1939 by the reservation of a section of the Dandenong Police Paddocks. The Dandenong National Park was gazetted on 12 February 1941. Sir Winston Churchill was honoured in the renaming of the Park in 1944. Churchill National Park was included on Schedule Two of the *National Parks Act 1975* (Vic.) in 1975.

Lysterfield Park (originally 1151 ha) was included on Schedule 3 of the National Parks Act on 19 May 1981 as a result of the *National Parks (Amendment) Act 1981* (Vic.). The Park was created following the decommissioning of the Lysterfield Reservoir (built in 1936) and placement of its catchment under the management of the then National Parks Service in 1979. Minor amendments were made to the Park in 1984 (1 ha net addition) and 1988 (road closure). It was opened to the public in 1986.

As a result of the *National Parks (Yarra Ranges and Other Amendments) Act 1995* (Vic.) additions were made to Churchill National Park (Churchill extension 78 ha) and

Lysterfield Park (Lysterfield north-eastern extension 125 ha). A further area of 121 ha was added to Lysterfield Park as a result of the *National Parks (Amendment) Act 1997* (Vic.) (Lysterfield western extension). These additions complete the implementation of the State Government's strategy to link the Parks.

This strategy is a component of a broader strategy to establish a public land corridor linking the Dandenong Ranges to the metropolitan parks in the Dandenong Creek Valley. That strategy commenced in 1971 with placement of a proposed public open space reservation on private land between the two Parks. Linking was achieved progressively by acquisitions in the Parish of Narre Warren. In 1990 the State Government acquired part of Crown Allotment 70A and part Monbulk Pre-emptive Right (ZA Nominees land) abutting the north-east boundary of Lysterfield Park, and part of Crown Allotments 71, 72 and 73 (Kings land) abutting the eastern boundary of Churchill National Park. The acquisition of part of Crown Allotments 59, 60 and 71 (Van Beers land) in 1993 completed the public land link between the Dandenong Valley and Birds Land.

1.5 Legislation and guidelines

Churchill National Park and Lysterfield Park are reserved and managed under the provisions of the National Parks Act. The Act requires the Director to preserve and protect the natural environment of the Parks and their natural and other features, and subject to this to provide for the use of the Parks by the public for enjoyment, recreation and education. The Act also provides for appropriate research.

The Land Conservation Council (LCC 1994) recommended that Lysterfield Park should be used and managed as a Regional Park and that the Lysterfield extension (north-eastern extension) should be added. The LCC did not make recommendations on the western half of Lysterfield Park, as these areas are outside the Melbourne 2 Study Area. The LCC noted that the Lysterfield extension (north-eastern extension), Churchill National Park and Lysterfield Park should be managed as part of an integrated unit.

The Parks are managed in accordance with Parks Victoria guidelines for the management of parks and LCC recommendations, and with other plans and guidelines, including:

- Port Phillip Area Fire Protection Plan (CNR 1992);
- Melbourne Parks and Waterways Guide to Priorities for Melbourne's Open Space Network (MPW 1995);
- Regional Strategy Plan (UYVDRA 1992).

1.6 Park management aims

The National Parks Act, in particular sections 4, 17 and 18, provides the basis for management of the Parks. The following management aims are derived from those sections, and as such broadly govern all aspects of park management.

Resource conservation

- Preserve and protect the natural environment.
- Allow natural environmental processes to continue with the minimum of interference.
- Maintain biodiversity.
- Conserve features of archaeological, historical and cultural significance.

Park protection

- Protect human life, the Parks and adjacent lands from injury by fire.

- Eradicate, or otherwise control, introduced plants, animals and diseases.

The Park visit

- Provide opportunities for appropriate recreation and tourism.
- Promote and encourage an appreciation, understanding and enjoyment of the Parks' natural and cultural values and their recreational opportunities.
- Encourage appropriate park use and visitor behaviour, and foster a conservation ethic in visitors and an understanding of minimal impact behaviour.
- Take reasonable steps to ensure the safety of visitors.

Other

- Provide for and encourage scientific research, surveys and monitoring that will contribute to a better understanding and management of the Parks.
- Co-operate with local, State and interstate government authorities, the community and other interested organisations to assist in the management of the Parks.

2 STRATEGIC DIRECTIONS

2.1 Park vision

A future visitor to Churchill National Park and Lysterfield Park finds a forested haven, in striking contrast to surrounding urban development. The Parks contain representative samples of the biological communities of the southern foothills of the Dandenong Ranges and are the major component of a bushland corridor linking the Dandenong Ranges to the Dandenong Valley. The native wetlands fringing Lysterfield Lake are a protected habitat for fauna, including migratory birds. The exotic eucalypt plantations offer expansive areas for passive recreation.

High quality visitor facilities and interpretation of natural and cultural values cater for large numbers of visitors. There are opportunities for intensive water-based activities at Lysterfield Lake, and recreation in natural settings elsewhere in the Parks. Many visitors enjoy views of Melbourne and the Dandenong Ranges and take advantage of the Parks' link with long-distance walking and cycling trails along the bushland corridor through to the Dandenong Ranges and the Dandenong Creek.

2.2 Management directions

Major management directions for the Parks are as follows.

Resource conservation

- Special protection will be given to the significant natural features, including wildlife habitat surrounding the headwaters of Lysterfield Lake and the Eastern Grey Kangaroos in Churchill National Park.
- Indigenous vegetation will be conserved.
- Indigenous vegetation will be re-established on degraded and pastured areas and, where appropriate, in plantation areas within Lysterfield Park.
- Developments outside day visitor areas at Lysterfield and Churchill, except as indicated to improve visitor access (section 5) will be avoided.
- Healthy Eucalypt plantations within Lysterfield Park will be retained, as a setting suitable for recreation in popular recreation areas.
- Significant cultural features will be protected.
- The natural landscape will be conserved, and protected from the effects of developments.

Park protection

- Indigenous plant and animal communities will be protected from pest plants and animals.
- Visitors, the Parks and adjacent lands will be protected from fire in accordance with the requirements of the Port Phillip Area Fire Protection Plan (CNR 1992).

The Park visit

- New walking and cycling trails will be provided, linking the Parks, major features and adjoining public land, and minor entry points will be developed to improve access to the Parks.
- Existing facilities in the Parks will be improved by extending and upgrading the swimmers-only areas and boat rigging area at Lysterfield Lake, and installing new and improved picnic facilities at Churchill National Park.
- Interpretative services for the Parks will be improved by providing new and wider opportunities for worthwhile visitor experiences.
- Visitors will be encouraged to explore the Parks' natural environment, particularly during the cooler weather, and to enjoy the extensive recreation opportunities.
- School and community groups will be encouraged to use the Park.
- Current market survey findings on visitor profiles, patterns of behaviour,

expectations and preferences will be used in planning park management.

- A signs plan for the Parks, including design guidelines, will be prepared and implemented.

Community awareness and involvement

- Awareness and pride in the Parks and their natural, cultural and recreation values will be promoted.
- Public support and involvement in park management programs will be encouraged.

2.3 Zoning

A park management zoning scheme has been developed to:

- provide a geographic framework in which to manage the Parks;
- indicate which management directions have priority in different parts of the Parks;

- indicate the types and levels of use appropriate throughout the Parks;
- assist in minimising existing and potential conflicts between uses and activities, or between those and the protection of park values;
- provide a basis for assessing the suitability of future activities and development proposals.

Two management zones apply to the Park – Conservation and Recreation, and Recreation Development.

In addition, special protection areas and special management areas are used to summarise requirements additional to those of the underlying primary management zones.

Table 1 specifies the management zone and overlay characteristics, and figure 3 shows their location.

TABLE 1 MANAGEMENT ZONES AND OVERLAYS

	ZONE		OVERLAY	
	CONSERVATION AND RECREATION	RECREATION DEVELOPMENT	SPECIAL PROTECTION AREA	SPECIAL MANAGEMENT AREA
AREA/LOCATION	1646 ha; 98.7% of the planning area. Most of the Parks.	22 ha; 1.3% of the planning area. Main visitor areas.	39.7 ha; 2.4% of the planning area. Northern reaches of Lysterfield Lake.	618 ha; 37 % of the planning area. Areas surrounding Lysterfield Lake dominated by plantations.
VALUES	Native vegetation (relatively weed-free to weed-infested), non-indigenous eucalypts, pasture and most of the Lake.	Sites with substantial facilities in natural and semi-natural settings.	Wetland areas, breeding habitat for water birds.	Exotic eucalypt plantations providing opportunity for passive recreation. A small section is occupied by the Park Depot and Lake wall. Areas occupied by major transmission lines.
GENERAL MANAGEMENT AIM	Protect natural environments and provide for sustainable dispersed recreation activities and small-scale recreation facilities without significant impact on natural processes.	Provide primarily for high use visitor nodes with a concentration of recreation and/or interpretation facilities.	Protect specific natural or cultural values in specific areas and sites where a special management focus is required.	Highlight areas or sites where special management provisions are needed to provide for a particular non-standard use or activity.

AMENDED: see updated table at start of document

3 RESOURCE CONSERVATION

3.1 Geological and landform features

The planning area's main landform features are the Lysterfield Hills and Lysterfield Lake.

Hornfels forms the major ridge of the Lysterfield Hills and there are granodiorite outcrops on the north and south mid to lower slopes.

The ridgeline and major spurs of the planning area have many large exposed granitic rocks that form impressive vantage and interest points.

Generally the geological and landform features are not subject to damage from visitor use.

Aim

- Minimise the impact of management activities and visitor use on significant landform features.

Management strategy

- *Monitor impact of visitor use on exposed granite rocks.*

3.2 Vegetation

The planning area includes a significant amount of viable, relatively undisturbed forest, but much of the indigenous vegetation has been subjected to some level of disturbance from previous land uses including timber harvesting, quarrying, grazing, dam construction and clearing for power lines. There are also several non-indigenous eucalypt plantations, and large areas of pasture.

Approximately half of the Lysterfield north-eastern extension supports native vegetation. This vegetation is relatively weed free and contains the largest trees in the planning area. More than half of the Lysterfield western extension supports native vegetation. There is some weed infestation but sites that have not been grazed for some time are regenerating naturally and a revegetation program has commenced.

Lysterfield Park is a regional site of botanical significance (UYVDRA 1989a). The Park is a refuge for a large number of native species and contains regionally significant species that are uncommon in both the Eastern Highlands and Gippsland (appendix 1).

