

Grampians National Park



Management Plan March 2003

This Management Plan for Grampians National Park is approved for implementation. Its purpose is to direct all aspects of management in the park until the plan is reviewed. A Draft Management Plan for the park was published in May 1998. One hundred and sixty-eight submissions, including one supported by 648 signatories, received on the Draft Plan have been considered in developing this approved Management Plan.

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GRAMPIANS NATIONAL PARK
MANAGEMENT PLAN

Published in March 2003 by Parks Victoria
Level 10, 535 Bourke Street, Melbourne, Victoria 3000

This Plan is based on a draft plan compiled by the Centre for Environmental Management, University of Ballarat under contract to Parks Victoria.

Disclaimers

This plan is prepared without prejudice to any negotiated or litigated outcome of any native title determination applications covering land or waters within the plan's area.

It is acknowledged that any future outcomes of native title determination applications may necessitate amendment of this plan and the implementation of this plan may require further notification under the procedures in Division 3 or Part 2 of the *Native Title Act 1993* (Cwlth).

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FOREWORD

The Grampians National Park is a dominant feature in the landscape of western Victoria, renowned for its spectacular natural scenery and wildflowers, diversity of flora and fauna, Aboriginal rock art and significant post-settlement heritage sites.

Grampians–Gariwerd has long been important to people. The diverse Aboriginal cultural heritage of the park is evidence of Aboriginal occupation dating from many thousands of years before the last ice-age. The Dreamtime and culture of the Grampians–Gariwerd is integral to the dreaming of the Gournditch–Mara, Kirrae Wurrung and Wotjobaluk Nations.

From the 19th century the Grampians–Gariwerd has also come to occupy an important place in the lives of many more recent arrivals, particularly the European families who cleared and settled the surrounding plains, and generations of other Australians who have spent holidays there, enjoying the area’s natural and cultural features.

Since its declaration in 1984, the National Park has been one of Victoria’s largest and most popular parks, attracting increasing numbers of interstate and overseas visitors, and many Victorians have continued to have a closer involvement with its management.

Implementation of this Approved Plan will help protect and conserve the park’s natural environments and range of cultural features,

help make the park more widely known and appreciated, and ensure visitors both enjoy and respect its importance for both current and future generations.

The Government recognises the value and importance of involving the community in the park’s management and I welcome the initiative to adopt working partnerships with the community. The strategy to manage the park in a working partnership with the Indigenous Nations, Brambuk Incorporated and Gariwerd Enterprises Pty Ltd (Brambuk), out of respect for their perspectives of landscape and tradition, aspirations for the park, and interests and rights in the land, is particularly welcome.

The proposal to create a new Brambuk: The National Park and Cultural Centre in partnership with Gariwerd Enterprises Pty Ltd is an important initiative that will greatly enhance opportunities for all Victorians to gain access to Aboriginal tradition and culture and, I trust, foster the process of reconciliation with Aboriginal peoples.

I am pleased to take this opportunity to thank those many individuals and organisations who contributed to this plan by responding to requests for information or views, or by making submissions on the Draft Plan. I look forward to continuing and broadening community support in helping to conserve this unique natural and cultural landscape.



Hon John Thwaites MP
Minister for Environment

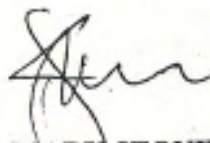
APPROVED MANAGEMENT PLAN

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

The plan provides the basis for the future management of Grampians National Park. It was finalised following consideration of the 168 individual submissions, including one supported by 648 signatories, received on the Draft Plan.



PROF LYNSAY NEILSON
Secretary to the
Department of Sustainability and Environment



MARK STONE
Chief Executive
Parks Victoria

SUMMARY

Grampians National Park (167 219 ha) is the fourth largest national park in Victoria. It protects a diverse range of ecosystems, outstanding geological formations, spectacular landscapes and a rich Indigenous and post-settlement cultural heritage. Importantly, approximately 74% of the park is designated as a Special Water Supply Catchment Area. Almost one third of the State's indigenous flora is found in the park, which is renowned for its spectacular spring wildflower displays. The park is of major importance for 167 species of threatened flora and fauna, of which 24 are endemic to the park. The park is of major importance for the Heath Mouse.

The park contains highly significant Aboriginal cultural sites, including the largest concentration of rock art sites in the State.

The park is integral to the dreaming of the Gournditch–Mara, Kirrae Wurrung and Wotjobaluk Nations (Indigenous Nations) who have maintained a strong association with the park since its declaration, including through Brambuk Aboriginal Cultural Centre.

Traditional names for rock art sites open to the public have been adopted and are in current use. Dual names have been adopted for some other features in the park.

The park will be managed in accordance with the *National Parks Act 1975* (Vic.) to protect its outstanding natural and cultural values, and provide for a range of recreation opportunities including scenic driving, camping, bushwalking and rock climbing. High-quality visitor facilities and services will enhance visitor experiences in the park.

Major management directions for the park are:

- Adoption of a working partnership approach to managing the park with the community, particularly the Indigenous Nations and major interest groups.
- Respect for the Indigenous Nations' aspirations for the park, perspectives of landscape, tradition, and interests and rights in the land.
- Establishment of Brambuk: The National Park and Cultural Centre by integrating Brambuk Aboriginal Cultural Centre and the Grampians National Park Visitor Centre, and management of the Centre in partnership with Gariwerd Enterprises Pty Ltd (Brambuk).
- Development of a Gariwerd/Grampians Aboriginal Cultural Heritage Strategy with the Indigenous Nations, Gariwerd Enterprises Pty Ltd and Brambuk Incorporated, relevant Government agencies and other community groups.
- Maintenance of the structure and diversity of vegetation communities and existing populations of threatened species, with restoration of disturbed communities in the long term.
- Protection of stream ecosystems from the impact of water harvesting.
- Promotion and management of the Wonderland Range and sites along the Mt Victory Road as the primary areas for tours where various groups can enjoy a range of park experiences.
- Provision of visitor information that emphasises the park's natural and cultural values and experiences, and is supportive of park visitor management strategies.
- Enhancement of recreation opportunities by improving facilities to appropriate standards and closing and redirecting resources from little-used sites.
- Coordination of the management of walking and cycling routes within the park with the availability of camping and accommodation facilities located in key tourism areas around the park.
- Development of integrated orientation and advisory information, and interpretation facilities and services.
- Cooperation with agencies with tourism responsibilities in promoting and orientating visitors to the new Brambuk: The National Park and Cultural Centre and the park.

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1 INTRODUCTION

1.1 Location and planning area

Grampians National Park is located in central-western Victoria, between Stawell and Horsham on the Western Highway and Dunkeld on the Glenelg Highway, 260 km from Melbourne and 460 km from Adelaide (figure 1).

Population centres within a short drive of the park include:

- the settlement of Wartook and the City of Horsham to the north-west;
- the tourist centre of Halls Gap at the base of the Wonderland Range and the townships of Ararat and Stawell to the north-east;
- the townships of Dunkeld and Cavendish and City of Hamilton to the south and south-west.

The planning area covers the Grampians National Park (167 219 ha). The park includes:

- The Sisters Reference Area (280 ha);
- Moora Valley Reference Area (510 ha);
- Grasstree Creek Reference Area (675 ha);
- Potter Creek Education Area (400 ha);
- Wannon Divide Education Area (275 ha);
- Halls Gap Education Area (proposed) (4 ha);
- Victoria Range Remote and Natural Area (14 000 ha);
- Serra Range Remote and Natural Area (11 200 ha);
- Major Mitchell Plateau Remote and Natural Area (6900 ha);
- that part of the Grampians National Park Visitor Centre site that is within the park;
- Brambuk Aboriginal Cultural Centre site.

The planning area also includes the very small strip of Crown land (Crown allotment 2A, Parish of William) that is reserved under section 4 of the *Crown Land Reserves Act 1978* (Vic.) for the purpose of Facilities and

Services for Promotion of Tourism and was placed under the control and management of the Director of National Parks [Secretary to the Department of Sustainability and Environment] in 1987 (section 5.1).

1.2 Creation of the park

The park was included in Schedule Two (National Parks) of the *National Parks Act 1975* (Vic.) as a result of the *National Parks (Amendment) Act 1984* (Vic.), and was proclaimed on 1 July 1984. Small additions were made in 1986, 1995 and 1998. Three small excisions were made in 1995 and 1997. The park resulted from the former Land Conservation Council's South-western Area District 2 Final Recommendations (LCC 1982).

1.3 Developing the management plan

This management plan for Grampians National Park was prepared by Parks Victoria in consultation with the Indigenous Nations, Gariwerd Enterprises Pty Ltd and Brambuk Incorporated, key stakeholders and community groups, and with due consideration of the existing Grampians National Park Plan of Management (NPS 1985).

Key groups consulted include: the Gournditch–Mara, Kirrae Wurrung and Wotjobaluk Nations; Brambuk Aboriginal Cultural Centre; Mirimbiak Nations Aboriginal Corporation; Grampians National Park Advisory Group, Friends of Grampians–Gariwerd, Friends of Zumstein, Department of Natural Resources and Environment (now Department of Sustainability and Environment), Aboriginal Affairs Victoria (AAV), Victorian Climbing Club, field naturalists clubs, Victorian Apiarists Association, anglers associations, tourism associations, Country Fire Authority Brigades, Victoria Association of Four Wheel Drive Clubs, Federation of Victorian Walking Clubs, Victorian National Parks Association, Tourism Victoria, Catchment Management Authorities, Australian Trail Horse Riders Association and the Victorian Hang Gliding and Paragliding Association.

2.1 Regional context

More than 90% of land adjoining the park is private land. The remainder is Grampians State Forest.

Grampians National Park, Black Range State Park, Grampians State Forest, Claude Austin Reserve and Rocklands Reservoir Reserve together form an area of 222 615 ha, which encloses a number of pockets of private land including a total area of some 9000 ha. The parks and forest in particular are all important for maintaining biodiversity in an area that has been predominantly cleared for farming.

Black Range State Park, less frequented than Grampians National Park, is notable for its rugged stone escarpments and range of interesting and uncommon plants species and important fauna species (PV 2000b).

Rocklands Reservoir is popular with visitors for camping and fishing.

Mount Arapiles–Tooan State Park, 55 km to the west of the Grampians, is one of the most popular climbing sites in Australia. It is also recognised for its geological features and floristically unusual and diverse vegetation communities, which contain important habitat for threatened fauna such as the Malleefowl (PV 2000b).

The park is within the Grampians Tourism region and closely linked to a number of Tourism Victoria's designated product regions. A Regional Tourism Development Plan has been developed for the Grampians region (Tourism Victoria 1997).

The park includes areas within the boundaries of three municipalities: Northern Grampians Shire, Rural City of Ararat and Southern Grampians Shire. Horsham Rural City adjoins the northern boundary of the park.

2.2 Park values and significance

Grampians National Park makes a valuable contribution to Victoria's parks and reserves system, which aims to protect viable, representative samples of the State's natural environments. The park also enables visitors to enjoy and appreciate natural and cultural

values, and makes an important contribution to tourism.

The park is assigned the World Conservation Union (IUCN) Category II (National Parks) of the United Nations' list of National Parks and Protected Areas. Category II areas are managed primarily for ecosystem conservation and appropriate recreation.

The Grampians National Park is the fourth largest and one of the highest profile parks in Victoria. It is a core area for biodiversity and is recognised as the single most important botanical reserve in Victoria (PV 2000a).

The park is within the national Victorian Midlands and Victorian Volcanic Plain bioregions and is part of five Victorian bioregions:

- 98% of the park falls within the Greater Grampians bioregion, which is very well represented in the park/reserve system.
- 1% of the park falls within the Dundas Tablelands bioregion, which is poorly represented in the park/reserve system.
- 1% of the park falls within the Wimmera bioregion, which is poorly represented in the park/reserve system.
- Less than 1% of the park falls within the Goldfields bioregion, which is poorly represented in the park/reserve system.
- Less than 1% of the park falls within the Victorian Volcanic Plain bioregion, which is poorly represented in the park/reserve system.

The park contains:

- three of 139 Reference Areas in the State;
- three of 21 Remote and Natural Areas in the State;
- 6.5% of the total park area included under Schedule Two of the *National Parks Act 1975*;
- 43% of the protected area network in the combined Wimmera and Glenelg–Hopkins Catchment Management Authority (CMA) regions.

The park has great cultural significance (chapter 5). To the Jardwadjali and Djab wurrung language groups, the mountain ranges within the park are called ‘Gariwerd’, the nose-like or pointed mountains, from ‘gar’ meaning nose, and ‘werd’ shoulder, which combined came to mean simply ‘the mountain range’ (Wettenhall et al. 1999).

The area within the park is embodied in the Dreamtime and culture of Aboriginal peoples. The Grampians–Gariwerd is integral to the dreaming of the Gourditch–Mara, Kirrae Wurrung and Wotjobaluk Nations that are traditionally associated with the Grampians and referred to as the ‘Indigenous Nations’ throughout the plan. Central to the dreaming is Bunjil, the great ancestor spirit. Parks Victoria recognises that the Indigenous Nations have aspirations for the park’s Aboriginal culture, and for the park’s land.

The park is one of 200 sites in Victoria listed on the Register of the National Estate as a Natural Place, in recognition of the area’s outstanding values and its importance as part of our heritage. The former Land Conservation Council listed four sites—Mount Difficult Quarry, Zumstein cottages and surrounds, Mafeking Goldfield and Stawell water supply system—as being of State significance (LCC 1997).

Significant features of the park include:

Natural

- spectacular landforms identified as being of high geological significance at the national level by the Australian Heritage Commission;
- seven broad vegetation types (BVTs), including areas of weed-free, diverse and intact vegetation of high conservation value (table 1);
- Red Gum Swamp Community No. 1, which is listed under the *Flora and Fauna Guarantee Act 1998* (Vic.) (FFG), at two locations;
- high flora diversity (975 vascular species; one third of the State’s flora), and high fauna diversity (312 vertebrate species, including a diverse macropod fauna);

- 148 species threatened in Victoria (26 endemic), including 40 which are also nationally threatened and 30 FFG-listed.

Water catchment

- highly significant water catchments—almost three quarters of the park is covered by special areas listed under the schedules of the *Catchment and Land Protection Act 1994* (Vic.).

Cultural values

- a landscape rich in Aboriginal Dreamtime stories;
- a strong association of Aboriginal people with the area;
- Brambuk Aboriginal Cultural Centre;
- largest concentration of rock art sites in Victoria—over 60% of known Aboriginal art sites in Victoria;
- significant archaeological occupation sites associated with rock shelters;
- quarries, mounds, surface scatters and scarred trees;
- a European history rich in diversity, content and interest.

Landscape

- spectacular scenery of unusual character;
- massive fissured sandstone cliffs contrasting with the surrounding plains;
- rock outcrops, sculptured rocks, caves;
- extensive forests interrupted by water bodies.

Recreation, education and tourism

- nationally renowned and striking wildflower displays;
- a focus for nature-based outdoor education for schools in Victoria;
- a nature and culture-based tourism destination of regional, State, national and international interest;
- a wide range of outdoor recreational opportunities.

Tourism in the Grampians region generates substantial net economic product for Victoria,

TABLE 1 REPRESENTATION OF BROAD VEGETATION TYPES

BROAD VEGETATION TYPE	PROPORTION OF TOTAL BVT IN VICTORIA (%)	PROPORTION OF TOTAL BVT IN THE PARKS SYSTEM (%)	PROPORTION OF PARK (%)
Inland Slopes Woodland	39.4	62.2	32.4
Sedge-rich Woodland	37.5	99.3	<1
Herb-rich Woodland	20.8	48.1	8.5
Dry Foothill Forest	3.9	14	56.2
Plains Grassy Woodland	1.2	11.4	1.1
Valley Grassy Forest	<1	4.2	<1
Grassland	<1	1.3	<1

estimated at \$100 million per annum in 1994 (CNR 1994).

2.3 Past land use

The Indigenous Nations associated with the Grampians–Gariwerd inhabited a rich and diverse land. Gariwerd provided rock shelters, stone quarries for tool making, ample timber for cooking and warmth, and extensive forests, swamps and streams harbouring food (Wettenhall et al. 1999).

On the surrounding plains, large numbers of lakes and swamps offered a wide range of resources, both plant and animal.

The Indigenous Nations are believed to have deliberately lit fires to herd game, such as kangaroos and emus, and to keep native grasslands sweet and green. As a result of this regular firestick farming, the grasslands and woodlands had an open structure characterised by widely spaced, very large trees with very little understorey (Wettenhall et al. 1999).

Water harvesting

Water harvesting for European settlers commenced in the 1870s with the construction of a weir, fluming syphons, tunnels, pipelines and associated features in the park as components of the Stawell water supply system.

Timber harvesting

Much of the park has been subjected to past wood harvesting activities. Following the declaration of the park in 1984, in accordance with recommendations of the LCC, timber harvesting was phased out, and harvesting activity ceased in 1994.

The earliest harvesting was by pastoral leaseholders and gold miners. The extent and nature of early harvesting is somewhat uncertain, but it dates back to at least 1860.

In the years prior to proclamation of the park, there were Hardwood Timber Production Zones for the utilisation of a range of species, mostly for sawlogs, sleepers, construction timbers, poles, and fencing. Timber production zones included areas of Victoria Range (eastern side), Fyans Creek (Barri yaloo Creek), Wannon River, Mafeking, Lake Wartook, Asses Ears, MacKenzie River, Victoria Valley, and Mt Zero–Stapylton. The main species harvested included Messmate, Brown Stringybark, Mountain Grey Gum, Red Gum, Yellow Gum, Yellow Box and Grey Box (FCV 1977).

Mining and quarrying

Mafeking Goldfield, the site of the last gold rush in Victoria (1900), contains well-preserved evidence of shallow alluvial sinkings and hydraulic sluicing.

The Mount Difficult Quarry to the north of Halls Gap contains many relics from the late 1800s. Stone from the Mount Difficult Quarry (also known as Heatherlie Quarry) has been used in several significant buildings in Melbourne and Stawell. The quarry is included on the Victorian Heritage Register.

The LCC (1997) recommended that extraction of stone from this quarry be permitted, subject to consultation with Heritage Victoria, but that historic relics be protected. Current legislation does not allow for the extraction of stone from Mount Difficult Quarry.

Grazing

Livestock grazing in the park dates back to the mid 1800s. After 1938 grazing was not permitted in the central area of the Grampians. By the 1970s grazing was confined to Red Gum and Yellow Box forests surrounding the ranges (FCV 1977). Much of the area now within the park was licensed for grazing.

Little information is available about the distribution of past grazing activities. Boundary areas appear to have been grazed more than areas towards the centre of the park, although this is difficult to determine.

Following the declaration of the park in 1984, in accordance with recommendations of the LCC, grazing was phased out, with no licences reissued after December 1985 (NPS 1985).

Tourism

Zumstein cottages and surrounds on the MacKenzie River were developed in the 1930s to accommodate increasing numbers of tourists attracted to the area. Zumstein remains a popular day visitor destination.

2.4 The park visitor

The park provides a wide range of outstanding opportunities for visitors to enjoy and appreciate scenic, natural and cultural values.

The park is the State's third most visited National Park after Mornington Peninsula National Park and Port Campbell National Park and attracts more than 800 000 visitors each year. The number of site visits has fluctuated around 1.4 million for the past five years. Over 90% of visitors are currently from Victoria and South Australia, with a high repeat visitation, particularly from Melbourne.

January, Easter and the wildflower season in September, October and November are the busiest periods in the park. August is consistently the quietest month, when the climate is at its least comfortable for outdoor activities (Tourism Victoria 1997).

Profiles

Most visitors to the park fall within four main groups:

1. The majority of visitors are general interest visitors. They usually stay outside the park in or around Halls Gap in accommodation or caravan/camping areas, or further afield in nearby towns or at the

homes of friends and relatives on country properties. Much of their time is used for scenic driving, taking short walks, scenic viewing, picnicking and wildlife watching.

2. Substantial numbers of people seek adventure activities in the park. Such visitors hike and rock climb around Mount Stapylton, the Mount Difficult Range, the Victoria Range (Billawin Range) and the Major Mitchell Plateau. Water sport activities in the Grampians are conducted on reservoirs outside the park.
3. Substantial numbers of special interest groups such as bird watchers, plant enthusiasts, amateur geologists, photographers and artists visit all parts of the park including sites of cultural significance, particularly rock art sites and wildlife viewing areas.
4. Educational groups of all ages, from primary and secondary schools and tertiary institutions, engage in activities across the park.

Circulation

Visitors approach the park from the north and east along the Western Highway, from the south along the Glenelg Highway or from the west along the Henty Highway.

Predominantly, visitors arrive by private car in family groups, and stay at least two nights, mainly in the park surrounds (Tourism Victoria 1997). A high proportion of visits are to the Wonderland Range and Mt Victory Road corridor via Halls Gap, or much less frequently, Wartook.

Substantial numbers of visitors travel to the northern part of the park along the Halls Gap–Mount Zero Road or Mount Victory Road to enjoy outdoor sports such as rock climbing or attractions such as Aboriginal art sites, magnificent wildflower shows (seasonal) and Beehive Falls (seasonal) or to visit Mt Zero.

A significant number of visitors travel from Dunkeld on the Glenelg Highway, north along Grampians Road to Halls Gap, enjoying the magnificent views of the Mount William Range and Serra Range.

Some regional residents, and many visitors with special interests, visit more remote areas of the park via the many other roads that lead into the Grampians, including Yarram Gap

Road, Glenelg River Road, Victoria Point Road and Victoria Valley Road.

Management

Parks Victoria encourages visitors to enjoy and appreciate the park's natural and cultural values by providing appropriate facilities and services at suitable locations. Facilities and services provide promotional, orientation and interpretative information, safety information and guidance on how to behave to protect the park and ensure the comfort of all.

Visitors' activities, if not adequately managed, can have significant adverse impacts on the park's natural, cultural and recreational values. The levels of impact vary with the sensitivity of the area, visitor numbers, and visitor activities and behaviour, and may include damage to soils, vegetation, rock faces, streams, Aboriginal rock art and archaeological sites (often unintentional), and the spread of weeds and Cinnamon Fungus.

Some visitor activities that can have significant impacts are:

- off-track walking, driving or riding to reach remote sites;
- inappropriate use of equipment (e.g. climbing bolts);
- camping in caves and sensitive areas;
- feeding wildlife;
- picking and/or collecting native flora;
- inappropriate disposal of human waste and rubbish;
- concentrated firewood collection in the vicinity of popular campgrounds.

An integrated approach is taken to park management to enhance the visitor experience while protecting and conserving the natural and cultural assets. Planning of visitor services and facilities takes account of visitors' needs, including travel patterns and activities, trends in visitor numbers, the potential impacts of visitor activities, and the need to minimise future relocation of facilities. It is not always possible to meet the expectations of visitors.

Visitor impacts are managed by delivering conservation messages through information, interpretation and education programs, by promoting minimum-impact behaviour, and by directing visitors to areas and sites where the

activities are sustainable. A key approach is to encourage all visitors to adopt minimum-impact techniques and to adhere to codes of conduct appropriate to their activity.

In recent years, substantial components of the park's recreational support facilities, particularly at McKenzie Falls and Zumstein, have been upgraded, enhancing visitor experiences for a broad range of user groups and increased numbers of visitors.