Eight regionally significant vegetation communities have been identified in the planning area: Herb-rich Forest (14% of the planning area), Valley Forest (3.3%), Shrubby Foothill Forest (3.9%), Damp Sclerophyll Forest (4.1%), Heathy Woodland (7.2%), Riparian Forest (1%), Swamp Scrub (6.0%) and artificially created wetlands (Cook 1994; Cheal et al. in prep.). Some stands of relatively weed-free Swamp Scrub are the most undisturbed examples of this community in the Melbourne region. A small area of Heathy Woodland in Churchill National Park is adjacent to power lines and prone to disturbance from maintenance works. The canopy of Messmate in the Damp Sclerophyll Forest in Lysterfield Park is suffering from severe dieback, which may be related to large Bell Miner colonies or to infection by Cinnamon Fungus. Rare species that occur in this community require protection from fire management activities.

A total of 167 native species has been recorded in the planning area, including more than 30 regionally significant species (appendix 1).

The plantations (636 ha) within the Lysterfield Park were first established in the early 1950s and includes ten species of eucalypt. They create a forested setting for recreation but some are showing signs of poor health or growth.

Aims

- Conserve native plant communities, as far as practicable, in their natural condition, and maintain genetic diversity.
- Provide special protection for significant plant species and communities.
- Restore indigenous communities.

- Revegetate pasture areas, degraded indigenous communities and plantations with indigenous species.
- Restore native vegetation to areas infested with introduced plants.
- Increase knowledge of significant plant species and communities.

Management strategies

- *Prepare a revegetation plan for the planning area, giving priority to pasture sites on the Churchill extension (10 ha), Lysterfield north-eastern extension (60 ha), and Lysterfield Park (10 ha), and retaining important views (section 3.5).*
- *Assess the health and growth potential of the plantations. Revegetate plantation areas which are unsuitable as recreation settings.*
- *Monitor significant species.*
- *Collect and store seed from local provenances of overstorey and understorey species to meet the Parks' revegetation requirements.*
- *Investigate the dieback of Messmate in Lysterfield Park (section 3.3 and 4.2).*
- *Minimise fire protection slashing in areas of Damp Sclerophyll Forest in Churchill National Park (consistent with achieving fire protection objectives) and monitor vegetation.*

3.3 Fauna

Native faunal habitat has been severely modified and degraded within the extensive areas of plantations and pasture. Despite this, the fauna of the Parks is very diverse because of the range of vegetation communities and variety of habitats, including the Lake and wetlands. Over 200 native species have been recorded, including 15 listed as threatened in Victoria, and over 40 considered significant at the State and Regional level (NRE 1998; UYVDRA 1989b) (appendix 2).

Twenty-seven species of mammals occur in the Parks, including the Koala, Eastern Grey Kangaroo, Black Wallaby and Platypus (SOS 1994).

A total of 172 species of birds has been recorded in the planning area. Lysterfield Park is a Regional Site of Zoological Significance (UYVDRA 1989b). Lysterfield Lake environs are a significant viable waterbird, habitat close to Melbourne. This wetland allows opportunities for feeding, breeding and refuge for at least 26 species of waterbirds, including the migratory Latham's Snipe and regionally significant waterbirds such as the Darter, Little Egret, Pied Cormorant and Great Crested Grebe. The wetlands are protected from disturbance.

The planning area supports several species of reptiles including the White-lipped Snake and Black Rock Skink, and seven species of frogs.

Eastern Grey Kangaroos are found throughout the planning area but most are contained within the perimeter cyclone fence at Churchill National Park. This population of Eastern Grey Kangaroos, estimated to be between 70 and 150, bred from eight kangaroos released into Churchill National Park in 1969. The health of this mob may be threatened by inbreeding, and release into a larger area of the Parks is desirable.

The perimeter cyclone fence effectively excludes most pest animals (except foxes) and protects park assets (sections 4.2 and 5.2.2). There are also several unconnected sections of cyclone fence around the perimeter of the planning area. Completion of the perimeter fencing around the boundary south of Wellington Road would be beneficial.

Faunal records were collected in the Parks mainly in the 1970s and early 1980s. More information is required on distribution, abundance and ecology, particularly of reptiles, amphibians and invertebrates.

The large populations of Bell Miners in the Parks may be linked to the severe defoliation of mature Messmates and may be affecting the presence and abundance of other species.

Aims

- Protect native fauna from management and visitor activities.
- Maintain the genetic diversity of fauna.
- Increase knowledge of the distribution and management of significant species.

Management strategies

- *Monitor the presence and habitat of significant species (appendix 2) and manage according to approved Flora and Fauna Guarantee Action Statements.*
- *Enhance faunal habitat by revegetating cleared land (section 3.2) and controlling weed species (section 4.2).*
- *Investigate the health, population size and habitat requirements of the Eastern Grey Kangaroos within the perimeter fencing at Churchill National Park, and monitor and manage according to expert advice.*
- *Subject to expert advice on population dynamics, habitat requirements, completion of necessary perimeter fencing and regeneration of indigenous vegetation to a maturity that can withstand browsing, remove the barrier to kangaroo movements between the fenced area in Churchill National Park and other areas.*
- *Monitor eucalypt dieback and investigate the link with Bell Miner populations. Seek expert advice if dieback spreads.*
- *Encourage wildlife surveys, particularly in areas previously not surveyed.*
- *Monitor the presence of koalas and platypus.*

3.4 Landscape

Panoramic views of the Dandenong Ranges and surrounding foothills, and of south-east Melbourne and the city centre, are available from the northern ridgeline of the Parks. Part of the ridgeline overlooks the Lysterfield Valley, a Recorded National Trust Landscape

(NTA 1981) which features large flat rocks and tors, mostly on adjoining private land.

Lysterfield Lake catchment, also a Recorded National Trust Landscape (NTA 1981), has views of forest largely unimpaired by built structures. Lysterfield Lake is an attractive waterbody with its northern reaches fringed by swamp vegetation and waterbird habitat.

Visual intrusions include high voltage power lines and pylons across Churchill National Park, vegetation control work beneath the lines, vegetation clearance for firebreaks to the west of the Lake, extensive quarrying to the north, an incomplete housing subdivision and retarding basin to the south, and views of power lines over the dam wall at Lysterfield Lake.

Aims

- Maintain opportunities for panoramic views within and from the Parks.
- Rehabilitate, ameliorate or minimise undesirable visual intrusions.

Management strategies

- *Maintain opportunities for panoramic views from the Lysterfield Hills Lookout.*
- *Screen, where possible, the Boral and Pioneer quarry operations from the Lysterfield Hills walking track.*
- *Screen, where possible, electricity transmission lines from view from the main recreation node at Churchill National Park.*
- *Encourage sufficient vegetation on South Break and Cloverdale Track to reduce the view of the vegetation clearance from the Lake.*

3.5 Cultural heritage

The Parks fall within the boundaries of the Woiworong and the Bunurong tribes, ancestors of the present-day Wurundjeri Aboriginal Community. The adjoining Police Paddocks Reserve contains important Aboriginal archaeological features. A significant feature

of the early history of Victoria, this site is where early Aboriginal/European interaction occurred (DCE 1990).

All Aboriginal material and sites are protected under the *Archaeological and Aboriginal Relics Preservation Act 1972* (Vic.) and the *Aboriginal and Torres Strait Islanders Heritage Protection Act 1984* (Cwlth).

The Lysterfield area was settled in the early 1850s and much of the land was cleared for farming (Coulson 1958). There are remains of an early settler's homestead (Dargon) and orchard near Monbulk Creek.

Churchill National Park was used for quarrying and firewood cutting in the 1920s and 1930s, and there is evidence of a rock crushing plant near Stonemasons Track (DCE 1990).

A major water storage (Lysterfield Lake) and associated aqueducts across the planning area were constructed during the 1930s. Dairy farms and a Church of England Boys Society training farm 'Boys Farm' were converted to eucalypt plantations to protect water quality. There are opportunities to interpret prior land use and settlement, and other cultural values.

Aim

- Protect significant archaeological and historic sites.

Management strategies

- *Identify, protect, manage and interpret Aboriginal sites and places in the Parks in accordance with Parks Victoria guidelines and in consultation with the local Aboriginal community and Aboriginal Affairs Victoria.*
- *Investigate, in co-operation with relevant experts, the significance of the Dargon homestead site, Church of England Boys Society training farm, other home and garden sites, aqueducts and former quarries. Protect and interpret sites as appropriate.*

4 PARK PROTECTION

4.1 Fire management

The National Parks Act requires the Director of National Parks to ensure that appropriate and sufficient measures are taken to protect parks from injury from fire. Current fire protection measures are in accordance with the Port Phillip Area Fire Protection Plan (CNR 1992). This Plan includes provision for the maintenance of fire protection tracks and fire breaks. There is also frequent liaison with private landholders, municipal and utility authorities and the local Country Fire Authority for the common purpose of fire management within the Parks and on adjacent land.

Slashing of strategic fire breaks is the major fire pre-suppression work performed. There are areas with identified flora values which need to be avoided (section 3.2). The extent of slashing on defined breaks may vary according to seasonal factors. Fuel reduction burning is restricted to small areas of the Parks where there is a need to protect identified assets.

Fire management includes the deliberate use or exclusion of fire to achieve particular conservation objectives, such as protecting assets or promoting certain vegetation communities or wildlife habitat.

Aims

- Protect human life, property and park values from damage by fire.
- Minimise the adverse effects of fires and fire suppression methods.
- Maintain fire regimes appropriate to the conservation of native flora and fauna.

Management strategies

- *Carry out fire protection works according to the Fire Protection Plan.*
- *Undertake ecological burning to promote populations of threatened flora or fauna or plant communities in accordance with an approved action statement or rehabilitation strategy based on sound research.*

- *Rehabilitate fire control lines and other disturbed areas resulting from unplanned fires and fire suppression activities as soon as possible after the fire.*
- *Notify the public of planned burns by erecting appropriate signs and placing notices on information boards.*
- *Ensure that park values are considered when the Emergency Response Plan (section 5.5) or Fire Protection Plan are reviewed.*

4.2 Pest plants and animals, and diseases

Over 130 species of non-indigenous plants occur in the planning area, most of which are the legacy of clearing, grazing and timber and firewood cutting. Eight species of major environmental weeds in the Parks (appendix 3) also occur on neighbouring land.

Blackberry, the most significant weed management problem, restricts access across gullies and lower slopes of the Lysterfield western extension.

Severe dieback of Messmate in the north-west part of Lysterfield Park, which may be caused by Cinnamon Fungus or Bell Miners, requires investigation (sections 3.2 and 3.3).

Plantation species, particularly of Southern Mahogany and Spotted Gum, are spreading into the native vegetation.

At least ten species of introduced animals occur in the planning area. Foxes, feral cats, dogs, rabbits and pigs are major pests. Pest animal control programs are directed mainly at foxes and pigs.

Many domestic animals enter the planning area (except the enclosed Churchill National Park) through the fences of neighbouring properties (sections 3.3 and 6.2).

Aims

- Control, and where possible eradicate, non-indigenous plants, animals and diseases.
- Minimise the impact of control programs on native flora and fauna.
- Minimise the potential for the introduction and spread of pest plants and animals, and diseases.

Management strategies

- *Prepare a pest management strategy for the planning area which details species and areas to be treated, and methods of control. Give priority to the Special Protection Area, areas with native vegetation and pasture areas.*
- *Give priority to monitoring and controlling Blackberry, Boneseed, Bridal Creeper, Spanish Heath and Sweet Pittosporum.*
- *Control, and where possible eradicate, foxes and pigs.*
- *Determine whether Cinnamon Fungus occurs in the Damp Sclerophyll Forest in Lysterfield Park, and if it is present follow Parks Victoria guidelines for control and/or containment.*
- *Minimise soil disturbance during wildfire suppression, road maintenance and facility development works, in accordance with Parks Victoria guidelines.*
- *Promote responsible pet ownership in the local community and among adjacent land owners.*
- *Liaise with neighbouring land owners to co-ordinate pest plant and animal control efforts.*

4.3 Soil conservation

The soils of the planning area are generally light grey gritty sandy loams over mottled yellow clay and have low bearing strength in wet conditions (SGAP 1991; Coffey & Partners 1980). Erodibility ranges from very high on the upper slopes to moderate/high on the middle to lower slopes. Soils along the western shoreline of the Lake are very prone to erosion and access is prohibited. Sections of the south-eastern and south-western shoreline area are actively eroding through wave wash, steep gradients and concentrated stormwater runoff.

Unformed tracks and some steeper management tracks and horse riding trails become unstable under wet conditions, and use during these periods accelerates erosion. A number of these trails require closure and rehabilitation.

Aim

- Prevent and control soil erosion caused by visitor and management activities.

Management strategies

- *Minimise soil erosion from construction works by utilising appropriate management techniques.*
- *Investigate and implement methods of preventing erosion to the swimming beaches and south-eastern shoreline.*
- *Close and revegetate inappropriate trails.*
- *Close tracks to vehicles and horses as necessary to prevent damage to tracks.*

5 THE PARK VISIT

5.1 The Park visitor

The Parks offer two distinctive visitor experiences. Lysterfield Lake visitor area caters for water-based recreation and has facilities for large numbers of visitors; the forest settings, hilltops and northern fringes of the Lake offer solitude, close-to-nature experiences and good views.

In 1996-97 the Parks received over 200 000 visitors. New suburbs developing near the Parks will attract many first-time visitors. Provision for older visitors and the increasing number of families with young children participating in nature-based recreation also needs to be addressed. The Parks have the capacity to cater for the increasing number of visitors in the cooler weather and away from the developed areas.

Entry fees are collected at Lysterfield Park during weekends and peak periods over summer and on public holidays. Fees are not currently collected at Churchill National Park.

Providing for the visitor

The Parks' main strength is as a natural setting for recreation by visitors from nearby suburbs. However, there is also scope to promote them as a stop for tourists exploring the Dandenong Ranges.

Future developments will include improved access and picnic facilities at Churchill National Park, and upgraded facilities at Lysterfield Park.

Three major trail networks are proposed to join regional trails and link major features of interest for walkers. Cycle routes and horse trails will also be improved.

The Parks (apart from the Lysterfield Park developed area after closing hours) are accessible to walkers from the adjoining Monbulk Creek Retarding Basin, Birds Land Reserve and Police Paddocks Reserve (figure 2).

Aims

- Provide opportunities and quality services and facilities for use and enjoyment of the Parks.
- Develop an understanding of visitor profiles, attitudes, needs and satisfaction.
- Provide for visitors in accordance with the overview of future visitor management.

Management strategies

- *Permit recreational activities in accordance with table 2.*
- *Provide and maintain facilities and services which highlight, but are in keeping with, the area's distinctive character (sections 5.2, 5.3, and table 3).*
- *Apply current market survey findings on visitor profiles, patterns of behaviour, expectations and preferences to assist in park management.*
- *Establish a program to determine appropriate levels of recreational activity consistent with protecting visitor experiences and park values.*
- *Monitor visitor numbers and use to ensure adequate provision of facilities consistent with appropriate types and levels of use.*
- *Encourage use of the Parks, especially Lysterfield Park, in non-peak periods and away from the main visitor areas.*
- *Encourage all visitors to adopt minimum impact techniques and to adhere to codes of conduct appropriate to their activity.*
- *Liaise with tourism bodies to promote the Parks to the local community and as an attraction to people touring the Dandenong Ranges.*
- *Liaise with State and local tourism bodies to co-ordinate tourism initiatives with park management.*

TABLE 2 SUMMARY OF RECREATION ACTIVITIES

ACTIVITY	ZONES		OVERLAYS	
	CONSERVATION & RECREATION	RECREATION DEVELOPMENT	SPECIAL PROTECTION AREA	SPECIAL MANAGEMENT AREA
Picnicking	Yes	Yes	No	No
Camping	No	No	No	No
Walking	Yes	Yes	Yes	Yes
Bicycle riding	YC	YC	No	YC
Horse riding	YC*	YC*	No	YC*
Orienteering/Rogaining	Yes*	No	No	No
Rock climbing/Abseiling	No	No	No	No
Fishing	YC	No	No	No
Firewood collecting	No	No	No	No
Motor boating (including launching and mooring)	No	No	No	No
Boating (non-motorised)	YC	YC	No	N/A
Swimming	No	YC	No	No
Water-skiing	No	No	No	No
Dogs	No	No	No	No
Sailing/Windsurfing	YC	YC	No	No

Y Yes - appropriate

No Not appropriate

* Lysterfield Park only

YC conditional - refer to relevant section for details

N/A Not applicable

- *Collect entry fees at Lysterfield Park.*
- *Review entry fees annually.*

5.2 Visitor recreation activities and facilities

5.2.1 Vehicle access

There are two public vehicle access points into the Parks: Churchill Park Drive, which leads to the Churchill National Park visitor area, and Horswood Road leading to the Lysterfield Park visitor area.

Several small car parks on the boundary of the Parks give access for walkers, cyclists and management vehicles.

Aims

- Maintain or provide access to the Parks' main visitor areas and appropriate locations on boundaries.
- Provide and maintain an appropriate network of management roads and tracks.

Management strategies

- *Manage access and management roads and tracks in accordance with figure 4.*
- *Provide small car parks at minor entry points on the boundary at Hallam North Road and Ryans Road (figure 4).*
- *Liaise with VicRoads to improve signage to the Parks on major feeder roads.*

TABLE 3 EXISTING AND PROPOSED RECREATION FACILITIES

SITE	TOILETS	PICNIC TABLES SEATS	BARBECUE FACILITIES	PARK INFO	WALK TRACK	SHELTER	COMMENTS
Lysterfield visitor area	2 blocks	E (47 tables)	21 electric	Visitor Centre and information board	E	P	Established day visitor area with two breakwaters, swimming beaches, boat rigging area, bird hide, additional beach proposed. No entry after closing time.
Churchill visitor area	1 block	E (16 tables)	5 gas	Information board	E + P	E	Established day visitor area. Install new tables and seats. Refurbish shelter. Construct walking and cycling track link to Police Paddocks.
Boys Farm site				E	E		Established Historic Trail with interpretative signs. Maintain historic artefacts.
Donelan Homestead site				P	E		Lookout and interpretation of site required. Provide information board.
Lysterfield Hills Lookout		P		P	E		Construct walking and cycling track linking the Parks and viewing platform. Install 1 seat.
Monbulk Ck Lookout		P		P	P		Install 1 seat. Interpretation of view required.
Tramline Quarry		P		P	P		Interpretation of site required.
Dandenong Lookout		P			E		Install 1 seat.
Dargon Homestead				P			Interpretation of site required.
Horse riding trails.				E			Provide small information board at major trail entry points.
E	existing facility	P	proposed facility				

AMENDED: see updated table at start of document

5.2.2 Day visits

Churchill National Park attracts over 80 000 people per year, mostly during spring and autumn. Lysterfield Park attracts over 120 000 people per year, mostly during summer.

Churchill National Park has facilities for smaller numbers of visitors. It has 70 car spaces and six picnic areas, a shelter and toilets.

Lysterfield Park has facilities for large numbers of visitors and has 500 car spaces, 21 electric barbecues, 20 picnic areas, changing rooms and toilet blocks. The Lake has two swimmers-only areas, breakwaters and a boat rigging area. All facilities, including the bird hide in the Special Protection Area, have access for visitors with limited mobility.

When the car parks at Lysterfield Park are filled to capacity (on average seven days per year) the entrance is closed until there are vacancies.

Aim

- Establish and maintain day visitor facilities that enhance visitor enjoyment of the Parks and are consistent with protecting park values.

Management strategies

- *Provide quality facilities and site interpretation at the two major visitor areas and other areas in accordance with table 2 and figure 4.*
- *Provide additional seating and barbecue facilities, and refurbish existing furniture, shelter and barbecue facilities at Churchill National Park.*

5.2.3 Bushwalking

Bushwalking in the planning area is popular. Many visitors, including several bushwalking groups, walk there regularly. Eight ‘walkers only’ tracks are provided and there is an extensive network of management roads and tracks that offer interesting short and longer walks. A new trail constructed across the

Lysterfield western extension will provide for longer walks with excellent views across the Lysterfield Hills.

Access from neighbouring public land will create longer walking opportunities between the Parks and Dandenong Valley and the Dandenong Ranges, but safe pedestrian crossing of Wellington Road and Churchill Park Drive needs to be provided.

Aim

- Increase the range of bushwalking opportunities in the Parks and to neighbouring public land, while minimising impacts on park values.

Management strategies

- *Provide for bushwalking along existing management tracks and along new trails in accordance with figure 4. Give priority to upgrading the three trail systems: the Dandenong Valley to Dandenong Ranges Track, the link between Churchill visitor area and Lysterfield Lake, and a Lake Discovery Loop.*
- *Designate tracks for ‘Walkers Only’ use in accordance with figure 4.*
- *Extend the walking track network to incorporate the views from rocky outcrops and tors (figure 4).*
- *Investigate the feasibility of pedestrian underpass or overpass links across Wellington Road and Churchill Park Drive.*
- *Provide track notes for walkers, possibly in the form of a saleable booklet.*
- *Monitor any recreational conflict between walkers, cyclists and horse riders.*
- *Continue to liaise with Melbourne Water and the Cities of Casey and Knox and the Shire of Yarra Ranges to connect walking trails to those on neighbouring public land.*

5.2.4 Cycling

Cycling is an increasingly popular activity, particularly with family groups. Most of the management tracks in the planning area are suitable for cycling throughout the year. These tracks cater for cyclists wishing to explore the Parks or further afield along paths on adjoining public and municipal land. Cyclists riding at high speeds pose risks to themselves and other park users.