2.5 Legislation, LCC recommendations and guidelines

Grampians National Park is reserved and managed under the *National Parks Act 1975* (Vic.). The Act requires the Secretary to the Department of Sustainability and Environment (DSE) to preserve and protect the natural condition of the park and its natural and other features and, subject to this, to provide for the use of the park by the public for enjoyment, recreation and education. The Act also provides for appropriate research. Sections 4 (Objects) and 17 of the National Parks Act provide the main basis for management of the park. Parks Victoria is responsible for the day-to-day management of the park.

The LCC's Wilderness Special Investigation Final Recommendations (LCC 1991) recommended the creation of the Victoria Range (Billawin Range), Serra Range and Major Mitchell Plateau Remote and Natural Areas, which were subsequently proclaimed under Schedule 6 (Remote and Natural Areas) of the National Parks Act on 30 June 1992. They are managed under the relevant provisions of the National Parks Act (particularly Sections 21C and 21D) and in accordance with LCC recommendations, which aim to protect the areas' remote and natural condition and to preclude new and incremental developments.

The management of Grampians National Park will take into consideration the provisions of the *Environment Protection and Biodiversity Conservation Act 1999* (Cwlth) with respect to actions that have, will have or are likely to have a significant impact on matters of national environmental significance.

The *State Environment Protection Policy (Waters of Victoria) 1988* identifies beneficial uses of waterways, including those within the

Grampians National Park, that are to be protected.

Issues relating to native title will be dealt with in accordance with the *Native Title Act 1993* (Cwlth). A Native Title application (No. VG6004/98) covering the south-western areas of the park has been lodged with the Native Title Tribunal by the Gournditch–Mara.

Consistent with the legislation and LCC recommendations, the management aims for the park are as follows.

Conservation

- Preserve and protect the natural environment.
- Allow natural environmental processes to continue with the minimum of interference.
- Maintain biodiversity.
- Protect water catchments and streams.
- Protect human life, the park, and adjacent lands from injury by fire.
- Eradicate, or otherwise control, introduced plants, animals and diseases.
- Conserve features of archaeological, historical and cultural significance.

The park visit

- Promote and encourage an appreciation, understanding and enjoyment of the park's natural and cultural values, and its recreation opportunities.

- Encourage appropriate park use and visitor behaviour, and foster a conservation ethic in visitors and respect for cultural heritage.
- Provide opportunities for appropriate recreation and tourism.
- Take every reasonable step to ensure visitor safety.

Other

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

The park is also managed in accordance with Parks Victoria's operational policies and other plans and guidelines, including:

- *State of the Parks 2000* (PV 2000a and PV 2000b);
- *Victoria's Biodiversity: Directions in Management* (NRE 1997);
- *Code of Practice for Fire Management on Public Land* (CNR 1995a);
- The approved fire management plans that cover the park (CFL 1989, NRE & PV 1999, NRE 2002)
- *Grampians Region Tourism Development Plan* (Tourism Victoria 1997).

3 STRATEGIC DIRECTIONS

3.1 Park vision

A future visitor to Grampians National Park finds an outstanding park renowned for its spectacular natural scenery and wildflowers, diversity of flora and fauna, range of highly significant cultural sites, and opportunities to enjoy these features in a variety of settings.

Community views and aspirations for the park are respected and integrated into park management. The park's natural environment is well protected and conserved by management based on a sound and increasing understanding of the park's natural values, ecological processes, and the specific requirements of significant plants and animals.

The cultural heritage of the park is protected, conserved and managed on the basis of a sound understanding of cultural values, including Indigenous tradition, and the interests and rights of Aboriginal peoples in land within the park.

The park attracts visitors with diverse backgrounds and interests. Visitor numbers to the park are sustainably managed to ensure that disturbance to natural and cultural values by visitor activities is minimal and the park is preserved for future generations.

Visitors enjoy the park's unique environment through a diverse range of appropriate recreational activities and gain an appreciation of its natural and cultural values. Walking is the most popular activity.

Visitor services and facilities are appropriately located to cater for the essential needs of visitors undertaking activities that provide enjoyment and understanding with minimal impact on the park.

The park is a key focus for local, interstate and international visitors and an integral component of Victoria's tourism infrastructure.

3.2 Zoning

A park management zoning scheme has been developed to:

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

Five management zones apply to the park: Reference Area Zone; Conservation Zone; Conservation and Recreation Zone; Recreation Development Zone; and Education Zone.

Three overlays also apply: Special Protection Area; Special Management Area – Public Utilities; and Land Use Designation – Remote and Natural Area. These overlays summarise requirements additional to those of the underlying primary management zones.

Table 3 specifies management zone and overlay characteristics. The locations of zones and overlays are shown in figure 2, and further details relating to the Special Protection Area and Special Management Area – Public Utilities are listed in appendices 1 and 2.

3.3 Management directions

Major management directions for the park are outlined below.

- All management programs and actions will be in accordance with the general management aims for the park (section 2.5) and zones (specified in table 2).
- Management strategies from this plan will be implemented in accordance with 1–3 year statewide prioritised programs prepared in accordance with the management plan and Parks Victoria's corporate plan.

TABLE 2 MANAGEMENT ZONES AND OVERLAYS

ZONES					
	REFERENCE AREA	CONSERVATION	CONSERVATION & RECREATION	RECREATIONAL DEVELOPMENT	EDUCATION
AREA / LOCATION	1465 ha, 1% of park. The Sisters, Moora Valley and Grasstree Creek Reference Areas.	65 500 ha, 39% of park.	99 546 ha, 59% of park.	<10 ha, <1% of park. Brambuk Cultural Centre/Grampians National Park Visitor Centre Precinct.	679 ha, <1% of park. Potter Creek, Wannon Divide and the proposed Halls Gap Education Areas.
VALUES	Relatively undisturbed representative land types and associated vegetation.	Broad areas with sensitive natural environments.	Important natural values and scope for recreation opportunities.	Grampians National Park Visitor Centre and Brambuk Aboriginal Cultural Centre.	Area for education purposes (figure 2).
GENERAL MANAGEMENT AIM	Protect viable samples of one or more land types that are relatively undisturbed for comparative study with similar land types elsewhere, by keeping all human interference to the minimum essential and ensuring as far as practicable that the only long-term change results from natural processes.	Protect sensitive natural environments and provide for minimal impact recreation activities and simple visitor facilities, subject to ensuring minimal interference with natural processes.	Protect less sensitive natural environments, and provide for sustainable dispersed recreation activities and small-scale recreation facilities without significant impact on natural processes.	Develop as a tourist destination incorporating the Grampians National Park Visitor Centre and the Brambuk Aboriginal Cultural Centre.	Provide primarily for environmental education in a relatively undisturbed area.
ACCESS	For approved scientific research.	Limited vehicular access.	2WD and 4WD public access generally available.	2WD.	2WD.
OVERLAYS					
	SPECIAL PROTECTION AREA	SPECIAL MANAGEMENT AREA – PUBLIC UTILITIES		REMOTE AND NATURAL AREA	
AREA / LOCATION	Areas detailed in appendix 1 and figure 2.	Areas detailed in appendix 2 and figure 4.		32 100 ha, 19% of park. Victoria Range, Serra Range and Major Mitchell Plateau Remote and Natural Areas.	
VALUES	Discrete significant areas requiring special attention.	Public utilities.		Significant remote and natural areas.	
GENERAL MANAGEMENT AIM	Protect specific natural or cultural values in specific areas and sites where a special management focus is required.	Provide for public utilities.		Protect the area's remote and natural attributes; prevent new and incremental developments, including the construction and upgrading of vehicular tracks and construction of new structures.	
ACCESS	Limited access.	Management access only.		As per underlying conservation zone.	

Note: Three quarters of the park is included in Special Water Supply Catchment Areas listed under Schedule 5 of the *Catchment and Land Protection Act 1994* (Vic.) (section 4.2).

Natural values conservation

- The structure and diversity of vegetation communities and existing populations of threatened species will be maintained, and disturbed communities will be restored as appropriate, in the long term.
- The Victoria Range (Billawin Range) Remote and Natural Area, Serra Range Remote and Natural Area, Major Mitchell Plateau Remote and Natural Area, and the Conservation Zone, will remain undeveloped.
- Changes in park condition will be detected early through monitoring of defined environmental indicators. Strategic monitoring, identified in the *State of the Parks 2000* report (PV 2000a), will be a key management priority.
- The park will be protected from fire through the implementation of approved DSE regional fire management plans.
- Stream ecosystems will be protected from the impact of water harvesting by management based on the findings of monitoring and research on the impacts of water harvesting on the park.
- Monitoring and research into the impact of water harvesting on the park will be encouraged, and supported as appropriate.
- Pest plants and animals and diseases will be managed to minimise impacts on flora and fauna.

Cultural values conservation

- A Gariwerd/Grampians Aboriginal Cultural Heritage Strategy will be developed to guide the protection, conservation and promotion of understanding of the park's Indigenous cultural heritage.
- All aspects of Aboriginal cultural heritage, including tradition, places, sites, objects and relics, will be protected, conserved and promoted in accordance with the Gariwerd/Grampians Aboriginal Cultural Heritage Strategy.

- Aboriginal perspectives of environment and landscape, practices and tradition, including stories, will be considered in all park planning and management and applied as appropriate.
- Research into the Indigenous Nations, cultural heritage, including perspectives of landscape and environment and tradition, will be encouraged, and supported as appropriate.
- Significant European post-settlement sites and relics will be protected from damaging natural processes and inappropriate recreational activities by developing and implementing individual site plans.

The park visit

- Recreation activities will be permitted in accordance with table 3.
- Recreation activities will be managed to encourage visitors' enjoyment and understanding, with minimal impact on the park.
- Visitors will be encouraged to adopt minimum impact techniques and to adhere to codes of conduct appropriate to their activity.
- The services and facilities of the Grampians National Park Visitor Centre and Brambuk Aboriginal Cultural Centre will be integrated into Brambuk: The National Park and Cultural Centre.
- Brambuk: The National Park and Cultural Centre will be developed and promoted as a major nature and culture-based visitor destination.
- Visitor pressures on key attractions will be monitored and managed as necessary.
- Visitors, visitor use, and visitor expectations and needs will be monitored and assessed systematically to provide a basis for planning park protection and the enhancement of visitor experiences.

TABLE 3 SUMMARY OF RECREATION ACTIVITIES

ACTIVITY	MANAGEMENT ZONES				MANAGEMENT OVERLAYS			
	1	2	3	4	5	6	7	8
	59% of Park	39% of Park	<1% of Park	<1% of Park	1% of Park	19% of Park	<<1% of Park	<<1% of Park
Picnicking	Y	Y	Y	Y	N	Y	Y	N
Camping – designated sites (limited facilities)	Y	N	N	N	N/A	N/A	N/A	N/A
Camping – dispersed (no facilities)	Y	Y	N	Y	N	Y	N	Y
Camp-fires	Y	N	N	Y	N	N	N	N
Bush walking	Y	Y	N/A	Y	N	Y	Y	Y
Bicycle riding	Y	Y	Y	N/A	N	Y	N	N
Horse riding	Y	Y	Y	N	N	N	N	N
4WD touring	Y	Y	N/A	N/A	N	Y	N	N
Pleasure driving	Y	Y	N/A	Y	N	Y	N	N
Trail bike riding	Y	Y	N/A	Y	N	Y	N	N
Orienteering or rogaining	Y	N	N/A	N/A	N	N	N	Y
Rock climbing or abseiling	Y	Y	N/A	N/A	N	Y	N	N/A
Fishing	Y	Y	N/A	Y	N	Y	N	N
Bait collection	N	N	N/A	N	N	N	N	N
Firewood collection	N	N	N	N	N	N	N	N
Hunting	N	N	N	N	N	N	N	N
Dogs	N	N	N	N	N	N	N	N
Hang gliding or paragliding	N	N	N	N	N	N	N	N
Fossicking	N	N	N	N	N	N	N	N

KEY:

1	Conservation and Recreation Zone	N	Not appropriate
2	Conservation Zone	Y	Permitted except where specifically constrained by overlay as indicated in the table, or by conditions specified elsewhere in the plan
3	Recreation Development Zone		
4	Education Zone		
5	Reference Area Zone	N/A	Not applicable
6	Remote and Natural Area		
7	Special Protection Area		
8	Special Management Area–public utility		

- The following recreation activities will be given priority in the planning and management of the park, in keeping with the encouragement of visitors' enjoyment and understanding and the minimisation of impacts on the park:
 - orientation, advisory information and interpretation;
 - scenic viewing;
 - short walks;
 - rock climbing;
 - camping;
 - bush walking;
 - picnicking.
- Heavily visited access roads, tracks and sites, and associated recreational facilities,

will be given priority for improvement and maintenance in park programs.

Community awareness and involvement

- Major community stakeholders and interest groups and the Indigenous community will be consulted on significant issues raised in implementing the plan.
- A strong and close relationship will be maintained with the Indigenous Nations, Brambuk Incorporated and Gariwerd Enterprises Pty Ltd (Brambuk).
- Indigenous Nations' aspirations for the park, perspectives of landscape and environment, tradition and interests and rights in the land will be respected and considered in all aspects of the park's planning and management.
- Park management will be approached through a working partnership with Brambuk Incorporated and the Indigenous Nations.
- Brambuk: The National Park and Cultural Centre will be managed as a partnership with Gariwerd Enterprises Pty Ltd.
- All works proposals will be assessed and action taken as necessary to ensure full compliance with the Native Title Act, including notification as required.
- Participation of Friends groups and volunteers in programs to protect and conserve the park will be encouraged and supported.
- The views of the Grampians National Park Advisory Group will be sought on strategic management issues relating to the park.
- Liaison will be maintained with community groups, neighbours and relevant Government agencies, and a working partnership will be adopted in dealing with issues of mutual concern relating to the park, as appropriate.

4 STRATEGIES FOR NATURAL VALUES CONSERVATION

4.1 Geological and landform features

The Australian Heritage Commission has identified the whole park as being of high geological significance at the national level.

The Grampians Ranges are a series of three north–south orientated ranges rising abruptly from the surrounding plains. Mount William (Mount Duwil) reaches the highest elevation at 1168 m. The distinctive cuesta landform of the Grampians, consisting of abrupt escarpments and generally west-dipping slopes, is the result of complex geological processes beginning in the Palaeozoic era.

The sediments which make up the Grampians were deposited about 400 million years ago and are approximately 3700 m deep (Cayley and Taylor 1997). They are composed of layers of massive sandstones, siltstones and mudstones which were folded and tilted during the Middle Devonian period, with later smaller earth movements causing further warping. Features such as the Wartook Syncline and the major fault line which runs to the east of Mount William (Mount Duwil) are the result of these earth movements.

Erosion of softer sediments and along fault lines has created valleys such as Dairy Creek and Devils Gap in the Wonderland Range. Granitic magma intruded into the Grampians sediments around 395 million years ago. The resultant deeply weathered batholiths form low hills between the Victoria and Serra Ranges. Magma intruded into cracks in the sandstones to form granitic dykes and sills in the Mount Gar (Mount Difficult), Mount William (Mount Duwil) and Wonderland Ranges. Many walking tracks on escarpments are on weathered sills and dykes. Associated metamorphic features in the park include the aureole surrounding the Mafeking intrusion, and ledges forming terraces and waterfalls along some of the escarpments.

Scree slopes have developed below escarpments, and outwash from the Ranges has formed alluvial plains which are found in Victoria Valley and the Wannon Valley and as elongated strips along some valley floors.

Type localities for the different rock units in the Grampians have recently been described. They are important reference sites against which other rocks can be compared, and they have a high priority for preservation for scientific purposes (Cayley & Taylor 1996).

Aims

- Minimise impacts on geological and geomorphological features.
- Provide opportunities for appropriate research into, appreciation of, and education about geological and geomorphological features.

Management strategy

- *Ensure impacts from visitors, management activities and educational studies on the park's geological and geomorphological features are minimised (chapter 6).*

4.2 Rivers and catchments

The Grampians–Gariwerd receives a relatively high and reliable rainfall. The park contains the headwaters of several substantial streams: the Wannon River and Fyans Creek (Barriyaloo Creek), in the valley adjacent to the Mount William Range; the Glenelg River, in the Victoria Range (Billawin Range); and a small tributary of the Wannon River called Dwyers Creek.

Almost three quarters of the park is included in Special Water Supply Catchment Areas listed under schedule 5 of the Catchment and Land Protection Act. All or part of the Wimmera Systems, Rocklands, Wannon River Tributaries (Lake Bellfield), Mason Creek (Willaura) and Little Tea Tree Tributaries (Hamilton) proclaimed water supply catchments are within the park.

The high-quality water harvested from the Grampians is of fundamental importance to the economy of western Victoria and is a very important value of the park. The Glenelg Region Water Authority, Grampians Region Water Authority and Wimmera Mallee Water each harvest water from the Grampians for supply to cities, towns and farms in the areas they service. Water supplies to the Wimmera–

Mallee stock and domestic water supply system, which includes towns and farms, come mainly from the Grampians.

A range of water supply infrastructure is located in the park, most of which pre-dates the creation of the park. Construction, operation and maintenance of the infrastructure can have a substantial impact on the park and requires careful management (section 8.1 and appendix 9). The artificial Lake Bellfield, Lake Wartook and Moora Moora Reservoir are surrounded by, but not included in, the park.

The park's hydrological values are protected under Parks Victoria's environmental management program, Catchment and Water Management, which addresses the management of vegetation, soils and water.

Water harvesting from the park has considerably reduced flows in sections of some streams in the park. Currently, little is known of the past impact of water harvesting or the ecological requirements of streams in the park. It is important that future bulk water agreements and consents for works in the park take account of the need to avoid further deleterious impacts on streams, and provide for ecological flows and further research.

Threats to vegetation in the catchments within the park include wildfire and inappropriate fire regimes (section 4.6), weed invasion (section 4.7), over-grazing by native and non-native herbivores (e.g. deer, rabbits), illegal flower picking, recreation activities, road and track maintenance and construction, and the spread of Cinnamon Fungus.

The potential for soil erosion throughout the park catchments is high. The majority of soils are shallow and infertile, and occur on steep slopes. These soils are especially susceptible to erosion when the protective vegetation cover is disturbed by natural or management activities. Colluvial and alluvial soils of the slopes and plains, although deeper, are also prone to erosion if the vegetation cover is removed.

Additional actions to control erosion, and other processes which affect water quality or the overall condition of land and water resources, are included in sections 4.3, 4.6, 6.2, and 6.7.

Aims

- Conserve the ecological condition of streams and stream catchments.

- Manage water harvesting to avoid further deleterious impacts on the ecological condition of streams and, where practicable, restore ecological stream flows.
- Improve knowledge of stream ecology.

Management strategies

- *Ensure that catchment and water values are adequately protected from recreation activities, planned and unplanned fire, invasion by pest plants, over-grazing by pest animals, and inappropriate management activities.*
- *Implement programs to re-establish native vegetation to improve the overall condition of land and water resources.*
- *Ensure that the ecological requirements of catchments in the park, including streams, are appropriately considered in all decisions that affect the level and scheduling of water harvesting from the park.*
- *Ensure that consents for the operation and maintenance of water supply facilities in the park avoid or minimise deleterious impacts on stream ecology or, where practicable, establish ecological streamflows. Include requirements for ecological monitoring and research as appropriate.*
- *Reduce habitat fragmentation by rationalising and revegetating unsustainable roads and tracks.*
- *Rehabilitate disturbed areas with indigenous species, in accordance with Parks Victoria's operational policies.*

4.3 Vegetation

Vegetation communities

Vegetation communities are categorised into broad vegetation types (BVTs) at the State level and ecological vegetation classes (EVCs) and floristic communities (FCs) at the park level.

There are seven BVTs in the park, of which four are highly depleted, having less than 10% of the pre-1750 vegetation cover remaining in Victoria (PV 2000b):

- *Inland Slopes Woodland* – substantially depleted in Victoria, but what remains is well represented in the park/reserve system;
- *Sedge-rich Woodland* – highly depleted and among the most depleted BVTs in Victoria, but what remains is moderately well represented in the park/reserve system;
- *Herb-rich Woodland* – highly depleted and among the most depleted BVTs in Victoria, but what remains is moderately represented in the park/reserve system;
- *Dry Foothill Forest* – partially depleted in Victoria, and what remains is moderately represented in the park/reserve system;
- *Plains Grassy Woodland* – highly depleted and among the most depleted BVTs in Victoria, and what remains is poorly represented in the park/reserve system;
- *Valley Grassy Forest* – substantially depleted in Victoria, and what remains is poorly represented in the park/reserve system;
- *Grassland* – highly depleted and among the most depleted BVTs in Victoria, but what remains is moderately represented in the park/reserve system.

EVC and FC maps for the Greater Grampians Study (Tumino & Roberts 2000) are used in detailed environmental planning and management for the park. The Study Area encompassed the Grampians National Park, Black Range State Park, intervening public land and areas of contiguous public land.

The Study Area contains 55 FCs, which represent 40 EVCs (appendix 4). Most of these FCs are found in the Grampians National Park, which covers a large proportion of the Study Area. Four of the EVCs and 37 of the FCs are endemic to the Study Area and one FC is endemic to the Greater Grampians bioregion.

Significant floristic communities and ecological units have been fragmented by the road and walking track network.

The most species-rich vegetation type found in the park, Lateritic Heathy Woodland, is among the most species-rich vegetation communities in the world, with an average of 82 vascular

species per 30 m² quadrat (Rankin et al. in prep.).

The park contains one vegetation community listed under the Flora and Fauna Guarantee Act — the Red Gum Swamp Community No. 1 — at two locations. This community has been recorded at seven locations across the State. All are within the combined Wimmera and Glenelg–Hopkins Catchment Management Authority regions. Twenty-eight EVCs that occur in the park are endangered, rare or vulnerable (appendix 4).

Vegetation values are protected under Parks Victoria's environmental management program.

Flora species

The Grampians National Park has a rich diversity of flora, with approximately 975 native vascular plant species, representing one third of the State total. The park is notable for being the most important botanical reserve in Victoria, exhibiting a rich and colourful wildflower display in spring.

The park is a sanctuary for 98 threatened vascular plant species (appendix 3), and contains 12 of the 145 flora species listed under the Act.

The Grampians Pincushion-lily is the only Flora and Fauna Guarantee (FFG)-listed species that is both endangered and endemic to the park. The park contains 100% of the State's records over the last 50 years for 20 threatened flora species.

Several species are at the limits of their range in the Grampians. The Mountain Grey Gum and Victorian Christmas-bush are at their westernmost limit, and Yucca and Mossy Woodruff at their most easterly limit. Twenty-six plant species are endemic to the park, and many others occur nowhere else in Victoria, although they may be found in other States. More than 75 terrestrial orchid species have been recorded in the park.

A survey of the Grampians during the Australasian Bryophyte Workshop in 1998 identified 137 species of mosses and 54 species of liverworts. Several of these species, including *Blindia ferruginea*, *Dawsonia polytrichoides*, *Hypopterygium rotulatum* and *Balantiopsis tumida*, represent highly disjunct occurrences. Several specimens from this survey are as yet undetermined, and are

considered to be significant as they may constitute new records for Victoria (Meagher 1998).

The park contains a large variety of fungi. In 1999 an extensive survey identified approximately 500 specimens, which are lodged with the National Herbarium, Melbourne.