Aim

- Provide cycling opportunities while minimising environmental damage and conflict with other recreation activities.

Management strategies

- *Permit cycling in accordance with table 2 and figure 4.*
- *Prohibit cycling on 'walkers only' tracks.*
- *Encourage the use of the 'Mountain Bike Code' (CNR 1993).*
- *Monitor the speed and safety of bike riding and the levels of conflict with walkers.*
- *Permit cycling events in the Conservation and Recreation Zone in Lysterfield Park in accordance with Parks Victoria guidelines.*
- *Prepare information showing cycling tracks, possibly in the form of a saleable booklet.*

5.2.5 Horse riding

Lysterfield Park has shared horse trails, which are popular with many local horse riding clubs, commercial operators and private riders. The horse trails link with Casey and Yarra Ranges horse trails (SEAC 1994). Equestrian access to Lysterfield Park is via Horswood Road, Wellington Road, Reservoir Road and Rockleigh Park Road (figure 4).

Soils in the Park often become very unstable during periods of extended wet weather resulting in soil erosion and risk to riders. Some steep and unformed trails to the east of

Logan Park Track are considered unsuitable for continued horse access.

Aim

- Provide opportunities for both commercial and recreational horse riders while minimising impacts of these activities on park values and park users.

Management strategies

- *Allow horse riding on horse trails as shown in figure 4.*
- *Trails proposed as horse trails will be opened for use when upgraded to appropriate standards.*
- *Prepare improved signage and information for horse riders showing horse trails and riding codes.*
- *Close horse trails during periods of wet weather and high fire danger, if there are concerns about overuse, soil erosion or risk and safety. Consult with Melbourne Water and the Casey City Council about the seasonal closure of the southern boundary trail.*
- *Liaise with Yarra Ranges Shire Council and Casey City Council, and with horse riders and equestrian bodies, and encourage involvement in maintenance of the equestrian trails and the control of weeds.*
- *Introduce a permit system for recreational riders as a monitoring and educational tool.*
- *Close and revegetate trails used for horse riding not shown on figure 4 (section 4.3) once alternative trails are upgraded to an appropriate standard*
- *Monitor weed infestation or spread along horse trails.*

5.2.6 Swimming

Lysterfield Lake is very popular for swimming during summer, and there are two ‘swimmers only’ areas which are separate from general boating activities. There is a need for another swimming area closer to the boat launching and rigging facility.

Aim

- Provide swimming opportunities while minimising conflicts with other water recreational users.

Management strategies

- *Maintain swimming facilities in the recreation development zone (figure 4).*
- *Provide a new ‘swimmers only’ area adjacent to the boat launching facility.*
- *Provide lifebuoys at the swimming beaches.*

5.2.7 Boating

The main users of Lysterfield Lake are windsurfers and dinghy sailors. Windsurfing is more popular throughout the year on windy days. The Lysterfield Sailing Club runs several organised events and offers sailing tuition.

Boat launching, rigging and resting facilities are provided next to the boat ramp.

Zoning of the Lake (Recreation Use Plan, CFL 1986) separates boating activities from the swimming area and the special protection area (no access). Boats are not allowed on the dam wall or the shoreline except in the boat launching area. There is little conflict between the different recreational user groups.

Boating activities on the Lake are managed under the *Marine (Vessels) Regulations 1988*. A volunteer lifesaving club recently commenced patrols of the Lake.

Aim

- Provide opportunities for boating in the Lysterfield Park while minimising the environmental impact of the activity and conflict with other Park visitors.

Management strategies

- *Provide for a range of water-based recreational activities consistent with conservation objectives and zoning.*
- *Permit only non-motorised boating on Lysterfield Lake. (Approved rescue, training and management boats are excepted).*
- *Allow the boat ramp to be used only by visitors with limited mobility and for management purposes.*
- *Enlarge the facility for boat rigging.*
- *Encourage boating and windsurfing tuition.*

5.2.8 Fishing

Recreational fishing was considered in 1986 when the Recreation Use Plan (CFL 1986) was developed. It was not permitted because of potentially severe environmental impacts to the erosion-prone shoreline and water quality (Coffey & Partners 1980), and conflicts with other water-based activities, particularly windsurfing, sailing and swimming. Park regulations do not permit recreational fishing, but fishing tuition by authorised groups is permitted from jetties on the western shoreline. Lysterfield Lake was stocked in the 1980s, predominantly with Brown Trout, and further stocked with Brown Trout and Rainbow Trout in 1995.

Illegal fishing in the old aqueduct has resulted in small campfires, increased litter and the deaths of birds caught in discarded fishing lines.

Aim

- Provide opportunities for tuition fishing.

Management strategies

- *Permit fishing in Lysterfield Lake only from jetties by authorised groups for the purposes of training and tuition.*
- *Implement a permit system to monitor fishing tuition from jetties by authorised groups.*

- *Review tuition fishing and restocking, with indigenous or exotic fish, after 12 months.*
- *Do not restock the Lake prior to a review of tuition fishing.*
- *Monitor incidences of illegal fishing and environmental degradation, and take appropriate action where necessary.*

5.3 Visitor information and interpretation

The small visitor centre at Lysterfield Park is well located to serve Park visitors.

The information displays require updating and new external panels promoting opportunities in both Parks and links to adjoining bushland are required.

The visitor centre has the potential to become a commercial operation.

Parks information boards are located in most key visitor nodes in both Parks, including the swimming areas, but more information is desirable.

There is a self-guided nature trail on the west side of Lysterfield Lake (figure 4) and a bird hide allows visitors to view a variety of waterbirds.

Aims

- *Orientate visitors to the Parks and their features.*
- *Enhance visitors' enjoyment and understanding of the Parks' natural and cultural values.*

Management strategies

- *Prepare an information and interpretation plan for the Parks in the context of broader regional opportunities.*
- *Provide new information boards with orientation information and safety messages at the following entrances: Churchill Park Drive, Hallam North Road, Ryans Road, Nixons Lane, and Logan Park Track.*

- *Provide a basic level of visitor orientation, information and safety messages at key visitor nodes, including the swimming areas.*
- *Investigate alternative commercial uses for the visitor centre such as a tea house (section 5.4).*
- *If sufficient demand exists seek Expressions of Interest from commercial operators to provide interpretation programs during peak visitor periods.*
- *Update the existing Park Note and ensure availability at popular destinations and tourism outlets.*
- *Provide a basic level of site interpretation at Lysterfield Hills, Monbulk Creek and Dandenong lookouts, and at important cultural sites (section 3.5) and significant landform features (section 3.1).*
- *Establish and implement monitoring and maintenance schedules for all interpretative facilities.*
- *Regularly evaluate information and interpretative programs related to the Parks.*

5.4 Commercial operations

The Parks provide a variety of opportunities for nature-based tourism close to Melbourne.

The Parks have two market streams: the more numerous short-term regular visitors wishing to use the developed facilities, and visitors who explore the Parks seeking close-to-nature experiences.

Activities currently offered by commercial operators in Lysterfield Park include horse riding and water-craft hire. There are opportunities for commercial ventures offering food and drink during peak visitor periods, cycle hire, guided tours of the Lake or neighbouring public land, forest and wetland interpretation (particularly for schools), and wildlife encounters.

Aim

- Provide opportunities for commercial services consistent with park objectives.

Management strategies

- *Encourage commercial operators to provide agreed services, facilities and information for visitors.*
- *Seek Expressions of Interest in establishing a tea house (with external and internal seating) in the existing visitor centre building (section 5.3).*
- *Encourage and assist commercial tour operators to develop knowledge about the Parks' values.*

5.5 Risk management and public safety

Lysterfield Lake's potential hazards for the public include fire and traffic congestion when the car parks at Lysterfield Park are full and the entrance temporarily closed. The Lysterfield Reservoir has been recognised as being a potentially high hazard dam (section 7.3).

An Emergency Response Plan for the Parks covers fire, search and rescue and other potential problems.

Aims

- Promote public safety in the use of the Parks.

- Ensure that staff are able to assist in emergency situations.
- Ensure that appropriate risk management procedures are in place.

Management strategies

- *Inform summer visitors of fire regulations and emergency management strategies in the event of a wildfire (section 5.3).*
- *Close the main park entrances or tracks with high fuel levels on days of extreme fire danger.*
- *Train Park staff in first aid and emergency resuscitation, search and rescue, and conflict avoidance techniques.*
- *Ensure that staff are familiar with all regulations relating to safety, particularly the Marine (Vessels) Regulations.*
- *Develop and review search and rescue and other emergency management and evacuation procedures, in co-operation with all relevant authorities.*
- *Update the Emergency Response Plan.*
- *Liaise with Victoria Police on days when the car parks are full or likely to be full (hot weather).*
- *Ensure that Park staff are appropriately trained in risk management procedures, especially in relation to monitoring of the Lysterfield Reservoir wall and associated infrastructure.*
- *Support and encourage the formation of a lifesaving service at Lysterfield Park.*

6 COMMUNITY AWARENESS AND INVOLVEMENT

6.1 Friends and volunteers

Valuable contributions to park management are made by the Friends of Churchill National Park and Lysterfield Park, the Australian Trust for Conservation Volunteers, Department of Correctional Services personnel, field naturalists clubs, local bird observers, local schools and other interested individuals and groups. Eumemmering Secondary College has undertaken a number of useful projects under the State Government Environmental Cadet program.

Aim

- Encourage volunteer involvement in managing the Parks.

Management strategies

- *Encourage increased membership of the Friends group by promoting the Parks in the local community.*
- *Develop and evaluate a long-term volunteer strategy that incorporates the skills and interests of volunteer groups in park management activities, e.g. monitoring Bell Miner populations, revegetation, and, if appropriate, volunteer guides programs.*

6.2 Community awareness and Park neighbours

The private land adjacent to the planning area is used for residential development, hobby farms, grazing, apple production and mineral extraction. Further residential subdivisions are planned along the southern boundary of the Parks. There is increasing interest among neighbours in the appropriate management of land.

Aims

- Encourage conservation and sound land management practices on private land adjoining the Parks.

- Increase public awareness of management activities undertaken in the Parks.