Aims

- Conserve native vegetation communities and maintain genetic diversity.
- Provide special protection for, and increase knowledge of threatened plant communities and species.
- Increase knowledge of significant flora and vegetation communities.

Management strategies

- *Restore the structure and diversity of Sedge-rich Woodland, the FFG-listed Red Gum Swamp Community No. 1 and the endemic EVC Montane Grassy Woodland. In addition restore the structure and diversity of the understorey and middle storey of the areas of Herb-rich Woodland and Plains Grassy Woodland, and the habitat of the Grampians Pincushion-lily.*
- *In the longer term, maintain the structure and diversity of the range of vegetation types throughout the park, in particular the FFG-listed Red Gum Swamp Community No. 1, Grampians Sedge-rich Wetland, three endemic EVCs (Heathy Herb-rich Forest, Montane Rocky Shrubland, Montane Wet Heathland) and the restricted endemic FC Grampians Montane Grassy Woodland.*
- *Develop and implement programs to protect threatened species.*
- *Manage FFG-listed species and communities according to approved Action Statements and Recovery Plans.*
- *Maintain existing populations of threatened species, and in particular maintain viable populations of the Mount William Grevillea and increase the population of the endemic Grampians Pincushion-lily.*
- *Complete research into key fire response species and ecologically based fire*

regimes for floristic communities within the park.

- *Develop and implement ecologically based fire management prescriptions and implement them through approved statewide programs (section 4.6).*
- *Undertake distribution mapping and monitoring of endangered and significant endemic species.*
- *Encourage survey and research into flora (including rare or threatened species), plant communities, fungi and bryophytes in the park, in consultation with Brambuk Incorporated and the Indigenous Nations. Record and use information gained to improve ecological vegetation and flora management. Discover and use Indigenous traditional knowledge only with the agreement of Brambuk Incorporated and the Indigenous Nation.*

4.4 Fauna

The park has a high diversity of faunal habitats and a related high faunal diversity. The park supports at least 230 bird species, 40 mammal species, 30 reptile species, 11 amphibian species, and 6 native fish species. Little is known of the majority of invertebrate species in the park, although there are a number of significant butterfly species.

The Victoria Valley Heaths are of particular interest as they contain very similar fauna to that of south-west Victorian coastal heaths. The Southern Emu-wren and Heath Mouse are at their northernmost limits in the Grampians. The Southern Brown Bandicoot and Long-nosed Potoroo also reach their northern limits in Victoria in the park.

The low open shrubby woodlands support a wide diversity of nectar-feeding birds, and the tall open forests are important for hollow-dependent species such as the Powerful Owl. The Grampians wetlands, particularly those in the south of the park, support a diverse community of waterbirds, including the Great Egret. The numerous cliff faces provide nesting sites for the Peregrine Falcon, and large populations of Emus are found throughout the lowland areas.

Of the species recorded in the park, 50 are classified as threatened in Victoria (appendix 5). The park contains 18 of the 137 fauna

species listed under the Flora and Fauna Guarantee Act. Action Statements under this Act have been prepared for the management of the Large Ant-blue Butterfly, Bush Stone-curlew, Red-tailed Black-Cockatoo, White-bellied Sea-Eagle, Powerful Owl, Brush-tailed Rock Wallaby, Grey-crowned Babbler and Small Milkwort.

Significantly, the FFG-listed Heath Mouse and Brush-tailed Rock Wallaby have been recorded at fewer than four sites in Victoria.

These species depend heavily on the park for suitable habitat to support their survival. The survival of the Heath Mouse depends on the burning regime (section 4.6) of the heathland it inhabits. The Smoky Mouse, recorded in the low open shrublands of the Major Mitchell Plateau, also requires special consideration in management.

Five of the 30 Victorian rare or threatened bird species that occur in the park are covered under international agreements—the Japan–Australia Migratory Birds Agreement (JAMBA), the China–Australia Migratory Birds Agreement (CAMBA), or both. All are recorded in several locations across Victoria, and the Great Egret has been recorded at over 300 locations statewide (appendix 5). None of these species are known to breed in the park.

Other threatened species include the Woodland Blind Snake, Swamp Skink, Warty Bell Frog, Dwarf Galaxias, Large Ant-blue Butterfly, Amethyst Hairstreak, Silvered Skipper and Large Brown Azure Butterfly (appendix 5).

The park is considered to have high macropod diversity, with Red-necked Wallabies and Grey Kangaroos and a growing population of Black Wallabies. There have been unconfirmed sightings of the Spot-tailed Quoll. Further investigation is required to determine its status in the park.

The Red-necked Wallabies, Grey Kangaroos and Black Wallabies in the park require monitoring to ensure that their grazing and browsing does not adversely affect native vegetation.

Red Deer inhabit the park, and although introduced they are considered to be ‘wildlife’ under the *Wildlife Act 1975* (Vic.). Deer numbers in Halls Gap and other areas in the park have increased dramatically over the last ten years.

The Grampians National Park is included in statewide native animal management programs and is a key release site for Koalas. Koalas have been released in the park for several decades.

Aims

- Protect and preserve indigenous fauna and fauna habitat, particularly significant species and habitats.
- Increase knowledge of significant fauna species and habitat.

Management strategies

- *Maintain the structure and diversity of potential Heath Mouse and Smoky Mouse habitat and improve its suitability. Maintain the habitat of the threatened Squirrel Glider, Powerful Owl and King Quail.*
- *Maintain the structure and diversity of potential Brush-tailed Rock-wallaby habitat in the Victoria Range (Billawin Range).*
- *Develop and implement programs to protect threatened species.*
- *Manage FFG-listed species according to approved Action Statements and Recovery Plans*
- *Monitor the occurrence and distribution of fauna and faunal habitats, particularly of threatened species including the Brush-tailed Rock-wallaby, Heath Mouse, and Spot-tailed Quoll (unconfirmed sightings), and record the information as a basis for improved fauna management.*
- *Monitor the impact and assess populations of grazing species such as kangaroos and deer on park values.*
- *Encourage research into Aboriginal traditional knowledge relating to fauna and fauna habitat in consultation with Brambuk Incorporated and the Indigenous Nations. Record, discover and use Indigenous traditional knowledge only with the agreement of Brambuk Incorporated and the Indigenous Nations.*
- *Implement appropriate fire regimes for the maintenance of specific faunal habitats, especially Heath Mouse habitat (section 4.6).*

- *Participate in statewide native animal management programs.*

4.5 Landscape

The Grampians form one of nine landscape character types in Victoria (Leonard & Hammond 1984). Their spectacular scenery and unusual visual character are major drawcards for visitors.

Massive sandstone cliffs contrast with surrounding plains, extensive forests are interrupted by water bodies, rock outcrops and deeply fissured cliffs, the colour and texture of the vegetation cover vary with elevation and season, and weather-sculpted rocks give character to the exposed sandstone.

The significant landscape requires, in relation to development and management activities, that consideration be given to views from major roads in and outside the park, and from major lookouts.

Threats to landscape character may result from changes related to human activity, and can come from increasing visitor pressure on sites, inappropriately planned or designed facilities and public utilities, and the utilisation of natural resources. Small incremental changes over time can have significant adverse impacts on landscape character. Gravel pits used for road maintenance can detract from the visual character of the park.

Public utilities infrastructure, which includes the telecommunication towers on Mount William (Mount Duwil) and on Mount Zero Road, and power lines to Lake Wartook, MacKenzie Falls, Mount William (Mount Duwil) and Mafeking Road, are prominent structures in the landscape. Proposals for placement of new utilities and alterations to existing facilities should ensure that the number and size of structures are kept to a minimum.

On a local scale, care must be taken to ensure that developments at key visitor sites have no adverse impact on the visual integrity of the area.

Inappropriate designs, materials and siting of developments adjacent to the park can also adversely affect landscape character. Currently, local governments enable park managers to comment on planning applications.

Aims

- Protect the landscape character of the park, including cultural components, while allowing natural processes of change.
- Minimise developmental intrusion into significant landscapes.

Management strategies

- *Continue to rehabilitate, remove or ameliorate undesirable developmental intrusions in the landscape as seen from key viewpoints, particularly through revegetation of closed tracks and gravel pits.*
- *Conduct risk assessments with respect to potential impacts on the landscape of all new developments and extensions to existing developments, including gravel pits, in consultation with Brambuk Incorporated and the Indigenous Nations, and Heritage Victoria as appropriate. Ensure that developments are planned and designed to minimise their impact on landscape values and avoid impacts on significant cultural landscapes.*
- *Work with the relevant authorities to minimise the visual impact of public utilities on park values.*

4.6 Fire management

Fire event records since 1939 indicate that much of the park has been subjected to both wildfire and prescribed burning over the last 60 years. There are also some areas that have no record of fire, totalling approximately 33 790 ha (as of 1999) in small areas scattered through the central and western sections of the park.

The effect of fire on flora and fauna is recognised as an important consideration for the management of the park. It plays an essential role in the ecology of various species and communities that have evolved under particular fire regimes. Some species are threatened by fires that are too frequent, or conversely by long term fire exclusion.

The management of fire therefore presents a challenge, particularly in establishing appropriate fire regimes in an area of such diverse and closely juxtaposed vegetation communities. Ecologically based fire

management prescriptions are being developed and implemented.

Fire has been a common occurrence in the park, and large areas of the park were burnt in 1985, 1988, 1989, 1990, 1992, 1994 and 1999. Cooperation with the Country Fire Authority, private landholders and Department of Sustainability and Environment for the common purpose of fire management within the park and on adjacent land has minimised the impact of these fires.

Management of species and communities must make reference to the historical fire regimes experienced. Relatively good data is available on fire occurrences, type and extent within the park. This data has been incorporated into a geographic information system (GIS) capable of assessing the historical fire regimes in the park. Ecologically based fire management prescriptions for various communities are being developed for the park, based on floristic communities and key fire response species (Tolhurst 1996).

Ecological management of fire includes developing and implementing ecological burning programs to improve the condition of environmental values and to maintain fire regimes appropriate to the conservation of flora and fauna. Where practical, dual-purpose burning to meet both ecological and fuel reduction requirements is developed in the three-year burn plan.

The *National Parks Act 1975* requires the Secretary to ensure that appropriate and sufficient measures are taken to protect parks and people from injury by fire. Fire management within the Grampians National Park is controlled by the *Code of Practice for Fire Management on Public Land* (CNR 1995a), the approved fire management plans that cover the park (CFL 1989, NRE 2002) and the *Interim Guidelines and Procedures for Ecological Burning on Public Land in Victoria* (NRE & PV 1999). A range of strategically located facilities are maintained in the park to assist with the fire suppression activities, including the Victoria Valley Airbase, fire dams and helipads. Access to the airbase crosses the runway and should be relocated. Liaison and consultation with the community, the Indigenous Nations, DSE and emergency agencies such as the Country Fire Authority, State Emergency Service and the Victoria

Police are sought on matters relating to fire management in the park.

Aims

- Protect human life, property and park values from injury by fire.
- Minimise the adverse effect of fire and fire suppression methods on park values.
- Maintain fire regimes appropriate to the conservation of flora and fauna.

Management strategies

- *Implement fire management in accordance with the requirements of approved fire management plans that cover the park (CFL 1989, NRE 2002).*
- *Develop and implement ecological burning programs to improve the condition of environmental values based on sound research, in consultation with Brambuk Incorporated and the Indigenous Nations. Where practicable, develop dual-purpose burning to meet both ecological and fuel reduction requirements.*
- *Conduct prescribed burns for ecological management and fire protection in consultation with Brambuk Incorporated and the Indigenous Nations, and in accordance with approved statewide programs, Code of Practice for Fire Management of Public Land in Victoria, Interim Guidelines for Ecological Burning of Public Land and approved fire management plans that cover the park (CFL 1989, NRE & PV 1999, NRE 2002).*
- *Promote the conservation objectives included in the Draft Environmental Action Plan (PV 2002) as objectives to be considered in the review and implementation of the Horsham District Fire Management Plan (NRE 2002).*
- *Encourage scientific research into the impact of fire on the flora and fauna of the park.*
- *Develop and maintain appropriate fire regimes for the maintenance of specific faunal habitat in the park, in particular Heath Mouse and Smoky Mouse habitat.*
- *Support the maintenance of, and safe access to, Victoria Valley Airbase and other wildfire suppression infrastructure.*

- *Assess the operational significance of existing fire dams and helipads with a view to enhancing the efficiency of operations, in consultation with the Forests Service.*
- *Develop and ensure the application of guidelines on preferred methods for wildfire suppression and fuel reduction burning in the park.*
- *Develop and implement prescriptions for the rehabilitation of constructed control lines for the Grampians National Park, in consultation with Brambuk Incorporated and the Indigenous Nations, and in accordance with the Code of Practice for Fire Management on Public Land and Parks Victoria policy.*
- *Provide input into wildfire suppression strategies to ensure the protection of environmental and cultural values, and restrict fire suppression activities in Reference Areas and other sensitive areas.*

4.7 Pest plants and animals and diseases

Over 200 introduced vascular plants, both exotic and native, have been recorded in the park. Priority environmental and noxious weeds are listed in appendix 6. Although this list is extensive, the pest plants do not infest large tracts of the park and are generally confined to boundary areas. There are a number of exotic plants associated with historic sites within the park.

Pest animals recorded include foxes, rabbits, feral cats, goats, and feral bees. All these species have the potential to severely affect the native flora and fauna. European Wasps are extending their range and present both an environmental and a human threat. Little is known about the effect of deer in the park, and research is needed. A relocation program was implemented in 1996. The effects of deer on the environment, including soil erosion, vegetation damage, and disease spread need to be monitored.

The invasive pathogen *Phytophthora cinnamomi* (Cinnamon Fungus) has been recorded from many sites within the park. This organism can seriously affect native vegetation and cause the death of susceptible species. Although it spreads naturally, the rate of spread is accelerated by the transport of infected soil and gravel by road-making

machinery and other vehicles. Limiting the spread of the disease can only be achieved through an up-to-date knowledge of its distribution, and by restricting access to uninfected sites at times when it is most likely to be spread.

Gravel for maintaining the park's road and track network was previously sourced from 29 gravel pits in the park, of which 14 are known to be infected with Cinnamon Fungus. Future closure and rehabilitation of gravel pits will reduce the number of currently active gravel pits from 18 to 11.

Lists of introduced species, assessments of their invasive potential, priorities for control, and control methods, and comprehensive and detailed pest plant and pest animal strategies and actions to implement this plan are included in the Draft Grampians National Park Environmental Action Plan (PV 2002).

Aims

- Eradicate new pest plant infestations.
- Control the spread of pest plants that threaten particular environmental values.
- Eradicate or control the population of target pest animal species which threaten particular environmental values, especially threatened flora and fauna species.
- Minimise the impacts of pathogens on native flora and fauna.

Management strategies

- *Map and eradicate new pest plant infestations, with priority given to infestations that have the potential to invade and substantially modify native vegetation communities.*
- *Monitor and control pest plant infestations adjacent to populations of threatened and priority flora species, including Grampians Pincushion-lily, Ribbed Bush-pea and Grampians Boronia.*
- *Identify and control pest plant infestations in depleted broad vegetation types (BVTs) and high-priority vegetation communities.*
- *Continue the control of proclaimed noxious weeds in keeping with the objectives of the 1999–2003 Wimmera Weed Action Plan and the Priority Pest Plant Treatment Calendar.*

-
- *Give control of foxes a high priority.*
 - *Monitor the occurrence of pest animals, and review pest animal strategies if there are impacts on natural values.*
 - *Establish the status of Sallow Wattle in the park and determine its priority for management as a potential environmental weed.*
 - *Assess the impact of grazing by non-native animals (particularly goats) on park values.*
 - *Participate in cooperative programs with landowners to control pest plants and pest animals, as appropriate.*
 - *Monitor the occurrence of Cinnamon Fungus and review management arrangements as necessary.*
 - *Source gravel for park roads only from pits that are certified pathogen and weed free, and preferably from outside the park.*
 - *Restrict the use of gravel from the park to Grampians National Park only.*
 - *Revegetate areas affected by the Cinnamon Fungus where practical, giving priority to Heath Mouse habitat.*
 - *Implement the Draft Environmental Action Plan (PV 2002) pest plant and animal strategies, and priorities for action, in accordance with the management plan.*
 - *Encourage research on, and update knowledge of, dieback and its relationship to Cinnamon Fungus.*

5 STRATEGIES FOR CULTURAL VALUES CONSERVATION

5.1 Indigenous cultural heritage

The Dreamtime and culture of the Grampians–Gariwerd is integral to the dreaming of the Gournditch–Mara, Kirrae Wurrung and Wotjobaluk Nations (Indigenous Nations). Central to the dreaming is Bunjil, the great ancestor spirit.

The Indigenous Nations have maintained a strong association with the park since the park's proclamation in 1984.

The Indigenous Nations have a long association with the Grampians–Gariwerd. The use of one site in the Victoria Range (Billawin Range) has been dated from 22 000 years ago. Recent archaeological investigations have demonstrated that there was intensive Aboriginal occupation of Grampians–Gariwerd. The draining of Lake Wartook in 1997 for maintenance works exposed 32 sites around the margin of what was once a swampy basin (Gunn 1998). These sites include:

- thirteen grind stones;
- two grinding patches;
- eleven piles of hearth stones;
- anvils for flaking quartz pebbles;
- dense scatters of waste flakes.

The park also contains a range of other known places and archaeological sites of particular significance to the Indigenous community. These include sites associated with rock shelters, quarries, mounds, surface scatters and scarred trees (appendix 7).

Much of the archaeological research for the park has focused on the art and rock shelter sites. The park contains the largest concentration of rock art sites in Victoria, comprising over 60% of the State's rock art sites. However, a comprehensive archaeological survey of the park has not yet been conducted (AAV 2001).

The park's Indigenous culture is rich, diverse, and living, but will need support and protection to be sustained.

All Aboriginal places, objects and archaeological relics are protected under the

Aboriginal and Torres Strait Islander Heritage Protection Act 1984 (Cwlth), the *Archaeological and Aboriginal Relics Preservation Act 1972 (Vic.)* and the *National Parks Act 1975 (Vic.)*.

Brambuk Incorporated is specified in the Schedule of the Aboriginal and Torres Strait Islander Heritage Protection Act as the local Aboriginal community. Its consent is required for any interference or disturbance to any Aboriginal place or Aboriginal object in the park.

In 1990 the use of Indigenous names for places in and around Gariwerd was proposed in recognition of the history and heritage of Indigenous people in western Victoria. Traditional names for the rock art sites open to the public — Ngamadjidj, Gulgurn Manja, Billimina and Manja — have been adopted and are in current use. Dual names have been adopted for some other features within the park.

Representatives of Brambuk Incorporated, Indigenous Nations, Gariwerd Enterprises Pty Ltd (Brambuk), AAV, South West Wimmera Cultural Heritage Program and Parks Victoria are developing a Gariwerd/Grampians Aboriginal Cultural Heritage Strategy for Grampians National Park and Black Range State Park to address all issues relating to the protection of Indigenous cultural values in the parks, including Aboriginal traditions, places and objects.

Parks Victoria respects the Aboriginal peoples' aspirations for the park, perspectives of landscape and environment, tradition, and interests and rights in the land and is committed to reconciliation with Indigenous communities.

Aims

- Foster reconciliation with the Indigenous Nations, Brambuk Incorporated and Gariwerd Enterprises Pty Ltd.
- Enrich and strengthen the park's management with Aboriginal tradition.
- Protect Aboriginal cultural values from damaging natural processes and

inappropriate recreational and management activities.

- Encourage rediscovery of Aboriginal cultural heritage relating to the park.

Management strategies

- *Continue and maintain a strong and close relationship with the Indigenous Nations, Brambuk Incorporated and Gariwerd Enterprises Pty Ltd, based on respect for their aspirations for the park, perspectives of environment and landscape, tradition, and interests and rights in the land.*
- *Adopt a working partnership approach with the Indigenous Nations, Brambuk Incorporated and Gariwerd Enterprises Pty Ltd in all aspects of the park's planning and management.*
- *Respect, consider and as appropriate apply Indigenous Nations aspirations for the park, perspectives of environment and landscape, and tradition, to all aspects of park planning and management.*
- *Develop a Gariwerd/Grampians Aboriginal Cultural Heritage Strategy for protecting, conserving, and promoting an understanding of Aboriginal tradition, places, objects and archaeological relics relating to Gariwerd. Consult and work in partnership with the Indigenous Nations, Brambuk Incorporated, Gariwerd Enterprises Pty Ltd, South West Wimmera Cultural Heritage Program, AAV, and relevant government agencies and community groups.*
- *Develop protocols for planning and managing works within the park, adopting a working partnership with Brambuk Incorporated, Gariwerd Enterprises and the Indigenous Nations.*
- *Promote Aboriginal tradition, places, sites, objects and relics as factors to be protected by appropriate integration into DSE regional fire protection planning. Provide information to DSE in consultation with Brambuk Incorporated and the Indigenous Nations.*
 - *Plan and manage all works in accordance with:*
 - *approved Gariwerd/Grampians Aboriginal Cultural Heritage Strategy;*
 - *protocols for planning and managing the works within the park;*
 - *Parks Victoria's Guidelines for Working with Aboriginal Communities and Protection of Cultural Sites;*
 - *government policy and directions;*
 - *relevant legislation.*
- *Encourage, and support in accordance with statewide prioritised programs:*
 - *archaeological surveys and risk assessments to identify Indigenous places and archaeological sites requiring specific protection from natural processes or inappropriate human activity, or other management action;*
 - *ongoing site condition monitoring programs at key Indigenous places and sites;*
 - *survey, mapping and recording of significant, traditional Aboriginal places and sites;*
 - *research into Aboriginal tradition (including stories, use of resources and land management practices), places, objects and archaeological relics relating to the park.*
- *Promote the protection of Aboriginal tradition, places and archaeological sites in:*
 - *NRE regional fire protection plans and Parks Victoria's ecological fire planning (section 4.6);*
 - *information, interpretation and education programs (section 6.1).*
- *Maintain confidentiality in respect of Aboriginal tradition, including men's and women's business, places, objects, archaeological relics and legal rights, in accordance with the wishes of the Indigenous Nations, Brambuk Incorporated and Gariwerd Enterprises Pty Ltd.*
- *Use Aboriginal intellectual property only with the agreement of the Indigenous Nations, Brambuk Incorporated and Gariwerd Enterprises Pty Ltd.*
- *Liaise and take a consultative, working partnership approach with the Indigenous*

Nations, Brambuk Incorporated, Gariwerd Enterprises Pty Ltd, South West Wimmera Cultural Heritage Program and relevant Government agencies (section 7.3) in dealing with Indigenous cultural issues of mutual concern and relating to the park and other areas.

- *Facilitate opportunities for Aboriginal people to obtain employment in the park in accordance with the Victorian Government's and Parks Victoria's Aboriginal Employment Strategies.*
- *Promote the learning, appreciation and understanding of Aboriginal cultural heritage, including perspectives of environment and landscape, and tradition among park staff.*
- *Encourage the sharing of knowledge among Indigenous Nations, Brambuk Incorporated and Gariwerd Enterprises Pty Ltd and park staff, to improve the management of the park.*

5.2 Brambuk: The National Park and Cultural Centre

Brambuk Aboriginal Cultural Centre and the Grampians National Park Visitor Centre are adjacent to each other in the tourist precinct of the park, south of Halls Gap (figure 3).

Brambuk Aboriginal Cultural Centre has provided information about Aboriginal cultural heritage, reconciliation and heritage protection through cultural performances, displays, and educational services since 1989. The Cultural Centre also contains a bush foods café and a retail outlet to sell and distribute publications relating to Aboriginal culture and the Grampians–Gariwerd.

Gariwerd Enterprises Pty Ltd (Brambuk) acts as Trustee for the Gariwerd Enterprises Trust that operates Brambuk Aboriginal Cultural Centre, among other businesses, on behalf of five Aboriginal communities of the Kirrae Wurrung, Goolum Goolum, Gunditjmara, Winda–mara and Framlingham people of the Western District and Wimmera Region.

The Grampians National Park Visitor Centre, located south of Halls Gap in the park, provides visitor orientation and interpretation through customer services staff and static and audio-visual displays, and also provides education services (section 6.1).

Parks Victoria, in accordance with its commitments (section 5.1) with Gariwerd Enterprises Pty Ltd, has established a Memorandum of Understanding that provides for the establishment of a new Brambuk: The National Park and Cultural Centre by integrating the existing Brambuk Aboriginal Cultural Centre and Grampians National Park Visitor Centre. The Memorandum of Understanding also provides for the management of the Centre by Parks Victoria and Gariwerd Enterprises Pty Ltd in partnership. Parks Victoria bases this partnership on principles that include respect for the traditions and aspirations of the Indigenous Nations and Gariwerd Enterprises Pty Ltd.

The new Centre will create promotional opportunities that will attract additional Victorian, interstate and international visitors to the park. It will also strengthen tourism links with other regional tourism attractions (section 6.1). It is anticipated that the Centre will become a major environmental and cultural destination for visitors.

Aims

- Establish and manage Brambuk: The National Park and Cultural Centre in partnership with Gariwerd Enterprises Pty Ltd.
- Provide a comprehensive and integrated range of informative visitor activities and services, and educational and interpretative services at Brambuk: The National Park and Cultural Centre.

Management strategies

- *In partnership with Gariwerd Enterprises Pty Ltd, establish a new Brambuk: The National Park and Cultural Centre that integrates the Brambuk Aboriginal Cultural Centre and the Grampians National Park Visitor Centre.*
- *Manage Brambuk: The National Park and Cultural Centre, in partnership with Gariwerd Enterprises Pty Ltd, to provide for a range of integrated, improved and expanded information, interpretation and educational experiences, services and facilities.*

- *Seek to manage Brambuk: The National Park and Cultural Centre in a manner that:*
 - *increases opportunities for the provision of Aboriginal traditional programs;*
 - *respects the perspectives of landscape and tradition, and aspirations for the park and interests and rights in the land, of the Indigenous Nations, Brambuk Incorporated and Gariwerd Enterprises Pty Ltd;*
 - *assists visitors to understand and appreciate the Grampians–Gariwerd;*
 - *increases awareness and understanding of Indigenous Nations traditions;*
 - *facilitates contributions to the development of the regional economy and generation of employment;*
 - *minimises duplication of services and facilities within the tourist precinct containing Brambuk: The National Park and Cultural Centre;*
 - *maintains the integrity of the Brambuk building as a cultural and architectural icon.*

5.3 Post-settlement cultural heritage

The history of the Grampians–Gariwerd since settlement is rich in diversity and interest. The name ‘Grampians’ was applied to the ranges by Major Mitchell on his 1836 expedition through western Victoria, which opened up the surrounding country for settlement. Squatters established runs in the area and other settlers soon followed. Generally unsuitable for farming, the Grampians–Gariwerd were utilised for their valuable resources of water and timber, and later stone and gold. Settlements around the Grampians–Gariwerd were generally associated with resource utilisation, and by the early 1900s with tourism.

The former Land Conservation Council (LCC) identified sites of historic significance in the park (appendix 8) as part of its special investigation of historic places on public land in south-western Victoria (LCC 1997).

Parks Victoria is developing a Heritage Management System which will include a

strategy, inventory, program and performance measures. Interpretation of culturally significant sites is addressed in section 6.1.

Historic and cultural places are managed in accordance with the *Heritage Act 1995* (Vic.) and the Australia ICOMOS Burra Charter (ICOMOS 1999).

Aim

- Protect post-settlement sites and relics from damaging natural process and inappropriate recreational activities.

Management strategies

- *Develop management statements for key post-settlement cultural sites in the park, adopting a working partnership approach with Heritage Victoria and local historical societies.*
- *Undertake works at key sites in accordance with the Burra Charter and Parks Victoria’s operational policies.*
- *Seek advice from relevant experts on conservation actions, particularly in relation to the recommendations for places listed in the LCC’s Special Investigation (LCC 1997).*
- *Encourage research into past land use and utilisation activities.*
- *Control exotic flora at historic sites where they pose a priority threat to a natural value and are not culturally significant (section 4.8).*

6 STRATEGIES FOR VISITORS

6.1 Information, interpretation and education

Parks Victoria supports the wide promotion of the Grampians National Park to attract visitors with an interest in natural, cultural and recreational opportunities in a natural environment. Parks Victoria also implements a range of information, interpretation and education programs to manage visitor behaviour and public safety, to conserve and protect park values, and to promote understanding and support for park management policies and practices. The programs are essential to:

- ensure that people have the opportunity to develop a keener awareness, appreciation, understanding and enjoyment of the values, features and issues of parks and other assets under the management of Parks Victoria;
- enrich the visitor experience at parks and other assets under the management of Parks Victoria;
- influence attitudes and behaviour to reduce risks to visitor safety and the impacts of visitors on park values, which in turn reduces the need for regulation, enforcement and costly mitigative measures;
- promote the attractions and programs provided by Parks Victoria;
- generate and reinforce public support for parks and park management.

The Grampians National Park Visitor Centre, south of Halls Gap (figure 3), has provided visitor orientation and interpretation through customer services staff, static and audio-visual displays since 1988. Education services have been provided since 1990. A retail outlet in the Visitor Centre sells and distributes publications relating to nature conservation, parks and the Grampians. Park staff supply current and authoritative information to counter staff and support the delivery of interpretive activities. The Visitor Centre attracts about 170 000 visitors annually (as of 2000).

Adjacent to the Visitor Centre, the Brambuk Aboriginal Cultural Centre has provided information about Aboriginal cultural heritage, reconciliation and heritage protection through cultural performances, displays, and educational services since 1989. The Cultural Centre also contains a bush foods café, and a retail outlet to sell and distribute publications relating to Aboriginal culture and the Grampians–Gariwerd.

Parks Victoria and Gariwerd Enterprises Pty Ltd are in the process of integrating the services and facilities of these two centres (section 5.1). Brambuk: The National Park and Cultural Centre will be the interpretive heart of the Grampians National Park.

Tandurrum Ceremonial Ground, located in State Forest nine kilometres north of Halls Gap, plays a key role in passing on knowledge of Indigenous culture to park visitors.

Promotion

There is considerable potential to raise public interest and awareness about the attractions of the park, and to promote appropriate opportunities to a diverse range of Victorian, interstate and overseas visitors. The provision of information about the park by Parks Victoria is integrated with the statewide and regional marketing strategies of Tourism Victoria. Parks Victoria supports the provision of marketing information that:

- highlights the natural and cultural values of the Grampians;
- promotes the park as a major visitor attraction;
- increases the profile of the park's natural features;
- builds awareness of Aboriginal culture and heritage;
- supports specific park management strategies aimed at managing visitor pressures across the park.

Orientation

Orientation information assists visitors to orient themselves as they approach and enter the park, and to understand appropriate and

safe behaviour. The information is particularly important for independent visitors. Orientation information includes factual information about park access and the location of visitor sites and facilities. It also includes advisory information such as:

- recreation activity codes of conduct;
- suitable access routes;
- strategies implemented by park management to protect the park;
- park and fire regulations and safety issues.

Orientation information is made available at Shire visitor information centres at Horsham, Stawell, Ararat and Hamilton on the approaches to the park, and at sites in the vicinity of and within the park.

Visitor orientation outside the park is also provided at the Dunkeld and Halls Gap visitor information centres. The Halls Gap centre was established by the Northern Grampians Shire in 2000. It is located where the potential to contact visitors to the Grampians is greatest, provides basic park information, and refers visitors wanting more detailed information to the park's Cultural Centre and Visitor Centre.

Additional orientation is provided throughout the park by walking track and road signage, and information panels at the four main entry points to the park, campgrounds and day use areas.

Orientation information is also included in Parks Victoria's Park Notes, detailed walking track guides for the Wonderland, northern and southern areas of the park, Grampians Road Map and a Grampians National Park Touring Guide booklet.

Interpretation

Interpretation is a means of communicating ideas, feelings and values to help people enrich their understanding of natural and cultural values, to foster positive attitudes towards the conservation of natural areas (particularly parks) and to increase awareness of the relationship between people and the natural environment.

Park interpretation involves the use of innovative communication tools, skills and approaches to present knowledge of the park and management practices to visitors. The park's diverse natural environment and

cultural history provide a diverse range of excellent interpretive opportunities. In particular, the rich Aboriginal history of the Grampians–Gariwerd provides an outstanding opportunity to enhance visitors' awareness, understanding and appreciation of the rich Indigenous culture and strong Aboriginal association with the area, and to foster a positive attitude towards Aboriginal people and culture generally.

Particular interpretive themes are manifest in particular areas/sites in the park, and in a range of cases can be related to sites that attract many visitors.

Grampians National Park Visitor Centre and Brambuk Aboriginal Cultural Centre include a range of interpretive displays and services that focus on natural and cultural history (see above). Brambuk: The National Park and Cultural Centre (section 5.2) will provide a venue for developing a distinctive, integrated and unique environmental and cultural interpretive focus.

Park Notes, display panels and interpretive activities are provided and various other sites in the park, including day use areas, interpretive trails, campgrounds and certain major Aboriginal rock art sites and shelters.

Significant interpretation of Aboriginal heritage is delivered at rock art sites and shelters. Interpretation of post-settlement history is made available at Mount Difficult (Heatherlie) Quarry and Mafeking. Many other historical sites have little or no interpretation. Personal interpretation and advice are provided to visitors throughout the park as staff undertake their general duties.

Interpretive facilities within the park at sites such as Silverband Falls, Wonderland Range, MacKenzie Falls, Zumstein, Mt Difficult (Heatherlie) Quarry, and Borough Huts were upgraded between 1994 and 2001.

Education

Education is largely a formal process of teaching skills, knowledge and concepts that lead to greater understanding of Victoria's natural and cultural values.

Appropriate educational visits to the park are encouraged. Adverse impacts of these activities on the park are minimised through suitable educational services.

The park, particularly the Brambuk Aboriginal Cultural Centre, Grampians National Park Centre (section 5.2) and education areas (section 3.2) are important educational resources for school students.

The development of the new Brambuk: The National Park and Cultural Centre (section 5.2) will provide a unique opportunity to promote reconciliation and conservation of the park's cultural and environmental values through educational programs to school students.

Two education areas have been declared within the park, at Potter Creek and Wannon Divide. An area of the park in the vicinity of Halls Gap is also used for educational activities.

The Potter Creek and Wannon Divide Education Areas are not heavily used. The Wannon Divide Education Area is remote from major access routes and adjacent to the Grasstree Creek Reference Area. Monitoring is needed to ensure that any use does not have a detrimental impact on the environment and natural values of the Education and Reference Areas. Currently, most educational programs are offered at the Halls Gap Education Area.

The Mount Stapylton campground adjacent to the Potter Creek Education Area could be a focus for the park's educational programs.

In 1990, the Department of Education and Training (DE&T) seconded a full-time teacher to the park as an Extension Education Officer, and support from DE&T is still current. In 2002, formal programs in the park involved 5426 students from 138 schools, and assistance was provided to teachers in organising visits to the park, and in curriculum development. These programs are highly valued by schools and have obvious long term benefits for the environment and for park management.

Aims

- Promote the proposed Brambuk: The National Park and Cultural Centre and the park in an integrated and cooperative manner with Tourism Victoria, regional tourism bodies and local shires.
- Orientate visitors to the proposed Brambuk: The National Park and Cultural Centre and the recreational, natural and cultural values and features of the park.

- Enrich visitors' experience, enjoyment, understanding and appreciation of the park's natural and cultural values, and encourage appropriate use of the park.
- Increase visitors' awareness, appreciation and respect for Aboriginal heritage through an understanding of the Aboriginal history and culture of the Grampians–Gariwerd.
- Interpret post-settlement sites and relics as appropriate.
- Provide education and support services that are appropriate, comprehensive and integrated, and are based on the proposed Brambuk: The National Park and Cultural Centre.

Management strategies

- *Plan and manage the park's information, interpretation and education services, adopting a working partnership approach with Gariwerd Enterprises Pty Ltd and the Indigenous Nations (section 5.2), local historical societies and schools using the park.*
- *Liaise with and support cooperative relationships between local Shire information centres and regional tourism associations, and the proposed Brambuk: The National Park and Cultural Centre.*

Promotion

- *Promote Brambuk: The National Park and Cultural Centre as a destination in its own right.*
- *Promote the role and significance of National Parks, and encourage support for them.*
- *Promote visitor use of the Parks Victoria Information Service (13 19 63) and Internet resource (Parkweb) (www.parkweb.vic.gov.au) to access park information.*
- *Promote the park's educational services and encourage the use of Parkweb's online material as a resource tool for teachers and students.*
- *Support Tourism Victoria's promotion of the park.*

TABLE 4 MANAGEMENT OF VISITOR ORIENTATION SITES

GRADE	SITE LOCATION	PLANNED FACILITY SERVICE	ACTION
Primary	Halls Gap Visitor Information Centre	Displays	Maintain
		Park Notes/Maps	Maintain
	Dunkeld Visitor Information Centre	Displays	Maintain
		Park Notes/Maps	Maintain
		Major orientation signage	Maintain
	Brambuk: The National Park and Cultural Centre	Information staff	Maintain
		Displays	Maintain
		Park Notes/Maps	Maintain
		Major orientation signage/display	Maintain
	Halls Gap township, Buandik picnic area and Zumstein	Major orientation signage	Maintain
Secondary	Staplyton, Troopers Creek, Smiths Mill, Borough Huts, Rosea, Jimmy Creek, Mafeking, Strachans, Buandik, Boreang, Bomjinna, Wannon Crossing campgrounds	Orientation signage	Maintain
	Mt Zero Picnic Area	Orientation signage	Maintain
	MacKenzie Falls	Orientation signage	Maintain
	Boroka Lookout	Orientation signage	Develop and maintain
	Hollow Mountain, Mt Abrupt and Mt William carparks	Orientation signage	Develop and maintain
	Wonderland Range walking tracks (entry points at Halls Gap, Wonderland carpark and Sundial carpark)	Orientation signage	Maintain

- *Provide input to promotional campaigns to optimise the use of existing facilities and to assist in protecting park values.*
 - *Ensure promotional campaigns emphasise opportunities and experiences in natural and cultural heritage values in ways that are appropriate for increasingly sophisticated visitor markets and the growing number of international visitors.*
- Orientation
- *Provide visitor information in accordance with table 7 that encourages responsible behaviour, such as appropriate vehicular and pedestrian access, recommended sites, codes of behaviour, park regulations and safety issues.*
 - *Implement a program to provide and maintain orientation facilities in accordance with table 4 and figure 3.*
 - *Maintain orientation facilities to appropriate standards and maintain road and track signposting in accordance with the Parks Victoria Signs Manual and regulations, and for public safety.*
 - *Continue to liaise with and support local shires, visitor information centres, licensed tour operators, and local and regional tourism associations to ensure the presentation and promotion of current and appropriate park information.*

TABLE 5 MANAGEMENT OF PARK INTERPRETATION SITES

AREA /THEME	LOCATION	PLANNED FACILITY/SERVICE	ACTION
Central Grampians			
Halls Gap – Natural and cultural values	Brambuk: The National Park and Cultural Centre	Wide range of interpretive services for both day and evening visitors	Develop and maintain
Wonderland – Diversity of plant life – Habitat for wildlife	Silverband Falls	Interpretive signage	Maintain
– History	Childs Grave	Interpretive signage	Maintain
Zumstein – Habitat for wildlife – History	Zumstein Picnic Area	Interpretive signage	Maintain
MacKenzie Falls – Water, a life force – History	MacKenzie Falls walking track	Interpretive signage	Maintain
Stawell Water Supply – Water, a life force	Tunnel	Interpretive signage	Maintain
	Borough Huts	Interpretive signage	Maintain
	Redmans Road	Interpretive signage	Maintain
Northern Grampians			
Mt Difficult Quarry – History	Quarry and Heatherlie Township Walk	Interpretive signage	Maintain
Gulgurn Manja, Ngamadjidj – Aboriginal cultural heritage	Gulgurn Manja Shelter	Interpretive signage	Maintain
	Ngamadjidj Shelter	Interpretive signage	Maintain
Southern Grampians			
Victoria Valley – Diversity of plant life – Ancient rugged landscape	Nature drive	GNP Touring Guide	Maintain
	Red Gum Walk	Interpretive signage	Maintain
Mafeking Goldfield – People in the landscape: the Europeans	Mafeking site	Interpretive signage	Maintain
Buandik – People in the landscape – Aboriginal cultural heritage	Billimina	Major interpretive signage	Maintain

- *Encourage licensed tour operators, schools and accommodation providers to develop their knowledge of the park and park management.*
- *Inform visitors of other parks and facilities within the region.*

Interpretation

- *Implement a program to provide and maintain interpretive facilities in accordance with table 5 and figure 3.*

- *Provide interpretive material that explains park management strategies and programs.*
- *Support the delivery of quality interpretation programs by licensed operators, contractors or volunteers where appropriate.*

Education

- *Support the presence in the park of seconded staff from the Department of Education.*
- *Encourage school groups to use the educational services and register their presence when visiting the park, even when no educational services are used.*
- *Seek declaration and proclamation of the Halls Gap Education Zone (figure 2) under Section 22 of the National Parks Act.*
- *Encourage school groups camping at the Mount Stapylton campground to use the Potters Creek Education Area for educational activities.*
- *Seek review of the boundary in the LCC recommendation for Wannon Divide Education Area.*
- *Monitor visitor demand for educational information.*
- *Develop integrated education and support services in Brambuk: The National Park and Cultural Centre, including:*
 - *classroom areas;*
 - *environmental and cultural activities;*
 - *displays and educational kits;*
 - *a resource room and associated resource library;*
 - *audio-visual resources;*
 - *interpretive display.*

6.2 Access

Roads and tracks

Many of the roads and tracks in the park were constructed for fire protection or timber extraction and were not designed for recreational use. Parks Victoria retains an appropriate network of roads and tracks for public vehicles and management purposes.

Some tracks are retained for management purposes only (MVO). The retained tracks are maintained as appropriate to minimise the hazards to users.

The condition of the extensive network of tracks through the park is a matter of frequent complaint from visitors. Maintaining the track network is a major task requiring considerable resources. Opportunities exist and are encouraged for four-wheel drive (4WD) clubs to be involved in the maintenance of designated tracks on a voluntary basis, in cooperation with park staff. The Victoria Association of Four Wheel Drive Clubs (VAFWDC) is consulted during the preparation of the schedule of seasonal road and track closures.

The main bitumen roads in the Grampians (Silverband Road, Grampians Tourist Road and Mount Victory Road) are not included in the park and are managed by VicRoads. Many local roads serving the park, such as the bitumen roads to key lookout points and car parks, are not included in the park (table 6) but are currently maintained by Parks Victoria. Other local roads such as Roses Gap Road (table 6) are managed by the responsible municipality. VicRoads has Roadside Management Plans for the Henty Highway, Grampians Tourist Road and the Victoria Valley Tourist Road and is developing a plan for the Mt Victory Tourist Road.

Aims

- *Maintain an appropriate network of roads and tracks for visitor use and management services.*
- *Minimise the impacts of roads and tracks, and their maintenance (including gravel extraction) on park values and water quality.*

Management strategies

- *Manage and maintain roads and tracks in the park according to the plan, including table 6 and figures 3 and 4.*
- *Maintain vehicular tracks additional to those in table 6 only where required for management purposes, or as part of the perimeter firebreak system, or for authorised access. Revegetate all superfluous tracks.*

TABLE 6 MANAGEMENT OF VEHICULAR ACCESS ROADS AND TRACKS

ROAD OR TRACK	PROPOSED CLASS	REMARKS	ACTION
Included in park			
Beehive Tk	5/C/O		Maintain
Bellfield Tk	5/D/O		Seasonal closure: maintain
Billywing Rd	4/B/O		Maintain
Billywing Tk	5/E/MVO	Sandy and wet; closed several years ago	Implement MVO
Bomjinna Tk	5/E/MVO	Mount William power line access	Maintain
Boundary Tk	4/D/O		Maintain
Briggs Tk	5/E/O		Seasonal closure: maintain
Burma Tk	5/E/MVO	Steep	Maintain
Burnt Hut Creek Tk	4/E/O		Seasonal closure; maintain
Carter Tk	5/E/MVO	Steep and rocky	Maintain
Chinaman Tk	5/E/O	Seasonal closure; granitic sand; erosion-prone	Seasonal closure; maintain
Cooinda Burrong Rd	4/C/O		Maintain
Crute Tk	5/E/MVO	Sandy; significant flora	Maintain
East Wartook Tk	5/E/MVO	Boggy	Maintain
Emmett Rd	4/B/O		Maintain
Fields Tk	4/E/O	North of Griffin Tk	Seasonal closure; maintain
Flagstaff Tk	5/D/O	Seasonal closure	Seasonal closure; maintain
Geerack Tk	4/D/O	Services water supply installation	Seasonal closure; maintain
Geranium Springs Rd	4/D/O		Maintain
Glenelg River Rd	4/B/O		Maintain
Glenisla Crossing Rd	4/B/O		Maintain
Goat Tk	5/D/O	Remote and Natural Area	Seasonal closure; maintain
Golton South Tk	4/D/O		Maintain
Greens Creek Rd	4/B/O		Maintain
Griffin Tk	5/E/MVO		Maintain
Happy Tk	5/E/MVO		Maintain
Harrops Tk	5/C/O		Maintain
Heatherlie Quarry Access Tk	5/D/MVO		Maintain
Henham Tk	5/D/O	Remote and Natural Area	Maintain
Hines Tk	5/D/O		Maintain
Homestead Tk	5/E/O	Remote and Natural Area	Seasonal closure; maintain
Hut Creek Tk	5/E/MVO	Remote and Natural Area.	Maintain
Ingleton Tk	5/D/MVO		Maintain
Jensens Rd	4/B/O		Maintain
Launders Tk	5/E/O		Seasonal closure; maintain

Table 6 (cont.)