Management strategies

- *Co-operate with adjacent land owners in the protection of both private property and public land from fire, pest plants and animals and other hazards, and in the promotion of conservation values.*
- *Liaise with local community groups and land owners, and as appropriate involve them in relevant aspects of planning and managing the Parks.*
- *Promote the provision of wildlife habitat and corridors among the local community (e.g. through the Land for Wildlife scheme).*
- *Apply, and encourage the application of, the Good Neighbour Policy to management issues on or near the boundary.*
- *Use local media to advise of pest plant and animal programs, fire protection activities, visitor services developments and other significant management activities being undertaken in the Parks.*

6.3 Schools education

A number of local school groups use the Parks for studies and there is potential for greater use by schools and educational institutions. There is scope for developing and providing resource material about the Parks.

Aim

- Promote the Parks' value particularly for environmental education.

Management strategies

- *Encourage greater use by schools and educational institutions.*
- *Encourage development of curriculum-based education resource materials, particularly relating to the topics of wetlands, revegetation and park management.*

7 OTHER ISSUES

7.1 Authorised uses

Six high voltage power lines traverse Churchill National Park, and another line traverses Lysterfield Park adjacent to Logan Park Track. Telstra and Optus underground fibre optic cables also traverse Churchill National Park in the vicinity of the power lines.

Two Melbourne Water underground pipes traverse the southern boundary of Lysterfield Park underneath the horse trail.

There is a permanent survey marker on the high point near the northern boundary of the Lysterfield western extension.

Emergency services occasionally undertake training in Lysterfield Park. Apiculture occurs on two sites in Lysterfield Park

Aim

- Minimise the impact of occupancies on the natural values and recreational amenity of the Parks.

Management strategies

- *Ensure that all occupancies, including utility services, are appropriately licensed and managed.*
- *Review conditions for vegetation removal under the power lines, particularly of the Heathy Woodland community in Churchill National Park, and negotiate agreements with relevant electricity companies under the National Parks Act.*
- *Protect the permanent survey marker.*
- *Protect Melbourne Water fittings under the horse trail from damage by horses.*
- *Allow emergency services to carry out training in the Parks in accordance with Parks Victoria guidelines.*
- *Manage apiculture in Lysterfield Park in accordance with park guidelines.*

7.2 Boundaries and adjacent uses

7.2.1 Roads

Lysterfield Park is segmented by Wellington Road and Logan Park Track. Wellington Road is a declared main road and is managed by Yarra Ranges Shire Council on behalf of VicRoads.

Logan Park Track is a government road closed to traffic under the provisions of the *Local Government Act 1989* (Vic). It is utilised by management vehicles, walkers, cyclists and horse riders. Dogs are currently permitted on this road.

The southern ends of Glen and Brae roads, and the northern end of Hallam North road, are unformed and appear to be part of the Lysterfield Park.

The transfer of management responsibilities for Logan Park Track and the unformed sections of Brae and Glen roads, to Parks Victoria would ensure that management of the roads is consistent with management of abutting sections of Lysterfield Park.

Aim

- Manage roads segmenting Lysterfield Park to a standard consistent with the adjoining Park.

Management strategies

- *Seek the transfer of Yarra Ranges Shire Council management responsibilities for Logan Park Track and the unformed section of Hallam North Road to Parks Victoria.*
- *Seek the transfer of Knox City Council responsibilities for the unformed sections of Brae and Glen roads to Parks Victoria.*
- *Discuss with VicRoads and Yarra Ranges Shire Council the management of the roadsides of Wellington Road to a standard consistent with the adjoining Park.*

7.2.2 Adjacent land

Private land use is managed through the municipal planning schemes of the Cities of Casey and Knox, and the Shire of Yarra Ranges. The UYVDR Regional Strategy Plan also affects land management in the Shire of Yarra Ranges (UYVDRA 1992).

The Yarra Ranges Shire Council owns the former Lysterfield landfill site adjoining the eastern boundary of Lysterfield Park. This site may soon be redeveloped.

Parks Victoria liaises with the Council and participates in the planning process to ensure the protection of park values.

Boral Resources (Vic.) and Pioneer Concrete (Vic.) operate rock quarries adjacent to the northern boundary of the planning area. After extraction is completed, the quarry sites will be revegetated and the land used for public purposes.

A future directions plan being prepared for the Police Paddocks will address links with Churchill National Park.

Aims

- Minimise conflicts between park management and surrounding land use.
- Minimise effects of adjacent land use on park values.
- Facilitate access to adjacent public land.

Management strategies

- *Liaise with the Cities of Casey and Knox, the Shire of Yarra Ranges and Melbourne Water about proposed developments and uses on adjacent land and to ensure appropriate access between the Parks and the adjoining public land.*
- *Direct visitors away from the Boral quarry by closing Quarry Track and constructing the proposed Lysterfield Hills Track.*
- *Investigate opportunities to provide access to the flat rocks and tors on private land adjacent to Native Track Lookout.*

7.3 Lysterfield Lake water management

The artificial lake infrastructure includes a dam wall, outlet tower, spillway and outlet valves. A recent assessment of the structure (Gutteridge, Haskins & Davey 1997) recommended a number of major improvements to dam infrastructure and monitoring procedures.

The water level of the Lake usually exceeds the desired level during spring and must be regulated manually by Park staff. Automatic water level management is desirable.

The water quality of the Lake generally complies with health standards for water contact sports. However, there have been two recent short-term outbreaks of blue-green algae, late in the summers of 1995 and 1996.

Aims

- Maintain the water level of the Lake at the height of the spillway.
- Maintain the lake structure.
- Maintain the water quality of the Lake to comply with health standards for water contact sports.

Management strategies

- *Monitor the lake infrastructure according to prepared engineering specifications.*
- *Undertake a feasibility study for a self-regulatory water level system, and install an appropriate system.*
- *Monitor the water quality of the Lake according to EPA specifications.*
- *Restrict public access to the Lake if the water quality does not meet EPA specifications.*
- *Undertake a capital works program to upgrade dam infrastructure.*
- *Ensure that Park staff are appropriately trained in dam safety procedures, including monitoring and surveillance.*

8 IMPLEMENTATION

A three-year rolling implementation program will be prepared for the Parks to ensure efficient implementation of this Plan. Priority management strategies are identified in table 4 as an initial step in this process.

TABLE 4 PRIORITY MANAGEMENT STRATEGIES

MANAGEMENT STRATEGY	SECTION IN PLAN
Resource conservation	
Prepare a revegetation plan.	3.2
Develop a seed bank and revegetate areas.	3.2
Protect and interpret significant cultural sites.	3.5
Park protection	
Implement the Port Phillip Area Fire Protection Plan.	4.1
Prepare a pest management strategy.	4.2
Control Blackberry infestations.	4.2
Implement a fox and pig control program.	4.2
Close horse trails as appropriate.	4.3
Seek the transfer of management for Logan Park Track to PV.	7.2.1
Investigate methods of controlling erosion along the south-eastern shoreline of the Lake.	4.3
Upgrade horse trails to an appropriate standards.	5.2.5
The Park visit	
Prepare an information and interpretation plan for the Parks.	5.3
Investigate establishing a tea house in the visitor centre.	5.4
Develop trails with links to paths on adjoining land and between major features.	5.2.3, 5.2.4
Provide a new swimming area and enlarged boat rigging facility.	5.2.6, 5.2.7
Develop visitor facilities at Churchill National Park.	5.2.2
Provide on-site Park information and interpretation and new Park Notes.	5.3
Community awareness and involvement	
Encourage membership of the Friends group.	6.1
Liaise with local community groups and land owners.	6.2
Monitoring and research	
Improve monitoring of horse riding.	5.2.5
Monitor visitor numbers and use.	5.1, 5.2
Investigate the health, population size and habitat of Eastern Grey Kangaroos in Churchill National Park.	3.3
Monitor eucalypt dieback and investigate link with Bell Miners.	3.2, 3.3
Monitor significant flora and fauna.	3.2, 3.3
Monitor the koala and platypus populations.	3.3
Monitor the infrastructure and the water quality of the Lake.	7.3

REFERENCES

- Carr, G.W., Yugovic, J.V. & Robinson, K.E. 1992 *Environmental Weed Invasions in Victoria*. Department of Conservation and Natural Resources & Ecological Horticulture, Victoria.
- CFL 1986 *Lysterfield Lake Park Recreation Use Plan*. Department of Conservation, Forests and Lands, Melbourne.
- Cheal, D.C., Lau, J.A., Robinson, R.W., Ellis, J.E. & Cameron, D.G. (in prep.) *Vegetation Survey and Sites of Botanical Significance in the Melbourne Area*. Department of Conservation and Natural Resources, Melbourne.
- CNR 1992 *Approved Fire Protection Plan Port Phillip Area (Dandenong Region)*. Department of Conservation and Natural Resources, Dandenong.
- CNR 1993 *Mountain Bike Code*. Department of Conservation and Natural Resources, Melbourne.
- CNR 1995 Draft Port Phillip Area Interpretation and Education Strategy. Department of Conservation and Natural Resources, Dandenong, (unpub.).
- Coffey & Partners 1980 *Lysterfield Lake Park Soil Stability Studies*. Report to the Ministry of Conservation, Melbourne.
- Coulson H. 1958 *The story of the Dandenongs 1838-1958*. Cheshire, Melbourne.
- Cook, D. 1994 Vegetation Community Survey for Lysterfield Lake Park, Churchill National Park, ZA Land and Link Land. (unpub.).
- DCE 1990 *The Dandenong Police Paddocks, Volume 3 – an Archaeological Survey*. Department of Conservation and Environment, Melbourne.
- Gullan, P.K., Cheal, D.C. & Walsh, N.G. 1990 *Rare or Threatened Plants in Victoria*. Department of Conservation and Environment, Victoria.
- Gutteridge, Haskins & Davey Pty Ltd 1997 Lysterfield Lake Dam, Mount Buffalo Dam and Lake Catani Dam. Report on Dam Safety Evaluation (unpub.).
- LCC 1994 *Melbourne Area, District 2, Review, Final Recommendations*. Land Conservation Council, Melbourne.
- MPW 1995 *A guide to priorities for Melbourne's Open Space Network*. Melbourne Parks and Waterways, Victoria.
- NPS 1978 *Churchill National Park Plan of Management*. National Parks Service, Melbourne.
- NPS 1995 *National Parks and Conservation Reserves, Guidelines and Procedures Manual*. National Parks Service, Department of Conservation and Natural Resources, Melbourne.
- NRE 1998 *Threatened Vertebrate Fauna in Victoria - 1998*. Department of Natural Resources and Environment, Victoria.
- NRE (database) 1998 Flora Information System. Department of Natural Resources and Environment, Victoria.
- NTA 1981 *Classified Landscapes*. National Trust of Australia (Victoria), Melbourne.
- SEAC 1994 *Sherbrooke Equestrian Strategy*. Sherbrooke Equestrian Advisory Committee, Shire of Sherbrooke, Victoria.
- SGAP 1991 *Flora of Melbourne*. Society for Growing Australian Plants, Maroondah.
- SOS 1994 *Birdsland Reserve Management Plan*. Shire of Sherbrooke, Victoria.
- UYVDRA 1989a *A Review of the Sites of Botanical Significance in the Upper Yarra and Dandenong Ranges Region*. Upper Yarra Valley and Dandenong Ranges Authority, Victoria.
- UYVDRA 1989b *Report on the Sites of Zoological Significance in the Upper Yarra Valley (Western Sections) and Dandenong Ranges*. Upper Yarra Valley and Dandenong Ranges Authority, Victoria.
- UYVDRA 1992 *Upper Yarra Valley and Dandenong Ranges Authority Regional Strategy Plan*. Upper Yarra Valley and Dandenong Ranges Authority, Victoria.