ROAD OR TRACK	PROPOSED CLASS	REMARKS	ACTION
Link Tk (Pohlner to Smiths Rd)	5/E/O		Seasonal closure; maintain
Lodge Rd	5/B/O		Maintain
Long Point Tk	5/E/MVO		Maintain
Lynchs Crossing Tk	5/E/O		Seasonal closure; maintain
Lynchs Tk	5/E/MVO		Maintain
Mafeking Rd	4/C/O		Maintain
Mair Tk East	5/C/O		Maintain
Mair Tk North	5/D/MVO		Maintain
Masons Tk	5/D/O		Seasonal closure; maintain
Matthews Tk	5/E/O	Sandy	Seasonal closure; maintain
Mitchell Rd	4/C/O		Maintain
Moora Tk	5/E/O		Seasonal closure (part); maintain
Mount Cassell Tk	5/E/O	Steep	Seasonal closure; maintain
Mount Difficult Rd	5/C/O		Maintain
Mount Difficult Tk		Section between Mt Victory Rd and Watchtower is used extensively by walkers (alternative access north of Watchtower is available)	
-(south of Watchtower)	5/D/MVO		Implement MVO south of Watchtower; maintain
-(north of Watchtower)	5/D/O		Maintain
Old Mill Tk	5/C/O		Maintain
Olive Plantation Rd	4/B/O	To Stapylton Campground	Maintain
Osslers Tk	4/D/O		Maintain
Phillip Island Tk	5/C/O		Maintain
Picnic Ground Rd	4/C/O		Maintain
Plantation Rd	4/B/O		Maintain
Red Hill Rd	4/B/O		Maintain
Red Rock Rd	4/C/O		Maintain
Ricky North Tk	5/E/MVO		Maintain
Rose Creek Rd	5/B/O		Maintain
Rosea Tk	5/D/O	Remote and Natural Area	Seasonal closure; maintain
Sanders Tk	5/D/O	Remote and Natural Area	Seasonal closure; maintain
Sawmill Tk	5/C/O		Maintain
Serra Rd			
(Grampians Rd to Glenelg River Rd)	5/B/O		Maintain
(Glenelg River Rd to Syphon Rd)	5/D/MVO	Bridge across Glenelg River failed to meet structural standards (alternative access—Syphon Rd)	Implement MVO

Table 6 (cont.)

ROAD OR TRACK	PROPOSED CLASS	REMARKS	ACTION
Serra Range Tk			
(south of Cassidy Gap Tk)	5/E/MVO	Wet and boggy for extensive periods	Implement MVO south of Cassidy Gap Tk
(north of Cassidy Gap Tk)	5/E/O		Seasonal closure; maintain north of Cassidy Gap Tk
Seven Dials Tk	5/E/MVO		Maintain
Shilcock Tk	5/E/MVO		Maintain
Stapylton C/G Rd	5/B/O		Maintain
Stockyard Tk	5/E/MVO	Remote and Natural Area	Maintain
Stony Creek Tk	5/B/O		Maintain.
Syphon Rd	5/C/O		Maintain
Taylors Tk	5/D/O		Maintain
Terraces Tk	5/E/MVO	Previously named Bellfield Fireline	Maintain.
Victoria Range Tk	5/D/O	Remote and Natural Area	Seasonal closure; maintain
Victoria Range Tk South	5/D/MVO		Maintain
Wallaby Rocks Tk	5/D/O		Maintain
Western Hwy Link Rd	4/B/O		Maintain
Waterworks Tk	4/D/MVO	Services water supply installation	
Yanganaginj Njawi Tk	5/C/O		Maintain
Yarram Gap Rd	4/A/O		Maintain
Zumstein Rd	5/C/O	Previously Zumstein Shortcut	Maintain
Zumstein Tk	5/E/MVO	Services Power / telecom installation	
On road reserve with sections in the park			
Assess Ears Rd #	4/C/O		
Brimpaen Rd #	4/B/O		
Bullawin Rd #	4/C/O		
Cassidy Gap Tk #	4/D/O	Significant vegetation	Seasonal closure; maintain
Coppermine Tk #	5/D/O		
Halls Gap/Mt Zero Rd #	4/B/O		
Heatherlie Tk #	4/D/O		
Jimmy Creek Rd #	4/B/O		
Pohlner Rd #	4/C/O		
Redman Rd #	4/C/O		
Spears Tk #	4/D/O		
Yarram Park Tk #	5/D/O		
On road reserve			
Roses Gap Rd	4/A/O		Maintained by Northern Grampians Shire Council
Smiths Rd #	4/C/O		

Table 6 (cont.)

ROAD OR TRACK	PROPOSED CLASS	REMARKS	ACTION
Not included in park or in road reserve			
MacKenzie Falls Rd #	4/A/O		
Mount Difficult Rd (to Boroka Lookout) #	5/A/O		
Mount William Rd	4/A/O		
Reed Lookout Rd #	5/A/O		
Sundial Rd #	5/A/O		
Wartook Rd #	4/A/O		
Wonderland Rd #	5/A/O		

* The Grampians Tourist Road (3/A/O), Mount Victory road (3/A/O) and Silverband Road (4/A/O) are not included in the park and are managed by VicRoads.

Management responsibilities under investigation (refer strategy in section 6.2).

KEY:

Parks Victoria Classification – vehicular roads:

Class and function:

- 3 Roads between key towns.
- 4 Roads provided for park access, and additional functions such as commercial uses, through access to other location (outside the Park), or access to private property or utilities.
- 5 Roads exclusively provide access for visitors into parks for recreational activities, or exclusive use for Park Management.

Development:

- A Primary Road – all weather, two lanes, mainly sealed road.
- B Secondary Road – all weather, two lanes formed and gravelled, or single lane sealed with gravel shoulders.
- C Minor Road – Single lane unsealed, formed road usually lightly gravelled.
- D Access Track – Single lane, dry weather formed from natural materials.
- E Rough Track – Single lane, unformed earth track at or near the natural surface.

Status:

- MVO Management vehicles only.
- O Open to public vehicles.

- *Liaise with responsible authorities and encourage them to minimise soil erosion when maintaining roads that traverse the park.*
- *Clarify ongoing management and maintenance responsibilities for local roads not included in the park but within the park boundaries, in conjunction with VicRoads and local municipalities.*
- *Review the number of active gravel pits in the park with a view to operating fewer gravel pits, and do not use pits infected with the Cinnamon Fungus (section 4.7).*
- *Ensure that any gravel extraction is in accordance with the Extractive Industries Development Act 1995 (Vic.) and Parks Victoria's operational guidelines.*
- *Continue to implement seasonal road closures as necessary according to table 6 and in consultation with the VAFWDC, and ensure that the public is given prior notice of any seasonal or temporary closures.*
- *Encourage and support 4WD clubs to assist with the maintenance of designated tracks. Develop guidelines for the maintenance of roads and tracks in Grampians National Park.*

6.3 Scenic driving

Driving

The park is extremely popular for two-wheel driving (2WD) and four-wheel driving (4WD). An extensive road and track network is maintained to provide access for a wide range of recreation activities and for park management purposes.

Two-wheel driving

There are several popular driving routes in the park, the most popular being through the scenic corridor from Halls Gap to Zumstein, along the Mt Victory Road promoted as 'A Day in the Grampians'. Tourist attractions accessed from this route include outstanding lookouts and short walks, the MacKenzie Falls and Zumstein areas, and Lake Wartook.

Many visitors combine drives along the Mt Victory Road corridor with a drive through the Wonderland Range on the Silverband Road which gives access to Silverband Falls, Delleys Dell and the Sundial carpark. Other promoted 2WD routes are Victoria Valley Nature Drive and the Southern Grampians Route (figure 4). The Victoria Valley Nature Drive helps visitors to discover and understand some of the natural features of the park.

Formed roads such as the Halls Gap–Mount Zero Road and the Glenelg River Road provide access to a range of cultural sites, picnic areas and campgrounds and are accessible to 2WD vehicles for most of the year.

Four-wheel driving

Family-based 4WD touring is becoming increasingly popular as 4WD vehicles become more comfortable. Most 4WD tracks in the park are not considered difficult or challenging, and the Grampians 4WD experience is seen to be one of enjoying the park's unique natural and cultural features while having an 'off the beaten track' experience.

The majority of tracks through the park are generally rough and some are sandy, steep or boggy, or have difficult stream crossings. Many become impassable, especially after rain. As a result of their condition some roads are seasonally closed, generally from mid-June to the end of October. Temporary closures

may also be required for public safety or road protection.

Four-wheel drive touring routes through the park can offer a range of experiences and opportunities to use park campgrounds or link up with outside accommodation facilities.

Aim

- Provide a range of opportunities for driving with viewing and picnicking while minimising the impact of the activity on park values.

Management strategies

- *Permit the use of roads and tracks for driving in accordance with the plan, including table 6, or as otherwise approved by the Secretary (or delegate).*
- *Discuss any proposed alteration to the status of these tracks with the VAFWDC, Brambuk Incorporated and the Indigenous Nations, and other stakeholders.*
- *Consider, in consultation with interest groups, proposals for 4WD touring routes through the park that:*
 - *provide attractive experiences;*
 - *are practicable to maintain;*
 - *are environmentally sustainable;*
 - *offer a range of natural and cultural park experiences;*
 - *provide a safe experience for a broad range of users;*
 - *are consistent with the protection of flora and fauna or cultural values;*
 - *are consistent with park zoning and legislation;*
 - *are consistent with other recreational uses and authorised access by public authorities.*
- *Encourage adherence to the Victoria Association of Four Wheel Drive Club's Code of Ethics.*

6.4 Scenic viewing and picnicking

Scenic viewing and picnicking are among the most popular day visitor activities. Readily accessed opportunities to view the outstanding scenery are concentrated along the Mt Victory corridor and Wonderland Range. Boroka and

Reed lookouts are easily accessed and offer spectacular panoramic views. Lookouts associated with short walks include The Pinnacle and The Balconies.

There are several waterfalls that make an interesting focus for day visits in the central area; these include the popular Silverband Falls and MacKenzie Falls.

Historic Zumstein is a popular picnicking destination for visitors. The facilities and walking tracks at Zumstein and the MacKenzie Falls areas have been developed to provide a quality experience to a range of user groups and to accommodate large numbers of visitors.

There are a variety of other scenic viewing and picnicking opportunities in the park. A range of facilities, including viewing platforms, picnic areas, and toilet facilities are maintained at key locations.

Some car parks at key locations, such as Wonderland, Sundial, Boroka and Reed Lookout car parks, have poor traffic flow and experience congestion during busy periods.

Aim

- Maintain and improve opportunities for scenic viewing and picnicking facilities, including those for visitors with limited mobility, while minimising impacts of these activities on park values and water quality.

Management strategies

- *Provide and maintain picnicking and carparking facilities in accordance with table 7 and figure 4.*
- *Continue to provide a range of activities and facilities throughout the park for people with limited mobility.*
- *Continue investigating opportunities to undertake improvements to traffic flow and visitor safety.*

6.5 Camping

Camping is a very popular activity in the park. Currently camp fees are payable at selected sites.

The park accommodates a range of camping experiences, from campgrounds with basic facilities to dispersed bush camping. Fourteen campgrounds with designated campsites and basic facilities including toilets, fireplaces and picnic tables are located within the park. Six have permanent water facilities, and the remainder have intermittent water supplies from seasonal creeks.

Stapylton campground in the northern Grampians was established in 1994. The campground is well used and is attracting new visitors to the park. It has basic visitor facilities for people with limited mobility. The Plantation campground located in State Forest adjacent to the park offers camping opportunities to large groups.

Vehicle-based dispersed camping currently occurs throughout the park but is not permitted in specified areas (figure 4), including Urban Water Supply Catchments and within 20 m of any stream, 50 m of any sealed road, 1 km of designated campgrounds or within picnic areas.

Vehicle-less camping is popular on the Mount Difficult Range, the Victoria Range (Billawin Range) and the Major Mitchell Plateau in association with overnight hikes. A remote campground with limited facilities is located at First Wannon Creek on the Major Mitchell Plateau.

Regularly used dispersed camping sites are increasing in size. Soil compaction, clearing of vegetation and removal of wood for campfires has degraded surrounding vegetation and has a deleterious effect on the visitor experience. Some sites require monitoring and maintenance to limit degradation. No fees are currently charged for dispersed camping.

Aims

- Provide a range of environmentally sustainable opportunities for camping.
- Minimise the impact of camping on park values.
- Maintain a range of designated campgrounds in the park and encourage visitors to use these facilities.

TABLE 7 MANAGEMENT OF VISITOR SITES

SITE	PLANNED SERVICE LEVEL	CAMPING	LOOKOUT	ART SITE	WALKING TRACK	TOILETS	WHEEL-CHAIR ACCESS	TABLES	SHELTER	FIRE PLACES	WATER	PARK INFO/INTERP.
Brambuk: The National Park and Cultural Centre	High	N	N	N	Y	Y	Y	Y	N	N	Y	Y/Rc
Billimina Shelter	Medium	N	N	Y	Y	Y	Y	Y	N	Y	S	Y
Borinjina campground	Basic	Y	N	N	Y	Y/Re	N	Y	N	Y	S	Y/P
Boreang campground	Medium	Y	N	N	N	Y	Y	Y	N	Y	S	Y
Boroka Lookout	High	N	Y	N	Y	Y	Y	N	N	N	S	Y/P
Borough Huts campground	Medium	Y	N	N	Y	Y	Y	Y	N	Y	Y	Y
Brim Springs picnic area	Basic	N	N	N	N	N	N	Y	N	Y	N	N
Buandik campground	High	Y	N	N	N	Y/Re	N	Y	N	Y	Y	N
Burnt Hut Track Grave	-	N	N	N	N	N	N	N	N	N	N	Y
Burrong Falls carpark	Basic	N	N	N	Y	N	N	Y	N	N/R	N	N
Childs Grave	-	N	N	N	N	N	N	N	N	N	N	Y
Chimney Pots carpark	Basic	N	N	N	Y	N	N	N	N	N	N	N
Delleys Dell carpark	Basic	N	N	N	Y	N	N	N/R	N	N	N	N
First Wannan Remote campground	Basic	Y	N	N	Y	Y	N	N	N	N	S	N
Flat Rock Crossing	Basic	N	N	N	N	N	N	N/R	N	N	S	N
Golton Gorge picnic area	Medium	N	N	N	Y	Y/Re	N	Y	N	Y	S	N
Grampians Gardens	Basic	N	N	N	Y	N	N	Y	N	N	N	N
Heatherlie Quarry	Medium	N	N	N	Y	N	N	N	N	N	N	N
Hollow Mountain carpark and Guilgum Manja	High	N	N	Y	Y	Y	Y	N	N	N	S	Y/P
Ingleton Springs picnic area	Basic	N	N	N	N	N	N	Y	N	Y	Y	N
Jimmy Creek campground	Medium	Y	N	N	Y	Y	Y	Y	N	Y	Y/I	Y
Kalymna Falls picnic area	Medium	N/R	N	N	Y	Y/Re	N	Y	N	Y	Y	N
MacKenzie Falls	High	N	N	N	Y	Y/I	Y	N	Y	N	Y	Y
Maifeking campground	Medium	Y	N	N	Y	Y/Re	N	Y	N	Y	Y/I	Y/I
Manja Shelter	Medium	N	N	Y	Y	N	N	N	N	N	N	N

Table 7 (cont.)

SITE	PLANNED SERVICE LEVEL	CAMPING	LOOKOUT	ART SITE	WALKING TRACK	TOILETS	WHEEL-CHAIR ACCESS	TABLES	SHELTER	FIRE PLACES	WATER	PARK INFO/INTERP.
Mirrnatwa Gap	Basic	N	N	N	N	N	N	N	N	N	N	N
Moora Moora Homestead	-	N	N	N	N	N	N	N	N	N	N	Y
Mount William carpark	Medium	N	N	N	Y	Y/P	N	N	N	N	N	Y/P
Mt Zero picnic area	Medium	N	N	N	Y	Y/Re	N	Y	N	Y	N	Y/Re
Ngamadji Shelter	Medium	N	N	Y	Y	Y	Y	N	N	N	N	N
Plantation campground (adjacent to National Park)	Medium	Y	N	N	Y	Y/Re	N	Y	N	Y	Y	N
Red Gum Walk	Basic	N	N	N	Y	N	Y	Y	N	N	N	Y
Red Rock picnic area	Basic	N	N	N	N	N	N	Y	N	Y	N	N
Redman Road fluming	-	N	N	N	N	N	N	N	N	N	N	Y
Reed picnic area (Mt Victory Rd)	Basic	N	N	N	N	N	N	N	Y	N/R	N	Y/P
Reed Lookout	High	N	Y	N	Y	Y/P	Y	N	N	N	N	Y/P
Rosea - current campground site	Medium	N/R	N	N	Y	Y/Re	N	Y	N	N/R	N	Y
Rosea hiker campsite	Medium	Y/P	N	N	Y/P	Y/P	N	Y/P	N	Y/P	Y/P	Y/P
Silverband Falls carpark	Medium	N	N	N	Y	N	N	N	N	N	N	Y/P
Smiths Mill campground	Medium	Y	N	N	N	Y/Re	N	Y	N	Y	Y	Y
Smiths Mill picnic area	Medium	N	N	N	N	N	N	Y	N	Y	Y	N
Sundial carpark	High	N	N	N	Y	Y/Re	N	Y	N	N/R	N	Y
Stapylton campground	Medium	Y	N	N	Y	Y	Y	Y	Y	Y	Y	Y/I
Strachans campground	Medium	Y	N	N	N	Y/Re	N	Y	N	Y	Y	Y/I
Troopers Creek campground	Medium	Y	N	N	Y	Y/Re	N	Y	N	Y	Y	Y
Tunnel (outside National Park)	-	N	N	N	N	N	N	N	N	N	N	Y
Wannon Crossing campground	Medium	Y	N	N	N	Y/Re	N	Y	N	Y	S	Y/P
Wonderland carpark	High	N	N	N	Y	Y/Re	N	N/R	Y	N	N	Y
Zumstein	High	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y

KEY:

- Facility
- Y Planned
- N Not planned
- S Planned on seasonal basis
- Action required
- P Provide facility
- Re Replace facility
- I Improve facility
- R Remove facility

Management strategies

- *Provide campground facilities according to the plan, including table 7.*
- *Encourage low-impact camping practice.*
- *Permit dispersed camping in the park except in specified areas (figure 4), within 20 m of streams, 50 m of sealed roads, 1 km of designated campgrounds or within picnic areas.*
- *Continue to monitor regularly used vehicle-based dispersed camping sites for site degradation, and close if degradation occurs.*
- *Implement appropriate fees, where practicable, for all camping in the park, including dispersed camping.*
- *Prohibit the use of chainsaws for the collection of firewood for campfires.*
- *Permit campfires only in designated fireplaces in the Conservation and Recreation Zone.*
- *Prohibit campfires in the Conservation Zone.*
- *Encourage the use of fuel stoves in the Conservation Zone and Conservation and Recreation Zone, to conserve vegetation.*

6.6 Bush and long-distance walking

Grampians National Park contains an extensive range of walking tracks. There are over 80 recognised walking tracks in the park, many of them following formed or marked routes. Most tracks are well signposted at their starting points, and walking guides are available for the more popular walks.

The majority of walking in the park occurs on the easier and shorter tracks developed around picnic areas, lookouts, waterfalls and Aboriginal art sites. The Wonderland–Halls Gap area has the greatest concentration of tracks, with walks beginning from the Wonderland carpark, Halls Gap township, Sundial carpark, Silverband carpark and Mount Rosea campground.

A number of interpretive walks are popular with park visitors, including the Red Gum Walk (suitable for people with limited mobility), Brownings Walk (Mafeking Goldfields), Heatherlie Quarry, and Zumstein Historic Walk.

Long-distance hiking opportunities are available throughout the park by linking existing walking tracks, management vehicle only tracks, and roads and tracks open to public vehicles. Popular overnight hikes include the Major Mitchell Plateau and areas in the Victoria and Mount Difficult Ranges.

A registration system has been introduced for overnight hikes on the Major Mitchell Plateau and would be useful if introduced for the Victoria Range (Billawin Range) and Mount Difficult Range overnight hikes.

Walking guides have been developed for each of the Wonderland-Halls Gap, northern Grampians and southern Grampians areas of the park.

Aims

- *Maintain a range of walking opportunities, from short easy walks to multi-day challenging walks.*
- *Minimise impacts of walkers, walking tracks and track construction on park values and water quality.*

Management strategies

- *Manage walking tracks in accordance with tables 7 and 8.*
- *Maintain the availability of walking guides for each of the Wonderland-Halls Gap, northern Grampians and southern Grampians areas of the park.*
- *Promote the range of walking tracks suitable for visitors with limited mobility.*
- *Implement a registration system for overnight hikes on the Victoria Range (Billawin Range), Mount Difficult Range and Major Mitchell Plateau to limit group size and maximum numbers at any one time in those areas.*

TABLE 8 WALKING TRACKS

TRACK	DISTANCE (ONE WAY) (M)	GRADE	USAGE	TRACK	DISTANCE (ONE WAY) (M)	GRADE	USAGE
Amphitheatre	2995	3	33	MacKenzie Falls	700	2	5
Djibalara (Asses Ears)	3000	5	15	MacKenzie Falls Lookout	1100	2	4
Balconies	1081	1	52	MacKenzie River	3500	3	3
Beehive Falls	1420	2	3	Middleton Gap	5000	5	1
Bellfield	3570	3	1	Mount Abrupt (Mount Murdadjooog)	3360	3	2
Billimina	1653	3	3	Mount Gar (Mount Difficult)	3000	4	2
Bomjinna	5000	4	1	Mount Sturgeon (Mount Wurgarri)	3000	3	2
Boroka	3710	3	2	Mt Zero	1070	3	3
Boronia Peak	3300	3	3	Ngamadjidj	40	2	3
Briggs Bluff	2500	4	2	Netherby Towers	10000	7	1
Brownings Circuit	2000	3	2	Paddys Castle	300	3	1
Bullaces Glen	435	3	3	Pansy Falls	1500	3	2
Bundaleer	352	5	2	Piccaninny	1184	3	2
Burma	3600	2	7	Piccaninny West	969	3	2
Burrong Falls	325	2	3	Pinnacle	2180	3	4
Castle Rock	3000	5	5	Pinnacle South	2102	3	4
Chatauqua Peak	3009	3	3	Pinnacle North	3636	3	4
Chimney Pots	2800	4	1	Plantation	2000	4	1
Clematis Falls	1152	2	3	Plateau	10540	4	1
Dairy Creek	1856	3	33	Red Gum Walk	2300	2	1
Dairy Creek Link	1637	3	1	Rosea	9004	3	2
Deep Creek	12000	4	1	Rosea car park	1852	3	2
Delley East	1625	3	3	Sheephills	6000	4	1
Delley West	635	3	2	Silverband Falls	700	2	4
Delleys Bridge	3000	3	2	Splitters Falls	500	3	3
Devils Gap	3188	3	1	Staircase	1300	4	1
Difficult East	2000	4	1	Stapylton	5550	3	3
Education Area Walk	800	3	2	Stockyard East	3000	1	7
Epacris Falls	200	3	2	Stockyard West	5000	1	4
Five Cascades	2000	3	3	Sturgeon Link	295	3	1
Flat Rock	2344	3	3	Summerday	230	3	3
Fortress	6000	4	1	Sundial Peak	1965	3	3
Fyans Valley	1000	2	2	Teddy Bear Gap	2500	3	1
Golton Loop	2238	3	2	Telstra Tower	1400	4	1
Grampians Garden	2519	3	2	Thackeray	1000	4	1

Table 8 (cont.)

TRACK	DISTANCE (ONE WAY) (M)	GRADE	USAGE	TRACK	DISTANCE (ONE WAY) (M)	GRADE	USAGE
Gulgurn Manja	700	3	3	Tilwinda Falls	1065	3	2
Heatherlie	1943	3	3	Tilwinda Link	300	3	2
Hollow Mountain	1248	3	4	Tower Hill	507	4	2
Jimmys Creek	5000	4	1	Tunnel	3100	3	2
Kalymna	3577	4	1	Turret Falls	48	3	2
Lakeview	543	3	3	Venus Baths	1971	2	4
Lakeview Link	516	3	3	Viewpoint	120	3	1
Longpoint	1200	4	1	Moorngalg Rocks (Wallaby Rocks)	100	4	1
Mackeys Peak	191	3	2	Wartook Lookout	500	4	1
Manja	1297	3	3				

KEY:

Australian Standards Classification – tracks:

Grade 1 Large number of visitors with high level of interpretation facilities.

Grade 2 Opportunity for a large number of visitors to walk easily in a natural environment with a moderate level of interpretation and facilities.

Grade 3 Opportunity to walk in relatively undisturbed natural environments, requiring moderate levels of fitness and care. Low levels of interpretation and facilities.

Grade 4 Opportunity for visitors to explore and discover natural environments along distinct tracks with minimal if any facilities.

Grade 5 Opportunity for those with advanced outdoor knowledge and skills to find their own way along often-indistinct trails to more remote locations.

Grade 6 Opportunity for highly experienced walkers to explore remote and potentially hazardous natural areas without reliance on managed tracks.

Grade 7 Management Track

Walking Track Usage

1 < 5,000

2 5,000 – 10,000

3 10,000 – 50,000

4 50,000 – 200,000

5 > 200,000

- *Prepare a strategy for the future management of walking tracks. Include consideration of:*
 - *locations and grades;*
 - *levels of use and visitor safety;*
 - *opportunities for access for people with limited mobility;*
 - *impacts on environmental values;*
 - *impacts on cultural values;*
 - *conformity with Australian standards;*
 - *condition and maintenance requirements.*

6.7 Rock climbing and abseiling

There has been a dramatic increase in rock climbing and abseiling activities in the park in recent years. There are at least 67 climbing sites with over 2000 recorded climbs in the park. Individuals, climbing clubs, commercial tour groups, youth groups, schools, adventure training groups, the Victoria Police, the Australian Defence Forces and the State Emergency Services all use the park for rock climbing and associated activities.

Most climbing occurs in the Hollow Mountain area (Summerday Valley), the Wonderland Range (Grand Canyon and Sundial), the Watchtower, Mount Rosea and The Bundaleer

(figure 3). There are only a few sites in the park suitable for instructional use, so these sites are heavily used, particularly Summerday Valley in the Hollow Mountain area. High usage areas such as the Summerday Valley area are inadequate for the number of different user groups accessing the area. Parks Victoria will work with the Victorian Rock Climbing Association and rock climbing community to undertake stabilisation work in these areas.

Over 37 licensed tour operators are permitted to conduct rock climbing tours in the park, but less than one third of them use the park regularly (section 6.13).

Few climbing sites have facilities. Some, such as those in the Wonderland area, adjoin key walking tracks. A walking track has been provided to the main climbs in Summerday Valley, and soil stabilisation has been carried out, with the assistance of volunteers, at Summerday Valley and the Watchtower. The Rosea campground is regularly used by climbers.

There is ongoing consultation with the climbing community to identify sites used by climbers, the various groups using sites, the impacts on sites, and a range of actions aimed at providing sustainable climbing opportunities that do not conflict with other park users or values.

Aim

- Allow rock climbing and abseiling in appropriate areas, consistent with the protection of park values.

Management strategies

- *Permit rock climbing and abseiling in the park, excluding Reference Areas or other specified areas, in accordance with Parks Victoria's operational policies.*
- *In conjunction with the rock climbing community, consider, and as appropriate:*
 - *further stabilise access to the base of climbs at Summerday Valley;*
 - *close climbs that conflict with Aboriginal cultural sites, significant flora and fauna or other park values, and signpost accordingly;*
 - *encourage the use of minimal impact and clean climbing techniques;*

- *regulate licensed tours;*
- *restore degraded sites;*
- *increase environmental awareness in the climbing community.*

6.8 Fishing

There are very few opportunities in the park for fishing, because of the limited number of suitable streams. Fishing, however, is very popular in the reservoirs, which are not included in the park although they are within its boundaries. Brown Trout and Rainbow Trout have been released into Lake Bellfield in the past and are still being released into Lake Wartook. Any further release into the reservoirs of fish species not currently present within the park may have adverse impacts on native species within the reservoir tributaries in the park.

Aim

- Continue to provide fishing opportunities while minimising conflict with park conservation values.

Management strategies

- *Permit recreational fishing in the park.*
- *Liaise with Fisheries Victoria to prevent the spread of non-native fish into the park.*
- *Prohibit the collection of fauna for bait in all areas of the park.*

6.9 Cycling and mountain bike riding

There are relatively low levels of cycling in the park at present. The level of cycling, including mountain bike riding, is expected to increase, however, as cycling is becoming an increasingly popular recreation activity in Victoria.

The existing road and track network open to public vehicles in the park offers opportunities for a wide range of cycling experiences, including challenging mountain bike riding opportunities.

The 'Mountain Bike Code' sets out guidelines for safe cycling and methods to minimise the impacts of cycling on park environments. Licensed tour operators are offering mountain bike tours in the park, and bikes can be hired in Halls Gap.

Aims

- Provide access for cycling and mountain bike riding.
- Minimise the environmental impact of these activities and conflicts with other recreation activities.

Management strategies

- *Permit cycling and mountain bike riding on all roads and tracks open to public vehicles. Seasonal closure of public roads will apply.*
- *Prohibit cycling and mountain bike riding on walking tracks and management vehicle only roads and tracks.*
- *Encourage adherence to the 'Mountain Bike Code'.*
- *Liaise with regional tourism groups and local government to investigate opportunities for cycling and mountain bike riding in the park.*

6.10 Horse riding

Horse riding occurs in the park as a consequence of the ample, accessible opportunities in nearby areas. Riding is permitted on a number of park tracks and roads that link up with riding opportunities outside the park (figure 3).

Demand for camping with horses in the park is minimal because groups prefer to camp in the adjoining State Forest. In the past, camping with horses in the park has been allowed occasionally, subject to approval from the Ranger in Charge.

Currently, organised horse events and groups with more than 10 horses require approval from the Ranger in Charge. Licensed tour operators (including other safari style operations) may be issued with a permit for guided horse riding tours after consideration of possible impacts on other park users and park values.

Aims

- Provide opportunities for horse riding.
- Protect park values and avoid conflict with the activities of other park visitors.

Management strategies

- *Permit horse riding on vehicle routes shown in figure 3.*
- *Prohibit overnight camping with horses in the park.*
- *Continue to require approval of the Ranger in Charge for organised events and groups with more than 10 horses.*
- *Provide a map showing park roads and tracks available for horse riding.*
- *Encourage riders to adopt minimal impact practices, and encourage adherence to the 'Horse Riding Code'.*
- *Prohibit off-track riding.*

6.11 Hang gliding and paragliding

Grampians National Park has limited hang gliding opportunities and the activity has not been allowed in the park since 1985. There have been reports of flights being launched from Boroka Lookout. This site in its current state is unsafe for take-off by hang gliders. Site modification and the construction of launch ramps in the park are considered incompatible with other park values.

The park is not considered suitable for the relatively new sport of paragliding because of the lack of launch and landing sites, and the irregular winds and updraughts.

Aim

- Protect park values and avoid risk to hang gliders and paragliders.

Management strategies

- *Prohibit hang gliding and paragliding in the park.*
- *Promote alternative areas within the region (Mount Cole and Mount Lonarch State Forests) for hang gliding and paragliding.*

6.12 Orienteering and rogaining

Orienteering and rogaining are infrequent recreation activities permitted in areas other than Reference Areas and Special Protection Areas (figure 2) where environmental impacts would be unacceptable, the Wonderland area (which has a concentration of other visitor

activities) and certain other heavily visited areas. Decisions on the acceptability of orienteering and rogaining are based partly on the intensity, frequency and timing of proposed events. There is no formal orienteering course within the park.

Aims

- Provide orienteering and rogaining opportunities.
- Minimise impacts of orienteering and rogaining on park values.

Management strategy

- *Allow orienteering and rogaining in the Conservation and Recreation Zone, except for the Wonderland Range area and other heavily visited or environmentally sensitive areas, in accordance with Parks Victoria's operational policies.*

6.13 Commercial tourism services

Licensed tour operators provide a broad range of recreational and educational services in the park. These services expand the opportunities for environmental, cultural and activity-based experiences available to visitors (chapter 5, sections 6.7, 6.9, 6.10).

Tour operators are well placed to educate their clients about conservation and park management issues and to encourage the adoption of minimum-impact practices in the park. Sustainable commercial tourism depends on establishing an agreed set of appropriate conditions, restrictions and concessions with tour operators.

More than 78 tour operators are licensed to use the Grampians National Park. A significant number of new licences have been issued since 1994. The majority of operators are not locally based, and about one third are based in metropolitan Melbourne.

Rock climbing, abseiling, bushwalking, coach tours and 4WD tours are the main activities offered by tour operators, with an increasing number catering for outdoor school groups. Protocols for the commercial interpretation of all Indigenous culture will be developed in the Gariwerd/Grampians Aboriginal Cultural Heritage Strategy.

Aims

- Support the operation of licensed tour operators in the Grampians National Park when compatible with park values, park management objectives and Parks Victoria's operational policies.
- Ensure operators and their clients adopt a responsible attitude to the park environment.

Management strategies

- *Require all tour operators to be licensed in accordance with Parks Victoria guidelines, and encourage relevant accredited training.*
- *Encourage licensed tour operators to assist in the protection of park values and management of its facilities, and ensure that they comply with park regulations and Parks Victoria guidelines.*
- *Include conditions in tour operator licences to ensure compliance with protocols for managing Indigenous cultural values.*
- *Promote opportunities for Indigenous peoples to develop and provide services appropriate for the park, in accordance with Parks Victoria's operational policies.*

6.14 Public safety

The park's rugged topography, changeable weather conditions on the higher peaks and opportunities for remote recreation present inherent dangers and risks to visitors. In response to these dangers and the difficulties associated with rescue activities, a Grampians Rescue Plan has been developed by a sub-committee of the Regional Emergency Response Plan Committee (RERPC). The rescue plan identifies the available resources and procedures to be adopted in the event of an incident requiring search or rescue in areas not easily accessible by road. The Northern Grampians Shire Council, Ararat Rural City Council and Southern Grampians Shire Council have Municipal Emergency Management Plans that cover a range of potential emergency situations within the park.

Aims

- Promote visitor awareness of safety issues and risks within the park.

- Ensure park staff are appropriately trained and available to assist in emergencies and to cooperate with emergency services.

Management strategies

- *Use park literature and information signs to increase visitors' awareness of safety issues and potential hazards in the park.*
- *Provide information on hazards and safety warnings.*
- *Continually assess key visitor sites and nodes, and identify and eliminate hazards where practicable.*

- *Encourage visitors to seek information on any activities they intend to undertake in the park.*
- *Assist in search and rescue operations in accordance with the Grampians Rescue Plan.*
- *Contribute to the respective local government Municipal Emergency Management Plans and the Grampians Rescue Plan, as developed by the RERPC, to minimise risks to park visitors in the event of a fire, and ensure staff and licensed operators are aware of the plans.*

7 STRATEGIES FOR COMMUNITY AWARENESS AND INVOLVEMENT

7.1 Friends and volunteers

Friends Groups, volunteers and students make a valuable contribution to park management and extend the scale and involvement of the community in particular projects.

The Friends of Grampians–Gariwerd and the Friends of Zumstein take a pro-active role in park management by carrying out original and innovative projects and promoting the protection and conservation of the park.

Tertiary students commonly undertake research activities such as pest plant and fire fuel mapping. These students give valuable assistance to the park whilst gaining important on-site experience in natural resource management.

Aim

- Encourage and support the participation of groups from the community in suitable projects in the park.

Management strategies

- *Maintain liaison and communication with Friends Groups, volunteers and work experience students.*
- *Provide opportunities for groups from the community to undertake research and/or participate in protection, conservation and maintenance programs to enhance the management of the park.*
- *Continue to support the Friends of Grampians–Gariwerd and Friends of Zumstein groups.*
- *Support participation of Friends groups, volunteers and work experience students in appropriate projects.*

7.2 Community awareness and park neighbours

The park has a long and irregular boundary of approximately 580 km and is bordered predominantly by freehold land (section 2.1). Agricultural enterprises include sheep, goat

and cattle grazing, olive plantations and ‘cut flower’ harvesting (e.g. thryptomene).

Many neighbouring families have long associations with the park and their knowledge is valued. Cooperative management and interaction with park neighbours will assist with the management of park boundary issues (section 8.2).

Several issues directly affect both the park and its neighbours. These include pest plant and animal control (section 4.7), wildlife management (section 4.4), landscape management (section 4.5), fire management (section 4.6), and the maintenance of boundaries (section 8.2).

Aims

- Increase awareness and understanding of significant park management activities.
- Encourage sound conservation and land management practices on private land adjoining the park.

Management strategies

- *Liaise with park neighbours and the community on issues relating to the management of the park.*
- *Encourage the application of the Good Neighbour Policy to manage issues on or near the boundary of the park, implement programs and encourage the use of neighbouring land in schemes such as Land for Wildlife and Landcare.*
- *Increase public awareness and understanding of significant park management activities, including fire management and fuel reduction burning, pest plant and animal control, ecological management and the conservation of significant species, and encourage sound conservation and land management practices on private land adjoining the park.*
- *Cooperate with adjoining landholders in coordinating fire and pest control programs.*

7.3 Agency and stakeholder partnerships

The efficient and effective management of Grampians National Park is achieved through establishing key partnerships with various agencies and stakeholders as well as with the Indigenous community.

In matters relating to park management, Parks Victoria liaises with State (e.g. AAV) and Federal (e.g. Aboriginal and Torres Strait Islander Commission) Government departments, emergency services agencies (Victoria Police, Ambulance Service, Country Fire Authority, State Emergency Services), local municipalities and planning authorities, Catchment Management Authorities, public utility and water authorities, tourism bodies and various interest groups and associations.

Aim

- Cooperate with and involve key agencies and stakeholders, to better manage and conserve the park.

Management strategy

- *Liaise with State and Federal Government departments, emergency services agencies, local municipalities and planning authorities, Catchment Management Authorities, public utility and water authorities, tourism bodies and various interests groups and associations regarding relevant park management activities.*

7.4 Advisory group

An Advisory Group provides advice to Parks Victoria on the strategic management of the park. The Advisory Group provides valuable community input into the management of the park.

Aim

- Continue to facilitate the strategic advisory role of the Advisory Group.

Management strategy

- *Provide executive and practical support for regular Advisory Group meetings, including briefings and reports on relevant matters, and seek advice on strategic park management issues.*

7.5 Research partnerships

An understanding of species and ecosystems in the park has been collated through research. Further research will be required to provide more detailed environmental information and to develop and scientifically evaluate new environmental management techniques. Parks Victoria has established key partnerships with a number of research institutions in Victoria through the Research Partners Program.

Aims

- Further develop research partnerships through the Parks Victoria Research Partners Program, to better understand the park's values and risks.
- Through effective research, develop strategies to best protect and conserve the park.

Management strategies

- *Provide support to Research Partners projects relating to the park as identified in approved statewide programs.*
- *Ensure research findings are integrated into park management practices.*

8 STRATEGIES FOR OTHER ISSUES

8.1 Authorised uses

A number of formal lease and licence agreements authorising certain uses apply to the park. These are reviewed periodically to ensure that the protection and conservation of park values is not compromised.

Planning permit applications for areas adjacent to the park are referred by local government to the DSE, which comments as a referral authority in consultation with Parks Victoria.

Apiculture

The park has been an important site for apiculture for over 100 years. At present the park may have up to 100 sites occupied at any one time. Available sites need review and may need to be relocated to more appropriate areas in the park.

Military training

Adventure training, bushcraft and field navigation exercises are regularly undertaken by Defence Force units, with minimal impacts on the park. Each exercise requires a separate permit.

Major events and functions

The park is receiving an increasing number of requests to hold major events (e.g. car rallies, outdoor theatre productions and festivals) and functions (e.g. weddings).

Commercial filming and photography

The park is one of Victoria's highest-profile parks. Images and shows depicting the natural, cultural and recreational values are used for tourism promotion, education and entertainment. Parks Victoria receives several applications for commercial filming and photography permits each year.

Occupancies

The following occupancies are located within the park:

- Zumstein. The Returned Services League (RSL) continues to occupy an area, including two houses, abutting the kangaroo viewing area at Zumstein. The houses are maintained and made available for rental by RSL groups and members of the public.

- Cooinda-Burrong Scout Camp. The Cooinda-Burrong Scout Camp is located in the park near the park boundary at Wartook. The two hectare camp area contains a number of dormitory and kitchen buildings and is used for scout camps and activities.
- MacKenzie Falls kiosk. The lease of the MacKenzie Falls kiosk was finalised in 1996. The kiosk is located at the picnic area at MacKenzie Falls, a major tourist destination in the park.

Public utilities

There is a range of public utilities within the park, including:

- installations associated with water production, which range from channels and pipelines to diversions and gauging stations, managed by Regional Water Authorities (appendix 9);
- telephone cables and towers;
- electricity lines;
- communication towers;
- trigonometric stations.

Public utilities infrastructure includes the telecommunication towers on Mount William (Mount Duwil) and on Mount Zero Road, and power lines to Lake Wartook, MacKenzie Falls, Mount William and Mafeking Road, which are prominent structures in the landscape.

Section 27 of the National Parks Act and Parks Victoria's operational policies require that public authority works in parks are limited to essentials and have a minimum effect on the park, park users and other park uses.

On a local scale, care must be taken to ensure that developments at key visitor sites have no adverse impact on the visual integrity of the area.

Aim

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

Management strategies

- *Continue to allow apiculture in accordance with Parks Victoria's operational policies.*
- *Locate bee sites as appropriate in consultation with the Victorian Apiarists Association (VAA) and under the following guidelines:*
 - *restrict new sites to areas of the Conservation and Recreation Zone other than Special Protection Areas identified in appendix 1 and figure 2.*
 - *locate sites only where there is suitable access.*
- *Permit Defence Force training in accordance with Parks Victoria's operational policies.*
- *Permit events and functions that:*
 - *have acceptable environmental impacts;*
 - *do not unduly disturb or disadvantage other visitors;*
 - *do not unduly increase liability risk exposure;*
 - *can be appropriately managed with available resources.*
- *Favour events and functions that provide community benefits or complement the park values.*
- *Manage commercial filming and photography in accordance with Parks Victoria's operational policies.*
- *Ensure that all occupancies are appropriately licensed or permitted and are used and operated in a manner that does not conflict with park values.*
- *Ensure that conditions included in authorisations are followed and reviewed as appropriate.*
- *Ensure that public authority works and activities in the park are appropriately authorised and managed in accordance with legislation and Parks Victoria's operational policies.*
- *Maintain a register of all authorised public utility occupations in the park, using the Land Information Management System (LIMS).*

8.2 Boundary and adjacent uses

The park is almost entirely surrounded by private farming land, the majority of which is at least partially cleared. This farming land has the potential to have an impact on the park's ecological processes and landscape.

The Grampians State Forest adjoining the park to the west offers a number of recreation opportunities not permitted in the park.

The popularity of the Grampians has resulted in the development of a number of tourist facilities adjacent to the park. The developments can complement the park experience and augment park management if they are planned properly and in consultation with Parks Victoria.

There are a small number of boundary anomalies, including sections of unused road reserves surrounded by park and a few enclaves of private land. A number of private water diversions are located in the park, close to its boundary. Some of these diversions are currently unlicensed.

Aims

- Cooperate with adjoining landholders and local municipalities to manage boundary and adjacent land use issues.
- Protect park values and encourage the development of tourist and other facilities outside the park that complement park aims.

Management strategies

- *Liaise with the Forests Service in relation to activities on adjacent State Forest that may impact on the park.*
- *Liaise with local planning authorities in conjunction with DSE and private landholders to ensure that the development and use of planning controls do not compromise the achievement of management aims for the park.*
- *Identify irregular occupation or use of the park and take action in accordance with legislation and Parks Victoria's operational policies.*
- *Identify and advise of any inconsistencies in park boundaries with local Shires' Planning Scheme boundaries.*

- *Encourage landowners to maintain fences along boundaries shared with the park, and take other appropriate actions to stop stock straying into the park.*
- *Consider requests for permission to use park tracks to gain access to freehold land in consultation with DSE. Ensure impacts are minimised through development of appropriate conditions.*
- *Do not allow the establishment of unauthorised access to private land through the park.*
- *Seek closure and incorporation into the park of unused road reserves encompassed by the park.*
- *Encourage landowners to use covenants and agreements to enhance conservation values on adjacent land.*

8.3 Aircraft

Flights over the park by light aircraft such as helicopters, balloons, gliders and ultralights are becoming popular. In 1993 the declaration of Remote and Natural Areas necessitated consideration of the control of aircraft overflying the park. In August 1994, under a voluntary code of practice, Fly Neighbourly Advice (FNA) guidelines were introduced. Developed by local civil and military operators and park managers, these guidelines establish minimum altitudes for flight over preferred scenic routes. Present levels of activity do not detract from park values, but increased activity may do so.

Aim

- Support application of the Fly Neighbourly Advice guidelines to ensure aviation activities have minimal impact on park values.

Management strategies

- *Periodically review Fly Neighbourly Advice guidelines with all relevant parties.*
- *Periodically monitor and assess impacts of aircraft flights, particularly light aircraft, on park values to determine appropriate levels of use over the park, and appropriate flight paths.*

9 IMPLEMENTATION

This Management Plan provides the strategic framework that governs the development and delivery of all management programs and actions affecting the Grampians National Park.

The plan is implemented through annual management programs for the park, prepared as a part of statewide, prioritised programs in accordance with Parks Victoria's Corporate Plan.

The performance of the plan's implementation will be measured by monitoring and recording the number of strategies implemented to June each year.

Amendments may be made to this Management Plan from time to time consistent with an authorised approval process. A partial or complete review of the plan will be considered five to ten years after its publication.

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APPENDIX 1 SPECIAL PROTECTION AREAS

CLASS/NUMBER*	LOCATION	SIGNIFICANT FLORA AND FAUNA	ABORIGINAL SITE	EUROPEAN SITE
Focus areas				
1	Northern Grampians (a)	X		
2	Northern Grampians (b)	X		
3	Dadswells Bridge	X		
4	Herb-rich Woodland	X	X	
5	Red Rock	X	X	
6	Mt William/Victoria Range	X		
7	Zumstein	X		X
8	Cassidy Gap	X		
9	South & West Inland Slopes Woodland	X	X	
10	Wonderland	X		
11	Heath Mouse & Smoky Mouse Habitat	X	X	
12	Sedge-rich Wetland	X		
Other significant areas				
13	Ngamadjidj		X	
14	Gulgurn Manja		X	
15	Hollow Mountain (Mount Wudjub- guyan)	X	X	
16	Victoria Range Road	X	X	
17	The Bundaleer		X	
18	Wab Manja		X	
19	Boggy Creek		X	
20	Brim Springs		X	X
21	Deep Creek	X	X	
22	Flume			X
23	Heatherlie			X
24	Djibalara (Asses Ears)	X		
25	Jacks Rest	X		
26	The Fortress Walking Track	X		
27	Troopers Creek			X
28	Bellfield Fireline			X

* Refer to figure 2.