APPENDIX 1 SIGNIFICANT FLORA

SCIENTIFIC NAME	COMMON NAME	STATUS
<i>Almaleea subumbellata</i>	Wiry Bush-pea	rs
<i>Amphibromus fluitans</i>	River Swamp Wallaby-grass	n
<i>Austrofestuca hookeriana</i>	Hookers Fescue	rs
<i>Azolla pinnata</i>	Ferny Azolla	rs
<i>Blechnum chambersii</i>	Lance Water-fern	rs
<i>Caladenia aurantiaca</i>	Orange-tip Caladenia	rs
<i>Calochilus campestris</i>	Copper Beard-orchid	rs
<i>Callitriche muelleri</i>	Round Water Starwort	rs
<i>Calystegia sepium</i>	Large Bindweed	rs
<i>Centipeda cunninghamii</i>	Common Sneezeweed	rs
<i>Drosera pygmaea</i>	Tiny Sundew	rs
<i>Eleocharis minuata</i>	Variable Spike Sedge	rs
<i>Eucalyptus globoidea</i>	White Stringybark	rs
<i>Gentianella diemensis</i> spp. agg.	Mountain Gentain	rs
<i>Gynatrix pulchella</i>	Hemp Bush	rs
<i>Helichrysum</i> aff. <i>rutidolepsis</i>	Pale Everlasting	rs
<i>Hydrocotyle muscosa</i>	Mossy Pennywort	rs
<i>Isolepus cernua</i>	Nodding Club-sedge	rs
<i>Leptocarpus brownii</i>	Coarse Twine-rush	rs
<i>Leptocarpus tenax</i>	Slender Twine-rush	rs
<i>Neopaxia australasica</i>	White Purslane	rs
<i>Pallama falcata</i>	Sickle Fern	rs
<i>Persicaria praetermissa</i>	Spotted Knotweed	rs
<i>Podolepsis jaceoides</i> s.l.	Showy Podolepsis	rs
<i>Pomaderris oraria</i>	Coast Pomaderris	rs
<i>Pterostylis X ingens</i>	Sharp Greenhood	rs
<i>Pterostylis furcata</i>	Sickle Greenhood	rs
<i>Pultenaea humilis</i>	Dwarf Bush-pea	rs
<i>Sphaerolobium vimineum</i>	Leafless Globe-pea	rs
<i>Vallisneria spiralis</i>	Eel-grass	rs
<i>Wolffia australiana</i>	Tiny Duckweed	rs

Source: Cook 1994; UYVDRA 1989a; Cheal et al. (in prep.); Gullan et al. 1990; NRE (database) 1998

Status:

n nominated for listing under the *Flora and Fauna Guarantee Act 1988* (Vic.).
rs regionally significant

APPENDIX 2 SIGNIFICANT FAUNA

SCIENTIFIC NAME	COMMON NAME	STATUS
Mammals		
<i>Hydromys chrysogaster</i>	Water Rat	-
<i>Isoodon obesulus</i>	Southern Brown Bandicoot	Lt
<i>Macropus giganteus</i>	Eastern Grey Kangaroo	-
<i>Ornithorhynchus anatinus</i>	Platypus	Lt
<i>Phascolarctos cinereus</i>	Koala	-
<i>Rattus lutreolus</i>	Swamp Rat	Lt
<i>Tachyglossus aculeatus</i>	Short-beaked Echidna	Lt
<i>Wallabia bicolor</i>	Black Wallaby	Lt
Birds		
<i>Aegotheles cristatus</i>	Australian Owlet-nightjar	Lt
<i>Anas rhynchotis</i>	Australasian Shoveler	Vul
<i>Anhinga melanogaster</i>	Darter	-
<i>Aquila audax</i>	Wedge-tailed Eagle	Lt
<i>Ardea alba</i>	Great Egret	End*
<i>Aythya australis</i>	Hardhead	Vul
<i>Botaurus poiciloptilus</i>	Australasian Bittern	End
<i>Callocephalon fimbriatum</i>	Gang-gang Cockatoo	Lt
<i>Cinchorhamphus mathewsi</i>	Rufous Songlark	Lt
<i>Circus aeruginosus</i>	Marsh Harrier	Lt
<i>Egretta garzetta</i>	Little Egret	-
<i>Falco peregrinus</i>	Peregrine Falcon	-
<i>Gallinago hardwickii</i>	Latham's Snipe	-
<i>Glossopsitta pusilla</i>	Little Lorikeet	Lt
<i>Haliaeetus leucogaster</i>	White-bellied Sea-Eagle	End
<i>Haliastur sphenurus</i>	Whistling Kite	Lt
<i>Hieraaetus morphnoides</i>	Little Eagle	Lt
<i>Lathamus discolor</i>	Swift Parrot	End*
<i>Megalurus gramineus</i>	Little Grassbird	Lt
<i>Neophema chrysostoma</i>	Blue-winged Parrot	Lt
<i>Ninox connivens</i>	Barking Owl	End
<i>Ninox strenua</i>	Powerful Owl	End*
<i>Nycticorax caledonicus</i>	Nankeen Night Heron	Vul
<i>Oxyura australis</i>	Blue-billed Duck	Vul
<i>Pachycephala olivacea</i>	Olive Whistler	Lt
<i>Pelecanus conspicillatus</i>	Australian Pelican	-
<i>Phalacrocorax varius</i>	Pied Cormorant	-
<i>Philemon citreogularis</i>	Little Friarbird	Lt
<i>Platalea regia</i>	Royal Spoonbill	Vul
<i>Podiceps cristatus</i>	Great Crested Grebe	Lt
<i>Pomatostomus temporalis</i>	Grey-crowned Babbler	End*
<i>Porzana pusilla</i>	Baillon's Crake	Vul
<i>Psophodes olivaceus</i>	Eastern Whipbird	Lt
<i>Rallus pectoralis</i>	Lewin's Rail	End
<i>Rallus philippensis</i>	Buff-banded Rail	Lt
<i>Recurvirostra novaehollandiae</i>	Red-necked Avocet	Lt
<i>Sericornis fuliginosus</i>	Calamanthus	Lt
<i>Sericornis pyrrhopygius</i>	Chesnut-rumped Hylacola	Lt
<i>Sericornis sagittatus</i>	Speckled Warbler	Lt

Appendix 2 (cont.)

SCIENTIFIC NAME	COMMON NAME	STATUS
<i>Stipiturus malachurus</i>	Southern Emu-wren	Lt
<i>Tadorna tadornoides</i>	Australian Shelduck	Lt
<i>Tringa hypoleucos</i>	Common Sandpiper	Lt
<i>Turnix varia</i>	Painted Button-quail	Lt
<i>Xanthomyza phrygia</i>	Regent Honeyeater	CE*
<i>Zoothera dauma</i>	White's Thrush	Lt
Reptiles		
<i>Egernia saxatilis intermedia</i>	Black Rock Skink	Lt

Status:

NRE 1998	CE	critically endangered in Victoria
	End	endangered in Victoria
	Vul	vulnerable in Victoria
UYVDRA 1989b	Lt	Locally threatened within the Greater Melbourne Area, including the UYVDR Region

* Listed under Flora and Fauna Guarantee Act

APPENDIX 3 MAJOR ENVIRONMENTAL WEEDS

SCIENTIFIC NAME	COMMON NAME	COMMENTS
<i>*Chrysanthemoides monilifera</i>	Boneseed	Occurs throughout the Parks. Major infestation near Wallaby Track.
<i>*Erica lusitanica</i>	Spanish Heath	Occurs along track margins and fire breaks.
<i>*Pittosporum undulatum</i>	Sweet Pittosporum	Predominantly occurs north of Wellington Road and in Churchill National Park. Also off Casuarina Track.
<i>*Rubus fruticosus</i> spp. agg.	Blackberry	Infestations throughout the Parks, particularly on former and current pasture sites and plantation land, and between Cloverdale Track and South Break.
<i>*Myrsiphyllum asparagoides</i>	Bridal Creeper	Occurs between Cloverdale Track and South Break. Potential to be a major problem.
<i>*Sollya heterophylla</i>	Bluebell Creeper	Infestation at Churchill National Park. Potential to be a major problem.
<i>*Ulex europaeus</i>	Furze	Infestation at Lake Track and throughout Churchill National Park.
<i>*Tradescantia albiflora</i>	Wandering Trad	Small infestations on old house sites and along Logan Park Rd.

Source: Carr et al. (1992)

* Introduced species

APPENDIX 4 MANAGEMENT OF ROADS AND TRACKS

ROAD OR TRACK	COMMENTS/USES	STATUS/CLASS		MANAGEMENT STRATEGY
		CURRENT	PROPOSED	
Abrahams Track	Internal track	MVO 2	MVO 2	
Acacia Nature Walk	Walking track	W C	W B	
Army Track East	Public access to Churchill NP	O 1	O 1	Seal with bitumen.
Army Track West	Internal track	MVO 1	MVO 1	Realign unsightly straight sections.
Asling Break	Slashed break	MVO 3	-	Close and rehabilitate.
Ballart Track	Internal track	MVO 2	MVO 2	
Bayview Track	Internal track	MVO 1	-	Close and rehabilitate, subject to SEC agreement.
Beach Road	Access to Beach car park	O 1	O 1	Maintain as sealed road.
Bellbird Track	Internal track	MVO 3	MVO 3	
Boys Farm Track	Internal track	MVO 2	MVO 2	
Boys Farm Heritage Walk	Walking track	W D	W C	
Casuarina Track	Internal track	MVO 1	MVO 1	
Channel Track	Internal track	MVO 2	MVO 1/W	The section (Channel Walk) between Army and Link Tracks is for walkers only.
Cloverdale Track	Slashed break	MVO 3	MVO 3	
Dargon Track	Internal track	MVO 3	MVO 1	
Donelan Track	Internal track	MVO 3	MVO 2	
East Boundary Track	Internal track	MVO 3	MVO 1/H	Horse access between Nodosa and Echidna only. Close and rehabilitate to south of Echidna.
East West Break	Slashed break	MVO 3	MVO 3	Maintain as slashed break.
Eastern Horse Trail	Horse trail	MVO 2/H	MVO 1/H	All weather horse trail.
Echidna Track	Horse trail	MVO 3/H	MVO 1/H	All weather horse trail. Close and rehabilitate to South of former Native Cherry Tk.
Eumemmering Track	Internal track	MVO 3	-	Close and rehabilitate.
Glen Track	Internal track	MVO 3	MVO 2	
Granite Track	Internal track	MVO 3	MVO 2	
Grassy Spur Walk	Internal track	MVO 3	MVO 2/W	MVO and walkers only.
Gully Break	Internal track	MVO 3	MVO 3	
Gun Club Track	Internal track	MVO 2	MVO 1/H	All weather track and horse trail.
Horswood Road West	Public access to Lysterfield Park and boat ramp	O 1	O 1	Maintain as sealed road. Close after hours.

AMENDED: see updated table at start of document

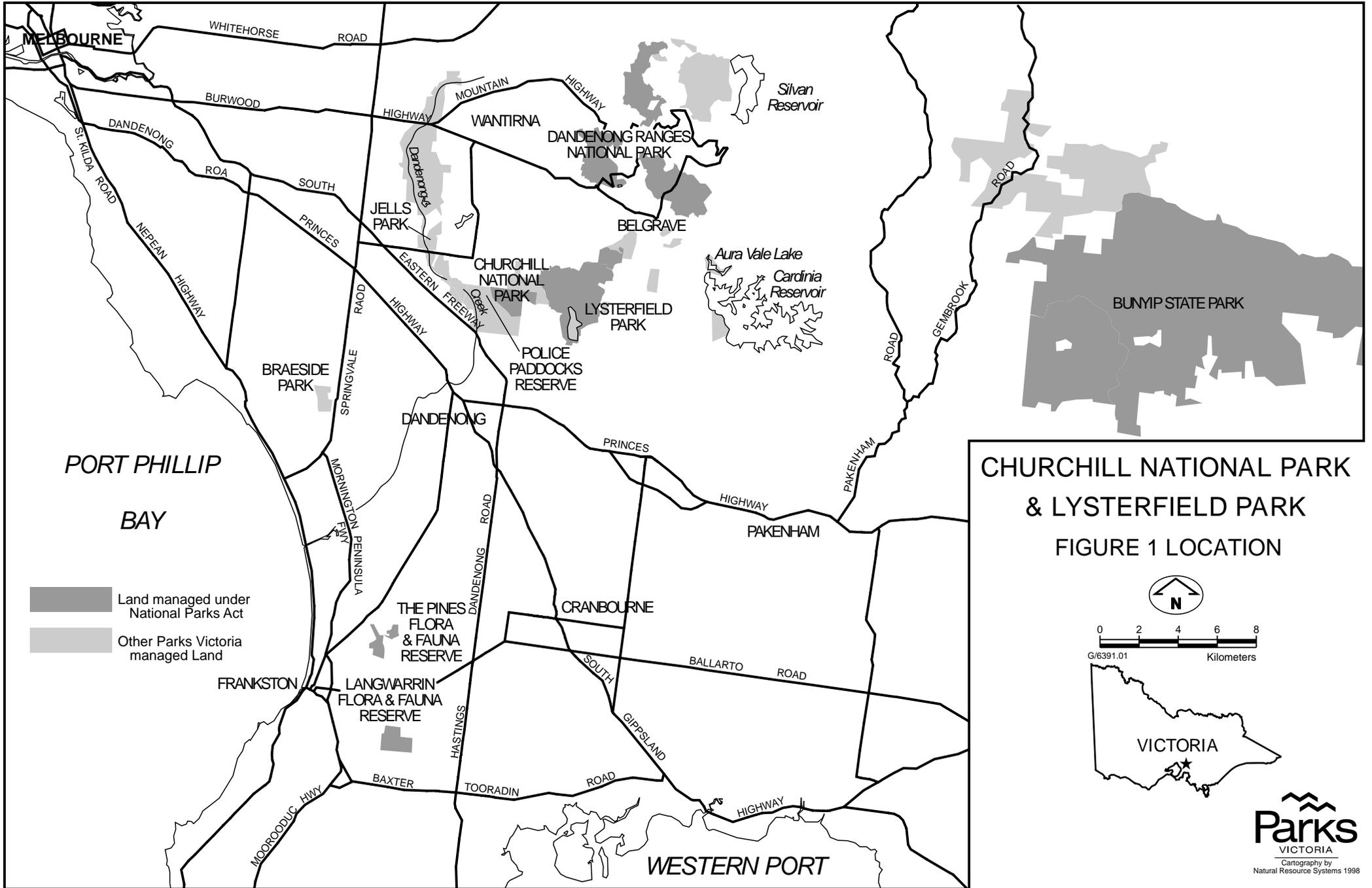
ROAD OR TRACK	COMMENTS/USES	STATUS/CLASS		MANAGEMENT STRATEGY
		CURRENT	PROPOSED	
Lake Track	Internal track	MVO 2	MVO 1	
Lamberts Track	Internal track	MVO 2	MVO 1	
Lanes Track	Internal track	MVO 2	MVO 2	
Link Track (Churchill)	Internal track	MVO 2	MVO 2	
Logan Park Road	Internal track	MVO 1 /H	MVO 1 /H	
Lyster Track	Internal track	MVO 2	MVO 2	
Lysterfield Hills Track	Internal track	MVO 2	MVO 2	
Lysterfield Hills Track East	New track	-	MVO 1	Develop new trail.
Mahogany Track	Internal track	MVO 2	MVO 1	
Native Cherry Track	Internal track	MVO 3/H	MVO 1/H	Rename to Echidna Track.
Native Track	Internal track	MVO 3	MVO 3	
Native Track	Internal track	MVO 2	MVO 1	Former Nth Boundary Track LLP.
Nodosa Track	Internal track	MVO 3	MVO1 /H	All weather horse trail.
North Boundary Track	Internal track	MVO 1	MVO 1	Close and rehabilitate the section between Army and Link Tracks subject to SEC agreement.
Powells Track	Internal track	MVO 1	MVO 1	
Pusilla Track	Slashed break	MVO 2	-	Close and rehabilitate.
Quarry Track	Internal track	MVO 2	MVO 2	
Ridge Track	Internal track	MVO 1	MVO 1	
Short Cut Walk	Walking track	W C	W B	
Snipe Track	Internal track	MVO 1	MVO 1	
South Break	Slashed break	MVO 3	MVO 3	Maintain slashed break.
Southern Horse Trail	Horse trail	MVO 3/H	MVO 1/H	All weather horse trail.
Stonemason Track	Internal track	MVO 1	MVO 1	
Sugar Glider Track	Internal track	MVO 3	-	Close and rehabilitate.
Sunset Track	Internal track	MVO 3	MVO 2	
Swampy Break	Internal track	MVO 3	MVO 2	Maintain slashed break.
Syphon Walk	Internal track	W C	W B	
Thompson Track	Internal track	MVO 3	W C	
Tramline Walk	Walking track	W B	W B	