APPENDIX 2 SPECIAL MANAGEMENT AREA – PUBLIC UTILITIES

FACILITY	LOCATION*	AUTHORITY
Powerline	Mt Zero	Powercor
	Mt Stapylton	Powercor
	Zumstein	Powercor
	Mt William (Mount Duwil)	Powercor
Communication tower	Mt Zero	Telstra
	Mt William (Mount Duwil)	Directorate of School Education and Air Services Australia
Water storage	Dunkeld	Glenelg Region Water Authority
	Silverband Road	Grampians Region Water authority
Weirs	Victoria Range (Billawin Range) (8 weirs)	Glenelg Region Water Authority
	Wannon	Wimmera Mallee Water
	Fyans	Grampians Region Water Authority
	Kalymna	Grampians Region Water Authority
Gauging station	Jimmy Creek (two stations)	Southern Rural Water Authority
	Smith Mill	Wimmera Mallee Water
Water channel	Moora	Wimmera Mallee Water
Water pipe	Fyans	Grampians Region Water Authority
	Wannon	Wimmera Mallee Water
Pump	Mafeking Road	Grampians Region Water Authority
Seismograph	Mt Zero	Wimmera Mallee Water
Airfield	Victoria Valley	Airstrip

* Refer to figure 4.

APPENDIX 3 THREATENED, ENDEMIC AND HIGH PRIORITY FLORA SPECIES

SCIENTIFIC NAME	COMMON NAME	FFG LISTED	TIV STATUS	NT STATUS	HP	ENDEMIC
<i>Acacia rupicola</i>	Rock Wattle		r			
<i>Agrostis avenacea</i> var. <i>perennis</i>	Wetland Blown-grass		k			
<i>Allocasuarina grampiana</i>	Grampians She-oak		r			Yes
<i>Allocasuarina luehmannii</i>	Buloke	L	v			
<i>Allocasuarina mackliniana</i> ssp. <i>hirtilinea</i>	Western She-oak		r			
<i>Arthropodium</i> sp. 3 (aff. <i>strictum</i>)	Small Chocolate-lily		k			
<i>Asperula minima</i>	Mossy Woodruff		r			
<i>Asplenium aethiopicum</i>	Shredded Spleenwort		v		Yes	
<i>Asterolasia phebalioides</i>	Downy Star-Bush	L	v	V	Yes	
<i>Austrodanthonia</i> sp. (syn. <i>Danthonia procera</i>)	Tall Wallaby-grass		k			
<i>Austrostipa setacea</i>	Corkscrew Spear-grass		r			
<i>Baeckea ramosissima</i> subsp. <i>prostrata</i>	Rosy Baeckea		r			
<i>Banksia saxicola</i>	Rock Banksia		r			
<i>Bauera sessiliflora</i>	Grampians Bauera		r			Yes
<i>Bertya findlayi</i>	Mountain Bertya		v	R	Yes	
<i>Billardiera bignoniacea</i>	Orange Bell-climber		r			
<i>Boronia latipinna</i>	Grampians Boronia		r	R		Yes
<i>Borya mirabilis</i>	Grampians Pincushion-lily	L	e	E	Yes	Yes
<i>Bossiaea riparia</i>	River Bossiaea		r			
<i>Bossiaea rosmarinifolia</i>	Grampians Bossiaea		r			Yes
<i>Brachyloma depressum</i>	Spreading Brachyloma		r			
<i>Caladenia carnea</i> var. <i>ornata</i>	Ornate Pink Fingers		v	V		
<i>Caladenia formosa</i>	Elegant Spider-orchid	L	v	V		
<i>Caladenia reticulata</i> s.s.	Veined Spider-orchid		v			
<i>Caladenia venusta</i>	Large White Spider-orchid		r	R		
<i>Comesperma polygaloides</i>	Small Milkwort	A	v		Yes	
<i>Correa aemula</i>	Hairy Correa		r			
<i>Correa lawrenceana</i> var. <i>grampiana</i>	Mountain Correa		r			Yes
<i>Correa reflexa</i> var. <i>angustifolia</i>	Grampians Correa		r			Yes
<i>Cyphanthera anthocercidea</i>	Large-leaf Ray-flower		r	R		
<i>Deyeuxia imbricata</i>	Bent-grass		v		Yes	
<i>Dianella callicarpa</i>	Swamp Flax-lily		r		Yes	
<i>Dillwynia oreodoxa</i>	Grampians Parrot-pea		r			Yes
<i>Diuris punctata</i> var. <i>punctata</i>	Purple Diuris	L	v			
<i>Diuris</i> sp. aff. <i>lanceolata</i> (Derrinalum)	Early Golden Moths		e	E		
<i>Dodonaea procumbens</i>	Trailing Hop-bush		v	V		
<i>Dodonaea truncatiales</i>	Angular Hop-bush		v			
<i>Epilobium pallidiflorum</i>	Showy Willow-herb		v			
<i>Eriocaulon australasicum</i>	Southern Pipewort	L	e	E		
<i>Eucalyptus alaticaulis</i>	Grampians Grey Gum		r			Yes
<i>Eucalyptus serraensis</i>	Grampians Stringybark		r			Yes
<i>Eucalyptus verrucata</i>	Mt Abrupt Stringybark		r			

Appendices

Appendix 3 (cont.)

SCIENTIFIC NAME	COMMON NAME	FFG LISTED	TIV STATUS	NT STATUS	HP	ENDEMIC
<i>Eucalyptus victoriana</i>	Victoria Range Stringybark		r			Yes
<i>Eucalyptus yarraensis</i>	Yarra Gum		k	R		
<i>Glycine latrobeana</i>	Clover Glycine	L	v	V		
<i>Gonocarpus mezianus</i>	Hairy Raspwort		r			Yes
<i>Gratiola pumilo</i>	Dwarf Brooklime		k	K		
<i>Grevillea confertifolia</i>	Grampians Grevillea		r	R		Yes
<i>Grevillea dimorpha</i>	Flame Grevillea		r			
<i>Grevillea microstegia</i>	Cassell Grevillea		r	R	Yes	Yes
<i>Grevillea williamsonii</i>	Mount William Grevillea		e	E	Yes	Yes
<i>Hibbertia cistiflora</i> ssp. <i>rostrata</i>	Rock Rose Guinea-flower		r			
<i>Hibbertia humifusa</i>	Rising Star Guinea-flower		r	R		
<i>Hovea corrickiae</i>	Glossy Hovea		r	R		
<i>Huperzia varia</i>	Long Clubmoss		v			
<i>Isoetes drummondii</i> ssp. <i>anomala</i>	Plain Quillwort		k			
<i>Leptospermum turbinatum</i>	Shiny Tea-tree		r			
<i>Leucopogon neurophyllus</i>	Mount William Beard-heath		r	R		
<i>Leucopogon thymifolius</i>	Thyme Beard-heath		r			
<i>Monotoca billawinica</i>	Grampians Broom-heath		r	R		Yes
<i>Olearia suffruticosa</i>	Clustered Daisy-bush		v		Yes	
<i>Phebalium stenophyllum</i>	Narrow-leaf Phebalium		r			
<i>Pimelea pagophila</i>	Grampians Rice-flower		v	V	Yes	Yes
<i>Platylobium alternifolium</i>	Victoria flat-pea		r	R		
<i>Pomaderris apetala</i> subsp. <i>apetala</i>	Grampians Pomaderris		r			Yes
<i>Prostanthera spinosa</i>	Spiny Mint-bush		r			
<i>Psilotum nudum</i>	Skeleton Fork-fern		r			
<i>Pterostylis planulata</i> s.s.	Grampians Rustyhood		r			Yes
<i>Pterostylis smaragdina</i>	Emerald-lip Greenhood		r	R		
<i>Pterostylis X ingens</i>	Sharp Greenhood		r			
<i>Ptilotus erubescens</i>	Hairy-tails	L				
<i>Pultenaea benthamii</i>	Bentham's Bush-pea		r			
<i>Pultenaea costata</i>	Ribbed Bush-pea		r	R		Yes
<i>Pultenaea daltonii</i>	Hoary Bush-pea		r			
<i>Pultenaea graveolens</i>	Scented Bush-pea	L	v			
<i>Pultenaea juniperina</i> s.s.	Pungent Bush-pea		r			
<i>Pultenaea luehmannii</i>	Thready Bush-pea		r	R		
<i>Pultenaea subalpina</i>	Rosy Bush-pea		r	R		Yes
<i>Pultenaea victoriensis</i>	Victoria Range Bush-pea		r	R		Yes
<i>Pultenaea williamsoniana</i>	Williamson's Bush-pea		v	V	Yes	Yes
<i>Quinetia urvillei</i>	Quinetia		r			
<i>Schoenus laevigatus</i>	Short-leaf Bog-sedge		k			
<i>Schoenus nanus</i>	Tiny Bog-sedge		k			
<i>Sphaerolobium acanthos</i>	Prickly Globe-pea		r	R		Yes
<i>Spyridium cinereum</i>	Tiny Spyridium		v	R		

Appendix 3 (cont.)

SCIENTIFIC NAME	COMMON NAME	FFG LISTED	TIV STATUS	NT STATUS	HP	ENDEMIC
<i>Stylidium soboliferum</i>	Grampians Trigger-plant		r			
<i>Swainsona brachycarpa</i>	Slender Swainson-pea	L	v		Yes	
<i>Thelymitra azurea</i>	Azure Sun-orchid		v			
<i>Thelymitra benthamiana</i>	Blotched Sun-orchid		v			
<i>Thelymitra matthewsii</i>	Spiral Sun-orchid	L	v	V	Yes	
<i>Thelymitra X irregularis</i>	Crested Sun-orchid		r			
<i>Thryptomene calycina</i>	Grampians Thryptomene		r			
<i>Trymalium daltonii</i>	Narrow-leaf Trymalium		r			Yes
<i>Trymalium X ramosissimum</i>	Branched Trymalium		r	R		
<i>Viola sieberiana</i> s.s.	Tiny Violet		k			
<i>Wurmbea uniflora</i>	One-flower Early Nancy		r			
<i>Xanthorrhoea caespitosa</i>	Yucca		r			
<i>Zieria</i> sp. (Grampians)	Grampians Zieria		r			Yes

Source: DSE (2003a).

KEY:

TIV (Threatened in Victoria)

- e Endangered in Victoria, i.e. rare and at risk of disappearing from the wild state if present land use and other causal factors continue to operate.
- v Vulnerable in Victoria, i.e. rare, not presently endangered but likely to become so soon due to continued depletion, or which largely occur on sites likely to experience changes in land use which would threaten the survival of the species in the wild.
- r Plants which are rare in Victoria but which are not considered otherwise threatened. This category does not necessarily imply that plants are substantially threatened, but merely that there are relatively few known stands.
- k Species poorly known, but suspected of being in one of the above categories.

NT (Nationally threatened)

- E Endangered species in serious risk of disappearing from the wild state within one or two years if present land use and other causal factors continue to operate.
- V Vulnerable species not presently endangered but at risk over a longer period through continued depletion, or which largely occur on sites likely to experience changes in land use which would threaten the survival of the species in the wild.
- R Species which are rare in Australia but which are not currently considered endangered or vulnerable. Such species may be represented by a relatively large population in very restricted areas or by smaller populations spread over a wider range.

FFG listed

- L Listed under the FFG Act.
- A The species has an Action Statement prepared for its management.

HP (Highest priority)

- Yes A species considered to be of highest priority for conservation management in the Greater Grampians bioregion.

APPENDIX 4 ECOLOGICAL VEGETATION CLASSES AND FLORISTIC COMMUNITIES

ECOLOGICAL VEGETATION CLASS (EVC)	EVC STATUS	FLORISTIC COMMUNITY (FC)	FC STATUS
Montane Rocky Shrubland	R ★	Mt William Montane Rocky Shrubland	★
		Grampians Montane Rocky Shrubland	★
		Gully Montane Rocky Shrubland	★
		Escarpment Montane Rocky Shrubland	★
Montane Wet Heathland	R ★	Grampians Montane Wet Heathland	★
Rocky Outcrop Shrubland	R E	Grampians Rocky Outcrop Shrubland	★
Rocky Outcrop Herbland	R	Grampians Rocky Outcrop Herbland	★
Wet Forest		Grampians Wet Forest	★
Damp Forest	R V	Grampians Damp Forest	★
Shrubby Foothill Forest		Grampians Shrubby Foothill Forest	★
Lowland Forest		Grampians Lowland Forest	★
		Feldspar Porphyritic Lowland Forest	★
Heathy Dry Forest		Grampians Heathy Dry Forest	★
Heathy Herb-Rich Forest	R ★	Metamorphics Heathy Herb-Rich Forest	★
		Grampians Heathy Herb-Rich Forest	★
Valley Grassy Forest	R V	Grampians Valley Grassy Forest	★
Herb-Rich Foot Hill Forest	V	Grampians Herb-Rich Foothill Forest	★
Damp Sands Herb-Rich Woodland	V	Grampians Damp Sands Herb-Rich Woodland	★
		Roses Gap Damp Sands Herb-Rich Woodland	★
Shrubby Woodland	R	Grampians Shrubby Woodland	★
Sand Thicket Woodland	★ ★	Sand Thicket Woodland	★
Alluvial Terraces Herb-Rich Woodland	E	Grampians Alluvial Terraces Herb-Rich Woodland	★
Red Gum Wetland	R V E	Red Gum Wetland	
Claypan Ephemeral Wetland	R	Claypan Ephemeral Wetland	★
Reed Swamp	R E	Reed Swamp	
Shallow Fresh Water Marsh	R V E	Shallow Freshwater Marsh	
Sedge-Rich Wetland	R V	Grampians Sedge-Rich Wetland	★ ★
Sedge Wetland	R V	Sedge Wetland	
Floodplain Thicket		Grampians Floodplain Thicket	★
Seasonally Inundated Shrubby Woodland	R V	Plains Seasonally Inundated Shrubby Woodland	
		Valley Seasonally Inundated Shrubby Woodland	
		Rocklands Seasonally Inundated Shrubby Woodland	★
Plains Sedgy Woodland	R V	Plains Sedgy Woodland	
Wet Heathland	R V	Wet Heathland	
Damp Heathland		Grampians Damp Heathland	★
Heathland Thicket	R	Grampians Heathland Thicket	★
Sand Heathland	R V	Grampians Sand Heathland	★
		Grampians Dune Sand Heathland	★

Heathy Woodland Grampians Desert Heathy Woodland ★

Appendix 4 (cont.)

ECOLOGICAL VEGETATION CLASS (EVC)	EVC STATUS	FLORISTIC COMMUNITY (FC)	FC STATUS
		Sand Heathy Woodland	
		Sandy Outwash Heathy Woodland	★
		Gully Outwash Heathy Woodland	★
		Slopes Lateritic Heathy Woodland	★
		Plains Lateritic Heathy Woodland	
Plains Grassy Woodland	V E	Greater Grampians Plains Grassy Woodland	▲
Creekline Grassy Woodland	R V E	Creekline Grassy Woodland	
Hills Herb-Rich Woodland		Granitic Hills Herb-Rich Woodland	
		Fertile Hills Herb-Rich Woodland	
Montane Grassy Woodland	R	Grampians Montane Grassy Woodland	★
Grassy Dry Forest		Grassy Dry Forest	★
Sand Forest	R V E	Sand Forest	
Riparian Scrub	R	Riparian Scrub	
Riparian Shrubland	R V E	Grampians Rocky Riparian Shrubland	★
Sedgy Riparian Woodland		Sedgy Riparian Woodland	
Riparian Forest		Riparian Forest	

Source: Tumino and Roberts (2000).

KEY:

EVC/FC Status

E Endangered (West Victoria Regional Forest Agreement, March 2000)

R Rare (West Victoria Regional Forest Agreement, March 2000)

V Vulnerable (West Victoria Regional Forest Agreement, March 2000)

★ Endemic to the Greater Grampians Study Area (NRE pers. com 1999)

▲ Endemic to the Greater Grampians Bioregion with two outliers outside the Study Area: Dundas Range, and Mt Arapiles

☆ New EVC

APPENDIX 5 THREATENED AND HIGH-PRIORITY FAUNA SPECIES RECORDED IN THE PARK

SCIENTIFIC NAME	COMMON NAME	FFG LISTED	TIV STATUS	NT STATUS	HP
<i>Accipiter novaehollandiae</i>	Grey Goshawk		LR		
<i>Acrodipsas brisbanensis</i>	Large Ant-blue Butterfly	A	R/R		
<i>Anas rhynchotis</i>	Australasian Shoveler		Vul		
<i>Ardea alba</i>	Great Egret	L	End		
<i>Aythya australis</i>	Hardhead		Vul		
<i>Biziura lobata</i>	Musk Duck		Vul		
<i>Botaurus poiciloptilus</i>	Australasian Bittern		End		
<i>Burhinus grallarius</i>	Bush Stone-curlew	A	End		
<i>Calyptorhynchus banksi</i>	Red-tailed Black-Cockatoo	A	End	End	
<i>Chlidonias hybridus</i>	Whiskered Tern		LR		
<i>Chthonicola sagittata</i>	Speckled Warbler		Vul		
<i>Coturnix australis</i>	Brown Quail		DD		
<i>Coturnix chinensis</i>	King Quail	L	CEn		
<i>Egernia coventryi</i>	Swamp Skink		Vul		
<i>Egretta garzetta</i>	Little Egret	L	CEn		
<i>Euastacus bispinosus</i>	Glenelg Spiny Cray		DD		
<i>Falco subniger</i>	Black Falcon		End		
<i>Gadopsis marmoratus</i>	River Blackfish		DD		
<i>Galaxias olidus</i>	Mountain Galaxias		DD		
<i>Galaxiella pusilla</i>	Dwarf Galaxias	L	LR		
<i>Geopelia cuneata</i>	Diamond Dove		Vul		
<i>Grantiella picta</i>	Painted Honeyeater	L	Vul		
<i>Grus rubicunda</i>	Brolga	L	Vul		
<i>Haliaeetus leucogaster</i>	White-bellied Sea-Eagle	A	End		
<i>Hesperilla crypsargyra lesouefi</i>	Silvered Skipper		R/R		
<i>Hylacola pyrrhopygia</i>	Chestnut-rumped Heathwren		DD		
<i>Jalmenus icilius</i>	Amethyst Hairstreak		Vul		
<i>Lathamus discolor</i>	Swift Parrot	L	End	Vul	
<i>Litoria raniformis</i>	Warty Bell Frog		Vul	Vul	
<i>Lophoictinia isura</i>	Square-tailed Kite		End		Yes
<i>Ninox connivens</i>	Barking Owl	L	End		Yes
<i>Ninox strenua</i>	Powerful Owl	A	End		
<i>Nycticorax caledonicus</i>	Nankeen Night Heron		Vul		
<i>Ogyris idmo halmaturia</i>	Large Brown Azure Butterfly		End		Yes
<i>Petaurus norfolcensis</i>	Squirrel Glider	L	End		
<i>Petrogale penicillata</i>	Brush-tailed Rock-wallaby	A	CEn	Vul	
<i>Phalacrocorax varius</i>	Pied Cormorant		LR		
<i>Platalea regia</i>	Royal Spoonbill		Vul		

Appendix 5 (cont.)

SCIENTIFIC NAME	COMMON NAME	FFG LISTED	TIV STATUS	NT STATUS	HP
<i>Pomatostomus temporalis</i>	Grey-crowned Babbler	A	End		
<i>Potorous tridactylus</i>	Long-nosed Potoroo		LR	Vul	
<i>Pseudomys fumeus</i>	Smoky Mouse	L	End	End	
<i>Pseudomys shortridgei</i>	Heath Mouse	L	LR	Vul	Yes
<i>Rallus pectoralis</i>	Lewin's Rail		End		
<i>Ramphotyphlops proximus</i>	Woodland Blind Snake		Vul		
<i>Sminthopsis murina</i>	Common Dunnart		DD		
<i>Sterna caspia</i>	Caspian Tern		Vul		
<i>Todiramphus pyrrhopygia</i>	Red-backed Kingfisher		Vul		
<i>Turnix velox</i>	Little Button-quail		DD		
<i>Tympanocryptis diemensis</i>	Mountain Dragon Grampians form		DD		Yes
<i>Varanus varius</i>	Lace monitor		DD		

Source: DSE (2003b)

KEY:

TIV (Threatened in Victoria).

- CEn** Critically Endangered: A taxon is Critically Endangered when it is facing an extremely high risk of extinction in the wild in the immediate future.
- End** Endangered: A taxon is Endangered when it is not Critically Endangered but is facing a very high risk of extinction in the wild in the immediate future.
- Vul** Vulnerable: A taxon is Vulnerable when it is not Critically Endangered or Endangered but is facing a high risk of extinction in the wild in the medium-term future.
- LR** Lower Risk – near threatened: A taxon is Lower Risk – near threatened when it has been evaluated, does not satisfy the criteria for any of the threatened categories, but which is close to qualifying for Vulnerable. In practice, these species are most likely to move into a threatened category should current declines continue or catastrophes befall the species.
- R/R** Rare: A taxon with a small Victorian population that is not presently Endangered, Critically Endangered or Vulnerable but is at risk. These taxa are usually localised within restricted geographical areas or habitats or are thinly distributed over a more extensive range.
- DD** Data Deficient: A taxon is Data Deficient when there is inadequate information to make a direct or indirect assessment of its risk of extinction based on its distribution or population status. Listing of taxa in this category indicates that more information is required and acknowledges the possibility that future investigations will show that a threatened classification is appropriate.

NT (Nationally threatened)

- E** Endangered: a species in serious risk of disappearing from the wild state within one or two years if present land use and other causal factors continue to operate.
- V** Vulnerable: a species not presently endangered but at risk over a longer period through continued depletion, or which largely occurs on sites likely to experience changes in land use which would threaten the survival of the species in the wild.
- R** Rare: a species which is rare in Australia but which is not currently considered endangered or vulnerable. Such species may be represented by a relatively large population in very restricted areas or by smaller populations spread over a wider range.

FFG listing

- L** Listed under the FFG Act.
- A** An Action Statement has been prepared for the management of the species.

HP (Highest priority)

- Yes** A species considered to be of highest priority for conservation management in the Greater Grampians bioregion.

APPENDIX 6 NOXIOUS AND ENVIRONMENTAL WEEDS

SCIENTIFIC NAME	COMMON NAME	CATEGORY
<i>Acacia baileyana</i>	Cootamundra Wattle	E
<i>Acacia decurrens</i>	Early Black Wattle	E
<i>Acacia elata</i>	Cedar Wattle	E
<i>Acacia howittii</i>	Sticky Wattle	E
<i>Acacia longifolia</i>	Sallow Wattle	E
<i>Acacia prominens</i>	Golden Rain Wattle	E
<i>Acer pseudoplatanus</i>	Sycamore Maple	E
<i>Agapanthus orientalis</i>	Common Agapanthus	E
<i>Agave americana</i>	Century Plant	E
<i>Ailanthus altissima</i>	Tree of Heaven	E
<i>Amaryllus belladonna</i>	Belladonna Lily	E
<i>Anopterus glandulosus</i>	Tasmanian Laurel	E
<i>Arbutus unedo</i>	Irish Strawberry Tree	E
<i>Carduus tenuiflorus</i>	Slender Thistle	E
<i>Centaureum erythraea</i>	Common Centaury	E
<i>Chrysanthemoides monilifera</i>	Boneseed	N
<i>Cirsium vulgare</i>	Spear Thistle	E
<i>Conyza</i> sp.	Fleabane	E
<i>Cortaderia selloana</i>	Pampas Grass	E
<i>Cotoneaster</i> sp.	Cotoneaster	E
<i>Crataegus monogyna</i>	Hawthorn	E
<i>Crococsmia X crocosmiiflora</i>	Montbretia	E
<i>Dittrichia graveolens</i>	Stinkwort	E
<i>Erica baccans</i>	Berry-flowered Heath	E
<i>Foeniculum vulgare</i>	Fennel	E
<i>Freesia leichtlinii</i>	Common Freesia	E
<i>Genista monspessulana</i>	Montpellier (Cape) Broom	N
<i>Hedera helix</i>	English Ivy	E
<i>Homeria flaccida / miniata</i>	Cape Tulip (One-leaf/Two-leaf)	N
<i>Hypericum androsaemum</i>	Tutsan	E
<i>Hypericum perforatum</i>	St Johns Wort	N
<i>Ilex aquifolium</i>	English Holly	E
<i>Lonicera japonica</i>	Japanese Honeysuckle	E
<i>Marrubium vulgare</i>	Horehound	N
<i>Melaleuca armillaris</i>	Giant Honey Myrtle	E
<i>Asparagus asparagoides</i>	Bridal Creeper/Smilax	N
<i>Olea europaea</i> subsp. <i>europaea</i>	European Olive	E
<i>Oxalis pes-caprae</i>	Sour-sob	E
<i>Pinus radiata</i>	Monterey Pine	E
<i>Pittosporum undulatum</i>	Sweet Pittosporum	E

Appendix 6 (cont.)

SCIENTIFIC NAME	COMMON NAME	CATEGORY
<i>Prunus lusitanica</i>	Portugal Laurel	E
<i>Prunus</i> spp., <i>Malus</i> spp.	fruit trees	E
<i>Rosa rubiginosa/Rosa canina</i>	Sweet Briar/Dog Rose	N
<i>Rubus fruticosus</i>	Blackberry	N
<i>Rubus laciniatus</i>	Cut-leaf Blackberry	N
<i>Salix babylonica</i>	Weeping Willow	E
<i>Senecio pterophorus</i>	African Daisy	N
<i>Delairea odorata</i>	Cape Ivy	E
<i>Sollya heterophylla</i>	Bluebell Creeper	E
<i>Ulex europaeus</i>	Furze/Gorse	N
<i>Vinca major</i>	Blue Periwinkle	E
<i>Watsonia meriana</i>	Bulbil Watsonia	E
<i>Zantedeschia aethiopica</i>	Arum Lily	E

Source: NRE (1999b).

KEY:

Notes:

- E Environmental weeds are identified by their ability to progressively out-compete and eliminate existing native species. There are several types of environmental weeds :
- species introduced from overseas;
 - Australian species from outside Victoria; and
 - Victorian species outside their pre European distribution.
- N Noxious weeds are plants that have or have the potential to become a threat to primary production, the environment or community health in Victoria and are declared under the *Catchment and Land Protection Act 1994* (Vic.).

**APPENDIX 7 NUMBER OF RECORDED ABORIGINAL ARCHAEOLOGICAL SITES IN
GRAMPIANS NATIONAL PARK AND THE STATE**

SITE TYPE	GRAMPIANS NATIONAL PARK	VICTORIA
Isolated artefact	60	3699
Rock shelter/cave	113	250
Grinding grooves	2	35
Exposure in bank	1	413
Fish trap	1	122
Mound	4	2100
Art site	84	140
Scarred tree	9	6368
Isolated hearth	8	726
Quarry/Stone source	11	170
Surface scatter	58	4647

Note: A comprehensive archaeological survey of Grampians National Park has not been conducted (AAV 2001).

APPENDIX 8 HISTORIC PLACES

LCC REFERENCE *	DESCRIPTION	SIZE (HA)
A14	Mount Difficult Quarry	42
A15	Cottages and surrounds, Zumstein	40
A17	Mafeking Goldfield	300
A16	Weir, fluming, syphons, tunnel, pipeline and assoc. features, Stawell water supply system	25
A30	Brambuk — curtilage around structure only	
A71	Lake Wartook	
A71	Wimmera–Mallee stock and domestic water supply system	
B17	Mount Zero Quarry and tramway	10
B24	Stony Creek Sawmill	5
B25	Borough Huts charcoal kilns	
B72	Reed Lookout	
C25	MacKenzie Falls	
B71	Cranages Cottage	
C32	Headworks system, Hamilton water supply	
B75	Grand Canyon	
C74	Mount Victory Road	
C75	Silverband Road	
B118	Major Mitchell monuments and memorials	
C31	Germaine family graves, Victoria Valley	
C23	Old Adelaide Road and monument	
C29	Green Creek Road sawmill	
C24	Smith sawmill	
C28	Geodetic stone cairn, Mount Thackeray	
C36	Glenbower homestead site no. 1	
C37	Glenbower homestead site no. 2	
C34	Silverband Falls	
C33	Mount Difficult campsite	
C38	Sandersons Gap Track	
C39	House site, Childe's sawmill	
C47	Drystone walls, Mount Sturgeon (Mount Wurgarri)	

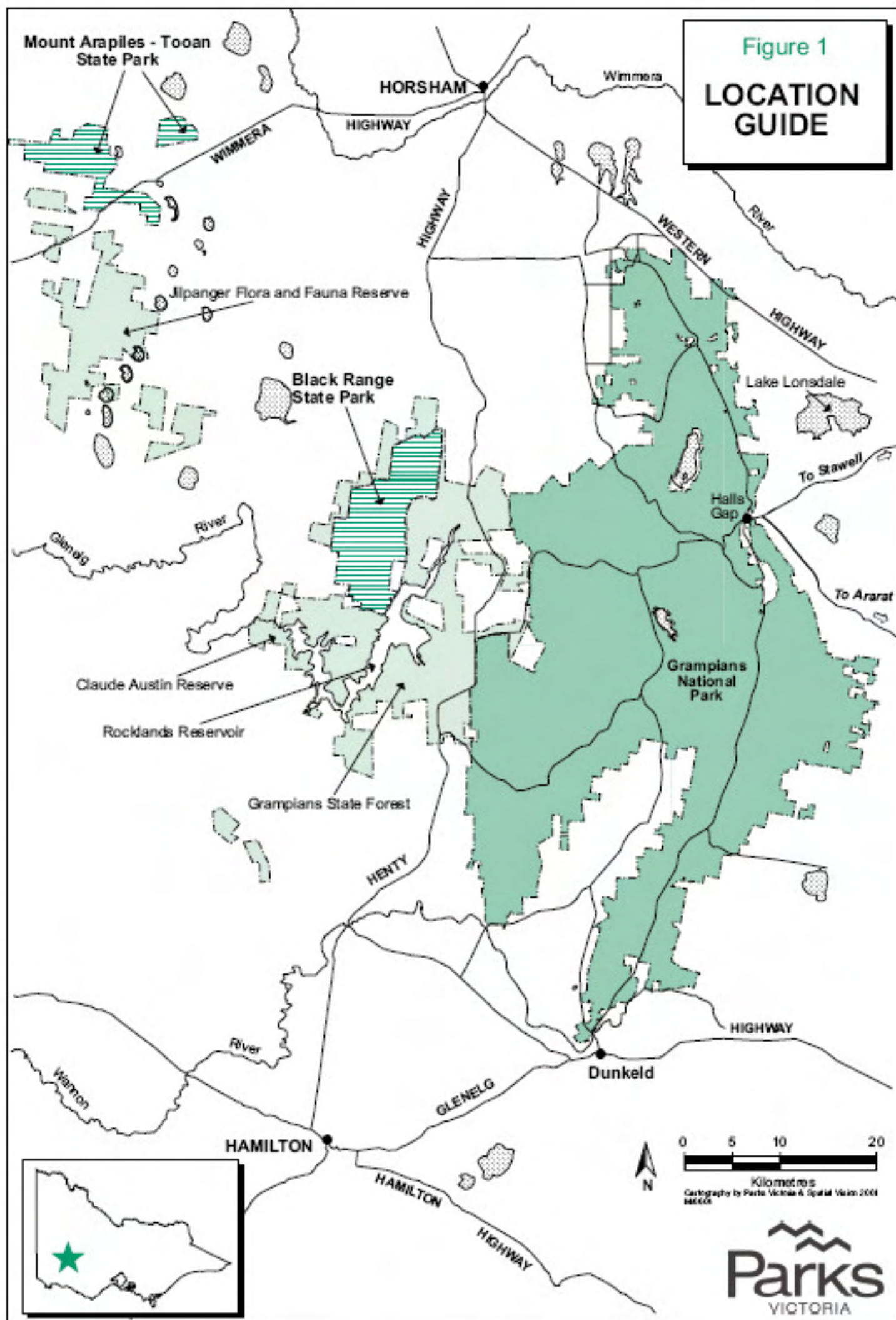
* Refer to LCC 1997.

APPENDIX 9 WATER SUPPLY INFRASTRUCTURE IN GRAMPIANS NATIONAL PARK

WATER AUTHORITY	AREA	DESCRIPTION
Wimmera Mallee Water	Fyans Creek–Wannon River Divide	Weirs and piping
	McKenzie Creek	Weirs and other infrastructure
	Various locations	Gauging stations
	Victoria Valley	Water channel
Grampians Region Water Authority	Fyans Creek (Barri yaloo Creek)	Weir, piping, tunnel and other infrastructure
	Williams Range, east side, on Mafeking Road and Picnic Ground Road	Weirs, bores and other infrastructure
Glenelg Region Water Authority	Near Dunkeld	Glenelg Water Reservoir
	Victoria Range	Weir, piping and other infrastructure

Figure 1

LOCATION GUIDE



GRAMPIANS NATIONAL PARK

Figure 2 MANAGEMENT ZONES



- Highway
- Sealed road
- Unsealed road
- Vehicle track
- Gate - Management Vehicles only
- Gate - Seasonally closed

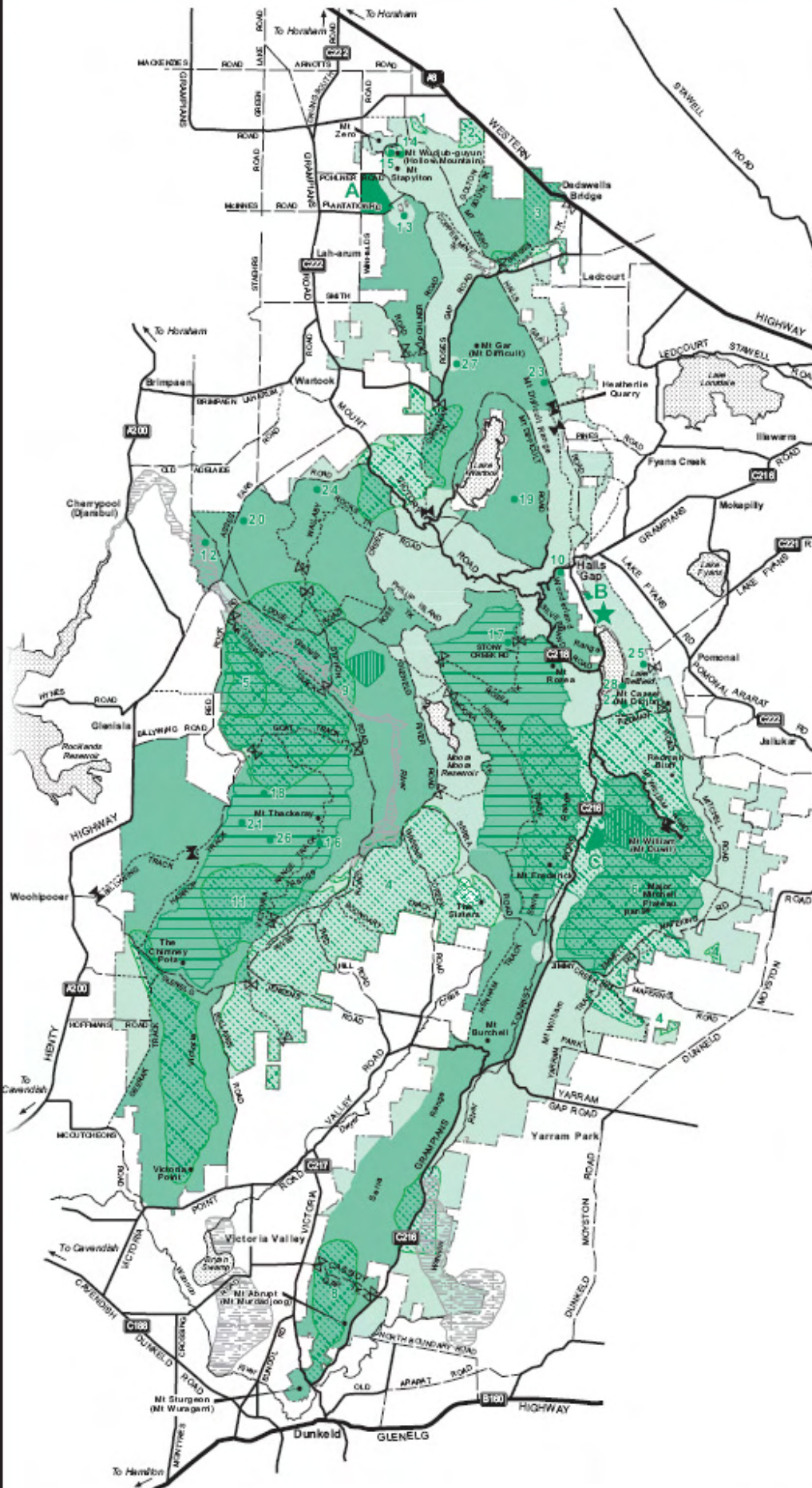
Management Zones

- Reference area
- Conservation
- Conservation and recreation
- Recreation development
Brambuk: The National Park & Cultural Centre
- Education
A Potter Creek Education area
B Halls Gap Education area (proposed)
C Wannon Divide Education area

Overlays

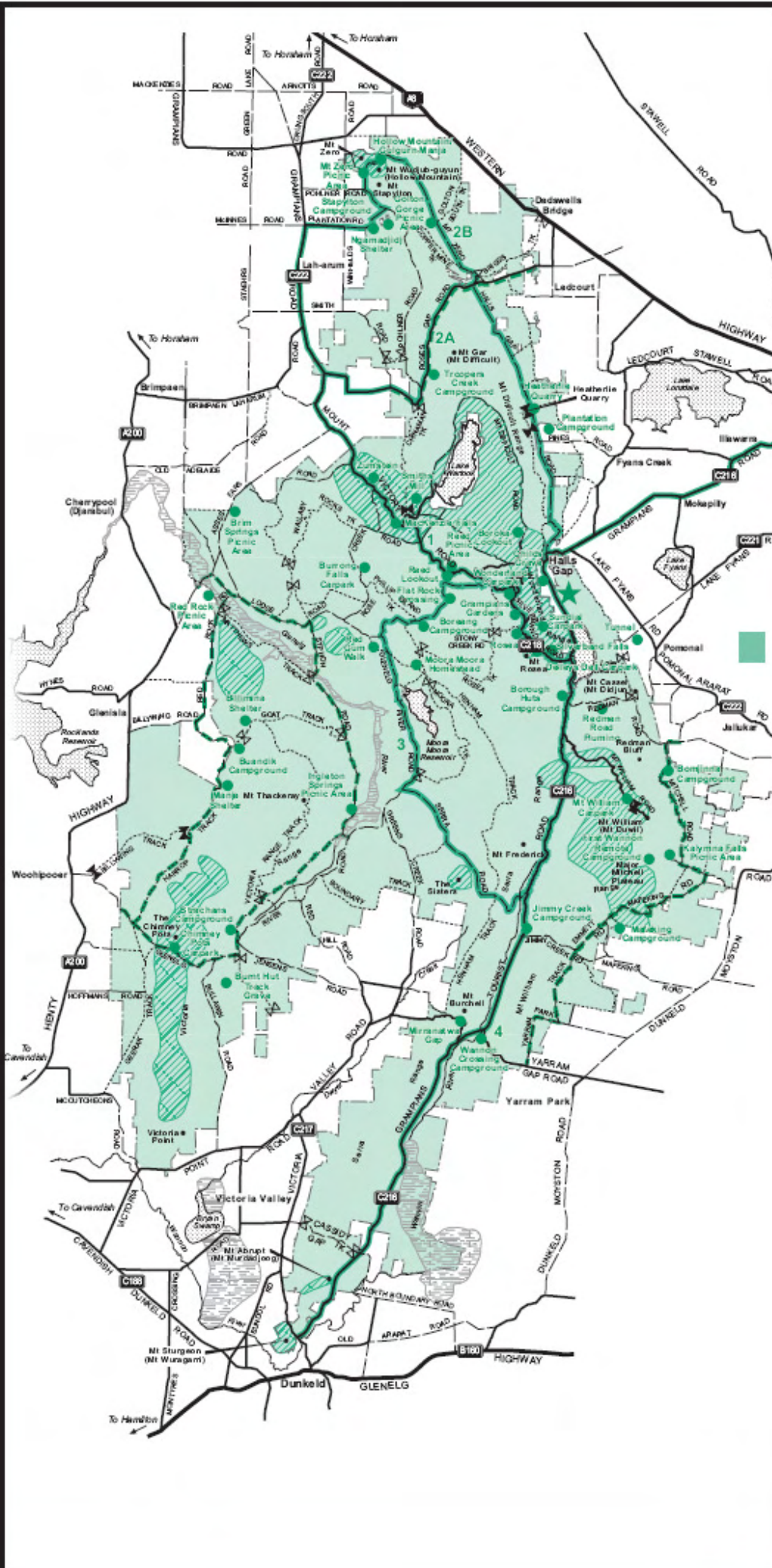
- Remote and natural area
- Special protection area
(Numbers relate to Appendix 1)

Note: Special management area - public utilities comprises the sites of the public utilities shown on Figure 4 as Authorised Uses.



GRAMPIANS NATIONAL PARK

Figure 3
VISITOR ACCESS & SITES



National Park

Access

- Highway
- Sealed road
- Unsealed road
- Vehicle track
- Gate - Management Vehicles only
- Gate - Seasonally closed

Self guided drive - 2WD

- 1 Halls Gap / Zumstein Corridor & Wonderland
- 2A, 2B Northern Grampians Route
- 3 Victoria Valley Nature Drive
- 4 Southern Grampians Route

Horse riding permitted

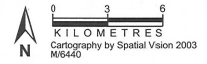
Bush Camping - Not permitted

Visitor Sites

- Brambuk: The National Park & Cultural Centre
- Other Sites (refer table 7)

GRAMPIANS NATIONAL PARK

Figure 4
AUTHORISED USES & ADJACENT LAND USE



- Highway
- Sealed road
- Unsealed road
- Vehicle track
- Gate - Management Vehicles only
- Gate - Seasonally closed

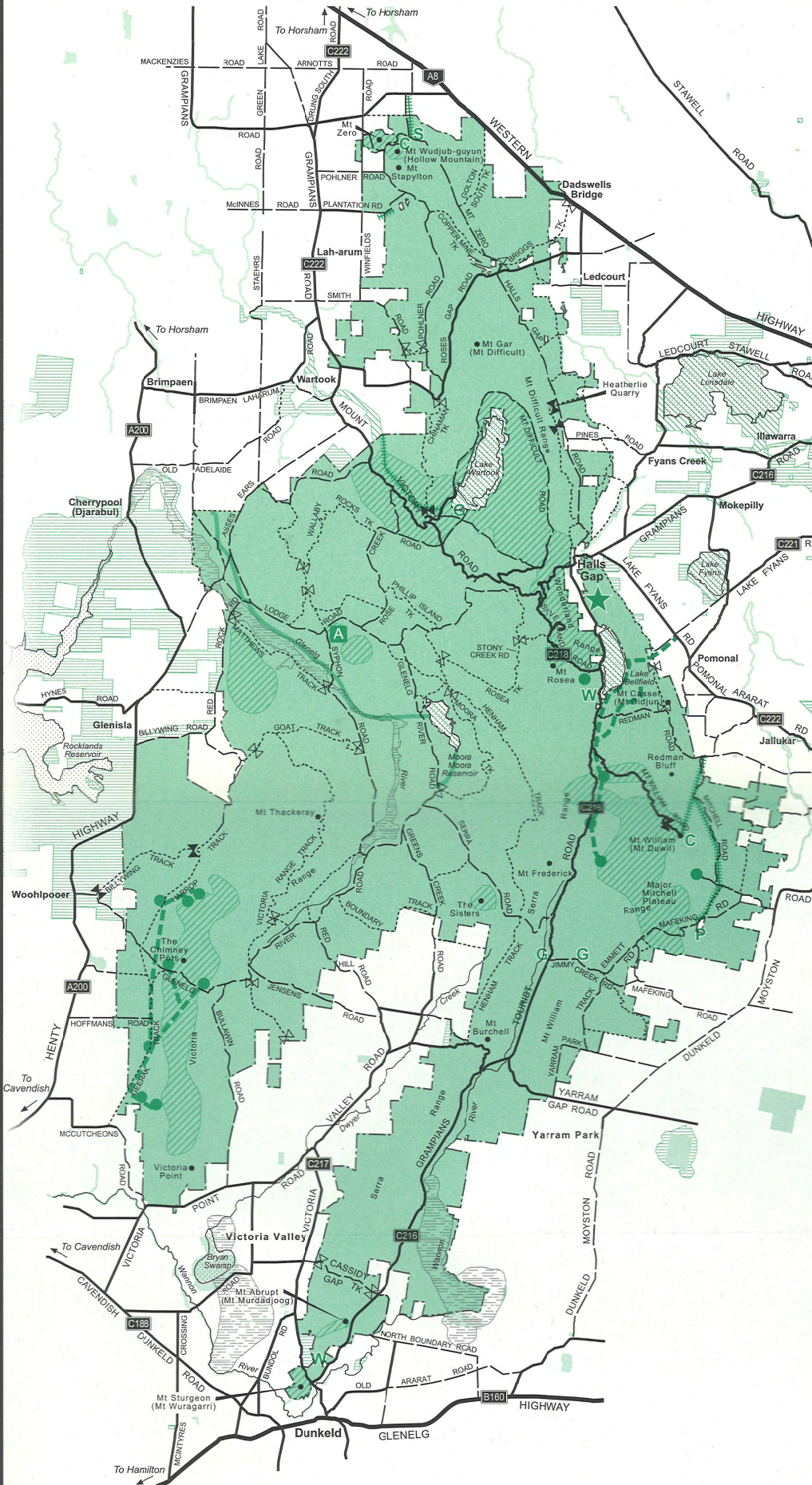
- Bush Camping - Not permitted
- Brambuk: The National Park & Cultural Centre

Authorised Uses

- Powerline
- Communication tower
- Water pipe
- Water channel
- Weir
- Water storage
- Gauging station
- Pump
- Seismograph
- Airbase

Adjacent Land Use

- National Park
- State forest
- Water supply reserve
- Other reserve
- Private land



For more information contact the Parks Victoria Information Centre on 13 1963, or visit www.parkweb.vic.gov.au