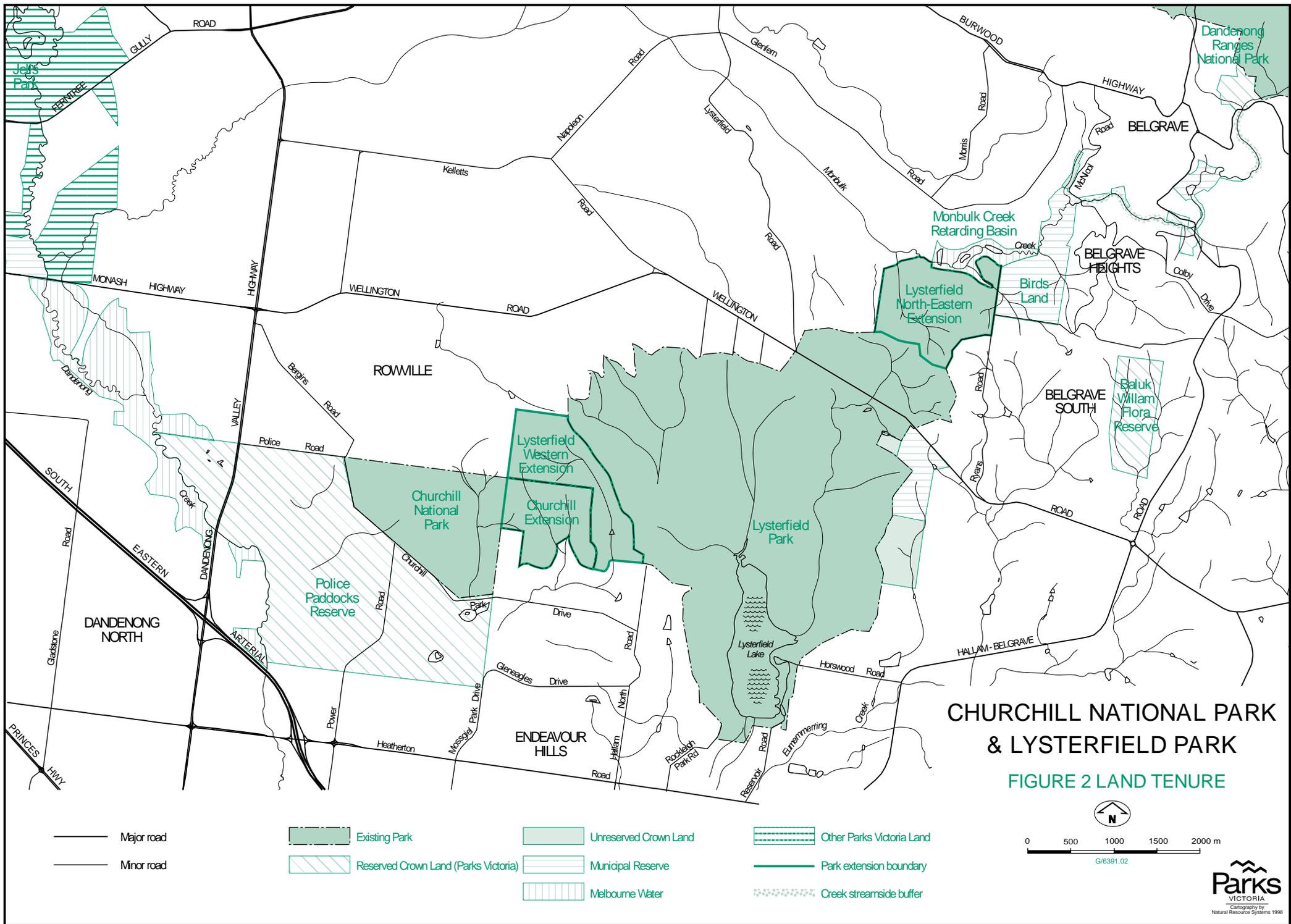
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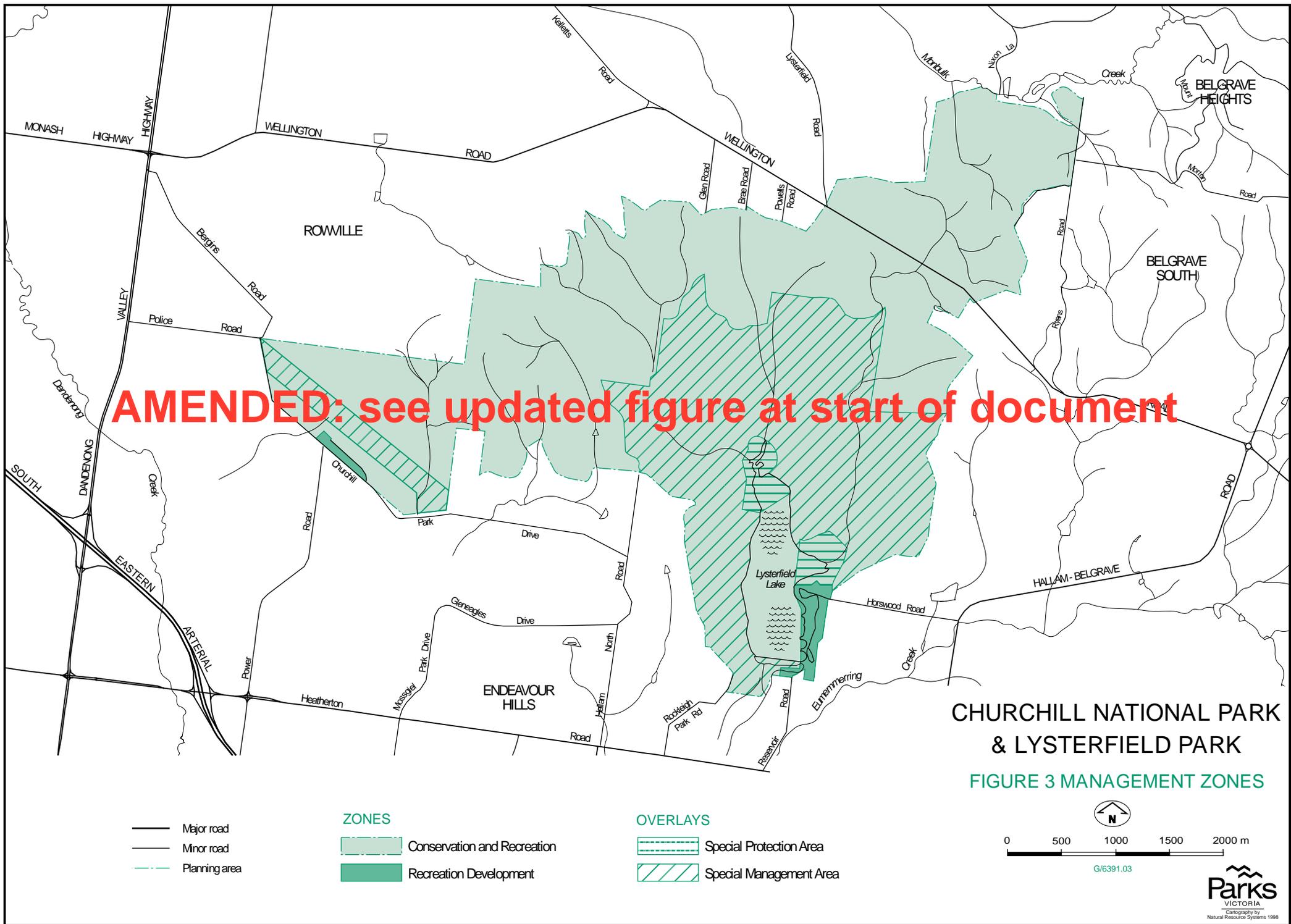
ROAD OR TRACK	COMMENTS/USES	STATUS/CLASS		MANAGEMENT STRATEGY
		CURRENT	PROPOSED	
Valley View Track	Internal track	MVO 2	MVO 2	
Wallaby Track	Internal track	MVO 1	MVO 1	
West Boundary Track	Internal track	MVO 3	MVO 2	
Woodland Walk	Internal track	MVO 3	MVO 3/W	MVO and walkers only.

Status:	O	Open to the public vehicles	Class:	1	All vehicle - all weather
	MVO	Management vehicles, walkers and cyclists		2	4WD - all weather
				3	4WD - dry weather only
	H	Horse trail		B	A well defined walking track, benched and drained
	W	Walkers only, no cyclists		C	A walking track, defined through use, which may be benched or drained
				D	A walking track or path defined through use but having no basic construction

AMENDED: see updated table at start of document







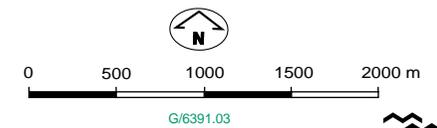
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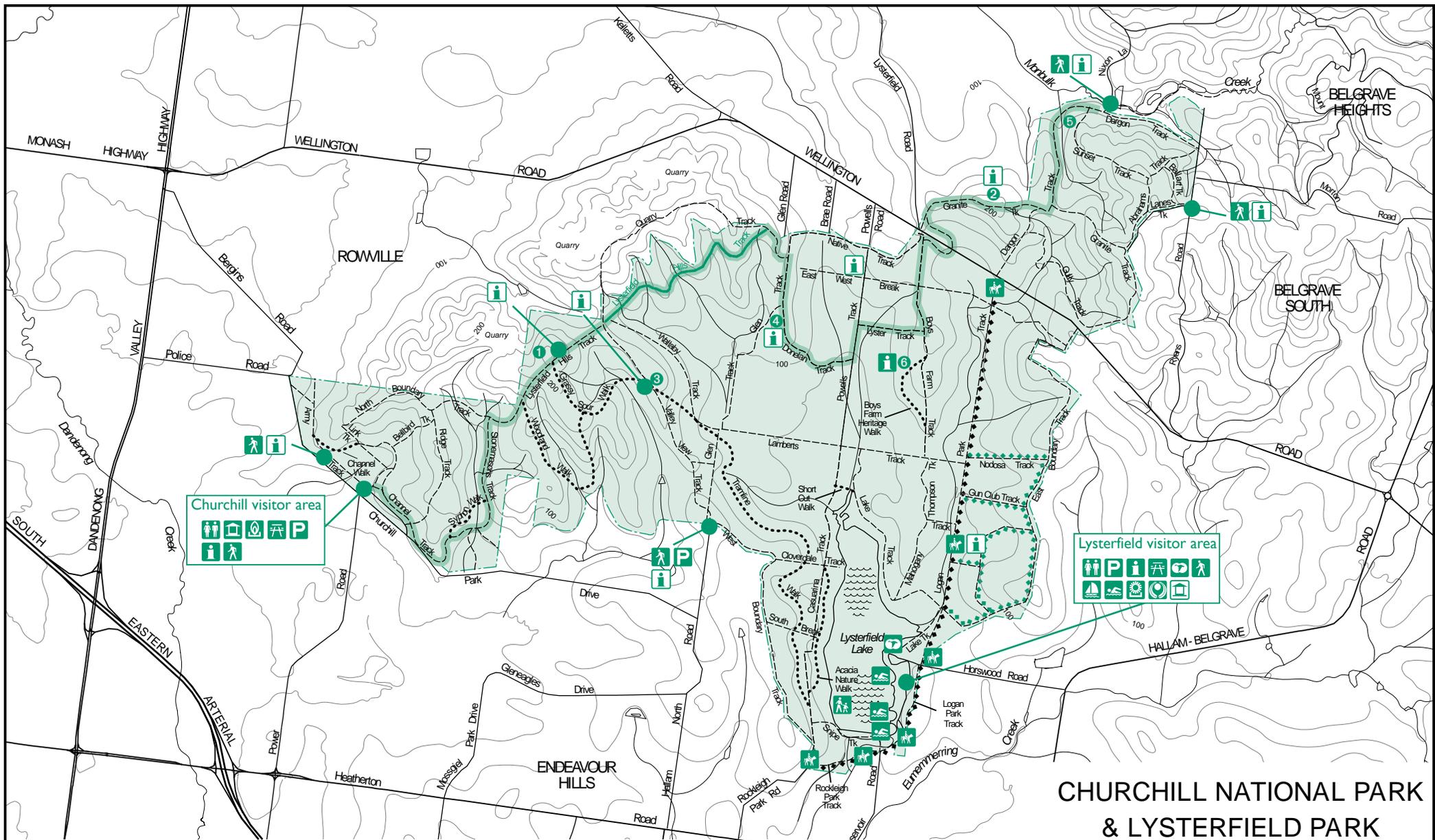
**CHURCHILL NATIONAL PARK
& LYSTERFIELD PARK
FIGURE 3 MANAGEMENT ZONES**

- Major road
- Minor road
- - - Planning area

- ZONES**
- Conservation and Recreation
 - Recreation Development

- OVERLAYS**
- Special Protection Area
 - Special Management Area





CHURCHILL NATIONAL PARK & LYSSTERFIELD PARK

FIGURE 4 VISITOR FACILITIES

EXISTING ACCESS

- Major road
- Minor road
- Walkers
- Walkers, cyclists and Management Vehicles only
- Equestrian trail
- Planning area

ADDITIONAL TRAILS PROPOSED

- Equestrian trail
- Proposed Dandenong Valley to Dandenong Ranges Trail
- Proposed walkers, cyclists and Management Vehicles only

EXISTING FACILITIES

- Barbecue electric
- Barbecue gas
- Bird hide
- Boat rigging & launching
- Car park
- Information
- Nature walk

PROPOSED FACILITIES

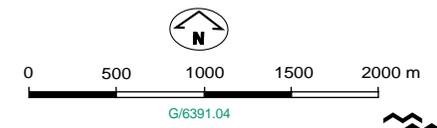
- Shelter
- Swimmers only
- Toilet
- Tables
- Ticket box
- Walking trail
- Cavaletti

PROPOSED FACILITIES

- Information
- Shelter
- Cavaletti

SPECIAL FEATURES

- 1 Lysterfield Hills Lookout
- 2 Monbulk Creek Lookout
- 3 Tramline Quarry Site
- 4 Donelan Homestead Site
- 5 Dargon Homestead Site
- 6 Boys Farm Site






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